SCOTTISH HOSPITALS INQUIRY

Bundle of documents for Oral hearings commencing from 19 August 2024 in relation to the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow

Bundle 14 - Volume 1 – Further Communications

Table of Contents

Document Number	Object ID	Document Name	Page Number
1	A37816420	Scottish Government CEL 18 (2007) 13 December 2007	Page 8
2	A39465187	Various emails between 25 May 2009 and 20 May 2016	Page 11
3	A38360510	Various emails between 12 June 2009 and 07 September 2015	Page 47
4	A39465106	NHSGGC IPCT Update Paper/Timeline and various emails - 22 September 2011 to 31 May 2016	Page 82
5	A39465130	Various emails between 07 March 2014 and 16 March 2016	Page 122
6	A38361052	Various emails between 29 July 2014 and 10 May 2016	Page 154
7	A49073341	Email chain from E Peters to C Peters - High risk airborne infections - 27 January 2015 to 22 July 2015	Page 186
8	A39465188	Various emails between 29 January 2015 and 08 December 2015	Page 190
9	A39465129	Infection Control Doctors - Minutes of Meetings - 14 April 2015	Page 237
10	A39465111	Various emails between 21 May 2015 and 24 October 2015	Page 261
11	A46157902	Email chain from C Peters to P Hamilton - New Building - 15 June 2015	Page 317
12	A32393890	Email chain from C. Peters to T. Inkster - Re: Decontam room_anything to add? - 19 June 2015 to 24 June 2015	Page 318
13	A49073179	Email chain from C Peters to T Inkster - Transplant Ventilation - 19 June 2015 to 25 June 2015	Page 323

14	A47197599	BMT Accommodation - Ventilation and email from C Peters to B Jones and others - Re: Transplant Ventilation - 19 June 2015 to 01 July 2015	Page 326
15	A40241808	Email chain from C Peters to T Walsh and others - Meeting re Ventilation - 25 June 2015 to 26 June 2015	Page 331
16	A39465191	Various emails between 23 June 2015 and 23 July 2015	Page 334
17	A39465122	Various emails between 26 June 2015 and 08 December 2015	Page 382
18	A32393894	Email from C Peters to T Walsh and others - DRAFT tabulation BMT Accomodation - 29 June 2015	Page 395
18.1	A32394217	BMT Accommodation - 29 June 2015	Page 396
19	A32393891	Email from C Peters to P Moir - Specifications and commissioning data - 01 July 2015	Page 399
20	A49073351	Email chain from C Peters to J Hood, T Inkster and B Jones - BMT rooms: for your comments - 03 July 2015	Page 400
21	A49073347	Email chain from C Peters to T Evans and E Peters - 03 July 2015 to 01 February 2016	Page 402
22	A49073348	Email chain from C Peters to B Jones and T Inkster - 04 July 2015 to 06 July 2015	Page 409
23	A40241750	Email chain from B Jones to C Peters and others - re BMT SGUH - 07 July 2015	Page 410
24	A45320213	NHSGGC - BMT Service Temporary Relocation News Release - 07 July 2015	Page 412
25	A49073362	NHSGGC - BMT Service Temporary Relocation News Release - 08 July 2015	Page 413
26	A38176264	Email from C Peters to P Wright - Resignation - 08 July 2015	Page 414
27	A32310963	Reasons for Resignation - T. Inkster - 09 July 2015	Page 416
28	A49073360	BMT Q&A for possible supplementary questions for discussion 8 August 2015	Page 421

29	A49073353	Email chain from C Peters to F Hollowell - RE: Meeting Request: Infection Control - 07 August 2015 to 10 August 2015	Page 423
30	A49073232	Email chain from B Jones to T Inkster - 12 August 2015 to 13 August 2015	Page 425
31	A49073354	Email chain from C Williams to C Peters - RE: Neuro surgical theatres - 19 August 2015 to 24 August 2015	Page 426
32	A49073342	Email chain from C Peters to D Stewart - Neuro theatres - 25 August 2015	Page 431
33	A49073344	Email chain from B Jones to T Inkster - IPC - 25 August 2015 to 24 September 2015	Page 432
34	A49073350	Neuro Surgical Theatres: Timeline and Infection Control Summary - 26 August 2015	Page 434
35	A46157911	Email chain from C Peters to E Peters and T Inkster – Negative pressure rooms in QEUH - 30 August 2015 to 31 August 2015	Page 438
36	A49073358	Email chain from B Jones to C Peters - RE: Negative pressure rooms in QEUH - 30 August 2015 to 31 August 2015	Page 440
37	A49073345	Email chain from C Peters to T Inkster - Isolation Rooms - 04 September 2015 to 25 April 2016	Page 442
38	A48800307	Various emails between 08 September 2015 and 23 October 2015	Page 443
39	A49073339	Email chain from C Peters to D Stewart - ITU isolation rooms - 15 September 2015 to 07 October 2015	Page 461
40	A49073356	Email chain from P Redding to C Peters - RE: Infection Control / Isolation rooms - 16 September 2015 to 06 October 2015	Page 462
41	A47739010	Summary of Infection Control Issues - 29 September 2015	Page 464
42	A46191398	Email chain from D Bell to C Peters and others - MERS patient - 07 October 2015 to 08 October 2015	Page 467
43	A49073363	Email chain from A Cruickshank to C Peters - RE: Update - 08 October 2015	Page 469

44	A46157909	Email from P Redding to C Peters re Infection control - 21 October 2015	Page 470
45	A47135218	Email from D. Stewart to others - Infection Control Team - 30 October 2015	Page 472
46	A47135186	Email chain from D. Stewart to T. Inkster - Re: Infection Control Team - 30 October 2015 to 02 November 2015	Page 474
47	A49073355	Email chain from C Peters to D Stewart - RE: Infection Control Team - 30 October 2015 to 02 November 2015	Page 476
48	A32375944	Letter from T. Inkster and C. Peters to D. Stewart - 09 November 2015	Page 478
49	A49073361	Email chain from A Cruickshank to C Peters - RE: Resignation - 23 November 2015	Page 482
50	A49073346	Email chain from C Peters to E Peters - Draft letter - 03 December 2015 to 01 February 2016	Page 484
51	A39465105	Email chain from C. Williams to others - Fw:2015210 (9.58) Peter Hoffman Re: HPS CBAR BMT - 10 December 2015 to 21 December 2015	Page 487
52	A46157908	Email chain from C Peters to D Stewart and T Inkster re Infection control concerns - 22 December 2015 to 29 December 2015	Page 490
53	A39465082	Various emails between 11 January 2016 and 16 November 2016	Page 492
54	A39465113	Various emails between 28 January 2016 and 09 December 2016 and QUEH/RHC Isolation Room Review - March 2017	Page 527
55	A46157912	Email from C Peters to T Inkster re Ventilation QEUH - 13 June 2016	Page 563
56	A46157915	Email from C Peters to T Inkster re Infection control handover - 25 July 2016	Page 564
57	A39465109	Various emails between 09 August 2016 to 13 June 2017	Page 570.
58	A47135194	Email chain from C. Peters to T. Inkster - Re: BMT Specification - 16 November 2016 to 21 August 2017	Page 582

59	A32403795	Email from C. Peters to A. Cruikshank and others - FW - 19 January 2017	Page 584
59.1		M. absessus Investigations SBAR - 19 January 2016	Page 585
60	A39465097	Various emails between 20 March 2017 and 26 July 2019	Page 616
61	A49364572	Text messages between Dr Redding and Jane Grant - 14 April 2017 April and 27 September 2017	Page 633
62	A39465112	Various emails between 05 May 2017 and June 2019	Page 638
63	A46157925	Various emails between 07 July 2017 and 05 September 2017	Page 673
64	A37916502	Email chain from [redacted] to L Imrie - HIATT RED - NHSGGC Ward 2A Royal Children Hospital - 26 July 2017 to 27 July 2017	Page 680
64.1		HAIORT 27.7.17 Ward 2A Stenotrophomonas maltophilia	Page 683
65	A37916622	Email from L Imrie to Outbreak Group - FW HIIORT ward 2A RHC - attached - 01 August 2017	Page 686
65.1		HIIORT 01.08.17 wared 2A Stenotrophomonas maltophilia	Page 687
66	A40630956	Email chain from S Devine to T Walsh and T Inkster - Triggers - 03 August 2017 to 17 March 2018	Page 690
67	A46157921	Email chain from T Walsh to C Peters and others - re South Glasgow Weekly Report - 18 August 2017	Page 693
68	A46157918	Email chain from C Peters to [redacted] - re Request - 23 August 2017	Page 695
69	A38825069	Email chain from C Peters to J Armstrong - Infection Control and the work on 4B for BMT - 23 August 2017 to 21 September 2017	Page 696
70	A47135177	Email chain from I Powrie to T Inkster and others - Neutropenics 4B - 27 August 2017 to 23 January 2018	Page 701
71	A39465084	Various emails between 27 August 2017 and 23 September 2019	Page 705

72	A46157924	Email from C Peters to self - record of event - 28 August 2017	Page 721
73	A38759263	Email chain between Penelope Redding, Tom Walsh and Jennifer Armstrong - 05 September 2017 to 03 October 2017	Page 722
74	A46157927	Email chain from [redacted] to C Peters and B Jones - ICD cover QEUH - 06 September 2017	Page 729
75	A32393895	Email from C. Peters to P McCamley - SBAR RE Infection Control and Patient Safety at QEUH - 03 October 2017	Page 731
75.1		SBAR RE Infection Control and Patient Safety at QEUH	Page 732
76	A46157926	Email chain from C Peters to S Dodd - Line infections 2A - 03 October 2017	Page 737
77	A46157928	Email from C Peters to B Jones - SBAR ICD 2017 - 06 October 2017	Page 738
78	A46157931	Email chain from C Peters to A Land and others - Meeting of Infection control and estates issues - QEUH and RHC - 16 October 2017 to 28 October 2017	Page 739
79	A46157929	Email from C. Peters, A. Balfour, E. Somerville and S. Dodd - Re: Ward 2A fungal counts - 19 October 2017 to 27 September 2019	Page 741
80	A49073359	Email from S Bustillo to J Armstrong - BMT press release - 8.8.15 - 23 October 2017	Page 745
81	A46157930	Email chain from B Jones to C Peters and others - 2A - 23 October 2017 to 24 October 2017	Page 746
82	A46157933	Email from C Peters to B Jones - SBAR 2a October 2017 - 30 October 2017	Page 748
83	A32393896	Email chain from C. Peters to T. Inkster - FW Infection Control Issues 041017 - 10 November 2017 to 05 January 2018	Page 752
83.1		Infection Control Issues 041017	Page 753
84	A41746035	Various emails between 06 December 2017 and 23 April 2019	Page 762

Health Finance Directorate
Property and Capital Planning (HD) Division

The Scottish Government

CEL 18 (2007)

13 December 2007

Dear Colleague

HEALTHCARE ASSOCIATED INFECTION:
SHFN 30 AND HAI-SCRIBE IMPLEMENTATION STRATEGY

Summary

This letter notifies colleagues of the publication by Health Facilities Scotland (HFS) of an Implementation Strategy and a Contractor Endorsement Document to assist NHS Boards in taking forward the guidance set out within Scottish Health Facilities Note (SHFN) 30: 'Infection control in the built environment: Design and planning' and HAI-SCRIBE (Healthcare Associated Infection System for Controlling Risk in the Built Environment).

Action

Addressees are required to ensure that a copy of this letter is cascaded to all appropriate staff within their area of responsibility. Use of the Implementation Strategy, SHFN 30, HAI-SCRIBE and the Contractor Endorsement Document is a mandatory requirement for all NHSScotland capital projects and maintenance/refurbishment projects. This requirement takes immediate effect.

Background

Demolition, construction or maintenance activities, in or near healthcare establishments, can pose significantly increased Healthcare Associated Infection (HAI) risks to vulnerable individuals. In the main, these risks can result in serious life-threatening airborne or water-borne infections such as Legionellosis, Cryptosporidiosis or Aspergillosis. Patients using healthcare facilities are more likely to be immunocompromised and also more likely to receive intensive medical interventions, which in turn increases their vulnerability to opportunistic infections. Every effort must therefore be taken to acknowledge and ultimately reduce these risks.

Developing solutions to the non-clinical issues surrounding HAI requires a clear understanding of how the briefing, planning, design, procurement, construction, commissioning and on-going maintenance of property can contribute to the prevention and control of HAI.

Addresses

For action
Addresses

For action
Chief Executives, NHS Boards.

Chief Executives, Special Health Boards.

NHSScotland Strategic Facilities Group.

NHSScotland Property Advisory Group.

Infection Control Managers, NHS Boards.

For information
Director, Health Facilities Scotland.

Chief Executive, National Services Scotland.

Chief Executive, Architecture and Design Scotland.

Deputy Chief Medical Officer.

Enquires to:
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Empire House
131 West Nile Street
GLASGOW G1 2RX

Tel: [redacted]
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http://www.scotland.gov.uk

To help achieve this Health Facilities Scotland (HFS) have produced two documents: Scottish Health Facilities Note 30 (SHFN 30) 'Infection control in the built environment: Design and planning' and; HAI-SCRIBE (Healthcare Associated Infection System for the Control of Risk of Infection in the Built Environment).

Both documents aim to provide information on the prevention and control of infection and on the prevention of cross-infection and cross-contamination in healthcare facilities to those responsible for the planning, design and maintenance of such facilities. Further background information is provided at Annexe A.

Implementation

SHFN 30 and HAI-SCRIBE can play a vital part in supporting the drive to reduce HAI within NHSScotland. The guidance contained within these documents, produced in 2005, now has to be effectively implemented and steps have to be taken to ensure that the implementation is successful throughout NHSScotland. Doing so will ensure that control of infection remains at the forefront of the design, planning, construction refurbishment and maintenance of healthcare facilities. To help put this into practice HFS has produced an Implementation Strategy, and a Contractor Endorsement Document. Copies of these can be accessed at the HFS website: http://www.hfs.scot.nhs.uk/ .

Implementation of HAI-SCRIBE and indeed SHFN 30 should be the responsibility of a specialist multi-disciplinary professional staff team who have the necessary and appropriate skills in relation to the healthcare facility being planned, designed, constructed, refurbished or maintained. The use of a multi-disciplinary team is necessary for the success of a new build or refurbishment healthcare project. Therefore the planning and implementation process should include an array of both healthcare professionals and contractor personnel. However, it is essential that all members of the project team have a background understanding of the principles of prevention and control of infection in the built healthcare environment.

Yours sincerely

[redacted]

ALEX SMITH

Further information

1. Healthcare Associated Infection (HAI) can be described as an infection which was neither present nor incubating at the time of admission but which has developed during the course of a stay in hospital or healthcare facility. HAI is important both medically and economically. Medically, it is important because of the mortality and morbidity associated with infection with approximately 1 in 10 of patients acquiring an infection as a result of receiving treatment and care. Economically, it is important as the annual cost to NHSScotland attributed to HAI is estimated at £180 million.

2. HAI is a complex issue involving the whole patient journey and the many different elements of treatment and care provision. The majority of directions taken to address HAI issues have focussed on the clinical aspects associated with the prevention and control of infection with many strategies, policies, guidance and research being carried out in this area. However, it is clear that the non-clinical aspects including the built environment have a role to play in the prevention and control of HAI. This is widely recognised in the HAI Taskforce Programme.

SHFN 30

3. SHFN 30 provides an insight to the key factors within the built environment, which can impact on the prevention and control of infection. It is therefore intended as a first point of reference on prevention and control of infection for healthcare estates and facilities managers, architects, builders, engineers, surveyors, health planners and Infection Control Teams working on healthcare estate, new build and refurbishment projects. SHFN 30 should also be seen as a reference guide for use in conjunction with the HAI-SCRIBE system.

HAI-SCRIBE

4. HAI-SCRIBE aims to reduce infection hazards through the use of a prevention and control of infection questionnaire using a number of scenarios within the built healthcare environment. These scenarios are:

    - the proposed site for development of a healthcare facility;
    - the design and planning stage of the proposed healthcare facility;
    - the construction and refurbishment stage of the healthcare facility;
    - the ongoing maintenance of the healthcare facility.

SHFN 30 and HAI-SCRIBE are available at the Health Facilities Scotland website: http://www.hfs.scot.nhs.uk/ .

FW: Isolation rooms, MDU and Renal Dialysis

McNamee, Sandra [redacted]

Fri 20/05/2016 09:15

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Griffin, Heather
Sent: 25 May 2009 17:23
To: Seabourne, Alan; Moir, Peter; Cowan, Brian
Cc: Walsh, Tom; McNamee, Sandra; Gallacher, Stephen
Subject: FW: Isolation rooms, MDU and Renal Dialysis

Dear All,

For information - A meeting took place with Tom Walsh, Anette Rankin and Pamela Joannidis to review and finalise the infection control advice for the requirement for isolation rooms in the New South Glasgow Hospital. The outcome is shown below.

1) Isolation rooms for the New South Glasgow Hospital are as follows:

Haemato-oncology -
Sealed ward with hepa filtration positive to the rest of the hospital

Respiratory (serving rest of medical)

3 negative pressure sealed rooms (without ante rooms)

NB post meeting note - Clinicians in Gastro and rheumatology do not feel that they need any isolation rooms, think the 3 in respiratory is plenty)

Renal inpatient wards
2 positively pressure sealed rooms with negatively pressured anti- room

A&E
2 negative pressure sealed rooms (without anti-rooms)

Critical Care (includes ICU/Surgical and medical HDU)

10 isolation rooms with anti-rooms - as per user request.

(NB - No isolation rooms required for CCU , surgical or Acute Assessment Unit)

A49525252

Other issues agreed were -

Medical Day Unit

Glass partitions between patients is not required (require 3.6m separation)

Renal Dialysis

The 30 station unit (for outpatients) will be split as follows - 6 single rooms and 3 open rooms of 8 patients (no glass partitions required)

Please let me know if there are any issues/comments .
Many Thanks
Heather

Lang, Ann

From: McNamee, Sandra
Sent: 07 September 2015 15:01
To: Lang, Ann
Subject: FW: Infection Control & Critical Care/CCU

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Gallacher, Stephen
Sent: 12 January 2010 10:04
To: Walsh, Tom; Cowan, Brian; Williams, Craig
Cc: McCluskey, Fiona; Griffin, Heather; McNamee, Sandra; Seabourne, Alan
Subject: RE: Infection Control & Critical Care/CCU

Tom – many thanks for this. I think this helps us in the project team agree the best way forward.

I discussed this issue yesterday with Alan Seabourne and today with Heather Griffin.

Our starting position in this is the overall Critical Care design that was signed off in the exemplar plan i.e. a 79 bedded area which is made up of ICU, Medical & Surgical HDU and CCU. After long and detailed discussion with users and infection control we agreed the overall layout to include 10 isolation rooms with the rest of the ICU and HDU beds being held within open fronted glass sided cubicles. CCU consisted of 20 beds and these would be single rooms (lead lined for pacing) with en suite facilities. This overall gave us 39 out of 79 beds within Critical Care as single rooms (i.e. approximately 50%).

This current discussion was raised by CCU users (not by the project team) who had indicated their desire to have a procedure room within CCU. This cannot be delivered within the 20 single room footprint and therefore their view was that it would be acceptable to move to glass cubicles akin to the rest of Critical Care.

Given your comments below and given the agreements already reached we do not want to redesign the ICU/HDU areas and therefore the sensible way forward would appear to be to keep with the original exemplar design.

It is clearly important that all parties can sign this off and I would appreciate comment around this way forward

Stephen

Dr Stephen J Gallacher
Consultant Physician/Lead Clinician (Medicine)
Southern General Hospital
1345 Govan Road
Glasgow G51 4TF

Telephone (Secretary): [redacted]
Fax (Direct): [redacted]

From: Walsh, Tom
Sent: 11 January 2010 12:15
To: Gallacher, Stephen; Cowan, Brian; Williams, Craig
Cc: McCluskey, Fiona; Griffin, Heather; McNamee, Sandra
Subject: RE: Infection Control & Critical Care/CCU

Hi Stephen

My understanding is that the CCU option discussed at the meeting on Friday would now leave the new build adult hospital with only 10 of the 79 critical care beds in defatco single room accommodation. The previous discussions around medical and surgical HDUs still left us with an overall compliment above 50% for all Critical Care. It's the drop below 50% that gives the IC service cause for concern. The current proposal reduces the defatco single room accommodation across Critical Care to circa 17%

The rationale for 50% :

Section 3.16 of Scottish Health Planning Note 57 recommends 50% single room accommodation in critical care areas as does HAIScribe (50 to 100% of total bed numbers)

CEL 48(2008,) (very last page), cites a presumption of 100% single room accommodation and requires SGHD approval of any lower percentage for specific patient groups.

I appreciate that there are other issues, including clinician preference, to be considered, but I would strongly suggest that an overall provision of circa 17% single room accommodation across Critical Care is something we should consider referring to SGHD as per the CEL.. We probably need to at least confirm that the 3 sided glass partitions are an acceptable alternative to a side room for these patient groups. (I am slightly confused by the need for privacy issue as patient observation was the key driver for 3 sided cubicles in the first place.)

We also need to ensure that the recently proposed procedure room is fully compliant in terms of ventilation systems etc

HFS have indicated that there is a Delphi Consultation exercise taking place this week so we may have more guidance later, but this is our interpretation of the guidance at present.

kind regards

Tom

-----Original Message-----
From: Gallacher, Stephen
Sent: 11 January 2010 09:51
To: Cowan, Brian; Walsh, Tom; Williams, Craig
Cc: McCluskey, Fiona; Griffin, Heather
Subject: Infection Control & Critical Care/CCU
Importance: High

Brian/Craig/Tom

I would be very grateful for some advice/help.

We are about to go into the 1:200 dialogue with contractors and have some ongoing issues around Critical Care/CCU design that we need to resolve before meeting 1.

The starting point in the exemplar design was that CCU has 20 beds in single bed rooms each with en-suite facilities. These rooms would (each) be lead lined to allow pacing to be carried out in each room. This meant that there was no separate "procedures room" within CCU. The cardiologists were happy with this and signed this off. From a design/flexibility perspective however this plan has some drawbacks. There is ongoing debate around how many CCU beds are needed. Planning have so far recommended 20 beds however there is a clear and consistent view being expressed both from Critical Care and from Cardiology that this number is too big. Many of these (CCU) beds are currently being used for what are essentially Medical HDU patients. Assuming that this is correct it should be anticipated that the Medical HDU facility within the new hospital will generally need to "flex" into CCU. The design of Medical HDU is of course different – being open fronted glass sided cubicles. This different design does not preclude flexing but clearing makes it more challenging. Clearly this raises the question as to whether we should have this apparent design inconsistency at all.

Since the appointment of Brookfield Cardiology have been discussing the CCU design internally. There appears to be an overall consensus within Cardiology that glass sided rooms might work for them as well. If they were to go down this route they would then need a separate procedure room. They are clearly very keen to have this room – this could be used for other work (such as permanent pacing) for patients who might not be in coronary care. At present there is nowhere in the design to accommodate this work – other than in theatre where the space has not been factored in

Agreement has been reached already with clinicians and with infection control around the layout of Medical HDU, Surgical HDU and ICU. These areas would all consist of glass sided, open fronted partitions (and in addition there will be 10 isolation rooms). There was a lot of debate about moving away from the mandated 100% single room model with Infection Control. The building guidance notes allow clinical views to be taken into consideration in the design process and therefore give some flexibility around this 100% single room issue. The clinical view expressed here was very strong and clear and was that 100% single rooms would be unworkable in this area. It was agreed that good infection control ultimately came down to good staff hygiene supported by the infrastructure – each "cubicle" would have separate hand washing facilities.

This brings me to a meeting we had on Friday (08/01) with Cardiology (the need for this meeting is summarised on the attached paper). We reached a clinical consensus quickly at this meeting. This was that CCU should be designed similarly to Medical HDU i.e. glass sided cubicles. There was a further complexity added by one of the cardiologists that some of these might also have frontages that could be closed to give extra privacy and this is something that will be discussed with the architects (it is not clear whether this is practical nor is there any reason why the desire for privacy would be any different from Medical HDU).

Sandra McNamee was at this meeting representing Infection Control. My concern from this meeting was the view expressed by Sandra that Infection Control could not sign off on this design as it was not in keeping with the legal requirements. I did point out that we already had agreement from Infection Control that this design was appropriate for the rest of Critical Care and that CCU should be no different – however we reached a bit of an impasse on this.

I suspect that Sandra might have come to this meeting "cold" and not have been fully briefed on the previous Critical Care discussions however it is imperative we resolve this. I have major concerns that failure to resolve this would open up once again the whole debate about single rooms vs. cubicles in ICU/HDU – one which we had resolved. At the end of the day however I recognise that Infection Control does have a responsibility to make sure what we design is fit for purpose.

If we cannot resolve this issue quickly this has the potential to be very (financially) expensive.

I would appreciate your input and would be happy to meet if that would be helpful

Stephen

Dr Stephen J Gallacher
Consultant Physician/Lead Clinician (Medicine)
Southern General Hospital
1345 Govan Road
Glasgow G51 4TF

Telephone (Secretary): [redacted]
Fax (Direct): [redacted]

Lang, Ann

From: Mike.Baxter[redacted]
Sent: 12 August 2010 08:27
To: McCluskey, Fiona
Cc: Seabourne, Alan; Bettina.Sizelan[redacted]
James.White[redacted] Norman.Kinnea[redacted]
Subject: RE: Critical care bed configuration New South Glasgow Hospital

Fiona

Thank you for this helpful paper. I am clear that the guidance recently issued in respect of single rooms relates to in patient ward accommodation and I therefore have no problem with the proposed configuration on the basis that the Board is confident that the ratio of open plan to isolation rooms gives sufficient coverage for those patients with high infection risk. With regard to the separation of beds within the open plan areas you will clearly want to ensure that, given agreement of infection control colleagues to arrangements, that privacy and dignity issues are adequately addressed with the physical screening arrangements put in place.

Kind Regards

Mike Baxter
Deputy Director (Capital Planning and Asset Management)
Scottish Government Health Directorates
Tel [redacted]
Mob [redacted]

From: McCluskey, Fiona [redacted]
Sent: 10 August 2010 12:40
To: Baxter M (Mike) (Health)
Cc: Seabourne, Alan
Subject: Critical care bed configuration New South Glasgow Hospital

Mike

Alan Seabourne has asked me to forward the paper outlining the reasons behind the proposed configuration of the Critical Care Unit in the New South Glasgow Adult Hospital. I look forward to your comments.

Kind regards

Fiona

please note new address & telephone number

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard [redacted]

New South Glasgow Hospital Project
Configuration of the Adult Critical Care Unit

1.0 Introduction

This purpose of this paper is to inform the Scottish Government Health Department on the proposed configuration of the Adult Critical Care Unit within the New South Glasgow Adult Hospital and to seek support for the design. National guidance is clear on the requirement for 100% single rooms, therefore all generic in-patient wards will have 100% single room accommodation. However clinicians remain concerned that 100% single room accommodation across Critical Care will pose significant challenges to the operational management of the unit.

2.0 Background

A 79-bedded Critical Care Unit is planned which will deliver services currently delivered from Intensive Care Unit's (ICU's) at the current Southern General Hospital, Victoria Infirmary & Western Infirmary. In addition it will also provide a High Dependency Unit (HDU) and will be co-located (share core entrance, administrative and support space) with Coronary Care (CCU). Co-locating all critical care services together facilitates the management of patients by specialist intensive care and cardiology staff, recognises economies of scale, increases flexibility around bed and staffing requirements and provides an ideal multi-professional training environment for clinicians from a wide range of specialties.

Meetings have been held with the clinicians, nursing staff, managers, project manager, infection control and architect to agree a design that meets national guidance and is clinically acceptable to the users delivering the service. The group considered other recent new builds, guidance regarding single rooms, infection control, the patient environment, and operational & staff retention issues.

It is proposed that Coronary Care will have 20 single rooms with en-suites. ICU/HDU patients will be managed in groups of 10 in "pods" that facilitate a high level of visibility and clinical management by the responsible medical and nursing staff and will have a total of 12 single isolation rooms & 47 open bed spaces. There will be an overall total of 96% single room accommodation across the hospital.

2.1 Benchmarking Exercise

The group also considered the results of a benchmarking exercise which reviewed new/recent refurbished units:

- Golden Jubilee National Hospital – open fronted cubicles with glass sides.
- Queens Hospital, London (completed 2006) - 100% open plan.
- Forth Valley (for completion 2010) – 60%/40% open plan/isolation rooms.
- Birmingham Royal Infirmary (for completion 2010) – 100% open plan.
- Pembury Hospital (for completion 2010) – 100% single rooms.

2.2 Single Room Accommodation & Bed Spacing Guidance

Single Room Accommodation & Bed Spacing Guidance (CEL 27 (2010) states *"in new developments where there are clinical reasons for not making 100% single room provision they should be clearly articulated in the appropriate Business Case." "In relation to bed spacing for multi-bedded rooms, the current advice remains unchanged. That is, taking into account of ergonomic criteria, specifically the amount of space required for*

patient handling and other activities which take place in the immediate vicinity of the bed, it is recognised that the minimum bed space should be not less than 3.6m (wide) x 3.7m (deep)".

This planned Critical Care design exceeds the minimum bed spacing guidance with an average bed spacing of 4.9m (wide) x 5.7m (deep). Each bed space will have an average total area of 27.17m² and will have a clinical wash hand basin at the front of the space.

Scottish Health Planning Note 57 – Facilities for Critical Care (draft 2008) provides guidance for the design of a critical care unit and states that *"Individual project teams should decide the minimum number of single bedrooms required, basing their decision on case mix and acting on the advice of the infection control team".*

2.3 Infection Control

As HAI rates have a direct correlation between staffing levels/hand hygiene the Infection Control Senior Management Team have advised that each bed space should be designed with a clinical wash hand basin placed at the front of the bed space - this has been incorporated into the design. As the design exceeds minimum bed spacing the Infection Control Senior Management Team have advised that there would be no added infection control risk to the patients nursed in individual open bays. The only exception would be patients who constitute a high infection risk who should be nursed in an isolation room. The Unit is designed in "pods" of 10, each with their own support areas (clean & dirty utility, nurses stations, patients showers/toilets) which allows maximum flexibility within the unit & will facilitate the separation of elective and emergency patients with the ability to 'close off' a "pod" during an infection control outbreak.

2.4 The Patient Environment

Clinicians acknowledge the benefits of single rooms in terms of privacy & dignity, lower ambient noise levels and some degree of control of individual room conditions, however there is a clinical consensus that a predominately open plan layout is desirable. This consensus relates to operational and staff welfare issues (as described below).

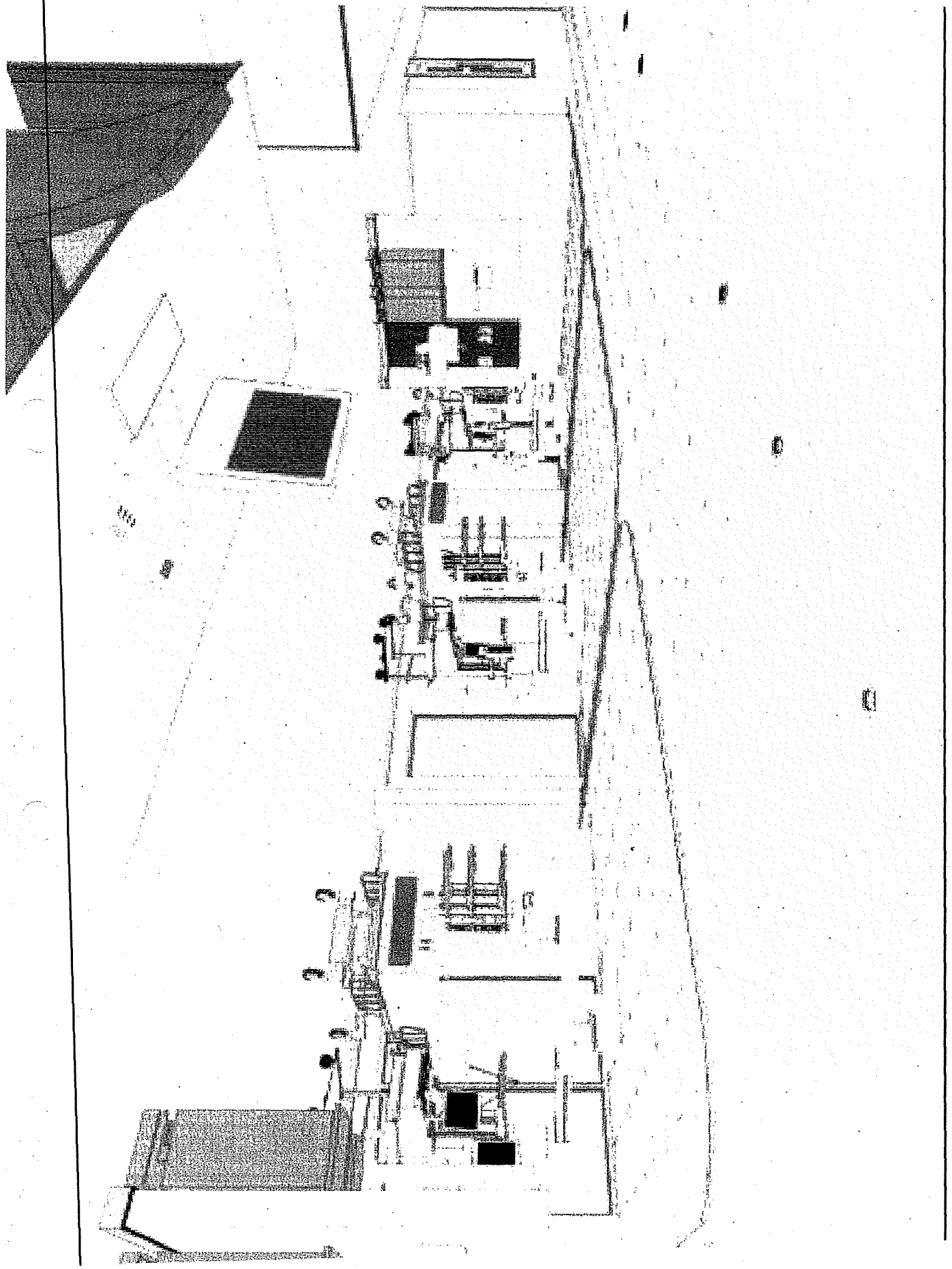
2.5 Operational & Staff Retention Issues

ICU clinicians and nurse managers are strongly opposed to 100% single rooms. They believe that the construction of any physical barrier surrounding bed areas will reduce the ability of staff in to hear what is happening in adjacent spaces and will reduce the opportunities for informal and experiential learning between colleagues. There is a perception that completely enclosed rooms, even where these are formed in glass will lead to staff feeling isolated and not provide an environment that is attractive to clinical staff in an area that already faces recruitment challenges.

There is a perception that there will be a requirement for an increase in the nursing establishment within an area comprising 100% single rooms and that the current workforce establishment would not fulfil this. An example of this is providing cross-cover for more than one patient during staff breaks in ICU and routinely looking after 2 patients in an HDU area.

3.0 Conclusion

Critical Care clinicians, nursing staff and managers have stated a preference for an open plan unit with curtains separating the bed spaces. There will also be isolation rooms as outlined within the paper. This view is supported by the NHS Greater Glasgow & Clyde Acute Services Chief Operating Officer, the Director of Surgery & Anaesthetics and the Infection Control Senior Management Team.



McCluskey, Fiona

From: Walsh, Tom
Sent: 23 June 2010 17:22
To: McCluskey, Fiona
Cc: McNamee, Sandra; Williams, Craig; Stewart, Jackie
Subject: RE: Critical Care NSGH

Hi Fiona

We discussed this at our SMT and the position remains as set out by Sandra, i.e. The bed spacing is adequate from an IC perspective and there is no increased risk associated with the removal of glass partitions from the plans.

This does not however address the issues associated with the overall provision of single room accommodation within Critical Care which remains non compliant with the relevant CEL and building note as previously intimated.

My understanding from your previous e-mails is that Jane Grant has approved the figure of 40% Single Room accommodation within the new SGH and therefore this hopefully concludes the discussion around this?

kind regards

Tom

-----Original Message-----
From: McCluskey, Fiona
Sent: 23 June 2010 17:03
To: Walsh, Tom
Subject: Critical Care NSGH

Hi tom

Sorry to be a pest but I wondered if you had managed to discuss the configuration of the Critical care unit with Craig yet? we are going into metings with the Critical care users first thing in the morning so it would be helpful if we knew what the IC advice is on whether or not we can take the glass partitions down between the beds before the meeting commences

Kind Regards

Fiona

FW: Ventilation

McNamee, Sandra [redacted]

Tue 10/05/2016 09:16

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]

1 attachment

Ventilation.doc;

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Stewart, Jackie
Sent: 18 August 2011 11:31
To: Walsh, Tom; McNamee, Sandra; Williams, Craig; Joannidis, Pamela
Subject: Ventilation

Hi,

Please find attached the ventilation specified so far. As I said I'm meeting with the M&E chaps next week to go into some more detail.
If this is not how you remember the spec, then please let me know and I'll take all the requirements with me to the informal meeting next week. I'm arranging to speak to someone about the water and will pass on details asap.

I can also confirm that procurement have been informed that washing machines are a big NO. The project manager is out of the office until this afternoon but I will guve her the heads up in case any of the users try and get one in the 'back door'. However, to be fair to Mairi, it's the sort of issue she would would pass by me anyway.

Thanks for your time this morning.

Kind regards,

Jackie.

A49525252

Ventilation/Infection Control

- Haemato-oncology will be a sealed hepa filtered ward; positive pressure to the rest. of the hospital and the treatment room will be negative pressure.
- 10 negative pressure rooms in critical care.
- 3 negative pressure rooms per respiratory ward.
- Renal in-patients will have 2 positive pressure rooms and a negative pressure ante-room.
- There will be 2 negative pressure rooms (no ante-rooms) in A&E.

All the above listed will be complaint with SHTM 03-01 and SHPN 4.

RE: M&E design for New south Glasgow Hospitals

Inkster Teresa (NHS Greater Glasgow & Clyde)

Sent: 24 August 2012 14:43

To: Walsh, Tom [redacted]; craig.williams [redacted]; jackie.stewart [redacted]

Jackie,

I would be keen to attend - I am free on the 17th
BW
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Walsh, Tom [redacted]
Sent: 24 August 2012 14:21
To: craig.williams [redacted]; jackie.stewart [redacted]
Cc: Inkster Teresa (NHS Greater Glasgow & Clyde)
Subject: RE: M&E design for New south Glasgow Hospitals

Hi Jackie

I'd be keen to be involved, but I'm on leave from 17th so wouldn't want to hold the meeting up.

Cheers

Tom

From: Williams, Craig
Sent: 24 August 2012 13:12
To: Stewart, Jackie
Cc: Inkster, Teresa (NHSmail); Walsh, Tom
Subject: RE: M&E design for New south Glasgow Hospitals

Dear Jackie

17TH would be good for me. From the air point of view it would be useful to have the detail for both adult and paediatric builds around:

the theatre suites
haem-oncology especially the bone marrow transplant areas including drawings of the rooms and proposed air flow in rooms and ante rooms

the proposed TB standard isolation room including drawings of the rooms and proposed air flow in rooms and ante rooms

Side rooms in ICU including drawings of the rooms and proposed air flow in rooms and ante rooms

And a list of any other proposed controlled ventilation areas on each floor including isolation rooms.

From the water point of view

Water provided to Haem-Onc including detail around instantaneous water heaters for showers etc and whether a separate water supply is being provided to this area
NICU
ICU
What specifications is the dialysis water to the renal units being provided to

If Teresa she might also want to come along, Tom may also wish to be there as he was involved in the initial discussions around provision of side rooms. If the detail could be circulated prior to the meeting that would be very helpful

I assume the meeting will be in the project offices

Craig

From: Bremner, Margaret
Sent: 23 August 2012 10:26
To: Stewart, Jackie; Williams, Craig
Subject: RE: M&E design for New south Glasgow Hospitals

Hi Jackie

Prof Williams is out of the office until Monday 3 September, the only date available is 17 September from 3:00pm onwards.

Cheers
Mags

From: Stewart, Jackie
Sent: 23 August 2012 09:53
To: Williams, Craig
Cc: Bremner, Margaret
Subject: M&E design for New south Glasgow Hospitals
Importance: High

Hi Craig,

The technical guys were wondering if you were available to meet with them either the 5th or 17th September? The will outline the water systems and ventilation systems in a generic format, e.g. bedrooms will have x amount of air changes, treatment rooms will have x amount of air changes etc.
If there ia a particular area you want more detail on, please let me know and they will prepare the data for your meeting.

Kind regards,

Jackie

New Build

Williams, Craig [redacted]

Sent: 18 September 2012 13:14

To: jackie.stewart[redacted]

Cc: Inkster Teresa (NHS Greater Glasgow & Clyde)

Dear Jackie

We were asked yesterday to provide the standards for renal water to the new build team

They are as below

BS ISO 26722 2009 Water treatment equipment for haemodialysis applications and related therapies

BS ISO 13959 2009 Water for haemodialysis and related therapies at the time of installation.

ISO 23500:2011 Guidance for the preparation and quality management of fluids for haemodialysis and related therapies

We agreed all correspondence would go through you so if you'd be kind enough to pass it on

Craig

****

Jackie.

Lang, Ann

From: McNamee, Sandra
Sent: 07 September 2015 15:15
To: Lang, Ann
Subject: FW: Isolation rooms
Attachments: DH Isolation rooms 10-12.pdf; HBN 4 Supp 1 Isolation facilities.pdf; HBN 4 Suppl 1 NOTE ON WITHDRAWA L 18-5-10.docx

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

om: Stewart, Jackie
ent: 14 November 2012 14:46
To: McNamee, Sandra
Subject: FW: Isolation rooms

Hi Sandra,

This is the email I alluded to yesterday. I have to admit that I'm a bit confused as this design was accepted before I joined the team and that Craig has been asked on numerous occasions to check issues that crop up. Craig and Teresa spent a lot of time with the tech guys and I specifically asked Craig what he wanted to go into in detail, as well as the overall approach to ventialtion and water supply. Brookfield have worked to the guidance.
I will however diplomatically double check the ventilation supply for these rooms with lobbies. My understanding is that they are negative pressure.
I'll get back to you asap.

Thanks,

Jackie.

---

om: Inkster Teresa (NHS Greater Glasgow & Clyde) [redacted]
Sent: 09 November 2012 15:45
To: Williams, Craig
Cc: Stewart, Jackie
Subject: FW: Isolation rooms

Thoughts from Peter Hoffman below regarding the isolation rooms.
BW
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Peter Hoffman [redacted]
Sent: 09 November 2012 15:35

To: Inkster Teresa (NHS Greater Glasgow & Clyde)
Subject: RE: Isolation rooms

Dear Teresa,

I suspect these rooms are "positive pressure ventilated lobby" (PPVL) room to the design in Health Building Note 4 supplement 1 (HBN4 suppl 1) – pdf attached. I'm not sure of the position in Scotland, but this guidance was archived in 2010 and replaced (England) very recently by the isolation room guidance attached.

I am not entirely happy with the HBN 4 suppl 1 room concept and see it as a series of engineering solutions to problems that may not merit that degree of solution. Let me explain (with reservations in brackets). The concept is that a high volume of air is supplied to the lobby. That air then flows out to both the corridor and into the room, creating a barrier to protect patients in the room from airborne microbes in the corridor. (I can't see what infectious agents would be relevant here). Air flows into the patient's room via a pressure release dampers – those moveable flaps you get in theatres. If built precisely to the design parameters of the test setup used to "prove" these rooms, this air circulates in the patient room and rapidly dilutes any airborne infectious agents from a patient in the bed. (1 – the tested dimensions are not published and the rooms I have seen are all variants on that pattern; 2 - I can't see why there needs to be such rapid dilution – staff are not that much at airborne risk). The air then passes through a transfer grille in the bathroom door and is extracted via a powerful extract in the ensuite bathroom. Another worry is that, while described as "neutral" pressure, this only means that the patient rooms are not intentionally positive or negative; they nevertheless will be either one or the other. If they leak outwards, there is the possibility of escape of infectious agents to adjacent rooms. The rooms are meant to be leak tested when they are first commissioned (but to a standard that relates to energy efficiency rather than total sealing) and annually thereafter (not sure how realistic this is).

I am happier with the concept of negative pressure. No attempt at "protective" isolation and rooms can leak, but they leak safely inwards. Simple and robust.

For protection of highly neutropenic patients (these are specifically excluded from both previous and current editions of the guidance), all fungal spores need to be removed from the air. This would be by HEPA-filtering the supplied air and ensuring that these room leak outwards, preventing ingress of unfiltered air via gaps (hence "positive pressure", but the protection is mostly in the HEPA filtering – positive pressure without HEPA filtration is pointless).

Does this address you questions? Happy for further exploration of the matter.

Regards,
Peter

From: Inkster Teresa (NHS Greater Glasgow & Clyde) [redacted]
Sent: 09 November 2012 10:57
To: Peter Hoffman
Subject: Isolation rooms

Dear Peter,

I was wondering if I could ask your advice about isolation rooms . I have been shown plans for the new Southern general hospital in Glasgow which include a suite of isolation rooms with lobbies . I am not familiar with these rooms although I am aware they have been put in new builds elsewhere . Is there any disadvantages to having them as opposed to the conventional negative and positive pressure rooms?

Kind Regards
Teresa

Lang, Ann

From: McNamee, Sandra
Sent: 07 September 2015 15:15
To: Lang, Ann
Subject: FW: NCH project meeting

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Joannidis, Pamela
Sent: 14 June 2013 08:37
To: Walsh, Tom; McNamee, Sandra
Cc: Williams, Craig; Stewart, Jackie
Subject: NCH project meeting

Hi

Craig, Jackie and myself met with Fiona McCluskey and Marie McLeod yesterday to review the design plans for the new children's hospital.

We were shown pathways for children with potentially transmissible infections into ED from waiting room, to triage through to mechanically ventilated en suite rooms in the children's observation ward.

We had discussions around 3-walled cubicles in main ED with curtain. Craig asked for information on air flows in / out of these bays.

We discussed mechanically ventilated isolation rooms. The NCH will have 24 lobbied en suite rooms (6 in PICU, 2 in observation ward, 6 in Haem/onc and the rest scattered throughout building in clusters of two).

Frances Wrath will provide Craig with information on the following:

1. Air flow around and in/out of bays in main ED.
2. Confirmation of HEPA filters on BMT vents
3. Location of dialysis points in building

kind regards

Pamela Joannidis
Lead Nurse, IC SGH and RHSC

From: Joannidis, Pamela
Sent: 01 September 2015 11:14
To: Lang, Ann
Subject: FW: SLWG Inpatient Redesign Group - Agenda / Minutes - 27.09.13
Attachments: SLWG Agenda - 270913.doc; SLWG Minutes - 060913.doc

From: Crookes, Cathy
Sent: 16 September 2013 15:34
To: Anderson, Helen; Barclay, Andrew; Bruce, Jacquie; Campbell, Morag; Crawford, Belinda; Davies, Philip; Dawes, Heather; Douglas, Anne; Drummond, Elaine; Gallacher, Christine; Hackett, Janice; Hammond, Phil; Hughes, Janis; Joannidis, Pamela; Liddell, Morag; Love, Elaine; McGoldrick, Pamela; McGrogan, Paraic; McKee, Lesley; Mohammed, Kalsoom; Morrissey, Simon; Ralph, Yvonne; Ramage, Ian; Redfern, Jamie; Robertson, Lynne; Rose, Carol; Rowland, David (NHSmail); Sabharwal, Atul; Stirling, Joanne; Taylor, Judy; Taylor, Maureen; Walker, Ailsa
Cc: Kubba, Haytham; Williams, Craig
Subject: SLWG Inpatient Redesign Group - Agenda / Minutes - 27.09.13

Dear All,

Please find attached Minutes and Agenda for the next scheduled meeting on Friday 27/9/13, 1.00 - 3.00pm, QMH Lecture

Please note that the Door Access Code for the QMH Lecture Theatre is - [redacted]

Many Thanks

Cathy Crooks
PA to Lynne Robertson, Heather Dawes
[redacted]

Acute Services Division
Women & Children's Directorate

AGENDA

Meetings:	Hospital Paediatrics & Neonatology On the Move / Inpatient Redesign Group
Date:	Friday 27th September 2013
Time:	1.00 - 3.00pm
Venue:	QMH Lecture Theatre

Item

1. **Apologies**

2. **Actions from notes of last meeting**
   - **2.1 Control of Infection Feedback**
   - **2.2 Proposed bed model**
   - **2.3 Medical staff cover**
   - **2.4 Nursing staff cover**

3. **AOB**

4. **Date & Time of Next Meeting**
   TBA

	our option appraisal for a bed model that does not adhere to the principles applied in adult services. E.G. isolation - co-location of patient groups in particular ring fencing of oncology / haematology, orthopaedics, cardiac specialties and co-location of long term respiratory patients with elective surgery patients and patients with bowel and bone conditions. Elaine Love representative on Acute Control of Infection group to take papers as described to meting on Monday 9 September 2013	**EL**
2.2	Proposed Bed Model There is no update on the proposed bed model due to control of infection issues therefore this will be decided once the control of infection issues are clarified	
2.3	Medical Staff Cover Discussion took place regarding ward based and specialty based junior medical staff allocation. Those present identified their rationale regarding their preference for a particular option. There was not a consensus at the meeting. It was suggested that Ian Ramage and a Surgical and Medical colleague representative develop a medical staff model(s) for the next meeting to be discussed.	**IR**
2.4	Nurse Staff Cover Judy Taylor updated the group regarding skills analysis and training programme development that includes the 4th floor and 3A in addition to E.D. Depending on the preferred bed model Elaine Drummond has highlighted further training and education is required regarding cleft service patients. It was noted that this will be included in the training and development programme. The medical staff present are keen to support and get involved and would be happy to make any suggestions to help the. Information to be shared with consultant colleagues. Judy Taylor noted that at the time of transfer of services if there was not enough appropriately trained staff then staff would need to move with the patient. This will be decided nearer the time should this go ahead. Recruitment continues for winter. Posts advertised and interviewing will take place shortly. It is noted that this is in a better timeline than last year	**JT/MT**
3.	**AOB** LR tabled some data that Anne Douglas, Bed Manager has produced in relation to information taken from TrakCare with regard to elective and emergency admissions in Ward 4B and 3A. Helen Anderson wondered if there was double counting in figures as patients are moved frequently. Information helpful but some of the group felt more detail was required	**JR**
4.	**Date & Time of Next Meeting** **Friday 27th September 2013, 1.00 - 3.00pm, QMH Lecture Theatre** **PLEASE NOTE DOOR CODE IS -** [redacted]	**ALL TO NOTE**

Lang, Ann

From: Joannidis, Pamela
Sent: 01 September 2015 11:15
To: Lang, Ann
Subject: FW: SLWG Inpatient Redesign Group - 25/10/13
Attachments: Yorkhill Bed model PJ 2.doc; SLWG Agenda - 251013.doc

From: Crookes, Cathy
Sent: 24 October 2013 16:59
To: Anderson, Helen; Bruce, Jacquie; Campbell, Morag; Crawford, Belinda; Davies, Philip; Dawes, Heather; Douglas, Anne; Drummond, Elaine; Gallacher, Christine; Hackett, Janice; Hammond, Phil; Hughes, Janis; Joannidis, Pamela; Liddell, Morag; Love, Elaine; McGoldrick, Pamela; McGrogan, Paraic; McKee, Lesley; Mohammed, Kalsoom; Morrissey, Simon; Ralph, Yvonne; Ramage, Ian; Redfern, Jamie; Robertson, Lynne; Rose, Carol; Rowland, David (NHSmail); Russell, Richard (NHSmail); Sabharwal, Atul; Stirling, Joanne; Taylor, Judy; Taylor, Maureen; Walker, Ailsa
Subject: SLWG Inpatient Redesign Group - 25/10/13

Dear All,

Attached is the paper produced by Control of Infection Team and Agenda for meeting tomorrow 25/10/13

Many Thanks

Cathy
[redacted]

Acute Services Division
Women & Children's Directorate

AGENDA

Meetings:	Hospital Paediatrics & Neonatology On the Move / Inpatient Redesign Group
Date:	Friday 25th October 2013
Time:	1.30 - 3.30pm
Venue:	QMH Lecture Theatre

Item

1. Apologies

2. Actions from notes of last meeting
- **2.1 Control of Infection Feedback**
- **2.2 Proposed bed model**
- **2.3 Medical staff cover**
- **2.4 Nursing staff cover**

3. AOB

4. Date & Time of Next Meeting
TBA

Infection Control Risks for consideration when redesigning paediatric services.

Introduction- setting the scene

A number of studies have identified the unique infection control issues in the paediatric population. There is a higher prevalence of community-acquired infections among hospitalised children and infants who have not yet become immune, resulting in more patients and their sibling visitors with transmissible infections present in paediatric healthcare settings, especially during seasonal epidemics (e.g. pertussis, respiratory viral infections, varicella, measles and rotavirus).

Close physical contact between healthcare workers and infants and young children (e.g cuddling, feeding, playing etc) and behaviours of youngsters within play /socialisation spaces provide increased opportunities for transmission of infectious materials. Family members rooming-in with a young patient can further increase the risk of transmission.

A number of intrinsic factors increase the likelihood that this exposure will result in infection, including immaturity of the neonatal immune system, lack of previous natural immunity, prevalence of patients with congenital or acquired immune deficiencies, congenital anatomic anomalies and use of invasive devices. Children receiving long term care interventions may be sources of introduction of resistant organisms to acute care settings.

Before proceeding with the redesign it is important to identify the potential Infection Control Risks. These fall into 2 main groups:

a) Where proposed paediatric practices differ from established adult practice
b) Risks inherent to a paediatric population

a) A number of IC segregation practices are well established in NHSGGC, these include;

i) complete "ring fencing" of elective orthopaedic patients from other medical and surgical admissions.
ii) Separation of Haematology/Oncology patients
iii) Separation of Cardiothoracic patients
iv) Separation of orthopaedic and gastrointestinal surgical patients

There is evidence that ring fencing elective orthopaedic joint replacement cases, is effective in reducing MRSA infection in adults. There is little evidence in the literature around segregating other groups.

B) Admissions to paediatric hospitals have a higher incidence of infective conditions than in adults. HEAT targets for MRSA and C difficile are not directly relevant to paediatric practice but there are no nationally agreed targets for paediatrics. Historically HAI RSV has been used as a measure at RHSC with a target of less than 2%. Following discussions at the Clinical Governance committee at the end of last year RSV HAI was measured for the 2012-3 RSV season and showed a rate of 4 %, higher than historic levels suggesting a possible effect of changes in bed management. There were also incidents with MRSA, Serratia, RSV, Parainfluenza and rotavirus over the last 12 months, again a higher number than the historical norm.

Year	Number of outbreaks/incidents	Organisms involved	Initial patient is side room
2009	3	D+V, Pseudomonas	Yes / no
2010	2	MRSA, RSV	No /Yes
2011	4	(D+V), Rotavirus, CDI, RSV	Yes
2012	8	Rotavirus, RSV, Para-influenza, CDI, Norovirus, adenovirus, Influenza, pertussis	Yes

Table 1: Infectious incidents recorded for 2012/13 RHSC

There are also additional problems specific to paediatrics, of parents providing care, different age groups mixing, both patients and visitors and the need to minimise day case attendance to the ward area. Toddlers will have a higher incidence of "community" viral infections which in this age group may be mild but if transmitted to immunocompromised long stay patients and the neonatal population may cause significant morbidity. Patients with chronic conditions such as CF, long term ventilated patients and some GI patients may also be colonised with multi-resistant gram negative organisms which may pose a risk to other patient groups if cross infection occurs

2. Practice in other areas and units

There does not seem to be a standard layout of wards in other UK paediatric centres. Larger paediatric hospitals tend to have separate orthopaedic wards and oncology units. For example Leeds has separated out acute and specialist medicine, haematology-oncology, adolescent and specialist surgery wards. John Radcliffe Hospital has separate wards for elective treatments, nephrology/urology, spinal and orthopaedics and cardiac.

3. Operational issues

If there is to be a different standard of care applied to patient placement in paediatrics than in adults it is important to examine the reasons for this.

While the numbers of Haematology-Oncology patients may ensure that segration of this group is possible, the number of elective orthopaedic and cardiac cases are not sufficient to staff separate wards. It may be possible to consider separating admissions geographically around a mixed ward but other factors such as skill mix of staff and availability of specialist equipment also need to be considered

	In-patient activity	Occupied bed days
Cardiology and cardiac surgery	1,333	5,850
Elective orthopaedics	1,122	2158
ENT and respiratory	2,577	8,101
Gastroenterology	453	1973

Table 1: In-patient and occupied bed days for RHSC 2012/13

CD (2007) Guideline for Isolation Precautions: Prevention Transmission of Infectious Agents in Healthcare Settings

Lang, Ann

From: Joannidis, Pamela
Sent: 01 September 2015 11:11
To: Lang, Ann
Subject: FW:

From: McCluskey, Fiona
Sent: 03 July 2014 10:02
To: Joannidis, Pamela
Subject: RE:

Hi Pamela

ee below information on lobbied isolation rooms

NCH	Observation ward	2no.
	PICU	4no.
	Cardiology	2no.
	ARU	2no.
	Schiehallion	8no.
	General wards	6no.
NSGH	Critical Care	10no.
	Renal (higher acuity)	2no.
	Haemato-oncology (HEPA filtration – not lobbied)	24no.

Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

From: Joannidis, Pamela [redacted]
Sent: 03 July 2014 09:25
To: McCluskey, Fiona

Thanks Fiona

Could you let us know Is it definite that the BMT from Beatson and the Brownlee wards are moving in to the new SGH?

Could you also let me know how many lobbied single rooms we have in the adult hospital again please?

kind regards

Nurse Consultant, Infection Prevention and Control

NHS Greater Glasgow and Clyde

[redacted]

From: McCluskey, Fiona
Sent: 03 July 2014 09:15
To: Joannidis, Pamela
Subject: RE:

Pamela

Grant Archibald chairs the IP Steering Group
Anne Harkness chairs the Emergency Flows Steering Group

Kind Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

From: Joannidis, Pamela [redacted]
Sent: 03 July 2014 08:29

Hi Fiona

Thank for this. Can you send me the names of the chairs of both please?

kind regards

Nurse Consultant, Infection Prevention and Control

NHS Greater Glasgow and Clyde

[redacted]

From: McCluskey, Fiona
Sent: 01 July 2014 15:50
To: Joannidis, Pamela
Subject:

Hi Pamela

Re: the process and protocols for patients requiring isolation..

Perhaps this is something that you would wish to take to the OTM Inpatient Flows Steering Group and the Emergency Flows Steering Group.

Kind Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

Lang, Ann

From: Joannidis, Pamela
Sent: 01 September 2015 11:11
To: Lang, Ann
Subject: FW:

From: McCluskey, Fiona
Sent: 03 July 2014 10:55
To: Joannidis, Pamela
Cc: Gallacher, Stephen; Griffin, Heather; Loudon, David
Subject: RE:

Hi Pamela

During the planning stage there were several meetings with Infection Control to agree and sign off the number of lobbied rooms required for the hospitals.

The transfer of the BMT was approved by Jane Grant late 2013 and the ward design was amended to incorporate this change.

The move of the Brownlee is a fairly recent decision made by ECMS Directorate. The Brownlee and was not considered as an option during the planning stage and Business Case. Therefore there are no plans to provide extra lobbied accommodation within the generic wards. The hospital tower is now built and ward areas completed or near completion.

It is important to note that any change to the tower design would have an significant impact on the hospital design, the contract and the final bed model for NHSGG&C and would need to be agreed by Robert Calderwood via the formal change process.

Kind Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

From: Joannidis, Pamela [redacted]
Sent: 03 July 2014 09:33
To: McCluskey, Fiona

Hi Fiona

Jackie has just updated me with the information re Brownlee and BMT. Can we ask if extra provision has been considered for these patients in the generic wards if they require lobbied accommodation?

kind regards

Nurse Consultant, Infection Prevention and Control
NHS Greater Glasgow and Clyde
[redacted]

Lang, Ann

From: McNamee, Sandra
Sent: 07 September 2015 15:05
To: Lang, Ann
Subject: FW: Emailing: Single rooms Critical Care briefing paper for J Grant June 2009
Attachments: Single rooms Critical Care briefing paper for J Grant June 2009.doc; Critical Care meeting with J Grant 12.6.09v2.doc

Importance: High

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

-----Original Message-----
From: Stewart, Jackie
Sent: 16 June 2010 10:55
To: McNamee, Sandra
Subject: FW: Emailing: Single rooms Critical Care briefing paper for J Grant June 2009
Importance: High

Hi Sandra,

As I mentioned yesterday, we are sitting at 40% single rooms on the crtical care floor (despite being reassured it would reach 50% including the CCu beds).
Fiona has said that the clinicians would be happier with curtains instead of the glass partitions if infection control are happy with this.
I have forwarded 2 papers that Fiona emailed me this morning. It is the first time I have seen them. Apologies if you have seen them already.
I'd be grateful for your guidance on this.

Thanks,

ckie.

-----Original Message-----
From: McCluskey, Fiona
Sent: 16 June 2010 09:23
To: Stewart, Jackie
Subject: Emailing: Single rooms Critical Care briefing paper for J Grant June 2009

Jackie

here are the papers that I discussed with you re: critical care layout. the clinicians would prefer an open layout with curtains between the beds, the compromise between the users & IC was to put up glasss partitions like the GJNH.

Good luck with the meeting with Sandra

Let me know asap as we will need to discuss with Alan

regards

New South Glasgow Hospital Project
Configuration of the Adult Critical Care Unit

1. Introduction

This purpose of this paper is to facilitate a decision regarding the requirement for single rooms within the Critical care Unit for the New South Glasgow Hospital. A decision is required for bidders taking part in the Competitive Dialogue process by 17th June 2009.

Within the New South hospital build a 79 bedded Critical Care Unit is planned. This will incorporate 20 ITU beds, 39 HDU beds and 20 CCU beds. The present schedule of accommodation allows for either single room or open plan configuration. An outstanding issue persists around whether beds for ITU/HDU are configured within single rooms or larger open spaces.

The paper explores the guidance on 100% single rooms and Critical Care Units and the views of Infection Control, managers and clinicians.

2. Single Rooms

There are 2 sets of guidance regarding single rooms. These are Provision of Single Room Accommodation & Bed Spacing (CEL 48) and Scottish Health Planning (SHPN) Note 57 (Draft 2008).

CEL 48 provides guidance for single rooms " For all new – build hospitals or other healthcare facilities which will provide in-patient accommodation ***there should be a presumption that all patients will be accommodated in single rooms, unless there are clinical reasons for multi-bedded rooms to be available.***"

SHPN 57 provides guidance for the design of a critical care unit and states that "Individual project teams should decide the minimum number of single bedrooms required, basing their decision on case mix and acting on the advice of the infection control team. ***Where possible, allowance should be made for future conversion of open bed spaces to isolation spaces.***"

A single room is defined as a room with a space for one patient with a bed, locker, clinical wash hand basin and space to accommodate all clinical equipment permanently located around the bed. This should not be confused with isolation rooms which are for patients who have special vulnerability or constitute an infection risk. These rooms provide specialized filtration and ventilation and have a gowning lobby attached.

3. Benchmarking

The design of Critical Care Units differs widely across the UK. A review of new/recent refurbished units was undertaken by the project team and clinical staff. The results are shown below

- Golden Jubilee National Hospital – open fronted cubicles with glass sides.
- Queens Hospital, London (completed 2006) - 100% open plan.
- Forth Valley (for completion 2010) – 60%/40% open plan/isolation rooms.
- Birmingham Royal Infirmary (for completion 2010) – 100% open plan.
- Pembury Hospital (for completion 2010) – 100% single rooms.

4. Current Situation

Several meetings have been held with the clinicians, nursing staff, managers, project manager, healthcare planner, infection control and architect to agree a design that meets national guidance and is clinically acceptable to the users delivering the service. During the meetings the issues of infection control, patient environment and operational issues/ staff welfare were discussed and are detailed below:

- Infection Control

There is a large body of evidence which supports the consensus that single room accommodation is effective in preventing HAI, however this evidence largely relates to general ward areas and not to Critical Care Units. There is an ongoing debate within the Infection Control team; some of the team are keen to comply with 100% single rooms, whereas others acknowledge that HAI rates have a direct correlation between staffing levels/hand hygiene. As Critical Care has a high staff /patient ratio, there would be no added benefit of single room accommodation. The only exception would be patients who constitute a high infection risk who should be nursed in an isolation room. Clinicians have requested 10 isolation rooms for the Critical Care Unit.

- The Patient Environment

Clinicians acknowledge the benefits of single rooms in terms of privacy & dignity, lower ambient noise levels and some degree of control of individual room conditions, however they still want open plan due to perceived operational and staff welfare issues.

- Operational & Staff Welfare Issues

ITU clinicians and nurse managers are strongly opposed to 100% single rooms. They believe that the construction of any physical barrier surrounding bed areas will reduce the ability of staff in to hear what is happening in adjacent spaces and will reduce the opportunities for informal and experiential learning between colleagues. There is a perception that completely enclosed rooms, even where these are formed in glass will lead to staff feeling isolated and not provide an environment that is attractive to clinical staff in an area that already faces recruitment challenges.

There is a perception that there will be a requirement for an increase in the nursing establishment within an area comprising 100% single rooms and that the current establishment would not fulfil this. An example of this is providing cross-cover for more than one patient during staff breaks in ITU and routinely looking after 2 patients in an HDU area.

The Clinical Director has confirmed that he would support as high a level of single room accommodation as can be rendered compatible with patient safety and provision of care by the current staffing levels.

Consensus amongst Nurse Directors is that single room accommodation in itself should not increase the number of nurses required, however where staffing levels are already compromised, these may be exacerbated by 100% single room accommodation.

5. Summary

Several meetings have been held to consider the configuration of the ITU/HDU beds and to date the group have been unable to achieve a consensus. The present schedule of accommodation allows for single room or open plan, however the bidders require a clear clinical brief by the 17th June 2009.

NEW SOUTH GLASGOW HOSPITALS PROJECT
ADULT CRITICAL CARE USER GROUP

Notes of a meeting held on 12th June 2009
In Jane Grant's Office,
Southern General Hospital

Present

Jane Grant	(JG)	Chief Operating Officer NHSGG&C
Alan Seabourne	(AS)	Director New South Hospitals Project
Heather Griffin	(HG)	Project Manager - New South Glasgow Hospitals Project
Stephen Gallacher	(SG)	Associate Medical Director New South Glasgow Hospitals Project
Fiona McCluskey	(FM)	Senior Nurse Adviser - New South Hospitals Project
Marion McDonald	(MMcD)	Acting CSM - Critical Care, Glasgow
Jackie Campbell	(JC)	General Manager Critical Care Glasgow
Sandy Binning	(SB)	Consultant Anaesthetist - Western Infirmary
Lesley Meikle	(LM)	Head of Nursing Surgical and Anaesthetics Directorate

Apologies

Cameron Howie	(CH)	Clinical Director - Critical Care, Glasgow
Brian Cowan	(BC)	Medical Director NHSGG&C Acute Division

AS opened the meeting, the purpose of which was to facilitate thhe decision on the layout of the Critical Care Unit for the New South Glasgow Hospital. AS informed the group that the bidders require an agreement on the unit configuration by the 17th June 2009 to formulate their bids. AS summarised the bed numbers and referred to guidance, benchmarking, infection control, the patient environment and operational /staff welfare issue. The unit comprises 79 beds in total. CCU will have 20 single rooms with en-suite facilities. Within the 59 ICU /HDU beds there is agreement that 10 of these should be isolation rooms with lobbies, however there is no consensus on the configuration of the remaining beds. Guidance for Critical Care Units (SHBN 57 draft) states that individual project teams should decide the minimum number of single bedrooms required, basing their decision on case mix and acting on the advice of the infection control team, and settles for a 50/50 minimum split of open plan/single rooms. Benchmarking has shown that new build Critical Care Units can be desined in open plan or single rooms this can be done successfully both ways.

Clinicians have acknowledged the benefits of single rooms in terms of privacy & dignity, lower ambient noise levels and some degree of control of individual room conditions. Clinicians perceive that single rooms will reduce the ability of staff to hear what is happening in adjacent spaces when additional assistance from colleagues is required in the event of a clinical emergency and will reduce the opportunities for informal and

experiential learning for junior staff, lead to staff isolation and a less attractive environment for staff in an area that already faces recruitment challenges. The clinicians preference is for an open plan unit.

The Infection Control team are keen to comply with 100% single rooms, however have also acknowledged that HAI rates have a direct correlation between staffing levels/hand hygiene and as Critical Care has a high staff /patient ratio, there would be no added benefit of single room accommodation.

SB reported to the group that a number of clinicians had recently visited the refurbished Cardiac ITU at Golden Jubilee National Hospital. He explained that he GJNH layout have bed spaces with 2- sided glass cubicles and open fronts with a wash hand basin between 2 spaces. Although the clinicians had reservations prior to the visit they had agreed that the layout would give a reasonable balance of privacy and dignity and give staff the ability to detect and recognise adverse events that need immediate intervention. SB reported that the GJNH layout would now be the preferred option for the ICU clinicians. He confirmed that this is supported by Cameron Howie. LM confirmed she was supportive and this layout would be acceptable to nursing staff.

In summary it was therefore agree that the ICU/HDU component of the Critical Care facility would consist of 49 bed spaces in 2- sided glass cubicles with open fronts and 10 single rooms with lobbies.

GENERIC WARD DESIGN PAPER

This purpose of this paper is to:-

- Provide recommendations from the Ward User Sub Group to the Clinical Advisory Board for input into the Clinical Design Brief for the Outline Business Case for the New South Glasgow Hospital.
- Seek advice from the Clinical Advisory Board on the next steps.

[redacted]

1. BACKGROUND

The Ward User Group was set up as a Sub Group of the Clinical Advisory Board under the Chairmanship of Margaret Smith, Director of Nursing. The group consisted of multi-professional experts which can be seen in Appendix 4. This included input from Directions Consultancy, Medical Planners appointed to work on NSGH OBC. The aim of the group was to produce a standardised, that is generic ward requirement, which will inform the costing and affordability exercise. This would assist in identifying the percentage of single rooms required for the new hospital.

The group also identified specialities that required 100% single rooms e.g Infectious Diseases, ITU and Renal. The Review also included benchmarking against other UK Hospital PFI sites (see Appendix 3). A number of assumptions have been made by the group based on strategies which are currently being developed i.e.

- Catering Review
- My Medicines Project
- IT

2. APPROACH

The group agreed a range of issues that were to be reviewed. Recommendations have been developed following examination of the literature, professional and expert advice being sought, with consensus being reached following group discussion.

3. SPECIFIC ISSUES

A range of specific issues need to be highlighted, as they will require further work. They include:-

- Single Rooms – should be a minimum of 50%
- Support Accommodation – which includes toilet, sink, shower, as well as storage and social accommodation needs to be sufficient to meet demands of the service
- Elective / Emergency split - workload should be separated.
- Patients View - the emerging consensus from patients and public is to have accommodation that meets needs of privacy, dignity, security and gender separation.
- Professional View - significant investment is required in working with healthcare staff to develop robust operational policies and redesign of the service.

4. NEXT STEPS

The next steps are to liaise with the Scottish Executive to do further work on a Risk Assessment Tool to determine the specific number of single rooms. Additionally further work is required to consider the impact of the single beds on manpower levels.

GENERIC WARD DESIGN AND OPERATIONAL REQUIREMENTS

Generic Design

Lead person responsible: Margaret Smith

No	Questions	Guidance	Feedback/advice from Group
1.	• Do you wish to have generalised wards that can switch from medical to surgical speciality as the need arises?		Yes – emphasis on flexibility
2.	Are there any exceptions to the standard ward layout? e.g.: • Will you require 100% single rooms for the infectious diseases ward (assumed to be 32 beds) and with dedicated air handling system?	SE guidance will be 50-100% single room **Isolation rooms: Best practice for capital planning (2004)** **Scottish Executive HDL Guidance awaited on percentage of single rooms** **Benchmarking Data as Appendix**	• 100% ITU/CCU/HDU/renal/ortho/vascular/dermatology – in addition, some of these will require to be isolation rooms • Infectious Disease (need policy for HIV, Hep B, Hep C) • Haematology • Renal 100% single side rooms in ID Unit. Ante rooms required. The purpose of an ante room is: • To provide a barrier against the entry/exit of contaminated air into/out of the isolation room. • To provide a controlled environment for donning/removal of PPE, decontaminating equipment and for clinical hand wash Clinical wash hand basin required in the anteroom as well as the isolation room. Sensor taps should be considered in this area. The ante room should be a minimum of 7m squared. All rooms should have negative ventilation. Switchable ventilation from source is not recommended because of the inherent difficulty of providing failsafe mechanisms and the risk of error with patients requiring source isolation having being mistakenly placed in a protective isolation room with a subsequent spread of infection. In addition, it is unlikely that positive pressure will be required in an ID Unit. Air lock between double doors. • Some areas will need X Ray C arm access, will need rooms for radioactive endocrine investigation Keith Hurst, Senior Lecturer, Health and Social Care Group, Health and Sciences Public Health and Research Institute, Leeds University carried out research on ward design, patient dependency, workload, staffing and quality commissioned and funded by NHS Estates.
3.	• What requirement will there be for Stroke?		The number of single rooms should be increased within the Stroke Service.
4.	• What requirement will there be for Assessment Beds?		The number of single rooms should be increased within the Assessment Service.
5.	• Will you require hoists over beds for Trauma and Orthopaedics?		• For limited number. • Ortho/ITU – establish where required
6.	• Will there be any other wards that will not fit standard ward layout?		• Yes – ortho, vascular, dermatology • Would want rehab areas to have dementia friendly design. Some areas e.g. for amputees will need enhanced disabled adjustments.

Ward Clustering and FM (Hotel Services)

Lead person responsible: Alex McIntyre

	Questions	Guidance	Feedback/advice from Group
1.	• Do you wish to have a cluster of wards e.g. 4 wards together with associated shared regeneration kitchens, disposal holds, staff rest/seminar rooms etc at "back of house"?		Three to four ward clusters preferred along with associated services e.g. shared regeneration kitchens etc. Rationale - Economies of scale allied to which clarity around responsibility for management of services. If rooms are of adequate size: it is acceptable to have shared facilities such as shared regen kitchens/disposal holds, staff rest/seminar rooms etc at "back of hours". These rooms must be easily accessible by all 4 wards.
2.	• What are the plans for catering – do you plan to have off site cook-chill?		Pan Glasgow Catering Services Review about to commence inherent in which identification of appropriate catering solution.One of the potential outcomes of which is off site production with regeneration facilities at local level. Cook Chill or Cook Freeze is acceptable
3.	• Is there a need for ward level / cluster level regeneration kitchens?		If outcome is cook chill/freeze as highlighted regeneration kitchen should be developed in ward clusters. Must be accessible, of adequate size and have good storage
4.	• Would a central "wash-up" be preferred to ward level or ward cluster level wash-ups (recommended)?		See 3 above Ward cluster wash-ups are acceptable. Facilities also required in each pantry to wash glasses, water jugs etc.
5.	• Should staff changing be close to the ward, on the ward, shared between a cluster of wards or centrally located?	Guidance to come from Uniform Group at Scottish Executive from HAI perspective SHFN 30: Infection Control in the built environment Watt Report (2002)	Central changing area within each Tower Stack preferred based on the following :- Localised ownership of security and general housekeeping, more options if accommodation requires to be isolated for infection control procedures. Uniform Management System to be investigated. Best practice suggests an area should be provided in staff changing where clean uniforms can be ordered and soiled uniforms can be disposed of for onward processing. Staff must have easy access to showering facilities in the event of a spillage or contamination. Changing facilities at each ward area will enhance compliance with uniform policy, however changing facilities at each cluster level with appropriate showering facilities are adequate. Are there places for an autovalet?
6.	• Do you require a staff rest area per ward or could this be shared between a cluster of wards e.g. 4 wards (at back of house)?		The preferred option (as highlighted in one above), would be to have a rest area associated with the cluster changing accommodation.
7.	• Should it be assumed you require a general meeting area per ward?		No. One per floor or two clusters. Needs work to define number of wards that would share a meeting room.

	Questions	Guidance	Feedback/advice from Group
8.	• Should it be assumed that a multidisciplinary seminar room and educational facilities will be factored into overall scheme?		Yes. Needs work to define shared facilities i.e. approximately one per 8 wards or one on alternate wards.
9.	• Should there be clean and dirty routes with associated dedicated clean and dirty lifts?		Yes.Clean and dirty fm routes should be clearly segregated and if possible service and patient lifts kept separate.
10.	• Do you wish to consider a shared disposal hold e.g. between 2 or 4 wards at "back of house"		In a similar fashion to the regen . issue. Disposal holds shared to the back between ward clusters is manageable as long as sized correctly and adjacencies allow nursing and support staff close proximity. Two Disposal Holds would be required per ward cluster.
11.	• How will clinical waste be collected – e.g. must not be stored in dirty utility rooms - prior to arriving at the disposal hold?		The optimum system to adopt will be a bin exchange system. Guidance on this will be published early in 2006 via the NHSiS Waste Action Plan developed in response to the Audit Scotland report into waste management in the NHSIS. The key principle will be greater segregation of waste types, security of the waste stream, minimisation of handling and where possible the exclusion of this type of waste from areas accessible to the public. Always with the caveat of achieving value for money.
12.	• How will linen be managed? Will there be linen rooms, a top up or trolley system and how will this impact on space utilisation?		This has not been defined. There should be adequate linen storage provided in all areas either for bulk storage or adequate space for a large linen trolley to be safely stored.
13.	• Will any wards require bulk fluid storage?		This is a pharmacy issue and is dependent on Prescribing and procurement Policies but this system could be used in some clinical specialities such as renal etc. Fluid stores for large areas e.g. : • A/E • Med/Surg complex Delivery will be direct to tower stacks and ward clusters will pick up from large decentralised storage areas. Retained site would also need storage space. Wards such as renal may require bulk fluid storage. They must be of appropriate size and have off floor storage and allow stock rotation and storage conditions that comply with the manufacturer's instruction. A new system of piping in renal fluids should be considered for the new hospital.
14.	• How will supplies & CSSD items get to and from the ward?		Pharmacy Van = Routine Main Porters Pool = Emergencies Office Transport = If main Pool is busy General Stores deal with their own supplies The National Logistics Strategy and current NHSGG Procurement plans indicate that a stock and non stock service will be delivered to all clinical areas in the following manner (deliveries preferable at night), but certainly all deliveries suitable for out of hours working):- Goods requested at ward level will be delivered as a consignment from the Central Warehouse to a designated receipt point within each acute site. Any non stock items which have been

	Questions	Guidance	Feedback/advice from Group
			requested will be delivered from the supplier or distributor also to the designated receipt point. All incoming goods will be consolidated by ward (stock and non stock) and be delivered by dedicated stores staff, normally on the day they are received within the central receipt point. In addition National Strategy is predicated on the development of Ward Product Management. Ward Product Management when developed will lead to clinical areas receiving more focused stock management support which will include the set up of stock areas, involvement with product selection and routine maintenance of stock levels including the ordering, receipt and stocking of ward stocks by members of the procurement staff. Ward Product Management is currently not operational but should be developed in the next 12/18 months. Via dedicated clean or goods in route. Enclosed/covered designated trolleys.
15.	• Are there any re-cycling opportunities?		A project will be competed during the Spring of 2006 between NHS Greater Glasgow and relevant other organisations co-ordinated by the Scottish Executive funded Envirowise to identify the various wastes we produce and to explore possible opportunities for greater minimisation of waste, re use of materials, recycling and where none of the foregoing are an option the most appropriate disposal solution with minimal impact on the environment but also achieving value for money.
16.	• How will specimens get to their destination e.g. pneumatic tube or alternative transportation? Where will pneumatic tubes be located?		Preferred option – the installation of pneumatic tube system as it is increasingly popular – in terms of speed operation, security discretion etc.. The ideal situation within a self contained building should blend with other service runs in terms of location whether above ceiling or behind walls with minimum maintenance. This would compliment the potential for routine specimen lift which are undertaken currently four times daily at 9.15 am 11.00 am 1.15 pm and 3.00 pm with back up support from the Portering Pool in event of emergencies. Automation will be supplemented by portering for specimens which are difficult to obtain e.g. brain samples, CFS, frozen sections.
17.	• How will blood / blood products be delivered to wards?		On request via Porters from each area. Emergency requests will come through pager and the Supervisor will designate a Porter who will stay in attendance as a runner with a van if necessary

Bed Areas

Lead person responsible: Margaret Smith

	Questions	Guidance	Feedback/advice from Group
1.	• How many beds per ward will you have?	Bed spacing: consultation document space around the bed (2004).	Ideally it should be 23-26 beds but flexibility should be used dependent on case mix. Density strongly influences many of the factors which either directly or indirectly affects spread of infection in hospitals. In any given ward the patient density will influence the number of staff and visitors entering the ward. • No of potential infectors in the ward space • No of susceptible persons in the ward space • The bio aerosol production rate • Contamination of room surfaces and fomites • Contamination of items of clinical equipment • Direct transportation of micro-organisms between patients
2.	• What is the percentage of single rooms required?	SHFN 30: Infection Control in the built environment Wanless report (2001) "the majority of beds in newly built hospitals will be ensuite single rooms"	50%-100% (HDL to be produced by SEHD – to follow) 100% SSRs. Some single rooms will require ventilation. Some will require negative ventilation, some will require positive ventilation. Provision of SSR helps prevent spread of micro organisms. Single rooms with ensuite facilities allow for easier management of infection than open wards. Ventilation: There is an increasing need for single rooms with negative or positive pressure and ensuite isolation rooms. These rooms will also require an ante room.
3.	• What is the percentage of 4 bed bays required?	SHFN 30: Infection Control in the built environment	50% or less Bed blocking is expensive therefore the higher number of single rooms reduces the need for bed blocking. If 4-bedded bays are used, they should have doors. Multiple beds in a single area should be kept to the minimum number possible to assist in prevention of cross-infection.
4.	• What types of en-suites will be required?	SHFN 30: Infection Control in the built environment: All single rooms in new build hospitals should have en suite facilities. Healthcare facilities must provide enough sanitary facilities and showers/bathrooms to ensure easy access	All single side rooms must have ensuite facilities. Actual type such as double assisted and number of these requires to be decided by ward user group. 4-bedded bays preferably should have two ensuite facilities. Toilet facilities should be no more than 12m from the bed area or dayroom. Shower, toilet, basin for single room 2 for 4 bed areas

	Questions	Guidance	Feedback/advice from Group
5.	• Should plans allow some double assisted for x single rooms? • Need definition ensuite (single, 4 bed room, bathroom, baths		• For two of single rooms at least per ward – need to check Disability Discrimination Act • Yes – stroke •
6.	• Should plans allow separate WC and shower / wash en-suites for 4 bed bays?		Yes (See comments in 'What types of ensuites will be required?")
7.	• Should plans allow for views, natural ventilation and daylight		Yes
8.	• Should gaps between bed centres in 4 bed bays be 3.6m minimum?	British Standard specification 8300 (2001) recommends that bed spacing 3.95 wide x 3.7m deep	Yes The closer the bed spacing, the higher the patient density per cubic metre. No research evidence exists which conclusively supports the minimum distance required between beds to avoid cross-infection. Anecdotally it is accepted that 3.6mm bed centre to bed centre is acceptable. There is good ergonomic evidence that suggests 3.6 is the preferred dimension.
9.	• Where should the siting and number of clinical wash hand basin(s) in 4 bed bays be?	SHFN 30: Infection Control in the built environment: Improving clinical care in the Scotland: HAI: QIS 2003. Property and Environment Forum: HAI Scribe.	Adjacent to each bed in a single room ITU and HDU settings: one per bed (situated at the front of each bed space) Acute, elderly care and long-term care settings: one per 4 beds. 1 per 4 bed areas. Review in high-risk areas Wash hand basins should not be obscured by curtains. Single rooms should have a wash hand basin in the ensuite facility in addition to a clinicl wash hand basin in the patient's room.
10.	• What bed head services do you require – can these be generic with specific needs for certain wards to include patient power?		Generic – light, radio, call (outlet power) Light, radio, call, socket, pt power, pc access
11.	• What kind of patient entertainment – patient power system should there be		Patientline – surveillance
12.	• Should there be vacuum and air outlets in some or all wards?		Vacuum and O2 in all wards Medical air on case by case basis.

Support Accommodation

Lead person responsible: Alex McIntyre/Margaret Smith/Kate McKean

	Questions	Guidance	Feedback/advice from Group
1.	• Is there a requirement for assisted bathrooms?		Yes - for every Medical Ward and DME Ward. No – Bathroom (OT require bath for home assessment).
2.	• Is there a need for a 'domestic' type bathroom (patient pref)?		• Review according to needs from sub-groups. If patient facilities then must include clinical wash hand basin. • Depending on layout/adjacencies we may need a domestic bathroom accessible to medicine/rehab for OT assessments pre-discharge
3.	• What other rooms do you require – e.g. treatment rooms, interview rooms, consult/exam rooms, office etc.?		All support accommodation required
4.	• Should it be assumed that a pantry is required per ward?		Yes Pantry of adequate size required per ward.
5.	• How many parking bays do you require for equipment e.g. X-Ray machines, resus trolleys?		• Resus • X-Ray – emergency R
6.	• Should there be more than one nursing station per ward – may depend upon ward layout and nursing organisation?		1 per ward
7.	• Are workstations required for medical trainees on ward (or cluster)?		Yes – separate seminar required
8.	• What storage needs are required?	SHFN 30: Infection Control in the built environment: Property and Environment Forum: HAI Scribe	Significant Off floor storage is essential. Separate dedicated storage facilities required for equipment, supplies etc. Inadequate provision of storage facilities can mean that inappropriate sites are used for storage of equipment and linen, leading to unnecessary contamination both of equipment and subsequently from equipment. It is not acceptable for any items to be stored in the corridors or ward area.
9.	• What overnight accommodation for relatives is required and where should it be located?		Central approach
10.	• Should there be an equipment library where EBME/medical physics monitor the use and maintenance of equipment ensuring it is continuously in working condition. (adjacent to CCA?)		Centralised approach
11.	• Should each ward have an office large enough to accommodate hand over and other meetings?		No – team approach for inpatient
12.	• What type and number of quiet rooms, options for use as interview room, and separate female only quiet rooms should there be?		Dual purpose rooms

	Questions	Guidance	Feedback/advice from Group
13.	• Should there be one therapy area per ward cluster?		For agreed areas – stroke. Need therapy areas in all areas except acute surgical/critical care All rehab wards, depending on layout/adjacencies may need therapy areas.

Pharmacy Requirements

Lead person responsible: **Kate McKean**

	Questions	Guidance
1.	• What facility for patients self-medicating should there be?	
2.	• What requirements for delivery to wards should there be?	
3.	• Will all wards have the use of pneumatic tube system?	
4.	• What will be the controlled drugs and other drug storage requirements?	
5.	• What will be the process for discharge medications?	

Note: text in blue denotes Infection Control comments
text in green denotes Facilities comments

Feedback/advice from Group
Plans are for this in as many areas as would be safe both for patient and other patients. Very acute areas are unlikely to be self-medicating. Other areas that are unlikely to self medicate are ITUs, HDUs and possibly acute receiving areas.
Ward areas need to have sufficient space to allow for delivery of bulky products that cannot be delivered via the pneumatic tube system e.g. fluids. Bulky products / ward boxes will be delivered to wards via porters / automated rail systems (elecronic trackers to guide boxes to delivery point and back to pharmacy) or directly by 3rd party providers. Areas will have to be well-marked and accessible to staff.
Yes for as many products as possible. Some products too bulky, too heavy or too toxic. Tube system should be the biggest bore size possible to ensure as many products as possible can be transported by this method. Ned to ensure that each ward has space to store tubes that the space is in an accessible but secure position within the ward.
CDs will, in the main, not be stored in patient bedside lockers, although discharge medications may be for short periods. Need central location in each ward for CD storage – in some wards, this is of significant size, e.g. to store epidural syringes. All wards will continue to need storage facilities for a range of medicines stored as ward stock, including injections, creams / ointments, liquids, some oral products. Refrigerated items will require to be stored at ward level.
Making the Most of Your Medicines (MmyM) (medicine management) Prescriber will write a discharge prescription that will be clinically screened by the clinical pharmacist on the ward (or remotely if not available on ward). The MMY technician will then check the prescription against the current medicines in the patients' bedside locker (also check against kardex if clinical screen is done remotely). If the prescription medicines and directions on the medicines labels match, then the discharge prescription can be annotated at ward level and the patient discharged with copies of the discharge prescription for his/her GP and community Pharmacist. If any discrepancies are discovered at this stage, the clinical pharmacist should be contacted for advice on how to proceed. If the MMyM technician discovers that there is insufficient supply for discharge, then sufficient supply will be fast-tracked at that time. **Non-Making the Most of Your Medicines (out of hours service)** The prescriber will write a discharge prescription that will be clinical screened by the ward clinical pharmacist where possible. The prescription will then be sent (by the usual method) to the pharmacy dispensary. The dispensary pharmacist will screen prescriptions

Pharmacy Requirements

Lead person responsible: Kate McKean

	Questions	Guidance	Feedback/advice from Group
1.	• What facility for patients self-medicating should there be?		Plans are for this in as many areas as would be safe both for patient and other patients. Very acute areas are unlikely to be self-medicating. Other areas that are unlikely to self medicate are ITUs, HDUs and possibly acute receiving areas.
2.	• What requirements for delivery to wards should there be?		Ward areas need to have sufficient space to allow for delivery of bulky products that cannot be delivered via the pneumatic tube system e.g. fluids. Bulky products / ward boxes will be delivered to wards via porters / automated rail systems (elecronic trackers to guide boxes to delivery point and back to pharmacy) or directly by 3rd party providers. Areas will have to be well-marked and accessible to staff.
3.	• Will all wards have the use of pneumatic tube system?		Yes for as many products as possible. Some products too bulky, too heavy or too toxic. Tube system should be the biggest bore size possible to ensure as many products as possible can be transported by this method. Ned to ensure that each ward has space to store tubes that the space is in an accessible but secure position within the ward.
4.	• What will be the controlled drugs and other drug storage requirements?		CDs will, in the main, not be stored in patient bedside lockers, although discharge medications may be for short periods. Need central location in each ward for CD storage – in some wards, this is of significant size, e.g. to store epidural syringes. All wards will continue to need storage facilities for a range of medicines stored as ward stock, including injections, creams / ointments, liquids, some oral products. Refrigerated items will require to be stored at ward level.
5.	• What will be the process for discharge medications?		**Making the Most of Your Medicines (MmyM) (medicine management)** Prescriber will write a discharge prescription that will be clinically screened by the clinical pharmacist on the ward (or remotely if not available on ward). The MMY technician will then check the prescription against the current medicines in the patients' bedside locker (also check against kardex if clinical screen is done remotely). If the prescription medicines and directions on the medicines labels match, then the discharge prescription can be annotated at ward level and the patient discharged with copies of the discharge prescription for his/her GP and community Pharmacist. If any discrepancies are discovered at this stage, the clinical pharmacist should be contacted for advice on how to proceed. If the MMyM technician discovers that there is insufficient supply for discharge, then sufficient supply will be fast-tracked at that time. **Non-Making the Most of Your Medicines (out of hours service)** The prescriber will write a discharge prescription that will be clinical screened by the ward clinical pharmacist where possible. The prescription will then be sent (by the usual method) to the pharmacy dispensary. The dispensary pharmacist will screen prescriptions

	Questions	Guidance	Feedback/advice from Group
			that have not yet been clinically screened at this point. The prescription will then be labelled, dispensed and checked within the hospital pharmacy. Once completed, the prescription and medicines will be transported back to the parent ward.
6.	• Will the service be 24/7 or out of hours access to drugs?		Probably a 12hour/day service with traditional on-call outwith these times. Two options exist for out of hours medicine supply: 1. Emergency cupboard areas required for large groups of wards (not for each cluster) which are within reasonable walking distance of one another. Issue around security. 2. Automated supply system that would service the whole hospital. Pharmacists would log into the automated system from home and trigger the supply.
7.	• What are the workstation/IT needs for pharmacy and other AHPs?		Ward pharmacy workstation required for every 60 beds with a minimum of two workstation PCs with system support/portal access/suitable IT kit e.g. eTablets, iPAq, docking stations, wLAN/access to Internet/e-mail etc. Access to power points to charge mobile kit. Hot desk area for case note reviews etc. These workstations need to be located near nursing areas to hep with team integration/communication. Dispensing/assembly space for MMyM process.
8.	• Bedside medication locker		Secure storage required for patients' own medicines. Preferred option is to use medication lockers that are integrated with the rest of the patients' bedside locker. Failing this, the medicine locker should be attached to the wall (PFI terms is a problem).
9.	• Storage area for fluids		3 options for fluids – central shed with delivery to wards; storage areas/groups of wards with direct delivery to these from supplier; individual ward storage with direct delivery to each ward as per storage requirements for each ward.
10.	• Storage area		General storage for pharmaceutical care notes, medicine labels, etc would be at the pharmacy workstation
11.	• The pharmacy workstation area		The pharmacy workstation area will have medicines stored in it and must be a controlled area but allowing easy staff access (e.g. swipe card locks which are preferred to combination locks where codes can be easily read by unauthorised personnel). It must also be a temperature-controlled area to allow medicine storage according to licence requirements.

Security

Lead person responsible: Alex McIntyre

	Questions	Guidance	Feedback/advice from Group
1.	• What will be the security for wards (e.g. video entry systems)?		It is envisaged that the wards would be subject to appropriate security measures based on risk assessment, also advice from Strategic Estates as to the latest available systems. Will need to build in features to help with wandering patients – wanderguard on doors etc.
2.	• Will there be swipe cards?		No. Proximity readers will be provided. Single badge system will be programmed to allow staff into areas e.g. ward, office, car park. Nursing badges are an issue to be resolved.
3.	• How will the security access to ward and in certain areas security of "wandering patients" be managed?		This would be dependant on 1 above. It is possible that certain individuals will be tagged so the system prevents movement into an other area.
4.	• Will there be tagging systems?		This has been discussed in the past, but it was thought that secure entries on the ward doors are more effective. The tags can be covered with tinfoil etc., to disable them. It was felt that tagging gave a false sense of security to staff and mothers.
5.	• How will access be gained for cardiac arrest and other emergency needs (including safety)?		This would be dependant on 1 above.

Elective/Emergency Split

Lead person responsible: Margaret Smith

	Questions	Guidance	Feedback/advice from Group
1.	• Will there be a split between surgical elective and medical/surgical emergency workload? Is ring-fencing an option?		Elective and Emergency services should be split, however, they need to have co-locations to A&E.
2.	• Will the split be by geographic separation or other means?		Both but adjacent to A/E
3.	• If level 1 patients are grouped within a generic critical care area (CCA): what implications will this have on the siting of wards?		Co-located CCU/ICU/theatres
4.	• Will there be step down beds?		Yes
5.	• Will there be admission and discharge lounges? If yes, where will they be sited?		Yes. Need to develop robust operational policies, possibly in partnership with CHSCPs. Location of lounges is critical to maximise their utilisation. The number of lounges will be dependent on the number of stacks.

Information Technology

Lead person responsible: Kate McKean

	Questions	Guidance	Feedback/advice from Group
1.	• Will IT systems have wireless connectivity?		Yes
2.	• Will there be workstations or will there be handheld devices?		Both
3.	• Is PACS and Electronic Patient Records etc. assumed?		Yes
4.	• Should it be assumed Patient Power will require non-wireless approach?		Probably – to be confirmed
5.	• What is the extent of use of telemetry?		Not known – to be confirmed
			Comments from Tom McNamara, IT. Before the above questions can be answered, fundamental issues need to be addressed and answered before the ward area detail can be confirmed. • There needs to be two diversely routed fibre links into the Glasgow network • There needs to be appropriate secure rooms to house the communications node cabinets where these links terminate • The node cabinets themselves need to be sized appropriately and there needs to be adequate power supplies • The above two items also apply to other internal node cabinets, the location of which needs to be designed to support the proposed geography of the building • There needs to be resilient fibre links between any internal node cabinets • There is a requirement to have a local computer room to house the local PACS equipment. This room needs to meet minimum security and environment standards (air conditioning etc.) • There may be an option to adapt one of the node cabinet rooms, but this needs to be designed to allow for expansion • The internal cabling should be installed to preferably category 6 standard, and the ducting should be capable of expansion • Adequate provision should be made in the budget for the active communications equipment (switches) to be housed in the node cabinets. • Has there been any thought of IP telephony?

Patient and Staff Focus Specification

Lead person responsible: Ann Galbraith

	Questions	Guidance	Feedback/advice from Group
1.	There is a need to produce guidance for design teams on these very important areas, for example: • How do design plans ensure that physical, emotional, social, cultural and spiritual needs are met?		• Spray hoses should be available within toilet areas for cleansing purposes for religious reasons. University of Strathclyde did this and not required in all areas – just one is okay • Suitable facilities should be available for ablutions prior to prayers for both patients and relatives e.g. for relatives who are remaining within the hospital for long periods during Ramadan • Individual multi use quiet rooms should be available at ward level e.g. for prayer, receiving good/bad news
2.	• How do design plans consider the senses?		• Induction loops at all reception points • Text phones • Pagers vibrating • Auditory and visual boards • Colour contrasting is required between floor and wall joints and around doorways to assist the visually impaired • Tactile signage in lifts and route finders
3.	• How do design plans consider the aspect of being close to nature, use of art, colours and overall sense of well-being?	Now I Feel Tall – What a Patient Led NHS feels like – DoH Report	• Require to link in with ongoing work for ACAD being undertaken by the Community Engagement Team – Dan Harley and Mark McAllister. • Output from focus groups anticipated in the New Year. Keen to be involved early on.
4.	• How do design plans ensure privacy and dignity standards are met with single sex accommodation?		• Recovery Areas should have divide between sexes with separate toilet facilities which do not require individuals to cross the other sex area.
5.	• How do design plans ensure confidentiality, considerations of impairment, places for social interaction to include children and young people is achieved?	Legislation	• Booking in areas should ensure that no patient related information can be overheard • Child areas in waiting areas should be considered – ??Staffed?
6.	• How do design plans promote spaces for reflection, religious needs etc.?	Edinburgh Royal Infirmary Sanctuary • Gold standard like to achieve	• Requirement for Chaplaincy Centre which should be accessible 24hrs/day therefore requirement for security • Should be situated close to main entrance/public services • Requires ablution facilities for Muslim faith • Flexible/multi-use space required which does not dictate how it should be used • Private rooms required for single sex prayer • Colour design should be soothing, relaxing and inspiring • Access at ward level for room for prayers at ward level

	Questions	Guidance	Feedback/advice from Group
7.	• How do design plans ensure a welcoming reception with way finding and information as appropriate?		• Requirement for natural planting at entrance and greenery within the reception area • Manned reception desk to direct and guide • Resource area for patients
8.	• How do design plans ensure waiting spaces are relaxing, clean, and comfortable and instil confidence in the client?		• Require a variety of height of chairs
9.	• How do design plans ensure light and airy views – if no views create them, reduce stress?		• Consideration should be given to create internal areas for visual focus if no external views created
10.	• How do design plans promote patient control and communication?		

(Disability needs to feature here)

Other Infection Control Issues

Lead person responsible: Penelope Redding

	Questions	Guidance	Feedback/advice from Group
1.	In addition to points raised under other headings: • Where, in addition to bed areas, clinical hand washbasins should be located? Should there be sensor (recommended) or elbow taps? Should there be soap/scrub solutions, gels, aprons and gloves?	SHFN 30: Infection Control in the built environment	Clinical wash hand basins required in Pantry, Sluice, DSR, Treatment room, clean utility, bathrooms Sensor taps preferable in all areas, however if cost issue consideration should be given to placing sensor taps in areas such as Rheumatology, orthopaedics etc. Where sensor taps not used, taps must be elbow/wrist operated combined with pillar taps. Touch-free control of water flow will further aid control of infection although maintenance issues need to be considered. For wash hand basin specification, see below: Scrub solution only required in areas where level 3 handwash required such as theatres, ICU, HDU. Wall-mounted liquid soap required at all wash hand basins. Wall-mounted alcohol gel required at all clinical wash hand basins. Alcohol gel to be placed near patient (bed end) Aprons and gloves required at entrance to every SSR and 4-bedded bay. Also required in dirty and clean utility and treatment rooms.
2.	• Should designs assume no carpet permitted in any clinical area?	SHFN 30: Infection Control in the built environment	Carpet not permitted anywhere on floors or walls.
3.	• Should there be seamless hard wearing, plastic, coved, flooring	SHFN 30: Infection Control in the built environment	Seamless washable plastic flooring preferable, must be able to withstand 10,000ppm available chlorine
4.	• Should there be painted washable walls?	SHFN 30: Infection Control in the built environment	Walls must be washable. Plasticised panelling preferable. Walls should have as few protrusions as possible. No wall carpeting.
5.	• What type of curtain or screen around beds in 4 bed bays should there be?		Screens: Encased screens, washable or disposable acceptable. If decision is made to have glass between single rooms, curtains or Venetian blinds must be enclosed with mechanism below. The need for blinds or curtains will be reviewed. Preference is blinds as no aerosol transfer of particles.
6.	• Are curtains for windows not acceptable? If so what alternative if any is needed?	SHFN 30: Infection Control in the built environment	Window blinds should be used with caution: the need for regular cleaning must be considered. Blinds acceptable if encased integral blinds. Curtains acceptable but must be launderable or disposable.
7.	• Will the dirty utility rooms have macerators and / or bedpan washers?		1 macerator required per dirty utility/sluice
8.	• Will the walls have wall protectors and bed docking devices?		Wall protectors and bed docking devices must be washable, easily cleaned and able to withstand 10,000ppm available chlorine.

	Questions	Guidance	Feedback/advice from Group
9.	• Consider sharps management – will disposal at point of use be assumed?		Sharps disposal at point of use: in line with policy manual.
10.	• Where will beds be cleaned post patient discharge?		Bed cleaning post discharge should take place in area rather than "contaminated" bed wheeled along corridor. Central bed point good for routine bed cleaning as part of ppm.
11.	• What are the air handling issues? E.g. treatment rooms? Other areas?		Air handling most important theatres, ID rooms and side rooms with ventilation. Further discussions need to take place to address this issue in detail.
12.	• Will there be magnetic white or self-healing boards rather than pin boards?		Boards must be washable
13.	• Will designs ensure that radiators and any fixtures and fittings permit cleaning behind them?	SHFN 30: Infection Control in the built environment	All areas must be accessible for cleaning. Radiators should be smooth, accessible and easily cleaned.
14.	• Will it be assumed that equipment storage should be off-floor?	SHFN 30: Infection Control in the built environment	All equipment storage should be off floor, unless wheeled equipment easily moveable to allow for cleaning. A large storage area is required for large pieces of equipment such as beds, mattresses, and hoists etc., which are currently not in use. The layout of this area must be designed to ensure safe and secure storage and allow for cleaning of the area.
15.	• What is the list of infection control essentials for this new hospital build?	NHS GGHB ICN Summary Paper Classification of Single Rooms	• No carpets any where • Air management systems • All isolation rooms must have gowning lobbies • All critical care beds including HDU beds must have single rooms. Some single rooms to be isolation rooms ergo with gowning lobbies. Numbers to be confirmed. • 4-bedded rooms must have two toilets with washbasins and two showers – one on each side • Need definition for: o Single room o Isolation room • In all wards decision needs to be made with regard to number of isolation rooms with gowning lobbies • If decision is made to have glass between single rooms, curtains or venetian blind must be enclosed within mechanism below. The need for blinds or curtains will be reviewed. IC preference is for blinds as no aerosol transfer of particles.

Functional Relationships

Lead person responsible: Clinical Advisory Board

	Questions	Guidance	Feedback/advice from Group
1.	• These will be considered on a specialty / disease / pathway basis, but, from a generic viewpoint, what are the critical and desirable adjacencies for wards?	SHFN 30: Infection Control in the built environment	Clinical Adjacency work will be carried out by Clinical Advisory Board and appropriate sub-groups. High-risk environment e.g. ID unit should not be adjacent to high-risk patients e.g. oncology/haematology. There are some departments where infection risk is higher; these should be situated so as not to further increase risk of infection. Wards and departments should be planned to be ergonomically sensible with the patient pathway in mind. Obvious clashes or routes within the ward area should also be avoided: e.g. route of dirty bedpan and food.

Appendix I

Other areas for consideration:

- Critical and desirable adjacencies for rooms within clinical areas.
- Type of Equipment

REQUIREMENTS (list A)

- DSR
- DIRTY UTILITY
- CLEAN UTILITY
- BATHROOM
- WARD AREA
- SINGLE ROOM
- TOILET
- BATHROOM
- SHOWER
- DISPOSAL HOLD
- PNEUMATIC TUBE
- PANTRY/KITCHEN
- LINEN ROOM
- STORAGE: EQUIPMENT
  SUPPLIES
- DUTY ROOM
- DAY ROOM
- CORRIDORS
- FLOORING
- WALLS
- VENTILATION
- PATIENT FLOW
- LIFTS
- GOODS FLOW/GOODS IN/OUT
- HAND WASHING FACILITIES

NHS Greater Glasgow and Clyde

Infection Control meeting

Hillington Project Office – Monday 18th May 2009 at 1pm

Notes of Meeting

Present

Tom Walsh
Heather Griffin
Stephen Gallacher
Fiona McCluskey
Annette Rankin
Sandra McNamee
Pamela Joannidis

The purpose of this meeting was to review the advice given to date by infection control and agree a final infection control position with regard to the New South Glasgow Adult Hospital areas shown below:

- Isolation Rooms
- Renal Dialysis
- Day Beds
- Theatre Recovery
- Endoscopy

Isolation Rooms – New South Glasgow Hospital

The group reviewed the paper produced by Drs Redding and Hood and Annette Rankin. The following was agreed as the final infection control position
1) Isolation rooms for the New South Glasgow Hospital are as follows:

Haemato-oncology -
Sealed ward with hepa filtration positive to the rest of the hospital

Respiratory (serving rest of medical)

3 negative pressure sealed rooms (without ante rooms)

Rheumatology/gastro undertake similar therapies but clinicians had not requested any isolation facilities. Project team to check with Gastro and Rheumatology clinicians that they area comfortable that 3 rooms is sufficient for all needs.

NB post meeting note - Clinicians in Gastro and rheumatology do not feel that they need any isolation rooms, think the 3 in respiratory is plenty)

Renal inpatient wards
2 positively pressure sealed rooms with negatively pressured anti- room

A&E
2 negative pressure sealed rooms (without anti-rooms) with patients being transferred to HDU if required

Critical Care (includes ICU/Surgical and medical HDU)

10 isolation rooms with anti-rooms - as per user request.

(NB It was agreed that no isolation rooms were required for CCU , surgical, orthopaedics or the Acute Assessment Unit).

Renal Dialysis
Users have requested that the layout of the 30 stationed renal dialysis unit be the same as the Stoghill ACH Dialysis Unit due to be opened next month.
The group therefore discussed and agreed to the unit being three open plan rooms with 8 "chairs" and 6 side rooms although it was noted that the spacing between "chairs" would have to be 3.6m² .

Day Beds

Medical day Unit (MDU)
There is a user preference for an open plan MDU. The group discussed the option of having the Medical Day Unit open plan with 1 single side room. This was agreed with the understanding that the space between bed/chair areas would be the standard 3.6m².

There are day beds planned within the renal, haemato-oncology and dermatology wards with shared toilets. The layout of the 4 bedded day rooms were discussed with infection control reps at a meeting on 28th November 2008. The advice at that point was for 3 sided open front cubicles.

Renal and Dermatology.
Discussion took place regarding the activity and types of procedures undertaken – these included blood transfusions, iron infusions, line insertions, renal biopsy and biologics infusions

The only concerns were based around line biopsy and line infusions (or similar procedures) being carried out in open plan areas. After consideration it was thought that glass partitions would make no difference and therefore it was therefore agreed that the renal and dermatology day areas could be open plan.

Haemato-Oncology

The haemato-oncology ward has 4 day beds planned within the ward area, the day procedure which will be undertaken within this area are considered by the users to be unsuitable for the Medical Day Unit.

However Given that the haemato-oncology ward is planned to be a Sealed ward with hepa filtration positive to the rest of the hospital infection control requested that the project team contacted users again and raised the potential for cross infections from the day patients to the inpatients to see if these day cases could be moved to the Medical Day Unit. Further information was also requested regarding the procedures which would take place.

The project team will contact the lead nurse of these specialities to discuss further and give feedback to infection control.

Theatres Recovery (40 spaces) and Endoscopy recovery (4 spaces)

The question was raised if the recovery areas could be an open plan – again as long as the spacing was kept to the correct levels (3.6m2) then the Infection Control team thought this acceptable.

NEW SOUTH GLASGOW HOSPITALS PROJECT
ADULT CRITICAL CARE USER GROUP

Notes of a meeting held on 12th June 2009
In Jane Grant's Office,
Southern General Hospital

Present

Jane Grant	(JG)	Chief Operating Officer NHSGG&C
Alan Seabourne	(AS)	Director New South Hospitals Project
Heather Griffin	(HG)	Project Manager - New South Glasgow Hospitals Project
Stephen Gallacher	(SG)	Associate Medical Director New South Glasgow Hospitals Project
Fiona McCluskey	(FM)	Senior Nurse Adviser - New South Hospitals Project
Marion McDonald	(MMcD)	Acting CSM - Critical Care, Glasgow
Jackie Campbell	(JC)	General Manager Critical Care Glasgow
Sandy Binning	(SB)	Consultant Anaesthetist - Western Infirmary
Lesley Meikle	(LM)	Head of Nursing Surgical and Anaesthetics Directorate

Apologies

Cameron Howie	(CH)	Clinical Director - Critical Care, Glasgow
Brian Cowan	(BC)	Medical Director NHSGG&C Acute Division

AS opened the meeting, the purpose of which was to facilitate thhe decision on the layout of the Critical Care Unit for the New South Glasgow Hospital. AS informed the group that the bidders require an agreement on the unit configuration by the 17th June 2009 to formulate their bids. AS summarised the bed numbers and referred to guidance, benchmarking, infection control, the patient environment and operational /staff welfare issue. The unit comprises 79 beds in total. CCU will have 20 single rooms with en-suite facilities. Within the 59 ICU /HDU beds there is agreement that 10 of these should be isolation rooms with lobbies, however there is no consensus on the configuration of the remaining beds. Guidance for Critical Care Units (SHBN 57 draft) states that individual project teams should decide the minimum number of single bedrooms required, basing their decision on case mix and acting on the advice of the infection control team, and settles for a 50/50 minimum split of open plan/single rooms. Benchmarking has shown that new build Critical Care Units can be desined in open plan or single rooms this can be done successfully both ways.

Clinicians have acknowledged the benefits of single rooms in terms of privacy & dignity, lower ambient noise levels and some degree of control of individual room conditions. Clinicians perceive that single rooms will reduce the ability of staff to hear what is happening in adjacent spaces when additional assistance from colleagues is required in the event of a clinical emergency and will reduce the opportunities for informal and

experiential learning for junior staff, lead to staff isolation and a less attractive environment for staff in an area that already faces recruitment challenges. The clinicians preference is for an open plan unit.

The Infection Control team are keen to comply with 100% single rooms, however have also acknowledged that HAI rates have a direct correlation between staffing levels/hand hygiene and as Critical Care has a high staff /patient ratio, there would be no added benefit of single room accommodation.

SB reported to the group that a number of clinicians had recently visited the refurbished Cardiac ITU at Golden Jubilee National Hospital. He explained that he GJNH layout have bed spaces with 2- sided glass cubicles and open fronts with a wash hand basin between 2 spaces. Although the clinicians had reservations prior to the visit they had agreed that the layout would give a reasonable balance of privacy and dignity and give staff the ability to detect and recognise adverse events that need immediate intervention. SB reported that the GJNH layout would now be the preferred option for the ICU clinicians. He confirmed that this is supported by Cameron Howie. LM confirmed she was supportive and this layout would be acceptable to nursing staff.

In summary it was therefore agree that the ICU/HDU component of the Critical Care facility would consist of 49 bed spaces in 2- sided glass cubicles with open fronts and 10 single rooms with lobbies.

Lang, Ann

From: Joannidis, Pamela
Sent: 01 September 2015 11:10
To: Lang, Ann
Subject: FW: SGH new builds

From: Joannidis, Pamela
Sent: 03 July 2014 11:32
To: Williams, Craig; McNamee, Sandra; Walsh, Tom
Subject: SGH new builds

Hi everyone

Fiona McCluskey has sent me the lobbied room details for the nSGH (Adult and Children). In a second email she has provided an explanation of the decision making around changes.

"See below information on lobbied isolation rooms

NCH	Observation ward	2no.
	PICU	4no.
	Cardiology	2no.
	ARU	2no.
	Schiehallion	8no.
	General wards	6no.
NSGH	Critical Care	10no.
	Renal (higher acuity)	2no.
	Haemato-oncology (HEPA filtration – not lobbied)	24no.

kind regards

Nurse Consultant, Infection Prevention and Control

NHS Greater Glasgow and Clyde

[redacted]

From: McCluskey, Fiona
Sent: 03 July 2014 10:55
To: Joannidis, Pamela
Cc: Gallacher, Stephen; Griffin, Heather; Loudon, David
Subject: RE:

Hi Pamela

During the planning stage there were several meetings with Infection Control to agree and sign off the number of lobbied rooms required for the hospitals.

The transfer of the BMT was approved by Jane Grant late 2013 and the ward design was amended to incorporate this change.

The move of the Brownlee is a fairly recent decision made by ECMS Directorate. The Brownlee and was not considered as an option during the planning stage and Business Case. Therefore there are no plans to provide extra lobbied accommodation within the generic wards. The hospital tower is now built and ward areas completed or near completion.

It is important to note that any change to the tower design would have an significant impact on the hospital design, the contract and the final bed model for NHSGG&C and would need to be agreed by Robert Calderwood via the formal change process.

Kind Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

From: Joannidis, Pamela [redacted]
Sent: 03 July 2014 09:33
To: McCluskey, Fiona
Subject:

Hi Fiona

Jackie has just updated me with the information re Brownlee and BMT. Can we ask if extra provision has been considered for these patients in the generic wards if they require lobbied accommodation?

NHS Greater Glasgow and Clyde	**NHS Greater Glasgow & Clyde** **Infection Prevention and Control Team**
Purpose:	Update Paper /Timeline
From:	IPCT NHSGGC
To:	Dr J Armstrong – Board Medical Director
Date:	26th April 2016
Subject/ situation:	Timeline re:correspondence regarding the move of the ID unit to the QEUH
Background:	This is a summary of the timeline of decisions made and issues raised (that the IPCT were aware of) with regard to the move of the ID Unit from GGH to the QEUH. **11th August 2014** (Fiona McCluskey(FMcC)to S McNamee (SM)) Summary Some issues had been raised by the Lead Nurse for ID regarding the proposed move specifically in relation to the flow of patients into the unit and the use of the pneumatic tube system – FMcC contacted SM for advice. SM pointed out that IPC advice on this move had not been obtained (late decision) and that she had significant concerns regarding the management of highly infectious patients in the proposed area. FMcC advised SM that this was not a project decision and that there were no lobbied rooms within the tower and that the only lobbied rooms were in ITU/HDU Craig Williams (CW) then contacted FMcC to support SM concerns regarding the move and to ask for a meeting to discuss. Ann Harkness (AH) was on annual leave but Joyce Brown was cc in and responded to say that this issue was being discussed at the ECMS SMT meeting on the 13th August. CW responded directly to Joyce "One of my concerns is the total number of lobbied isolation rooms available within the NSGH. The addition of the adult bone marrow transplant unit and the brownlee to the specialties on site will increase this" **15th August 2014 (AH to CW)** AH responded to CW: "happy to meet at your convenience with one of the ID team. They are content with access to 2 dedicated isolation rooms within the medical HDU cluster and we are agreeing protocols for access to others if necessary with our critical care colleagues - we agreed this before we made the decision to move them as it was clearly a deal breaker for the clinicians if it had not been possible." ..."The sgh ED has a decontamination area that we could use as necessary but in reality most people will come via ED / IAU as at present and we take no special precautions other than in very

	few cases" SM responded "I confess I don't have major concerns regarding the pathway through the building, we can put controls in to manage this; my concern is about the co-location of these patients with our most vulnerable. I will wait and see what Craig come back with but I guess if the ID physicians have signed this off they must think the risk to others in critical care is low". **BICC Minutes 6th October 2014** Dr Seaton commented that the adult Infectious Diseases Unit was late in the planning of being moved to the new hospital. He said the high isolation rooms will be on different floors from where other patients will be based. He is concerned that because of this the nursing expertise will not be aligned to beds where patients will be and will be nursed by a different cohort of nurses. Joyce Brown replied that she is looking into this. Dr Seaton asked Fiona if there was any chance the IDU beds could be co-located but Professor Williams said there would need to be a massive airflow change for this to happen. Dr Armstrong asked if maybe IDU should stay at Gartnavel but Dr Seaton said this would be inadequate for managing the patients. With regards to the MDRTB Regulations Professor Williams said that the technical team are looking at the ITU wards and asked Fiona if there had been any update. Fiona agreed to contact Brookfield. **BICC December 2014** Professor Williams commented that in relation to the new build update at the last meeting from Fiona McCluskey he has still not received word regarding the issue with transplant patients and if a contingency plan is in place with regard to the MDRTB Regulations Dr Armstrong suggested writing a letter to David Louden asking for an update on these issues and Professor Williams agreed to do this. Letter sent 22 December 2014 asking the following questions re NSGH: 1. Whether the lobbied side rooms meet the current guidance for housing bone marrow transplant patients. 2. Whether the lobbied side rooms meet the DH guidance for housing Multi- Drug resistant TB patients. Response was by e mail on the 5th January 2015 (Colin Grindlay Brookfield to David Hall Director Curry and Brown) "Please see attached correspondence from Wallace Whittle advising the isolation rooms throughout the hospital have been designed in line with SHPN 04 supplement 1. Wallace Whittle sees no reason as to why the isolation rooms cannot be used under the

guidance issued previously by NHS"

David Hall then e mails David Louden(DL) and DL forwards to CW

The message from David Hall is as follows:

"I tasked Brookfield and their design team with reviewing the guidance document The prevention and Control of TB in the UK with particular reference to ANNEX D Environmental Control – Ventilation. As you will note below then have confirmed that in their professional opinion they see no reason as to why the isolation rooms cannot be used under the guidance as they have been designed in accordance with SHPN 04 supplement 1, attached"

CW replied to David and again and raised his concern regarding the exclusion of ID and BMTU from the guidance docs.

Meeting arranged to discuss by DL.

BICC 26 January 2015

Professor Williams reported that in relation to the MDRTB Regulations the rooms in IDU are compliant.

Looking at the patient pathway from the Emergency Department Professor Williams advised that this was satisfactory. Dr Seaton stated that the ID Physicians commented that if there was a VHF patient the ante room should be adequately sized to deal with this eventuality and required to be assessed. He said as a group the ID Physicians would like to see the beds and ante rooms to be used for these type of patients. Dr Armstrong stressed that the keys for the new hospital were being handed over tomorrow and this would need to be discussed with David Louden as a matter of urgency. She suggested a small group meet after this meeting and she would contact David Louden to see if the ID Physicians would be able to look at this area today.

In the Infectious Diseases Unit Dr Seaton advised that there are only two beds for VHF type of patients and the rest of the unit is for managing all other patients. In the Brownlee he stated that a VHF patient would be admitted via the fire exit.

Dr Kennedy advised that a sub group is commencing to look at VHF type of patients

27th January -2nd February 2015

Andrew Seaton (AS) sent a message to CW asking to confirm the type of ventilation available. If confimed as appropriate AS noted that these rooms "should be appropriate for short term patient management (VHF) before transfer to Royal Free".

Response from CW is as follows: (cc in was David Louden, Ann Harkness, Ian kennedy & SM)

This is broadly what we have been discussing at BICC for the last while. The positive

	pressure ante-room prevents ingress and egress of organisms from the room and can be used for source or protective isolation without the need to flip any switches. The problem has been that in Scottish Health Planning note 04 there is an Exclusion which states "This Supplement does not describe the specialist facilities required in infectious disease units or on wards where severely immuno-compromised patients are nursed. Guidance for these facilities will follow in a further Supplement to SHPN 04.However the planning team and HFS have been unable to locate further definitive guidance. This being the case I asked David Louden and his team to specifically cross reference our lobbied rooms with the DH guidance on rooms for MDRTB. At a meeting last week he confirmed that their view is that the lobbied isolation rooms at the NSGH provide equivalent protection, he will confirm this by e mail. As such I have no concerns about the suitability of the rooms for MDRTB etc. In terms of the Ebola, following your comments at BICC Sandra about the size of the ante-rooms, Iain Kennedy, Sandra and I met with Emma Thompson, who was nominated by the ID physicians to represent them. I explained that we were content that the lobbied side rooms at NSGH are sufficient under the ACDP guidance to manage an Ebola patient prior to transfer to a designated secure unit, but, that they are not sufficient for anything other than short term management, in particular my understanding was that GGC is not planning to act as a referral unit or accept transfers of these patients. If a severely unwell patient requires to be managed in Glasgow the view was that this would constitute a Major Incident and be managed accordingly. She expressed concern about the transfer of patients through the NSGH to the designated room and suggested that an isolator may be required to support the transfer. We agreed that she or other ID physicians would walk the route and take up their concerns through the directorate. I hope this gives you sufficient detail to address your concrens but if there is anything else please let me know. **1st February 2015** AS e mailed CW again "if they are signed off as safe and appropriate then we're all content. Just to check suspected MERS, SARS, Avian Flu etc. Same specification as MDRTB? Presume all ok for paediatric facility as well?" This went to Kevin Hill via AH and Jamie Redfern (GM) followed up on behalf of paediatrics. CW response was as above. **24th April 2015** (Jackie Barmanroy NC IPC on the project e mailed Frances Wrath with the following question about the RHC) I'm looking for your help regarding the following concerns Lynne has raised in regard to the new build - 1. Can we have assurance that the theatre ventilation has been commissioned?

	2. Can we have assurance that the dialysis lines/outlets have been commissioned /flushed ? 3. That estates will be responsible for the helix monitors for Schiehallion's BMT rooms? Response from Frances on the 5th May re the RHC was as follows: "Sorry I was on leave for most of last week. All areas have been commissioned in line with contract ER's and all legislative requirements. The Board's Estate s Team have access to all commissioning data and any specific questions are better addressed to them". **15th August 2015** **Not clear what triggered this e mail but AH sent e mail to Joyce Brown and AH responded:** **SM sent** "i confess i don't have major concerns regarding the pathway through the building, we can put controls in to manage this; my concern is about the co-location of these patients with our most vulnerable. I will wait and see what Craig comes back with but i guess if the ID physicians have signed this off they must think the risk to others in critical care is low. AH Responded "happy to meet at your convenience with one of the ID team. They are content with access to 2 dedicated isolation rooms within the medical HDU cluster and we are agreeing protocols for access to others if necessary with our clinical colleagues – we agreed this before we made the decision to move them as it was clearly a deal breaker for the clinicians if it had not been possible. The separate access to the brownlee off the carpark was designed because of the likelihood of admissions out of hours when the main doors were shut – not due to any infection risk. **4th September (AH to ID consultants cc in CW)** Just to confirm that we have had confirmation that the isolation rooms tested in critical care have passed the full range of tests , so there is no longer any need to have to admit elsewhere. The rooms in medical HDU are not tested yet – so patient placement will be in the ICU area until the full test programme is complete. Emma – in terms of your elective day case – that can now be planned for admission

	Ian Powrie to Sandra McNamee 30/09.15 Two rooms meet the agreed commissioning criteria: Isolation Bed 50 (Disc CCW-165) & • Isolation Bed 31 (Disc CCW-078) Both rooms have supply and extract HEPA filtration and meet the agreed air permeability test requirements set out in SHTM 04-01 supplement 1. However I would recommend confirming that Craig agreed that these rooms are suitable for ID patients, at our meeting last week he was still reviewing the status of the CCW rooms to define which rooms would be allocated for ID patients?
Action	None
Recommendation	Note the paper and timeline.

Inkster, Teresa

From: Peters, Erica
Sent: 06 May 2016 14:58
To: Inkster, Teresa
Cc: Bell, David; Evans, Thomas; Evans, Thomas (Uni); Fox, Ray; MacConnachie, Alisdair; Macconnachie, Alisdair (NHSmail); Seaton, Andrew; Thomson, Emma; White, Beth; Yates, John
Attachments: IC lett T Inkster 05.16 final.docx

Dear Teresa,
Please find attached a letter from the ID consultants raising our concerns about the management of dangerous pathogens in GG&C. We look forward to hearing your responses.
Kind regards,

Erica Peters
on behalf of Infectious Diseases Department consultants

5th May 2016

Dear Teresa,

Congratulations on your new role as Infection Control Lead. We look forward to working with you in this capacity.

As you know in May last year we moved from our purpose built ID unit on the GGH site to QEUH ward 5c. This has come with significant benefits to our patients, not least access to state of the art intensive care as well as proximity to other specialties. We were reassured that we would have access to at least two "negative pressure rooms" before we moved over. However this did not materialise and there have been some significant issues in relation to Infection Control. Safety for staff and patients has been highlighted by our recent experiences with Ebola infection. We have grave concerns that the new building is not a fit or safe environment to manage dangerous pathogens. We seek reassurances that, as lead, you are able to resolve some of the concerns below as a matter of urgency. We would like to see an urgent review of the facilities in place to manage such infections within GG&C, considering facilities available in adjacent health boards as part of that review. This would allow any interim solutions to the current problem to be considered.

Our major concern is the absence of airborne infection isolation rooms for managing dangerous pathogens, currently MERS-CoV being of highest concern. We are looking after potential patients in the positive pressure ventilated lobby rooms in HDU but we have questions about their suitability. There have been ongoing discussions about the basic engineering and lack of alarm systems. This pathogen has a high mortality rate (>36%) and clearly puts healthcare workers and other patients at risk if not managed appropriately. Nosocomial transmission is well described. We seek reassurance that the current environment meets national standards and ideally would like an independent review of these rooms.

Recently updated NICE guidelines have highlighted the issues of managing open TB in the new QEUH and possibly across the healthboard area. We previously took patients requiring inpatient care from other board areas to our negative pressure rooms, including from GRI, VIG, RAH and Inverclyde. We also often have very immunosuppressed patients on our ward, particularly HIV. We are now trying to manage PTB patients in the HDU rooms as well to avoid cross infection of TB to our other patients. The NICE guidelines highlight immunosuppression including specifically biologic agents as of particular risk in addition to HIV. Many inpatients throughout other specialties are on such agents, so are also at risk. We are not clear if the HDU rooms have enough air exchanges to keep staff safe and we do have MDR-TB presenting commonly which is of particular concern. Again we need a board wide strategy to manage in-patients with respiratory tuberculosis in terms of where they are cared for.

We are working in collaboration, on an updated SOP for VHF which I think is reasonably far forward.

We look forward to a good working relationship that leads to high quality clinical care for our patients with infection but also protects other patients and staff from such infections, particularly highly dangerous pathogens such as MERS CoV.

Kind regards,

Erica Peters David Bell Beth White Alisdair MacConnachie

Tom Evans Ray Fox Andrew Seaton John Yates Emma Thomson

ID Physicians GG&C

SBAR – Isolation rooms critical care
Dr T Inkster – May 2016

<table>
<tr><td>Situation</td><td>NHSGGC Infectious disease physicians at QEUH have written to the Lead ICD to express concern re the suitability/safety of isolation rooms in critical care for patients with multi-drug resistant Tuberculosis (MDRTB) and Middle east respiratory syndrome coronavirus (MERs-CoV)</td></tr>
<tr><td>Background</td><td>There are ten positive pressure ventilated lobbied (PPVL) rooms in Critical care at QEUH. Infectious diseases have access to two of these rooms for the isolation of patients with confirmed or suspected airborne infections.

Access to these PPVL rooms for ID patients can be difficult due to the competing need for critical care beds.

There are no negative pressure rooms in the QEUH.</td></tr>
<tr><td>Assessment</td><td>Guidance on the use of PPVL rooms for MDRTB is conflicting (see table below)
<table>
<tr><th>Guideline</th><th>Year</th><th>Recommendation</th></tr>
<tr><td>The Interdepartmental working group on Tuberculosis</td><td>1998</td><td>Minimum requirement for an infectious MDRTB patient is a negative pressure room</td></tr>
<tr><td>HBN 0401 Suppl 1 and SHPN 04-01 Suppl 1 Isolation facilities in acute settings</td><td>2005/2008</td><td>'Airborne infection' – no examples. Exclusion – does not describe isolation facilities required in an ID unit. Guidance will follow..</td></tr>
<tr><td>HBN 04-01 Suppl 1 Isolation facilities for infectious patients in acute settings</td><td>2013</td><td>PPVL suitable for chickenpox , measles and 'some forms of pulmonary tuberculosis'</td></tr>
<tr><td>SHTM 03-01 Ventilation for healthcare premises Part A</td><td>2014</td><td>Infectious disease isolation room – negative pressure room -5PA, 10 ACH</td></tr>
<tr><td>NICE Tuberculosis</td><td>2016</td><td>Negative pressure room</td></tr>
</table>
</td></tr>
</table>

MERs- CoV

MERs- CoV is a new and emerging pathogen therefore not considered in HBNs or SHTMs.

Guideline	Year	Recommendation
Health Protection Scotland	2015	Patients should be admitted to a negative pressure isolation room. If not possible a single room with ensuite facilities should be used
CDC	2015	Patients should be placed in AIIR – single patient rooms at a negative pressure and minimum 6 ach/hour

Conclusion - There is no guidance which definitively states that PPVL rooms are suitable for either MDRTB or MERs – CoV. Negative pressure rooms are the preferred option.

Room design

PPVL rooms in critical care at QEUH have been modified slightly to the original design criteria e.g. extracts are present in patient rooms . In addition verbal report on ACH/hr in en-suites is 3 , recommendation is at least 10 ACH/hr

HBN 0401 suppl1 – ' **modifying** or failing to provide one element of the system will jeopardise the performance of the system as a whole'

Risks

The risks associated with PPVL rooms not being deemed suitable for MDRTB or MERs-CoV or having been modified against original design criteria are

1) Cross transmission or outbreaks of serious airborne infections in patients
2) Cross transmission or outbreaks of serious airborne

	infections in staff members who have not been adequately protected.
Recommendations	1) External review by Health Facilities Scotland as to the suitability of PPVL rooms in critical care for MDRTB and MERs- CoV patients , preferably to incorporate an opinion from the Department of Health 2) External review by Health Facilities Scotland of the design specification and validation with a view as to whether modifications represent an ongoing risk. Consideration given to contacting Malcolm Thomas for an opinion , the original designer of the PPVL concept. 3) Consider ring fencing two critical care beds for use by Infectious diseases department so that they have access to two rooms at all times Note this SBAR excludes recommendations for VHF.

RE: Call

Inkster Teresa (NHS GREATER GLASGOW & CLYDE)

Thu 12/05/2016 14:40

To: Walsh, Tom [redacted]; Harkness Anne (NHS GREATER GLASGOW & CLYDE) [redacted];

Importance: High

Hi Anne,

We just wanted to catch up with you regarding the letter I received from the ID physicians regarding the critical care isolation rooms.

Following discussions with Dr Armstrong and David Loudon the plan is to review the original specifications and validation reports before requesting an external assessment from HFS . I am keen that this review should also seek clarity from the Department of Health regarding the suitability of these rooms for MDRTB and MERS- CoV and an opinion from Malcom Thomas, the orginal designer.

I was intending to inform the ID consultants of this plan . In the meantime while a review is undertaken it would seems sensible to send MDRTB patients elsewhere if possible. Would MDGH be an option?

I am in QEUH this afternoon on [redacted] if you are free to discuss further

Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Walsh, Tom [redacted]
Sent: 12 May 2016 14:26
To: Harkness Anne (NHS GREATER GLASGOW & CLYDE); Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: Call

Sorry Anne

Now in another meeting and Teresa is on-call and had to head back over to QEUH.

Teresa will drop you an email

T
Sent from my BlackBerry 10 smartphone.

critical care isolation rooms

Inkster Teresa (NHS GREATER GLASGOW & CLYDE)

Thu 12/05/2016 15:46

To: Loudon David (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE) [redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted];

Hi David,

I discussed the critical care isolation rooms with Jennifer again today. I think what it would be useful for me to see at this stage are the original plans/specifications and any validation reports. I appreciate you may have sent these to Craig already but I do not have access to this info currently.

Folllowing that, I think we need to consider an external review from HFS which incoporates a definitive statement from the Dept of Health re the suitability of these rooms for MDRTB and MERs and possibly some input from Malcolm Thomas , the designer of this concept. I think this approach will provide the reassurances that the ID physicians need.

Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

FW: Negative pressure rooms?

Inkster Teresa (NHS GREATER GLASGOW & CLYDE)

Thu 19/05/2016 14:24

To:Loudon David (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc:Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE) [redacted]; Harkness Anne (NHS GREATER GLASGOW & CLYDE) [redacted];

David - this is the email trail initiated by public health in 2011
Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: McNamee, Sandra [redacted]
Sent: 10 May 2016 09:16
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: FW: Negative pressure rooms?

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Stewart, Jackie
Sent: 27 September 2011 13:20
To: Walsh, Tom; Penrice, Gillian

Cc: Ahmed, Syed; McNamee, Sandra
Subject: RE: Negative pressure rooms?

Hi Gillian,

Thanks for your enquiry. I hope the information in this email is adequate, if not please let me know and I'll get as much detail as you require.

In the adult hospital there are 3 negative pressure rooms in the respiratory ward, which is on the top floor of the building.
The isolation rooms in critical care are also negative pressure.
The haemato-oncology ward has 10 negative pressure rooms.

In the children's hospital there are 4 negatively pressured isolation rooms in critical care and it will also have 4-6 (number still to be decided) negative pressure rooms in the Schiehallion unit for the BMT patients.

Kind regards,

Jackie.

Jacqueline Stewart, MSc
Consultant Nurse Infection Control
New South Glasgow Hospital & Labs Project
Site Offices - Top Floor
SGH Construction Site
Off Hardgate Road
Glasgow
G51 4SX
Tel: [redacted]
Mob: [redacted]

From: Walsh, Tom
Sent: 23 September 2011 08:24
To: Penrice, Gillian; Stewart, Jackie
Cc: Ahmed, Syed; McNamee, Sandra
Subject: RE: Negative pressure rooms?

Hi Gillian

Jackie Stewart, one of our Senior ICNs is on secondment to advise on the new build hospitals projects.

Jackie could you let Gillian know the plans re negative pressure rooms.

Many thanks

Tom

From: Penrice, Gillian
Sent: 22 September 2011 17:13
To: Walsh, Tom; McNamee, Sandra
Cc: Ahmed, Syed
Subject: Negative pressure rooms?

Hello Tom and Sandra

We were discussing the Scottish Government TB Action Plan at the TB monitoring group this afternoon. As you may be aware, one of the recommendations is that '*each board should have arrangements to ensure access to negative pressure facilities where these are required.*'

I thought this was one of the things in the Action Plan which Glasgow could happily 'tick' as completed (as I was thinking about adultts with TB) when Dr Jimmy Paton reminded the group that these are not available in Yorkhill. When asked if he knew if such rooms were planned in the new children's hospital he did not know - hence my email to you.

Will there be negative pressure rooms in the new hospital? I do hope so, as I presume it might be too late in the day to change the plans.

Thank you for your help.

Best wishes

Gillian

Dr Gillian Penrice
Consultant in public health medicine
Public Health Protection Unit
1st Floor, West House
Gartnavel Royal Hospital
1055 Great Western Road
Glasgow G12 0XH

[redacted]

FW: SBAR - critical care isolation rooms

Inkster Teresa (NHS GREATER GLASGOW & CLYDE)

Mon 23/05/2016 10:49

To: Cruickshank Anne (NHS GREATER GLASGOW & CLYDE) [redacted];

1 attachment

SBAR1.doc;

Interesting email trail
T

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 19 May 2016 08:18
To: Loudon, David; Harkness Anne (NHS GREATER GLASGOW & CLYDE)
Cc: Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE); Walsh Thomas (NHS GREATER GLASGOW & CLYDE)
Subject: RE: SBAR - critical care isolation rooms

MDRTB has been around for a long time and the need for a negative pressure room features in guidance from 1998 onwards. Of note is that the first UK case of XDRTB (untreatable) was in Gartnavel in 2008.

MERs was not known at the time of sign off. The ID physicians have chosen to focus on MERs as it is an imminent and emerging threat. However, other airborne infections such as SARs and H1N1 were known about.

Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Loudon, David [redacted]
Sent: 18 May 2016 20:02
To: Harkness Anne (NHS GREATER GLASGOW & CLYDE)
Cc: Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE); Inkster Teresa (NHS GREATER GLASGOW & CLYDE); Walsh Thomas (NHS GREATER GLASGOW & CLYDE)
Subject: Re: SBAR - critical care isolation rooms

Were both MERS and MDRTP known to the Board when the design was signed off? I'd guess not.

David

David W Loudon MCIOB CBIFM MBA
Director of Facilities and Capital Planning
NSH Greater Glasgow & Clyde

> On 18 May 2016, at 19:55, Harkness, Anne [redacted] wrote:
>
> i think that question is even simpler
>
> this SBAR says we need negative pressure rooms for MERS and MDRTB - we don't have any
>
> I dont see how HFS can guide us through the variation in advice from HPS / NICE / CDC etc
> don't need an external view for that - so we need the emerging pathogens group to consider how we manage that risk and whether we should be developing that facility
>
> Doesn't answer the question re the current PPVL are functioning as specificed - which I assume is within the HFS scope of expertise
>
> A
>
> -----Original Message-----
> From: Armstrong, Jennifer
> Sent: 18 May 2016 19:40
> To: Harkness, Anne; Inkster, Teresa (NHSmail); Loudon, David
> Cc: Walsh, Tom
> Subject: Re: SBAR - critical care isolation rooms
>

RE: SBAR - critical care isolation rooms

Harkness, Anne [redacted]

Wed 18/05/2016 19:55

To:Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE) [redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Loudon David (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc:Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted];

i think that question is even simpler

this SBAR says we need negative pressure rooms for MERS and MDRTB - we don't have any

I dont see how HFS can guide us through the variation in advice from HPS / NICE / CDC etc
don't need an external view for that - so we need the emerging pathogens group to consider how we manage that risk and whether we should be developing that facility

Doesn't answer the question re the current PPVL are functioning as specificed - which I assume is within the HFS scope of expertise

A

-----Original Message-----
From: Armstrong, Jennifer
Sent: 18 May 2016 19:40
To: Harkness, Anne; Inkster, Teresa (NHSmail); Loudon, David
Cc: Walsh, Tom
Subject: Re: SBAR - critical care isolation rooms

Anne
I wonder if few steps first to make it simple for me.

1. Do the rooms we built provide protection for staff and other patient from these 2 pathogens? That is the question ID have asked and that is the one we need advice on. The HFS and DH can help here unless someone else knows the answer.

2. If they do, then we are all reassured. If they don't then we need a contingency plan. And that should be worked through with ITU/ID and IC.

Business cases etc can wait until we know what the answer to question 1 is. If the answer takes a long time to get them suggest a work around in the event we get one of the pathogens.

J

Sent from my BlackBerry 10 smartphone on the EE network.
Original Message
From: Harkness, Anne
Sent: Wednesday, 18 May 2016 18:55
To: Inkster, Teresa (NHSmail); Loudon, David; Armstrong, Jennifer
Cc: Walsh, Tom
Subject: RE: SBAR - critical care isolation rooms

I think this conflates a number of issues and we should separate them

1 - provide reassurance about the functioning of the current isolation rooms - from current evidence plus an external view should that be required

2 -develop a solution for emerging pathogens - as stated there is no guidance on MERS and there is no clear guidance about MDRTB , we would also want a respiratory and public health view on this . If we require a service development to provide negative pressure rooms then that has to be taken through a planning process re patient numbers etc etc and a business case developed for the cost .

3 - access to the rooms - this is an operational issue , it is not mentioned in the letter from ID so I am not clear how this has emerged with such a definitive recommendation and this has to be seen in the context of the operational funcitoning on the site. we only have 9 medical HDU beds - to leave 2 empty most of the time would seem mad and to staff 2 more needs a revenue bid

There have never been any issues with admitting a patient when it has been required . I have never received any alert form the ICT re a failure to isolate . Part of the review of the last ebola admiisson was to write an SOP so the c care staff are clear how to clear a room once the need is highlighted - so this is in hand

Anne

-----Original Message-----
From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 18 May 2016 18:35
To: Loudon, David; Armstrong, Jennifer; Harkness, Anne
Cc: Walsh, Tom
Subject: RE: SBAR - critical care isolation rooms

Thanks both. I am aware that the design brief did not request an ID unit - that specification is something different entirely. The SBAR I sent is specifically for isolation rooms in critical care for airborne infections which I believe were in the original design brief.
Kind Regards

Re: SBAR - critical care isolation rooms

Loudon, David [redacted]

Wed 18/05/2016 19:41

To:Harkness Anne (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted] Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE) [redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted];

Thanks Anne, this is helpful.

Teresa, is it your view from the data I sent you on the Isolation Rooms (Departmental Specification and Commissioning Data) that the rooms are not compliant with the guidelines in place when the contract was signed with Brookfield Multiplex? If this is the case, where do you consider the non compliance exists? Bear in mind that it was the Boards responsibility to provide the specification to the contractor.

Regards

David

David W Loudon MCIOB CBIFM MBA
Director of Facilities and Capital Planning
NSH Greater Glasgow & Clyde

> On 18 May 2016, at 18:55, Harkness, Anne [redacted] wrote:
>
> I think this conflates a number of issues and we should separate them
>
> 1 - provide reassurance about the functioning of the current isolation rooms - from current evidence plus an external view should that be required
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>
> 3 - access to the rooms - this is an operational issue , it is not mentioned in the letter from ID so I am not clear how this has emerged with such a definitive recommendation and this has to be seen in the context of the operational funcitoning on the site. we only have 9 medical HDU beds - to leave 2 empty most of the time would seem mad and to staff 2 more needs a revenue bid
>

Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Loudon, David [redacted]
Sent: 18 May 2016 18:29
To: Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE); Inkster Teresa (NHS GREATER GLASGOW & CLYDE); Harkness Anne (NHS GREATER GLASGOW & CLYDE)
Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE)
Subject: RE: SBAR - critical care isolation rooms

Jennifer

Let's discuss tomorrow as I think that your view is equally critical bearing in mind that the design brief didn't request an Infectious Diseases Unit within the hospital.

David

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning
NHS Greater Glasgow & Clyde
Corporate Headquarters
JB Russell House
Gartnavel Royal Hospital
Glasgow
G12 0XH

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

From: Armstrong, Jennifer
Sent: 18 May 2016 18:24
To: Inkster, Teresa (NHSmail); Loudon, David; Harkness, Anne
Cc: Walsh, Tom
Subject: RE: SBAR - critical care isolation rooms

david

guess your view critical here; however I would back HFS external review as we do need some assurance for this group iof infections
j

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 18 May 2016 11:51
To: Armstrong, Jennifer; Loudon, David; Harkness, Anne
Cc: Walsh, Tom
Subject: SBAR - critical care isolation rooms

Dear all,

Please find attached an SBAR I have put together in relation to the critical care isolation rooms .

As you will see the guidance on this subject is conflicting and non- definitive. Based on the information I have at present I cannot provide the ID physicians with reassurance that these rooms are suitable for patients with MDRTB or MERsCoV without an external review.

Can you let me know if you have any comments and if you are happy to proceed with the recommendations.

Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

****

RE: HFS Isolation room status question?

McNamee, Sandra [redacted]

Tue 31/05/2016 10:11

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

I know it must feel like pulling teeth but it really is...
Sandra

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

-----Original Message-----
From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 27 May 2016 12:33
To: Walsh, Tom; McNamee, Sandra
Subject: FW: HFS Isolation room status question?

Progress..
T

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology Dept of Microbiology Queen Elizabeth University Hospital Glasgow Direct dial : [redacted]

From: Loudon, David [redacted]
Sent: 27 May 2016 11:51
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE); Powrie Ian (NHS GREATER GLASGOW & CLYDE)
Cc: Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE)
Subject: RE: HFS Isolation room status question?

Thanks Tersa.

Leave it with me.

I would anticipate an initial meeting with HFS colleagues and will ensure you're invited.

Regards

David.

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning NHS Greater Glasgow & Clyde Corporate Headquarters JB Russell House Gartnavel Royal Hospital Glasgow
G12 0XH

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

-----Original Message-----
From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 27 May 2016 09:17
To: Loudon, David; Powrie, Ian
Cc: Armstrong, Jennifer
Subject: RE: HFS Isolation room status question?

Thanks David

Yes , I would still like question 1 asked . As you know the guidance is vague and subject to misinterpretation so I really don't know the answer. I am aware that DOH are involved in advice re installation of a modified version of these rooms in a London hospital although I suspect that may have more to do with bioterrorism preparedness and I don't know what the modifications are. This is why it would be useful to have a DOH opinion which could be done via HFS.

I know the hospital wasn't designed with ID containment in mind. However it was designed knowing that we would have patients coming though the door or already in the hospital with airborne infections too sick to be transferred to the Brownlee , requiring ventilation or critical care support on site.

If the answer to Q1 is no then obviously we don't need to proceed with Q2.

Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC

Training Programme Director Medical Microbiology Dept of Microbiology Queen Elizabeth University Hospital Glasgow Direct dial : [redacted]

From: Loudon, David [redacted]
Sent: 26 May 2016 18:30
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE); Powrie Ian (NHS GREATER GLASGOW & CLYDE)
Cc: Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE)
Subject: RE: HFS Isolation room status question?

Teresa

I am content to contact HFS on question 1 and will do that tomorrow subject to your response to the next sentences. I would again note that the hospital was not designed with infectious diseases containment in the design brief and I suspect that we already know the answer that HFS will provide. Do you as the infection control expert still consider that it is worthwhile to request their view on question 1?

I am awaiting some clarifications from our professional and project team on question 2 and once I have the information, I will make contact with HFS.

Regards

David

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning NHS Greater Glasgow & Clyde Corporate Headquarters JB Russell House Gartnavel Royal Hospital Glasgow
G12 0XH

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 26 May 2016 12:38
To: Powrie, Ian; Loudon, David
Subject: RE: HFS Isolation room status question?

Hi both - is there any update on this?
Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology Dept of Microbiology Queen Elizabeth University Hospital Glasgow Direct dial : [redacted]

From: Powrie, Ian [redacted]
Sent: 20 May 2016 18:31
To: Loudon David (NHS GREATER GLASGOW & CLYDE); Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: HFS Isolation room status question?
David,

Teresa & I discussed the issues raised by the ID Physicians this afternoon following which I have prepared the following questions for submission to HFS for assessment and verification?

If you are comfortable with these questions and the attached supporting information would you like Teresa to submit the to HFS for formal review.

Regards

Ian

I. Powrie
Sector Estates Manager (South & Clyde)
Queen Elizabeth University Hospital Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,
Direct : [redacted]
Mob: [redacted]

Re: letter

Thomas Evans [redacted]

Sun 29/05/2016 12:16

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Peters Seija (NHS GREATER GLASGOW & CLYDE) [redacted]; Bell David (NHS GREATER GLASGOW & CLYDE) [redacted]; Seaton Ronald (NHS GREATER GLASGOW & CLYDE) [redacted]; Fox Raymond (NHS GREATER GLASGOW & CLYDE) [redacted]; alisdair.macconnachie[redacted]; john.yate[redacted]; beth.white[redacted]; Thomson Emma (NHS GREATER GLASGOW & CLYDE) [redacted];

Importance: High

Dear Theresa

Thank you very much - that is most helpful

Best wishes

Tom

Professor Tom Evans
[redacted]
Level 4, Glasgow Biomedical Research Centre,
120 University Place,
Glasgow G12 8TA
UK
Phone: [redacted]
Fax: [redacted]

On 27 May 2016, at 14:10, Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted] wrote:

Dear all

Thank you for your letter.

Apologies for the delay in getting back to you - it has taken me some time to gather information on the specification of the critical care isolation rooms and also to reach a consensus as to how to proceed .

I requested an external review and have now had agreement that one can be initiated. An enquiry will be submitted to Health Facilities Scotland . I will be present at the initial meeting and will be requesting an opinion from both HFS and the DOH. The questions I will be asking are around the suitability of these PPVL rooms for airborne infection and the impact of modifications that have been made to the original design.

The broader issue of capacity and preparedness is also under discussion and the outcome of the above review will influence how we proceed with this.

I will keep you informed - HFS usually respond quickly.

Kind Regards
Teresa

Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology

Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Peters, Erica
Sent: 06 May 2016 14:58
To: Inkster, Teresa
Cc: Bell, David; Evans, Thomas; Evans, Thomas (Uni); Fox, Ray; MacConnachie, Alisdair; Macconnachie, Alisdair (NHSmail); Seaton, Andrew; Thomson, Emma; White, Beth; Yates, John
Subject:

Dear Teresa,
Please find attached a letter from the ID consultants raising our concerns about the management of dangerous pathogens in GG&C. We look forward to hearing your responses.
Kind regards,

Erica Peters
on behalf of Infectious Diseases Department consultants

Queen Elizabeth University Hospital

Isolation Rooms

Report 2016 D 0.05

Ian Storrar

1. Introduction

1. Health Facilities Scotland (HFS) were contacted by Mr D Loudon , Director of Facilities and Capital Planning of NHS Greater Glasgow and Clyde (NHS GGC), to give an opinion on the suitability of the isolation rooms at the isolation rooms at the Queen Elizabeth University Hospital (QEUH) in Glasgow, with reference to the scope noted below.
2. HFS and NHS GGC met at QEUH on 13th June 2016 to discuss the scope of this report and visit an isolation room.
3. The scope was agreed as follows:-
    - Review client briefing information
    - Review design documentation
    - Review as installed information
    - Review commissioning information
    - Engage colleagues from Health Protection Scotland (HPS) as necessary
    - Comment on the isolation room designs with respect to published guidance and the client briefing information
    - Is the ventilation design criteria set out in SHPN 04 supplement 1: Isolation Facilities in Acute Settings As detailed in Table 1: Isolation Suite – Ventilation Parameters and Sheet 2: New build single room with en-suite facilities and bed-access lobby (isolation suite), suitable for safe nursing of patients with the one of the following conditions?
        - Multi Drug Resistant TB (MDRTB)
        - MERS
        - H1N1
4. The two main design guidance documents current at the time of design for isolation rooms are
    - SHPN 04 Supplement 1 dated September 2008
    - HBN 04-01 Supplement 1 dated 2005. (Note: this document is superseded by the 2015 version, specifically the guidance therein that relates to rooms used for source isolation. It does not supersede the guidance on protective isolation). Most of the documents cite HBN 04 Supplement 1 as the design guidance and the 2005 version will be used to check the various aspects of the design and as installed information as this was current at the time of design. It should be noted that Scottish Design Guidance should take precedence over any equivalent English (or other) Design Guidance if it is available.

5. Both HPN 04-01 supplement 1 (2005) and SHPN 04 supplement 1 (2008) advise "This supplement does not describe the specialist facilities required in infectious disease units or on wards where severely immuno-compromised patients are nursed. Guidance for these facilities will follow in a further supplement to HBN 4". The Department of Health (DoH) has not provided this additional documentation to date.
6. To enable this report to be concluded in full some additional information is required from NHS GGC to allow a more comprehensive assessment of the physical and environmental conditions. The suggested additional information is noted in Appendix 2.
7. HPS have provided commentary on this report based on the information received from NHS GGC and the notes contained within this report. To provide expert opinion on the possible use of the isolation rooms for highly infectious patients would require further work by HPS in collaboration with HFS and NHSGGC.

2. Review of Documentation provided by NHS GGC

1. The documents provided by NHS GGC for review are listed in Appendix 1
2. From the information provided there are a combination of single isolation rooms without lobbies and isolation suites with lobbies. Additionally there appears to be rooms noted as isolation rooms which do not have en-suite facilities.
3. The document "NSGACL Critical Care NSG_iss1_rev - Clinical Output Spec" clause 2.1.1 notes that the Intensive Care Unit (ICU) shall have 20 beds in two pods of ten, 2 of which are single rooms with gowning lobbies and the remainder of which (18) are single bed rooms with glass frontage. This clause also notes that the facility will "need to meet all current Scottish Health Planning / Health Building Note on radiological protection issues and Health Board Radiological Protection Officer advice." Clause 2.1.1 also notes that all patient rooms must have access to natural light. Clause 7.2 notes that the Environmental and Services Requirements "should correspond to the relevant SPHNs, HTMs and other technical guidance and the technical output specification for this project." The specific requirements of the isolation rooms from a clinical perspective are outlined in Clause 8. Clause 8.1 notes that for intensive care (level 3) single rooms and lobbies are required for isolation.
4. The room datasheet (RDS) document RDS - NA-SZ-01-RD-400-CCW_B, details the specific requirements for the isolation rooms amongst others. This notes that the mechanical services ventilation provision should be to HBN 04-01 Supplement 1.
5. Considering the drawings provided for the isolation room lobby (NA-SZ-XX-AS-400-126 and NA-SZ-XX-AS-400-126_Z1) against the requirements of HBN 04-01 Supplement 1, it is noted that whilst the majority of items are provided, the following are not:
   - Storage for "other" clean PPE (plastic apron, glove and mask storage provided)
   - Storage for room cleaning equipment
   - Facilities for completing and storing log books
6. Detailed drawings for isolation rooms with en-suites were not provided therefore no comment can be made.
7. Considering the drawings for the isolation rooms which were provided (NA-SZ-XX-AS-400-127-01 and NA-SZ-XX-AS-400-127-01_Z1), they show rooms with no en-suite as part of the design. This arrangement is also shown on schematic ZBP-XX-XX-SC-524-707 B. This

arrangement is not part of HBN 04-01 Supplement 1, which notes that an en-suite is a key consideration and provides a simple cost effective way to provide isolation. It is not clear from the information provided where these rooms are, as those isolation rooms identified in 2.2 above have en-suites.

8. In general, the air handling units serving the isolation rooms supply and extract air from other rooms (non-isolation rooms). A common supply is permissible under the guidance in HBN 04-01 Supplement 1; there is no information provided on the control strategy to ensure that the supply system will deliver constant volume depending on the demand.
9. The ventilation extract from the isolation room en-suites and the isolation rooms themselves are extracted via a separate system which would appear to terminate at a louver on the side of the building. HBN 04-01 Supplement 1 notes that this extract should terminate at roof level at least 3m above the building height. It is not clear from the information provided if all the extract fans are supplied from the "essential" side of the electrical distribution or if they have any safe change housings for changing filters.
10. The recoded magnehelic gauges for the isolation rooms, with the exception of Lobby ID GW3-051 (Bed 16) read 10 Pa or above. The noted unit was recorded as 9.0 Pa. HBN 01 Supplement 1 permits a positive pressure between 8Pa and 12 Pa.
11. The room leakage test carried out and reported by the specialist contractor, RSK Environment Limited, indicate that they meet the leakage parameters set out in HBN 04-Suppliemnt 1.
12. There is no confirmation in the commissioning data provided that the rooms or the en-suites meet the required air change rates.

3. Conclusions and recommendations

1. It is clear that in HBN-04 Supplement 1 that the design of the isolation suits is based on a validated design, which was carried out by BSRIA for DoH. The drawings provided appear to show that the isolation rooms at QEUH do not, in some instances, meet the requirements of the guidance in the following respects :-
    - Some isolation suite extract ventilation would appear to terminate behind louvers on the facade
    - Some extract ventilation would appear to terminate in formed turrets above plant rooms.
    - Isolation suites may have been provided without en-suite facilities.
    - Log books not available in lobbies

Recommendations

2. As stated in both HBN 04-01 Supplement 1 (and SHPN 04 Supplement 1), "this supplement does not describe the specialist facilities required in infectious disease units or on wards where severely immuno-compromised patients are nursed. Guidance for these facilities will follow in a further supplement to HBN 4." The Department of Health (DoH) have confirmed that the additional guidance noted was never produced and there are no plans in place for it to be produced as part of their guidance review. Therefore, to provide a more detailed

response to the safe nursing of patients with certain conditions this additional guidance may be required. In conjunction with colleagues from HPS we are preparing a SBAR and bid to Scottish Antimicrobial Resistance and Healthcare Associated Infection group (SARHAI) to provide advice and guidance for these patients.

3. Without complete information on the isolation rooms to be reviewed it is not possible for HPS to provide a comprehensive response to NHSGGC regarding the suitability of the rooms to care for highly infectious or infectious patients. With the limited information available HPS would recommend;
    - That the isolation rooms with positive pressure lobbies and en-suites are not used for highly infectious/infectious patients. The positive pressures recorded in the lobby meets the parameters laid out in HBN 04-01 Supplement 1. Leak tests also confirmed met the leakage parameters set out in HBN 04-01 Suppliement 1. However no air changes information is available for the room and en-suite itself so we cannot advise if the rooms meet expected or safe standards.
    - That rooms without lobbies are not used for highly infectious/infectious patients. At this time as we do not have air changes information and cannot be confident that the risk of cross transmission of infection from the room via the ventilation system cannot be excluded.
    - That rooms without en-suite facilities are not used for the care of highly infectious/infectious patients as advised within the HBN 04-01 Supplement 1, which notes that an en-suite is a key consideration and provides a simple cost effective way to provide isolation. Using rooms without en-suite facilities risks possible cross transmission of infection as alternative methods for toilet facilities and personal hygiene must be made.
    - That NHSGGC provide the requested information to allow HPS/HFS to provide a more detailed appraisal of the current isolation room facilities and suitability for use, which may include some on-site collaborative working.
    - That HPS and HFS, in line with previous work, visit NHSGGC and review the isolation rooms in question and all associated building and commissioning information to provide an SBAR on the suitability of the rooms as requested by NHSGGC.
    - Caring for highly infectious/infectious patients within the QEUH should be undertaken using a risk assessment for patient placement until a full appraisal of the isolation rooms is complete and recommendations provided.

Appendix 1

Documents provided by NHS GGC

General

Locations of Isolation rooms

Client briefing

Bed glass dividers – PMI (Project Manager Instruction)

Handles – PMI (Project Manager Instruction)

NSGACL Critical Care NSG_iss1_rev - Clinical Output Spec

Room data sheets

Room Data Sheets RDS - NA-SZ-01-RD-400-CCW_B

Signed off drawings

NA-SZ-XX-AS-400-126 - gowning lobby

NA-SZ-XX-AS-400-127-01 - Single room isolation

ZBP-XX-XX-SC-524-701 - Ventilation Schematic AHU 01

ZBP-XX-XX-SC-524-703 - Ventilation Schematic AHU 03

ZBP-XX-XX-SC-524-704 - Ventilation Schematic AHU 04

ZBP-XX-XX-SC-524-705 - Ventilation Schematic AHU 06

ZBP-XX-XX-SC-524-707 - Ventilation Schematic AHU 08 – 17

ZBP-XX-XX-SC-524-708 - Ventilation Schematic AHU 18

ZBP-XX-XX-SC-524-709 - Ventilation Schematic AHU 19

ZBP-XX-XX-SC-524-871 - Ventilation Schematic AHU 41

ZBP-ZD-01-PL-524-014_J - Ventilation Layout First Floor Critical Care

ZBP-ZG-01-PL-524-017_M - Ventilation Layout First Floor Critical Care

As installed information

ME-ZD-01-PL-500-521_Z1 - First Floor CCU As Built Domestic Water Pipe Work

ME-ZD-01-PL-500-522_Z1 - First Floor CCW As Built Domestic Water Services

ME-ZD-01-PL-524-521_Z1 - First Floor CCU As Built Ventilation Ductwork Layout

ME-ZD-01-PL-524-522_Z1 - First Floor CCU As Built Ventilation Ductwork Layout

NA-SZ-XX-AS-400-126_Z1 – Gowning lobby : Single Bedroom

NA-SZ-XX-AS-400-127-01_Z1 - Critical Care Bed Area

Commissioning information

QEUH isolation room summary

NSGH Isolation Rooms - Mag Calibration and room pressure set

Extract fan commissioning results for EF 08, 09, 10,11,12,13,14,15,16 and 17

Supply fan commissioning results for AHU 08, 09, 10,11,12,13,14,15,16 and 17

524395 South Glasgow Hospital Isolation Room Test Results (00) 23.11.20...

524395 South Glasgow Hospital Isolation Room Test Results (01) 24 11 20

Appendix 2

Additional information requested from NHS GGC

- Client brief
- Design parameters
- Designers drawings
- Designers specification
- Contractors proposals
- As installed schematics
- As installed room drawings
- Initial commissioning results (air flows, pressure regime, etc)
- Any subsequent test results post commissioning/handover
- O&M information on the plant and equipment for the isolation rooms
- Is the document "NSGACL Critical Care NSG_iss1_rev - Clinical Output Spec" effectively the ACR or was there any other document produced to advise of the design parameters?
- Did the contractor provide any written proposals?
- Has there been any post commissioning test/commissioning results taken?
- How does the isolation room AHU extract duct work terminate?
- To allow the room diffusers to match up to the commissioning documents can you please advise of the room names/references for the following and what drawing they are on please

room	Fan ref	Terminal ref
	8/EF01	TG06
	8/EF01	TG07
	AHU 08	SG009
	9/EF01	TG009
	9/EF01	TG010
	AHU 9	SG025
	10/EF01	TG013
	10/EF01	TG014
	AHU10	SG005
	11/EF01	TG015
	11/EF01	TG016
	AHU 11	SG038

room	Fan ref	Terminal ref
	12/EF01	EG014
	AHU 12	SG014
	13/EF01	EG013
	AHU 13	SG023
	14/EF01	EG001
	AHU 14	SG001
	15/EF01	EG020
	AHU 15	SG027
	16/EF01	EG045
	16/EF01	EG046
	AHU 16	SG054
	17/EF01	EG041
	17/EF01	EG042
	AHU 17	SG048

MDRTB cases

INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)

Wed 03/05/2017 12:39

To:brian.jones [redacted] john.coia [redacted]; John.Hood [redacted]; MACLEOD, Mairi (NHS GREATER GLASGOW & CLYDE) [redacted]; Weinhardt, Barbara [redacted]; JAMDAR, Sara (NHS GREATER GLASGOW & CLYDE) [redacted]; HASNIE, Sulman (NHS GREATER GLASGOW & CLYDE) [redacted]; Peters Christine (NHS GREATER GLASGOW & CLYDE) [redacted]; Wright Pauline (NHS GREATER GLASGOW & CLYDE) [redacted]; Khanna Nitish (NHS GREATER GLASGOW & CLYDE) [redacted]; alison.balfour [redacted]; Leanord Alistair (NHS GREATER GLASGOW & CLYDE) [redacted]; Valyraki, Kalliopi [redacted]; COTTOM, Laura (NHS GREATER GLASGOW & CLYDE) [redacted]; KHALSA, Kamaljit (NHS GREATER GLASGOW & CLYDE) [redacted]; POLUBOTHU, Padmaja (NHS GREATER GLASGOW & CLYDE) [redacted]; Soulsby, Hannah [redacted]; SHEPHERD, James (NHS GREATER GLASGOW & CLYDE) [redacted]; MACALISTER HALL, Sarah (NHS GREATER GLASGOW & CLYDE) [redacted]; Jenna Gillies [redacted]; Dhillon, Raje [redacted];

Cc:Peters Seija (NHS GREATER GLASGOW & CLYDE) [redacted];

Dear all ,

There have been two cases of MDR-TB in GGC within a 2 week period. One patient has required admission , the other is being managed in the community. Public health are investigating contacts and any links between the two.

If you are informed of any possible or confirmed cases either in hospital or the community can you let myself and the site ICD know so that we can advise on patient placement or clinic attendance.

We currently have a reduced capacity in GGC for airborne infections . The ten PPVL rooms at QEUH are currently under review by external agencies as to their suitability for airborne infection .

At present the only site which has negative pressure rooms is GRI (respiratory wards and ICU) .

If called out of hours re placement of a **confirmed case** the patient should be transferred to GRI if medically fit - the ID and respiratory physicians are aware of this contingency plan and should be contacted .

It is highly unlikely, but if no negative pressure rooms are available, the next safest alternative is one of the PPVL rooms in QEUH - room 43 or 44.

A risk assessment has been undertaken in conjunction with ID and respiratory colleagues and we have agreed that ' '**suspected cases**' can be managed in the PPVL rooms at QEUH.

If a suspected or confirmed patient is in any other hospital and cannot be transferred then the advice would be to isolate in a single room + ensuite with full PPE in place for staff (as per ICT policy) and preferably no immunocompromised patients in the vicinity .

Two additional negative pressure rooms will be available once the RAH ICU refurbishment is complete.

Let me now if you have any questions

Kind regards
Teresa

HTM 04-01

Southern General Hospitals Construction Site,
2nd Floor, Modular Building, Off Hardgate Road, Glasgow,G51 4SX
[redacted]
Tel: [redacted]
Reception: [redacted]
Mob [redacted]

Research building note 00-10
Part C - sanitary arrangements

From: Ritchie Lisa (NATIONAL SERVICES SCOTLAND) [redacted]
Sent: 07 March 2014 11:55
To: Kane, Mary Anne
Cc: Inkster, Teresa (NHSmail); Stewart Ian (NATIONAL SERVICES SCOTLAND); Paterson Ann (NATIONAL SERVICES SCOTLAND); Powrie, Ian; McIntosh Julie (NATIONAL SERVICES SCOTLAND)
Subject: Enquiry regarding taps in the SGH

Dear Maryanne,

Thank you for your enquiry which has been passed to me. I understand that you have already spoken with Ann and Annette seeking advice from HPS with regards to the taps to be fitted within the new Southern General Hospital (SGH).

My understanding of your enquiry is that the tap type/design purchased for the new SGH was chosen prior to the publication of UK and Scotland-wide pseudomonas guidance. Subsequently, this tap type/design… read more does not meet the required technical specification and you wished to convene a meeting with representatives from HFS and HPS (in particular microbiology consultant input) as soon as possible to discuss the way forward with this.

I understand from HFS that Ian Powrie has also spoken directly with Ian Stewart regarding this same issue.

It would be helpful therefore if you could confirm the above is correct, and clarify the main issues to be discussed at a meeting with all parties present.

Julie is presently seeking a suitable date for a meeting to take place within the couple of weeks.

I look forward to hearing from

Kind regards,
Lisa

Lisa Ritchie
Nurse Consultant Infection Control
Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

[redacted]

Inkster Teresa (NHS Greater Glasgow_Clyde)

From: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Sent: 13 March 2014 12:44
To: Inkster Teresa (NHS Greater Glasgow & Clyde)
Subject: FW: Enquiry regarding taps

Teresa,

I have highlighted Jimmy's responses in red.

Kind regards,
Lisa

Lisa Ritchie
Nurse Consultant Infection Control
Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

From: Jimmy Walker [redacted]
Sent: 12 March 2014 16:12
To: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Subject: RE: Enquiry regarding taps

Hi Lisa,

Query:
Notwithstanding the potential for warranty issues, should the board modify the water systems during the first two year warranty period, the manufacturer has advised that these flow control devices serve a wider purpose than simple flow restrictors, performing 3 very important functions:

Response: any changes may make the warranty of the devices invalid. In Scotland, as far as I am aware your guidance is to react to clinical outcomes and where appropriate take environmental samples that may include water samples. If there are concerns about the microbiological status of these devices then it may be appropriate to schedule sampling during the two year warranty period and react accordingly.

The 3rd is claimed to be vital to prevent air outside the tap from getting inside, as this will introduce contamination and make the bacterial problems worse?

Response:

1. Provide laminar flow Yes the devices are there to provide laminar flow which reduces dispersal of droplets.
2. Regulate the flow rate – some sites have issues with too much flow/pressure resulting in droplets being disseminated from the wash hand station which can be an issue near medicine preparation areas or where medical equipment is being decontaminated.

3. Retain water inside the tap -I would be interested to see the evidence for this claim. Yes bacteria will be present in the air as aerosols and in a hospital ward environment there will be dispersal of both aerosols and larger droplets which will tend to drop out and land on surfaces. As these larger droplets land on surface, the bacteria contained will tend to proliferate where the environment is moist and wet so I am not entirely convinced that water retention within a tap would prevent contamination -there will still be enough moisture inside taps that do not retain water to encourage microbial growth.

Is this a valid position with regards to contamination of the tap spout assembly? Other manufacturers have redesigned their flow control devices to eliminate this retention of a water to air seal?

Yes a number of tap manufacturers have designed their outlets to be self draining but I am not aware of any scientific evidence on which this is based (there was a previous tendency to have self-draining shower, for the prevention of legionella developing in the shower head and flexible hoses but again these have not necessarily to be seen to prevent legionella growth in these areas due to the retention of water in the tubing and showerhead that allow microbial growth.

There are also several issue with regards to the redesign of the system engineering in order to manage the flow control with regards to items 1 & 2 if the flow control devices are removed, e.g.

- Fitting flow control devices in line would potentially move the problem from the readily accessible tap discharge point to an inaccessible in line position with the associated HAI risks.
    1. The fitting of flow control devices would have to be balanced with a risk of HCAI issues (where too much flow is present) or potentially where too much flow could result in water droplets potentially leading to the surrounding area getting wet or too much water on the floor – I have evidence where this has been the case. However, management of the water systems should identify any problems and implement procedures to prevent microbial build up elsewhere.
- In liner flow control will also reduce the effectiveness of full bore water flow scrubbing of the bio-film during routine maintenance as the in line flow control will limit the flow rate.
    1. As above, any decision to reduce the flow rates should be taken in consideration of the risk of transmission of water borne microorganisms, and water droplets that may lead to other risks.

Get back to me if you need any more input - happy to assist where I can and I will interested in the outcomes.

Jimmy

Dr Jimmy Walker

Water System Microbiology and Decontamination Expert
PHE Biosafety Unit
Porton Down
Salisbury
SP4 0JG
Tel: [redacted]
Mob: [redacted]
Email: [redacted]
Twitter: [redacted]

From: Ritchie Lisa (NATIONAL SERVICES SCOTLAND) [redacted]
Sent: 11 March 2014 16:44
To: Jimmy Walker
Subject: Enquiry regarding taps
Importance: High

Dear Jimmy,

Longtime no see! I'm seeking your expertise on taps please.

Background:
One of our NHS Boards procured the Home Optitherm tap for the clinical environments within a new hospital build. This tap was selected from a short list of TMT devices which comply(ied) with NHS specifications, guidance and WRAS approvals available at that time. This was prior to the recommendations of the Scotland-wide pseudomonas guidance mandated under CEL 08 (2013) which states that *"Bio film can develop on flow straighteners and it is recommended that these are removed from taps"*. This recommendation is also reflected in the advice within SHTM 04-01: part A "Design, Installation and Testing" section 9.51, Note 12. However this SHTM guidance does not specify where these devices should removed.

Our Health Facilities Scotland colleagues have advised this board: *"you have been offered a product that was completely acceptable at the date of the contract award for the new hospital and, while you could instruct the contractor to replace the taps or modify them, this would most likely create a serious delay and consequential costs. I think you will have to live with them but, whenever contractual requirements allow it, remove the restrictors and adjust the flows"*

Query:
Notwithstanding the potential for warranty issues, should the board modify the water systems during the first two year warranty period, the manufacturer has advised that these flow control devices serve a wider purpose than simple flow restrictors, performing 3 very important functions:

1. Provide laminar flow
2. Regulate the flow rate
3. Retain water inside the tap

The 3rd is claimed to be vital to prevent air outside the tap from getting inside, as this will introduce contamination and make the bacterial problems worse?
Is this a valid position with regards to contamination of the tap spout assembly? Other manufacturers have redesigned their flow control devices to eliminate this retention of a water to air seal?

There are also several issue with regards to the redesign of the system engineering in order to manage the flow control with regards to items 1 & 2 if the flow control devices are removed, e.g.

- Fitting flow control devices in line would potentially move the problem from the readily accessible tap discharge point to an inaccessible in line position with the associated HAI risks.
- In liner flow control will also reduce the effectiveness of full bore water flow scrubbing of the bio-film during routine maintenance as the in line flow control will limit the flow rate.

I would appreciate your thoughts on the above.

Kind regards,
Lisa

Lisa Ritchie
Nurse Consultant Infection Control
Infection Control Team / HAI Group
Health Protection Scotland

RE: Advice re Pseudomonas risk

Hanson, Mary [redacted]

Wed 26/03/2014 13:34

To: Inkster Teresa (NHS Greater Glasgow & Clyde) [redacted];

Categories: Green Category

Hi Teresa

Sorry for the delay in replying- just catching up on emails after a long weekend off.

I agree with you that it would be simpler and give reassurance if the contractor is able to take action in the high risk units to meet the HTM 04-01 and the Scottish recommendations relating to flow straighteners now, rather than at some point in the future when refurbishment/ replacement is taking place. If HPS gives this opinion, then it`s up to NHS GGC to decide whether to follow that advice.

As NHS GGC seems to be in principle meeting the Scottish requirements (according to HFS), I think the justification for the extra cost has to be around a safe environment for vulnerable patients. Personally I wouldn`t advise embarking on a sampling regimen to monitor for Pseudomonas in the high risk units.

This is just my personal opinion, but you might want to also approach Prof Kevin Kerr at Harrogate who is chair of the ESCMID Food/ Water Infections Study Group, unless you can wait to hear from the NI Microbiologist. I have heard Kevin speak on Pseudomonas risks from hospital water [redacted], and have chatted to him at meetings. He might also give you informal advice that would give increased confidence to HPS in responding to NHS GGC

Kind regards

Mary

From: Inkster Teresa (NHS Greater Glasgow & Clyde) [redacted]
Sent: 21 March 2014 11:18
To: Hanson, Mary
Subject: Advice

Hi Mary – Jacqui Reilly suggested I contact you as we have had a query at HPS from NHS GGC regarding Pseudomonas/taps in the new SGH . I have a conflict of interest as I am one of GGCs ICDs and I sit on the water group.

Essentially the issue is that the taps in the new Southern General were selected prior to the recommendations of the Scottish pseudomonas guidance and CEL 08(2013) and these taps have flow straighteners . The guidance states that bioflim can develop on flow straighteners and that these should be removed from taps – its not clear whether this is universal or high risk areas only.

We have been approached by GGC for an opinion / risk assessment on the matter .

The advice from HFS to GGC is quoted below;

"that the you have been offered a product that was completely acceptable at the date of the contract award for the South Glasgow Hospital and, while you could instruct the contractor to replace the taps or modify them, this would most likely create a serious delay and consequential costs. I think you will have to live with them but, whenever contractual requirements allow it, remove the restrictors and adjust the flows"

One of my colleagues at HPS has discussed with Jimmy Walker, decontamination expert at PHE. His opinion is that GGC should institute sampling and react accordingly- see below

Response: any changes may make the warranty of the devices invalid. In Scotland, as far as I am aware your guidance is to react to clinical outcomes and where appropriate take environmental samples that may include water samples. If there are concerns about the microbiological status of these devices then it may be appropriate to schedule sampling during the two year warranty period and react accordingly.

My own personal feeling is that they should remove these straighteners /replace taps in the high risk units i.e. ICU/NICU **now** before these units are occupied. Keeping these straighteners in place will make them non compliant with HTM04-01 , the Scottish pseudomonas guideline, and the CEL. I think its easy to say sample and react accordingly but there is a high likelihood they will find Pseudomonas and need to remove them at some point anyway so why not do it now when the units are unoccupied and they are not exposing patients to the risk . Also if there is an incident/outbreak in one of these units then where does that leave them ? - think they need to be mindful of why these guidelines were issued.

Outwith the high risk areas then perhaps the HFS advice is appropriate i.e they remove them when contractual requirements allow it .

I would appreciate your opinion on the matter – maybe I am over- reacting! If you don't feel comfortable giving an opinion thats fine – just let me know if there is anyone else you can think of that I can approach (outwith GGC) . I have also contacted the microbiologist involved with the NI outbreak but she is currently on annual leave.

Kind Regards
Teresa

disclosure, copying or alteration of this message is

strictly forbidden.

****

T: [redacted]

From: Inkster Teresa (NHS Greater Glasgow & Clyde)
Sent: 28 March 2014 11:43
To: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Subject: FW: Advice re Pseudomonas risk

See below , response from Mary Hanson – can we catch up on this when you get back
Best wishes
Teresa

From: Hanson, Mary [redacted]
Sent: 26 March 2014 13:35
To: Inkster Teresa (NHS Greater Glasgow & Clyde)
Subject: RE: Advice re Pseudomonas risk

Hi Teresa

Sorry for the delay in replying- just catching up on emails after a long weekend off.

I agree with you that it would be simpler and give reassurance if the contractor is able to take action in the high risk units to meet the HTM 04-01 and the Scottish recommendations relating to flow straighteners now, rather than at some point in the future when refurbishment/ replacement is taking place. If HPS gives this opinion, then it`s up to NHS GGC to decide whether to follow that advice.

As NHS GGC seems to be in principle meeting the Scottish requirements (according to HFS), I think the justification for the extra cost has to be around a safe environment for vulnerable patients. Personally I wouldn`t advise embarking on a sampling regimen to monitor for Pseudomonas in the high risk units.

This is just my personal opinion, but you might want to also approach Prof Kevin Kerr at Harrogate who is chair of the ESCMID Food/ Water Infections Study Group, unless you can wait to hear from the NI Microbiologist. I have heard Kevin speak on Pseudomonas risks from hospital water [redacted], and have chatted to him at meetings. He might also give you informal advice that would give increased confidence to HPS in responding to NHS GGC

Kind regards

Mary

Advice re Pseudomonas risk

chie Lisa (NATIONAL SERVICES SCOTLAND)

08/04/2014 16:38

ter Teresa (NHS Greater Glasgow & Clyde) [redacted];

ttachment

_taps_amends version 2.docx;

ided version

regards,

itchie
e Consultant Infection Control
ion Control Team / HAI Group
h Protection Scotland

National Services Scotland
loor Meridian Court
logan Street
ow G2 6QE
[redacted]

n: Inkster Teresa (NHS Greater Glasgow & Clyde)
: 08 April 2014 15:41
itchie Lisa (NATIONAL SERVICES SCOTLAND)
ect: RE: Advice re Pseudomonas risk

a ,

e made a few changes , let me know what you think.
not comfortable including recommendation 1 - I think the risk is too high. I think the recommendations should be 1) ve straighteners from taps in high risk units i.e. adult ICU and NICU or 2) If unable to remove straighteners replace with compliant ones in high risk units.

Regards
a

resa Inkster
ltant Microbiologist and Infection Control Doctor
of Microbiology
Building
ow Royal Infirmary
dial : [redacted]

n: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
: 08 April 2014 09:46
nkster Teresa (NHS Greater Glasgow & Clyde)
ect: FW: Advice re Pseudomonas risk

Situation
NHS Greater Glasgow and Clyde (GG&C) seeking advice from Health Protection Scotland (HPS) on the removal of flow straighteners from the taps procured for the new Southern General Hospital (SGH).

Background
The Horne Optitherm tap which incorporates flow straighteners, was procured for all clinical environments within the new SGH prior to the publication of UK and Scotland-wide pseudomonas guidance in June 2013 (ref). ~~This tap design incorporates flow straightners.~~ The HPS, Guidance for Neonatal Units (NNUs) and adult and paediatric ICUs, June 2013, states; *"Bio film can develop on flow straighteners and it is recommended that these are removed from taps."* This recommendation is also made within SHTM 04-01: part A Design, Installation and Testing, section 9.51, note 12; suggesting that it should be applied universally in all clinical areas across the hospital.

~~The tap manufacturer, Horne, has indicated that if the flow straightners are removed from taps then the two year warranty will become null and void.~~

Assessment
It is recognised that any alterations made to the taps may make the warranty of the devices invalid and therefore this assessment focuses on the:

- ~~-~~Ffunction of the flow straightners as advised by Horne ~~i.e. provide laminar flow, regulate the flow rate, retain water inside the tap~~; and ~~the~~
- Ceurrent guidance on minimising the risk of *Pseudomonas aeruginosa* infection from water.

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In assessing the HAI risks associated with flow straighteners HPS also sought the advice of Dr Jimmy Walker, Water System Microbiology and Decontamination Expert, Public Health England. In addition advice was sought from the HPS Consultant Microbiologist, a Consultant Microbiologist from NHS Lothian and the estates department at NHS Forth Valley.

Our response to Horne's statementson the function of flow straightners is set out below:

- Provide laminar flow: Agreed. Flow straighteners are there to provide laminar flow which reduces the dispersal of droplets from running water.
- Regulate the flow rate: Agree in part. Some sites have issues with too much flow/pressure resulting in water droplets being disseminated from the wash hand station which can be an issue near medicine preparation areas or where medical equipment is being decontaminated. The fitting of flow control devices would have to be balanced with a risk of HAI issues (where too much flow is present) ~~or potentially where too much flow could~~ result ing in water droplets ~~potentially leading to~~contaminating ~~-~~the surrounding area ~~getting wet~~.
- Retain water inside the tap: There is no evidence for this claim. Yes, bacteria will be present in the air as aerosols and in a hospital ward environment there will be dispersal of both aerosols and larger droplets which will tend to drop out and land on surfaces. As these larger droplets land on surface, the bacteria contained will tend to proliferate where the environment is moist and wet so it is not entirely convincing that water retention within a tap would prevent contamination.

In considering water safety for healthcare premises, in particular minimising the risk of *Pseudomonas aeruginosa* infection from water, the removal of flow straighteners from taps in high risk units is one of a number of critical controls ~~points~~ to be considered in the hospital water

delivery system (ref). The positioning of hand hygiene products around hand wash stations, water pressure, and flow rate are highlighted together with other considerations on pages 8 and 9 of the 2013 HPS guidance.

Recommendation

The HPS Guidance for NNUs, adult and paediatric ICUs in Scotland, June 2013, is designed to minimise the risk of infection with *Pseudomonas aeruginosa* – the risk however can never be eliminated.

Based on the above assessment and the extant national guidance on water safety and potential infection risks to patients, particularly in high risk units (ref all) NHS GG&C should consider the following options: ...

~~Instruct the contractor to install the taps in all clinical areas across the hospital without removing the flow straightners (maintaining the two year warranty on the taps) and commence a water sampling regimen to monitor for *Pseudomonas* in the high risk units.~~

~~2.~~1. Instruct the contractor to install the taps in all clinical areas across the hospital after removing the flow straightners (relinquishing the two year warranty on the taps).

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~~3.~~2. Instruct the contractor to install new compliant ~~the~~ taps without flow straightners in the high risk units only (relinquishing the two year warranty on the taps in those areas).

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Health Protection Scotland

NHS National Services Scotland

Pseudomonas risk: Taps	
Situation	NHS Greater Glasgow and Clyde (GG&C) have sought advice from Health Protection Scotland (HPS) on the requirement to remove flow straighteners from the taps procured for the new Southern General Hospital (SGH).
Background	The Horne Optitherm tap which incorporates flow straighteners, was procured for all clinical environments within the new SGH prior to the publication of UK and Scotland-wide pseudomonas guidance in June 2013[1, 2]. The HPS, Guidance for Neonatal Units (NNUs) and adult and paediatric ICUs, June 2013[1], states; *"Bio film can develop on flow straighteners and it is recommended that these are removed from taps."* This recommendation is also made within SHTM 04-01: part A Design, Installation and Testing, section 9.51, note 12[3]; suggesting that it should be applied universally in all clinical areas across the hospital.
Assessment	It is recognised that any alterations made to the taps may make the warranty of the devices invalid and therefore this assessment focuses on the: • Function of the flow straighteners as advised by Horne; and • Current guidance on minimising the risk of *Pseudomonas aeruginosa* infection from water. In assessing the HAI risks associated with flow straighteners HPS also sought the advice of Dr Jimmy Walker, Water System Microbiology and Decontamination Expert, Public Health England (Porton Down). In addition advice was sought from a Consultant Microbiologist from NHS Lothian and the Estates Department at NHS Forth Valley. Our response to Horne's statements[4] on the function of flow straighteners is set out below: • Provide laminar flow: Agreed. Flow straighteners are there to provide laminar flow which reduces the dispersal of droplets from running water. • Regulate the flow rate: Agree in part. Some sites have issues with too much flow/pressure resulting in water droplets being disseminated from the

	wash hand station which can be an issue near medicine preparation areas or where medical equipment is being decontaminated. The fitting of flow control devices would have to be balanced with a risk of HAI issues (where too much flow is present) resulting in water droplets contaminating the surrounding area. • Retain water inside the tap: There is no evidence for this claim. Although flow straighteners reduce the amount of water inside the tap, because the tap remains moist there is no evidence to suggest this would reduce the number of micro-organisms present. In considering water safety for healthcare premises, in particular minimising the risk of *Pseudomonas aeruginosa* infections arising from water, the removal of flow straighteners from taps in high risk units is one of a number of critical controls to be considered in the hospital water delivery system. The positioning of hand hygiene products around hand wash stations, water pressure, and flow rate are highlighted together with other considerations on pages 8 and 9 of the 2013 HPS guidance[1]. There are three options to tap installation in the SGH: 1. Instruct the contractor to install the procured taps in all clinical areas across the SGH. This would subsequently require NHS GG&C to commence a water sampling regimen to monitor for *Pseudomonas* in high risk units. 2. Instruct the contractor to install the: • Procured taps in all clinical areas across the hospital excluding high risk units; and • Procured taps without flow straighteners in high risk units. 3. Instruct the contractor to install: • The procured taps in all clinical areas across the hospital excluding high risk units; and • New compliant taps (without flow straighteners) in high risk units.
Recommendation	The HPS Guidance for NNUs, adult and paediatric ICUs in Scotland[1] is designed to minimise the risk of infection with *Pseudomonas aeruginosa* – the risk however can never be eliminated. Based on the above assessment and the extant national guidance on water safety and potential infection risks to patients, particularly in high risk units[1, 2] HPS recommend NHS GG&C to progress with option 2 or 3.

References

1. Health Protection Scotland (HPS) 2013, Guidance for neonatal units (NNUs) (Levels 1, 2 & 3), adult and paediatric intensive care units (ICUs) in Scotland to minimise the risk of *Pseudomonas aeruginosa* infection from water
   http://www.hps.scot.nhs.uk/haiic/ic/guidelinedetail.aspx?id=54784

2. Scottish Executive Health Department, CEL (2013) 8, Water sources and potential infection risk to patients in high risk units – a revised guidance
   http://www.sehd.scot.nhs.uk/mels/CEL2013_08.pdf

3. Health Facilities Scotland (HFS) 2012, Scottish Health Memorandum 04-01: The control of *Legionella*, hygiene, 'safe' hat water, cold water and drinking water systems Part A: Design, installation and testing
   http://www.hfs.scot.nhs.uk/publications

4. Email communication from Ian Powrie, Senior Estates Manager, NHS Greater Glasgow and Clyde, 10th March 2014, Re: enquiry regarding taps in the SGH

FW: Taps for clinical wash-hand basins

Ritchie Lisa (NATIONAL SERVICES SCOTLAND)

Fri 09/05/2014 16:36

To: Stewart Ian (NATIONAL SERVICES SCOTLAND) [redacted];

Cc: Curran Evonne (NATIONAL SERVICES SCOTLAND) [redacted]; MacDonald Laura (NATIONAL SERVICES SCOTLAND) [redacted]; Southworth Paul (NATIONAL SERVICES SCOTLAND) [redacted]; Inkster Teresa (NHS Greater Glasgow & Clyde) [redacted];

Dear Ian,

Thank you for keeping us in the loop with this tap issue. HPS has provided an SBAR to NHSGG&C on this matter and would be happy to be involved in a meeting.

Kind regards,
Lisa

Lisa Ritchie
Nurse Consultant Infection Control
Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

From: Curran Evonne (NATIONAL SERVICES SCOTLAND)
Sent: 09 May 2014 08:07
To: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Subject: FW: Taps for clinical wash-hand basins

From: Powrie, Ian [redacted]
Sent: 08 May 2014 13:21
To: Stewart Ian (NATIONAL SERVICES SCOTLAND)
Cc: McLaughlan Edward (NATIONAL SERVICES SCOTLAND); Curran Evonne (NATIONAL SERVICES SCOTLAND); Storrar Ian (NATIONAL SERVICES SCOTLAND); O'Brien Geraldine (NATIONAL SERVICES SCOTLAND); 'Gerry.Cox[redacted]'; McInally Iain (NHS AYRSHIRE & ARRAN); Haggarty Peter (NATIONAL SERVICES SCOTLAND); Loudon David (NHS Greater Glasgow & Clyde)
Subject: RE: Taps for clinical wash-hand basins

Ian,

Further to your e-mail below and In order to clarify the current situation on the NSGH project, the Horne taps are not as stated below on offer for installation? they are in fact fully procured, supplied, installed and awaiting final commissioning. These taps where fully compliant with the available national guidance at the time of selection, with the suggested non compliance arising from subsequent revisions of SHTM and CEL guidance.

Also to be fair to Horne, NHS GG&C's initial enquiry for both HPS & HFS support was to convene a meeting with HPS, HFS GG&C & Horne to assess Horne's stated position and recommendation to retain the Flow control device and the technical justification for this in light of recent revisions of national guidance, as well as assessing the technical implications to water the system design if the flow control devices are removed? Unfortunately this proposed meeting was not convened and the HPS SBar was developed without the opportunity to assess Horne's evidence on the function and value of their flow control device.

I hope this both clarifies the current status of the project and the ongoing support and commitment to engage, offered so far by Horne.
If it would prove to be of value I would be happy to attend the proposed meeting.

Regards

Ian

[redacted]

Sector Estates Manager (NSGH)
Project Team, New South Glasgow Hospitals,
Southern General Hospitals Construction Site,
2nd Floor, Modular Building, Off Hardgate Road, Glasgow,G51 4SX
[redacted]
Tel: [redacted]
Reception: 0141 245 5700
Mob: [redacted]

From: Stewart Ian (NATIONAL SERVICES SCOTLAND) [redacted]
Sent: 08 May 2014 11:31

To: sales[redacted]
Cc: McLaughlan Edward (NATIONAL SERVICES SCOTLAND); Curran Evonne (NATIONAL SERVICES SCOTLAND); Storrar Ian (NATIONAL SERVICES SCOTLAND); O'Brien Geraldine (NATIONAL SERVICES SCOTLAND); Gerry.Cox[redacted]; McInally Iain (NHS AYRSHIRE & ARRAN); Powrie, Ian; Haggarty Peter (NATIONAL SERVICES SCOTLAND)
Subject: Taps for clinical wash-hand basins

For the attention of Angus WD Horne, Managing Director.

Good morning.

We have been in frequent contact with the Project Team for the New South Glasgow Hospital regarding the taps you are offering for installation in the new facilities and have a copy of your letter dated 1st May 2014 to Ian Powrie. Until we are convinced otherwise, the taps on offer do appear to be non-compliant with the advice that has been published and circulated in HTMs, SHTMs, CELs not only in Scotland but also via NHS England, NHS Wales and NHS Northern Ireland. We would like to be convinced that your product avoids the issues that have caused concerns regarding build-up of waterborne bacteria. Really, we would. However, you have not made any approaches to Health Facilities Scotland or Health Protection Scotland and, as we are responsible for the production and publication of guidance – *not* NHS Greater Glasgow & Clyde – that might have been a more productive route.

We are anxious to resolve this issue and offer you the opportunity to come to our office to present your evidence. If this is backed-up by video, please confirm what facilities you require so that we can arrange a meeting room that provides them. It is likely that there will be representation from Health Protection Scotland as well as the National Water Services Advisory Group. In view of this, it would be helpful to have 2/3 optional dates when you would be available. Please feel free to bring literature that can be distributed and it is helpful if there is a sample that can be handed round for examination. The next two weeks are filled up with meetings and I suggest that you might like to offer dates after 27th May.

I look forward to hearing from you.

Regards,

Ian Stewart
Project Manager
Engineering & Environment
Health Facilities Scotland
NHS National Services Scotland

3rd Floor
Meridian Court
5 Cadogan Street
Glasgow
G2 6QE
Telephone: Direct Dial: [redacted]
Reception: 0141 207 1600

www.hfs.scot.nhs.uk

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NHS National Services Scotland is the common name for the Common Services Agency for the Scottish Health Service. www.nhsnss.org <http://www.nhsnss.org/>

Health Facilities Scotland
Engineering and Environment

NHS National Services Scotland

Minutes of special meeting held in the Labs FM Block at the South Glasgow Hospital to discuss and resolve issues with Optitherm taps installed in the Hospital

Date: 5th June 2014

Time: 11/00 am

Chairman: Ian Stewart (IGMS) Health Facilities Scotland

Present:		
	Lisa Ritchie (LR)	Health Protection Scotland
	Paul Southworth (PS)	Health Protection Scotland
	Alan Gallacher (AG)	NHS Greater Glasgow & Clyde
	Ian Powrie (IP)	NHS Greater Glasgow & Clyde
	Jim McFadden (JMcF)	NHE Greater Glasgow & Clyde
	Gerry Cox (GC)	Golden Jubilee Hospital
	Iain McInally (IMcI)	NHS Ayrshire & Arran
	Jimmy Walker (JW)	Public Health England
	Ian Storrar (IGS)	Health Facilities Scotland
	Angus Horne (AH)	Horne Engineering Ltd
	John Horne (JH)	Horne Engineering Ltd

Apologies: These had been received from Eddie McLaughlan and Geraldine O'Brien

1. **Welcome and introductions:**

   IGMS thanked everyone for their attendance and conducted the necessary introductions.

2. **Background information:**

   IGMS explained that following the neonate deaths in Northern Ireland in 2012 guidance had been published individually by DH and HPS/HFS with the aim of setting out precautions to avoid infections from *Pseudomonas* sp. SHTM 04-01 had been updated to replicate this. Scottish guidance was about to be reviewed.

   Among the recommendations was advice that flow straighteners / aerators / rosettes should not be installed within taps in accommodation occupied by vulnerable (immunocompromised) patients.

   Concern had been expressed that the South Glasgow Hospital- due for handover early in 2015 - incorporated taps with these features, principally Optitherm taps manufactured by Horne Engineering. The meeting had been requested by NHS GG&C to review their situation and an

invitation issued to Horne Engineering had been taken up.
Differences between SHTM and HTM 04-01were referred to and are summarised in the Addendum

3. Horne Engineering presentation;

This was given by Angus Horne, Managing Director, who was grateful for the opportunity to attend.

The issue was illustrated showing the desirability of retaining a solid column of water delivered (laminar flow-fashion) from a tap outlet. It was necessary that this should not be broken up and aerators should *never* be fitted to tap outlets. The importance of the stopping of water delivery coincidentally with the closing of the tap lever was stressed. If water continued to empty from the body of the tap, this would induce air providing scope for retrospective contamination. HSG274 (part 2 clause 2.46) stated that "wetted systems should not be drained down". While this referred to the commissioning of complete systems it was equally applicable to taps. JW explained this further in the context of self-draining showers that induced air into warm dark places that were introduced on the premise that self-draining would reduce the propensity for *Legionella* in the shower head or hose. This was not, in the end, found to be the case.

A plea was made for the designation "flow straighteners" or "outlet fitting" to be used in guidance. The devices integral with the Optitherm taps relied on a mesh made out of hexagonal holes to maintain surface tension and hold back water within the tap body after shut-off.

4. Discussion:

In discussion, JW illustrated the build-up of biofilms on similar outlet devices found in taps installed in Northern Ireland. JW had been advised that the build-up had occurred within 4 months. AH explained that a more open mesh did not allow surface tension and water retention to be so efficiently achieved. Also illustrated was the extent of *Pseudomonas* contamination around a typical wash hand basin and the splashing that had occurred on the surroundings and floor. Contamination was also likely if correct procedures were not followed in the cleaning regime adopted. A cloth used to clean the WHB surfaces followed by the tap could create a "wicking" process and contamination of the inner surface at the point of discharge. (Current guidance is available on how to clean wash hand basins and outlets). A more open mesh did not allow surface tension and water retention to be so efficiently achieved. JW explained that a test rig had been set up at Porton Down. This had identified weak points liable to be contaminated as the tap outlet, the solenoid and the thermostatic valve. Testing had been carried out by injecting contamination to the pipework. Further research and experimentation would be required with *Pseudomonas* contamination applied at the point of delivery.

It was concluded that spout water retention was unlikely to eliminate *Pseudomonas* although a reduction may be possible. LR stressed the reasons for incorporating the six critical points in the existing and forthcoming updated guidance. Risk management was the key. *Pseudomonas* elimination was the holy grail. Influences on outcomes included, commissioning procedures, operational management, seasonal influences and personnel involved. The approach had to be tailored to individual circumstances. There was no fixed rule.

IGMS thanked Horne Engineering for taking the time to explain the working of their product and suggested that they should take the opportunity to give presentations to the National Water Services Advisory Group on future innovative products.

5. Action arising from presentation:

5.1 **Forthcoming HPS/HFS guidance**: It was felt that the six critical points referred to and the risk-based proportional approach was still appropriate and no alteration appeared necessary. The review of the guidance would be circulated to the Water Group and to SETAG.

Action: IGMS

5.2 **SHTM 04-01** would similarly be unaffected as it replicated the HPS/HFS guidance being issued for review. IGMS pointed out that it now incorporated more helpful advice on the setting up of water safety groups.

5.3 **The South Glasgow Hospital**: it was unanimously agreed that as the taps installed within the new build development had complied with guidance current at the time of its specification and briefing and that the hospital was in the process of being commissioned, it should be regarded as being in the "retrospective" category, not "new build". There was no need to apply additional flow control facilities or remove flow straighteners and any residual perceived or potential risks would form part of the routine management process.

5.4 **Future research**: It was agreed that there was a need to determine whether the retention of water within the body of taps offered a better solution to that of ensuring that none was retained. Further research and experimentation would be required with *Pseudomonas* contamination applied at the point of delivery.

Ian Stewart
Health Facilities Scotland
5th June 2014

ADDENDUM

Differences between HTM and SHTM 04-01

HTM 04-01 Part A

Paragraph 2.6 Devices fitted to, or close to, the tap outlet (for example flow straighteners) may exacerbate the problem by providing the nutrients which support microbial growth, providing a surface area for oxygenation.

Paragraph 3.9 Owing to their high surface-area-to-volume ratio and location at the tap outlet, certain designs of flow straightener may present a greater surface area for colonisation and support the growth of organisms. Therefore, when selecting new taps, where possible flow straighteners should be avoided/not included. Health Building Note 00-09 also advises against using aerators in outlets.

Paragraph 4.49b Where practical, consider removal of flow straighteners. However, the removal of flow straighteners may result in splashing and therefore additional remedial action may need to be taken. If they are seen to be needed, periodically remove them and either clean/disinfect or replace them. Replacement frequency should be verified by sampling/swabbing.

SHTM 04-01 Part A

Note 15 recommends the removal of flow straighteners.

"The Scottish Water Byelaws 2004 place limits on the flow of water to draw-offs where plugs are not provided. Spray-type mixer taps are not recommended in healthcare premises; therefore, the type of tap should be carefully selected to minimise the formation of aerosols. The water flow profile must be compatible with the shape of the wash hand basin. Flow straighteners and aerators can capture biofilm but their removal can create turbulent flow at increased pressure resulting in splashing of surrounding surfaces and flooring. Current advice is that they should be removed."

W: Enquiry regarding taps in the SGH

Ritchie Lisa (NATIONAL SERVICES SCOTLAND)

Wed 24/02/2016 16:21

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Importance: High

Hi Teresa,

Good to hear from you. I'm well, thank you; hope you are too!
I just wanted to let you know that I am on the case with this and will get back to you by the end of the week.

Kind regards,
Lisa

Lisa Ritchie
Nurse Consultant Infection Control
Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 22 February 2016 15:08
To: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Subject: RE: Enquiry regarding taps in the SGH

Hi Lisa - hope you are well. I have moved to QEUH from GRI and I am one of the ICDs here now. I am writing in relation to the attached SBAR which we worked on while I was in HPS.

GGC opted for option 1 which was to retain these taps in high risk areas however as yet no sampling regime has been commenced . I was told at the local water group that subsequent guidance has stated that sampling is not necessary. Do you know if this is the case and have you been involved in any discussions regarding this?

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Sent: 09 April 2014 15:52
To: Kane Maryanne (NHS Greater Glasgow & Clyde); Powrie Ian (NHS Greater Glasgow & Clyde)
Cc: Inkster Teresa (NHS Greater Glasgow & Clyde); Stewart Ian (NATIONAL SERVICES SCOTLAND); HPSInfectionControl (NATIONAL SERVICES SCOTLAND)
Subject: Enquiry regarding taps in the SGH

Dear Maryanne, Ian,

Thank you for your enquiry regarding the requirement to remove flow straighteners from the taps procured for the new Southern General Hospital (SGH).

In assessing the HAI risks associated with flow straighteners HPS also sought the advice of Dr Jimmy Walker, Water System Microbiology and Decontamination Expert, Public Health England (Porton Down). In addition advice was sought from a Consultant Microbiologist from NHS Lothian and the Estates Department at NHS Forth Valley.

Please find attached our assessment and recommendation on tap installation in the new SGH to minimise the risk of *Pseudomonas aeruginosa* infections arising from water.

Kind regards,
Lisa

Lisa Ritchie
Nurse Consultant Infection Control
Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

From: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Sent: 21 March 2014 16:09
To: Kane Maryanne (NHS Greater Glasgow & Clyde)
Cc: Inkster Teresa (NHS Greater Glasgow & Clyde); Stewart Ian (NATIONAL SERVICES SCOTLAND); McIntosh Julie (NATIONAL SERVICES SCOTLAND); Thomas Leigh (NATIONAL SERVICES SCOTLAND); Powrie Ian (NHS Greater Glasgow & Clyde)
Subject: RE: Enquiry regarding taps in the SGH

Dear Maryanne,

Just to keep you posted with progress regarding your enquiry: Teresa and I have had a discussion this afternoon with Jimmy Walker from Public Health England regarding tap and water system design and pseudomonas. Teresa has taken a couple of actions from this discussion and plans to catch up with Ian Powrie next week with a view to having a further meeting with the two Ians and Jimmy at the end of next week.

Kind regards,
Lisa

Lisa Ritchie
Nurse Consultant Infection Control
Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

From: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Sent: 07 March 2014 11:55
To: Kane Maryanne (NHS Greater Glasgow & Clyde)

Cc: Inkster Teresa (NHS Greater Glasgow & Clyde); Stewart Ian (NATIONAL SERVICES SCOTLAND); Paterson Ann (NATIONAL SERVICES SCOTLAND); Powrie Ian (NHS Greater Glasgow & Clyde); McIntosh Julie (NATIONAL SERVICES SCOTLAND)
Subject: Enquiry regarding taps in the SGH

Dear Maryanne,

Thank you for your enquiry which has been passed to me. I understand that you have already spoken with Ann and Annette seeking advice from HPS with regards to the taps to be fitted within the new Southern General Hospital (SGH).

My understanding of your enquiry is that the tap type/design purchased for the new SGH was chosen prior to the publication of UK and Scotland-wide pseudomonas guidance. Subsequently, this tap type/design… read more does not meet the required technical specification and you wished to convene a meeting with representatives from HFS and HPS (in particular microbiology consultant input) as soon as possible to discuss the way forward with this.

I understand from HFS that Ian Powrie has also spoken directly with Ian Stewart regarding this same issue.

It would be helpful therefore if you could confirm the above is correct, and clarify the main issues to be discussed at a meeting with all parties present.

Julie is presently seeking a suitable date for a meeting to take place within the couple of weeks.

I look forward to hearing from.

Kind regards,
Lisa

Lisa Ritchie
Nurse Consultant Infection Control
Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

RE: Enquiry regarding taps in the SGH

Ritchie Lisa (NATIONAL SERVICES SCOTLAND)

Wed 16/03/2016 12:35

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc:Storrar Ian (NATIONAL SERVICES SCOTLAND) [redacted]; Stewart Ian (NATIONAL SERVICES SCOTLAND) [redacted] Jimmy.Walker[redacted]; McIntyre Jackie (NATIONAL SERVICES SCOTLAND) [redacted];

Categories: Green Category

1 attachment

database_JW_Slides.pptx;

Dear Teresa,

I had a useful telephone conversation with Jimmy following my email to him regarding the question of whether the SBAR options and recommendations of April 2014 remain extant. Jimmy is in agreement that there is no reason why the SBAR and the options that were agreed would not be extant; the QEUH went with option 1 rather than the recommended options 2 or 3.

Given option 1 was: Instruct the contractor to install the procured taps in all clinical areas across the SGH, this would subsequently require NHS GG&C to commence a water sampling regimen to monitor for *Pseudomonas* in high risk units; it would seem prudent therefore, and as a precaution to undertake sampling to assess the risk of contaminated outlets.

Jimmy also advised that the DoH has recently been redrafting HTM 04-01 and combining the sections on legionella and *Pseudomonas aeruginosa*. This redrafted guidance will reinforce the role of the Water Safety Group as being pivotal in the management of safe water systems in healthcare and the risk assessments that are required to safe guard patients.

Jimmy also shared some slides (attached) detailing some software that the Belfast Trust has developed in collaboration with a software company. This is an interesting way forward that enables members of the water safety group to interrogate what is happening and where floor plans and schematics are available and can be adapted by trusts to suit their own particular requirements.

Happy to discuss further

Also, wondered if you could give me a call when you are free on [redacted] – I have a request for you to chair a HPS facilitated group.
Kind regards,
Lisa

Nurse Consultant Infection Control
Infection Control Team/HAI Group
Health Protection Scotland

nipcm-logo-white.gif Scotland's National Infection Prevention and Control Manual
Website launch: 6 April 2016 http://www.nipcm.hps.scot.nhs.uk/

NHS National Services Scotland
Health Protection Scotland
4th Floor 252

Meridian Court
5 Cadogan Street
Glasgow
G2 6QE<SPAN style="FONT-FAMILY: 'Tahoma','sans-s

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 07 March 2016 17:37
To: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Subject: RE: Enquiry regarding taps in the SGH

Thanks Lisa. Let me know what Jimmy thinks. Happy to have a T/C to discuss.

I think a SLWG would be useful - I have had so much going in the last few months in relation to the built environment . In fact I have been invited and am travelling to India later this week with Peter Hoffman and Christine Peters to talk to Infection Control colleagues in Mumbai about water/ventilation . If you do set up a SWLG myself and Christine would be happy to participate.

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Sent: 02 March 2016 17:27
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Cc: Stewart Ian (NATIONAL SERVICES SCOTLAND); Storrar Ian (NATIONAL SERVICES SCOTLAND)
Subject: RE: Enquiry regarding taps in the SGH

Hi Teresa,

After I emailed you earlier, I drafted an email to Jimmy Walker at PHE to ask him firstly, if he is aware of any UK revised/new guidance; and secondly, to ask his opinion on whether the recommendations made in the SBAR remain extant, given that these taps were installed throughout (including all high risk areas) in 2014; should a water sampling programme be in place / commenced now? Let's see what he comes back with; maybe a T/C would be helpful to chat this through.

Hospital water and ventilation systems (from a microbiological perspective) are two areas that I know Michael Lockhart (now at HPS as you know) and Martin Connor (from D&G) in his capacity as Chair of the amalgamated HPS National IP&C Guidance, Policy and Outbreak Preparedness Steering Group wish to see progress. Maybe we need to think about having a small SLWG of experts from across the UK to help us work through some of this... ?

Kind regards,
Lisa

Lisa Ritchie
Nurse Consultant Infection Control
Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 02 March 2016 15:41
To: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Cc: Stewart Ian (NATIONAL SERVICES SCOTLAND); Storrar Ian (NATIONAL SERVICES SCOTLAND)
Subject: RE: Enquiry regarding taps in the SGH

Thanks Lisa - I couldn't fine anything and no-one has been able to produce any documents.

So is the opinon from HPS that the SBAR remains unchanged and that if we have these taps in high risk areas we should have a water sampling programme in place?

Thanks for your help
Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Ritchie Lisa (NATIONAL SERVICES SCOTLAND)
Sent: 02 March 2016 12:09
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Cc: Stewart Ian (NATIONAL SERVICES SCOTLAND); Storrar Ian (NATIONAL SERVICES SCOTLAND)
Subject: RE: Enquiry regarding taps in the SGH

Afternoon Teresa,

I have now reviewed the changes made since original publication of HPS Guidance for neonatal units (NNUs) (levels 1, 2 & 3), adult and paediatric intensive care units (ICUs) in Scotland to minimise the risk of *Pseudomonas aeruginosa* infection from water; and there is no reference to any change in water sampling.

Colleagues in HFS have also confirmed that there has been no change in guidance since the issue of version 2.0 of SHTM 04-01 Part A and B in July 2014. Part A acknowledges *"Some updating has been done to take account of experience in using the guidance and recent developments affecting design and installation of domestic water services arising from the impact of the discovery of Pseudomonas aeruginosa bacteria in water supplies, including re-titling "Water safety for healthcare premises".*
There has been nothing further.

So, we (HPS and HFS) are not sure what guidance your local water group is referring to. However, happy to pursue/advise further if you find out what guidance the group believes has been revised.

Speak soon

Kind regards,
Lisa

Lisa Ritchie
Nurse Consultant Infection Control
Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

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Lisa

Lisa Ritchie
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Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

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Cc: Inkster Teresa (NHS Greater Glasgow & Clyde); Stewart Ian (NATIONAL SERVICES SCOTLAND); Paterson Ann (NATIONAL SERVICES SCOTLAND); Powrie Ian (NHS Greater Glasgow & Clyde); McIntosh Julie (NATIONAL SERVICES SCOTLAND)
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I look forward to hearing from.

Kind regards,
Lisa

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Infection Control Team / HAI Group
Health Protection Scotland

NHS National Services Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow G2 6QE
T: [redacted]

Lang, Ann

From: McNamee, Sandra
Sent: 07 September 2015 15:22
To: Lang, Ann
Subject: FW: Infection Control input to new SGH

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Walsh, Tom
Sent: 29 July 2014 11:32
To: Loudon, David
Cc: McNamee, Sandra
Subject: Infection Control input to new SGH

Dear David

The commissioning of the new SGH was discussed at the Board Infection Control Committee yesterday. The NHSGGC Infection Prevention and Control Team (IPCT) have been, and are, engaged in a number of groups advising on aspects of the new build through liaison between Fiona McCluskey and our Assistant Director of Nursing, Sandra McNamee.

The Infection Control Committee were keen that the IPCT are appropriately involved in the on-going and future commissioning of the new facilities, and asked that I contact you to offer any support required.

Happy to discuss if that would be helpful.

Kind regards

Tom

Tom Walsh
Board Infection Control Manager
NHSGGC

Lang, Ann

From: McNamee, Sandra
Sent: 07 September 2015 15:23
To: Lang, Ann
Subject: FW: NCH 3rd floor proposed adjacencies
Attachments: Draft adjacencies extract OP V.5 (1).docx

Importance: High

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Williams, Craig
Sent: 08 August 2014 10:57
To: McNamee, Sandra; Walsh, Tom
Subject: FW: NCH 3rd floor proposed adjacencies
Importance: High

This is the document I mentioned, could we discuss this and decide how best to progress

Thanks

* Document will not print

Craig

From: McGoldrick, Pamela
Sent: 06 August 2014 16:13
To: Mitchell, Clare; Williams, Craig
Cc: Taylor, Maureen; Davies, Philip
Subject: NCH 3rd floor proposed adjacencies
Importance: High

Dear Dr Williams/Clare

Following a meeting with Phil Davies and Maureen Taylor and a review of activity in each of the clinical areas the proposed adjacencies on the 3rd floor of the NCH have been amended.

I have attached the revised proposal for adjacencies on the 3rd floor.

Whilst there is an imperative to nominally allocate areas for specific specialties on the 3rd floor we also know that there will be a degree of flexibility in how these beds are deployed to accommodate peaks and troughs of admission.

I would be grateful if you could review the proposed adjacencies from an infection control perspective and come back to me within 1 week with any comments.

Many thanks
Pam

Draft Proposal – 3rd Floor Adjacencies NCH

Although the continuum of the third floor is designed to allow flexible use of the bed spaces/cubicles it is anticipated that each of the 3 ward areas will have a name, identity and charge nurse (and possibly nursing team) of its own to allow consolidation of working relationships and clinical expertise in certain medical and surgical specialties.

The flexible accommodation on the third floor will be populated by the multiple paediatric specialties with appropriate adjacencies, namely:

Ward	Specialties
Ward 3a	Nephrology (inc dialysis), Urology, Orthopaedics, Medical specialties (endocrine/diabetes, dermatology, rheumatology, [redacted] complex respiratory)
Ward 3b	Gen Surgery, Gastro, ENT, Max Fax (oral/cleft), Ophthalmology, Plastics, NICU Graduates (8 beds)
Ward 3c	Neurosurgery, Neurosciences, Complex Respiratory - [redacted] **patients,** ENT Tracheostomy, Eating Disorders

Infectious Diseases Patients -The location of suitable negative pressure cubicles will determine where certain patients with infectious diseases are accommodated (2 on each of the 3 wards on the third floor)

[redacted] **Cohorts** - Although the absolute number of inpatients with [redacted] is likely to be low, ongoing work has indicated a need for 3 separate [redacted] cohorts and it is envisaged that 2 of these cohorts will be on the 3rd floor. The most appropriate adjacencies are as outlined in the table below and in accordance with the protocol for [redacted] patients

Wards 1 & 2	Ward 3
N / NI NMR Other / NIM Other	CI / CI* / CC CI / CI* / MR Other

3 x 4 bed bays exist on the 3rd floor (1 in each ward). Beds in the 4 bed bay will be deployed based on clinical need. Regular, ongoing complex discussions will be required to ensure optimal use of the cubicles and the 4 bed bays according to clinical need. There may be a requirement for an additional 5pm Bed Huddle to identify patients at particular risk who require close observation.

FW: Highly Infectious patients in the NSGH and other issues!

McNamee, Sandra [redacted]

Tue 10/05/2016 11:52

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: McCluskey, Fiona
Sent: 11 August 2014 15:21
To: Williams, Craig; McNamee, Sandra
Cc: Newton, Margaret; Brown, Joyce; Gallacher, Stephen; Gallacher, Stephen; Griffin, Heather; Macleod, Mairi; Walsh, Tom; Joannidis, Pamela; Griffin, Heather
Subject: RE: Highly Infectious patients in the NSGH and other issues!

Hi Craig

I think Anne Harkness is on annual leave but will find out when she is back and who she needs to attend. Will be in touch. Do you have a PA or keep your own diary?

Regards

Fiona

From: Williams, Craig
Sent: 11 August 2014 15:20
To: McCluskey, Fiona; McNamee, Sandra
Cc: Newton, Margaret; Brown, Joyce; Gallacher, Stephen; Gallacher, Stephen; Griffin, Heather; Macleod, Mairi; Walsh, Tom; Joannidis, Pamela
Subject: RE: Highly Infectious patients in the NSGH and other issues!

Dear Fiona

I agree with Sandra that there are a number of concerns around this move which need discussion. Would it be worth the project team, ourselves and ECMS/Brownlee representatives meeting to discuss this in some detail

Craig

From: McCluskey, Fiona
Sent: 11 August 2014 15:17
To: McNamee, Sandra
Cc: Newton, Margaret; Brown, Joyce; Gallacher, Stephen; Gallacher, Stephen; Griffin, Heather; Macleod, Mairi; Williams, Craig; Walsh, Tom; Joannidis, Pamela
Subject: RE: Highly Infectious patients in the NSGH and other issues!

Hi Sandra 252

We were advised by ECMS that the Brownlee is moving this was not a Project decision – I think this reasoning was the move of HDU from GGH, Stephen would be best to advise.

There are no lobbied rooms within the adult tower of the hospital. The rooms are all mechanically ventilated. The only lobbied rooms within the adult hospital are in ITU/HDU. Is CDU you are referring to adult or childrens? We are still waiting for ECMS to advise on the bed configuration for the adult hospital.

Kind Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

From: McNamee, Sandra [redacted]
Sent: 11 August 2014 15:11
To: McCluskey, Fiona
Cc: Newton, Margaret; Brown, Joyce; Gallacher, Stephen; Gallacher, Stephen; Griffin, Heather; Macleod, Mairi; Williams, Craig; Walsh, Tom; Joannidis, Pamela
Subject: RE: Highly Infectious patients in the NSGH and other issues!

Hi Fiona
Thank you for your e mail - as you rightly point out the Brownlee Unit was not part of the planning process and therefore IPC advice on this was not actively sought nor given. I (and I think I will be correct in stating) and Professor Williams have significant concerns about this, especially in relation to the management of highly infectious patients, e.g. [redacted] who should be managed in a specialist unit with lobbied negative pressure isolation rooms. Can I assume (as previously discussed) that the respiratory unit has three negatively pressured lobbied isolation rooms and medical receiving two? Can I also ask what floor you propose to transfer [redacted] to?

Regarding the pneumatic tube system - this is a building note that I will have a look at and get back to you on.

Kind regards
Sandra

Sandra McNamee
Assistant Director of Nursing
Infection Prevention & Control
[redacted]
252

From: McCluskey, Fiona
Sent: 11 August 2014 13:45
To: McNamee, Sandra
Cc: Newton, Margaret; Brown, Joyce; Gallacher, Stephen; Gallacher, Stephen; Griffin, Heather; Macleod, Mairi
Subject: Highly Infectious patients in the NSGH and other issues!

Hi Sandra

Margaret Newton has contacted me with some concerns regarding the New Hospital

1. **The flow of highly infectious patients into the New South**.
   As you may recall the hospital was never planned on the basis of the transfer of the Brownlee.The generic bedrooms are mechanically ventilated with pressure in the rooms negative to the corridors. There are no lobbied bedrooms in the adult tower (although there are lobbied bedrooms in the CDU & wards of the NCH). This was agreed in 2009 with microbiologist/ICT involvement. In the adult there are 12 lobbied isolation rooms; 8 with en-suite within the ITU/HDU component of the Critical Care Unit.
   Margaret is concerned about the flows of patients into the adult hospital. I would have thought an SOP could be developed for these patients?

2. **Pneumatic Tube System & Clean Utilities**

The PTS is situated within the clean utility in both the adult and childrens hospital. This includes the haemato-oncology wards within both adult and childrens hospitals. You may remember seeing this on your visit to the wards. Margaret has told me that the Beatson and other hospitals do not have PTS within the Clean utility as blood specimens are not allowed within 'clean rooms'. PTS is integral to the flows within the hospital and this issue was never raised during the 1:200 or 1:50 design stages.

Can you advise on both these issues?

Kind Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

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All messages passing through this gateway are checked for viruses, but we strongly recommend that you check for viruses using your own virus scanner as NHS Greater Glasgow & Clyde will not take responsibility for any damage caused as a result of virus infection.

****

Lang, Ann

From: Williams, Craig
Sent: 01 September 2015 16:48
To: Lang, Ann
Subject: FW: Highly Infectious patients in the NSGH and other issues!

From: Williams, Craig
Sent: 12 August 2014 20:02
To: Brown, Joyce; McNamee, Sandra
Subject: Re: Highly Infectious patients in the NSGH and other issues!

Dear Joyce

One of my concerns is the total number of of lobbied isolation rooms available within the NSGH. The addition of the adult bone marrow transplant unit and the brownlee to the specialties on site will increase the
****
Sent from a NHSGG&C BlackBerry device
****

From: Brown, Joyce
Sent: Tuesday, August 12, 2014 06:09 PM GMT Standard Time
To: McNamee, Sandra; McCluskey, Fiona; Williams, Craig
Cc: Newton, Margaret; Gallacher, Stephen; Gallacher, Stephen; Griffin, Heather; Macleod, Mairi; Walsh, Tom; Joannidis, Pamela; Griffin, Heather; Walsh, Tom
Subject: RE: Highly Infectious patients in the NSGH and other issues!

Dear Sandra

We are going to discuss any Brownlee issues at the ECMS SMT meeting tomorrow

Regards
Joyce

From: McNamee, Sandra [redacted]
Sent: 12 August 2014 11:55
To: McCluskey, Fiona; Williams, Craig
Cc: Newton, Margaret; Brown, Joyce; Gallacher, Stephen; Gallacher, Stephen; Griffin, Heather; Macleod, Mairi; Walsh, Tom; Joannidis, Pamela; Griffin, Heather; Walsh, Tom
Subject: RE: Highly Infectious patients in the NSGH and other issues!

Hi
I don't see anything in the guidance that specifies where this should be located. I have discussed with Pamela and agreed that provided the blood samples are packaged appropriately then this can be located in the clean utility. This should be reflected in local operational policies.
Kind regards
Sandra

Sandra McNamee
Assistant Director of Nursing
Infection Prevention & Control
[redacted]

From: McCluskey, Fiona
Sent: 11 August 2014 15:21
To: Williams, Craig; McNamee, Sandra
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Hi Sandra

We were advised by ECMS that the Brownlee is moving this was not a Project decision – I think this reasoning was the move of HDU from GGH, Stephen would be best to advise.

There are no lobbied rooms within the adult tower of the hospital. The rooms are all mechanically ventilated. The only lobbied rooms within the adult hospital are in ITU/HDU. Is CDU you are referring to adult or childrens? We are still waiting for ECMS to advise on the bed configuration for the adult hospital.

Kind Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project

Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

From: McNamee, Sandra [redacted]
Sent: 11 August 2014 15:11
To: McCluskey, Fiona
Cc: Newton, Margaret; Brown, Joyce; Gallacher, Stephen; Gallacher, Stephen; Griffin, Heather; Macleod, Mairi; Williams, Craig; Walsh, Tom; Joannidis, Pamela
Subject: RE: Highly Infectious patients in the NSGH and other issues!

Hi Fiona
Thank you for your e mail - as you rightly point out the Brownlee Unit was not part of the planning process and therefore IPC advice on this was not actively sought nor given. I (and I think I will be correct in stating) and Professor Williams have significant concerns about this, especially in relation to the management of highly infectious patients, e.g. MDR TB who should be managed in a specialist unit with lobbied negative pressure isolation rooms. Can I assume (as previously discussed) that the respiratory unit has three negatively pressured lobbied isolation rooms and medical receiving two? Can I also ask what floor you propose to transfer CDU to?

Regarding the pneumatic tube system - this is a building note that I will have a look at and get back to you on.

Kind regards
Sandra

Sandra McNamee
Assistant Director of Nursing
Infection Prevention & Control
[redacted]

From: McCluskey, Fiona
Sent: 11 August 2014 13:45
To: McNamee, Sandra
Cc: Newton, Margaret; Brown, Joyce; Gallacher, Stephen; Gallacher, Stephen; Griffin, Heather; Macleod, Mairi
Subject: Highly Infectious patients in the NSGH and other issues!

Hi Sandra

Margaret Newton has contacted me with some concerns regarding the New Hospital

1. **The flow of highly infectious patients into the New South**.
   As you may recall the hospital was never planned on the basis of the transfer of the Brownlee.The generic bedrooms are mechanically ventilated with pressure in the rooms negative to the corridors. There are no lobbied bedrooms in the adult tower (although there are lobbied bedrooms in the CDU & wards of the NCH). This was agreed in 2009 with microbiologist/ICT involvement. In the adult there are 12 lobbied isolation rooms; 8 with en-suite within the ITU/HDU component of the Critical Care Unit.
   Margaret is concerned about the flows of patients into the adult hospital. I would have thought an SOP

2. Pneumatic Tube System & Clean Utilities

The PTS is situated within the clean utility in both the adult and childrens hospital. This includes the haemato-oncology wards within both adult and childrens hospitals. You may remember seeing this on your visit to the wards. Margaret has told me that the Beatson and other hospitals do not have PTS within the Clean utility as blood specimens are not allowed within 'clean rooms'. PTS is integral to the flows within the hospital and this issue was never raised during the 1:200 or 1:50 design stages.

Can you advise on both these issues?

Kind Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

Lang, Ann

From: McNamee, Sandra
Sent: 07 September 2015 15:26
To: Lang, Ann
Subject: FW: Lobbied rooms in nSGH

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Williams, Craig
Sent: 20 August 2014 10:11
To: McCluskey, Fiona
Cc: McNamee, Sandra
Subject: RE: Lobbied rooms in nSGH

Dear Fiona

Thanks for information but I need an assessment from the design team to assure me that the rooms meet the specification I described in the earlier e mail. This is because the Brownlee is moving to the South and so all of our MDRTB patients will be managed there.

Best wishes

Craig

From: McCluskey, Fiona
Sent: 20 August 2014 10:08
To: Williams, Craig
Subject: RE: Lobbied rooms in nSGH

Craig

I have attached the ADB sheet which describes the references to the mechanical ventilation of the room.

Hope this helps

I understand that Mairi Macleod is arranging a meeting to discuss the isolation rooms in the new childrens haemato-oncology unit to discuss the ventialtion of rooms

Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
[illegible] Project

Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

From: Williams, Craig
Sent: 20 August 2014 09:40
To: McCluskey, Fiona
Cc: McNamee, Sandra
Subject: RE: Lobbied rooms in nSGH

Dear Fiona

Thanks, could I just double check that the lobbied side rooms meet the specifications contained in:

The Interdepartmental Working Group on Tuberculosis (1998) The prevention and control of tuberculosis in the United Kingdom: UK guidance on the prevention and control of transmission of 1. HIV-related tuberculosis 2. drug-resistant, including multiple drug-resistant, tuberculosis. London: Department of Health. Available from www.dh.gov.uk.

Best wishes

Craig

From: McCluskey, Fiona
Sent: 20 August 2014 09:25
To: Williams, Craig
Subject: Lobbied rooms in nSGH

Craig

I can confirm that there are 10 rooms lobbies within the adult Critical care Unit and 2 rooms with lobbies in the nal Acuity wards

Kind Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

Lang, Ann

From: Williams, Craig
Sent: 01 September 2015 16:49
To: Lang, Ann
Subject: FW: Vhf

-----Original Message-----
From: Williams, Craig
Sent: 25 August 2014 15:41
To: McNamee, Sandra
Subject: Fw: Vhf

Dear Sandra

This is the level of the curent debate, "sounds a bit like the right isolation room " I ll get some more info and get back to you. Were all the rooms at the brownlee taken out of use after the CCHF

Craig
****
Sent from a NHSGG&C BlackBerry device
****

----- Original Message -----
From: Bell, David
Sent: Monday, August 25, 2014 03:17 PM GMT Standard Time
To: Williams, Craig
Subject: RE: Vhf

Craig

That mobile number does not seem to work

We have been asked to submit a bid for this in GGC in the next 4 weeks. We have not yet had any discussions about it so it is very early days. There is no intention of building any new ID unit. In the ACDP guidance on page 48 there is a description of an enhanced room. It sounds very close to the negative pressure rooms we have or will have at the nSGH. I am on [redacted] until 4pm

david

-----Original Message-----
From: Williams, Craig
Sent: 25 August 2014 14:20
To: Bell, David
Subject: Fw: Vhf

Dear david

Andrew seaton told me you were leading on this, would you be able to give me a call

Best wishes

Craig

****

----- Original Message -----
From: Williams, Craig
Sent: Monday, August 25, 2014 01:25 PM GMT Standard Time
To: MacConnachie, Alisdair
Subject: Vhf

Dear alisdair

Hope all is ok with you

We have been asked to look at the IC implications of providing "an ID facility which can provide an enhanced level of care and security"

Not quite sure what that looks like, would you be free to talk this through. I am on [redacted]

Craig
****
Sent from a NHSGG&C BlackBerry device
****

Lang, Ann

From: Williams, Craig
Sent: 01 September 2015 16:41
To: Lang, Ann
Subject: FW: Ventilation in new SGH for VHF

From: Williams, Craig
Sent: 29 August 2014 15:31
To: Harkness, Anne
Subject: Fw: Ventilation in new SGH for VHF

Contact with estates as discussed

Craig
****
Sent from a NHSGG&C BlackBerry device
****

From: Williams, Craig
Sent: Wednesday, August 27, 2014 01:40 PM GMT Standard Time
To: Powrie, Ian
Subject: Ventilation in new SGH for VHF

Dear Ian

There have been some discussions about housing Ebola patients in the lobbied side rooms in the new hospital. As you know HBN04-01 suppl1 says the rooms we have can be used in exceptional circumstances, the thing I am wondering about is when we discharge the patient we need to fumigate the rooms. Can we isolate the ventilation in individual rooms in the ICU area to allow for fumigation.

Best wishes

aig

RE: Lobbied rooms in nSGH

Inkster Teresa (NHS Greater Glasgow & Clyde)

Sent: 16 September 2014 09:53

To: McCluskey, Fiona [redacted]; Williams Craig (NHS Greater Glasgow & Clyde); Mcnamee Sandra (NHS Greater Glasgow & Clyde); pamela.joannidis[redacted]

Cc: Hirst, Allyson [redacted]

Dear all - the link to the CDC guidance discussed at Fridays meeting is below. The relevant section is on Page 10 . The current BMT rooms are built to that spec.

http://www.cdc.gov/mmwr/PDF/rr/rr5210.pdf

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: McCluskey, Fiona [redacted]
Sent: 21 August 2014 16:57
To: Williams Craig (NHS Greater Glasgow & Clyde); Mcnamee Sandra (NHS Greater Glasgow & Clyde); Hamilton Pauline (NHS Greater Glasgow & Clyde); Inkster Teresa (NHS Greater Glasgow & Clyde); pamela.joannidis[redacted]
Cc: Hirst, Allyson
Subject: RE: Lobbied rooms in nSGH

Ok I have asked Allyson to organise a separate visit for the adult areas.

From: Williams, Craig
Sent: 21 August 2014 11:46
To: McCluskey, Fiona; McNamee, Sandra; Hamilton, Pauline; Inkster, Teresa (NHSmail); Joannidis, Pamela
Cc: Hirst, Allyson
Subject: RE: Lobbied rooms in nSGH

Dear Fiona

That would be very useful and probably needs to be a separate meeting. Sandra and I are going to look at the areas in question, it would be useful to meet as soon as possible after that. I would propose to invite Pamela and Teresa along as well

Best wishes

Craig

From: McCluskey, Fiona
Sent: 20 August 2014 10:28
To: Williams, Craig

Cc: Hirst, Allyson
Subject: RE: Lobbied rooms in nSGH

Craig

I have spoken to our technical advisors and they would be keen for us to meet with yourself and the technical team from Brookfield so that we can clarify. Could this be done at the same time as the meeting with Schiehallion or is this more urgent.

Can you let me know and Allyson can set up a meeting

Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

From: Williams, Craig
Sent: 20 August 2014 10:11
To: McCluskey, Fiona
Cc: McNamee, Sandra
Subject: RE: Lobbied rooms in nSGH

Dear Fiona

Thanks for information but I need an assessment from the design team to assure me that the rooms meet the specification I described in the earlier e mail. This is because the Brownlee is moving to the South and so all of our MDRTB patients will be managed there.

Best wishes

Craig

From: McCluskey, Fiona
Sent: 20 August 2014 10:08
To: Williams, Craig
Subject: RE: Lobbied rooms in nSGH

Craig

I have attached the ADB sheet which describes the references to the mechanical ventilation of the room.

Hope this helps

I understand that Mairi Macleod is arranging a meeting to discuss the isolation rooms in the new childrens haemato- oncology unit to discuss the ventialtion of rooms

Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

From: Williams, Craig
Sent: 20 August 2014 09:40
To: McCluskey, Fiona
Cc: McNamee, Sandra
Subject: RE: Lobbied rooms in nSGH

Dear Fiona

Thanks, could I just double check that the lobbied side rooms meet the specifications contained in:

The Interdepartmental Working Group on Tuberculosis (1998) The prevention and control of tuberculosis in the United Kingdom: UK guidance on the prevention and control of transmission of 1. HIV-related tuberculosis 2. drug-resistant, including multiple drug-resistant, tuberculosis. London: Department of Health. Available from www.dh.gov.uk.

Best wishes

Craig

From: McCluskey, Fiona
Sent: 20 August 2014 09:25
To: Williams, Craig

Subject: Lobbied rooms in nSGH

Craig

I can confirm that there are 10 rooms lobbies within the adult Critical care Unit and 2 rooms with lobbies in the Renal Acuity wards

Kind Regards

Fiona

Fiona McCluskey
Senior Nurse Advisor
New South Hospitals Project
Top Floor
Construction Offices
(off Hardgate Road)
Southern General Hospital
Glasgow G51 4SX
Direct Dial [redacted]
Switchboard 0141 245 5700

Lang, Ann

From: Walsh, Tom
Sent: 01 September 2015 11:19
To: Lang, Ann
Subject: FW: Lobbied side rooms in NSGH

From: McCamley, Pamela
Sent: 14 January 2015 16:09
To: Williams, Craig
Cc: Walsh, Tom
Subject: RE: Lobbied side rooms in NSGH

Craig, yes Jennifer is happy for you to attend and feed back to her and to BICC (I understand it was the BICC that asked for a review?). If there are really significant problems can you escalate to Jennifer asap please, as Jennifer and Robert will need to discuss with David asap.

I will let David know that Jennifer will let you take forward and feed back to her.

Thanks

Pamela

From: Williams, Craig
Sent: 14 January 2015 09:58
To: McCamley, Pamela
Cc: Walsh, Tom
Subject: FW: Lobbied side rooms in NSGH

Dear Pamela

This is about the specification for side rooms for the Brownlee and BMT moving to the NSGH. I am happy to report back to Jennifer if she thinks that is appropriate but if you wouldn't mind letting David Loudon know

Best wishes

Craig

From: Loudon, David
Sent: 13 January 2015 16:47
To: Walsh, Tom; Williams, Craig
Cc: Armstrong, Jennifer; 'David Hall'; Moir, Peter; Hirst, Allyson
Subject: RE: Lobbied side rooms in NSGH

Craig

Can we arrange a meeting next week to discuss please?

I'll ask Peter Moir and David Hall to join me. Would be helpful if Jennifer could also attend.

Regards

David W. Loudon, MCIOB, CBIFM, MBA
Project Director - South Glasgow Hospitals Development / Director of Facilities and Capital Planning - Designate
NHS Greater Glasgow & Clyde
New South Glasgow Hospital Site Offices
Top Floor, NHS Offices
Hardgate Road
Glasgow
G51 4SX

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

From: Walsh, Tom
Sent: 13 January 2015 15:08
To: Loudon, David; Williams, Craig
Cc: McCluskey, Fiona; Armstrong, Jennifer; 'David Hall'; Moir, Peter; Wrath, Frances
Subject: RE: Lobbied side rooms in NSGH

Dear David

Using Tom's computer. Thanks for your reply, my main concern is section 1.10 of the SHPN that you sent to me which states that:

Exclusions

1.10 This Supplement does not describe the specialist facilities required in infectious disease units or on wards where severely immuno-compromised patients are nursed. Guidance for these facilities will follow in a further Supplement to SHPN 04.

If we are to house the ID unit and BMT in premises built to SHPN 04 then the specification has specifically excluded these units.

Craig

From: Loudon, David
Sent: 06 January 2015 09:59
To: Williams, Craig
Cc: Walsh, Tom; McCluskey, Fiona; Armstrong, Jennifer; 'David Hall'; Moir, Peter; Wrath, Frances
Subject: RE: Lobbied side rooms in NSGH

Craig,

Thanks for your message below and please also see the response below from Currie & Brown and Brookfield Multiplex. I hope that this is a satisfactory answer to your query. Please confirm. I have also attached a copy of SHPN 4 Supplement 1.

Regards

David

Project Director - South Glasgow Hospitals Development / Director of Facilities and Capital Planning - Designate
NHS Greater Glasgow & Clyde
New South Glasgow Hospital Site Offices
Top Floor, NHS Offices
Hardgate Road
Glasgow
G51 4SX

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

David,

Further to your note prior to Christmas, I tasked Brookfield & their design team with reviewing the guidance document 'The Prevention and Control of Tuberculosis in the United Kingdom' with particular reference to ANNEX D ENVIRONMENTAL CONTROLS: VENTILATION.

As you will note below, they have confirmed that, in their professional opinion, they see no reason as to why the isolation rooms cannot be used under the guidance as they have been designed in accordance with SHPN 04 supplement 1, attached.

Regards

David

David Hall
FCIOB/MAPM
Director
Currie & Brown
Email: [redacted]
Building 3, 2 Parklands Avenue, Maxim Office Park, Eurocentral
Lanarkshire ML1 4WQ
United Kingdom

Tel: [redacted]
Mobile: [redacted]
Fax: [redacted]
Website: www.curriebrown.com

From: Colin Grindlay [redacted]
Sent: 05 January 2015 16:24
To: David Hall
Cc: Darren Pike
Subject: FW: Christmas Reading

David,

Please see attached correspondence from Wallace Whittle advising the Isolation rooms throughout the hospital have been designed in line with SHPN 04 Supplement 1.

Wallace Whittle see no reason as to why the isolation rooms cannot be used under the guidance issued previously by NHS.

Regards

Colin Grindlay
M&E Manager - Construction

Brookfield BM MULTIPLEX

From: Williams, Craig
Sent: 22 December 2014 09:29
To: Loudon, David
Cc: Walsh, Tom; McCluskey, Fiona
Subject: Lobbied side rooms in NSGH

Dear David

At the last Board Infection Control Committee I was asked by Jennifer Armstrong to contact you to find out where we are with information from the project team around lobbied side rooms at the NSGH.

Sandar MacNamee and I met with Fiona McCluskey and a ventilation expert from the project team several months ago to discuss two things in particular:

1) Whether the lobbied side rooms meet the current guidance for housing Bone marrow transplant patients

2) Whether the lobbied side rooms meet the DH guidance for housing Multi-Drug resistant TB patients

Fiona has all of the relevant technical information from our meeting. The suitability of these rooms impacts on the move of the BMT and ID units from GGH to NSGH so it would be helpful to gat an answer as soon as possible.

Best wishes

Prof Craig Williams
Lead ICD NHSGGC

RE: Tuesday 20 January at 4pm - Lobbied side rooms in NSGH (David Louden)

Inkster Teresa (NHS Greater Glasgow & Clyde)

Sent: 20 January 2015 09:49

To: Hamilton, Pauline [redacted]

Cc: Williams Craig (NHS Greater Glasgow & Clyde)

Sorry , I won't be able to make this. I'm working at home today because one of my boys is off school sick.
Teresa
Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Hamilton, Pauline [redacted]
Sent: 20 January 2015 09:39
To: Inkster Teresa (NHS Greater Glasgow & Clyde)
Cc: Williams Craig (NHS Greater Glasgow & Clyde)
Subject: Tuesday 20 January at 4pm - Lobbied side rooms in NSGH (David Louden)

Hi Teresa

Craig has just left a message inviting you to attend today's meeting. See below.

Thanks
Pauline [redacted]

From: Hamilton, Pauline
Sent: 16 January 2015 15:16
To: Hirst, Allyson
Subject: FW: possible dates next week for Lobbied side rooms in NSGH (David Louden)

Hi Allyson

Craig has confirmed he can meet with David Louden, Peter Moir and David Hall at 4pm on Tuesday 20 January in the SGH Project Offices. Tom Walsh is not available to attend this meeting.

I'll send a meeting request to David Louden, Peter and yourself.

Thanks for your help.

Pauline [redacted]

From: Williams, Craig
Sent: 16 January 2015 11:42
To: Hamilton, Pauline
Subject: RE: possible dates next week for Lobbied side rooms in NSGH (David Louden)

Dear Pauline

We will go for Tuesday at 4 and I will update Tom

Craig

From: Hamilton, Pauline
Sent: 15 January 2015 12:53
To: Williams, Craig
Subject: possible dates next week for Lobbied side rooms in NSGH (David Louden)

Hi Craig

I've spoken to Allyson re dates.

David Louden, Peter Moir and David Hall are all available to meet at 4pm on Tuesday 20 January, SGH

Project Offices however Tom is not back at work until Wednesday.

So if Tom is to attend also, the other possible dates are:

- 1.30pm Thursday 22 January (JB Russell House) - but you have the REF and Research Planning Event in Paisley (just in case you're not there for the whole event)

- 4.30pm Friday 23 January (SGH Project Offices) - you're in Perth from 2-3pm

We didn't look at the following week as I know you're keen to have the meeting asap.

Please let me know if any of the dates can work.

Thanks
Pauline [redacted]

From: Hirst, Allyson
Sent: 15 January 2015 12:35
To: Hamilton, Pauline
Subject: FW: Lobbied side rooms in NSGH

Pauline

David can do neither of these dates - both area already booked out with meeting I cannot get David out of. You could give me a call this afternoon to review the diary to see if anything else looks doable

Allyson

From: Loudon, David
Sent: 14 January 2015 16:34
To: Hirst, Allyson
Subject: FW: Lobbied side rooms in NSGH

David W. Loudon, MCIOB, CBIFM, MBA
Project Director - South Glasgow Hospitals Development / Director of Facilities and Capital Planning - Designate
NHS Greater Glasgow & Clyde
New South Glasgow Hospital Site Offices
Top Floor, NHS Offices
Hardgate Road
Glasgow
G51 4SX

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

From: Hamilton, Pauline
Sent: 14 January 2015 16:25
To: Loudon, David
Cc: Williams, Craig
Subject: RE: Lobbied side rooms in NSGH

Dear David

Please let me know if you and your colleagues are available to meet with Craig and Tom on either of the dates below:

- 3pm onwards on Wednesday 21 January

- Would need to be 8.30am on Thursday 22 January

I look forward to hearing from you.

Kind Regards
Pauline [redacted]

Dear David

At the last Board Infection Control Committee I was asked by Jennifer Armstrong to contact you to find out where we are with information from the project team around lobbied side rooms at the NSGH.

Sandar MacNamee and I met with Fiona McCluskey and a ventilation expert from the project team several months ago to discuss two things in particular:

1) Whether the lobbied side rooms meet the current guidance for housing Bone marrow transplant patients

2) Whether the lobbied side rooms meet the DH guidance for housing Multi-Drug resistant TB patients

Fiona has all of the relevant technical information from our meeting. The suitability of these rooms impacts on the move of the BMT and ID units from GGH to NSGH so it would be helpful to gat an answer as soon as possible.

Best wishes

Prof Craig Williams
Lead ICD NHSGGC

Lang, Ann

From: Walsh, Tom
Sent: 01 September 2015 11:21
To: Lang, Ann
Subject: FW: High risk airborne infecitons

From: Loudon, David
Sent: 06 February 2015 15:04
To: Williams, Craig
Cc: Walsh, Tom
Subject: RE: High risk airborne infecitons

Craig

I'm not sure but I would expect that clear guidance needs to be provided to the project team to enable a review of the existing installation. Perhaps, this is one for you to discuss with Jennifer?

Regards

David

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning
NHS Greater Glasgow & Clyde
New South Glasgow Hospital Site Offices
Top Floor, NHS Offices
Hardgate Road
Glasgow
G51 4SX

Direct Line: [redacted]
Mobile Phone: [redacted]
E-mail: [redacted]

From: Williams, Craig
Sent: 06 February 2015 13:13
To: Loudon, David
Cc: Walsh, Tom
Subject: Re: High risk airborne infecitons

Dear David

Thanks, just for clarity what is the process by which users will supply specifications

Best wishes

Craig

Sent from my BlackBerry 10 smartphone on the EE network.

From: Loudon, David

To: Williams, Craig; Redfern, Jamie
Cc: Mitchell, Clare; Walsh, Tom; Armstrong, Jennifer
Subject: RE: High risk airborne infecitons

Craig ,

Please see my comments below in red.

Regards

David

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning
NHS Greater Glasgow & Clyde
New South Glasgow Hospital Site Offices
Top Floor, NHS Offices
Hardgate Road
Glasgow
G51 4SX

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

From: Williams, Craig
Sent: 05 February 2015 15:21
To: Redfern, Jamie
Cc: Loudon, David; Mitchell, Clare; Walsh, Tom
Subject: RE: High risk airborne infecitons

Dear Jamie

The problem has been a paragraph in Scottish Health Planning note 04 which is an exclusion stating " This Supplement does not describe the specialist facilities required in infectious disease units or on wards where severely immuno-compromised patients are nursed. Guidance for these facilities will follow in a further Supplement to SHPN 04.

However the planning team and HFS have been unable to locate further definitive guidance. This being the case I asked David Loudon and his team to specifically cross reference the positive pressure lobbied rooms for use as Infectious disease rooms with the DH guidance on rooms for MDRTB. At a meeting last week he confirmed that their view is that the lobbied isolation rooms at the NSGH provide equivalent protection, he will confirm this by e mail. As such I have no concerns about the suitability of the rooms for MDRTB so the ID rooms present no problem. We can confirm that the designers, Wallace Whittle, have reviewed the documentation and have advised that there is o reason to prevent use of the lobbied rooms for MDRTB patients.

In terms of BMT the positive pressure ante rooms prevent ingress and egress of organisms from the room and can be used for source or protective isolation without the need to flip any switches. They are of a similar specification to those that we have been using on Schiehallion since they were rebuilt a number of years ago and I am unaware of any problems occuring. David Louden and his team are looking for other new builds across the UK to see what specifications were used. I do not think there is any problem with us continuing to use rooms of this specification in [illegible] in the risk register that we are aware of the SHBN but I will await further guidance

from reading the attached set of emails I have to confirm suitability for paediatric accommodation re above can either of you guys confirm as per what has been agreed for adult services at the nsgh

From: Hill, Kevin
Sent: 02 February 2015 10:53
To: Redfern, Jamie
Cc: Beattie, Jim; Love, Elaine
Subject: Fw: High risk airborne infecitons

For review and action please.
Kind regards

Sent from my BlackBerry 10 smartphone on the EE network.

From: Harkness, Anne [redacted]
Sent: Monday, 2 February 2015 10:13
To: Hill, Kevin
Subject: Fw: High risk airborne infecitons

Can you address this please, ta

A
****
Sent from a NHSGG&C BlackBerry device
****

From: Hague, Rosie
Sent: Monday, February 02, 2015 08:47 AM GMT Standard Time
To: Seaton, Andrew; Williams, Craig; Armstrong, Jennifer
Cc: McNamee, Sandra; Kennedy, Iain; Harkness, Anne; Loudon, David
Subject: RE: High risk airborne infecitons

It would also be good to have confirmation of the position for severely immuno-compromised patients.

Rosie

From: Seaton, Andrew
Sent: 01 February 2015 16:03
To: Williams, Craig; Armstrong, Jennifer
Cc: McNamee, Sandra; Kennedy, Iain; Harkness, Anne; Loudon, David; Hague, Rosie
Subject: RE: High risk airborne infecitons

Dear Craig,
Thanks. If they are signed off as safe and appropriate then we're all content. Just to check suspected MERS, SARs, Avian FLu etc. Same specifications as MDRTB? Presume all ok for paediatric facility as well?
Kind regards,
andrew

Dr R A Seaton
Consultant in Infectious Diseases and General Medicine
Lead doctor NHS Greater Glasgow and Clyde Antimicrobial Management Team
Gartnavel General Hospital

G120YN
Tel [redacted]
Fax: [redacted]
Out of office email for non patient-related matters: [redacted]

my actions protect antibiotics
ANTIBIOTIC GUARDIAN
join me at antibioticguardian.com

From: Williams, Craig
Sent: 29 January 2015 16:23
To: Seaton, Andrew; Armstrong, Jennifer
Cc: McNamee, Sandra; Kennedy, Iain; Harkness, Anne; Loudon, David
Subject: RE: High risk airborne infecitons

Dear Andrew

This is broadly what we have been discussing at BICC for the last while. The positive pressure ante-room prevents ingress and egress of organisms from the room and can be used for source or protective isolation without the need to flip any switches.

The problem has been that in Scottish Health Planning note 04 there is an Exclusion which states " This Supplement does not describe the specialist facilities required in infectious disease units or on wards where severely immuno-compromised patients are nursed. Guidance for these facilities will follow in a further Supplement to SHPN 04.

However the planning team and HFS have been unable to locate further definitive guidance. This being the case I asked David Louden and his team to specifically cross reference our lobbied rooms with the DH guidance on rooms for MDRTB. At a meeting last week he confirmed that their view is that the lobbied isolation rooms at the NSGH provide equivalent protection, he will confirm this by e mail. As such I have no concerns about the suitability of the rooms for MDRTB etc.

In terms of the Ebola, following your comments at BICC Sandra about the size of the ante-rooms, Iain Kennedy, Sandra and I met with Emma Thompson, who was nominated by the ID physicians to represent them. I explained that we were content that the lobbied side rooms at NSGH are sufficient under the ACDP guidance to manage an Ebola patient prior to transfer to a designated secure unit, but, that they are not sufficient for anything other than short term management, in particular my understanding was that GGC is not planning to act as a referral unit or accept transfers of these patients. If a severely unwell patient requires to be manged in Glasgow the view was that this wouyld constitute a Major Incident and be managed accordingly.

She expressed concern about the transfer of patinets through the NSGH to the designated room and suggested that an isolator may be required to support the tarnsfer. We agreed that she or other ID physicians would walk the route and take upm their concerns through the directorate.

I hope this gives you sufficient detail to address your concrens but if there is anything else please let me know.

Best wishes

Craig

Consultant Microbiologist Royal Hospital for Sick Children, Glasgow
Lead Infection Control Doctor, NHSGGC
Professor of HAI, UWS

t. [redacted]
w. www.uws.ac.uk/hai

From: Seaton, Andrew
Sent: 27 January 2015 10:55
To: Williams, Craig; Armstrong, Jennifer
Cc: Dunn, Patricia
Subject: High risk airborne infecitons

Dear Jennifer and Craig,
This is a follow on from BICC. From the discussion yesterday around the 2 dedicated ID beds within HDU I had understood them to be negative pressure. One of my colleagues, Alisdair MacConnachie, has told me that Craig had informed him that the ante room is positive pressure but the patient room is not under negative pressure. Please can this be confirmed? We do need capacity to properly isolate patients with suspected MERS, avian FLU and MDRTB etc. It is essential this is clarified that these rooms are fit for purpose. As discussed yesterday assuming good size of ante room and appropriate channels/ contingency for patient entry/exit etc the VHF facility in these rooms should be appropriate for short term patient management before transfer to Royal Free.
Kind regards,
andrew

Dr R A Seaton
Consultant in Infectious Diseases and General Medicine
Lead doctor NHS Greater Glasgow and Clyde Antimicrobial Management Team
Gartnavel General Hospital
1053 Great Western Road
Glasgow
G120YN
Tel [redacted]
Fax: [redacted]
Out of office email for non patient-related matters: [redacted]

From:	Peters, Erica on behalf of Peters, Erica
To:	Peters, Christine
Subject:	FW: High risk airborne infecitons
Sent:	22/07/2015 18:14:43

See below,
A bit of an email trail about the negative pressure rooms in HDU FYI

From: Seaton, Andrew
Sent: 22 July 2015 13:44
To: Peters, Erica
Subject: Re: High risk airborne infecitons

Yes no problem
Andrew

Sent from my BlackBerry 10 smartphone on the EE network.

From: Peters, Erica
Sent: Wednesday, 22 July 2015 11:13
To: Seaton, Andrew
Subject: RE: High risk airborne infecitons

Andrew,
Are you happy for me to send this to Christine Peters? There is ongoing concern about the negative pressure rooms although I understand they are probably ok.
Erica

From: Seaton, Andrew
Sent: 02 February 2015 17:39
To: Fox, Ray; MacConnachie, Alisdair; Peters, Erica; Bell, David; 'Thomas Evans'; 'Emma Thomson'
Subject: FW: High risk airborne infecitons

Dear all,
see below from Craig Williams re the "-ve pressure rooms". I've replied again specifying other airborne viral infection, but the suggestion is the rooms are OK. This makes life much less complicated if correct. His comment about "discussing the last while" in committee isn't quite true (as far as the BICC is concerned). It was mentioned one week ago. I'll follow up.
cheers,
andrew

Dr R A Seaton
Consultant in Infectious Diseases and General Medicine
Lead doctor NHS Greater Glasgow and Clyde Antimicrobial Management Team
Gartnavel General Hospital
1053 Great Western Road
Glasgow
G120YN
Tel [redacted]

Fax: [redacted]
Out of office email for non patient-related matters: [redacted]

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From: Williams, Craig
Sent: 29 January 2015 16:23
To: Seaton, Andrew; Armstrong, Jennifer
Cc: McNamee, Sandra; Kennedy, Iain; Harkness, Anne; Loudon, David
Subject: RE: High risk airborne infecitons

Dear Andrew

This is broadly what we have been discussing at BICC for the last while. The positive pressure ante-room prevents ingress and egress of organisms from the room and can be used for source or protective isolation without the need to flip any switches.

The problem has been that in Scottish Health Planning note 04 there is an Exclusion which states " This Supplement does not describe the specialist facilities required in infectious disease units or on wards where severely immuno-compromised patients are nursed. Guidance for these facilities will follow in a further Supplement to SHPN 04.

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I hope this gives you sufficient detail to address your concrens but if there is anything else please let me know.

Best wishes

Craig

Prof Craig Williams
Consultant Microbiologist Royal Hospital for Sick Children, Glasgow
Lead Infection Control Doctor, NHSGGC
Professor of HAI, UWS

t. [redacted]
w. www.uws.ac.uk/hai

From: Seaton, Andrew
Sent: 27 January 2015 10:55
To: Williams, Craig; Armstrong, Jennifer
Cc: Dunn, Patricia
Subject: High risk airborne infecitons

Dear Jennifer and Craig,
This is a follow on from BICC. From the discussion yesterday around the 2 dedicated ID beds within HDU I had understood them to be negative pressure. One of my colleagues, Alisdair MacConnachie, has told me that Craig had informed him that the ante room is positive pressure but the patient room is not under negative pressure. Please can this be confirmed? We do need capacity to properly isolate patients with suspected MERS, avian FLU and MDRTB etc. It is essential this is clarified that these rooms are fit for purpose. As discussed yesterday assuming good size of ante room and appropriate channels/ contingency for patient entry/exit etc the VHF facility in these rooms should be appropriate for short term patient management before transfer to Royal Free.
Kind regards,
andrew

Dr R A Seaton
Consultant in Infectious Diseases and General Medicine
Lead doctor NHS Greater Glasgow and Clyde Antimicrobial Management Team
Gartnavel General Hospital
1053 Great Western Road
Glasgow
G120YN
Tel [redacted]
Fax: [redacted]
Out of office email for non patient-related matters: [redacted]


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CDC guidance

Inkster Teresa (NHS Greater Glasgow & Clyde)

Sent: 26 February 2015 14:19

To: Loudon David (NHS Greater Glasgow & Clyde); david.hal[redacted]; Moir Peter (NHS Greater Glasgow & Clyde)

Cc: Walsh Thomas (NHS Greater Glasgow & Clyde); Williams Craig (NHS Greater Glasgow & Clyde)

Dear all - link to CDC guidance discussed at yesterdays meeting is below
Kind Regards
Teresa

http://www.cdc.gov/mmwr/PDF/rr/rr5210.pdf

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

Lang, Ann

From: Walsh, Tom
Sent: 01 September 2015 11:21
To: Lang, Ann
Subject: FW: CDC guidance

From: Inkster Teresa (NHS Greater Glasgow & Clyde) [redacted]
Sent: 26 February 2015 14:19
To: Loudon, David; david.hal[redacted]; Moir, Peter
Cc: Walsh, Tom; Williams, Craig
Subject: CDC guidance

Dear all - link to CDC guidance discussed at yesterdays meeting is below
Kind Regards
Teresa

http://www.cdc.gov/mmwr/PDF/rr/rr5210.pdf

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

Lang, Ann

From: Williams, Craig
Sent: 01 September 2015 16:47
To: Lang, Ann
Subject: FW: NSGH A&C - Sterilisation Results

From: Williams, Craig
Sent: 18 March 2015 15:15
To: Lang, Ann
Subject: Re: NSGH A&C - Sterilisation Results

I will do a verbal update thanks

Sent from my BlackBerry 10 smartphone on the EE network.

From: Lang, Ann
Sent: Wednesday, 18 March 2015 15:11
To: Williams, Craig
Subject: RE: NSGH A&C - Sterilisation Results

Hi Craig

Do you want the attached documents that was with the email to go out with the agenda or will you provide a verbal update at the meeting?

Thanks
Ann

From: Williams, Craig
Sent: 18 March 2015 14:55
To: Lang, Ann
Subject: Fw: NSGH A&C - Sterilisation Results

uld we put this on the list for SMT

Thanks

Craig

Sent from my BlackBerry 10 smartphone on the EE network.

From: Powrie, Ian [redacted]
Sent: Wednesday, 18 March 2015 12:45
To: Williams, Craig
Cc: Kane, Mary Anne; Hunter, William; Loudon, David; Moir, Peter
Subject: FW: NSGH A&C - Sterilisation Results

Craig,

55
441
496
665

Following your site visit to witness the testing protocol applied for water quality sampling during the commissioning period, please find attached for your review the water analysis results. I would be grateful if you would certify: The system to be of potable quality and can be suitable to be brought into service as required under SHTM 04-01 Water safety in healthcare premises Part A: Design, Installation and testing, paragraph 17.9.

I am also in the process of arranging for a further round of tests from designated sentinel points in advance of the migration programme, to verify that the water management programme implemented from the date of handover has effectively maintained the potable water quality.

Regards

Ian

[redacted]
Sector Estates Manager (NSGH)
Project Team, New South Glasgow Hospitals,
Southern General Hospitals Construction Site,
2nd Floor, Modular Building, Off Hardgate Road, Glasgow,G51 4SX
[redacted]
Tel [redacted]
Reception: 0141 245 5700
Mob: [redacted]

Lang, Ann

From: Williams, Craig
Sent: 01 September 2015 16:40
To: Lang, Ann
Subject: FW: ventilation arrangents in adult theatres

From: Williams, Craig
Sent: 14 April 2015 13:19
To: Mitchell, Clare
Subject: FW: ventilation arrangents in adult theatres

Do you know who OK'd this

Craig

From: McMullin, Linda
Sent: 14 April 2015 10:35
To: McMullin, Linda; Williams, Craig
Cc: Crawford, John; Carr, Michelle; Halliday, Seonaid
Subject: RE: ventilation arrangents in adult theatres

Craig,

Are you able to help please.

Thanks,

Linda

From: McMullin, Linda
Sent: 26 March 2015 13:38
To: Williams, Craig
Cc: Crawford, John; Carr, Michelle; Halliday, Seonaid
Subject: FW: ventilation arrangents in adult theatres

Craig,

I am looking for a bit of advice please.

It has been raised by one of the Orthopaedic surgeons that they have concerns over a shared `prep` room , see e mail below. What I need from you is an assurance that there is no issue. The room will be shared between elective orthopaedics and renal. I am presuming you have not received the commisioning documents for the AHUs to allow you to make comment as yet. I have requested them from Ian Powrie earlier this week again.

Can I have your thoughts please and the best way to take this forward. Would a risk assessment be of use or will I wait until you have seen the figures.

Many thanks,

Linda

To: Halliday, Seonaid; McMullin, Linda; Pace, Nick
Cc: Hodgson, May
Subject: FW: ventilation arrangents in adult theatres

Step 1 –seeking assurance that ventilation gradients correct!

From: Crawford, John
Sent: 24 March 2015 12:12
To: David Hall; Griffin, Heather
Cc: Carr, Michelle; Crawford, John
Subject: ventilation arrangents in adult theatres

David and Heather

After visits to the theatre suite orthopaedic services have raised concerns about the ventilation wrt the daily store room shared between theatres.

I have a note that the concept of shared 'prep room' was discussed 9/3/9. Infection control was present and this was discussed and assented to. It was clear that this would be a daily use store and not a 'laying out' room – this to e done in theatre. The Output Based Specification documents following also this make clear the intended use was to be as a daily store rather than for 'laying out' of instruments. Indeed the HBNs make clear you cannot have a shared 'layout' room.

The HBNs indicate that where there are shared areas between theatres (the example given is a shared scrub area) that specialist engineering advice should be sought to ensure proper ventilation gradients. The concern is that if the ventilation for these rooms has been set up as if for a 'laying out' prep room with the pressure either higher (conventional) or the same (ultraclean) as the operating room then this will be inappropriate. ie you can't have a higher pressure room shared between two theatres. And this will be the reason you can have shared scrub areas but not laying out areas.

Could you please reassure us that the ventilation arrangements are appropriate for the use in both the conventional and ultra clean theatres?

(David, I had also asked about the different ventilation in the theatres 15/16 cf all the other adult theatres and you said you would look into this.)

Many thanks

John

John Crawford
Lead Clinician Anaesthetics
Anaesthetic Dept
Southern General Hospital
Sec [redacted]
BBerry [redacted]
Mob [redacted]

Lang, Ann

From: Joannidis, Pamela
Sent: 01 September 2015 11:43
To: Lang, Ann
Subject: FW: New Children's hospital

From: Wrath, Frances
Sent: 05 May 2015 11:04
To: Barmanroy, Jackie
Cc: Robertson, Lynne; Joannidis, Pamela
Subject: RE: New Children's hospital

Hi Jackie

Sorry I was on leave for most of last week. All areas have been commissioned in line with contract ER's and all legislative requirements. The Board's Estates Team have access to all commissioning data and any specific questions are better addressed to them.

Regards

Frances

From: Barmanroy, Jackie
Sent: 24 April 2015 10:03
To: Wrath, Frances
Cc: Robertson, Lynne; Joannidis, Pamela
Subject: New Children's hospital
Importance: High

Good morning Frances,

I'm looking for your help regarding the following concerns Lynne has raised in regard to the new build -

1. Can we have assurance that the theatre ventilation has been commissioned?
2. Can we have assurance that the dialysis lines/outlets have been commissioned /flushed ?
3. That estates will be responsible for the helix monitors for Schiehallion's BMT rooms?

Many thanks,

Jackie.

Jackie Barmanroy
Senior Nurse Infection Control
South West Sector
Tel [redacted]

Lang, Ann

From: Mitchell, Clare
Sent: 08 September 2015 16:47
To: McNamee, Sandra
Cc: Lang, Ann
Subject: FW: SCHIEHALLION

QUERIES RE NEW HOSPITAL

Clare Mitchell
Lead Infection Prevention & Control Nurse
Office Block (Zone 2/1)
Queen Elizabeth University Hospital
1345 Govan Road
Glasgow, G51 4TF
[redacted]

From: Mitchell, Clare
Sent: 01 June 2015 08:45
To: Robertson, Lynne
Cc: Redfern, Jamie; Hughes, Janis; Love, Elaine; Stewart, Graham; Kirkwood, Jean; Barmanroy, Jackie; Macleod, Mairi
Subject: RE: SCHIEHALLION

Lynne,

The snagging list should be auctioned by the commissioning team.

We will provide guidance for staff for ward 2a and the other wards with isolation rooms. I will discuss with Prof Williams but he is off until Friday.

Regards

Clare

Clare Mitchell
Lead Infection Control Nurse
South West Sector
Administration Building
Southern General Hospital
Govan Road - G51 4TF
[redacted]

From: Robertson, Lynne
Sent: 29 May 2015 17:42
To: Mitchell, Clare
Cc: Redfern, Jamie; Hughes, Janis; Love, Elaine; Stewart, Graham; Kirkwood, Jean; Barmanroy, Jackie; Macleod, Mairi
Subject: FW: SCHIEHALLION

Clare,

There also needs to be a completion of snagging were there are holes in walls etc. Jean has sent a snagging list

In addition to ventilation guidance monitoring protocol developed for 2A and the other wards with isolation rooms

Regards
Lynne

Lynne Robertson
CSM
Women and Children's Directorate
[redacted]
P/A. Cathy Crookes
[redacted]

From: Kirkwood, Jean
Sent: 29 May 2015 16:27
To: Robertson, Lynne; Gibson, Brenda
Cc: McAuley, Mary; Doyle, Emma; Howat, Angela
Subject: FW: SCHIEHALLION

From: Mitchell, Clare
Sent: 29 May 2015 16:21
To: Kirkwood, Jean
Cc: Barmanroy, Jackie; Johnson, Angela
Subject: SCHIEHALLION

Jean,

Following on from the discussions we have had this morning Prof Craig Williams has informed a variety of senior staff of the issues in Schiehallion (Prof Gibson, Mary Ann Kane who is G M of Facilities, Dr Jim Beattie, E Love and the Senior Infection Control Team).

Prof Williams advised that the following actions will take place this week:

1. Ventilation will be put on by Wednesday
2. Ventilation commissioned by Wednesday
3. General clean on Thursday
4. Air sampling on Friday
5. The commissioning team are aware of the parents room to be finished

7 Meeting planned for 12 md in Yorkhill Friday 5th June to discuss Schiehallion and make sure we are all happy that the actions agreed have been put in place. Venue and e-mail re this still to be sent out (Monday)

Can we keep in touch next week. Can you let me know your contact number. Call me Monday/Tuesday

Regards

Clare

Clare Mitchell
Lead Infection Control Nurse
South West Sector
Administration Building
Southern General Hospital
Govan Road - G51 4TF
[redacted]

Lang, Ann

From: Joannidis, Pamela
Sent: 01 September 2015 12:02
To: Lang, Ann
Subject: FW: BMT unit new RHSC

From: McNamee, Sandra
Sent: 05 June 2015 09:47
To: Mitchell, Clare; Joannidis, Pamela
Subject: FW: BMT unit new RHSC

FYI

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Williams, Craig
Sent: 05 June 2015 09:44
To: Armstrong, Jennifer
Cc: McNamee, Sandra; Walsh, Tom
Subject: BMT unit new RHSC

Dear Jennifer

Further to our discussion:

On the 29th May Clare Mitchell the lead ICN and myself went to do a walkround on ward 2a in the New RHSC to determine the best points for air sampling which we planned to undertake prior to the move of the paediatric BMT unit. On arrival at the unit we found that there were some holes in the walls of the BMT cubicles and the ventilation had not been switched on.

I met with Mary Anne Kane who said she would look into it, the project team were confident that the work could be undertaken over the next week to allow the unit to be cleaned and air sampling performed today.

Upon further investigating Mary Anne found that the HEPA filters had not been fitted. If this is the case then we will be unable to validate the rooms.

From an infection control point of view it would be potentially unsafe to move children from their current HEPA filtered rooms to rooms in the new hospital until we can provide appropriate facilities.

Craig

Prof Craig Williams
Consultant Microbiologist Royal Hospital for Sick Children, Glasgow
Lead Infection Control Doctor, NHSGGC

SGH new Build

Peters, Christine [redacted]

Tue 16/06/2015 12:00

To:Powrie Ian (NHS Greater Glasgow & Clyde) [redacted];

Cc:Inkster Teresa (NHS Greater Glasgow & Clyde) [redacted]; Williams Craig (NHS Greater Glasgow & Clyde) [redacted]

Importance: High

Dear Ian,
I am writing on behalf of Teresa Inkster and myself to request an urgent meeting with you regarding the specifications of the isolation rooms in the new SGH building.

I cover the Southern site directorate for Infection Control, and Teresa will be responsible for Regional infection Control .

We have not been involved in the design or commissioning of these rooms and recognize that it is imperative to gain an accurate understanding of the spec and monitoring systems in place to ensure adequate infection control going forward..

We would very much appreciate a meeting with yourself – possibly this Friday or some time next week,

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

Lang, Ann

From: McNamee, Sandra
Sent: 07 September 2015 15:35
To: Lang, Ann
Subject: FW: Ventilation SGUH

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Williams, Craig
Sent: 19 June 2015 15:26
To: Stewart, David
Cc: Walsh, Tom; Powrie, Ian; McNamee, Sandra
Subject: Ventilation SGUH

Dear David

Further to our brief conversation earlier. It seems that the lobbied side rooms in the ITU/HDU area have not had HEPA filters fitted. Ian is going to check the room exhausts. This means that the rooms will offer no protection, in terms of airborne infection, to patients housed in them so neutropenic patients will not be in protective isolation. If the exhaust filters are fitted correctly then the rooms will offer effective protection to others in the unit if a patient with infection is housed in the room. The baffles were still covered in foam rubber so it is difficult to see how any validation could have been done. Ian is checking the hand over documentation to check what testing was supposed to have been done prior to handover.

In addition bone marrow transplants are being undertaken in ward 4B1 not in the lobbied side-rooms in the renal area where we thought that they would be done. The rooms have HEPA filtered inlets but no lobbies so will offer less protection than the previous unit at the Beatson. I am trying to find out if adult BMT's are being carried out in similar areas anywhere else in the UK.

Best wishes

Craig

Prof Craig Williams
Consultant Microbiologist RHSC Glasgow
Lead ICD NHSGGC
Professor of HAI UWS

t [redacted]
w www.uws.ac.uk/hai

Lang, Ann

From: Joannidis, Pamela
Sent: 01 September 2015 12:04
To: Lang, Ann
Subject: FW: Project team

From: Morton, Stefan
Sent: 09 June 2015 14:52
To: Joannidis, Pamela
Cc: McNamee, Sandra
Subject: Project team

Hi Pamela, I have just spent the morning at the NCH, assisting with the final scheduled dispensers for installation.
I have checked and rechecked the requirements and feel that I have reached the end of my responsibility there.
We were unable to do this last week as a promised delivery was not supplied and put back till August.
The contingency plan was instead utilised, using suitable brackets from demitting sites.
I am not naïve enough to say there will be no areas we have missed however the plan was to pass any work to Facilities beyond a reasonable point.
A lot of queries raised with me are for additional work beyond what was scheduled and work that was not within my remit in the first place.
Jackie had kindly met me today to finalise the trough dispensers and apart from two dispensers, everything was concluded.
We could not gain access to one room and Jackie has been asked by Fiona McCluskey to assist this.
I hope this is satisfactory, Stefan.

RE: Ventilation

Inkster Teresa (NHS Greater Glasgow & Clyde)

Thu 25/06/2015 10:29

To:John.Hood[redacted];

Cc:Peters Christine (NHS Greater Glasgow & Clyde) [redacted];

Hi John - I have been asked to attend a meeting re ventilation issues at nSGH this afternoon as Craig is on A/L this week. Did you have any involvement?
Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Peters, Christine [redacted]
Sent: 24 June 2015 09:52
To: Inkster Teresa (NHS Greater Glasgow & Clyde)
Subject: FW: Ventilation

FYI

From: Walsh, Tom
Sent: 23 June 2015 17:40
To: Peters, Christine
Subject: Re: Ventilation

Hi Christine

Craig led on most of this with some input from John Hood.

Design sign off was by Jackie in the south team whilst she was seconded to the project

Kr

Tom

Sent from my BlackBerry 10 smartphone.

From: Peters, Christine
Sent: Tuesday, 23 June 2015 14:33
To: Walsh, Tom
Cc: Inkster, Teresa (NHSmail)
Subject: Ventilation

Hi Tom,

How was the design of the new build signed off from an infection control point of view? Ie who would be the most appropriate person to speak to, to get an overview of the design in regard to ventilation from an infection control point of view?

Kind regards,

[redacted]

Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile: [redacted]

Legionella New SOuthern

Peters, Christine [redacted]

Thu 25/06/2015 17:52

To:Powrie Ian (NHS Greater Glasgow & Clyde) [redacted];

Cc:Wright Pauline (NHS Greater Glasgow & Clyde) [redacted]; Inkster Teresa (NHS Greater Glasgow & Clyde) [redacted];

Hi Ian,

Following our conversation today could you please send to Pauline and myself a table of the legionella testing results you mentioned today specifying the outlets that have been positive as well as the species of legionella and actions taken to date.

Regards,

[redacted]

Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile: [redacted]

RE: legionella water testing in BMT unit

Inkster Teresa (NHS Greater Glasgow & Clyde)

Sat 27/06/2015 13:24

To:Powrie, Ian [redacted]; Peters Christine (NHS Greater Glasgow & Clyde)
[redacted]

Hi Ian - can I also attend the meeting . It was myself who asked Pauline Wright to contact Jim about this . I was Infection control doctor for the Beatson and will be moving across to cover regional services at SGH in August. I would be keen to replicate the sampling regime we had in place when the BMT unit was housed in the Beatson. These are high risk BMT patients who have been moved to a less protective environment in terms of Legionella control. I think fortnightly sampling would be a good starting point - it may be that we can reduce the frequency of testing with time if we can demonstrate adequate control.

I am on annual leave on Monday but free Tues afternoon and Wednesday morning if either of these times suit

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Powrie, Ian [redacted]
Sent: 27 June 2015 08:22
To: Peters Christine (NHS Greater Glasgow & Clyde)
Cc: Inkster Teresa (NHS Greater Glasgow & Clyde)
Subject: Fwd: legionella water testing in BMT unit

Christine,

I would be grateful if we could meet to discuss the issue raised below

I.Powrie
Sector Estates Manager (NSGH)
Project Team, New South Glasgow Hospitals,
Southern General Hospitals Construction Site,
2nd Floor, Modular Building, Off Hardgate Road, Glasgow,G51 4SX<x-apple-data-detectors://0/0>
ian.powrie[redacted]<mailto:karen.connelly[redacted]k%20Office>
Tel: [redacted]
Reception: 0141 245 5700<tel:0141%20245%205700>
Mob: [redacted]

Begin forwarded message:

From: "McFadden, Jim" [redacted]
Date: 26 June 2015 15:38:17 BST

To: "Powrie, Ian" [redacted]
Subject: FW: legionella water testing in BMT unit

Ian

Are you OK with this.??.

Regards

Jim

From: Wright, Pauline
Sent: 26 June 2015 15:09
To: McFadden, Jim
Cc: Peters Christine (NHS AYRSHIRE & ARRAN); Peters, Christine; Inkster, Teresa (NHSmail)
Subject: legionella water testing in BMT unit

Hi Jim,

The bone marrow transplant (BMT) unit has now moved from Beatson (B8/B9) to SGUH 5B. As a high risk unit, this requires a regular programme of legionella water testing. I would be grateful if you could liaise with the Estates Manager, GGH in order to replicate their previously agreed testing protocol.

Thanks

Pauline

Dr Pauline Wright

Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
New Lab Building
Southern General Hospital
Tel: [redacted]

RE: New Build

Peters, Christine [redacted]

Mon 29/06/2015 09:20

To:Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Cc:Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Wright Pauline (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Powrie Ian (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]

Thanks Tom,

I was informed verbally by Ian Powrie on Thursday afternoon at the meeting with Teresa that there had been a series of positive legionella water tests in the new Build.

I have asked for the results in writing to identify where and when these were positive.

So far I have not received these , I will pop down to Ians office this morning to see where we are on this.

Teresa and Pauline are both off today,

Regards,
Christine

From: Walsh, Tom
Sent: 26 June 2015 11:32
To: Peters, Christine
Cc: Inkster, Teresa (NHSmail); Wright, Pauline; McNamee, Sandra
Subject: RE: New Build

Thanks Christine

Sorry I'm not clear from the email if we have confirmed Legionella in the building or are awaiting results?

Thanks

Tom

From: Peters, Christine
Sent: 26 June 2015 11:18
To: Walsh, Tom
Cc: Inkster, Teresa (NHSmail); Wright, Pauline
Subject: New Build

Hi Tom,

sorry about the deluge of emails. QUick summary of issues and actions:

1. **Legionella in new build** :

- requested results in writing to enable clinical risk assessment - may need to change some sinks from automated detectors to manual pending full information

2. **BMT accomodation Adults :**
ventilation

- awaiting full documentation on current accomodation specs and validation
- Teresa and I are putting together requirements for accreditation and CDC specification on what would be ideal
- pentamidine room specs also requested
- Teresa organising air testing on 5B
- need to have a high level discussion about the way forward when the information is in hand

water

- need full reports and to ensure legionella not in any of these outlets when that information becomes available as above
- continue water flushing as per Beatson protocol

Cleaning

- revert to Beatson protocols

3. **Decon room for VHF patients/ Mers**

- clearly not ready for use, not designed for this and needs a design team redesign, validation and commissioning for new use
- ? how do we take this forward

4. **Lobbied Isolation room**

- Hepa filters need to be put in place where immunosuppressed adults will be housed - I assume the reason for Beatson coming to new build is the critical care facilities - need to clearly identify which lobbied rooms they are to be housed in and put HEPA in there first ? who makes this decision
- requested validation data and leak testing needs to be carried out and signed off
- all lobbied rooms the light fittings sealed- this was being taken forward by Ian powrie as an urgent matter

5. **Theatres**

- requested all validation data and monitoring system information

Please advise how best to tie all this together and take matters forward in as efficient and co-ordinated manner as possible,

kind regards,

Christine

RE: Water testing at the new Southern Building

Hunter, William [redacted]

Sent: 30 June 2015 13:22

To: Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20)

Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); pamela.joannidis[redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Powrie Ian (NHS GREATER GLASGOW & CLYDE - SGA20); Kane Maryanne (NHS GREATER GLASGOW & CLYDE - SGA20)

Christine,

In response your points:

1. Ian Powrie can go through the up to date water testing arrangements and results schedule at a date/time that suits you both. Ian is based in the Lab building...ground floor therefore if you confirm a suitable date/time Ian can meet you.
2. Same as above.
3. Same as above.

The water testing results and details so far will be reported at the next Sector group meeting.

Regards

Billy

From: Peters, Christine
Sent: 30 June 2015 13:17
To: Hunter, William
Cc: Walsh, Tom; Inkster, Teresa (NHSmail); Joannidis, Pamela; Williams, Craig; Powrie, Ian
Subject: Water testing at the new Southern Building

Hi Billy,
Thanks for your phone call and for agreeing to get the information to me in writing as soon as possible regarding

1. The water testing that has taken place in the new building, with results
2. The documented risk assessment of the positive legionella cultures from water outlets in the new building
3. The actions taken to decontaminate the system

Going forward, are the new testing protocol and results being reported through the water group structure?

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

FW: New South Building water testing

Peters, Christine [redacted]

Wed 01/07/2015 15:38

To Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]

From: Kane, Mary Anne
Sent: 01 July 2015 15:14
To: Peters, Christine; Griffin, Heather
Cc: Powrie, Ian; Williams, Craig; Joannidis, Pamela; Hunter, William; Gallacher, Alan
Subject: RE: New South Building water testing

Christine
I am not sure why you would write to myself and Heather about this .
Ian Powrie is the sector estates manager with responsibility for this . We have to date shared this data via the Sector Water Groups and have involved Pamela and Craig in discussions on newSGUH .
The Board has a Water Safety Policy which describes the governance arrangments in place . I am sure that Ian and Pamela would be more than happy to take you through the details of the arrangements in place .
Mary Anne

From: Peters, Christine
Sent: 30 June 2015 17:32
To: Griffin, Heather
Cc: Powrie, Ian; Kane, Mary Anne
Subject: RE: New South Building water testing

Thank you Heather for clarifying that for me.

Regards,

[redacted]

Dr Christine Peters

Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

From: Griffin, Heather
Sent: 30 June 2015 17:00
To: Peters, Christine
Cc: Powrie, Ian; Kane, Mary Anne
Subject: RE: New South Building water testing

Dear Christine, thank you for your e-mail.

The New Hospitals Project was completed a couple of weeks ago and therefore I have moved onto another post and am no longer located at the Southern or involved in the New Hospital's (as build /migration complete) .

Hi Ian, would you be able to help Christine's enquiry ?

Many Thanks
Heather

From: Peters, Christine
Sent: 30 June 2015 12:11
To: Kane, Mary Anne; Griffin, Heather
Cc: Walsh, Tom; Powrie, Ian; Inkster, Teresa (NHSmail)
Subject: New South Building water testing
Importance: High

Dear Heather and Mary Anne,

As Infection Control Doctor for the South side, I have been informed by Ian Powrie that there have been positive legionella samples in the new build water supply. I have not seen any records of this testing taking place or the actions taken as a result of the positive cultures.

Please could you provide me with details of the testing that has taken place, the locations that have had positive results, the sero type of the legionella grown and a copy of the risk assessment along with actions taken.

Regards,
[redacted]

Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

RE: BMT SGUH

Walsh, Tom [redacted]

Sent: 07 July 2015 17:02

To: Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20)

Dear all

Lets discuss how the IPCT should be involved in commissioning in future at our next SMT meeting?

Kr

Tom

From: Peters, Christine
Sent: 07 July 2015 12:57
To: Walsh, Tom; Inkster, Teresa (NHSmail); Williams, Craig; Hood, John; Jones, Brian; Jenkins, Gary
Subject: RE: BMT SGUH

I am unaware of the way in which the project team operated or the interaction with the IPCT over the years of the New South Building Project as that has never been in the local ICD remit.

Regards,

[redacted]

Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile: [redacted]

From: Walsh, Tom
Sent: 07 July 2015 12:32
To: Inkster, Teresa (NHSmail); Williams, Craig; Hood, John; Jones, Brian; Peters, Christine; Jenkins, Gary
Subject: RE: BMT SGUH

HI all

I can't see this in an HTM and am equally left wondering why we didn't do this if we (or some of the team) knew we should?

My understanding is that this was a complete hospital build and that all validation and commissioning was by the external contractor prior to handover, which is different to commissioning a new unit/ dept in an existing hospital.

I agree in that I would have expected any issues with validation to be brought to the attention of the ICT for further comment/ investigation in the course of commissioning. (It's not as if we didn't make repeated requests for the data)

Kr

Tom

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 07 July 2015 12:19
To: Williams, Craig; Hood, John; Jones, Brian; Peters, Christine; Jenkins, Gary
Cc: Walsh, Tom
Subject: RE: BMT SGUH

Dear all,

I am uncomfortable with the statement in this document regarding commissioning. It is my opinion that the infection control team should be involved in the validation process , review validation reports and ensure air and water quality **prior** to patients moving in to the unit .

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor

Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Williams, Craig [redacted]
Sent: 07 July 2015 10:35
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Hood John (NHS GREATER GLASGOW & CLYDE - SGA20); brian.jones[redacted]; Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: BMT SGUH

Dear All

Attached is a draft of a document to clarify the original building requirements and briefly describes the building and validation process. Is everyone content that if the building is provided to the original specification it will provide a safe environment for patients. Comments by 1130 please

Craig

RE: A&C Commissioning data (email 1 of 2)

Williams, Craig [redacted]

Sent: 07 July 2015 14:04

To: Powrie Ian (NHS GREATER GLASGOW & CLYDE - SGA20); Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)

Cc: Kane Maryanne (NHS GREATER GLASGOW & CLYDE - SGA20); Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20)

Dear Ian

I think the review of these should be taken forward by the group that Ann Harkness is pulling together, if not we can arrange to meet separately and go through the detail

Best wishes

Craig

From: Powrie, Ian
Sent: 07 July 2015 13:02
To: Williams, Craig; Peters, Christine; Inkster, Teresa (NHSmail)
Cc: Kane, Mary Anne
Subject: A&C Commissioning data (email 1 of 2)

Craig/Christine/Teresa,

Please find attached the full set of commissioning data records for Isolation rooms and theatres.
Let me know if you need any input\support from me?

Regards

Ian

[redacted]
Ian Powrie,
Sector Estates Manager,
South Glasgow Hospitals Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,
Direct 1: [redacted]
Direct 2: [redacted]
Mob: [redacted]

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FW: High risk airborne infecitons

Peters, Christine [redacted]

Mon 25/04/2016 15:30

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Email trail

From: Peters, Erica
Sent: 22 July 2015 18:15
To: Peters, Christine
Subject: FW: High risk airborne infecitons

See below,
A bit of an email trail about the negative pressure rooms in HDU FYI

From: Seaton, Andrew
Sent: 22 July 2015 13:44
To: Peters, Erica
Subject: Re: High risk airborne infecitons

Yes no problem
Andrew

Sent from my BlackBerry 10 smartphone on the EE network.

From: Peters, Erica
Sent: Wednesday, 22 July 2015 11:13
To: Seaton, Andrew
Subject: RE: High risk airborne infecitons

Andrew,
Are you happy for me to send this to Christine Peters? There is ongoing concern about the negative pressure rooms although I understand they are probably ok.
Erica

From: Seaton, Andrew
Sent: 02 February 2015 17:39
To: Fox, Ray; MacConnachie, Alisdair; Peters, Erica; Bell, David; 'Thomas Evans'; 'Emma Thomson'
Subject: FW: High risk airborne infecitons

Dear all,
see below from Craig Williams re the "-ve pressure rooms". I've replied again specifying other airborne viral infection, but the suggestion is the rooms are OK. This makes life much less complicated if correct. His comment about "discussing the last while" in committee isn't quite true (as far as the BICC is concerned). It was mentioned one week ago. I'll follow up.
cheers,
andrew

Dr R A Seaton
Consultant in Infectious Diseases and General Medicine

Lead doctor NHS Greater Glasgow and Clyde Antimicrobial Management Team
Gartnavel General Hospital
1053 Great Western Road
Glasgow
G120YN
Tel [redacted]
Fax: [redacted]
Out of office email for non patient-related matters: [redacted]

my actions protect antibiotics
ANTIBIOTIC GUARDIAN
join me at antibioticguardian.com

From: Williams, Craig
Sent: 29 January 2015 16:23
To: Seaton, Andrew; Armstrong, Jennifer
Cc: McNamee, Sandra; Kennedy, Iain; Harkness, Anne; Loudon, David
Subject: RE: High risk airborne infecitons

Dear Andrew

This is broadly what we have been discussing at BICC for the last while. The positive pressure ante-room prevents ingress and egress of organisms from the room and can be used for source or protective isolation without the need to flip any switches.

The problem has been that in Scottish Health Planning note 04 there is an Exclusion which states " This Supplement does not describe the specialist facilities required in infectious disease units or on wards where severely immuno-compromised patients are nursed. Guidance for these facilities will follow in a further Supplement to SHPN 04.

However the planning team and HFS have been unable to locate further definitive guidance. This being the case I asked David Louden and his team to specifically cross reference our lobbied rooms with the DH guidance on rooms for MDRTB. At a meeting last week he confirmed that their view is that the lobbied isolation rooms at the NSGH provide equivalent protection, he will confirm this by e mail. As such I have no concerns about the suitability of the rooms for MDRTB etc.

In terms of the Ebola, following your comments at BICC Sandra about the size of the ante-rooms, Iain Kennedy, Sandra and I met with Emma Thompson, who was nominated by the ID physicians to represent them. I explained that we were content that the lobbied side rooms at NSGH are sufficient under the ACDP guidance to manage an Ebola patient prior to transfer to a designated secure unit, but, that they are not sufficient for anything other than short term management, in particular my understanding was that GGC is not planning to act as a referral unit or accept transfers of these patients. If a severely unwell patient requires to be manged in Glasgow the view was that this wouyld constitute a Major Incident and be managed accordingly.

She expressed concern about the transfer of patinets through the NSGH to the designated room and suggested that an isolator may be required to support the tarnsfer. We agreed that she or other ID physicians would walk the route and take upm their concerns through the directorate.

I hope this gives you sufficient detail to address your concrens but if there is anything else please let me know.

Best wishes

Craig

Prof Craig Williams
Consultant Microbiologist Royal Hospital for Sick Children, Glasgow
Lead Infection Control Doctor, NHSGGC
Professor of HAI, UWS

t. [redacted]
w. www.uws.ac.uk/hai

From: Seaton, Andrew
Sent: 27 January 2015 10:55
To: Williams, Craig; Armstrong, Jennifer
Cc: Dunn, Patricia
Subject: High risk airborne infecitons

Dear Jennifer and Craig,
This is a follow on from BICC. From the discussion yesterday around the 2 dedicated ID beds within HDU I had understood them to be negative pressure. One of my colleagues, Alisdair MacConnachie, has told me that Craig had informed him that the ante room is positive pressure but the patient room is not under negative pressure. Please can this be confirmed? We do need capacity to properly isolate patients with suspected MERS, avian FLU and MDRTB etc. It is essential this is clarified that these rooms are fit for purpose. As discussed yesterday assuming good size of ante room and appropriate channels/ contingency for patient entry/exit etc the VHF facility in these rooms should be appropriate for short term patient management before transfer to Royal Free.
Kind regards,
andrew

Dr R A Seaton
Consultant in Infectious Diseases and General Medicine
Lead doctor NHS Greater Glasgow and Clyde Antimicrobial Management Team
Gartnavel General Hospital
1053 Great Western Road
Glasgow
G120YN
Tel [redacted]
Fax: [redacted]
Out of office email for non patient-related matters: [redacted]

From: Walsh, Tom
Sent: 12 August 2015 11:48
To: Peters, Christine
Subject: RE: A&C Commissioning data (email 1 of 2)

Hi Christine

I'm not sure Infection Control were included in the group Anne Harkness was putting together. I would need to double check this with Craig.

I understand Ian Powrie is involved in the work of the group and should hopefully be able to provide any clarification in the interim.

KR

Tom

From: Peters, Christine
Sent: 10 August 2015 15:19
To: Walsh, Tom
Cc: Wright, Pauline; Inkster, Teresa (NHSmail)
Subject: FW: A&C Commissioning data (email 1 of 2)

Hi Tom,

I am looking for some clarity around responsibilities for taking forward the commissioning and validation data reviews with regards to theatres, isolation suites and A+E decon room in the new QEUH building in particular. Is this something that Craig has taken forward with Anne Harkness as in the email below? If so what will be the feedback mechanism to the local ICDs?

Regards,
Christine

From: Williams, Craig
Sent: 07 July 2015 14:04
To: Powrie, Ian; Peters, Christine; Inkster, Teresa (NHSmail)
Cc: Kane, Mary Anne; Walsh, Tom
Subject: RE: A&C Commissioning data (email 1 of 2)

Dear Ian

I think the review of these should be taken forward by the group that Ann Harkness is pulling together, if not we can arrange to meet separately and go through the detail

Best wishes

Craig

From: Powrie, Ian
Sent: 07 July 2015 13:02
To: Williams, Craig; Peters, Christine; Inkster, Teresa (NHSmail)

Cc: Kane, Mary Anne
Subject: A&C Commissioning data (email 1 of 2)

Craig/Christine/Teresa,

Please find attached the full set of commissioning data records for Isolation rooms and theatres.
Let me know if you need any input\support from me?

Regards

Ian

[redacted]
Ian Powrie,
Sector Estates Manager,
South Glasgow Hospitals Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,
Direct 1: [redacted]
Direct 2: [redacted]
Mob: [redacted]

RE: Infection Control Team

Stewart, David [redacted]

Mon 02/11/2015 12:32

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Dear Teresa

You raised concerns about communication, behaviours, clarity of roles and transparency of decision making: these are the issues we intend to address at the meeting.

With regards to specific safety concerns, your main worry was around estates and, in particular, the functioning of the isolation facilities; whether they were fit for purpose and how this was validated. I understand that significant progress has been made with respect to this and that there is now more confidence in these facilities, albeit work continues. If, despite this, you believe that there are ongoing safety issues I would be grateful if you could elaborate on what these are.

Kind regards

David

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 30 October 2015 13:12
To: Stewart, David
Subject: RE: Infection Control Team

Thank you for this

How will the patient safety concerns that I raised be addressed?

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Stewart, David [redacted]
Sent: 30 October 2015 10:49
To: Bagrade Linda (NHS GREATER GLASGOW & CLYDE); alison.balfour[redacted] Changez Huma (NHS NATIONAL WAITING TIMES BOARD); Inkster Teresa (NHS GREATER GLASGOW & CLYDE); 'Christine.peters[redacted]'; Williams Craig (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE); Cruickshank Anne (NHS GREATER GLASGOW & CLYDE); brian.jones[redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE); Neil Catherine (NHS GREATER GLASGOW & CLYDE)
Cc: Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE); Maclennan Aileen (NHS GREATER GLASGOW & CLYDE); Howat Bridget (NHS GREATER GLASGOW & CLYDE); Green Rachel (NATIONAL SERVICES SCOTLAND); McQueen, Juli
Subject: Infection Control Team

Dear All 252

Please see attached letter.

Kind regards

David

Dr David Stewart
Deputy Medical Director
NHS Greater Glasgow and Clyde
[redacted]

RE: Infection Control Team

Peters, Christine [redacted]

Mon 02/11/2015 12:41

To: Stewart David (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Dear David,

Teresa and I are working on a document delineating current and past patient safety issues that pertain to Infection control management within the organisation. We are doing this in collaboration with other colleagues and will forward to you as soon as we have completed it.

Regards,

Christine
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Stewart, David
Sent: 02 November 2015 12:27
To: Peters, Christine
Subject: RE: Infection Control Team

Dear Christine

Much of our discussion was around communication, behaviours, clarity of roles and transparency of decision making: these are the issues we intend to address at the meeting.

With regards to specific safety concerns, your main worry was around the functioning of the isolation facilities, whether they were fit for purpose and how this was validated. I understand that significant progress has been made with respect to this and that, although work continues, there is now more confidence in these facilities. I am therefore concerned that you believe that there are ongoing safety issues and would be grateful if you could elaborate on what these are.

Kind regards

David

From: Peters, Christine
Sent: 30 October 2015 12:04
To: Stewart, David
Subject: RE: Infection Control Team

Dear David,

Please could you clarify whether I am to expect an individualised response to the concerns I raised in my resignation letter and my interview with you and HR,, most particularly in relation to ongoing patient safety issues?

Regards,

Christine

Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Stewart, David
Sent: 30 October 2015 10:52
To: Peters, Christine
Subject: FW: Infection Control Team
Importance: High

Apologies - I typed the wrong email address.

David

From: Stewart, David
Sent: 30 October 2015 10:50
To: Bagrade, Linda (NHSmail); Balfour, Alison; 'hchangez[redacted]'; Inkster, Teresa (NHSmail); 'Christine.peters[redacted]'; Williams, Craig; McNamee, Sandra; Cruickshank, Anne; Jones, Brian; Walsh, Tom; Neil, Isobel
Cc: Armstrong, Jennifer; MacLennan, Aileen; Howat, Bridget; Green, Rachel (NHSmail); McQueen, Juli
Subject: Infection Control Team
Importance: High

Dear All

Please see attached letter.

Kind regards

David

Dr David Stewart
Deputy Medical Director
NHS Greater Glasgow and Clyde
[redacted]

3/07/2020

RE: Letter_ CONFIDENTIAL

[redacted]

Stewart, Da

Thu 12/11/2015

To: Peters Christi REATER GLASGOW & CLYDE) [redacted];

Cc: Inkster Teres REATER GLASGOW & CLYDE) [redacted];

portance: Hig

Christine & Teresa

you for this - I received the hard copy today.

wil have heard, Anne Cruickshank has taken over the role of Clinical Director for Infection Control as well as iology. It would be very helpful to share this with her in order that we can agree how best to address your ns. Are you content that I do so?

gards

Peters, Christine
0 November 2015 12:58
wart, David
ter, Teresa (NHSmail)
: FW: Letter_to_DS[2] CONFIDENTIAL
ance: High

id,

d attached an electronic version of our letter posted to you yesterday. The hard copy is on letter headed paper formatting, and is signed by both of us,

ne
e Peters
Microbiologist
ieneral Hospital

[redacted]

****
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FIYjU2NmU5OQ

FW: Joint South & Clyde Water Safety Group Meeting 2 December 2015

Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)

Wed 02/12/2015 11:10

To: Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Cc: Cruickshank Anne (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Importance: High

Hi Craig,

Unfortunately todays water group meeting has been cancelled. The plan had been to review all the water testing results from QEUH at todays meeting. As yet I have not seen any results for Legionella testing in ward 4B . I have requested these repeatedly from Ian Powrie but have not yet received them . As you will be aware the BMT is due to move back in 2 weeks time and it is crucial to know that the water supply is safe. I am aware from meetings that Legionella has been isolated somewhere in the new build but I have been unable to ascertain where . I have been told that the results have been sent to yourself.

Can you send me copies of any results you have ?

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: McNeil, Elaine [redacted]
Sent: 02 December 2015 08:45
To: Bagrade, Linda; Brattey David (NHS GREATER GLASGOW & CLYDE - SGA20); Campbell Andrew (NHS GREATER GLASGOW & CLYDE - SGA20); Conaghan Ann (NHS GREATER GLASGOW & CLYDE - SGA20); alan.gallacher[redacted]; Higgins Joan (NHS GREATER GLASGOW & CLYDE - SGA20); Sandra.Higgins[redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Kyle Stewart (NHS GREATER GLASGOW & CLYDE - SGA20); Martin Gardiner; Mccormack William (NHS GREATER GLASGOW & CLYDE - SGA20); Mcfadden James (NHS GREATER GLASGOW & CLYDE - SGA20); Mcilravey Kathleen (NHS GREATER GLASGOW & CLYDE - SGA20); Mitchell Clare (NHS GREATER GLASGOW & CLYDE - SGA20); Morrison Edward (NHS GREATER GLASGOW & CLYDE - SGA20); 'Neil Charles'; Paterson Diane (NHS GREATER GLASGOW & CLYDE - SGA20); Paterson Michele (NHS GREATER GLASGOW & CLYDE - SGA20); Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Powrie Ian (NHS GREATER GLASGOW & CLYDE - SGA20); Purdon Colin (NHS GREATER GLASGOW & CLYDE - SGA20); 'Rhona Cameron'; Robertson, Linda; Ron Nealis; Ryan Whiteford; Wright Pauline (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: RE: Joint South & Clyde Water Safety Group Meeting 2 December 2015

Dear Colleagues

Due to unforeseen diary commitments the Joint South & Clyde Water Safety Group meeting scheduled for 2 December 2015 at 10.30am is cancelled.

A new date will be arranged for January 2016.

Apologies for any inconvenience caused.

Regards

Elaine McNeil

Facilities Department
PA/Administrative Officer to Billy Hunter General Manager - Facilities, Clyde & South Sector &
Alan Gallacher, General Manager Estates
1st Floor Estates Building
Royal Alexandra Hospital
Corsebar Road
Paisley
PA2 9PN
Tel No: [redacted] Fax No: [redacted]

From: McNeil, Elaine
Sent: 30 November 2015 10:22
To: Bagrade, Linda; Brattey, David; Campbell, Andrew; Conaghan, Ann; Gallacher, Alan; Higgins, Joan; Higgins, Sandra; Inkster, Teresa (NHSmail); 'Kyle, Stewart'; Martin Gardiner; McCormack, Bill; McFadden, Jim; McIlravey, Kathleen; 'Mitchell, Clare'; Morrison, Edward; 'Neil Charles'; Paterson, Diane; Paterson, Michele; Peters, Christine; Powrie, Ian; Purdon, Colin; 'Rhona Cameron'; Robertson, Linda; Ron Nealis; Ryan Whiteford; Wright, Pauline
Subject: Joint South & Clyde Water Safety Group Meeting 2 December 2015

Dear Colleagues

I have attached the agenda and previous minute for the Joint South & Clyde Water Safety Group meeting scheduled for 2 December 2015 at 10.30am.

Regards

Elaine McNeil

Facilities Department
PA/Administrative Officer to Billy Hunter General Manager - Facilities, Clyde & South Sector &
Alan Gallacher, General Manager Estates
1st Floor Estates Building
Royal Alexandra Hospital
Corsebar Road
Paisley
PA2 9PN
Tel No: [redacted] Fax No: [redacted]

RE: Water testing

Peters, Christine [redacted]

Tue 08/12/2015 17:12

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Excellent!

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 08 December 2015 17:06
To: Hunter, William; Powrie, Ian
Cc: Peters, Christine
Subject: Water testing

Hi both

At the water meeting which was cancelled last week I was going to bring up water testing results. At GRI I received monthly reports of outlets tested, results and actions put in place - I have attached an example of this for your info.
Is it possible to have something similar in place for this site?

Also can myself and Christine be sent backdated water results for QEUH to when sampling was commenced for the new build. I am slightly concerned that we are the ICDs for the site and have seen no results as yet , particularly when others have made reference to positive Legionella results somewhere in the hospital.

Finally with regards to taps , can I ask what the outcome of the SBAR that HPS sent in relation to flow straighteners was ? . Are these taps still in place in high risk units and was the intention to sample for Pseudomonas in these areas and is that underway? (aside from adult BMT which I have recently requested)

Thanks

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

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Infection Control Doctors

Minutes of Meeting

Tuesday 14 April 2015 at 1.30pm

Common Room, Level 11, Western Infirmary

PRESENT
Craig Williams, Linda Bagrade, Aleks Marek, Pauline Wright
IN ATTENDANCE
Kam Khalsa, Trainee Microbiologist
Ursula Altmeyer, ST5
Pauline Hamilton (notes)

APOLOGIES
Teresa Inkster, Alison Balfour, Christine Peters

Item	Action

1. Welcome & Apologies
Craig welcomed everyone to today's meeting. Apologies were received from the abovementioned.

2. Minutes of Previous Meeting (10 March 2015)

The minutes of the previous meeting held on 10 March 2015 were accepted with the following amendments:

> **Page 3: AOCB:** should read "... Air sampling **will be** carried out ... ", and "...recommendation to wait **24 hours** after being carried out ...".

2.1 Matters Arising not on the Agenda and Actions

- Craig provided an update in relation to new builds. The water supply for the proposed new BMT Unit at the new-SGH is not a stand alone system. It is separate from the rest of the tower as it is part of the supply to the renal unit so dosing could be done locally if needed. There is no current guidance for monitoring and testing frequency so this will need to be developed by the Water Group. Currie & Brown have still to respond to Craig in writing with their recommendation in relation to lobbied side rooms.

- Linda to forward the e-mail detail in relation to theatre validation to Craig for him to take forward. Craig will also contact Alan Gallacher to request the relevant SOP and will distribute this to the ICDs when available. — LB CW

- Craig previously agreed to ask that MRSA Screening and Naseptin regimen is included on the IPC / Lab Med Group agenda for discussion at their next meeting on 7 May 2015. — CW

- Linda updated in relation to the MRSA Policy that at the IPCT SMT, status of sites was discussed. It was noted that changes to TrakCare are currently taking place and it was agreed it may be best to wait until TrakCare is fully updated before lifting the information for the SOP. (cont/...)

Item	Action

- Pauline asked if any change was made in the policy if patients were clinically affected. Linda updated that she had discussed this with Ysobel Gourlay and there is no issue with IPC changing the Naseptin treatment to 5 days as long as IPC provide reference to evidence. Craig suggested that reference could be made to the minutes that the treatment regimen was discussed and agreed by the ICDs. It was agreed that the ICDs would research evidence in relation to 5 or 10 day treatment and return to Craig their findings within 14 days of today's date (by 28.04.15). **All**

- It was agreed that screening of MDR-Acinetobacter being extended to Surgical ITU and HDU and not just ITU areas and that CPE being added to the alerts will be discussed at the CPE meeting once arranged.

- Craig updated that the previously discussed issues at Golden Jubilee specifically in relation to water penetration in HDU following decorating works in two HDUs is on the IPC / Med Op Group Agenda for 7 May 2015. There is a general appetite in the Acute Divisional Unscheduled Care Group (Winter Planning) to set up some pathway which would allow providing test for influenza. Some work would be required over the summer months with triage step if influenza positive. Group to take forward to be set up next week.

3. For Discussion

3.1 Protected Sessions for ICDs

At the last meeting protected sessions for ICDs was discussed briefly. It was agreed this is worth keeping on the agenda pending the assessment of the management changes. The IPC committees will remain as is. IPC must be mentioned in all clinical governance agendas. Sector IPC Lead Nurses and Sector ICDs will be expected to attend clinical governance meetings. There are two options which lead from this; either retain IPC broadly as it currently stands, or extend the IPCTs at AICC and clinical governance meetings avoiding duplication. Amount of activity expected from the IPCTs should not increase at all although any duplication of work at AICC and governance meetings may have an impact.

Craig requested that the ICDs list their current meeting attendance to and note any additional time required to attend once re-organisation is in place. At the next IPC / Med Op Lab meeting (07.05.15) Craig will ask that both the ICD Meeting and IPC SMT Meeting are specifically ring fenced to allow ICD's to attend. **All**

3.2 *Pseudomonas*

No further issues noted.

3.3 Alerts (ICNet)

Next steps need to use the ESBLs as an example. Isolates and individual patients were discussed and if it would be possible to work out numbers:

- Urines and blood cultures based by hospital sites and look at first isolates. Could try weekly to see what this would look like. If numbers go up then why and who is going to collect and act upon. To include special units would be useful.

Cont / ...

Item	Action

- Agreed urines and blood cultures in individual patients with a 12-month duplication by hospital site to start with, and will also look at spinal neurology and renal transplant by site. ICDs will be responsible for taking appropriate action.

- It was agreed that matching empiric antibiotics to urines would be virtually impossible. Pauline suggested look at 2-month. If get ESBL working then add. Craig suggested for individual units, starting with places with specific protocol if could do through telepath for hospital wide data. Pauline agreed to speak to Mhairi to find out how telepath and ICNet data compare and tie up. Pauline will update Craig with this information. — PW PW

It was noted that ICNet training is still be arranged once the current problems have been resolved. Surveillance would try and aggregate data points to agree a control limit before producing the first alert. It was agreed that hospital based surveillance would be necessary.

3.4 Influenza Isolation Precautions

Craig met with respiratory physicians to discuss influenza who have agreed it is reasonable to clinically triage patients for influenza both at GRI and RAH. Risk assessment to be written up this week by the respiratory physicians. It was noted that it would not be a failure to isolate if bed spacing is met in accordance with policy and SICPs are in place. Craig agreed to forward the information he has available just now. Patient pathway needs to be looked at in more detail for next year and Craig has already started discussions with David Raeside in relation to this. It was noted that surfaces are the main problem. Influenza Isolation Precautions to be added to the next agenda for discussion.

4. Working Groups

4.1 Decontamination Sub-Group

The Decontamination Sub-Group are due to meet on 16.04.15.

4.2 Theatre Validation (TUMM)

The TUMM Group are due to meet on 21.04.15. Craig has met with Mary Anne Kane to discuss non-theatre ventilated rooms. A list of areas of concern from each site is required in order to capture maintenance. Anywhere taking respiratory procedures then air changes needs to be checked. A reporting template can then be developed.

4.3 Board Water Safety Group

The Board Water Safety Group met on 07.04.15. The agenda for this meeting was distributed with the ICD agenda.

Craig reported that at this meeting the issue of the engineer not sticking to protocol was discussed. It was agreed that Legionella sampling should only be from areas of high-risk or areas they are able to maintain temperature controls. The period is still to be decided although 24 hours looks likely. Testing would be required after the set time period. Some flushing would still be maintained. Would be concerned if any more than 24 hours. It was noted that in old sites where this can never be fixed, it will either be taken out of use or be decommissioned. This is still to be confirmed.

Item	Action

Board Water Safety Group (cont/...)

The Water Safety Policy is due for review. Re-design of template for the Water Policy for Legionella samples positive will be populated to make consistent across the board. Also, risk assessments for dosing or not is being considered by the Water Safety Group will decide. It was agreed that the ICD s will discuss the Water Safety Policy prior to the Water Safety Group meeting and the May 2015 BICC. It was noted that the Water Policy is an Estates policy and not IPC.

Craig agreed to forward the HFS information to the ICDs. **CW**

4.4 IPC Policy Group

The IPC Policy Group met on 01.04.15. The agenda for this meeting was distributed with the ICD agenda. It was noted that MRSA was discussed earlier in today's meeting.

Linda reported that the return comments were made on the CDI Policy specifically in relation to the treatment protocol. The treatment plan has been updated however the old criteria is still being referred to. Also, therapy duration has changed which does not match current treatment plans. The Policy Group have decided rather than be specific in the policy that the relevant links are inserted for staff to refer direct to current treatment plans. There have also been changes to death certification and the policy has been updated to reflect this.

The TBP Policy was also reviewed by the Policy Group. List of diseases of pathogens and what would do. Linda asked if the ICDs would be able to look at the TBP Policy in more detail and to return comments / suggestions to Linda direct. Craig reported that at the last BICC AGPs was discussed (item 4.4 at BICC) and asked that this is forwarded to the ICDs. It was noted that this is a confusing document as there is a lot of duplication and not straightforward to read therefore it has been decided to go only with pathogens and what diseases they can cause to make more user friendly. Consensus from the ICDs is required to include viruses which will need to be mapped against. It was agreed that the ICDs will read and refer to the table of evidence and influenza specifically about bronchoscopy, to cross-check. It is expected this will take the next couple of months to sort out. **Secy** **All**

4.5 IPC / Lab Med Operational Group

The IPC / Lab Med Operational Group minutes of the meeting held on 26.02.15 were distributed with the ICD agenda. This group next meet on 07.05.15 - agenda items to be added are CPE and air sampling. **CW**

5. AOCB

- Pauline reported [redacted].
- Aleks reported that Estates are wanting want to put in some new shower heads and images were shown of these. Craig stated Estates would need to document who would be responsible for removing and cleaning.

Item	Action

- Aleks reported that a patient intubated from Crosshouse had PVL from sputum. Decided not to do contact tracing therefore no prophylaxis provided. Public health would need to organise med vet sampling.

6. DATE AND TIME OF NEXT MEETING

The next meeting will be held at 3.00pm on Tuesday 12 May 2015, Level 11 Common Room, Western Infirmary, Glasgow.

Subsequent meetings in 2015 (2nd Tuesday of every month at 3.00pm):

- 9 June
- 14 July
- 11 August
- 8 September
- 13 October
- 10 November
- 8 December

RE: ventilation group

Walsh, Tom [redacted]

Fri 19/08/2016 11:34

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]

Yep, sorry lost sight of this, will chase up

T

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 19 August 2016 11:29
To: Walsh, Tom
Subject: Fw: ventilation group

Should we get a date in the diary for this meeting? It will cover a lot of the outstanding areas I mentioned yesterday that I have still to look at - interventional radiology, endoscopy etc
T

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Walsh, Tom [redacted]
Sent: 06 June 2016 16:17
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: Re: ventilation group

Thanks Teresa

I've asked Ann to set up the meeting

T

Sent from my BlackBerry 10 smartphone.

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: Monday, 6 June 2016 16:12
To: Walsh, Tom
Subject: ventilation group

Hi Tom - attached is a table of the specialist ventilated areas in the city. I guess the next step will be to sit down with Ian and Alan to discuss how we take this forward. I can look out all the relevant standards and maintenance guidance in in the meantime.

Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

FW: Specialist Ventilation Units/ Areas.

Inkster, Teresa [redacted]

Thu 23/07/2020 19:19

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

From: Walsh, Tom
Sent: 19 August 2016 12:58
To: Lang, Ann [redacted]
Cc: Inkster, Teresa [redacted]; Powrie, Ian [redacted]; Gallacher, Alan [redacted]
Subject: Specialist Ventilation Units/ Areas.

Hi Ann

Could you please arrange a meeting for Teresa and I to meet up with Alan and Ian to discuss Specialist Ventilation Areas within GGC.

All, can we consider how we monitor/ assure around validation of ventilation in specialist areas outhwith operating theatres. I think AICC also wondered if this could be incorporated into the work of the current Theatre Validation group?

Many thanks

Tom

Fw: rooms

INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)

Tue 29/11/2016 14:16

To: Powrie Ian (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc [redacted]; Pritchard Lynn (NHS GREATER GLASGOW & CLYDE) [redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted] alan.gallacher [redacted]

Hi Ian,

[redacted] and Lynn did a walkaround of the QEUH - see below. From these areas the most important ones that we should add to the list for specialist ventilated areas are ;

- endoscopy - END 033,34,35
- cardiac pacemaker room - A1 CCU -034
- interventional radiology rooms and anaesthetic room A1 RAF 077 and 080 , RAF 063
- Ward 11 B ENT room - this appears to be functioning like an outpatient minor ops dept- I doubt that it is appropriately spec'd for that! i.e. 15 ACH

Do we have a record of or can you check the air changes in these areas?

We can remove the mortuary facilities from our list as they will be covered by the lab accreditation process.

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: [redacted]
Sent: 17 November 2016 15:44
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Cc: Pritchard Lynn (NHS GREATER GLASGOW & CLYDE)
Subject: rooms

Hi Teresa,

An update of the walkaround so far of the main stack excluding theatres and ITU/HDU, I've been around most with Lynn and some on my own:

Ward 11B (ENT): Treatment rooms for aspiration of quinsy, valve work, nasal packages etc – A11 Gen W 24-001 & 004

Ward 4C (renal): Various day areas/dialysis and line insertion areas. Main designated treatment/procedure room is A4 Ren W – 176 where invasive procedures including renal biopsies take place. Also has a ? treatment room HOW – 003 which it was unclear what the function was.

Dermatology: DMW – 005/006/010 (biopsies but also tar treatments which staff were complaining were overwhelming due to smells/fumes so not sure if ventilatory requirements may be different for staff due to chemicals used as opposed to invasive procedures)
Procedure rooms 139, 140, 141 (DOPD 023, 024 and 026)

There is a renal dialysis area on the same level as dermatology (L3) with numerous rooms where dialysis is undertaken (haemo and CAPD)

Endoscopy (ERCPs etc): END 033, 034 & 035

CCU: procedure room where pacemaker insertion etc is carried out: A1 CCU – 034. I spoke to Brian Murphy, one of the cardiology consultants. He was also concerned at the lack of antechamber in the room and has requested to be kept in the loop once the group is formed, with regards ventilation and structural issues relating to the pacing room – his email address is brianmurphy[redacted]

Imaging:
Ultrasound rooms: RAG 078, 084 & 085, RAF 035, RAF 042
CT rooms A1 RAF 075 & 078. A0 RAG 023 & 020
"Mammography room" RAF 033 (picc lines are inserted here)
Interventional radiology rooms A1 RAF 077 and 080
There was an anaesthetics room RAF 063 where I was told "preocedures" are done but presume this is just before their interventional radiology procedure
Fluoroscopy RAF 009, RNM 042, 046, 036 and 037 – mostly taking peripheral bloods and giving injections of radioactive substances according to the team

Medical Day unit (1st floor): A1 MDU – 042 (intrapleural catheters inserted)

Will update you ASAP on neuro and maternity once complete.

Best wishes,

[redacted]

RE: specialist ventilated areas

Walsh, Tom [redacted]

Mon 14/05/2018 10:42

To: Kane Maryanne (NHS GREATER GLASGOW & CLYDE) [redacted]; INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Powrie Ian (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: alan.gallacher[redacted];

I agree, reasonable place to start, could we consider for the next meeting agenda?

T

From: Kane, Mary Anne
Sent: 14 May 2018 10:40
To: Walsh, Tom; Inkster, Teresa (NHSmail); Powrie, Ian
Cc: Gallacher, Alan
Subject: RE: specialist ventilated areas

Theatre Ventilation Group – Ian Powrie is the Lead for this from a PPFMperspective

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From: Walsh, Tom
Sent: 14 May 2018 10:39
To: Inkster, Teresa (NHSmail); Powrie, Ian; Kane, Mary Anne
Subject: RE: specialist ventilated areas

Hi Teresa

It would be useful to get this group up and running.

Anyone have any thoughts on potential for linking to an existing group?

Cheers

Tom

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 08 February 2018 16:55
To: Powrie, Ian; Walsh, Tom
Subject: [ExternaltoGGC]specialist ventilated areas

Hi - I think we need to progress the group we discussed to look at validation of specialist ventilation areas outwith theatres.

I have had issues with annual validation at BOC and with air changes in endoscopy at GGH , highlighted to me on return to work . This group would capture all of that sort of activity.

I can't remember if we decided on a chair person? Any thoughts?

KR
Teresa

RE: ventilation issues

Armstrong, Jennifer [redacted]

Fri 07/12/2018 17:49

To: Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Devine, Sandra [redacted]; INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Steele, Tom [redacted];

Thanks Tom and Teresa; I think it maybe helpful for us to discuss how we are progressing this; I will pick this up on Monday with Tom (Steele) as he is back from AL to discuss and we can describe best way to manage this
KR
Jennifer

From: Walsh, Tom
Sent: 07 December 2018 08:16
To: Armstrong, Jennifer
Cc: Devine, Sandra; Inkster, Teresa (NHSmail); Steele, Tom
Subject: RE: ventilation issues

Thanks Teresa

Tome Steele is on leave but I agree that a single point of contact in facilities who is coordinating this would be helpful.

Jennifer, I was at a meeting with Tom and Teresa on Wednesday. We discussed the additional workload the current water and ventilation issues are creating together with the need for more ICD input to the CDU at Cowlairs.

Tom was supportive of a case being presented for additional sessions to ensure this additional work does not detract from core IC business. I have drafted the attached SBAR setting out the position and costs. I would be grateful for your consideration and support for this.

Kr

Tom

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 06 December 2018 20:02
To: Armstrong, Jennifer
Cc: Walsh, Tom
Subject: [ExternaltoGGC]ventilation issues

Jennifer , there have been a number of recent issues in relation to ventilation that I need to make you aware of and I need advice re the best way forward.

1) Following the 2A/B report I requested info on other high risk wards and did some testing with John Hood. We noted that there were inconsistent pressures in the rooms in the wards we tested , some being positive and others being negative. This has implications for wards 5C/D, Infectious diseases and level 7 Resp QEUH. These findings were confirmed by estates for 5C/D. Info for level 7 outstanding.

After discussion at our IC SMT I escalated to Health and Safety. The risk is from smear positive TB patients sitting in a positive pressure room and relates to staff/visitors in the vicinity . The ID physicians understandably have expressed concern.

I wrote to Anne Harkness who responded to tell me there is a group already looking at this .It is a concern that I am not aware of this group and there is no IPCT representation .

There is an immediate need for clinicians , estates and IPCT to understand the ventilation setup , what remedial actions can take place and understand where it is safe to place patients. H+S need to review the risk to staff in light of these findings.

2) A meeting took place to update clinical and IPCT yesterday re negative pressure room upgrades in QEUH and RHC. I had a diary conflict so a lead IPCN went . Essentially the rooms in adult critical care failed validation, not meeting the design criteria. I have not been able to sign them off. We were assured that the issues would not affect the RHC rooms however these have now also failed validation. The clinical staff present at the meeting, themselves requested that the project be halted, as they are losing beds whilst facing winter pressures. The project was put on hold.

There was also a discussion about the need to administer HPV to ductwork potentially contaminated by MDRTB and VHF?? , which has led me to wonder whether there are ductwork issues there as well as 2A . I await further info.

In light of this and the 5C/D issues were are in a difficult situation with regards to management of TB in particular. We still have the pathway in place for MDRTB to go to GRI

3) Ward 4C haematology - I have a meeting tomorrow to discuss this area as similar to 2A/B there are issues with the spec. They are in a better position currently in that the rooms are slightly positive, so this is less urgent.

4) Almost all our endoscopy units have been rated poor on validation reports ,apart from Inverclyde (data on ACADs and QEUH awaited). This has implications for bronchosopy procedures in relation to airborne infection as the air changes are insufficient.

5) Ongoing 2A/B issue - had a good meeting with design engineer re specification . Duration of project is 12 months.

I am sorry to bother you with this but I feel that we are at the stage where this needs a project manager . There are a lot of issues to work through and there needs to be representation from clinical teams , IPCT and H+S. Can you advise?

Please call me if you need more info

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

Fw: Isolation room Annual verification SOP

INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)

Wed 06/02/2019 13:23

To:Powrie Ian (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc:Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted]; Devine, Sandra [redacted]; MAREK, Aleksandra (NHS GREATER GLASGOW & CLYDE) [redacted];

1 attachment

Isolation room facilities Annual Ventilation SOP-1 draft 26012018.pdf;

Hi Ian

Comments from myself and Aleks;

1) Air sampling should be at discretion of ICD. There are different facilities on each site and you would not sample a negative pressure room as you would expect contamination. Similar to an operating theatre, unless significant work being done sampling might not be necessary.

2)Is it possible to have an appendix housing the rooms and types of facility for each hospital?

3)On page 3 item 6 , can we add specifics for PPVL rooms i.e. filtration tests, Air permeability tests

4)Can site ICDs get copies of all results

5) Can site ICDs be contacted straight away if a room fails

6) General comment not for guideline re quality of reports from contractors. Some don't include any conclusions or adequate info for ICD to make assessment. Is it the case that GGC are going to be using a single contractor for all ?

7) We had been trying to set up a ventilation group similar to TUMM to look at all these rooms and other areas such as endoscopy, interventional radiology.How is this being progressed?

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Walsh, Tom [redacted]
Sent: 15 January 2019 14:14

To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE); Devine, Sandra
Subject: FW: Isolation room Annual verification SOP

Hi Teresa/ Sandra

Should probably go to ICDs/ SMT for comment?

Thanks

Tom

From: Powrie, Ian
Sent: 15 January 2019 13:47
To: Walsh, Tom
Subject: Isolation room Annual verification SOP

Hi Tom,

I would be grateful if you could review the attached SOP and offer any comment, once you are comfortable with this protocol can you please advise how this would be taken through the BICC for formal ratification?

Regards

Ian

I. Powrie
Deputy General Manager (Estates)

Queen Elizabeth University Hospital Campus
Property, Procurement & Facilities Management Directorate
Facilities Corporate Services Dept
CMB Building
Glasgow
G51 4TF

PA Elaine McNeil: [redacted]
Direct : [redacted]
Internal [redacted]
Mob: [redacted]

RE: PPVL rooms in RHC

Conner, Darryl James [redacted]

Tue 26/03/2019 17:22

To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Powrie Ian (NHS GREATER GLASGOW & CLYDE) [redacted]; Purdon Colin (NHS GREATER GLASGOW & CLYDE) [redacted]

Hi Teresa,

I can confirm that all the isolation rooms within the children's hospital have been annually verified and passed for compliance, I am currently collating all the reports for your viewing and just waiting on the last two rooms reports that where completed last week as part of our "2018/19 Isolation room verification programme" from the contractor.

Meanwhile I will have Checked :

Ward 2C
Room 6: **minus** 3 pa (Should the pressure also be 10 pa for this room)

Ward CDU
Room 18: **+2** pa

Ward 3B
Room 5: **+5** pa

Ward 3C
Room 9: **+25**
Room 10: +12

And report back my findings and any rectifications if required.

Regards
Darryl

Darryl James Conner MIHEEM
Interim Site Manager Operational Estates (SMOE)
Queen Elizabeth University Hospital Campus,
Labs Bldg.
1345 Govan Rd
Glasgow
G51 4TF

Tel: [redacted]
Mob: [redacted]
Email: [redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 26 March 2019 13:47
To: Conner, Darryl James [redacted]
Subject: [ExternaltoGGC]Fw: PPVL rooms in RHC

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 26 March 2019 13:45
To: Powrie Ian (NHS GREATER GLASGOW & CLYDE); darryl.conner[redacted]
Cc: angela.johnson[redacted]; Dodd Susan (NHS GREATER GLASGOW & CLYDE)
Subject: Fw: PPVL rooms in RHC

HI - can I check the accuracy of this table. I have to keep it uptodate to send out to microbiology colleagues following concerns they raised in 2017 re patient placement.

Thanks
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 07 March 2019 12:00
To: Powrie Ian (NHS GREATER GLASGOW & CLYDE)
Subject: Fw: PPVL rooms in RHC

Sorry this was another email I had sent to Colin re a couple of pressures in PPVL rooms not being as desired. Can you help or tell me who to contact?
T

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 04 March 2019 16:25

To: Purdon Colin (NHS GREATER GLASGOW & CLYDE)
Cc: Dodd Susan (NHS GREATER GLASGOW & CLYDE); angela.johnson[redacted]
Subject: Fw: PPVL rooms in RHC

Hi Colin

Following the email below I checked the PPVL rooms in RHC this afternoon

There are 2 that have issues with pressures

Ward 2C room 6 is reading -10PA and the stabilisers are not moving. Not sure what the issue is here. Pressure guage not moving at all so not sure if broken and why stabilisers dont budge

Ward 3B , pressure is reduced at 5-6PA

Do we have annual validation reports for all the PPVL rooms in RHC?

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Johnson, Angela[redacted]
Sent: 14 February 2019 10:46
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Cc: Dodd Susan (NHS GREATER GLASGOW & CLYDE)
Subject: RE: PPVL rooms in RHC

Hi Teresa,
As requested.
There were some rooms with pressure readings that are different from 10 pa:

Ward 2C
Room 6: **minus** 3 pa (Should the pressure also be 10 pa for this room)

Ward CDU
Room 18: **+2** pa

Ward 3B
Room 5: **+5** pa

Ward 3C
Room 9: **+25**
Room 10: +12

What is the range of acceptability in pressure for these rooms?

Kind regards
Angela

Angela Johnson
Senior Infection Control Nurse
The Royal Hospital for Children
Glasgow G51 4TF
Tel: [redacted] (Extension [redacted])
or: [redacted] (Extension [redacted] - Voicemail)

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 14 February 2019 08:57
To: Johnson, Angela
Subject: [ExternaltoGGC]Re: PPVL rooms in RHC

Just the door numbers is fine
T

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Johnson, Angela [redacted]
Sent: 14 February 2019 07:50
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: RE: PPVL rooms in RHC

Hi Teresa,
Do you require disc numbers from each door or just door numbers?
Kind Regards
Angela

Angela Johnson
Senior Infection Control Nurse
The Royal Hospital for Children
Glasgow G51 4TF
Tel: [redacted] (Extension [redacted])
or: [redacted] (Extension [redacted] - Voicemail)

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 13 February 2019 16:54
To: Dodd, Susie; Johnson, Angela
Subject: [ExternaltoGGC]Re: PPVL rooms in RHC

Angela, the water meeting has been cancelled for Friday afternoon . Do you have any time then to walk round RHC and make sure the table of PPVL rooms is accurate

Thanks
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology

Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Dodd, Susie [redacted]
Sent: 12 February 2019 17:07
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE); angela.johnson[redacted]
Subject: Fw: PPVL rooms in RHC

Hi teresa,
I can't find the email I sent earlier this week.
Angela, can you fill Teresa in on the queries around these room numbers (or maybe find the email I sent about it on Monday - Teresa can't find it).
Thanks
Susie

Sent from my BlackBerry 10 smartphone on the EE network.

From: Dodd, Susie [redacted]
Sent: Friday, February 8, 2019 8:52 AM
To: Gibson, Brenda; Spenceley, Neil; Rolls, Gael; Somerville, Emma; Thomson, Kathleen; Johnston, Elaine
Cc: Johnson, Angela; Kennea, Lynne; Anderson, Kathryn
Subject: PPVL rooms in RHC

Good morning,

The table attached details the available PPVL rooms in RHC and those with hepa filtration built in. You will note that 2 of the PPVL rooms in PICU have hepa filters and 2 do not. It is the advice of the IPCT that any Schiehallion patient requiring admission/transfer to PICU be prioritised for placement in one of the hepa filtered rooms (12 or 17). Should there be more than 2 Schiehallion patients requiring PICU care at any one time then room 5 or 18 should be used and a portable hepa filter placed in the room for the duration of their PICU stay. Staff are reminded also to ensure doors are kept closed in these rooms to maintain adequate pressures.

Please forward this email onto any colleagues who need to know this information.

Kind regards,
Susie

Susie Dodd
Lead Infection Prevention and Control Nurse
Royal Hopsital for Children
[redacted]

RE: Specialist ventilation

Conner, Darryl James [redacted]

Fri 26/04/2019 17:26

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Hi Teresa,

Thanks, I will collate the information as discussed and initiate the monthly group meeting as requested.

Best

Regards
Darryl

Darryl James Conner MIHEEM
Interim Site Manager Operational Estates (SMOE)
Queen Elizabeth University Hospital Campus,
Labs Bldg.
1345 Govan Rd
Glasgow
G51 4TF

Tel: [redacted]
Mob: [redacted]
Email: [redacted]

-----Original Message-----
From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 26 April 2019 16:50
To: Conner, Darryl James [redacted]
Subject: [ExternaltoGGC]Fw: Specialist ventilation

Hi Darryl

Further to our conversation earlier in addition to the PPVL and BMT rooms the areas/rooms listed in the email trail below are ones to also focus on

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology Dept of Microbiology Queen Elizabeth University Hospital Glasgow Direct dial : [redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 01 February 2017 14:57
To: Powrie Ian (NHS GREATER GLASGOW & CLYDE)
Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE)

Subject: Specialist ventilation

Hi Ian - any update on the email below?

KR
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology Dept of Microbiology Queen Elizabeth University Hospital Glasgow Direct dial
: [redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 29 November 2016 14:16
To: Powrie Ian (NHS GREATER GLASGOW & CLYDE)
Cc: [redacted]; Pritchard Lynn (NHS GREATER GLASGOW & CLYDE); Walsh Thomas (NHS GREATER GLASGOW & CLYDE); alan.gallache[redacted]
Subject: Fw: rooms

Hi Ian,

[redacted] and Lynn did a walkaround of the QEUH - see below. From these areas the most important ones that we should add to the list for specialist ventilated areas are ;

- endoscopy - END 033,34,35
- cardiac pacemaker room - A1 CCU -034
- interventional radiology rooms and anaesthetic room A1 RAF 077 and 080 , RAF 063
- Ward 11 B ENT room - this appears to be functioning like an outpatient minor ops dept- I doubt that it is appropriately spec'd for that! i.e. 15 ACH

Do we have a record of or can you check the air changes in these areas?

We can remove the mortuary facilities from our list as they will be covered by the lab accreditation process.

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology Dept of Microbiology Queen Elizabeth University Hospital Glasgow Direct dial
: [redacted]

Re: [ExternaltoGGC]update

Steele, Tom [redacted]

Wed 15/05/2019 13:38

To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Devine, Sandra [redacted]

Thanks, I'm happy to Chair in the short term. I've also asked for urgent feedback on the other matters raised.

Regards, Tom

Sent from my iPhone

On 15 May 2019, at 13:15, INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted] wrote:

> Hi Tom
>
> I know its not possible to meet this week but just a few things to update you on
>
> - I have been sent annual validation reports now for PPVL rooms and notice some issues with some of them . I plan to summarise key points in an email to Darryl but keen that we get a group established to start looking at these . Do you have anyone in mind to chair?
>
> - Still awaiting the ventilation spec for ward B7 at the Beatson haematology unit. I know that the air is HEPA filtered but Mark has not got back to me re the rest. If the original design criteria is available that is all I need just now
>
> - Awaiting results of endoscopy unit air changes still for Victoria, Stobhill and up to date records for QEUH. Looks like initial validation reports show 10 ach which is a bit lower than recommended. Alan had forwarded results for the reprocessing unit in an ACAD but its the clinical endoscopy unit that we need info for.
>
> - We still need to bottom out drain cleaning regimes. We have a recurring problem in Phillipshill with ESBL Klebsiellas in patients linked to drains. I think we need to establish the method and frequency for higher risk areas
>
> Thanks
>
> Kind regards
>
> Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

Fw:

Inkster Teresa (NHS GREATER GLASGOW & CLYDE)

Sun 14/08/2016 20:26

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 16 September 2015 07:18
To: Peters Christine (NHS GREATER GLASGOW & CLYDE)
Subject: FW:

see below

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Williams, Craig
Sent: 22 May 2015 16:12
To: Gibson, Brenda
Cc: Mitchell, Clare; Young, Janet

A49525252

Subject: RE:

Dear Brenda

The unit should be safe to use from the day you move in, we will air sample 1 week before the move as a final check.

Best wishes

Craig

Prof Craig Williams
Consultant Microbiologist Royal Hospital for Sick Children, Glasgow
Lead Infection Control Doctor, NHSGGC
Professor of HAI, UWS

t. [redacted]
w. www.uws.ac.uk/hai

From: Gibson, Brenda
Sent: 21 May 2015 15:12
To: Williams, Craig; McVeigh, Alanna; Kirkwood, Jean
Subject:

Dear Craig,

Can you confirm your views on when we will be able to restart transplanting in the NCH. My understanding is that the air sampling will be in place before we move and the delay will be 1-2 weeks. Is that correct?

Brenda

[ExternaltoGGC]Fw: Transplant rooms

INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Mon 17/08/2020 16:44
To: Inkster, Teresa [redacted]

Dr Teresa Inkster
Consultant Microbiologist, QEUH
National Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Inkster Teresa (NHS Greater Glasgow & Clyde)
Sent: 03 June 2015 09:55
To: McNamee, Sandra; Mitchell Clare (NHS Greater Glasgow & Clyde)
Subject: RE: Transplant rooms

Yes definitely. Call me when you are free
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: McNamee, Sandra [redacted]
Sent: 03 June 2015 08:38
To: Inkster Teresa (NHS Greater Glasgow & Clyde); Mitchell Clare (NHS Greater Glasgow & Clyde)
Subject: FW: Transplant rooms

Hi Teresa
I know Craig is back on Friday but I think we need to try and escalate this today. what do you think?
kind regards
Sandra

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Mitchell, Clare
Sent: 03 June 2015 08:20
To: McNamee, Sandra
Subject: FW: Transplant rooms

Sandra,

For information

Clare

Clare Mitchell
Lead Infection Control Nurse
South West Sector
Administration Building
Southern General Hospital
Govan Road - G51 4TF
[redacted]

From: Kirkwood, Jean
Sent: 02 June 2015 17:48
To: Mitchell, Clare
Cc: Robertson, Lynne; McAuley, Mary
Subject: Transplant rooms

Hi Claire,
Following our meeting with Ian Powrie this morning. It has become apparent none of the transplant rooms have hepa-filters fitted!
They have the mechanism there, but no filters were asked for? This seems to relate back to a meeting between NCH team, Craig & Yvonne MacKinnon last January??
Lynne Robertson is escalting this and we are hoping to have the filters authorised and ordered.
many thanks
Jean

Lang, Ann

From: Joannidis, Pamela
Sent: 01 September 2015 12:03
To: Lang, Ann
Subject: FW: Sciehallion Isolation rooms.

From: McNamee, Sandra
Sent: 08 June 2015 09:33
To: Joannidis, Pamela
Subject: FW: Sciehallion Isolation rooms.

FYI

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Williams, Craig
Sent: 08 June 2015 09:26
To: Archibald, Grant; Powrie, Ian
Cc: Loudon, David; Alasdair Fernie; Kane, Mary Anne; Hunter, William; McNamee, Sandra; Macleod, Mairi
Subject: RE: Sciehallion Isolation rooms.

Dear Grant

The microbiological testing will be done first thing Tuesday morning. This will give us a result on Wednesday 10th June late morning but if the engineering is OK the micro testing is very much belt and braces and is unlikely to give any suprises

Best wishes

Craig

Prof Craig Williams
Consultant Microbiologist Royal Hospital for Sick Children, Glasgow
Lead Infection Control Doctor, NHSGGC
Professor of HAI, UWS

t. [redacted]
w. www.uws.ac.uk/hai

From: Archibald, Grant
Sent: 07 June 2015 19:39
To: Powrie, Ian
Cc: Loudon, David; Alasdair Fernie; Kane, Mary Anne; Hunter, William; Williams, Craig; McNamee, Sandra; Macleod, Mairi
Subject: Re: Sciehallion Isolation

Dear Ian

Thanks for the further update and for you and your colleagues great efforts over the last 48 hours.

Kind regards

Grant.

Sent from my iPhone

On 7 Jun 2015, at 18:40, Powrie, Ian [redacted] wrote:

> Dear colleague,
>
> Quick note to confirm that:
>
> H14 HEPA filters where delivered yesterday as planned and have been installed and challenge tested in the above facility, validation paperwork to follow in the morning.
> All 8 isolation suites have been deep cleaned and are sitting at the require 10 Pascal, DP. The room doors are all closed and on purge ready for micro-bacteriological testing tomorrow.
>
> Craig, can you please advise when you will be carrying out the micro-bacteriological tests and confirm that the results will be available after 48hrs (Wednesday 10th June)?
>
> Regards
>
> Ian

[redacted]
Ian Powrie,
Sector Estates Manager,
South Glasgow Hospitals Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,

Tel: [redacted]
Mob: [redacted]

RE: Sciehallion Isolation rooms.

Kane, Mary Anne [redacted]

Sent: 08 June 2015 13:37
To: Inkster Teresa (NHS Greater Glasgow & Clyde); Williams Craig (NHS Greater Glasgow & Clyde); Powrie Ian (NHS Greater Glasgow & Clyde)
Cc: pamela.joannidi[redacted] Mitchell Clare (NHS Greater Glasgow & Clyde); Mcnamee Sandra (NHS Greater Glasgow & Clyde)

Craig has advised that we can proceed after 24 hours on Friday at the Contingency Meeting - Is this not the case as it will mean that the ward cannot move in the agreed timeline from Friday
Mary Anne

From: Inkster Teresa (NHS Greater Glasgow & Clyde) [redacted]
Sent: 08 June 2015 13:25
To: Kane, Mary Anne; Williams, Craig; Powrie, Ian
Cc: Joannidis, Pamela; Mitchell, Clare; McNamee, Sandra
Subject: RE: Sciehallion Isolation rooms.

I have discussed with Ian - we will sample tomorrow morning at 10am. However, results for air sampling take 5-7 days and not 48 hrs.
Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Kane, Mary Anne [redacted]
Sent: 08 June 2015 12:52
To: Williams Craig (NHS Greater Glasgow & Clyde)
Cc: Inkster Teresa (NHS Greater Glasgow & Clyde); pamela.joannidi[redacted]; Mitchell Clare (NHS Greater Glasgow & Clyde); Mcnamee Sandra (NHS Greater Glasgow & Clyde)
Subject: FW: Sciehallion Isolation rooms.

Can someone please respond to this as time is marching on .

From: Powrie, Ian
Sent: 08 June 2015 11:11
To: Powrie, Ian; Loudon, David; 'Alasdair Fernie'; Kane, Mary Anne; Hunter, William; Archibald, Grant; Williams, Craig; McNamee, Sandra; Macleod, Mairi; Fergus Shaw [redacted]
Subject: RE: Sciehallion Isolation rooms.

Craig,

Do you have any idea when you will be carrying out the micro-bacteriological tests?
There are 2 rooms which have just been identified as requiring building fabric repairs, therefore these will not be available until about 4pm this afternoon.
The other 4 rooms are good to go as stated yesterday.

Please call me to advise me on your plans?

Regards

Ian

[redacted]

Ian Powrie,
Sector Estates Manager,
South Glasgow Hospitals Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,

Tel: [redacted]
Mob [redacted]

From: Powrie, Ian
Sent: 07 June 2015 18:41

To: Loudon, David; 'Alasdair Fernie'; Kane, Mary Anne; Hunter, William; Archibald, Grant; Williams, Craig; McNamee, Sandra; Macleod, Mairi
Subject: RE: Sciehallion Isolation rooms.

Dear colleague,

Quick note to confirm that:

H14 HEPA filters where delivered yesterday as planned and have been installed and challenge tested in the above facility, validation paperwork to follow in the morning.
All 8 isolation suites have been deep cleaned and are sitting at the require 10 Pascal, DP. The room doors are all closed and on purge ready for micro-bacteriological testing tomorrow.

Craig, can you please advise when you will be carrying out the micro-bacteriological tests and confirm that the results will be available after 48hrs (Wednesday 10th June)?

Regards

Ian

[redacted]

Ian Powrie,
Sector Estates Manager,
South Glasgow Hospitals Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,

Tel: [redacted]
Mob: [redacted]

Lang, Ann

From: Joannidis, Pamela
Sent: 01 September 2015 12:04
To: Lang, Ann
Subject: FW: DEEP CLEAN OF ISOLATION ROOMS

From: Mitchell, Clare
Sent: 09 June 2015 14:36
To: Coyne, Patricia
Cc: Kane, Mary Anne; Williams, Craig; McNamee, Sandra; Joannidis, Pamela
Subject: DEEP CLEAN OF ISOLATION ROOMS

Pat,

The air monitoring in ward 2a, haemato- oncology/BMT was high in particular the 8 Hepa filtered isolation rooms.

The advice of Prof Williams is that the ward should have a further clean and the isolation rooms listed below should have a deep clean including walls washed prior to re-sampling. The provisional plan is to re-sample the rooms on Friday 12th June.

The isolation rooms are :

Rm 17
Rm 18
Rm 19
Rm 20
Rm 22
Rm 23
Rm 24
Rm 25

Pat can you contact me if you have any queries.

Thanks

Regards

Clare

Clare Mitchell
Lead Infection Control Nurse
South West Sector
Administration Building
Southern General Hospital
Govan Road - G51 4TF
[redacted]

FW: Urgent/Important - Schiehallion testing

Joannidis, Pamela [redacted]

Sent: 02 July 2015 08:50

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Powrie Ian (NHS GREATER GLASGOW & CLYDE - SGA20); Ewins, Anna-Maria [redacted]; Barmanroy, Jackie [redacted]; Kirkwood Jean (NHS GREATER GLASGOW & CLYDE - SGA20); MacKinnon, Yvonne [redacted] Mcauley Mary (NHS GREATER GLASGOW & CLYDE - SGA20)

Cc: Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE - SGA20)

Dear all
Can we all meet up in Schiehallion ward today at 2pm to discuss the progress re BMT provision in Schiehallion.
Kind regards

Pamela

From: Kirkwood, Jean
Sent: 02 July 2015 08:40
To: Joannidis, Pamela
Subject: RE: Urgent/Important - Schiehallion testing

yes

From: Joannidis, Pamela
Sent: 02 July 2015 08:33
To: Kirkwood, Jean; Leighton, Sheenagh; McVeigh, Alanna; Inkster, Teresa (NHSmail); Barmanroy, Jackie
Cc: Williams, Craig; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian; Lavery, Brian
Subject: RE: Urgent/Important - Schiehallion testing

Thanks Jean
Can we meet in the ward?
Pamela

From: Kirkwood, Jean
Sent: 02 July 2015 08:32
To: Joannidis, Pamela; Leighton, Sheenagh; McVeigh, Alanna; Inkster, Teresa (NHSmail); Barmanroy, Jackie
Cc: Williams, Craig; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian; Lavery, Brian
Subject: RE: Urgent/Important - Schiehallion testing

Free at 2pm - 2.30.
many thanks
Jean

From: Joannidis, Pamela
Sent: 01 July 2015 23:12

To: Leighton, Sheenagh; McVeigh, Alanna; Kirkwood, Jean; Inkster, Teresa (NHSmail); Barmanroy, Jackie
Cc: Williams, Craig; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian; Lavery, Brian
Subject: RE: Urgent/Important - Schiehallion testing

Hi Jean
We (ICD Dr Inkster, Jackie and myself) spoke to eve this evening. I agree it would be useful to meet tomorrow. Are you free anytime after 2pm? Ian , Teresa, can you also make this?
Pamela

From: Leighton, Sheenagh
Sent: 01 July 2015 18:53
To: McVeigh, Alanna; Kirkwood, Jean; Lavery, Brian
Cc: Williams, Craig; Joannidis, Pamela; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian
Subject: RE: Urgent/Important - Schiehallion testing

Hi Alanna,

I would like to take advice on wall washing. The domestic staff will not wash the full length of a walls or windows. They are only required to remove marks from walls.

I assume this child would be in strict isolation, I would like clarification if second clean is required as it is my understanding that entry to room is limited.

Happy to discuss. I agree we need to give clear guidelines to all staff concerned

Sheenagh

From: McVeigh, Alanna
Sent: 01 July 2015 15:58
To: Kirkwood, Jean; Lavery, Brian
Cc: Williams, Craig; Joannidis, Pamela; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian; Leighton, Sheenagh
Subject: Urgent/Important - Schiehallion testing

Dear All

Please see attached 3 SOPs that I have been trying to get agreed (via email) since we moved - which are all relevant to the email below. I stop for leave on Friday for one week and would be really grateful if we could get these completed before I stop as we need clear guidance for staff and confident that everything is in place for the patient being isolated for transplant.

Best wishes.

Alanna

From: Kirkwood, Jean
Sent: 01 July 2015 15:41

RE: Urgent/Important - Schiehallion testing

Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)

Sent: 03 July 2015 11:15

To: Joannidis, Pamela [redacted] Walsh Thomas (NHS Greater Glasgow & Clyde)

Cc: Robertson Lynne (NHS GREATER GLASGOW & CLYDE - SGA20); Mcauley Mary (NHS GREATER GLASGOW & CLYDE - SGA20); Kirkwood Jean (NHS GREATER GLASGOW & CLYDE - SGA20); Leighton Sheenagh (NHS GREATER GLASGOW & CLYDE - SGA20); Barmanroy, Jackie [redacted] Mcveigh Alanna (NHS GREATER GLASGOW & CLYDE - SGA20); Ewins, Anna-Maria [redacted]

Follwing sealing of the light fittings and cleaning repeat particle counts this morning are

Room 17 - 515
Room 18 - 1587

I have discussed these results with Jean . The transplant patient should be nursed in Room 17 . Air sampling results for fungi will be available in 5-7 days .

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Joannidis, Pamela [redacted]
Sent: 03 July 2015 09:42
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: Robertson Lynne (NHS GREATER GLASGOW & CLYDE - SGA20); Mcauley Mary (NHS GREATER GLASGOW & CLYDE - SGA20); Kirkwood Jean (NHS GREATER GLASGOW & CLYDE - SGA20); Leighton Sheenagh (NHS GREATER GLASGOW & CLYDE - SGA20); Barmanroy, Jackie; Mcveigh Alanna (NHS GREATER GLASGOW & CLYDE - SGA20); Ewins, Anna-Maria
Subject: RE: Urgent/Important - Schiehallion testing

Hi Teresa
This is really useful thanks.
The new Schiehallion has 8 rooms that are spec'd to BMT level with ante rooms and magnhelix gauges. Of these rooms 18 and 17 had the light fittings sealed yesterday and a deep clean has been carried out. Sampling has just taken place as agreed.
Pamela

-----Original Message-----
From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 02 July 2015 19:04
To: Leighton, Sheenagh; Joannidis, Pamela; Kirkwood, Jean; McVeigh, Alanna; Barmanroy, Jackie
Cc: Williams, Craig; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian; Coyne, Patricia
Subject: RE: Urgent/Important - Schiehallion testing

Thanks Sheenagh

I thought it would be useful to summarise the discussions at our meeting this afternoon which was held in response to the queries in the email below from Alanna yesterday.

1) Air sampling has been centralised at the GRI microbiology lab so reports will be issued in this format - the info

contained in the reports will include particle counts, air sampling results and comments in relation to people in the vicinity of the testing and/or cleaning in progress at the time . This info will aid with interpretation.

2+3)Ideally particle counts should be < 1000 at 0.5um. What type of patient is in the room is irrelevant as all these rooms should meet the spec for a BMT unit. We should not expect to see any fungus on the plates from these rooms. Elevated particle counts +/- fungal growth requires a risk assessment on each occasion by infection control. This should include checking for water ingress and that engineering parameters are satisfactory. Infection control will advise whether these rooms need to be closed.

4+5) It would be useful for the GRI lab to have a schedule for air sampling in 2A and I will follow this up with Prof Williams on his return. I expect this will involve monthly sampling on a rotational basis. Currently as we have identified issues on the unit we are testing at an increased frequency and will continue to do so until we are satisfied with the air quality.

6) It would be useful to have names of individuals we should send reports to in addition to the ICD , lead ICN and estates officer for the site. For adult BMT we send reports to Robert Boyd, Quality Manager.

In relation to the final point re placement of a transplant patient, it was decided in a meeting with Prof Williams and clinicians last week to proceed with a transplant case and to place that child in the safest room . As I explained in the meeting I cannot presently state that one room is safer than another based on particle counts and air sampling results . Particle counts and air sampling have been performed on 4 consecutive occasions since 9/6/15. Each time, counts have been elevated throughout the unit and we have had fungus including Aspergillus growing on plates from certain rooms and the corridors. As I explained air sampling takes place for just a few minutes and as a result we will miss bursts of fungal spores. In addition I have yet to see any validation reports for the ventilation system or Legionella sampling results for 2A.

I was made aware by Ian Powrie on 25/7 that there is an issue with light fittings in the rooms. On inspection by myself and Pamela it was evident that the light fittings are not sealed and there is direct communication with the void above with visible dust on these fittings. This may explain the elevated particle counts/fungal growth. So, although we have lobbied rooms and HEPA filtration we have holes in the ceiling and therefore an unsealed room which does not meet the spec for a BMT patient .

Following discussion with Ian Powrie sealed light fittings will be fitted today in Rooms 17 and 18 - this was in progress when I visited the unit this afternoon. Cleaning will take place tonight and repeat particle counts and air sampling will take place tomorrow morning . As discussed there is a clinical need for a childs transplant to go ahead and therefore they will be admitted to either room 17 or room 18 . Prophylactic Ambisome will be administered three times a week and depending on results of sampling may be increased to treatment dose.

Sealed light fittings will be acquired as soon as possible for the rest of the unit. In addition we discussed cleaning the unit with Actichlor plus.

I will discuss tomorrows particle counts with Jean when they become available.

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor Dept of Microbiology Lister Building Glasgow Royal Infirmary Direct dial : [redacted]
From: Leighton, Sheenagh [redacted]
Sent: 02 July 2015 16:22
To: pamela.joannidis[redacted] Kirkwood Jean (NHS GREATER GLASGOW & CLYDE - SGA20); Mcveigh Alanna (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Barmanroy, Jackie
Cc: Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson Lynne (NHS GREATER GLASGOW & CLYDE - SGA20); Mcauley Mary (NHS

GREATER GLASGOW & CLYDE - SGA20); Powrie Ian (NHS GREATER GLASGOW & CLYDE - SGA20); Lavery Brian (NHS GREATER GLASGOW & CLYDE - SGA20); Coyne Patricia (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: RE: Urgent/Important - Schiehallion testing

Hi Folks,

I have contacted the wall washer and have informed him he requires to use Actichlor to was down the wall.
I will instruct the domestic staff that the must use actichlor for daily clean of surfaces and floors in the strict and the transplant rooms.

Sheenagh

From: Joannidis, Pamela
Sent: 02 July 2015 08:33
To: Kirkwood, Jean; Leighton, Sheenagh; McVeigh, Alanna; Inkster, Teresa (NHSmail); Barmanroy, Jackie
Cc: Williams, Craig; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian; Lavery, Brian
Subject: RE: Urgent/Important - Schiehallion testing

Thanks Jean
Can we meet in the ward?
Pamela

From: Kirkwood, Jean
Sent: 02 July 2015 08:32
To: Joannidis, Pamela; Leighton, Sheenagh; McVeigh, Alanna; Inkster, Teresa (NHSmail); Barmanroy, Jackie
Cc: Williams, Craig; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian; Lavery, Brian
Subject: RE: Urgent/Important - Schiehallion testing

Free at 2pm - 2.30.
many thanks
Jean

From: Joannidis, Pamela
Sent: 01 July 2015 23:12
To: Leighton, Sheenagh; McVeigh, Alanna; Kirkwood, Jean; Inkster, Teresa (NHSmail); Barmanroy, Jackie
Cc: Williams, Craig; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian; Lavery, Brian
Subject: RE: Urgent/Important - Schiehallion testing

Hi Jean
We (ICD Dr Inkster, Jackie and myself) spoke to eve this evening. I agree it would be useful to meet tomorrow. Are you free anytime after 2pm? Ian , Teresa, can you also make this?
Pamela

From: Leighton, Sheenagh
Sent: 01 July 2015 18:53
To: McVeigh, Alanna; Kirkwood, Jean; Lavery, Brian
Cc: Williams, Craig; Joannidis, Pamela; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian
Subject: RE: Urgent/Important - Schiehallion testing

Hi Alanna,

I would like to take advice on wall washing. The domestic staff will not wash the full length of a walls or windows. They are only required to remove marks from walls.

I assume this child would be in strict isolation, I would like clarification if second clean is required as it is my understanding that entry to room is limited.

Happy to discuss. I agree we need to give clear guidelines to all staff concerned

Sheenagh

From: McVeigh, Alanna
Sent: 01 July 2015 15:58
To: Kirkwood, Jean; Lavery, Brian
Cc: Williams, Craig; Joannidis, Pamela; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian; Leighton, Sheenagh
Subject: Urgent/Important - Schiehallion testing

Dear All

Please see attached 3 SOPs that I have been trying to get agreed (via email) since we moved - which are all relevant to the email below. I stop for leave on Friday for one week and would be really grateful if we could get these completed before I stop as we need clear guidance for staff and confident that everything is in place for the patient being isolated for transplant.

Best wishes.

Alanna

From: Kirkwood, Jean
Sent: 01 July 2015 15:41
To: McVeigh, Alanna; Lavery, Brian
Cc: Williams, Craig; Joannidis, Pamela; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary
Subject: RE: Urgent/Important - Schiehallion testing

Hi there,
As SCN within Ward 2A, I am unclear what rules I am applying to the isolation cubicles.
I would like to have some SOP issued about frequency of air sampling, implications of results i.e. air particle count v fungal loads!
I urgently require to identify a cubicle for our transplant patient.
Pamela, if you are free tomorrow I would welcome any guidance.
many thanks
Jean

From: McVeigh, Alanna
Sent: 01 July 2015 15:15
To: Lavery, Brian
Cc: Williams, Craig; Joannidis, Pamela; Kirkwood, Jean; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria
Subject: Urgent/Important - Schiehallion testing
Importance: High

Hi Brian

I'm hoping you can help me! If not, can you please advise who can?

Jean Kirkwood has sent the attached on to me and we have a few queries relating to the results and format. Can I also check if these are the latest results or are the samples currently being taken weekly which would mean result should be available from yesterday?

1. I've attached the format we previously received - is it possible to receive this format again or will the attached be the new format?

2. Can you please advise on the thresholds for particle counts (min/max for safe use) - we don't have any guidance on this and not sure if there is a sliding scale for room use dependent on patient type. At the moment all our rooms are in use - some for general haematology/oncology patients and some for strict isolation, even though we have a range of counts in the isolation rooms from 519 to 163,306 (above report). We are concerned we don't have any guidance on when a room should be closed for use.

3. The above also applies to plate growth - Rooms 17, 18, 20 & 24 are all in use yet had fungus/yeast growth. At what point should the room be closed for use?

4. The attached only shows isolation room air sampling - can you please advise if other rooms in the ward have/are to be sampled and if so how regularly?

5. Can you please advise how regularly the isolation rooms will be sampled and if there will be a rotation ie 2 rooms per month etc?

6. Would it be possible to copy me in on future air sampling reports?

We are very concerned at the moment that we have a patient due to start transplant conditioning tomorrow. The initial plan was to put this patient into Room 25 but this is currently in use for a high-risk patient (however, if this is the best room for the transplant patient its likely the current patient would be moved). The second choices currently (based on the attached) would be rooms 20 & 22 as have no plate growth and less than 2,000 particles. Can you confirm that these are the best options?

Many thanks.

Alanna McVeigh
SCT Quality Manager / Administrator
Schiehallion Ward (Ward 2A)
Royal Hospital for Sick Children
1345 Govan Road
GLASGOW G51 4TF
Tel: [redacted]

From: Kirkwood, Jean
Sent: 23 June 2015 15:06
To: McVeigh, Alanna
Subject: FW: Schiehallion testing

From: Lavery, Brian
Sent: 23 June 2015 14:56
To: Williams, Craig
Cc: Inkster, Teresa (NHSmail); Kirkwood, Jean; Cullen, Karen; Mallon, John
Subject: Schiehallion testing

Hi Craig

Please find attached reports for the environmental testing in Ward 2A on 16/6/15 All fungi have been sent to Mycology for identification.

Regards

Brian Lavery
Technical Manager / IT Manager
Microbiology Department
New Lister Building
Glasgow Royal Infirmary
Alexandra parade
Glasgow G31 2ER

Teresa,
Thank you for this.
Do you think we should contine to sample weekly? Although the other isolation rooms are occuppied, should we resample them to identify the best room for the next patient?

Best wishes,
Anna Maria

-----Original Message-----
From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 03 July 2015 11:16
To: Joannidis, Pamela; Walsh, Tom
Cc: Robertson, Lynne; McAuley, Mary; Kirkwood, Jean; Leighton, Sheenagh; Barmanroy, Jackie; McVeigh, Alanna; Ewins, Anna-Maria
Subject: RE: Urgent/Important - Schiehallion testing

Follwing sealing of the light fittings and cleaning repeat particle counts this morning are

Room 17 - 515
Room 18 - 1587

I have discussed these results with Jean . The transplant patient should be nursed in Room 17 . Air sampling results for fungi will be available in 5-7 days .

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor Dept of Microbiology Lister Building Glasgow Royal Infirmary Direct dial : [redacted]
From: Joannidis, Pamela [redacted]
Sent: 03 July 2015 09:42
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: Robertson Lynne (NHS GREATER GLASGOW & CLYDE - SGA20); Mcauley Mary (NHS GREATER GLASGOW & CLYDE - SGA20); Kirkwood Jean (NHS GREATER GLASGOW & CLYDE - SGA20); Leighton Sheenagh (NHS GREATER GLASGOW & CLYDE - SGA20); Barmanroy, Jackie; Mcveigh Alanna (NHS GREATER GLASGOW & CLYDE - SGA20); Ewins, Anna-Maria
Subject: RE: Urgent/Important - Schiehallion testing

Hi Teresa
This is really useful thanks.
The new Schiehallion has 8 rooms that are spec'd to BMT level with ante rooms and magnhelix gauges. Of these rooms 18 and 17 had the light fittings sealed yesterday and a deep clean has been carried out. Sampling has just taken place as agreed.
Pamela

Sent: 03 July 2015 14:39
To: Ewins, Anna-Maria
Subject: RE: Urgent/Important - Schiehallion testing

Yes Anna thats fine
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor Dept of Microbiology Lister Building Glasgow Royal Infirmary Direct dial : [redacted]
From: Ewins, Anna-Maria [redacted]
Sent: 03 July 2015 14:31
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: RE: Urgent/Important - Schiehallion testing

Hi Teresa,
Do you think we can open room 18 up for non-SCT patients?
BW,
Anna Maria

-----Original Message-----
From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 03 July 2015 12:17
To: Ewins, Anna-Maria; Powrie, Ian
Cc: Kirkwood, Jean; McVeigh, Alanna
Subject: RE: Urgent/Important - Schiehallion testing

Hi Anna - yes I think we need to continue with weekly sampling at the moment for rooms 17 and 18 - these rooms are the best option at the moment . I will arrange this for next week . Until the other rooms have had light fittings sealed we will continue to have dust present in these rooms and particle counts will therefore be elevated. Ian - can you give us an indication as to how quickly the light fittings in the other 6 BMT rooms will be sealed- after that I will arrange repeat sampling for them.

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor Dept of Microbiology Lister Building Glasgow Royal Infirmary Direct dial : [redacted]
From: Ewins, Anna-Maria [redacted]
Sent: 03 July 2015 12:13
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: Kirkwood Jean (NHS GREATER GLASGOW & CLYDE - SGA20); Mcveigh Alanna (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: RE: Urgent/Important - Schiehallion testing

FW: Urgent/Important - Schiehallion testing

Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)

Sent: 06 July 2015 16:52

To: Williams Craig (NHS Greater Glasgow & Clyde)

Cc: pamela.joannidis[redacted]

Craig - see below for the situation in Schiehallion. I still have not seen copies of the original spec for the unit, validation reports or water sampling results. I also do not have an update as to when the remaining 6 rooms will have the light fittings sealed. There is a 2nd transplant due to be undertaken shortly so this work needs to be completed ASAP.

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)
Sent: 03 July 2015 09:50
To: Walsh Thomas (NHS Greater Glasgow & Clyde)
Subject: FW: Urgent/Important - Schiehallion testing

Sorry Tom , I should have copied you in on this
Best wishes
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: McVeigh, Alanna [redacted]
Sent: 03 July 2015 09:42
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Leighton Sheenagh (NHS GREATER GLASGOW & CLYDE - SGA20); pamela.joannidis[redacted]; Kirkwood Jean (NHS GREATER GLASGOW & CLYDE - SGA20); Barmanroy, Jackie
Cc: Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson Lynne (NHS GREATER GLASGOW & CLYDE - SGA20); Mcauley Mary (NHS GREATER GLASGOW & CLYDE - SGA20); Powrie Ian (NHS GREATER GLASGOW & CLYDE - SGA20); Coyne Patricia (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: RE: Urgent/Important - Schiehallion testing

Hi Teresa

Thank you for your email below which answers all my queries. Very much appreciated. I have previously asked Ian for the validation reports so would be grateful of a copy when this is available.

Best wishes.

Alanna

-----Original Message-----
From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 02 July 2015 19:04
To: Leighton, Sheenagh; Joannidis, Pamela; Kirkwood, Jean; McVeigh, Alanna; Barmanroy, Jackie
Cc: Williams, Craig; MacKinnon, Yvonne; Gibson, Brenda; Ewins, Anna-Maria; Robertson, Lynne; McAuley, Mary; Powrie, Ian; Coyne, Patricia
Subject: RE: Urgent/Important - Schiehallion testing

Thanks Sheenagh

I thought it would be useful to summarise the discussions at our meeting this afternoon which was held in response to the queries in the email below from Alanna yesterday.

1) Air sampling has been centralised at the GRI microbiology lab so reports will be issued in this format - the info contained in the reports will include particle counts, air sampling results and comments in relation to people in the vicinity of the testing and/or cleaning in progress at the time . This info will aid with interpretation.

2+3)Ideally particle counts should be < 1000 at 0.5um. What type of patient is in the room is irrelevant as all these rooms should meet the spec for a BMT unit. We should not expect to see any fungus on the plates from these rooms. Elevated particle counts +/- fungal growth requires a risk assessment on each occasion by infection control. This should include checking for water ingress and that engineering parameters are satisfactory. Infection control will advise whether these rooms need to be closed.

Williams, Craig [redacted]

Sent: 10 July 2015 10:24

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)

Cc: Lavery Brian (NHS GREATER GLASGOW & CLYDE - SGA20)

Dear Teresa

All of the light fittings in Schiehallion have now been replaced. Could we arrange another round of particle counting/air sampling for the rooms as soon as possible.

Thanks

Craig

Prof Craig Williams
Consultant Microbiologist RHSC Glasgow
Lead ICD NHSGGC
Professor of HAI UWS

t [redacted]
w www.uws.ac.uk/hai

RHSC BMT Meeting Monday 10th August 2015
In attendance:

G Archibald (Chair)
J Armstrong
B Gibson
J Hood
B Jones
D Louden
A Mathers
S McNamee
P Moir
J Redfern
D Stewart
T Walsh

	Action
RHSC BMT ACTION PLAN	
The meeting was held to discuss concerns regarding the BMT formerly at the RHSC. The following actions were agreed:	
1. Provide confirmation of the Specification document used for the design and build (Scottish Building Notes 2008)	D Louden
2. Provide confirmation the facility has been built in accordance with that specification.	D Louden
3. Provide confirmation of commissioning of the facility.	D Louden/ ICT
4. Identification of alternate English building note 2013. Website link/copied to be e-mailed to those attending.	J Hood
5. Call round of similar units elsewhere in the UK to identify their facilities configuration (lobbied rooms, positive pressure etc) based on an agreed questionnaire template.	S McNamee/ B Gibson
6. Identification of further actions which could improve performance of existing facility: - testing of seals - adjustment of pressure - relocation of any external environmental factors - further deep cleaning of rooms	D Louden/ ICT
7. Review of gathered microbiological data: Is performance improving in the facility.	T Walsh
8. Caring for patients (i) Decision not to admit Patient ZZ - discussion to be	J Redfern/

Lang, Ann

From: Loudon, David
Sent: 26 August 2015 16:51
To: Williams, Craig
Cc: Armstrong, Jennifer; Walsh, Tom; Hunter, William
Subject: RE: Paediatric BMT

Craig

Thanks for your message.

Billy Hunter will make contact with both hospitals tomorrow and update me on their discussion.

Regards

David

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning
NHS Greater Glasgow & Clyde
Management Building
Govan Road
Glasgow
G51 4SX

Direct Line: [redacted]
Mobile Phone: [redacted]
Email: [redacted]

From: Williams, Craig
Sent: 26 August 2015 10:51
To: Loudon, David
Cc: Armstrong, Jennifer; Walsh, Tom
Subject: Paediatric BMT

Dear David

As part of the work we are doing around the paediatric BMT we were asked to identify other units using positive pressure lobbied side rooms. There were a number of these across the UK but at the last meeting Leeds and Sheffield were identified as the most appropriate comparators. I have contacted the microbiologists on these sites but it was also agreed that we would look at the engineering parameters in use on these sites. Ian Powrie has not been able to get this information and is on leave from tomorrow.Would you be able to take this forward?

Best wishes

Craig

Professor Craig Williams
Consultant Microbiologist RHSC Glasgow
Lead ICD NHSGGC
Professor of HAI UWS

t. [redacted]

Lang, Ann

From: Powrie, Ian
Sent: 28 August 2015 11:45
To: Williams, Craig
Cc: Redfern, Jamie; McNamee, Sandra; Walsh, Tom; Gibson, Brenda; Hunter, William; Loudon, David
Subject: Re: BMT unit

Hi Craig,

As we discussed I have attempted to contact estates at both Leeds and Sheffield children's hospitals, unfortunately I have not managed to make contact with anyone at Sheffield despite several attempts.

Leeds Children's Hospital, BMTU is 4 years old, and is a retro fit development within a 40 year old building.

They have four isolation suites with the design based on HBN 04-01 supplement 1, all four suites are supplied from a single AHU with stand by AHU resilience, complete with H13 HEPA filtration within the AHU, there are no terminal HEPA's installed in the suite.

The facility is lobbied with a en-suite anti-room, The supply air is provided via the lobby which sits at a 8-12pa differential pressure to the corridor, with a pressure balanced transfer grille from the lobby to the isolated bed room. The lobby door and room door are interlocked to activate a local alarm should ether door be left open.

The bed room is at a differential pressure of 20-25pa to the en-suite, where the extract is 152 ltrs/s split 60% from the en-suite and 40% from the bed room, there are no transfer grilles between the bed room and the en-suite.

Feel free to give me a call today if you would like to discuss.

Regards

Ian

I.Powrie
Sector Estates Manager (NSGH)
Project Team, New South Glasgow Hospitals,
Southern General Hospitals Construction Site,
2nd Floor, Modular Building, Off Hardgate Road, Glasgow,G51 4SX
[redacted]
Tel: [redacted]
Reception: 0141 245 5700
Mob: [redacted]

On 18 Aug 2015, at 15:16, Williams, Craig [redacted] wrote:

> Dear Jamie
>
> I've done a quick phone around of Microbiology Consultants taken from the list of Paediatric transplant centres listed on the BSBMT registry. Our build is in line with all of the other paediatric centres that I have been able to contact so far. There is a lot of variability in how the ongoing testing of the rooms is done which will be useful to discuss further. I will try and get hold of more centres prior to the meeting. Not sure if this tallies with Prof Gibsons findings
>
> Best wishes

Lang, Ann

From: Redfern, Jamie
Sent: 31 August 2015 12:32
To: Loudon, David
Cc: Brattey, David; Walsh, Tom; Williams, Craig
Subject: Re: SCHIEHALLION WARD - BMT SUITE

I'm sure Brenda will be able to provide the clinical input.
If some lays down the key tasks to be progressed I'm happy to try and make sure they happen.

Sent from my Samsung device

-------- Original message --------
From: "Loudon, David" [redacted]
Date: 31/08/2015 11:57 AM (GMT+00:00)
To: "Redfern, Jamie" [redacted]
Cc: "Brattey, David" [redacted], "Walsh, Tom" [redacted], "Williams, Craig" [redacted]
Subject: Re: SCHIEHALLION WARD - BMT SUITE

Jamie

Per Peters message, who will provide the clinical brief to enable the design engineer to progress?

David

David W Loudon MCIOB CBIFM MBA
Director of Facilities and Capital Planning
NSH Greater Glasgow & Clyde

On 31 Aug 2015, at 11:40, Redfern, Jamie [redacted] wrote:

> Hi David
>
> In IP's absence is this something you can pick up
> As noted there is a significant degree of urgency in this matter
> Happy to discuss if helpful
>
> Jamie
>
> **From:** Williams, Craig
> **Sent:** 31 August 2015 11:04
> **To:** Redfern, Jamie
> **Cc:** Loudon, David; Walsh, Tom
> **Subject:** FW: SCHIEHALLION WARD - BMT SUITE
>
> Dear Jamie
>
> Ian Powrie is now on annual leave so I'm not sure who or how the board will guide the design engineer. Ian has been in touch with Leeds and his view is that the change in the pressure regime he outlined is broadly how Leeds operate so it would be desirable for us to move to this as quickly as possible

I sthis something that you can take forward

Best wishes

Craig

From: Moir, Peter
Sent: 25 August 2015 15:04
To: Powrie, Ian; Williams, Craig; McNamee, Sandra
Cc: Loudon, David
Subject: RE: SCHIEHALLION WARD - BMT SUITE

All

Under Stage two a design engineer will need to be given guidance by the Board on the pressure regime for the suite at present the set up broadly replicates those in table 1 of SHPN 04 for isolation suites, who will provide this information?

P

From: Powrie, Ian
Sent: 25 August 2015 13:34
To: Moir, Peter; Williams, Craig; McNamee, Sandra
Cc: Loudon, David
Subject: RE: SCHIEHALLION WARD - BMT SUITE

Peter,

Craig and I have reviewed our combined comments are highlighted in red below.

Regards

Ian

From: Moir, Peter
Sent: 25 August 2015 10:55
To: Williams, Craig; Powrie, Ian; McNamee, Sandra
Cc: Loudon, David
Subject: SCHIEHALLION WARD - BMT SUITE

All

This is not a meeting note but a draft response to Grant's questions based on our discussion yesterday. Please read through and confirm you are in accord with what is written or suggests amendments. Note I need a date in item 4 when test results would be available I believe we discussed 5 days but not sure. I intend passing to David Loudon early afternoon.

QUESTIONS

1.0 An opinion regarding the suitability of the facilities in their current configuration

The eight isolation suites in Schiehallion Ward have been designed and constructed to meet the

– Scottish Health Planning Note 04 (SHPN-04) In-patient Accommodation Supplement 1: Isolation Facilities in Acute Settings is confirmed as the correct document for this type of ward.

SHPN 04 also makes reference under 1.10 of an exclusion for specialist facilities where severely immune-compromised patients are nursed. The document notes that guidance for these facilities will follow in a further supplement to SHPN 04 although no such guidance has been issued.

Guidance from Health Protection Scotland for this type of treatment also makes reference to SHPN 04 Supp. 1 and the use of source and protective isolation through a pressurised lobby as being the preferred solution.

3.0 Identification of what other actions ICT/Estates require to be conducted to make the rooms operational.

ICT/Estates recommend a two stage approach.

Stage One – Bring Two Rooms into Operation (Rooms 18 and 19)
The rooms within the eight isolation suites require to be correctly sealed and certified by specialist contractors, to ensure there is no scope for ingress of particulates into the main patient bedroom and en-suite facilities. The rooms then require to be formally completed and certify the testing schedule outlined in SHPN 04 appendix 2 to ensure that

a. air Infiltration/leakage
b. differential pressures
c. HEPA Challenge tests (DOP)

are within the tolerances set out in the document. These tests will be undertaken by a third party company specialising in this type of testing and a formal report with results will require to be submitted to the Board for review. On successful completion of the air permeability test, the room will then be made available to the Board's Facilities team to undertake smoke testing, deep clean and on completion microbiological tests will be undertaken and results obtained before the room is brought into use.

Stage Two – To All Rooms on a Phased Basis (when available)

In addition to the actions in Stage One for the remaining six rooms, ICT/Estates believe that it would be beneficial to rebalance the existing ventilation in the suite to increase the air pressures within the patient bedroom and en-suite WC/SH, in relation to the main ward corridor and external air. This would further mitigate the risk to the patient from any potential breach that may occur to the suite seals during operation. The eight suites each have their own supply and extract ventilation system and it is believed that pressures could be positively increased in the suite by altering the existing dampers and installing a transfer grille in the door to the en-suite.

All of these recommendations remain within the scope of SHPN 04.

If this course of action were to be followed, the ventilation design engineer would be required to specify the new pressure regime to meet these aims and revalidated the design parameters within the scope of the existing guidance SHPN 04, prior to engineers making adaptations and re-commissioning of the air handling equipment and this work would be additional to Brookfield's current contract.

2.0 An Infection Control opinion identifying if the rooms can now be used.

Rooms can be brought into operation provided they meet the following requirements:

a) Formal certification of the testing schedule outlined in SHPN 04 appendix 2 .
b) microbiological testing:
    1. Meet particulate requirements and
    2. An absences of fungal spores

test undertaken by NHS staff.

4.0 The timescales for effecting item 3 if it applies.

Room 18 has passed the air leakage test and achieved the differential differentials set out in SHPN 04 Supp 1. Room 19 was sealed on 24th August and will undergo an air permeability test on 26th August. On assumption that both rooms are passed and report provided by the test engineer on 26th August the rooms will then be available for NHS Facilities to undertake a deep clean of both rooms. The rooms could then undergo microbiological tests on Friday 28th August and results should be available by 4th September 2015. Smoke testing will be performed between the 28th Aug & 2nd Sept with the final clinical clean carried out on the 3rd Sept.

Regards

Peter Moir
Deputy Project Director

South Glasgow Hospitals Project Office
NHS Greater Glasgow & Clyde
Room L1/25
Management Building
1345 Govan Road
Glasgow G51 4TF

Tel: [redacted]
Mob: [redacted]
Em: [redacted]

ang, Ann

From: Redfern, Jamie
Sent: 31 August 2015 11:40
To: Brattey, David
Cc: Loudon, David; Walsh, Tom; Williams, Craig
Subject: RE: SCHIEHALLION WARD - BMT SUITE

Hi David

In IP's absence is this something you can pick up
As noted there is a significant degree of urgency in this matter
Happy to discuss if helpful

Jamie

From: Williams, Craig
Sent: 31 August 2015 11:04
To: Redfern, Jamie
Cc: Loudon, David; Walsh, Tom
Subject: FW: SCHIEHALLION WARD - BMT SUITE

Dear Jamie

Ian Powrie is now on annual leave so I'm not sure who or how the board will guide the design engineer. Ian has been in touch with Leeds and his view is that the change in the pressure regime he outlined is broadly how Leeds operate so it would be desirable for us to move to this as quickly as possible.

Is this something that you can take forward

Best wishes

Craig

From: Moir, Peter
Sent: 25 August 2015 15:04
To: Powrie, Ian; Williams, Craig; McNamee, Sandra
Cc: Loudon, David
Subject: RE: SCHIEHALLION WARD - BMT SUITE

Al

Under Stage two a design engineer will need to be given guidance by the Board on the pressure regime for the suite at present the set up broadly replicates those in table 1 of SHPN 04 for isolation suites, who will provide this information?

P

From: Powrie, Ian
Sent: 25 August 2015 13:34
To: Moir, Peter; Williams, Craig; McNamee, Sandra
Cc: Loudon, David
Subject: RE: SCHIEHALLION WARD - BMT SUITE

MEETING TO DISCUSS BMT UNIT RHC
Monday 7 September 4.45pm to 6:15PM
Held in Dr Alan Mathers Office Ground Floor RHC

In Attendance	Apologies
Dr Jennifer Armstrong (Chair) - JA Dr Alan Mathers - AM Mr Billy Hunter - BH Mr Jamie Redfern - JR Mr Grant Archibald (by telephone) - GA Prof. Brenda Gibson - BG Prof. Craig Williams – CW Mr. David Brattey - DW	Mr. David Loudon - DL

1.Purpose of the meeting:

This meeting was brought together to identify the progress made in resolving the Bone Marrow Transplant (BMT) room estates issues in RHC and determine position for the paediatric haematology oncology service in being able to start new cases. JA acknowledged the clinical frustration about progress and the need to plan for patients currently waiting transplant. Group were reminded that the two rooms / suites currently under scrutiny were 18 and 19. There are a further 6 rooms / suites which over time should reach the level of BMT specification / performance required. These are room / suites 17, 20, 22, 23, 24 and 25.

2. Agenda

The meeting was informed by the Agenda set earlier and circulated by JA and a stepwise debate took place around:

1. Previous situation at the old RHSC / Yorkhill unit for baseline (CW/DL/ BH)
2. Current position of the new unit in terms of build and recent sealing etc (CW/DL)
3. Further proposed work (BH/ DL)
4. Position of patients (BG)
5. Risk assessment (all)
6. Agreed way forward and conclusion. ALL

3. RHSC and RHC transplant rooms / suites specifications and Performance	BH/ DL were tasked with
1. BH described the former BMT unit rooms within RHSC, it was noted that the suite configuration was consistent with the 18 / 19 rooms / suites within Ward 2A of the RHC: i.e. lobby/in-patient room and en-suite. 2. Air pressure within the former RHSC BMT suites achieved 10 pascals of positive pressure and this was provided by an air handing unit - input within the lobby and patient room, with extract located within the en-suite. 3. The air handing units within the suites of the new RHC provide air input within the lobby and there is extract within	1. Formally writing up a summary document which compared old RHSC and current RHC unit in terms of specification and performance. The purpose of this was to provide formal audit trail that the new arrangements for transplanting children in current RHC were as good if not better than the previous arrangements in old RHSC / Yorkhill. This document also needed to formally confirm that the specification in RHC was built to all appropriate building note regulations and clearly reference these. The document needed to confirm that there was no technical / engineering

the patient room and ensuite. This is available in all 8 rooms / suites. 4. Air pressure monitoring of the new RHC BMT rooms /suites 18 and 19 has taken place four times per day since Wednesday 2nd September and reading consistently measure 9.5/10 pascals. Readings have been taken at six hourly intervals by Estates staff (i.e. 03:00/09:00/15:00/21:00) 5. BH confirmed that the two BMT suites (RHC) have been sealed (which should safely last one year) to avoid air penetration from a source outwith the air handling unit. 6. Recent air permeability testing took place week commencing 31st August 2015 and satisfactory results. This process was undertaken by Lead Consultant Microbiologist/Brookfield colleagues & Estates Management. 7. BH indicated that from an engineering perspective, the BMT suite conditions within the new RHC provided no lesser standard by comparison to the former RHSC transplant suites. 8. BH confirmed that Brookfield could retro fit air handling unit modifications to the 8 BMT room / suites (in accordance with the design parameters of Leeds) at an approx cost of £35k per room - (excluding VAT). Timeline for the completion of one BMT suite is estimated to take 4 – 6 weeks and depending upon access, two suites could be done at the same time. The group agreed to explore this option in more detail. 9. BH confirmed that he saw no technical/ engineering risk to providing transplants in the identified rooms / suites 18 and 19 based on comparison to RHSC and recent test results of RHC rooms /suites. Also noting specifications met all relevant building note regulations.	risk to transplanting in rooms 18 and 19 based on test results to date and comparison specification to old RHSC. **BH Response** . RHSC BMT Suites were designed to meet SHTM 03-01 Verification for Healthcare Premises. . Air pressure achieved 10 pascals. . BMT Suite design features a) lobby, b) patient room & c) en-suite facility. . Lobby & patient room had positive pressure & en-suite had negative pressure. RHC BMT Suites are designed to meet SHTM 03-01 which was the design brief stipulated by NHSGGC. . Air pressure achieves 10 pascals within suites 18 & 19. . The lobby has positive pressure. . The patient room has neutral pressure. . The en-suite has negative pressure – - Air permeability testing undertaken on Friday 21st August 2015 (Bed 18) and Wednesday 26th August 2015 (Bed 19) by Risk Environmental Ltd on behalf of Brookfield Multiplex Europe achieved acceptable levels of air permeability and comply with the reqired criteria laid down in HBN04 Supplement 1. - The environmental conditions of RHSC & RHC are comparable and there are no indicators to suggest that the BMT suites within RHC pose any clinical risk from an engineering

	perspective, based on the present situation at this point in time. 2. Circulating the air pressure results for new RHC. These pressure tests should continue with an agreed forward reporting mechanism in place and described by estates. Process for escalation identifying any problems with the test results and impact on room performance to 10 pascals should be described and implemented. **BH Response** Air Pressure Testing is currently being undertaken by Estates Operatives 4 times per day (03:00 / 09:00 / 15:00 / 21:00). All results demonstrate satisfactory outcomes (10 pascals). In the event of lower level readings being noted Estates Operatives will investigate the problem and liaise with nurse colleagues. BMT suite pressure monitoring will be reviewed and linked to the Building Management System (BMS) which will automatically monitor air pressure levels within BMT suites. In the event that air pressure falls outwith an acceptable tolerance (to be agreed) the BMS will alarm and Estates staff will respond. A protocol will be developed week commencing 14TH September 2015 to identify response arrangements. 3. Liaising with Brookfield colleagues to seal two further rooms/ suites. In doing this the aim was to meet the same standard of air permeability within the two BMT suites currently fully sealed. Further to this there

	should be further work undertaken to fully seal the remaining 4 BMT rooms/ suites. On completion of this work plan service would have an incremental uplift of 2 – 4 – 8 fully performing BMT suites over an agreed project time. Project plan for taking this work forward to be drafted between service, estates and Brookfield. Noted that completion of this work plan will be linked to ongoing clinical activity and use of cubicles **BH Response** Brookfield and clinical colleagues have agreed a programme of access to allow the remainder of suites within 2A to be sealed in accordance with the two BMT suites, to achieve satisfactory levels of air permeability. Please find attached programme which has been agreed (Appendix 3) 4. Liaising with Brookfield around a work plan which would on completion provide service with at least 2 rooms which matched specification used in Leeds. In taking this work plan forward there needed to be clarity on any impact it would have on clinical services within the unit. **BH Response** Brookfield have confirmed that further retrospective modifications to the air handing units within two BMT suites could be undertaken at an agreed time. The cost of these works will total £35k (excluding VAT) per suite. The programme of work will take six to eight weeks (per suite), however it is feasible to work on two suits at the same time if this is clinically acceptable.
Cleaning in ward area: 1. Due to the high level of pedestrian	BH was tasked with 1. Implementing the proposed changes

activity in Ward 2A corridor, and as part of risk mitigation, it was agreed that increased cleaning of the wards circulation areas would take immediate effect and with a chlorine based solution.	to cleaning for BMT cubicles and corridor in the unit as described. A standing operating procedure for domestic services should be in place with robust reporting lines regarding daily compliance. This should be implemented with immediate effect. BH Response Revised cleaning SOP has been agreed between Facilities, Lead ICN and Lead Nurse. This has resulted in higher frequency of cleaning tasks be undertaken and the use of hypochlorite cleaning solution. Once the updated SOP is complete, this will be shared colleagues. It is anticipated that the revised SOP will be available Friday 11th Sept. Increased cleaning frequencies are fully in place.
Microbiology 1.CW updated on recent microbiology testing in rooms / cubicles 18 and 19. He confirmed that testing from 31st August showed 1 colony growing at 22C in the ensuite, further sealing has been undertaken in Rm 19 since the testing and sampling repeated on 4th September. After 3 days incubation Room 18 - ensuite at 30 degrees incubation - 1 colony - main at 22 degrees incubation - 1 colony Room 19 - ensuite at 22 degrees incubation - 2 colonies - main at 30 degrees incubation - 1 colony	CW was tasked with 1. Providing the outcome of sampled testing when results became available between Wednesday 9th and Friday 11th September and clarifying implication of results re performance of rooms / suites 18 and 19 suitability to begin transplanting.
Clinical Services 1. BG confirmed that there was a standard operating procedure in place and used by staff for when BMT cubicles were in use 2. BG noted there were 3 patients awaiting transplant. 3. BG confirmed patient1 [redacted] (acute relapse) was described as urgent and needed to start treatment	Clinical team were tasked with providing 1. Providing a copy of the standard operating procedure used by nurses and other clinical / support staff when BMT room/ cubicle in use 2. Provisional transplant start times for patient 3 and patient 2. This work would be carried out in conjunction with ongoing estate work and clinical

within circa 2 weeks. BG confirmed it was not clinically possible to transfer patient 1 to another unit for transplant noting capacity issues, waiting lists and clinical work up etc. 4. BG confirmed that patient 2 ([redacted]) was not clinically urgent. However [redacted] because of room / suite difficulties. Parents of this child were anxious that the transplant was completed as soon as possible. 5. BG updated on patient 3 who had received news recently of a suitable donor and was also now classed as clinically urgent with a start date for treatment required within the next 4 weeks 6. All agreed that patient 1 should be transplanted immediately subject to pending microbiology test results being satisfactory. Subject to estate work (sealing of additional rooms / cubicles) being carried out timeously and any further ongoing microbiology testing plans should also be set for patients 2 and 3 to be transplanted over next few weeks.	timelines. 3. A standard operating procedure for transfer of any transplant patient between cubicles if problems with a sealed room/ other microbiology results emerge which cause concern. CW would also have to be involved in draft and implementation of this SOP.
Conclusions 1. On completion of the relevant engineering / microbiology documentation there is a need for 3 way Directorate sign off for patient 1 to be transplanted within the next 2 weeks.	1. Three way Directorate agreement sign of being JA, DL and GA.

Draft V2 2015-09-09
Jamie Redfern General Manager HPN/ Acting Director W&Cs

FW: Paediatric BMT

Balfour, Alison [redacted]

Thu 10/09/2015 12:38

To Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

1 attachment

Update from meeting to discuss Paediatric BMT.doc;

From: Williams, Craig
Sent: 08 September 2015 12:31
To: McNamee, Sandra; Joannidis, Pamela; Balfour, Alison
Cc: Redfern, Jamie
Subject: Paediatric BMT

Dear Sandra

Notes from the meeting about Paediatric BMT held last night. I have discussed our actions with Pamela and she will take them forward

Craig

Update from meeting to discuss Paediatric BMT

Previous situation at the old Yorkhill unit for baseline

Estates colleagues compared the rooms provided on the Old RHSC site with the new RHC in engineering terms and advised that the new rooms provide equivalent patient protection.

Current position of the new unit in terms of build and recent sealing etc

Rooms 18 and 19 in the new unit have been sealed and have passed both parts of the air permeability test (leakage) [e mail from Peter Moir] In addition the sealing has been reviewed by JH using smoke testing who found no defects in Rm 18, a small defect in the ensuite of room 19 and a potential leak via the computer sockets in the bedhead services. These have now been rectified (DL).

Estates are now recording pressures 4 times per day and will take action should any problems occur.

Estates colleagues indicated that the seals should be effective for some time and they would have no concerns for up to a year. The need for regular PPM as per HPN was discussed.

Further proposed work

In the short term, timeframe to be identified, a further two rooms will be sealed to a standard required to pass both the air permeability test and visual inspection of seals to provide a fallback should problems occur with the ventilation in Rm 18 or 19.

In addition to sealing all of the rooms a program of additional work will be undertaken to adjust airflows in the room to ensure that the patient room and the ensuite are positive to the external void

Room Testing

Microbiological testing was discussed, the testing from 31st August showed 1 colony growing at 22C in the ensuite, further sealing has been undertaken in Rm 19 since the testing and sampling repeated on 4th September. After 3 days incubation

Room 18 - ensuite at 30 degrees incubation - 1 colony
- main at 22 degrees incubation - 1 colony

Room 19 - ensuite at 22 degrees incubation - 2 colonies
- main at 30 degrees incubation - 1 colony

Final results will be available at 7 days. The significance of the testing was discussed. In the context of a fully sealed room testing is useful as a prompt to review engineering, operational management and cleaning.

Cleaning of rooms 18 and 19 will increase and a chlorine clean will be used. Cleaning to the corridor will be increased and again chlorine will be used (PJ to liaise with Billy Hunter)
PJ will review SOP's for source isolation with nursing staff on Schiehallion to ensure rooms are used optimally.

Risk assessment

It was agreed that the risk to patients was higher if transplants were further delayed than proceeding in fully sealed rooms.

FW: Sealing of Suites within Childrens Hospital Ward 2A

Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)

Wed 09/09/2015 16:17

To: brian.jones[redacted]; Cruickshank Anne (NHS GREATER GLASGOW & CLYDE - SGA20)
[redacted]

Importance: High

Sensitivity Confidential

Dear both ,

I was asked by Craig yesterday to cover him on Friday - I was not told of any issues . I have just received the email thread below in relation to childrens BMT . I am particularly concerned about the phrase ;
'By this Friday at the latest I am looking for infection control to feed into the process where three way Director approval will be reached that rooms 18 and 19 are passed for transplanting.'

Once again I am being asked to make a major decision about patient safety with no handover and no involvement in the background to all of this .

I am not prepared to make this decision

Can you please advise me how to respond

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: McNamee, Sandra [redacted]
Sent: 09 September 2015 16:05
To: Redfern James (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: pamela.joannidis[redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); alison.balfou[redacted]
Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

Hi Jamie
I am acting up for Tom so could you cc me into any correspondence regarding this issue.

In response to your e mail:

- My understanding is that the ICDs who will give advice after reviewing the results of this weeks testing will be Dr. Alison Balfour (Thursday) or Dr T Inkster (Friday). We will let you know when these are available.
- Craig will be back on Monday and can advise on the testing of the other rooms due to be sealed next week.
- Pamela is meeting with Billy tomorrow to progress the issues regarding the cleaning of the unit.

Thanks
Sandra

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

A49525252

[redacted]

From: Hamilton, Pauline
Sent: 09 September 2015 15:41
To: McNamee, Sandra
Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

fyi

From: Redfern, Jamie
Sent: 09 September 2015 15:08
To: Joannidis, Pamela
Cc: Williams, Craig
Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

Hi Pamela

In Craig's absence will you and colleagues in infection control / microbiology be following up on actions set for him following Monday's meeting?
That is
- update on the pending microbiology test results in rooms 18 / 19 ward 2a rhc hopefully received today and fully reported by Friday?
- completion on test results of 2 additional rooms in ward 2a rhc which will be fully sealed next week 1 on the Wednesday and 1 on the Friday by Brookfield.
By this Friday at the latest I am looking for infection control to feed into the process where three way Director approval will be reached that rooms 18 and 19 are passed for transplanting.
We aim to start transplant of a patient next Monday so this timeline is absolutely key. If concerns around it I need to be made aware immediately.
Our aim as quick as possible is then to have the 2 further rooms fully sealed and passed by Brookfield/ estates and subsequently infection control to same standard of rooms 18 / 19.
This will require you guys as noted abobe to be able to do the necessary microbiology tests the minute sealing and permeability is finished on these two additional rooms. Again if this causes any concerns can you let me know.

Jamie

From: Redfern, Jamie
Sent: 09 September 2015 14:46
To: Armstrong, Jennifer; Archibald, Grant; Williams, Craig; Loudon, David
Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

Dear all

See attached email below which confirms that by next Friday I would hope all things being equal we move from 2 to 4 rooms in ward 2a fully sealed and with passed permeability testing completed. Prof Gibson is aware of this plan as is SCN for the ward.
I will keep you updated on progress of this and also liaise direct with microbiology around additional testing they will be looking to do on the newly sealed rooms. As also noted at end of next week we will then agree a timetable to have the 4 remaining rooms (out of the 8) in ward 2a sealed and tested.
The proposal to do additional estates work on say 2 of the 8 rooms (meet the LEeds spec) will require further discussion which estates colleagues agreed to take up direct with Gillon in the first instance.

Jamie

From: Redfern, Jamie
Sent: 09 September 2015 14:38
To: Hunter, William
Cc: 'Gillon Armstrong'; Dawes, Heather
Subject: RE: Sealing of Suites within Childrens Hospital Ward 2A

A49525252

Hi Billy

I did a walk round each ward area TODAY in RHC where sealing / permeability testing in cubicles remains outstanding.
Gillon has now met the senior charge nurse for each area and agreed a provisional plan for the majority of these rooms.
He seemed very happy with the progress we have made.
Included in this is a draft plan next week to seal and test two further rooms in ward 2a.
This would be 1 room Tuesday / Wednesday and the 2nd room Thursday Friday.
So by close of play next Friday we would aim to have 4 rooms sealed and tested in this ward as per agreement at Monday's meeting.
For the two additional rooms would then look for microbiology to do their additional testing.
At the end of next week we will review progress in 2a and look to agree a plan with Gillon to do the 4 remaining rooms in 2a and what remains outstanding across rest of hospital which should in effect be 2 rooms in critical care.
Hopefully this makes sense. Gillon is going to provide a spreadsheet which highlights this in a more structured fashion.
Cheers

Jamie

From: Hunter, William
Sent: 08 September 2015 09:19
To: Redfern, Jamie
Cc: 'Gillon Armstrong'
Subject: Sealing of Suites within Childrens Hospital Ward 2A

Jamie,

I have spoken to Gillon Armstrong this morning in connection with above and he is keen to complete the job of sealing all suites within ward 2A, to reflect the level of air permeability within which has been achieved within the two BMT suites.

Gillon, on behalf of Brookfield, requires access to these rooms and I had suggested that you may be best placed to arrange this. I also understand that you guys are scheduled to meet tomorrow therefore it would be helpful if access arrangements could be agreed which would then go some way to support our risk migration strategy as described last night by the Medical Director.

Can you please drop me an email to confirm that above request is ok.

Regards
Billy

William Hunter \ General Manager \ South & Clyde Sector Facilities Directorate \ NHS Greater Glasgow & Clyde \ New Laboratory Medicine & FM Building, Southern General Hospital \ Tel: [redacted]) \ Fax: [redacted] \ email: [redacted]

RE: Sealing of Suites within Children's Hospital Ward 2A

McNamee, Sandra [redacted]

Fri 11/09/2015 09:43

To Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]

Teresa - I have some additional information could you call me urgently.
kind regards
Sandra

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 10 September 2015 15:43
To: McNamee, Sandra
Cc: Joannidis, Pamela; Balfour, Alison; Jones, Brian
Subject: RE: Sealing of Suites within Childrens Hospital Ward 2A
Importance: High

Dear Sandra ,

I have not been involved in any discussions or attended any meetings regarding childrens BMT and I have not received a handover. This is a complex issue and, ideally, any decision should be made in conjunction with estates colleagues, Prof Williams (ICD for RHC) and Dr John Hood (local ventilation expert who has been closely involved).

Pamela, Alison and myself met today and reviewed the particle counts from Friday 4th September and these are still elevated in rooms 18 and 19 . Pamela has reviewed the unit today and has expressed concerns re practice and procedures. Pamela has also noted outside construction work in close vicinity to the unit.

Whilst particle counts are only one parameter , they would indicate that further investigations are necessary to ensure safety for patients. It would be helpful to have sight of the following ;

1) Validation reports including leak test results
2) Minutes from relevant previous meetings
3) The most recent report and recommendations from Dr Hood

In light of the information currently available to us , Alison, Pamela and I feel that we must err on the side of caution and cannot recommend that the unit is safe for transplant procedures.

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: McNamee, Sandra [redacted]
Sent: 09 September 2015 16:05
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Cc: pamela.joannidi[redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); alison.balfou[redacted]
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Sandra McNamee
Associate Nurse Director

Infection Prevention & Control
[redacted]

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Jamie

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Jamie

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Sent: 08 September 2015 09:19
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Cc: 'Gillon Armstrong'
Subject: Sealing of Suites within Childrens Hospital Ward 2A

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Can you please drop me an email to confirm that above request is ok.

Regards
Billy

William Hunter \ General Manager \ South & Clyde Sector Facilities Directorate \ NHS Greater Glasgow & Clyde \ New Laboratory Medicine & FM Building, Southern General Hospital \ Tel: [redacted] \ Fax: [redacted] \ email: [redacted]

Dear All

I Can now confirm the above meeting for **today at 12 Noon** in Jamie's Office, Ground Floor, Royal Hospital for Children, Govan Road, Glasgow.

Jamie's office is located off the main entrance. Passed Radio lollipop on the right hand said. Left at the patient information office and Jamie's office is second last door on the right.

Thank you.

Jacquie Bruce
PA to Kevin Hill, Director, Women & Children's Directorate and
Jamie Redfern, General Manager, Hospital Paediatrics & Neonatology
Zone 2, Area 2, Office Block
SGUH
Govan Road, Glasgow, G51 4TF
Tel: [redacted]
Email: [redacted]

PS. I've signed up to improving our email culture

From: Redfern, Jamie
Sent: 11 September 2015 08:40
To: McNamee, Sandra; Bruce, Jacquie
Cc: Hunter, William; Bruce, Jacquie
Subject: Bmt

Hi Sandra
I spoke to Grant earlier today.
He is not available just now
Can we meet urgently today with the microbiologist who was working on this yesterday with Billy Hunter to discuss bmt. We may have to meet Grant later. My secretary will try to coordinate.
In meantime I will also try to get a hold of Brenda Gibson.
Your help with this much appreciated.
Cheers
Jamie

Jacquie
Asap for today as early as possible can you liaise with Sandra and Billy to get us in my office to discuss. Sandra can link you to microbiologist. Check too if Alan is about. If not we need to go without him and I'll brief him later.
Cheers
Jamie

Sent from my Samsung device

Re: BMT service at Royal Hospital for Children

Mathers, Alan [redacted]

Fri 11/09/2015 16:32

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Cc: Gibson, Brenda [redacted]; Redfern James (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; brian.jones [redacted] Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Thanks : very helpful

Sent from my BlackBerry 10 smartphone on the EE network.

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)
Sent: Friday, 11 September 2015 15:58
To: Mathers, Alan; Williams, Craig
Cc: Gibson, Brenda; Redfern, Jamie; Jones, Brian; McNamee, Sandra
Subject: RE: BMT service at Royal Hospital for Children

Dear Alan,

Thanks for your email . I appreciate that this is a difficult risk assessment. Whilst I cannot comment on the haematological risk, from my perspective, based on available evidence as discussed this morning, I am unable to state that the rooms are microbiologically safe.

Antifungal prophylaxis is not 100% effective. Furthermore the efficacy of prophylaxis would be reduced in an environment with an increased fungal burden . The prevention of invasive fungal disease in SCT patients is achieved through a combination of both antifungal chemoprophylaxis and the provision of a clean air environment.

I hope this advice is useful and I would be happy to discuss further.

Please find attached a spreadsheet and lab reports of fungi grown from June onwards. We are awaiting mycology reports from fungi grown in August/September .

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor

Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Mathers, Alan [redacted]
Sent: 11 September 2015 14:53
To: Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: Gibson, Brenda; Redfern James (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: BMT service at Royal Hospital for Children

Dear Teresa,

Thanks for input today.
Appreciate that you were catapulted into a difficult situation.

"We" (ie local team) have to weigh up a whole range of risks as you appreciate from, in particular the acute patient situation. There is inherent mortality risk and this escalates with time passing and in addition the donor is being worked up and there is a risk that we lose them. So: risk assessment continues to evolve.

Would you be able to send a list of the fungi grown and the site and provide a view as to how effective anti-fungal prophylaxis would be (there is a Double prophylaxis option too)?

The use of another place in Glasgow (such as Beatson) is considered untenable for the patient foremost in our thoughts due to lack of Paediatric Intensive care.

A meeting on Monday will be convened and so info for then would be very helpful.

Appreciate if you can reply to all.

Kind regards

Alan

Dr Alan M Mathers
Chief of Medicine Women and Children
Consultant Obstetrician and Gynaecologist
Greater Glasgow and Clyde Health Board
PA: Janice.Hackett [redacted]
[redacted]
alternative: email [redacted]

Re: BMT RHC

McNamee, Sandra [redacted]

Mon 14/09/2015 08:25

To alan.mather[redacted]; Archibald Grant (NHS GREATER GLASGOW & CLYDE)[redacted]; Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE)[redacted];

Cc:Redfern James (NHS GREATER GLASGOW & CLYDE)[redacted]; Archibald Grant (NHS GREATER GLASGOW & CLYDE)[redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE)[redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE)[redacted]

Hi to be fair, additional information regarding the type of fungal spores became available between these conversations. Sandra
Sent from my BlackBerry 10 smartphone on the EE network.

From: Mathers, Alan
Sent: Monday, 14 September 2015 08:17
To: Archibald, Grant; Armstrong, Jennifer
Cc: Redfern, Jamie; McNamee, Sandra; Archibald, Grant
Subject: Re: BMT RHC

Dear All
I am doing a theatre list this morning at GRI and will be over for an already packed afternoon at RCH around 2pm providing theatre goes to plan.
I sense that none of the local measures that could be / are being put in place will militate against the risk that the majority bacteriological advice is providing and there is a matter of determining whose opinion trumps others: every time the advisory circle increases and different people are round the table there is more heat than light.

I was quoted very different risks from bacteriological about some of the organisms last Friday and obviously the context of how they might reach the patient is critical.
Kind regards

Alan

Sent from my BlackBerry 10 smartphone on the EE network.

From: Archibald, Grant
Sent: Monday, 14 September 2015 07:57
To: Armstrong, Jennifer

Cc: Mathers, Alan; Redfern, Jamie; McNamee, Sandra; Archibald, Grant
Subject: Re: BMT RHC

In on site now and this an if discussions are required

Grant Archibald
Chief Officer

On 14 Sep 2015, at 6:58 am, Armstrong, Jennifer [redacted] wrote:

> Just for clarity, what I asked for is that the estates team and the infection control team work together over the weekend to urgently address the issues identified in the unit. They would then put in place any additional measures to mitigate the risks. I was keen that we engender a sense of urgency to address the problem. However I note further meeting today so hopefully there may be some progress and review of all the data with a risk assessment of different courses of action.
> J
>
> Sent from my BlackBerry 10 smartphone on the EE network.
>
> **From:** Mathers, Alan
> **Sent:** Friday, 11 September 2015 17:52
> **To:** Redfern, Jamie; McNamee, Sandra
> **Cc:** Armstrong, Jennifer; Archibald, Grant
> **Subject:** RE: BMT RHC
>
> Dear Jamie,
>
> Just spoke with Brian Jones, listened and have advised him to organise further testing over weekend irrespective of any pre-conceived perceived doubts about value.
> He quoted different lethality of some of the Fungi described earlier in day but isn't hopeful for a bacteriology clean bill of health (no pun at all intended).
>
> Interim results from plates placed on Saturday would be available Wednesday / Thursday.
>
> Kind regards
>
> Alan
>
> **From:** Redfern, Jamie
> **Sent:** 11 September 2015 16:30
> **To:** McNamee, Sandra

Cc: Armstrong, Jennifer; Mathers, Alan; Archibald, Grant
Subject: BMT RHC

HI Sandra

I have just spoken to Jennifer A and she has asked that infection control be instructed to carry out further particle and fungi tests on cubicle 18 and 19 in RHC ward 2a over the weekend. She is also keen that we get the reported results on these tests as quickly as possible into next weekend preferably ahead of when the child arrives on Thursday night to hospital for treatment beginning on the Monday 21st. Can you please put the processes in place to make this happen and confirm to all ccd into this email when actioned. Thanks

Jamie

PS: I will try to follow this email up by phone call to you

FYI

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

Mark as unread

Redfern, Jamie [redacted]
Sat 24/10/2015 14:47
Brenda
I will arrange a meeting on Monday with you, Ian Powrie, jean, heather and Craig. Anyone who thinks they also need to be involved let me know.
Jamie

Sent from my Samsung device

-------- Original message --------
From: "Gibson, Brenda" [redacted]
Date: 24/10/2015 12:56 PM (GMT+00:00)
To: "Kirkwood, Jean" [redacted], "Powrie, Ian" [redacted], "Redfern, Jamie" [redacted], "Dawes, Heather" [redacted], "Williams, Craig" [redacted], "Inkster, Teresa (NHSmail)" [redacted], "Loudon, David" [redacted], "Kane, Mary Anne" [redacted], "Hunter, William" [redacted], "Ewins, Anna-Maria" [redacted], "Hutton, Melanie" [redacted]
Cc: "MacKinnon, Yvonne" [redacted]
Subject: RE: Critical care rooms

Sorry , I have just returned from Toronto but had heard about this problem before reading this e-mail. I have to join Jean Kirkwood in asking whether these rooms are fit for purpose. I have also been told that the negative pressure was first noted by a parent , which if true is unacceptable. I am aware that there has been a meeting about this issue , but would like another to understand the extent of the problem and the long term consequences.

B.W.

Brenda

Prof Brenda Gibson
Consultant Haematologist
Schiehallion Ward (Ward 2A)
Royal Hospital for Sick Children
1345 Govan Road
GLASGOW G51 4TF

Tel: [redacted] (work mobile)
Tel: 0141 -201 0000 (Switchboard) Page [redacted]
Tel: [redacted] (personal)

From: Kirkwood, Jean
Sent: 23 October 2015 09:24
To: Powrie, Ian; Redfern, Jamie; Dawes, Heather; Williams, Craig; Inkster, Teresa (NHSmail);Loudon, David; Kane, Mary Anne; Hunter, William; Ewins, Anna-Maria; Hutton, Melanie
Cc: MacKinnon, Yvonne; Gibson, Brenda
Subject: RE: Critical care rooms

Sorry, are these rooms fit for transplant patients to be in?

Many thanks
Jean

From: Powrie, Ian
Sent: 23 October 2015 08:08
To: Redfern, Jamie; Dawes, Heather; Kirkwood, Jean; Williams, Craig; Inkster, Teresa (NHSmail); Loudon, David; Kane, Mary Anne; Hunter, William
Subject: FW: Critical care rooms

Jamie,

Further to our discussion last night regarding ward 2a isolation bed room 18, which had lost its lobby positive pressure, as indicated the ventilation plant was reset and restored at approximately 18:00hrs.
However following this the ventilation plant for isolation bed room 19 failed, which I believe you are moving a transplant patient into this morning?
Unfortunately my team nor I could return this plant to service as the controls where holding it off line, I implemented our emergency call out procedure for Schneider control s support provider who returned to site by 21:00 hours, the during their investigations a further 4 ventilation supplying war 2A also failed in the manner, this is believed to be a network problem but could not be confirmed with the resources available last night. The 5 affected units where place in manual and the pressures set by hand for each isolation suite(at between 10 – 15pa) in order to maintain an isolation capability in these suites.

The isolation suites affected by this common fault are:

Isolation Bed No 10.
Isolation Bed No 11.
Isolation Bed No 20.
Isolation Bed No 19.
Isolation Bed No 18.

The engineer completed these works at 03:30 this morning, the Controls network engineer will investigate further this morning.
I will keep you up to date on progress made.

Regards

ian

[redacted]
Sector Estates Manager (South & Clyde)
Queen Elizabeth University Hospital Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,
Direct : [redacted]
Mob: [redacted]

From: Guthrie, James
Sent: 23 October 2015 05:33
To: Powrie, Ian
Subject: Critical care rooms

HI IAN,

Here is the list of the 36 isolation room figures. Most of the pressures look ok even though the guys say the filters are dirty but everybody interprets that differently.
The room pressures are still being taken daily in the critical care wards but 4 times a day in schiehallion and have been for a while.

The Schneider tech jim came out and also Paul the manager to help. They were here until 3.30 AM but had a lot of issues. While working on 41AHU 31 the lads were inspecting the system and found 2 more units beside this one to be off. Paul checked this and then a fourth and fifth went offline. They worked on it but it has baffled them. They believe but are not sure, there could be a network problem that has stopped the signal getting to the inverters to command them to start but still unsure. Subsequently we had to put the five AHUs on hand and have balanced the speed to get a good pressure. We are monitoring the pressures constantly and the guys are adjusting the frequency to do this. If we did not we would have had 5 rooms down. Paul is briefing Kenny when he comes in.The AHU`s that have been put on hand are:

41A AHU 19

41A AHU 23

41A AHU 26

41A AHU 29

41A AHU 31

I will email David a list of Filters required that are starting to run low.

Regards jim

Julie Rothney

From: Peters, Christine
Sent: 15 June 2015 13:55
To: Hamilton, Pauline
Cc: Wright, Pauline
Subject: RE: New Building

Ok will do,
Christine

From: Hamilton, Pauline
Sent: 15 June 2015 12:23
To: Peters, Christine
Subject: RE: New Building

Dear Christine

You can get this from Ian Powrie

Craig

From: Peters, Christine
Sent: 15 June 2015 10:08
To: Williams, Craig
Cc: Wright, Pauline
Subject: New Building

Hi Craig,
Do you have a summary of the ventilation specs of the various parts of the new building including the specialised ventilated rooms and the decon room in A+E as well as the respiratory clinics?

Thanks,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Peters, Christine
To: Inkster, Teresa (NHSmail)
Subject: RE: Decontam room _ anything to add?

Thanks Tom, great,
It would be useful to identify

1. A summary of the ventilation system, particularly with regard to the specialist rooms and the design attributes that went into the planning (presumably whoever signed off would have this?)
2. Which rooms have special ventilation and how these have been flagged up to bed managers for appropriate patient placements
3. Ventilation validation data prior to hospital opening
4. Ongoing monitoring and performance systems
5. Method of inspection for HEPAS and where these have been identified as being missing.
6. Communication structures around ventilation issues. Ian Powrie was not aware of air sampling going on in the suites in renal

Teresa may think of more questions

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Walsh, Tom
Sent: 24 June 2015 10:05
To: Peters, Christine
Cc: Inkster, Teresa (NHSmail); Williams, Craig; Joannidis, Pamela; McNamee, Sandra
Subject: RE: Decontam room

Hi Christine

I need to leave sharp today. I think it would perhaps be more useful to discuss this during the meeting to get input from SMT?

I'm not sure however we can, at this point, add much to the email David Bell sent this morning (as below), and the email from Craig suggesting checking the ventilation and HEPA filters.

I think we would benefit more from a coordinated meeting on this whole issue rather than multiple strands as David suggests.

KR

Tom

From: Bell, David
Sent: 24 June 2015 08:52
To: Lloyd, Mhairi; Peters, Christine; Hughes, Liz; Gordon, Jonny; Long, Jason
Cc: Powrie, Ian; Kennedy, Iain; Harkness, Anne; Joannidis, Pamela; Brown, Anthony
Subject: RE: VHF/Mers Preparedness

Christine,

Thanks

A lot of the issues you raised were discussed or noted last Friday when some of us met– Paeds ID, Paeds AE, Adult ID, Adult A&E. You were not aware of that meeting but I will make sure that you are involved in future meetings so we have Infection control input too. We need to avoid repeating ourselves or having parallel meetings about the same things. We had previous IC input at a previous meeting about the decontamination room back in May when Pamela Joannidis was present.

With regard to your specific points:

1. The ventilation specs have been forwarded to you now by Anne Harkness and these were previously OK'd by Craig Williams from IC. You can look at these yourself to see whether you agree. If the ventilation system is not currently working then that is something we were not aware of. Mhairi Lloyd has raised this with estates as a priority to fix as well as the water etc
2. The storage space / kit. We noted last Friday that there was excess chemical decontamination kit in the rooms and some of it is approaching expiry date. Anthony Brown, A&E ANP, has already contacted the suppliers to get these serviced, and then the plan is put together a common approach to chemical incidents between adults and paeds – see email below. Once this is done, the plan was to rationalise the decontamination kit and create more space in the room for the "Infection PPE". This would in turn allow the doffing room to be cleared. In an emergency now, we could clear the doffing room (there is not much in there) and there is space in the "donning" room to get the PPE on.
3. Monitoring kit – which could be disposed of, has been identified already by Mhairi

At the moment, the Brownlee PPE is all stored on 5C (the new ID ward). Liz Hughes has boxes of this packed and ready, and in the event of a VHF case now, we would bring this down to the Decon room. The boxes are packed with everything that is needed for the buddy and the team with the patient, and have checklists etc. **In the immediate term we would use that and so we are ready to use this now**. In the near future, the plan is to have a shared store of this in the room that Paeds and Adult A&E and ID teams would all train with and use.

The rooms are the best place to manage a ?VHF in the new hospital – this has been agreed by all

the teams who would actually have to look after the patients. The facility is better than we had at the Brownlee and Yorkhill. Hopefully your concerns about the ventilation can be addressed quickly.

We had planned to do a training exercise in the second half of July – lots of people are on leave from now for a couple of weeks including myself. We also need to expand and repeat the PPE training so that enough adult, A&E and Paeds staff are comfortable with this. Again this was discussed last week and Anthony and Mhairi and hopefully Liz Hughes were to meet to try to standardise this (Liz was not at the meeting)

MERS is a different issue – again the ventilation system is critical, as is the ventilation system in the 2 Medical HDU rooms that are isolation rooms. Can you find out if these have the filters and are suitable??? We had assumed that the HDU rooms were where we would manage resistant TB / MERS cases

I am on leave from tonight until July 6th. My ID colleagues are aware that the current ?VHF plan is to use the decontam room with the kit from 5C

David

From: Peters, Christine
Sent: 24 June 2015 09:18
To: Walsh, Tom
Cc: Inkster, Teresa (NHSmail)
Subject: FW: Decontam room

HI Tom,

Craig indicated to me that he had not had information on the ventilation systems and that I should liaise with Ian Powrie regarding this (see below and in conversations).

I would appreciate an opportunity to discuss this with you either before or after the SMT today.

Thank you,
Christine

From: Williams, Craig
Sent: 22 June 2015 12:15
To: Peters, Christine
Cc: Inkster, Teresa (NHSmail)
Subject: RE: Decontam room

Dear Christine

I've not got anything in writing, given experience elsewhere in the hospital I would go and physically check the presence of a HEPA filter and any magnahelics that are there. Any problems let me know

Craig

From: Peters, Christine
Sent: 22 June 2015 11:52
To: Williams, Craig
Cc: Wright, Pauline
Subject: FW: Decontam room

Hi Craig – see David Bell's note below regarding the decon room in A+E SGH – did you get info on the ventilation? If so I would like to see it. Thanks.

Christine

From: Bell, David
Sent: 19 June 2015 15:57
To: Peters, Christine
Subject: Decontam room

Christine

Just met with some of the A&E / Paeds staff regarding the decontamination room

I don't know if you have managed yet to see the room but your IC input would be very helpful – particularly around the ventilation system in the rooms. We were told that it was suitable (Craig Williams via. Anne Harkness). We also identified the A&E Triage area as a second ?Ebola patient area in the event that the decontamination room was unavailable.

The outcomes of today's meeting were:

1. To standardise the PPE that is used for Ebola and have it stored and ready in the decontam room. At the moment, A&E and ID order their own. We can then all train in the same kit
2. To ensure enough medical and nursing staff are fully trained to use the PPE
3. To do a practise run in the last week of July

I think you will soon receive an email from Mhairi Lloyd (A&E charge nurse) to invite you down to A&E to review the IC aspects of the plan

We also briefly talked about MERS. The A&E staff have apparently been mostly fit tested already for FFP3 masks. I will check that the same is also true in 5C with the ID staff

I will copy you into future Ebola / MERS correspondence.

David

Consultant in Infectious Diseases and General Medicine
South Glasgow University Hospital
1345 Govan Road
Glasgow
G51 4TF

Telephone:

Direct:
Secretary: [redacted]

From:	Peters, Christine on behalf of Peters, Christine
To:	Inkster, Teresa (NHSmail)
Subject:	RE: Transplant ventilation
Sent:	25/06/2015 11:57:00

Not sure why this was not asked before.

From: Inkster Teresa (NHS Greater Glasgow & Clyde) [redacted]
Sent: 25 June 2015 11:11
To: Peters, Christine
Subject: FW: Transplant ventilation

FYI
Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Hood, John [redacted]
Sent: 25 June 2015 11:07
To: Inkster Teresa (NHS Greater Glasgow & Clyde)
Subject: FW: Transplant ventilation

FYI
J

From: Hood, John
Sent: 23 June 2015 18:13
To: Williams, Craig; Powrie, Ian; Walsh, Tom
Subject: RE: Transplant ventilation

Dear Craig,
Sorry for delayed reply. My computer was changed last Chritmas and a decade of emails still reside in it that I cannot (easily) access. I have scanned in a document which includes the spec for the haematology BMT rooms in the top floor of the Beatson - Ian had already asked me this question some time ago and I pointed him in the direction of the Estates Dept at GGH - but as Mel Aitken left some years ago, the original commissioning details may be lost.
The other specifications that are not on this sheet are:

1. Sealed rooms (can't remember the leak allowed)
2. Waterproof paint throughout - particularly in toilet/shower areas
3. Plasterboard that has fungicide in it - in toilet/shower areas particularly
4. Positive pressure from room to corridor of at least 5 but as near 10 Pa as possible.
5. A clear **digital** read out of the pressure difference across the door (**not** a magnahelix guage)
6. The particle counts in these rooms when commissioned, cleaned and empty of people, should be certainly below 1000 particles of ≤0.5microns per cubic foot. Good ones should be 100 - 200 or less.

The second question about adult UK BMT units and 'non DH rooms' I cannot answer…..but suggest you talk to Peter Hoffman at PHE Colindale:
[redacted], Peter. Hoffman[redacted]

Hope that this helps.
Kindest regards
John

From: Williams, Craig
Sent: 19 June 2015 15:31
To: Hood, John
Cc: Powrie, Ian; Walsh, Tom
Subject: Transplant ventilation

Dear John

It appears that bone marrow transplants are being undertaken in ward 4B1 SGUH not in the lobbied side-rooms in the renal area where we thought that they would be done. The rooms on 4B1 have HEPA filtered inlets but no lobbies. Ian Powrie is currently trying determine which pressure gradients are in place. These rooms will offer less protection than the previous unit at the Beatson. Do you have the engineering specs for the Beatson, also do you know if any adult BMT units in the UK just have "non-DH" rooms.

Best wishes

Craig

Prof Craig Williams
Consultant Microbiologist RHSC Glasgow
Lead ICD NHSGGC
Professor of HAI UWS

t [redacted]
w www.uws.ac.uk/hai


WISH LIST
[redacted] - table
for BMT

BMT Accomodation

VENTILATION

	Required	Current	Action
Design	1.HEPA Filtration for high risk patients	HEPA filtration in each room , 2 rooms verbally reported NOT to be HEPA filtered	Brookfield to indicate which rooms are NOT HEPA filtered and high risk patients should not be placed in these rooms
	2. Positive Pressure in each room 5-10 Pascals in relation to corridor	Rooms on 4B NOT designed to be positive pressure	Measure pressure gradient
		No method of measuring pressure gradient is currently installed in any of the 4B rooms	????
		No anteroom	
		Corridor is NOT HEPA filtered	
		Prep room is NOT HEPA filtered	
	3. Air exchanges required to be >12ph	Verbally reported as 10ph	Need commissioning and validation data to confirm
	4. Sealed room (0.5-sq ft leakage)	Rooms not sealed	
		Not a solid ceiling	
	5. Clean to dirty airflow	?	
	6. Backup system in case of failure/ need to shut down and maintain main system	?	
	6. water resistant paint	Yes	
	6. Fungicidal plasterboard in bathroom and toilet	?	
Commissioning	JACIE standards dictate that following relocation	? ???Not readily available information at	

	qualification and validation must be performed to confirm new space meets standards. Design Spec for: Air velocity, Air-flow rates, room air-change rates, pressure differentials Measured systems out put to demonstrate meets design spec Microbiological Air testing Leak testing of rooms Filter testing	present ? ? Carried out 29/06/2015 Not done ?	
Monitoring	Daily : Visual airflow pattern indicator Daily records of pressure gradient System for failure alarms to be relayed to clinical staff Schedule for air testing – particle counts and Fungal culture	Not in place Not possible as not in design Not in design Commencing	
Maintenance	Schedules and Documentation for: Filter changes AHU drainage System cleaning Performance indication Performance measurement Record of any remedial work or changes to system	???	

References

FACT-JACIE Standards

HBN4- supplement 1

SHTM 03-01 Part A ,+ Part B

From: Peters, Christine
Sent: 01 July 2015 13:16
To: Jones, Brian; Parker, Anne; McQuaker, Grant; Campbell, Myra; Inkster, Teresa (NHSmail); Jenkins, Gary
Subject: RE: Transplant ventilation

Thank you Brian,
This is in agreement with the specifications that we outlined this morning,

Please find attached a summary of the specifications and current state of knowledge about what we have in place, pending further information becoming available this afternoon.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile: [redacted]

From: Jones, Brian
Sent: 01 July 2015 13:09
To: Parker, Anne; McQuaker, Grant; Campbell, Myra; Peters, Christine; Inkster, Teresa (NHSmail); Jenkins, Gary
Subject: FW: Transplant ventilation

FYI

From: Hood, John
Sent: 23 June 2015 18:13
To: Williams, Craig; Powrie, Ian; Walsh, Tom
Subject: RE: Transplant ventilation

Dear Craig,
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[redacted], Peter. Hoffman[redacted]

Hope that this helps.
Kindest regards
John

From: Williams, Craig
Sent: 19 June 2015 15:31
To: Hood, John
Cc: Powrie, Ian; Walsh, Tom
Subject: Transplant ventilation

Dear John

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Best wishes

Craig

Prof Craig Williams
Consultant Microbiologist RHSC Glasgow
Lead ICD NHSGGC
Professor of HAI UWS

t[redacted]
w www.uws.ac.uk/hai

From: Peters, Christine
To: Walsh, Tom; Inkster Teresa (NHS Greater Glasgow & Clyde); Wright, Pauline
Subject: FW: Meeting re Ventilation
Date: 26 June 2015 11:01:23

Hi Tom,
I have not had comments back from Ian and assume the notes below to be correct as sent out last night.

I have commenced work on a checklist of specifications and validation requirements for ventilation, however if you already have a document like this it may save some work!

My view is that until we have all the documentation in hand, particularly with regards to validation, it is difficult to make an adequate risk assessment regarding the suitability of the accomodation for BMT patients on 5B. Of note there has to date been no air sampling taken on this unit, and there is also a need for documentation regarding water standards - unless this is already in hand?

Although I am not in today I will be on my mobile [redacted] should you require any clarification,

kind regards,

Christine

From: Peters, Christine
Sent: 25 June 2015 18:31
To: Powrie, Ian
Cc: Inkster, Teresa (NHSmail)
Subject: Meeting re Ventilation

Hi Ian,
Thanks for your time today and for arranging the meeting today with David Hall and the rep from Brookfield (David?).

Please let me know any inaccuracies in my summary below before we circulate more widely
By way of a brief summary;

1. The whole building is mechanically ventilated – ie no natural ventilation
2. We identified that none of the Positive pressure Lobbied rooms have HEPA filtered supply, although there is space for them, if they are put in this would involve changing the supply and extract balance
3. None of the lobbied rooms have been leak tested
4. There is an extract in the bedroom (in roof) as well as in the toilet in the lobbied suites
5. The lobbied suites are 2 on the RENAL 4C, 8 on Critical Care
6. There is a pressure Gauge for visual checks on the lobbied rooms
7. There is an alarm system for AHU failure but this is not linked to nurses station
8. Most of the rooms on 5B Haematology oncology ward (where BMT patients are currently housed)have HEPA supply – except for 2 which we need to have identified. There is no HEPA supply to the corridor, or the prep room on this ward

9. The 5B rooms are not designed to be positive pressure rooms to 10Kpascals differential to corridor, and the air exchange rate we think is 10 ph
10. The commissioning and validation data on ventilation for any part of the hospital including theatres has not had infection control signoff
11. There is no easy to read collection of relevant documents for the specialist ventilated areas including design spec, commissioning and validation data
12. There is no ongoing monitoring system in place for every lobbied room that includes alerts to infection control
13. The light fittings used in the isolation suites in Shahallion are not sealed, allowing open access to the ceiling space which would account for the high particle counts experienced in these rooms
14. The air sampling in the renal ward lobbied rooms were in non HEPA filtered rooms, and air sampling has not been carried out in the Haematology rooms
15. The decontamination room was not designed as an isolation suite for highly infectious patients, and does not have a HEPA extract or negative pressure to 10Kpascals. A redesign for change of use would need to be undergone, including the drainage tank which currently needs specialist emptying

We agreed the following course of action:

1. Brookfield to help put together a folder of documents relating to ventilation to include design spec and validation data easily identified for each room
2. ICDs to discuss and agree on ideal specifications for specialist isolation requirements
3. Gap analysis to be carried out
4. Urgent remediation to the light fittings in Shehallion- but needs to be done paying attention to HAISCRIBE methodology and air testing carried out before being re- occupied
5. David Hall to discuss above issues with Project manager Mr Lowden.

Kind regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

All messages passing through this gateway are checked for viruses, but we strongly recommend that you check for viruses using your own virus scanner as NHS Greater Glasgow & Clyde will not take responsibility for any damage caused as a result of virus infection.

****

Hood, John

From: Hood, John
Sent: 23 June 2015 18:13
To: Williams, Craig; Powrie, Ian; Walsh, Tom
Subject: RE: Transplant ventilation
Attachments: 201506221110.tif

Dear Craig,
Sorry for delayed reply. My computer was changed last Chritmas and a decade of emails still reside in it that I cannot (easily) access. I have scanned in a document which includes the spec for the haematology BMT rooms in the top floor of the Beatson - Ian had already asked me this question some time ago and I pointed him in the direction of the Estates Dept at GGH - but as Mel Aitken left some years ago, the original commissioning details may be lost.
The other specifications that are not on this sheet are:

1. Sealed rooms (can't remember the leak allowed)
2. Waterproof paint throughout - particularly in toilet/shower areas
3. Plasterboard that has fungicide in it - in toilet/shower areas particularly
4. Positive pressure from room to corridor of at least 5 but as near 10 Pa as possible.
5. A clear digital read out of the pressure difference across the door (not a magnahelix guage)
6. The particle counts in these rooms when commissioned, cleaned and empty of people, should be certainly below 1000 particles of ≤0.5microns per cubic foot. Good ones should be 100 - 200 or less.

The second question about adult UK BMT units and 'non DH rooms' I cannot answer.....but suggest you talk to Peter Hoffman at PHE Colindale:
[redacted], Peter. Hoffman[redacted]

Hope that this helps.
Kindest regards
John

From: Williams, Craig
Sent: 19 June 2015 15:31
To: Hood, John
Cc: Powrie, Ian; Walsh, Tom
Subject: Transplant ventilation

Dear John

It appears that bone marrow transplants are being undertaken in ward 4B1 SGUH not in the lobbied side-rooms in the renal area where we thought that they would be done. The rooms on 4B1 have HEPA filtered inlets but no lobbies. Ian Powrie is currently trying determine which pressure gradients are in place. These rooms will offer less protection than the previous unit at the Beatson. Do you have the engineering specs for the Beatson, also do you know if any adult BMT units in the UK just have "non-DH" rooms.

Best wishes

Craig

Prof Craig Williams
Consultant Microbiologist RHSC Glasgow

Lead ICD NHSGGC
Professor of HAI UWS

t [redacted]
w www.uws.ac.uk/hai

Air sampling 5B nSGH

Inkster Teresa (NHS Greater Glasgow & Clyde)

Sent: 26 June 2015 10:51

To: Lavery Brian (NHS Greater Glasgow & Clyde); karen.culler[redacted]

Cc: Peters Christine (NHS Greater Glasgow & Clyde)

Hi Brian - as discussed earlier can we do particle counts and air sampling in the adult haematology ward on Monday 29th June - this is ward 5B. Can we check each of the rooms , corrdiors and outside air. I am on annual leave that day but if you could email the particle count results I will check on them from home.
Thanks
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

FW: Meeting re Ventilation

Peters, Christine [redacted]

Sent: 26 June 2015 11:00

To: Walsh Thomas (NHS Greater Glasgow & Clyde); Inkster Teresa (NHS Greater Glasgow & Clyde); Wright Pauline (NHS Greater Glasgow & Clyde)

Hi Tom,
I have not had comments back from Ian and assume the notes below to be correct as sent out last night.

I have commenced work on a checklist of specifications and validation requirements for ventilation, however if you already have a document like this it may save some work!

My view is that until we have all the documentation in hand, particularly with regards to validation, it is difficult to make an adequate risk assessment regarding the suitability of the accomodation for BMT patients on 5B. Of note there has to date been no air sampling taken on this unit, and there is also a need for documentation regarding water standards - unless this is already in hand?

Although I am not in today I will be on my mobile [redacted] should you require any clarification,

kind regards,

Christine

From: Peters, Christine
Sent: 25 June 2015 18:31
To: Powrie, Ian
Cc: Inkster, Teresa (NHSmail)
Subject: Meeting re Ventilation

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the air exchange rate we think is 10 ph

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5. David Hall to discuss above issues with Project manager Mr Lowden.

Kind regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

LF 220

AIR SAMPLING REQUEST FORM

LOANHEAD 4B SOUTH

SAMPLED BY : KC/AM
DATE: 29/6/15

Read by.....
Date.....

LOCATION 4B NSGUH

SOURCE	LABORATORY NO.	GROWTH ON SAB 7 DAYS 22°C	GROWTH ON SAB 7 DAYS 30°C	GROWTH ON TSA 7 DAYS 30°C	CUMULATIVE (Ave) PARTICLE COUNTS 0.5µm	ORGANISM ISOLATED (COMMENT)
R90	15.1901458.S				960	EMPTY
R91	15.1901459.Z				5931	
R92	15.1901460.R				2611	
R93	15.1901461.D				5440	
R94	15.1901462.S				1468	
R95	15.1901463.Z				2354	
R96	15.1901464.Q				579197	

Signed by..... Checked by..... Date .....

Address : Clinical Microbiology, New Lister Building, Alexandra Parade, Glasgow G32 2ER Tel : 0141 201 8546

A49525252

LF 220

AIR SAMPLING REQUEST FORM

LAND 4B SGUH

SAMPLED BY : KL/SC
DATE: 29/6/15

Read by.....
Date.....

LOCATION 4B NSGUH

SOURCE	LABORATORY NO.	GROWTH ON SAB 7 DAYS 22°C	GROWTH ON SAB 7 DAYS 30°C	GROWTH ON TSA 7 DAYS 30°C	CUMULATIVE (Ave) PARTICLE COUNTS 0.5µm	ORGANISM ISOLATED (COMMENT)
R97	15.1901465.H				164255	FIRST SAMPLE
R97	15.1901466.W				113112	SECOND SAMPLE
R98	15.1901467.A				11313	
R99	15.1901468.C				3592	
CORRIDOR NEAR R90	15.1901469.K				18479	
CORRIDOR NEAR R97	15.1901520.J				17161	

Signed by..... Checked by..... Date .....

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A49525252

LF 220

AIR SAMPLING REQUEST FORM

WARD 4B SGUH

SAMPLED BY : KC/SL
DATE: 24/6/15

Read by.....
Date.....

LOCATION 4B NSGUH

SOURCE	LABORATORY NO.	GROWTH ON SAB 7 DAYS 22°C	GROWTH ON SAB 7 DAYS 30°C	GROWTH ON TSA 7 DAYS 30°C	CUMULATIVE (Ave) PARTICLE COUNTS 0.5µm	ORGANISM ISOLATED (COMMENT)
WARD 4B R83	15.1901451.P				7621	
R84	15.1901452.F				N/A	NOT SAMPLED DOORS WIDE OPEN
R85	15.1901453.T				970	
R86	15.1901454.M				2785	
R87	15.1901455.V				2503	INVISION STAFF PRESENT
R88	15.1901456.R				1645	
R89	15.1901457.D				1072	

Signed by..... Checked by..... Date .....

Address : Clinical Microbiology, New Lister Building, Alexandra Parade, Glasgow G32 2ER Tel : 0141 201 8546

A49525252

LF 220

AIR SAMPLING REQUEST FORM

WARD 4B SGUH

SAMPLED BY : KC/SK
DATE: 29/6/15

Read by.....
Date.....

LOCATION 4B NSGUH

SOURCE	LABORATORY NO.	GROWTH ON SAB 7 DAYS 22°C	GROWTH ON SAB 7 DAYS 30°C	GROWTH ON TSA 7 DAYS 30°C	CUMULATIVE (Ave) PARTICLE COUNTS 0.5µm	ORGANISM ISOLATED (COMMENT)
WARD 4B R76	15.1901444.N				4658	1 VISITOR
R77	15.1901445.E				2475	CHIROPODIST PRESENT
R78	15.1901446.Y				1129	
R79	15.1901447.P				1850	
R80	15.1901448.F				4211 ~~2769~~	GMPM
R81	15.1901449.T				2769	1 VISITOR 1 STAFF PRESENT
R82	15.1901450.Y				4391	

Signed by..... Checked by..... Date .....

Address : Clinical Microbiology, New Lister Building, Alexandra Parade, Glasgow G32 2ER Tel : 0141 201 8546

A49525252

From: Barmanroy, Jackie
Sent: Tuesday, 30 June 2015 16:06
To: Peters, Christine
Cc: Inkster, Teresa (NHSmail); Joannidis, Pamela; Walsh, Tom
Subject: RE: Haem-onc

Sorry Christine, I'm at the lead nurses meeting all morning tomorrow.

Regards,
Jackie.

Jackie Barmanroy
Senior Nurse Infection Control
New Office Accomodation Block
South Glasgow University Hospital/Royal Hospital for Sick Children
Tel: [redacted] or [redacted].

From: Peters, Christine
Sent: 30 June 2015 16:06
To: Barmanroy, Jackie
Cc: Inkster, Teresa (NHSmail); Joannidis, Pamela; Walsh, Tom
Subject: RE: Haem-onc

Hi Jackie,

Would you be able to attend a meeting tomorrow at 10 am tomorrow up at 4B regarding the design and provision of the BMT accommodation.

Regards,
Christine

From: Walsh, Tom
Sent: 30 June 2015 15:57
To: Peters, Christine
Cc: Inkster, Teresa (NHSmail); Joannidis, Pamela
Subject: Re: Haem-onc

Hi Christine

I can't make it. Might be useful to include Jackie Stewart?

T

Sent from my BlackBerry 10 smartphone.

From: Peters, Christine
Sent: Tuesday, 30 June 2015 15:49
To: Walsh, Tom
Cc: Inkster, Teresa (NHSmail)
Subject: Haem-onc

Hi Tom,

Update re BMT rooms: we have organised a meeting tomorrow with Garry Jenkins, Ian Powrie and Myra Campbell regarding the current accommodation on the BMT unit.
We plan to raise all the issues I have already forwarded to you with regard to ventilation as well as water testing.

A49525252

RE: Haem-onc

Peters, Christine [redacted]

Tue 30/06/2015 16:18

To: Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Barmanroy, Jackie [redacted]

Cc: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; pamela.joannidis [redacted]

HI Tom,

This meeting has come from the clinical team, Myra has escalated to Garry and it is dependent on his availability. The particle counts from yesterday were up to 579 x the upper limits in some rooms, and this has raised the level of concern markedly. There is a need to rapidly risk assess and ensure all the team are in possession of the information that we now have regarding the ventilation to ensure the best patient placement possible with current arrangements.

Would it be possible for one of the leads to miss the leads meeting?

Regards,

Christine
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Walsh, Tom
Sent: 30 June 2015 16:13
To: Barmanroy, Jackie; Peters, Christine
Cc: Inkster, Teresa (NHSmail); Joannidis, Pamela
Subject: Re: Haem-onc

Hi Christine

Ideally I'd prefer a lead or senior ICN at the meeting.

Happy for the meeting to go ahead but I wondered if we could perhaps arrange when we can have ICN input or until the original meeting planned for next Tuesday?

Tom

Sent from my BlackBerry 10 smartphone.

A49525252

Is there anything further you would like to have discussed and would you be able to attend – it is at 10 am at ward 4B?

Regards,

Christine

Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

Specifications and commissioning data

Peters, Christine [redacted]

Sent: 01 July 2015 18:23

To: peter.moir[redacted]

Cc: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20); Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20)

HI Peter,

Following on from the meetings this afternoon we would be grateful if the infection control team could be provided with the following information:

As a priority :

1. Design Specifications for ventilation (pressures, air exchange, permeability, filters, supply and extract locations) for
   - The whole of ward 4B
   - The positive pressured lobbied rooms on level 4 and in critical care
   - The decon room in A+E
   - Schallion in the new childrens' hospital

2. Commissioning and Validation data for the above areas including
   - Filter testing
   - Permeability testing of rooms
   - Air exchanges
   - Pressure gradient measurements

We will request information on other areas in the near future.
Thank you for your help in this matter.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile: [redacted]

Particle Counts ward 4B SGUH 2/7/15

Lavery, Brian [redacted]

Fri 03/07/2015 08:18

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Cc:Karen.culler[redacted] [redacted] brian.jones[redacted] [redacted]
Mallon, John [redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20)
[redacted];

1 attachment

Particle Counts 4B SGUH.pdf;

Hi Teresa
Here is the report of the particle counts performed in Ward 4B yesterday 2/7/15

Regards

Brian Lavery/Karen Cullen
Technical Manager / IT Manager
Microbiology Department
New Lister Building
Glasgow Royal Infirmary
Alexandra parade
Glasgow G31 2ER

LF 220

AIR SAMPLING REQUEST FORM

SAMPLED BY : KC/BC
DATE: 2/7/15

Read by LW
Date 2/7

LOCATION New SGUH 4B

SOURCE	LABORATORY NO.	GROWTH ON SAB 7 DAYS 22°C	GROWTH ON SAB 7 DAYS 30°C	GROWTH ON TSA 7 DAYS 30°C	CUMULATIVE (Ave) PARTICLE COUNTS 0.5µm	ORGANISM ISOLATED (COMMENT)
Rm 85	15.1901560.B				1074	
Rm 84	15.1901561.X				521	
Rm 83	15.1901562.L				892	
Rm 82	15.1901563.G				729	
Rm 81	15.1901564.N				378	
Rm 80	15.1901565.E				2260	2 visitors
Rm 79	15.1901566.Y				2077	

Signed by: [redacted] (ASBMS) Checked by..... Date 2/7/15

Address : Clinical Microbiology, New Lister Building, Alexandra Parade, Glasgow G32 2ER Tel : 0141 201 8546

A49525252

LF 220

AIR SAMPLING REQUEST FORM

SAMPLED BY : KC/BL
DATE: 2/7/15

Read by... MM
Date... 2/7

LOCATION New SGUH 4B

SOURCE	LABORATORY NO.	GROWTH ON SAB 7 DAYS 22°C	GROWTH ON SAB 7 DAYS 30°C	GROWTH ON TSA 7 DAYS 30°C	CUMULATIVE (Ave) PARTICLE COUNTS 0.5µm	ORGANISM ISOLATED (COMMENT)
Rm 92	15.1901553.C				1637	
Rm 91	15.1901554.K				1789	
Rm 90	15.1901555.J				255	
Rm 89	15.1901556.B				1522	2 visitors
Rm 88	15.1901557.X				1095	1 visitor
Rm 87	15.1901558.L				3195	Domestic damp cleaned floor.
Rm 86	15.1901559.G				2660	room Empty.

Signe[redacted] (Assms) Checked by..... Date 2/7/15

Address : Clinical Microbiology, New Lister Building, Alexandra Parade, Glasgow G32 2ER Tel : 0141 201 8546

A49525252

LF 220

AIR SAMPLING REQUEST FORM

SAMPLED BY: MC/BL
DATE: 2/7/15

Read by: MC
Date: 2/7

LOCATION: New SGUH 4B

SOURCE	LABORATORY NO.	GROWTH ON SAB 7 DAYS 22°C	GROWTH ON SAB 7 DAYS 30°C	GROWTH ON TSA 7 DAYS 30°C	CUMULATIVE (Ave) PARTICLE COUNTS 0.5µm	ORGANISM ISOLATED (COMMENT)
Rm 78	15.1901567.P				1108	~~Room~~ Empty
Rm 77	15.1901568.F				504	
Rm 76	15.1901569.T				462	
Corridor	15.1901570.Y				61,452	Corridor at Rm 98

Signed by: [redacted] (ASBMS) Checked by: ..... Date: 2/7/15

Address: Clinical Microbiology, New Lister Building, Alexandra Parade, Glasgow G32 2ER Tel: 0141 201 8546

A49525252

LF 220

AIR SAMPLING REQUEST FORM

SAMPLED BY: KC/BL
DATE: 2/7/15

Read by... KC
Date..... 2/7

LOCATION New SGUH 4B

SOURCE	LABORATORY NO.	GROWTH ON SAB 7 DAYS 22°C	GROWTH ON SAB 7 DAYS 30°C	GROWTH ON TSA 7 DAYS 30°C	CUMULATIVE (Ave) PARTICLE COUNTS 0.5µm	ORGANISM ISOLATED (COMMENT)
Rm 99	15.1901546.H				1468	Empty
Rm 98	15.1901547.W					Requested by S/N NOT TO BE DONE.
Rm 97	15.1901548.A				246,552	1 visitor
Rm 96	15.1901549.C				1221	1 visitor
Rm 95	15.1901550.H				2293	Empty.
Rm 94	15.1901551.W				632	
Rm 93	15.1901552.A				903	

Signed by [redacted] (ASBMS) Checked by..... Date 2/7/15

Address : Clinical Microbiology, New Lister Building, Alexandra Parade, Glasgow G32 2ER Tel : 0141 201 8546

A49525252

RE: Ventilation BMT Unit

Walsh, Tom [redacted]

Fri 03/07/2015 13:28

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Campbell Myra (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]

Cc: pamela.joannidis [redacted]; Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; brian.jones [redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Thanks Teresa

Patient safety has to be our number one priority..

Can I just be absolutely clear, as this obviously has major implications,.... although the situation has improved, we still consider the environment to be a significant infection risk to BMT patients and there is no viable alternative to us recommending the patients are relocated?

Gary I've tried to contact you by telephone. Clearly your call, but from my perspective the sooner we can meet and discuss and, (if required), escalate this the better.

KR

Tom

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 03 July 2015 12:55
To: Walsh, Tom; Jenkins, Gary; Campbell, Myra
Cc: Joannidis, Pamela; Peters, Christine; Jones, Brian
Subject: RE: Ventilation BMT Unit

Based on what we know so far and following discussion with Dr John Hood we will be recommending transfer back to the Beatson as we know that that unit is safe in terms of air and water quality. However the final decision will lie with the clinical team due to the risk associated with lack of HDU/ICU facilities on the Gartnavel site .
Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Walsh, Tom [redacted]
Sent: 03 July 2015 12:41
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Jenkins Gary (NHS GREATER GLASGOW & CLYDE -

A-495252502

FW: Ventilation BMT Unit

Jones, Brian [redacted]

Fri 03/07/2015 14:50

To: Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Campbell Myra (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Parker, Anne [redacted]; Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

FYI

From: Jones, Brian
Sent: 03 July 2015 14:49
To: Walsh, Tom
Subject: RE: Ventilation BMT Unit

Thanks Tom.

I think Christine's email represents an accurate summary of the current situation.

It is clear that the environment is sub-optimal for the appropriate care of highly immunocompromised patients. I understand your concerns and appreciate the implications of any recommendation to move patients - it will be a difficult decision to take and will require an assessment by the committee of all the risks.

Brian

From: Walsh, Tom
Sent: 03 July 2015 14:10
To: Jones, Brian
Subject: FW: Ventilation BMT Unit

Brian

Email from Christine and Teresa. I have some concerns regarding the implications of the recommendation to move the patients.

Tom

From: Peters, Christine
Sent: 03 July 2015 13:35
To: Peters, Christine; Walsh, Tom; Jenkins, Gary; Campbell, Myra
Cc: Joannidis, Pamela; Inkster, Teresa (NHSmail)
Subject: RE: Ventilation BMT Unit

Hi all,

From the ICD and microbiology point of view:

Current SItuation

A49525252

Currently Allograft BMT patient are accomodated on 4B at the new southern General.

Parameters for Quality of Air

1. Air Exchanges: verbal report of 6ph - ICT have no written data to confirm this (ideally 12ph required)
2. Pressure Differential between rooms and corridor - verbally reported to be at just above 5 - ICT have no written data on comissioning values or new values after alteration to AHU, however this would meet the 5-10 target if sustained
3. Particle counts on 2/7/14 still above upper limit of 1000 in 12 rooms, corridor (which has extract only and is negative to rooms but positive to rest of hospital) particle count of >61452
4. Fungal sample plates from 29/06 from rooms have fungi growing through - too early to speciate
5 HEPA filters: ICT do not have comissiong data - efficiency not tested to date
6. Ceiling have non sealed tiles

Monitoring
1. No means to constantly monitor pressure differentials either locally or centrally
2. No water testing yet carried out to our knowledge - this has been requested 26/07

Water Quality

1. ICT do not have written specifications ? filtered water ? legionella testing results

In summary we are not in a position to assure safety of the 4B environment for the patients in terms of water borne or air borne infections particularly with the knowledge that there are massive demolition and building works ongoing on the site. This will need to be weighed by clinical colleagues against other risks in relocating as Teresa has indicated. We are aware that the Beatson facility is safe with regard to air and water quality.

regards,

Christine

From: Peters, Christine
Sent: 03 July 2015 12:18
To: Walsh, Tom; Jenkins, Gary; Campbell, Myra
Cc: Joannidis, Pamela; Inkster, Teresa (NHSmail)
Subject: RE: Ventilation BMT Unit

HI Tom ,
I am concerned that although there has been a considerable iimprovement in the particle counts , the room counts in half the rooms are still above the accepted upper limit and the corridor counts are very high. We would not expect any further improvements if no further changes are made to ventilation parameters.
I think it would be It would be useful to go ahead with a meeting to fully assess the new situation.
regards,
Christine

From: Walsh, Tom
Sent: 03 July 2015 12:14
To: Jenkins, Gary; Campbell, Myra
Cc: Joannidis, Pamela; Inkster, Teresa (NHSmail); Peters, Christine
Subject: FW: Ventilation BMT Unit

Hi Gary, Myra

Very useful and focused meeting yesterday. We have the attached interim results from the air sampling following the initial engineering changes agreed yesterday and Pamela is confirming the increased cleaning regime.

More than happy to meet today but I was thoughtful as to whether this constituted sufficient immediate "step change" in improvement for the clinical team at this point?

I wondered if there was value in postponing and evaluating continued improvement on Monday when the engineering/ ventilation/ cleaning changes had time to more fully "bed in"?

KR

Tom

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 03 July 2015 09:51
To: Walsh, Tom; Peters, Christine
Cc: Joannidis, Pamela
Subject: RE: Ventilation BMT Unit

Hi Tom . I have attached the particle counts which were performed yesterday afternoon . I have been told verbally that the pressure was increased to 5.2 PA (acceptable range 5-10PA) but I have not seen written evidence for this.

As you can see the particle counts are better and that 9 out of 24 rooms are now <1000 . The questions/ issues we still have here is how long can the pressure be maintained at a higher level and how do we know if the pressure fails as we have no alarm system on the unit. Also I have no info on air changes per hour and whether these have been increased. We are also still waiting to see the validation reports which Christine requested after the meeting on Wednesday.

The decision that needs to be made is whether we can accept this ventilation in the short term but we do not have all the info we require to make this decision as yet.

Further particle counts are being done this morning and I will update you after that. I agree 4pm on a Friday is not a good time for a meeting.

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Walsh, Tom [redacted]
Sent: 03 July 2015 08:31
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: pamela.joannidis[redacted]
Subject: FW: Ventilation BMT Unit

Hi Christine, Teresa

Please let me know of any updates/ results for the BMT.

4pm feels a bit late for a meeting if there is a possibility of moving back to the Beatson (hopefully not required)

Thanks

A49525252

Tom

From: Campbell, Myra
Sent: 02 July 2015 15:54
To: Jenkins, Gary; Jones, Brian; Peters, Christine; Inkster, Teresa (NHSmail); Powrie, Ian; Moir, Peter; Walsh, Tom; Barmanroy, Jackie; Joannidis, Pamela; Parker, Anne; Irvine, David; McArdle, Agnes; McLaughlin, Marie; Meehan, Laura; Loudon, David
Subject: Ventilation BMT Unit

Tomorrows meeting will be held in 4th floor meeting room WS4-033 at 4pm.

Ian , could you please inform David Hall and David Alexander.

Thank you for your expert input which is invaluable,
Regards,
Christine

From: Hood, John
Sent: 03 July 2015 15:57
To: Peters, Christine; Inkster, Teresa (NHSmail); Jones, Brian
Subject: RE: BMT rooms: for your comments
Importance: High

Dear All,

With my experience of both the design and commissioning of the BMTUs in both GRI in 1999 and the top floor of the Beatson in 2007/2008 I would not have allowed patients into these units on the basis of the essentially unverified and worrying information shown below. My experience with the Beatson was that the contractor had the spec of the unit signed off by 'someone' in the trust as being OK. I did pressure measurements myself and particle counts etc which essentally showed that none of the rooms were to any extent positively pressurised. The contractor eventually accepted this but it took 1 year for everything to be OK as they had not put powerful enough air handlers in to do the job and had to replace them.
Others need to realise that picking individual parameters and saying that they are better or OK do not understand that it is all of these parameters that need to be right. Aspergillus control is not only about HEPA filtration but also air changes to dilute and remove and a **consistent** flow of air from the room to the corridor - this will be dependent not only in more air in than out but also that the room is sealed to a reasonable level.
It is also my view that all of these things need to be well and truly sorted prior to putting at risk patients in them as clearly trying to sort them out with at risk patients there will give you even more issues of controlling the environment during the process.
On that basis if there are existing units still available in the city that can guarantee appropriate control of air and water then the patients should be there until the same guarantee exists in the new rooms. But clearly the clinicians need to decide whether the risk of not having ITU/HDU on site is greater than the perceived risk of using the rooms in there present, essentially unverified state.

John Hood
Consultant Microbiologist
GRI

From: Peters, Christine
Sent: 03 July 2015 12:56
To: Inkster, Teresa (NHSmail); Jones, Brian; Hood, John
Subject: BMT rooms: for your comments

I would value your comments on this summary of the current situation to be sent to Tom Walsh and Garry Jenkins.

Current SItuation

Currently Allograft BMT patient are accomodated on 4B at the new southern General.

Parameters for Quality of AIr

1. AIr Exchanges: verbal report of 6ph - ICT have no written data to confirm this
2. Pressure Differential between rooms and corridor - verbally reported to be at just above 5 - ICT have no written data on comissioning values or new values after alteration to AHU
3. Particle counts on 2/7/14 still above upper limit of 1000 in 12 rooms, corridor (which has extract only and

is negative to rooms but positive to rest of hospital) particle count of >61452
4. Fungal sample plates from 29/06 from rooms have fungi growing through - too early to speciate
5 HEPA filters: ICT do not have comissiong data - efficiency not tested to date
6. Ceiling have non sealed tiles

Monitoring
1. No means to constantly monitor pressure differentials either locally or centrally
2. No water testing yet carried out to our knowledge - this has been requested 26/07

Water Quality

1. ICT do not have written specifications ? filtered water ? legionella testing results

It is my view that we are not in a position to say that the risk of fungal infection has been lowered to a level that would make us comfortable. However this has to be weighed against all the other clinical risks associated with moving the patients out.

IN terms of remedial actions to be taken, I think it will require a multi disciplinary team to fully deliniate what the expectations should be for the facilities on the unit and then an options appraisal of how best to accomplish this - ie having patients in the unit or moved back to a location that is know to be safe and can be monitored - ie old Beatson.

regards,
Christine

Re: response to poor environmental quailty

Parker Anne (NHS GREATER GLASGOW & CLYDE - SGA20)

Sun 05/07/2015 17:46

To:Jones Brian (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Cc:Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Thanks - my colleagues who are not on annual leave are happy. Haven't spoken to Gary yet plan to do so tonight and will specifically name Theresa and Christine as infection control team.
Very happy to put brief statement from CDc in. Feel we need to present way forward
Anne

Sent from my iPhone

On 5 Jul 2015, at 17:11, Jones Brian (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted] wrote:

> Anne
> This is good. Might be worth including CDC specs for the rooms - Teresa/Christine can you provide please?
> As the microbiologist for the programme I would like to be a signatory.
> Thanks
> BJ
>
> Sent from my iPhone
>
> On 5 Jul 2015, at 12:18, Parker Anne (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted] wrote:
>
> > Any thoughts? How drive to wigan went OK.
> >
> > Sent from my BlackBerry 10 smartphone on the EE network.
> > **From:** Parker Anne (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
> > **Sent:** Sunday, 5 July 2015 09:43
> > **To:** Mcquaker Ian (NHS GREATER GLASGOW & CLYDE - SGA20); Clark Andrew (NHS GREATER GLASGOW & CLYDE - SGA20); Irvine David (NHS GREATER GLASGOW & CLYDE - SGA20); Macdonald Ian (NHS GREATER GLASGOW & CLYDE - SGA20); Loudon Gail (NHS GREATER GLASGOW & CLYDE - SGA20); Hart Alistair (NHS GREATER GLASGOW & CLYDE - SGA20); anne.morrison[redacted]
> > **Subject:** response to poor environmental quailty
> >
> > I would propose sending the attached along with the following email to David Dunlop, Rachel Green, Dave Stewart and Jennifer Armstrong. I will discuss with Gary before I do so and will not send if you feel this is inappropriate. Please feel happy to comment and change
> >
> > Dear
> > We are sure you are aware of the current concerns with regard to environmental quality on Ward 4B1. We attach our analysis of the situation and recommendations to help resolve this. We would like to thank the representatives of infection control present at several meetings for their analysis of the situation and work to provide data, which has enabled us to reach these conclusions and the Regional Services management team for their prompt recognition of the potential consequences and their handling of the situation. We are keen to ensure that the move back to the Beatson is for as limited a time as possible
> >
> > regards
> >
> > Dr Anne Parker MD, FRCP, FRCPath
> > Consultant Haematologist
> > Beatson, West of Scotland Cancer Centre
> > Great Western Rd
> > GLASGOW
> > G12 0YN

A49525252

Tel [redacted]
Fax [redacted]

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<Response to Environmental Quailty.docx>

Situation

The South Glasgow clinical haematology and Scottish adult allogeneic transplant in patient service have moved into potentially unsafe accommodation, for this particular patient group, in the new facilities at the Queen Elizabeth University Hospital, Glasgow. This is following on from advice given by infection control that the safety of the environment for immune-compromised patients in terms of water and air quality cannot be guaranteed in the new accommodation on Ward 4B1, QEUH.

Background

All haemato-oncology patients are potentially at risk because of a poor quality environment, but the patients at highest risk are those undergoing allogeneic transplant, closely followed by those receiving high dose chemotherapy with stem cell rescue and acute leukaemia induction. There are a number of standards set for these patient groups and the following are pertinent to the current situation.

The NICE guidelines for Improving Outcomes for haematological cancer (2003) states that acute leukaemia patients should have access to

- In-patient unit that minimises airborne microbial contamination.
- For isolation: a number of single rooms with en-suite facilities. All patients receiving induction therapy or other high-dose chemotherapy should be housed in single rooms with en-suite facilities.
- Full haematology and blood transfusion laboratories on site. Rapid availability of blood counts and blood products including products such as CMV seronegative and gamma-irradiated blood components

The Bone Marrow Transplant standards are set by JACIE in the 6th edition standards

- *B2.1 There shall be a designated inpatient unit of appropriate location and adequate space and design that minimizes airborne microbial contamination.*
- *B2.6 There shall be written guidelines for communication, patient monitoring, and prompt transfer of patients to an intensive care unit or equivalent when appropriate.*
- *B2.13 There shall be an intensive care unit or equivalent coverage available.*
  Explanation: The Clinical Program must have documentation that there is ready access to an ICU or equivalent coverage in an immediate fashion for its patients when appropriate. This requires the ability to provide multisystem support including assisted respiration. Ordinarily, this would be within the institution but contractual arrangements with another institution may be considered if transfer procedures are in place to ensure prompt service and patient safety.

The SGH team moved at the end of April from old suboptimal accommodation with 14 beds on ward 24 to purpose built single rooms with en suite facilities.

The transplant team moved on June 6 from the Beatson, which had a long track record of excellent accommodation in terms of patient support, air and water quality. The team knew that following the move there would be some compromise in environmental quality, due to lack of negatively pressured anterooms. However, the transplant team were assured that the quality of environmental care provided would be sufficient for their populations needs and met regulatory standards. After consideration, the BMT team felt that the move provided a significant gain in quality of care for transplant patient's due to co-location with acute specialties and critical care support. In addition, the award of national service designation for allogeneic transplantation meant that the transplant team required additional bed spaces which were not available in the Beatson facility. It was understood that, prior to the move of the 2 services, the accommodation had the appropriate specifications for the allogeneic BMT patient population and during commissioning validation had had been carried out to ensure that these specifications had been met,. There was no indication at any time prior to the move, to either team or Regional Services management, that there were any problems with the specification or post commissioning validation. The team were reassured during a visit to the ward that the air handling system had central monitoring and was fit for purpose.

The first indication of possible problems was in the week of June 8th when an email was received by Dr Anne Parker, indicating that the 2 rooms with ante-rooms in the renal unit were not functioning to the expected level of air quality. On review, neither room was being used appropriately with

doors shut, but the BMT team were not intending to use the rooms and no concerns about other areas were raised. However, this was not the case after the meeting on Wednesday July 1st, when it became clear that none of the rooms on ward 4B1 came close to the standards required to provide a safe environment for highly immuno-compromised patients. It was agreed that remedial action would be taken and the meeting reconvened on Friday July 3rd at 4pm. At this meeting it became clear that neither water nor air quality of an appropriate standard could be guaranteed, and that major works would be required to achieve this.
As part of the move all allogeneic in-patients had an increase in the intensity of their antifungal prophylaxis and were switched from itraconazole to posaconazole to cover the move maximise prophylaxis cover during the transition. Following information about overall air quality the high dose chemotherapy with stem cell rescue patients were changed from fluconazole to itraconazole to give aspergillus cover.

Analysis

- The current accommodation at QUEH is not fit for high risk haemato-oncology patients to remain in safely, and would not pass the JACIE inspection planned for the Autumn 2015.
- There are no immediate measures available to promptly remedy the faults at the QUEH.
- Suitable accommodation, which meets environmental standards, is available at the Beatson, West of Scotland Cancer Centre, however, there are only 20 beds rather than the 24 available in the QEUH.
- The current provision of critical care support at the Beatson, WOSCC, is inadequate to meet the needs of this vulnerable population and the lack of co-location of other acute specialties is a cause for concern
- Antifungal prophylaxis measures had been taken for some patients prior to the concerns being raised and for other subsequently.

Recommendations

1) Move all high risk patients, currently in ward 4B1, to the Beatson, West of Scotland Cancer Centre, wards B8 and B9 where water and air quality are compliant with requirements. This would include all allogeneic transplant recipients, all acute leukaemia's undergoing induction chemotherapy and all patients receiving high dose chemotherapy with stem cell rescue.
2) Refine protocols already in place to provide immediate access to critical care assessment at the Beatson, West of Scotland Cancer Centre site with rapid transfer to the Queen Elizabeth University Hospital, Glasgow for critical care monitoring as required.
3) Discuss as soon as possible with patients, relatives and friends the implications of the above for them and explain the remedial action already taken and plans for the move.
4) Put in place a plan to remedy the faults in the accommodation at QEUH to allow a speedy return.
5) Review GG&C haemato-oncology in patient and day case practise as the move will reduce the number of in-patient beds available for GG&C
6) Work in close partnership with colleagues from other discplines and all management teams to ensure the resolution of this situation promptly and safely to ensure best patient care.

RE: BMT SGUH

Peters, Christine [redacted]

Sent: 07 July 2015 11:25

To: Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20); Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Hood John (NHS GREATER GLASGOW & CLYDE - SGA20); brian.jones[redacted]

Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20)

Attachments: BMT documentTeresa and Chr~1.doc (40 KB)

Hi All,
We have only had 20 minutes to look at this document. We would rather have a full scale discussion round a table as the issues are so enormous and we all seem to have different pieces of information at our disposal.

Regards,

Teresa Inkster and Christine Peters Joint signed

From: Jenkins, Gary
Sent: 07 July 2015 10:58
To: Williams, Craig; Inkster, Teresa (NHSmail); Hood, John; Jones, Brian; Peters, Christine
Cc: Walsh, Tom
Subject: RE: BMT SGUH

Craig,

We should also mention that there is no negative pressure in the pentamadine room.
The other issue in your bullet point, air exchanges at >12 – it stated yes, should it not state no as this has not yet been achieved?

I have also gone through this with Anne Parker, Myra Campbell, Laura Meehan and Alison McCardle; they are all comfortable with it.

Thanks
Gary

From: Williams, Craig
Sent: 07 July 2015 10:35
To: Inkster, Teresa (NHSmail); Hood, John; Jones, Brian; Peters, Christine; Jenkins, Gary
Cc: Walsh, Tom
Subject: BMT SGUH

Dear All

Attached is a draft of a document to clarify the original building requirements and briefly describes the building and validation process. Is everyone content that if the building is provided to the original specification it will provide a safe environment for patients. Comments by 1130 please

Craig

Original Specification

The original clinical output specification from 2009 for the Heamato-oncology area at the New SGUH clearly specified that this patient group is vulnerable to infection and therefore require the provision of a protected environment. The ventilation section of this document details the following requirements in relation to this:

Please note that the haemato-oncology ward has a very specific function. There should be no opening windows The space should be sealed and ventilated . Positive pressure to the rest of the document and all highly filtered air >90%, probably best HEPA with adequate number of positive pressure sealed HEPA filtered side rooms for neutropaenic patients as in the Beatson West of Scotland Cancer Centre.

An appendix to the specification details that the HEPA filters meet EU12 standard (99.99% @ 0.3μm)

Advice for this was sought from Dr John Hood Consultant Microbiologist

Specification for rooms at WoS Cancer Centre

In the absence of definitive UK guidance on builds for severely immunocompromised patients the positive pressure side rooms are built to the CDC specification that is 12 air changes per hour and the rooms at a positive pressure to the corridor of 5-10 kPa.

Build process

Confirmation that the build was progressing as expected was sent to the clinical team on 9th December 2013 from Heather Griffin:

Thank you for your e-mail and also for your time in meeting with us the other day.
With regard to your query -

1. The spec for the Haemato-oncology area is as requested by John , in other words - hepa filtration positive to the rest of the hospital and all highly filtered air to H13 ie 99.95%. (Myra , refer to the plan I gave you).

2. The pentamidine treatment room is negatively pressured.

John is John Hood as described in the original specification above.

The expectation therefore was that the Heam-onc unit at SGUH was being built to the same standard as WoS Cancer centre.

Commissioning

The Infection control team was assured that all areas of the SGUH had been fully commissioned and validated from a Mechanical and Ventilation point of view. The details of the validation were not provided but that is not unusual as this is an

Comment [P1]: Not an exact full quote compared to the document I have in hand entitled " Clinical Output Specification". This was in a document from 2009 which is a Brief and as far as I understand was on the basis of haem-onc patients being housed in the facility , NOT BMT . It lacks any indication about number of air exchanges or air pressure monitoring therefore is not a specific spec, rather a general indication .

Comment [P2]: We have not seen this appendix

Comment [P3]: John Hood can comment on this

Comment [P4]: The CDC state >2.5, the 5-10 comes from beatson experience and allows for redundancy and opening of doors. This is only one aspect of the design specification

Comment [P5]: We cannot comment as We have not seen this

Comment [P6]: IWe are not in a position to confirm this

Comment [P7]: Was this written? What were the requirements stipulated?

engineering specialism and ICPT's would only normally be involved in the event of significant failure. It is now apparent that Brookfield had not been required to undertake particle count test as part of their commissioning process.

Comment [P8]: Depends what the understanding is.

Comment [P9]: This is why the validation needs to be stipulated prior to it occurring and checked prior to

Current deficiencies identified

1.HEPA Filtration for high risk patients	HEPA filtration in each room , 2 rooms verbally reported NOT to be HEPA filtered Lobbied side rooms not HEPA filtered
2. Positive Pressure in each room 5-10 Pascals in relation to corridor	No method of measuring pressure gradient is currently installed in any of the 4B rooms
3. Air exchanges required to be >12ph	Verbally reported as 10ph
4. Sealed room (0.5-sq ft leakage)	Rooms not seale? Validation for leak testing
5) Particle counts 29th June 960-579197	Not a solid ceiling, movement of ceiling tiles Yes Current standard at WoS Cancer Centre <1000 Counts >1000 in many rooms, has been carried out three times now.

Comment [P10]: This refers to air exchanges – spaces inserted to make table make sense

Deleted: d

Deleted: ¶ ¶

Deleted: ? Validation for leak testing¶

NO COMMENT ON WATER QUALITY AND TESTING

Conclusions

1) **The original specification provided to Brookfield if delivered would have provided a safe environment for this vulnerable group of patients**

Comment [P11]: The spec did not stipulate air changes and actual pressure levels or monitoring system

2) **Particle counting would normally be required to validate areas provided with HEPA filtered air to ensure both the function of the HEPA filter and ensure the room seal. Expert Engineering advice should be sought to advise whether the commissioning process in this case was adequate. No validation data has to date been made available to the IPCT**
3) **In the light of the current provision of isolation facilities available to the Haem-Onc patients the IPCT support the return of these patients to WoS Cancer centre until the unit at the QEUH is provided to the required specification and appropriately validated**

Comment [P12]: Droplet dispersal methods for each filter is the method

Comment [P13]: Agree

RE: BMT SGUH

Jones, Brian [redacted]

Sent: 07 July 2015 12:16

To: Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Hood John (NHS GREATER GLASGOW & CLYDE - SGA20); Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20); Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20)

Dear All,

Any document summarising our understanding of the current situation should be agreed by all the parties involved and should take account of the comments from Teresa, Christine and John.

Kind regards,

Brian

From: Peters, Christine
Sent: 07 July 2015 11:44
To: Hood, John; Williams, Craig; Inkster, Teresa (NHSmail); Jones, Brian; Jenkins, Gary; Walsh, Tom
Subject: RE: BMT SGUH

Caig,

Who is this document for and can we have sight of the final format please?

Regards,

[redacted]

Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Hood, John
Sent: 07 July 2015 11:40
To: Williams, Craig; Inkster, Teresa (NHSmail); Jones, Brian; Peters, Christine; Jenkins, Gary; Walsh, Tom
Subject: FW: BMT SGUH
Importance: High

Please find my annotated comments.
John H

From: Williams, Craig
Sent: 07 July 2015 10:35

To: Inkster, Teresa (NHSmail); Hood, John; Jones, Brian; Peters, Christine; Jenkins, Gary
Cc: Walsh, Tom
Subject: BMT SGUH

Dear All

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Craig

RE: BMT SGUH

Peters, Christine [redacted]

Sent: 07 July 2015 12:23

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Hood John (NHS GREATER GLASGOW & CLYDE - SGA20); brian.jones[redacted]; Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20)

Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20)

I am in agreement with Teresa.

Regards,

[redacted]

Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 07 July 2015 12:19
To: Williams, Craig; Hood, John; Jones, Brian; Peters, Christine; Jenkins, Gary
Cc: Walsh, Tom
Subject: RE: BMT SGUH

Dear all,

I am uncomfortable with the statement in this document regarding commissioning. It is my opinion that the infection control team should be involved in the validation process , review validation reports and ensure air and water quality **prior** to patients moving in to the unit .

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Williams, Craig [redacted]
Sent: 07 July 2015 10:35
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Hood John (NHS GREATER GLASGOW & CLYDE - SGA20); brian.jones[redacted]; Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: BMT SGUH

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Craig

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Original Specification

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Please note that the haemato-oncology ward has a very specific function. There should be no opening windows The space should be sealed and ventilated . Positive pressure to the rest of the document and all highly filtered air >90%, probably best HEPA with adequate number of positive pressure sealed HEPA filtered side rooms for neutropaenic patients as in the Beatson West of Scotland Cancer Centre.

Please note that in 2009 the Beatson BMTU had been open for only 1 year and at that time there was no plans (why would there have been?) to build essentially a new BMTU at the New Southern General Hospital. The last sentence 'probably best HEPA with adequate number of positive pressure sealed HEPA filtered side rooms for neutropenic patients *as in the Beatson West of Scotland Cancer Centre*' essentially says that these rooms should be of the same standard of the BMTU rooms in level 4 of the Beatson.

Formatted: Font: Italic, Complex Script Font: Italic

An appendix to the specification details that the HEPA filters meet EU12 standard (99.99% @ 0.3μm) This is only part of such a spec.

Advice for this was sought from Dr John Hood Consultant Microbiologist
I suspect that the sentence noted above 'probably best....' Is a quote from me.

Specification for rooms at WoS Cancer Centre

In the absence of definitive UK guidance on builds for severely immunocompromised patients the positive pressure side rooms are built to the CDC specification that is 12 air changes per hour and the rooms at a positive pressure to the corridor of 5-10 kPa.
Above is only part of a proper spec.
The spec of both the water and air quality in the top floor of the Beatson was as a result of discussions with Andy Streifel (world expert in air quality) of the University of Minnesota and Peter Hoffman (UK authority from PHLS/HPA/PHE) and my experience of the outbreak of invasive aspergillosis in Cardiac Transplant patients at GRI in the early 1990 while major building work was ongoing, the design and commissioning of the BMTU at GRI in 1999 and the design and commissioning of Level 4 of the Beatson in 2007/8.

Build process

Confirmation that the build was progressing as expected was sent to the clinical team on 9th December 2013 from Heather Griffin:

Thank you for your e-mail and also for your time in meeting with us the other day.
With regard to your query -

1. The spec for the Haemato-oncology area is as requested by John , in other words - hepa filtration positive to the rest of the hospital and all highly filtered air to H13 ie 99.95%. (Myra , refer to the plan I gave you). This does not include the other important bits of the spec e.g. the air of the corridors around these rooms should also be filtered to a higher level – as in the Beatson + the importance of a clear visual display showing what the pressures are (among a great many other things).

2. The pentamidine treatment room is negatively pressured.

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John is John Hood as described in the original specification above.

The expectation therefore was that the Heam-onc unit at SGUH was being built to the same standard as WoS Cancer centre.

This might have been the expectation but on what I have been shown it does not appear to be the case. Where are the validation documents?

Commissioning

The Infection control team was assured that all areas of the SGUH had been fully commissioned and validated from a Mechanical and Ventilation point of view. The details of the validation were not provided but that is not unusual as this is an engineering specialism and ICPT's would only normally be involved in the event of significant failure. It is now apparent that Brookfield had not been required to undertake particle count test as part of their commissioning process.

In both 1999 and 2007/2008 as the Infection Control Doctor involved in the design spec of both these units I saw that my role was crucial to ensure that both the air and water specs were both checked and verified prior to moving patients from what was seen to be from a verified safe area into the new one. Infact Andy Streifel was in Glasgow in 1999 and instructed me in the use of both microanemometers and particle counts (before we relied on pharmacy clean room staff for this). He was also in Glasgow during the Beatson Construction. In both the commissioning of the GRI and Beatson Units issues were identified. At the design and late construction stage at GRI it became clear the the spec employed would have given the patients a unit that would have been acceptable in the US in the early 1970's! (the spec had been given and signed off by clinicians!) – we quickly worked with the commissioning engineer to bring it up to that of a then US unit. There were also many issues during the commissioning period which were identified and resolved with Gordon Cheape, Alex Graham and myself .
In the Commissioning of the Beatson top floor I again saw it as my role to ensure that the specs were up to standard. I did this in conjunction with the Commissioning engineer and Mel Aitken (Estates Officer). The spec had been signed off as OK by 'someone in the Trust'. It was clear from my pressure readings that none of the rooms (29) were in any way positively pressurised. The contractor dodged and dived eventually I measured them with their subcontractor in tandem – getting the same readings. The contractor had allegedly known about these faults for months. If this validation had not taken place these patients would have been transferred into clearly

non functioning rooms. It took 1year for the rooms to be up to the required spec. During that time we found other serious faults such as lack of waterproof paint in toilet areas etc.
Although I knew about the view that BMTU patients were to be housed in the new SGH I was not involved in the spec or the commissioning (for BMTU patients).

I would also worry about the commissioning of the new DH lobbied rooms on this site as in discussion with Peter Hoffman they really need careful leak (permeability) testing and what is the programme for ongoing checking of their permeability.

Current deficiencies identified

1.HEPA Filtration for high risk patients	HEPA filtration in each room , 2 rooms verbally reported NOT to be HEPA filtered
2. Positive Pressure in each room 5-10 Pascals in relation to corridor	No method of measuring pressure gradient is currently installed in any of the 4B rooms Verbally reported as 10ph Rooms not sealed Not a solid ceiling, movement of ceiling tiles
3. Air exchanges required to be >12ph	Yes
4. Sealed room (0.5-sq ft leakage)	? Validation for leak testing
5) Particle counts 29th June 960-579197	Current standard at WoS Cancer Centre <1000

Conclusions

1) **The original specification provided to Brookfield if delivered would have provided a safe environment for this vulnerable group of patients**
2) **Particle counting would normally be required to validate areas provided with HEPA filtered air to ensure both the function of the HEPA filter and ensure the room seal. Expert Engineering advice should be sought to**

advise whether the commissioning process in this case was adequate. No validation data has to date been made available to the IPCT

3) **In the light of the current provision of isolation facilities available to the Haem-Onc patients the IPCT support the return of these patients to WoS Cancer centre until the unit at the QEUH is provided to the required specification and appropriately validated**

I agree that it is safest to return patients to the top floor of the Beatson until these rooms have been properly commissioned and validated.

John Hood
7 July 2015

RE: BMT SGUH

Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)

Sent: 07 July 2015 12:51

To: Walsh, Tom [redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Hood John (NHS GREATER GLASGOW & CLYDE - SGA20); brian.jones [redacted]; Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20)

I am unclear then why myself and BMS staff sampled an empty ward 2A in RHSC prior to patients moving in . Why was there a different process for the transfer of Yorkhill BMT patients ?

In addition as John has stated we we were involved with validation of the Beatson which was a new build at the time

Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Walsh, Tom [redacted]
Sent: 07 July 2015 12:31
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Hood John (NHS GREATER GLASGOW & CLYDE - SGA20); brian.jones [redacted]; Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: RE: BMT SGUH

HI all

I can't see this in an HTM and am equally left wondering why we didn't do this if we (or some of the team) knew we should?

My understanding is that this was a complete hospital build and that all validation and commissioning was by the external contractor prior to handover, which is different to commissioning a new unit/ dept in an existing hospital.

I agree in that I would have expected any issues with validation to be brought to the attention of the ICT for further comment/ investigation in the course of commissioning. (It's not as if we didn't make repeated requests for the data)

Kr

Tom

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 07 July 2015 12:19
To: Williams, Craig; Hood, John; Jones, Brian; Peters, Christine; Jenkins, Gary
Cc: Walsh, Tom
Subject: RE: BMT SGUH

Dear all,

I am uncomfortable with the statement in this document regarding commissioning. It is my opinion that the infection control team should be involved in the validation process , review validation reports and ensure air and water quality **prior** to patients moving in to the unit .

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Williams, Craig [redacted]
Sent: 07 July 2015 10:35
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Hood John (NHS GREATER GLASGOW & CLYDE - SGA20); brian.jones [redacted] Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: BMT SGUH

Dear All

Attached is a draft of a document to clarify the original building requirements and briefly describes the building and validation process. Is everyone content that if the building is provided to the original specification it will provide a safe environment for patients. Comments by 1130 please

Craig

RE: BMT SGUH

Walsh, Tom [redacted]

Tue 07/07/2015 17:02

To Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]

Dear all

Lets discuss how the IPCT should be involved in commissioning in future at our next SMT meeting?

Kr

Tom

From: Peters, Christine
Sent: 07 July 2015 12:57
To: Walsh, Tom; Inkster, Teresa (NHSmail); Williams, Craig; Hood, John; Jones, Brian; Jenkins, Gary
Subject: RE: BMT SGUH

I am unaware of the way in which the project team operated or the interaction with the IPCT over the years of the New South Building Project as that has never been in the local ICD remit.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

From: Walsh, Tom
Sent: 07 July 2015 12:32
To: Inkster, Teresa (NHSmail); Williams, Craig; Hood, John; Jones, Brian; Peters, Christine; Jenkins, Gary
Subject: RE: BMT SGUH

HI all

I can't see this in an HTM and am equally left wondering why we didn't do this if we (or some of the team) knew we should?

My understanding is that this was a complete hospital build and that all validation and commissioning was by the external contractor prior to handover, which is different to commissioning a new unit/ dept in an existing hospital.

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Kr

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Sent: 07 July 2015 12:19
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Cc: Walsh, Tom
Subject: RE: BMT SGUH

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Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building

Glasgow Royal Infirmary
Direct dial : [redacted]

From: Williams, Craig[redacted]
Sent: 07 July 2015 10:35
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Hood John (NHS GREATER GLASGOW & CLYDE - SGA20); brian.jones[redacted]; Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: BMT SGUH

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Craig

Williams, Craig

From: Jenkins, Gary
Sent: 23 July 2015 10:25
To: Parker, Anne; Morrison, Anne; Meehan, Laura; Campbell, Myra; Moir, Peter; Williams, Craig; Hunter, William; McClintock, Wendy; Campbell, Myra; Powrie, Ian; McArdle, Agnes; McLaughlin, Marie; Walsh, Tom; McQuaker, Grant
Cc: MacDonald, Marion; Dunlop, David; Dodds, David; Harkness, Anne; Kane, Mary Anne; Stewart, David; Archibald, Grant
Subject: BMT SERVICE: QEUH

Dear All,

I should like to provide the following update from the meeting held yesterday.

From a haematology perspective, the service is content with the work programme. However we still need Infection Control sign-off on the issues noted at point 1 below if we are to allow the work to progress as planned on Monday 27th July. Could I ask Craig and Tom to review this please as a priority.

1. Infection Control / Microbiology Issues
   - HAI Scribe documentation needs to be completed (Ian Powrie / Peter Moir / Clare Mitchell / Jackie Barmanory)
   - Confirmation the programme of works outlined in the email from Peter Moir on Friday 17th are appropriate from an Infection Control and Microbiology perspective (Craig Williams)
   - Confirmation from Peter Hoffman (external ICD / Microbiologist) that the revised programme is acceptable for a BMT Unit (Craig Williams)
   - Confirmation that the air exchanges and negative air flow measurements for the Pentamadine room are appropriate - you will note there is no proposed change and the area appears to be working following assessment (Craig Williams / Ian Powrie)
   - Confirmation that the non digital pressure gauges are acceptable - please note these are not digital as per the initial recommendation, however they are exactly the same as the rest of QEUH (Craig Williams)

2. Ward Logistical Issues
   - Confirmation received from Wendy McClintock that there is adequate interim storage to service the retained 10 Haematology beds
   - The Seminar Room on level 4 should be booked out for the duration of the works to act as an interim holding area for deliveries / surplus goods (Wendy McClintock)
   - We agreed that the zoned area, as per the model described by Peter, is operationally viable and allows the existing ward to function as normal whilst the contractors are on site

3. Estates / Facilities Issues
   - Additional storage for beds and lockers to be identified (Billy Hunter)
   - The route of access from the lab block up to the ward can be managed around the AGV schedules (Billy Hunter / Peter Moir)
   - Brookfield method statement to be sent to Billy Hunter for review (Peter Moir)

4. Ward / Service Issues that need to be planned
   - The maintenance schedule is once per annum for each room, taking approximately 2 days. This will result in 48 'lost' days related to planned activities. Consideration should be given as to how this will be accommodated - i.e. planned downtime and method of 'tenting off' the physical environment (Myra Campbell / Alison McCardle / Laura Meehan / Marie McLaughlin)
   - A contingency model should be developed for unplanned issues, i.e. emergency access. I suggested that it would be useful to liaise with renal and see if there is an opportunity to utilise the two lobby rooms if required (Myra Campbell / Margaret McLucas / Gus McKillop / Laura Meehan)

As discussed, the scheduled works will last for 11 weeks, thereafter a period of testing will be undertaken (2-3 days) prior to the service to transfer back to QEUH.

Regards
Gary

RE: legionella water testing in BMT unit

Inkster Teresa (NHS Greater Glasgow & Clyde)

Sat 27/06/2015 13:24

To:Powrie, Ian [redacted]; Peters Christine (NHS Greater Glasgow & Clyde)
[redacted]

Hi Ian - can I also attend the meeting . It was myself who asked Pauline Wright to contact Jim about this . I was Infection control doctor for the Beatson and will be moving across to cover regional services at SGH in August. I would be keen to replicate the sampling regime we had in place when the BMT unit was housed in the Beatson. These are high risk BMT patients who have been moved to a less protective environment in terms of Legionella control. I think fortnightly sampling would be a good starting point - it may be that we can reduce the frequency of testing with time if we can demonstrate adequate control.

I am on annual leave on Monday but free Tues afternoon and Wednesday morning if either of these times suit

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Lister Building
Glasgow Royal Infirmary
Direct dial : [redacted]

From: Powrie, Ian [redacted]
Sent: 27 June 2015 08:22
To: Peters Christine (NHS Greater Glasgow & Clyde)
Cc: Inkster Teresa (NHS Greater Glasgow & Clyde)
Subject: Fwd: legionella water testing in BMT unit

Christine,

I would be grateful if we could meet to discuss the issue raised below

I.Powrie
Sector Estates Manager (NSGH)
Project Team, New South Glasgow Hospitals,
Southern General Hospitals Construction Site,
2nd Floor, Modular Building, Off Hardgate Road, Glasgow,G51 4SX<x-apple-data-detectors://0/0>
[redacted]
Tel: [redacted]
Reception: 0141 245 5700<tel:0141%20245%205700>
Mob: [redacted]

Begin forwarded message:

From: "McFadden, Jim" [redacted]
Date: 26 June 2015 15:38:17 BST

To: "Powrie, Ian" [redacted]
Subject: FW: legionella water testing in BMT unit

Ian

Are you OK with this.??.

Regards

Jim

From: Wright, Pauline
Sent: 26 June 2015 15:09
To: McFadden, Jim
Cc: Peters Christine (NHS AYRSHIRE & ARRAN); Peters, Christine; Inkster, Teresa (NHSmail)
Subject: legionella water testing in BMT unit

Hi Jim,

The bone marrow transplant (BMT) unit has now moved from Beatson (B8/B9) to SGUH 5B. As a high risk unit, this requires a regular programme of legionella water testing. I would be grateful if you could liaise with the Estates Manager, GGH in order to replicate their previously agreed testing protocol.

Thanks

Pauline

Dr Pauline Wright

Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
New Lab Building
Southern General Hospital
Tel: [redacted]

RE: New Build

Peters, Christine [redacted]

Mon 29/06/2015 09:20

To:Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Cc:Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Wright Pauline (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Powrie Ian (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]

Thanks Tom,

I was informed verbally by Ian Powrie on Thursday afternoon at the meeting with Teresa that there had been a series of positive legionella water tests in the new Build.

I have asked for the results in writing to identify where and when these were positive.

So far I have not received these , I will pop down to Ians office this morning to see where we are on this.

Teresa and Pauline are both off today,

Regards,
Christine

From: Walsh, Tom
Sent: 26 June 2015 11:32
To: Peters, Christine
Cc: Inkster, Teresa (NHSmail); Wright, Pauline; McNamee, Sandra
Subject: RE: New Build

Thanks Christine

Sorry I'm not clear from the email if we have confirmed Legionella in the building or are awaiting results?

Thanks

Tom

From: Peters, Christine
Sent: 26 June 2015 11:18
To: Walsh, Tom
Cc: Inkster, Teresa (NHSmail); Wright, Pauline
Subject: New Build

Hi Tom,

sorry about the deluge of emails. QUick summary of issues and actions:

1. **Legionella in new build :**

- requested results in writing to enable clinical risk assessment - may need to change some sinks from automated detectors to manual pending full information

2. **BMT accomodation Adults :**
ventilation

- awaiting full documentation on current accomodation specs and validation
- Teresa and I are putting together requirements for accreditation and CDC specification on what would be ideal
- pentamidine room specs also requested
- Teresa organising air testing on 5B
- need to have a high level discussion about the way forward when the information is in hand

water

- need full reports and to ensure legionella not in any of these outlets when that information becomes available as above
- continue water flushing as per Beatson protocol

Cleaning

- revert to Beatson protocols

3. **Decon room for VHF patients/ Mers**

- clearly not ready for use, not designed for this and needs a design team redesign, validation and commissioning for new use
- ? how do we take this forward

4. **Lobbied Isolation room**

- Hepa filters need to be put in place where immunosuppressed adults will be housed - I assume the reason for Beatson coming to new build is the critical care facilities - need to clearly identify which lobbied rooms they are to be housed in and put HEPA in there first ? who makes this decision
- requested validation data and leak testing needs to be carried out and signed off
- all lobbied rooms the light fittings sealed- this was being taken forward by Ian powrie as an urgent matter

5. **Theatres**

- requested all validation data and monitoring system information

Please advise how best to tie all this together and take matters forward in as efficient and co-ordinated manner as possible,

kind regards,

Christine .

RE: Water testing at the new Southern Building

Hunter, William [redacted]

Sent: 30 June 2015 13:22

To: Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20)

Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); pamela.joannidis[redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Powrie Ian (NHS GREATER GLASGOW & CLYDE - SGA20); Kane Maryanne (NHS GREATER GLASGOW & CLYDE - SGA20)

Christine,

In response your points:

1. Ian Powrie can go through the up to date water testing arrangements and results schedule at a date/time that suits you both. Ian is based in the Lab building...ground floor therefore if you confirm a suitable date/time Ian can meet you.
2. Same as above.
3. Same as above.

The water testing results and details so far will be reported at the next Sector group meeting.

Regards

Billy

From: Peters, Christine
Sent: 30 June 2015 13:17
To: Hunter, William
Cc: Walsh, Tom; Inkster, Teresa (NHSmail); Joannidis, Pamela; Williams, Craig; Powrie, Ian
Subject: Water testing at the new Southern Building

Hi Billy,
Thanks for your phone call and for agreeing to get the information to me in writing as soon as possible regarding

1. The water testing that has taken place in the new building, with results
2. The documented risk assessment of the positive legionella cultures from water outlets in the new building
3. The actions taken to decontaminate the system

Going forward, are the new testing protocol and results being reported through the water group structure?

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

FW: New South Building water testing

Peters, Christine [redacted]

Wed 01/07/2015 15:38

To Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]

From: Kane, Mary Anne
Sent: 01 July 2015 15:14
To: Peters, Christine; Griffin, Heather
Cc: Powrie, Ian; Williams, Craig; Joannidis, Pamela; Hunter, William; Gallacher, Alan
Subject: RE: New South Building water testing

Christine
I am not sure why you would write to myself and Heather about this .
Ian Powrie is the sector estates manager with responsibility for this . We have to date shared this data via the Sector Water Groups and have involved Pamela and Craig in discussions on newSGUH .
The Board has a Water Safety Policy which describes the governance arrangments in place . I am sure that Ian and Pamela would be more than happy to take you through the details of the arrangements in place .
Mary Anne

From: Peters, Christine
Sent: 30 June 2015 17:32
To: Griffin, Heather
Cc: Powrie, Ian; Kane, Mary Anne
Subject: RE: New South Building water testing

Thank you Heather for clarifying that for me.

Regards,

[redacted]

Dr Christine Peters

Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

From: Griffin, Heather
Sent: 30 June 2015 17:00
To: Peters, Christine
Cc: Powrie, Ian; Kane, Mary Anne
Subject: RE: New South Building water testing

Dear Christine, thank you for your e-mail.

The New Hospitals Project was completed a couple of weeks ago and therefore I have moved onto another post and am no longer located at the Southern or involved in the New Hospital's (as build /migration complete) .

Hi Ian, would you be able to help Christine's enquiry ?

Many Thanks
Heather

From: Peters, Christine
Sent: 30 June 2015 12:11
To: Kane, Mary Anne; Griffin, Heather
Cc: Walsh, Tom; Powrie, Ian; Inkster, Teresa (NHSmail)
Subject: New South Building water testing
Importance: High

Dear Heather and Mary Anne,

As Infection Control Doctor for the South side, I have been informed by Ian Powrie that there have been positive legionella samples in the new build water supply. I have not seen any records of this testing taking place or the actions taken as a result of the positive cultures.

Please could you provide me with details of the testing that has taken place, the locations that have had positive results, the sero type of the legionella grown and a copy of the risk assessment along with actions taken.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

FW: Joint South & Clyde Water Safety Group Meeting 2 December 2015

Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)

Wed 02/12/2015 11:10

To: Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Cc: Cruickshank Anne (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Importance: High

Hi Craig,

Unfortunately todays water group meeting has been cancelled. The plan had been to review all the water testing results from QEUH at todays meeting. As yet I have not seen any results for Legionella testing in ward 4B . I have requested these repeatedly from Ian Powrie but have not yet received them . As you will be aware the BMT is due to move back in 2 weeks time and it is crucial to know that the water supply is safe. I am aware from meetings that Legionella has been isolated somewhere in the new build but I have been unable to ascertain where . I have been told that the results have been sent to yourself.

Can you send me copies of any results you have ?

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: McNeil, Elaine [redacted]
Sent: 02 December 2015 08:45
To: Bagrade, Linda; Brattey David (NHS GREATER GLASGOW & CLYDE - SGA20); Campbell Andrew (NHS GREATER GLASGOW & CLYDE - SGA20); Conaghan Ann (NHS GREATER GLASGOW & CLYDE - SGA20); alan.gallacher[redacted]; Higgins Joan (NHS GREATER GLASGOW & CLYDE - SGA20); Sandra.Higgins[redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Kyle Stewart (NHS GREATER GLASGOW & CLYDE - SGA20); Martin Gardiner; Mccormack William (NHS GREATER GLASGOW & CLYDE - SGA20); Mcfadden James (NHS GREATER GLASGOW & CLYDE - SGA20); Mcilravey Kathleen (NHS GREATER GLASGOW & CLYDE - SGA20); Mitchell Clare (NHS GREATER GLASGOW & CLYDE - SGA20); Morrison Edward (NHS GREATER GLASGOW & CLYDE - SGA20); 'Neil Charles'; Paterson Diane (NHS GREATER GLASGOW & CLYDE - SGA20); Paterson Michele (NHS GREATER GLASGOW & CLYDE - SGA20); Peters Christine (NHS GREATER GLASGOW & CLYDE - SGA20); Powrie Ian (NHS GREATER GLASGOW & CLYDE - SGA20); Purdon Colin (NHS GREATER GLASGOW & CLYDE - SGA20); 'Rhona Cameron'; Robertson, Linda; Ron Nealis; Ryan Whiteford; Wright Pauline (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: RE: Joint South & Clyde Water Safety Group Meeting 2 December 2015

Dear Colleagues

Due to unforeseen diary commitments the Joint South & Clyde Water Safety Group meeting scheduled for 2 December 2015 at 10.30am is cancelled.

A new date will be arranged for January 2016.

Apologies for any inconvenience caused.

Regards

Elaine McNeil

RE: Water testing

Peters, Christine [redacted]

Tue 08/12/2015 17:12

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Excellent!

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 08 December 2015 17:06
To: Hunter, William; Powrie, Ian
Cc: Peters, Christine
Subject: Water testing

Hi both

At the water meeting which was cancelled last week I was going to bring up water testing results. At GRI I received monthly reports of outlets tested, results and actions put in place - I have attached an example of this for your info.
Is it possible to have something similar in place for this site?

Also can myself and Christine be sent backdated water results for QEUH to when sampling was commenced for the new build. I am slightly concerned that we are the ICDs for the site and have seen no results as yet , particularly when others have made reference to positive Legionella results somewhere in the hospital.

Finally with regards to taps , can I ask what the outcome of the SBAR that HPS sent in relation to flow straighteners was ? . Are these taps still in place in high risk units and was the intention to sample for Pseudomonas in these areas and is that underway? (aside from adult BMT which I have recently requested)

Thanks

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

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From: Peters, Christine
To: Walsh, Tom; Inkster, Teresa (NHSmail); Williams, Craig
Subject: DRAFT tabulation BMT Accomodation
Attachments: BMT Accomodation.docx

Hi all,
A similar effort for the 4B rooms for BMT (there was a lot of confusion about this ward's location it has to be said! – but we now know it is 4B!)

This is just in regard to ventilation. Water is a whole other issue, as is cleaning schedules.

Not sure is anyone has discussed these requirements with Peter Hoffman at all?

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

BMT Accomodation

VENTILATION

	Required	Current	Action
Design	1.HEPA Filtration for high risk patients	HEPA filtration in each room , 2 rooms verbally reported NOT to be HEPA filtered	Brookfield to indicate which rooms are NOT HEPA filtered and high risk patients should not be placed in these rooms
	2. Positive Pressure in each room 5-10 Pascals in relation to corridor	Rooms on 4B NOT designed to be positive pressure No method of measuring pressure gradient is currently installed in any of the 4B rooms No anteroom Corridor is NOT HEPA filtered Prep room is NOT HEPA filtered	Measure pressure gradient ???? Need commissioning and validation data to confirm
	3. Air exchanges required to be >12ph 4. Sealed room (0.5-sq ft leakage) 5. Clean to dirty airflow 6. Backup system in case of failure/ need to shut down and maintain main system 6. water resistant paint 6. Fungicidal plasterboard in bathroom and toilet	Verbally reported as 10ph Rooms not sealed Not a solid ceiling ? ? Yes ?	
Commissioning	JACIE standards dictate that following relocation	? ???Not readily available information at	

	qualification and validation must be performed to confirm new space meets standards. Design Spec for: Air velocity, Air-flow rates, room air-change rates, pressure differentials Measured systems out put to demonstrate meets design spec Microbiological Air testing Leak testing of rooms Filter testing	present ? ? Carried out 29/06/2015 Not done ?	
Monitoring	Daily : Visual airflow pattern indicator Daily records of pressure gradient System for failure alarms to be relayed to clinical staff Schedule for air testing – particle counts and Fungal culture	Not in place Not possible as not in design Not in design Commencing	
Maintenance	Schedules and Documentation for: Filter changes AHU drainage System cleaning Performance indication Performance measurement Record of any remedial work or changes to system	???	

References

FACT-JACIE Standards

HBN4- supplement 1

SHTM 03-01 Part A ,+ Part B

From: Peters, Christine
To: "peter.moi[redacted]
Cc: Inkster, Teresa (NHSmail); Walsh, Tom; Jenkins, Gary
Subject: Specifications and commissioning data

HI Peter,

Following on from the meetings this afternoon we would be grateful if the infection control team could be provided with the following information:

As a priority :

1. Design Specifications for ventilation (pressures, air exchange, permeability, filters, supply and extract locations) for

- The whole of ward 4B
- The positive pressured lobbied rooms on level 4 and in critical care
- The decon room in A+E
- Schallion in the new childrens' hospital

2. Commissioning and Validation data for the above areas including
    - Filter testing
    - Permeability testing of rooms
    - Air exchanges
    - Pressure gradient measurements

We will request information on other areas in the near future.
Thank you for your help in this matter.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

From:	Peters, Christine on behalf of Peters, Christine
To:	Hood, John; Inkster, Teresa (NHSmail); Jones, Brian;
Subject:	RE: BMT rooms: for your comments
Sent:	03/07/2015 17:43:00

Thank you for your expert input which is invaluable,
Regards,
Christine

From: Hood, John
Sent: 03 July 2015 15:57
To: Peters, Christine; Inkster, Teresa (NHSmail); Jones, Brian
Subject: RE: BMT rooms: for your comments
Importance: High

Dear All,

With my experience of both the design and commissioning of the BMTUs in both GRI in 1999 and the top floor of the Beatson in 2007/2008 I would not have allowed patients into these units on the basis of the essentially unverified and worrying information shown below. My experience with the Beatson was that the contractor had the spec of the unit signed off by 'someone' in the trust as being OK. I did pressure measurements myself and particle counts etc which essentally showed that none of the rooms were to any extent positively pressurised. The contractor eventually accepted this but it took 1 year for everything to be OK as they had not put powerful enough air handlers in to do the job and had to replace them.
Others need to realise that picking individual parameters and saying that they are better or OK do not understand that it is all of these parameters that need to be right. Aspergillus control is not only about HEPA filtration but also air changes to dilute and remove and a **consistent** flow of air from the room to the corridor - this will be dependent not only in more air in than out but also that the room is sealed to a reasonable level.
It is also my view that all of these things need to be well and truly sorted prior to putting at risk patients in them as clearly trying to sort them out with at risk patients there will give you even more issues of controlling the environment during the process.
On that basis if there are existing units still available in the city that can guarantee appropriate control of air and water then the patients should be there until the same guarantee exists in the new rooms. But clearly the clinicians need to decide whether the risk of not having ITU/HDU on site is greater than the perceived risk of using the rooms in there present, essentially unverified state.

John Hood
Consultant Microbiologist
GRI

From: Peters, Christine
Sent: 03 July 2015 12:56
To: Inkster, Teresa (NHSmail); Jones, Brian; Hood, John
Subject: BMT rooms: for your comments

I would value your comments on this summary of the current situation to be sent to Tom Walsh and Garry Jenkins.

Current SItuation

Currently Allograft BMT patient are accomodated on 4B at the new southern General.

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1. No means to constantly monitor pressure differentials either locally or centrally
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1. ICT do not have written specifications ? filtered water ? legionella testing results

It is my view that we are not in a position to say that the risk of fungal infection has been lowered to a level that would make us comfortable. However this has to be weighed against all the other clinical risks associated with moving the patients out.

IN terms of remedial actions to be taken, I think it will require a multi disciplinary team to fully deliniate what the expectations should be for the facilities on the unit and then an options appraisal of how best to accomplish this - ie having patients in the unit or moved back to a location that is know to be safe and can be monitored - ie old Beatson.

regards,
Christine

From:	Peters, Christine on behalf of Peters, Christine
To:	'Thomas Evans'; Peters, Erica;
Cc:	Fox, Ray; Bell, David; Evans, Thomas; Evans, Thomas (Uni); MacConnachie, Alisdair; Macconnachie, Alisdair (NHSmail); Seaton, Andrew; Emma Thomson; White, Beth; Yates, John;
Subject:	RE:
Sent:	01/02/2016 09:51:00

Dear Erica and Tom,

Thank you all for your input. I am in agreement entirely with you Tom that we need to have absolute confirmation regarding the suitability of these rooms as they are today for highly infectious airborne infections. I can assure you I have been doggedly pursuing this for a number of months and have escalated to senior levels of management at every stage.

I was planning to review the rooms (again) with Ian Powrie (estates) last week unfortunately and ironically I was off with a nasty flu like illness. I am back now and this is one of my top priorities.

I will keep you all posted with the outcome of the review with Ian and would greatly appreciate ID consultant support in bringing this matter to a conclusion ASAP.

Kind regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Thomas Evans [redacted]
Sent: 28 January 2016 15:10
To: Peters, Erica
Cc: Fox, Ray; Bell, David; Evans, Thomas; Evans, Thomas (Uni); MacConnachie, Alisdair; Macconnachie, Alisdair (NHSmail); Seaton, Andrew; Emma Thomson; White, Beth; Yates, John; Peters, Christine
Subject: Re:

Thanks Erica - I have no doubt that Infection Control are well aware of these issues; my concern is that management aren't fully aware of the potential gravity of isolation rooms not being fit for purpose.

Best wishes

tom

Professor Tom Evans
[redacted]
Level 4, Glasgow Biomedical Research Centre,
120 University Place,
Glasgow G12 8TA
UK
Phone: [redacted]
Fax: [redacted]

On 28 Jan 2016, at 13:06, Peters, Erica [redacted] wrote:

I am aware of this Tom. Christine has been trying to get this information and is somewhat further down the track with it now. We know that only one room in the paeds building has been actually tested post build. She has asked for independent verification of the efficacy of the current adult rooms post build(an HPE employee). Once we have all the info together as a group we need to take this up to management if we are not satisfied. It is very important that we respect the expertise of our IC colleagues who are very much concerned with patient and staff safety and we need to allow them to get all the data together first-happy to discuss and probably easier to do this in person. We are actively working on this.
Erica

From: Thomas Evans [redacted]
Sent: 27 January 2016 13:52
To: Peters, Erica
Cc: Fox, Ray; Bell, David; Evans, Thomas; Evans, Thomas (Uni); MacConnachie, Alisdair; Macconnachie, Alisdair (NHSmail); Seaton, Andrew; Emma Thomson; White, Beth; Yates, John
Subject: Re:

Hi Eriica

The NHS guidelines for these rooms is in the attached pdf

These are the infection control guidelines for these rooms in North America which are broadly similar

"Airborne infection isolation room (AIIR). Formerly, negative pressure isolation room, an AIIR is a single-occupancy patient-care room used to isolate persons with a suspected or confirmed airborne infectious disease. Environmental factors are controlled in AIIRs to minimize the transmission of infectious agents that are usually transmitted from person to person by droplet nuclei associated with coughing or aerosolization of contaminated fluids. AIIRs should provide negative pressure in the room

(so that air flows under the door gap into the room); and an air flow rate of 6-12 ACH (6 ACH for existing structures, 12 ACH for new construction or renovation); and direct exhaust of air from the room to the outside of the building or recirculation of air through a HEPA filter before retruning to circulation (MMWR 2005; 54 [RR-17])."

Comments:

Can we get the data on room testing to show how many exchanges there are per hour and the pressure differential between the patient room and the entrance.

Unless we can be reassured as to these simple measurements I would strongly advocate that we are **not** equipped to admit a patient with an infectious disease of high consequence that can be spread by the respiratory route. I think we need to alert management to this issue as we seem never to get a straight answer. There is a significant risk to healthcare staff unless we can be sure that these rooms are fit for purpose - our employers are legally required to take all necessary steps to maintain the safety of staff. Of course spread to patients is also a significant risk.

Would welcome thoughts but as the physicians responsible for the care of patients who need these facilities I think it vital that we ensure the safety of staff and patients. I would be happy to forward this on to senior NHS management.

Best wishes

tom

Professor Tom Evans
[redacted]
Level 4, Glasgow Biomedical Research Centre,
120 University Place,
Glasgow G12 8TA
UK
Phone: [redacted]
Fax: [redacted]

On 25 Jan 2016, at 14:24, Peters, Erica [redacted] wrote:

They are not negative pressure rooms in the manner that you are referring to. There is positive pressure in the anteroom so if the doors are both closed then air comes from the ante room and pushes into the patients room(and the corridor) so the pressure differential is from high in the ante room to lower in the patients room-I'll refer to them as isolation rooms to avoid further confusion. Of note they do not have the same number of air

exchanges as negative pressure rooms so are probably below the standard specified for TB as per most guidelines i.e 8-12 exchanges. There are also no filters.

I'll hopefully rewrite a second draft this week for your input. I note the door handle for the interior door has been put on in the HDU room...but on the wrong side of the door. I'll let IC know.

From: Fox, Ray
Sent: 22 January 2016 09:39
To: Peters, Erica; Bell, David; Evans, Thomas; Evans, Thomas (Uni); MacConnachie, Alisdair; Macconnachie, Alisdair (NHSmail); Seaton, Andrew; Thomson, Emma; White, Beth; Yates, John
Subject: RE:

I presume positive pressure room should read as negative pressure?

I suspect we will need some flexibility around "suspected pulmonary tuberculosis"

Ray

From: Peters, Erica
Sent: 22 January 2016 09:06
To: Bell, David; Evans, Thomas; Evans, Thomas (Uni); Fox, Ray; MacConnachie, Alisdair; Macconnachie, Alisdair (NHSmail); Seaton, Andrew; Thomson, Emma; White, Beth; Yates, John
Subject:

This is very much a draft and I have received some feedback from Liz and Christine which I haven't as yet added. However I have put in the references to the UK guidelines(need to read the new TB Guidelines to see if there has been any change-suspect not)
I'll beef it out next week but this will let you see where the discussion is coming from.

Erica

Dr S Erica Peters

Consultant
Infectious Diseases and General Medicine

Administrative Building
Queen Elizabeth University Hospital
1345 Govan Road
Glasgow G51 4TF

Secretary Infectious Diseases: [redacted]
Secretary Hepatitis: [redacted]

****
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From:	Peters, Christine on behalf of Peters, Christine
To:	Hood, John; Inkster, Teresa (NHSmail); Jones, Brian;
Subject:	RE: BMT rooms: for your comments
Sent:	03/07/2015 17:43:00

Thank you for your expert input which is invaluable,
Regards,
Christine

From: Hood, John
Sent: 03 July 2015 15:57
To: Peters, Christine; Inkster, Teresa (NHSmail); Jones, Brian
Subject: RE: BMT rooms: for your comments
Importance: High

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John Hood
Consultant Microbiologist
GRI

From: Peters, Christine
Sent: 03 July 2015 12:56
To: Inkster, Teresa (NHSmail); Jones, Brian; Hood, John
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regards,
Christine

From:	Peters, Christine on behalf of Peters, Christine
To:	Jones, Brian; Inkster, Teresa (NHSmail);
Subject:	RE:
Sent:	06/07/2015 14:09:00

Yes, these are the documents I was referring to, and the pressure of 5-10, comes from John Hood's experience in the Beatson and discussions he had with the guy in America (cant recall name) – I asked him about that. It also allows for redundancy in the system as 5 can drop easily with doors opening etc.So John is clear that 5-10 is the target range rather than >2.5 as in the MMWR guidance.

Christine

From: Jones, Brian
Sent: 06 July 2015 13:11
To: Inkster, Teresa (NHSmail); Peters, Christine
Subject: FW:

fyi

From: Brian Jones [redacted]
Sent: 04 July 2015 13:30
To: Jones, Brian
Subject:

Dr Brian L Jones
Consultant Medical Microbiologist

From: Jones, Brian
To: Peters, Christine; Hood, John; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); Jenkins Gary (NHS GREATER GLASGOW & CLYDE - SGA20); Walsh, Tom
Subject: RE: BMT SGUH
Date: 07 July 2015 12:17:14

Dear All,

Any document summarising our understanding of the current situation should be agreed by all the parties involved and should take account of the comments from Teresa, Christine and John.

Kind regards,

Brian

From: Peters, Christine
Sent: 07 July 2015 11:44
To: Hood, John; Williams, Craig; Inkster, Teresa (NHSmail); Jones, Brian; Jenkins, Gary; Walsh, Tom
Subject: RE: BMT SGUH

Caig,

Who is this document for and can we have sight of the final format please?

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Hood, John
Sent: 07 July 2015 11:40
To: Williams, Craig; Inkster, Teresa (NHSmail); Jones, Brian; Peters, Christine; Jenkins, Gary; Walsh, Tom
Subject: FW: BMT SGUH
Importance: High

Please find my annotated comments.
John H

From: Williams, Craig
Sent: 07 July 2015 10:35
To: Inkster, Teresa (NHSmail); Hood, John; Jones, Brian; Peters, Christine; Jenkins, Gary
Cc: Walsh, Tom
Subject: BMT SGUH

Dear All

Attached is a draft of a document to clarify the original building requirements and briefly describes the building and validation process. Is everyone content that if the building is provided to the original specification it will provide a safe environment for patients. Comments by 1130 please

Craig

7th July 2015

BONE MARROW TRANSPLANT SERVICE TEMPORARY RELOCATION

Routine air quality monitoring has identified a higher particle count than is desirable in the Bone Marrow Transplant unit.

As a precautionary measure, while we explore remedial measures, we have decided to return this service to the Beatson West of Scotland Cancer Centre from the Queen Elizabeth University Hospital together with the intensively treated acute leukaemia patients.

18 patients are being transferred back to the Beatson temporarily, and we have already been in direct contact with the patients affected and their families to explain the situation and apologise for any inconvenience this may cause.

This is temporary measure to enable us to identify and implement what may be necessary to ensure air quality purification levels are optimal for this group of patients.

Dr Anne Parker, Lead Consultant for Haemato-Oncology, said: “In consultation with colleagues from various disciplines, it has been agreed that 18 patients will move to the Beatson West of Scotland Cancer Centre for an interim period. This will enable remedial work to take place without disrupting patient care. This is purely a precautionary step and we have no evidence that any patient has been adversely affected as a result of the environment issues. We are fortunate that the Beatson is available to us and we are working with our critical care colleagues in the new High Acuity Unit which has been established there.”

The return to the new hospital will take place as soon as possible.

This issue relates only to the adult hospital. Bone Marrow Transplant services at the Royal Hospital for Children Glasgow are separate and unaffected.

ENDS

For further information either telephone **0141 201 4429** or email press.office@ggc.scot.nhs.uk

News Release

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8th July 2015

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ENDS

For further information either telephone **0141 201 4429** or email press.office@ggc.scot.nhs.uk

From: Peters Christine (NHS AYRSHIRE & ARRAN)
Sent: 08 July 2015 11:29
To: brian.jones[redacted]
Subject: Resignation

Dear Brian,

Following my resignation from the role of ICD South Glasgow yesterday and debrief conversations with Anne Cruikshank, Isabel Neil and yourself this is a summary of my reasons for resignation.

Immediate reason

I was asked by the ICD lead to comment on a document that summarised the situation on the BMT accommodation for senior management. On consideration of the document with colleagues I had serious misgivings regarding the content and made my comments in writing. I am unable to be party to a document that does not fit with my understanding of the facts.

Sub-acute reasons

Over the last 2 weeks I have discovered a host of issues pertaining to the new build and the process of validation of the building. I worked conscientiously to ensure that patient safety was prioritised and that actions were taken to protect the most vulnerable patients in accordance with guidelines and discussion with experts. On three occasions I was told that the issue was initially not considered to be that serious as it was "just Christine" or a "hyper vigilant local ICD" , and it was only on written support from other Microbiologists that the actual extent of the problem was accepted. In fact everyone at the final meeting regarding the BMT accommodation was unanimous in recognising the risk to patients; my findings were not challenged with regard to fact or conclusions. There is quite simply no point to the site ICD role if it requires constant affirmation of decisions by the lead ICD which can result in delays.

Furthermore there has been an absence of adequate communication. Teresa Inkster and I had the unfortunate experience of investigating and discovering problems that had already been discovered and not passed on to us. I refer in particular to the fact that light fittings in Schallion were open to the ceiling void, thus explaining the unexpectedly high counts in the isolation rooms, as well as the fact that HEPA filters were missing in all the positive pressure lobbied rooms in the new build. These facts had to be re-discovered which is inefficient and causes delays in remedial action. I still have not got to the bottom of the legionella in the water issue. Apparently no-one in the ICT knew that there were positive cultures in water outlets in the new build, but the Estates team informed me that

this information was in fact passed on. I feel as if I have been going round in circles with this issue and it really should be a very simple matter. I am not willing to continue in a position where I am unable to access relevant information when required.

Chronic reasons

There have been longer term issues with the communication cascade within the ICT as well as a lack of clarity around the role of the site based ICDs. I have already raised these issues with Tom and Craig in January and they agreed to introduce monthly ICD meeting which were minuted (this had not been the case prior to my meeting with them). These meetings have helped in that it is now possible to refer back to minutes as a useful record of decisions. However, there continues to be problems with cascade of information, as exemplified by the building issues, but by no means restricted to these. It is impossible to fulfil the role of an ICD where the roles and areas of responsibility are unclear.

In addition to the communication issues, I feel that there is an unhealthy atmosphere within the team, and find expressing a different view from the leadership to be an intimidating challenge. I find this to be in marked contrast to the open and supportive ethos of the Clinical Microbiology team where strongly expressed differing views are tolerated in the spirit of open discussion and mutual respect.

I am aware that resigning just before a long period of (planned) leave is not ideal, however in the circumstances I can see no other option.

I am entirely willing to discuss the above with any relevant persons, however it will need to be after my return from leave.

I would like to re-iterate to you that I am willing to serve any period of notice that you indicate to be appropriate and will of course be willing to take part in Clinical Microbiology duties with relevance to infection control in the same way as all my non-ICD Microbiology colleagues.

regards,
Christine Peters

This document summarises events between the 19th June to 7th July 2015 and my reasons for resigning as an Infection Control doctor.

Friday 19th June

I was contacted by Prof Craig Williams to ask if I could cover any ventilation issues at the new Queen Elizabeth University hospital for a 1 week period commencing 22nd June while he was on annual leave. I was not handed over any issues by him at this time.

Thursday 25th June

I was asked by my colleague Dr Christine Peters to attend a 2pm meeting (in place of Prof Williams) with herself , estates and project team members ,as she had concerns regarding the decontamination room in the A+E department of QEUH. As Christine is an existing ICD at QEUH she took the opportunity to ask those present at the meeting for information relating to all the specialised ventilated areas within the new hospital. Those present were unable to provide details of the original specification, validation/commissioning data, or ongoing monitoring of air +/or water quality where applicable for the following areas;

1) Adult Bone Marrow Transplant unit

2) RHSC Bone Marrow Transplant unit

3)Operating theatres,

4) ICU isolation rooms,

5) Isolation rooms within the renal unit for infected BMT patients

6) Decontamination Room .

We were also informed by the estates manager of:

1) Unsealed rooms in the Children's BMT ward in that they had holes in the ceiling

2) Missing HEPA filters in isolation rooms in the renal unit

3) Legionella pneumophila (serogroup 1) isolated from water testing of the adult hospital.

He informed us that all these matters had been discussed with Prof Williams.

I left the meeting feeling very concerned at the lack of information available and the lack of handover I had received. Immediately after the meeting Dr Peters went to visit the Adult Bone Marrow Transplant unit and telephoned me late afternoon to inform me that there were problems with the ventilation, including no visual monitoring of pressures had been installed and that no air testing had taken places. Staff in the unit were very concerned.

Friday 26th June

Dr Peters works part time and not on a Friday, however we discussed our concerns via a telephone call that day. We required further information urgently to risk assess the situation. We therefore requested the following from estates and project team colleagues;

1) All the original plans and ventilation specifications for the ventilated areas listed above

2) All the commissioning and validation checks

3) Results of air and water testing prior to the patients moving in

4) Results of ongoing monitoring of air and water quality.

I realised at that point that there were a vast number of issues to investigate and that they would need to be prioritised. I was particularly concerned about the reports of Legionella in the adult hospital and the lack of patient risk assessment in relation to that. I was also concerned about the lack of air testing (particle counts and sampling) in the adult BMT unit. (In contrast testing had been taking place in the children's BMT unit). Based on the information I had up to that point I prioritised the adult BMT unit. I therefore requested urgent particle counts and air sampling tests for adult BMT at the earliest opportunity which was Monday 29th June.

Monday 29th June

I was on annual leave on this day but BMS staff from GRI undertook particle counts and air testing of the adult BMT.

Tuesday 30th June

Prof Williams was expected to have returned from annual leave however I was informed he was still away so I continued to cover for him.

I received results from the particle counts performed in adult BMT and these were grossly elevated. Two rooms had very high counts , a clear indicator that there was a problem with ventilation. At this point we were still waiting for the information that we had requested. That afternoon, Dr Peters, Prof Jones (lead microbiologist for haemato-oncology) and I visited the unit and met with Myra Campbell to discuss our concerns. We also walked round the unit.

Wednesday 1st July

I attended two incident meetings at 10 am and 4pm chaired by Gary Jenkins to discuss the adult BMT situation. Some information was made available at these meetings about current ventilation parameters. This information in conjunction with particle counts was enough for myself and colleagues (Dr C Peters, Dr B Jones and Dr J Hood) to conclude that the environment was not safe for patients. We also discussed the clinical risk of moving back to the Beatson which lacked ICU/HDU facilities . In the meantime we agreed to have engineers increase the positive pressure within the new unit, repeat particle counts and reassess the situation on Friday 3rd July. We were still awaiting the information we had requested however verbal indications at the meetings seemed to indicate that the adult BMT might not have been built to an appropriate specification.

After the 4pm meeting I went to visit the children's BMT unit with Pamela Joannidis, Nurse Consultant Infection control. I had been made aware of an email sent to the BMS who had undertaken air sampling by staff on the unit asking the BMS to advise them which room on the unit was safest for a child undergoing a bone marrow transplant. I felt it essential to address the concerns that the staff on the unit might have . Whilst on the ward I noted that the transplant rooms had unsealed light fittings and a direct communication with the void above. I could see visible dust around the light fittings and there was visible dust on surfaces in the room . It was impossible to do a full risk assessment until all the relevant info was available. I reviewed particle counts which were elevated and air sampling results which revealed fungal growth including Aspergillus from areas within the children's BMT.

I was informed that one child was soon to start induction for a transplant. I had major concerns about patient safety. Fortunately no children were undergoing transplantation at the time although there were immunocompromised children on the ward. By this time it was 7pm so I asked Pamela Joannidis to set up a meeting for the next day.

I asked Pamela for minutes of the meeting from June 19th which she had attended. I was told none were taken. There were also no notes available.

Thursday 2nd July

I attended a meeting with staff from children's BMT including Consultant haematologist Anna Ewins and Pamela Joannidis. I was asked to give my opinion as to which room within the unit was safest for a child who was about to undergo a bone marrow transplant. I explained that I could not, with the information I had available, state that one room was safer than another. I advised against proceeding with a transplant. This meeting was difficult as I was challenged for giving conflicting advice to that received from Prof Williams on June 19th. I explained that the rooms had holes in the ceiling and were therefore unsealed (sealed rooms are a required specification for any BMT unit). The elevated particle counts and fungal growth were discussed. I also informed them that I had not seen crucial documentation on validation and did not know if the BMT unit meet the CDC specification. In addition I could not guarantee water safety as I had not seen Legionella results despite requesting them.

I was informed that clinical need meant that the child's transplant had to proceed and that the decision had already been made. My action at that point was to urgently request sealing of the BMT rooms. In addition I advised antifungal prophylaxis for the children already in the unit, for the transplant patient and suggested possible relocation of the next transplant to facilities in Edinburgh. I visited the unit later that evening and noted that in Rooms 17 and 18 the lights had been sealed. However I was still concerned the rooms might not be fully sealed. As I had not seen validation data I requested a deep clean of the rooms and arranged urgent particle counts for the next day. I requested urgent sealing of the light fittings in the remaining rooms.

Friday 3rd July

I was informed that particle counts in Room 17 of the children's BMT (where light fittings had been sealed) were lower and less than 1000. I concluded that using room 17 this was the safest option for this transplant patient

At 4pm I attended at meeting regarding adult BMT where a decision was made to transfer patients back to the protective environment of the Beatson level 4.

Tuesday 7th July

Following the AICC on Monday 6th July I was asked by infection control colleagues to comment and agree to a document summarising the situation with the adult BMT. I believed that this document did not reflect the facts as I understood them and therefore did not feel able to sign the document. . My comments back were not well received. I was unclear where this document was being sent.

It was with great regret that I the felt that I had to resign as infection control doctor that afternoon.

Reasons for my resignation

The reasons for my resignation stem largely from my experience within the past two weeks. I have major concerns regarding the specialised ventilated areas within QEUH and RHSC and the impact on patient safety.

Dr Peters and I have put in numerous requests to various individuals including infection control, estates and project team members for information including original spec/plans, commissioning data, data pertaining to ongoing monitoring of these areas and water sampling results.

Without this information available it has made it impossible for me to perform risk assessments.

I believe the limited information I had available available demonstrates deficiencies in the current ventilation systems in adult and paediatric BMT units . With regards to water quality and Legionella I have no information other than a verbal report that Legionella is present within the adult hospital.

You will understand that it is impossible for me to fulfil my role as an ICD unless all the info acquired to make decisions is available.

I am unclear as to what input there has been from infection control to the various stages in relation to the new hospital facilities. I was not involved with the decision to transfer adult and children BMT patients prior to ensuring air and water quality.

Furthermore I have been asked to approve a document relating to adult BMT that I do not agree with, my comments have not been well received, there is an unwillingness to incorporate them and I have not seen a final version.

I am an experienced ICD however my role had become increasingly difficult and challenging. At times I feel my professional views are not acknowledged or accepted. Despite my requests for clarity I do not have a full understanding of the role of the ICD within the infection control team. As an ICD and Consultant Microbiologist I have a duty of care to provide the best possible service to patients. At present I have concerns about patient safety and feel that there has to be a clear understanding of all the issues that require to be resolved in relation to the new hospital.

I am happy to cooperate with any enquiry however I have to be confident that the facts as I understand them are accurate. This is why I was unable to endorse a document which I believed needed to be revised to correct some of the detail.

Dr Teresa Inkster

09/07/2015

BMT Q&A FOR POSSIBLE SUPPLEMENTARY QUESTIONS FOR DISCUSSION

1 - Why was this not picked up sooner? The unit has been operational for over a month?

As soon as our routine monitoring arrangements identified a higher air particle count we took swift action to address the situation together with expert clinical haemato-oncology consultant colleagues.

Why were these issues not picked up during the commissioning process?

There is a process for validating that facilities are in line with specifications and we are currently in the process of reviewing the processes in this instance to understand why this was not identified. However, our robust routine monitoring arrangements have worked and identified the issue so that early action could be taken.

3 - How many patients have been treated in the unit so far and can you guarantee that they will not have been adversely affected?

The 39 patients that have been treated in the unit so far have all been reviewed by expert clinicians and the lead clinician for haemato-oncology has confirmed that she is confident no patients have been adversely affected by this higher air particle count.

4 - How much will the work cost?

We are currently identifying what may be necessary to ensure air quality purification levels are optimal and as such as cost is yet to be confirmed.

5 - What exactly is the work that is required to make the unit fit for these patients?

We are currently identifying what may be necessary to ensure air quality purification levels are optimal

7 - Is the anaesthetic cover on the Beatson site adequate for these patients?

The haemato –oncology clinicians have confirmed that they are content that the BOC will provide a safe environment for this group of patients in the interim given that the unit has only recently transferred for this location and that the out of hours anaesthetic cover arrangements on the site are appropriate.

8 - In view of these issues only being discovered now what reassurance can you provide that all other areas of the hospital are safe for patients?

We are not aware of any other issues.

9 - Is this a fault by the builder?

There is a process for validating that facilities are in line with specifications and we are currently in the process of reviewing the processes in this instance to understand why this was not identified. However, our routine monitoring arrangements have worked and identified the issue so that early action could be taken.

From:	Peters, Christine on behalf of Peters, Christine
To:	Hollowell, Frances
Cc:	Howat, Bridget; Stewart, David;
Subject:	RE: Meeting Request: Infection Control
Sent:	10/08/2015 09:28:00

Dear Fran,

Thank you for the invitation to meet with Dr David Stewart and Bridget Howat to discuss the reasons for my wish to resign from my current position as Infection Control doctor in South Glasgow. I would be happy to attend on 18/08/15 at 13:00 , and look forward to the opportunity to discuss all the issues pertaining to this situation.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Hollowell, Frances
Sent: 07 August 2015 08:23
To: Peters, Christine
Cc: Howat, Bridget; Stewart, David
Subject: Meeting Request: Infection Control

Sent on behalf of Dr David Stewart

Dear Christine

On behalf of Dr. David Stewart, I would like to invite you to a meeting with both he and Bridget Howat [HR Manager] regarding team concerns within Infection Control. He understands that you are planning to demit from infection control duties shortly and would welcome the opportunity to discuss this with you, in particular regarding the issues you have encountered which led to this situation.

The meeting will take place in David's office in the Management Building [ground floor] in QEUH and should last approximately one hour. Can you please advise if you are available on either of the following dates:

- 18/08/2015 for one hour between 13:00 - 15:00hrs
- 20/08/2015 for one hour between 15:30 - 17:00hrs

An early response would be appreciated.

kind regards

Fran

Fran Hollowell
PA to Dr David Stewart, Deputy Medical Director, NHSGG&C
& Ann Crumley, Head of Organisational Development
Management Building
Queen Elizabeth University Hospital
Glasgow G51 4TF

Tel: [redacted]
email; [redacted]

hours of work: 08:00 - 16:30 [Mon - Fri]

From:	Jones, Brian on behalf of Jones, Brian
To:	Inkster, Teresa (NHSmail); Peters, Christine; Wright, Pauline;
Subject:	FW:
Attachments:	BMT 2009 44 495-507.pdf;HICPAC Guidelines Isolation 2007.pdf;
Sent:	13/08/2015 13:44:07

FYI

From: Jones, Brian
Sent: 12 August 2015 12:34
To: Archibald, Grant
Subject:

Dear Grant,

I have not been asked to address any action points (and I don't want to muddy the waters) but I thought, in order to provide a more complete picture, I would send you copies of the guidance from an international group published in Bone Marrow Transplantation in 2009 and the HICPAC Guidance 2007 from the US (see Table 5 on p.132 Components of a protective environment).

In the SHPN 04 Supplement 1 (2008) it states on p.4 that the supplement does not describe the facilities required ….on wards where severely immunocompromised patients are nursed. On p.16 it states that where immunocompromised patients are to be accomodated such as in transplant units…. there could be a need for positive pressure isolation rooms. In the DoH HBN 04-01 Supplement 1, Isolation facilities for *infectious patients* in acute settings (2013) it states that the HBN does not describe the specialist facilities required …..for protective isolation of severely immunocompromised patients.

Peter Hoffman's advice has been consistent over the years and remains that these rooms are not appropriate for the protective isolation of severely immunocompromised patients.

I hope this helps and I'd be happy to discuss further.

Kind regards,

Brian

Professor Brian L. Jones
Consultant Medical Microbiologist, Glasgow Royal Infirmary
Head of Service, Microbiology & Virology, NHS GGC

Professor of Clinical Microbiology & Infection
Institute of Infection, Immunity & Inflammation,
University of Glasgow

Tel [redacted]
Mobile [redacted]

[redacted]

From:	Williams, Craig on behalf of Williams, Craig
To:	Peters, Christine
Cc:	Walsh, Tom; Stewart, David; Mitchell, Clare;
Subject:	Re: Neuro surgical theatres
Sent:	24/08/2015 16:43:15

Dear Christine

If you go ahead as you have described could you please let me know how things go.

Best wishes

Craig

Sent from my BlackBerry 10 smartphone on the EE network.

From: Peters, Christine
Sent: Monday, 24 August 2015 2:37 PM
To: Williams, Craig
Cc: Walsh, Tom; Stewart, David; Mitchell, Clare
Subject: RE: Neuro surgical theatres

Dear Craig,

Thank you for your email. Whilst the ingress of raw sewage was the initial reason for infection control becoming involved, we have now identified a multiplicity of issues regarding the safe functionality of the suite. I cannot consider the sewage ingress as an isolated issue. In order to safely reopen/divert theatre work the risks of each scenario have to be fully elucidated, which is why I have attempted to be as comprehensive as possible in assessing the theatres. If I cannot re open theatre 1,2,3 due to air quality post water damage (still awaiting air sampling results so I cannot give you full information at this moment) the work will be going through other theatres such as theatre 4 which need to be examined in terms of a clear risk assessment.
The critical issues are:

1. Repeated ingress of raw sewage, to the extent that it has dripped into neuro theatre whilst *patient was on the table with open cranium.* This has occurred on more than one occasion.
    - There is a pipe in situ which Estates advise can easily block and a repeat episode occur at any time
    - There are concerns that there is damp in the ceiling that has not adequately dried out. Any removal of fungal spores in the unit depends on an adequate ventilation system removing them, pending adequate fixing of the source which may involve replacing the ceiling etc and a more radical solution found to the pipe work in situ.

2. As there are no prep rooms in the suite at all ,sterile packs are stored in cupboards until required, the packs are laid onto trolleys and wheeled into theatre through the "dirty corridor" , to be laid up in theatre. Regulations state that the sterile pack store cupboards should have Air Exchange rate of 10 and a nominal Pressure of 25. These were not tested as part of validation. Teresa and I identified that the store cupboards were extremely stuffy with vents dirty and dusty, and dust on all the shelving. Certainly cleaning would help, however this will not solve the underlying issue of sterile surgical packs being stored in a facility that does not give clean air flow

3. The Ventilation validation report highlighted that Theatre 4 (which is unaffected by the sewage leak) has a Positive Pressure of 13pa (should be 25pa therefore well less than the critical 75% parameter) and the anaesthetic room has a Positive pressure of 3 pa (should be 10) ,with a suggestion that this was due to missing pressure stabilisers – an issue found throughout the suite.
4. The scrub room on level one is open to the corridor and if theatre 3 is used (even if sewage is cleaned etc) Its use involves scrubbed staff walking up an extremely busy corridor which has a constant flow of main hospital corridor air flowing round it and multiple un-scrubbed staff walking up and down . This goes against all theatre planning principles. Again scrub room parameters are not included in the validation report

5. The Anaesthetic rooms 1,2,3 have fundamental problems with regard to ventilation that the sewage incident rectification will not improve, namely the lack of an extract and the inadequate air exchange rate.

6. Outside air from what is effectively a building site is readily accessing all the theatres

7. There is a critical lack of storage space through out the suite which has been exacerbated by the closure of theatre 1,2,3 (highlighted by the theatre staff as a

problem)

I have been copying Teresa Inkster to my emails as it seems she is ICD for Regional and covers me Thurday/Friday, I am not sure why she is not copied in on any of your replies.

In conclusion I do not think it is possible to go into the meeting tomorrow morning and simply focus on the sewage ingress as any clinical risk assessment will need to take into account all the other factors.

Grateful for any further advice,

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Williams, Craig
Sent: 24 August 2015 13:12
To: Peters, Christine
Cc: Walsh, Tom; Stewart, David; Mitchell, Clare
Subject: Re: Neuro surgical theatres

Dear Christine

Thank you for your e mail. I think the meeting tomorrow should concentrate on the issues raised by the ingress of liquid into the theatre and ensure that this has been safely rectified.

In respect to the other issues you raise around airflow and design, I will ask Alan Gallagher to look into this further and give his advice from an estates point of view. There is also work ongoing to complete the action plan which resulted from the repeat IC audit which was undertaken last week

Best wishes

Craig

Sent from my BlackBerry 10 smartphone on the EE network.

From: Peters, Christine
Sent: Monday, 24 August 2015 11:31 AM
To: Williams, Craig
Cc: McNamee, Sandra; Mitchell, Clare; Inkster, Teresa (NHSmail)
Subject: RE: Neuro surgical theatres

Dear Craig,

I am fully aware that the last 3 audits were green, and that the validation report number 597 was completed on 6/08/2015 and rated the theatres as Average.

The limitations of the audit tool are that they do not consider the entirety of the unit at once, and while it concentrates on knowledge and staff practice and cleanliness, it does not take into account overarching considerations such as air flow. The audit tool is also a snapshot and results can vary depending on what was exactly observed on the day.

The validation report states that the layouts are standard by 5+6+7+8 Appendix 7 HTM 03-01 Part A. The layout is not according to these designs with the anaesthetic rooms being across corridors for three theatres, no prep rooms in situ and the scrub room being open to the corridor. Furthermore the air exchange rates in Anaesthetic rooms 1,2 and 3 are less than 50% of desired range which raises issues regarding anaesthetic gases as well as microbiological air quality. The pressures for the anaesthetic rooms 4 and 5 are less than half the recommended level and the positive pressure in theatre was less than half of recommended. I have further questions regarding the validation report and have left a message with the author to discuss.

Teresa and I are clear that based on our observations on Wednesday 19th we have serious concerns regarding the safety of using these theatres, and we have sent you a report .That opinion remains.

There is a meeting at 8 am tomorrow morning chaired by Susan Walker. Please let me know how you would like to take this forward,

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Williams, Craig
Sent: 21 August 2015 09:18
To: Peters, Christine
Cc: McNamee, Sandra; Mitchell, Clare
Subject: Re: Neuro surgical theatres

Dear Christine

I am concerned to hear your opinion on the theatres especially in light of the fact that the last 3 formal audits were green. I have asked Clare to urgently repeat the audit.

It would be helpful if you could liase with the nursing team around this and frame your concerns in the context of the audit results and the theatre validation programme

Craig

Sent from my BlackBerry 10 smartphone on the EE network.

From: Peters, Christine
Sent: Wednesday, 19 August 2015 2:22 PM
To: Williams, Craig
Cc: Walsh, Tom; Inkster, Teresa (NHSmail)
Subject: Neuro surgical theatres

Hi Craig,

I tried to call, it would be good to have the opportunity to discuss the situation with regards to neuro theatres with you.

Teresa and I walked around all the theatre suite this morning with Daren Hopkins from Estates. We have very large concerns over the state of the entire theatre suite and are both of the opinion that they are not fit for purpose.

I am compiling a report , but suggest that we have an urgent meeting about it.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From:	Peters, Christine on behalf of Peters, Christine
To:	Stewart, David
Subject:	FW: Neuro theatres
Sent:	25/08/2015 13:18:00

Just to ensure you know I am going to this meeting now.

From: Walsh, Tom
Sent: 25 August 2015 12:12
To: Walker, Susan; Peters, Christine; Inkster, Teresa (NHSmail); McNamee, Sandra; Hunter, William; Gallacher, Alan; MacDonald, Marion
Subject: Neuro theatres

Dear colleagues.

Following an initial meeting this morning and a subsequent discussion with my GM colleagues Susan Walker, I would ask you to prioritise an urgent meeting at 1:30pm to review the position in relation to the Neuro Theatres at QEUH.

Susan is based on the 3rd floor of the Institute and is looking for room for us.

KR

Tom

From:	Jones, Brian on behalf of Jones, Brian
To:	Inkster, Teresa (NHSmail); Peters, Christine;
Subject:	FW: IPC
Sent:	24/09/2015 10:33:10

FYI
BJ

From: Cruickshank, Anne
Sent: 24 September 2015 09:44
To: Jones, Brian
Cc: Neil, Isobel
Subject: RE: IPC

Hi Brian

As you know I spoke to David Stewart, and he had hoped to feedback on the Board's review by the end of this month.

He's on leave until 29th September, at which point I'm on leave till 8th October. I've asked him if he could let me know how things are progressing when I get back, and will contact him immediately on my return.

Could you let Christine and Theresa know, and thank them for their patience.

Regards

Anne

From: Jones, Brian
Sent: 25 August 2015 17:18
To: Cruickshank, Anne
Subject: IPC

Dear Anne,

As I continue to receive expressions of concern re IPC, I wonder if you are able to update me on the status of the Board's investigation?

Kind regards,

Brian

Professor Brian L. Jones
Consultant Medical Microbiologist, Glasgow Royal Infirmary
Head of Service, Microbiology & Virology, NHS GGC

Professor of Clinical Microbiology & Infection
Institute of Infection, Immunity & Inflammation,
University of Glasgow

Tel [redacted]
Mobile [redacted]

Neuro Surgical Theatres : Timeline and Infection Control Summary

10/08/15

Dr Peters received email regarding clinical concerns of Neuro surgeons regarding repeated ingress of sewage into neuro surgical theatres. Dr Peters asked to attend meeting that had been called by Susan Walker (General Manager Regional)


FW Contaminated theatres - urgent mee


FW NEURO THEATRE.msg

11/08/15

8am meeting highlighted clinical concerns that a proper final fix to the problem of recurrent sewage ingress has not been implemented. Mention was made of previous increases in infection rates that had been investigated and Miss Brown and Mr St George highlighted that there had been a number of cases of infections from which there was no positive microbiology reports.

Walk around theatres by Dr Peters with Pamela Philip (Theatre Co-ordinator) and Jackie Barmanroy ICN. Work underway and theatres 1 and 2 sealed off for remedial work. Longstanding issues around storage, missing baffles and layout as being non-standard were highlighted as per report .

Agreed to keep Theatres 1,2 closed pending full investigation of previous issues, and theatre 3 only for emergencies as has previously occurred when theatre 1 had sewage ingress. .

Lead ICD on annual leave. Jackie Barmanroy reported to lead ICN.

Information on design and validation requested and previous records of infection control issues. Walk around had occurred in March by Infection control – this information requested from ICN


RE Contaminated theatres - follow up .l


RE Contaminated theatres - follow up .l

12/08/15

Summary of walk around circulated by Dr Peters


RE Neuro theatres Draft For your comme


Infection Control Walk around theatres

Information on number of leaks received by Dr Peters

RE Contaminated theatres - follow up .

17/08/15

Data on previous ventilation issues received by Dr Peters

requested local ventilation data Thea

RE Contaminated theatres - follow up .

NEURO ENT THEATRES WALKROU

Initial air sampling results, however ventilation had been switched off in Theatres 1 and 2 and switched on in theatre 3.

Air Sampling NSGUH Neuroscience Theatre

18/08/15

Morning meeting identified that due to continued concerns re functionality of suite a, theatre 1,2,3 would be closed .

Email sent to Prof Williams to update

RE Neuro theatres.msg

19/08/15

Walk around with Dr Peters, Dr Inkster and Estates personnel , major concerns identified, despite audits being green. Tried to phone Prof Williams, no reply, sent urgent email.

RE Neuro surgical theatres.msg

FW Neuro Theatre Audits.msg

20/8/15

Summary of findings from walk around sent to Prof Williams, his email unable to accept so Dr Inkster forwarded to Nurse Consultant Sandra MacNamee.

FW Neuro Theatres.msg

24/8/15

Email correspondence from Prof Williams

RE Neuro surgical theatres.msg

25/08/15

Meeting chaired by Susan Walker. No ICN attended – they were informed not to by line management. Dr Peters informed the group of the findings of the walk around and her opinion that the theatres in current situation could not be considered to be meeting standards from an infection control point of view, and that this would need to be escalated through infection control and an external expert review of the whole suite requested. An urgent meeting was requested with infection control.

Dr Peters phoned Prof Williams to request his attendance at an urgent meeting, he said he was too busy and would get back to her. Dr Peters phoned Dr David Stewart to ask for advice as Susan Walker asked for urgent meeting. He advised the need for a break down of the problems and the fixes to each problem, and the relative risk incurred by each problem. He indicated the need for a risk gradient approach to the whole situation.

Urgent meeting pulled together by Susan Walker with Tom Walsh ICM chairing.

FW URGENT - follow up meeting re INS the

Wednesday 26/08/15

Dr Peters phoned Malcolm Thomas, co-author of HTM 03-01 and advisor on ventilation to DoH who indicated his concurrence with the view that there were serious concerns over the state of infection control within the suite given the information regarding recurrent sewage leaks, dusty sterile equipment stores, missing baffles and numerous stained tiles throughout the suite, along with practice issues such as drawers of sterile goods being stored in corridors. He specifically stated that he would consider missing baffles to be “show stoppers” in this context and that the whole design and functional ality had to be considered as a whole, that air exchange numbers alone are not enough.

Dr Inkster went to inspect work being carried out

Meeting chaired by Gary Jenkins Regional Services Director.


RE INFECTION CONTROL MEETING A


Ongoing work neuro theatres 1-3.msg

27. email

Julie Rothney

From: Peters, Christine
Sent: 31 August 2015 15:13
To: Peters, Erica; Inkster, Teresa (NHSmail)
Subject: RE: Negative pressure rooms in QEUH

Thank you Erica , I had not been informed of this situation.

I will forward to Brian to inform all Microbiology Clinical staff,
Regards,

[redacted]

Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

From: Peters, Erica
Sent: 31 August 2015 14:32
To: Inkster, Teresa (NHSmail); Peters, Christine
Subject: FW: Negative pressure rooms in QEUH

FYI

From: Bell, David
Sent: 30 August 2015 11:23
To: Emma Thomson ([redacted]); Fox, Ray; MacConnachie, Alisdair; Peters, Erica; Seaton, Andrew; 'Thomas Evans'
Cc: Dundas, Stephanie (MK) ID Unit Consultant; claire.mcgoldrick[redacted] Kennedy, Dr N - Consultant Physician
Subject: Negative pressure rooms in QEUH

There is an issue with the negative pressure HDU isolation rooms in the new hospital

I was phoned by Anne Harkness (management) on Friday evening to say that the 2 negative pressure rooms in HDU are not usable for a highly infectious pathogen at the moment. They are not confident that the rooms are fully protective for staff. The rooms are being urgently serviced / checked this coming week but at the present time we cannot admit a ?MERS or ?infectious MDR TB into one of these rooms. Until this situation is sorted out we will have to ask Monklands to help – I spoke to Claire on Friday and I am copying in Nick and Stephanie. I hope that you are able to continue to help us this week if we had a case needing isolation.

For a ?VHF patient, we would still use the decontamination room next to A&E in QEUH.

I am away Monday and Tuesday on leave. Anne will get back in touch once she has an update on this situation

Regards

David

Consultant in Infectious Diseases and General Medicine
South Glasgow University Hospital
1345 Govan Road
Glasgow
G51 4TF

Telephone:
Direct:
Secretary: [redacted]

From:	Jones, Brian on behalf of Jones, Brian
To:	Peters, Christine
Subject:	RE: Negative pressure rooms in QEUH
Sent:	31/08/2015 15:30:31

I had an idea. If this is official then an email from IPC to let us know would be appropriate.
BJ

From: Peters, Christine
Sent: 31 August 2015 15:15
To: Jones, Brian
Subject: FW: Negative pressure rooms in QEUH

Hi Brian,
Not sure if you already know about this, perhaps all Clinical Microbiology consultants and trainees should be aware of this change in planning for ?Mers ?MTB

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Peters, Erica
Sent: 31 August 2015 14:32
To: Inkster, Teresa (NHSmail); Peters, Christine
Subject: FW: Negative pressure rooms in QEUH

FYI

From: Bell, David
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Cc: Dundas, Stephanie (MK) ID Unit Consultant; claire.mcgoldrick[redacted]; Kennedy, Dr N - Consultant Physician
Subject: Negative pressure rooms in QEUH

There is an issue with the negative pressure HDU isolation rooms in the new hospital

I was phoned by Anne Harkness (management) on Friday evening to say that the 2 negative pressure rooms in HDU are not usable for a highly infectious pathogen at the moment. They are not confident that the rooms are fully protective for staff. The rooms are being urgently

serviced / checked this coming week but at the present time we cannot admit a ?MERS or ? infectious MDR TB into one of these rooms. Until this situation is sorted out we will have to ask Monklands to help – I spoke to Claire on Friday and I am copying in Nick and Stephanie. I hope that you are able to continue to help us this week if we had a case needing isolation.

For a ?VHF patient, we would still use the decontamination room next to A&E in QEUH.

I am away Monday and Tuesday on leave. Anne will get back in touch once she has an update on this situation

Regards

David

Consultant in Infectious Diseases and General Medicine
South Glasgow University Hospital
1345 Govan Road
Glasgow
G51 4TF

Telephone:
Direct:
Secretary: [redacted]

From:	Peters, Christine on behalf of Peters, Christine
To:	Inkster, Teresa (NHSmail)
Subject:	FW: Isolation Rooms
Sent:	25/04/2016 15:34:00

From: Peters, Erica
Sent: 04 September 2015 10:49
To: Inkster, Teresa (NHSmail); Peters, Christine
Subject: FW: Isolation Rooms

See below

From: Harkness, Anne
Sent: 04 September 2015 10:42
To: MacConnachie, Alisdair; Bell, David; Seaton, Andrew; Fox, Ray; 'Emma Thomson'; Evans, Thomas; Peters, Erica
Cc: Davidson, Scott; McFarlane, Cath; Williams, Craig
Subject: Isolation Rooms

Just to confirm that we have had confirmation that the isolation rooms tested in critical care have passed the full range of tests , so there is no longer any need to have to admit elsewhere.

The rooms in medical HDU are not tested yet – so patient placement will be in the ICU area until the full test programme is complete

Emma – in terms of your elective day case – that can now be planned for admission

Anne

FW: Sealing of Suites within Childrens Hospital Ward 2A

Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)

Wed 09/09/2015 16:17

To: brian.jones[redacted]; Cruickshank Anne (NHS GREATER GLASGOW & CLYDE - SGA20)
[redacted]

Importance: High

Sensitivity Confidential

Dear both ,

I was asked by Craig yesterday to cover him on Friday - I was not told of any issues . I have just received the email thread below in relation to childrens BMT . I am particularly concerned about the phrase ;
'By this Friday at the latest I am looking for infection control to feed into the process where three way Director approval will be reached that rooms 18 and 19 are passed for transplanting.'

Once again I am being asked to make a major decision about patient safety with no handover and no involvement in the background to all of this .

I am not prepared to make this decision

Can you please advise me how to respond

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: McNamee, Sandra [redacted]
Sent: 09 September 2015 16:05
To: Redfern James (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: pamela.joannidis[redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); alison.balfou[redacted]
Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

Hi Jamie
I am acting up for Tom so could you cc me into any correspondence regarding this issue.

In response to your e mail:

- My understanding is that the ICDs who will give advice after reviewing the results of this weeks testing will be Dr. Alison Balfour (Thursday) or Dr T Inkster (Friday). We will let you know when these are available.
- Craig will be back on Monday and can advise on the testing of the other rooms due to be sealed next week.
- Pamela is meeting with Billy tomorrow to progress the issues regarding the cleaning of the unit.

Thanks
Sandra

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

A49525252

[redacted]

From: Hamilton, Pauline
Sent: 09 September 2015 15:41
To: McNamee, Sandra
Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

fyi

From: Redfern, Jamie
Sent: 09 September 2015 15:08
To: Joannidis, Pamela
Cc: Williams, Craig
Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

Hi Pamela

In Craig's absence will you and colleagues in infection control / microbiology be following up on actions set for him following Monday's meeting?
That is
- update on the pending microbiology test results in rooms 18 / 19 ward 2a rhc hopefully received today and fully reported by Friday?
- completion on test results of 2 additional rooms in ward 2a rhc which will be fully sealed next week 1 on the Wednesday and 1 on the Friday by Brookfield.
By this Friday at the latest I am looking for infection control to feed into the process where three way Director approval will be reached that rooms 18 and 19 are passed for transplanting.
We aim to start transplant of a patient next Monday so this timeline is absolutely key. If concerns around it I need to be made aware immediately.
Our aim as quick as possible is then to have the 2 further rooms fully sealed and passed by Brookfield/ estates and subsequently infection control to same standard of rooms 18 / 19.
This will require you guys as noted abobe to be able to do the necessary microbiology tests the minute sealing and permeability is finished on these two additional rooms. Again if this causes any concerns can you let me know.

Jamie

From: Redfern, Jamie
Sent: 09 September 2015 14:46
To: Armstrong, Jennifer; Archibald, Grant; Williams, Craig; Loudon, David
Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

Dear all

See attached email below which confirms that by next Friday I would hope all things being equal we move from 2 to 4 rooms in ward 2a fully sealed and with passed permeability testing completed. Prof Gibson is aware of this plan as is SCN for the ward.
I will keep you updated on progress of this and also liaise direct with microbiology around additional testing they will be looking to do on the newly sealed rooms. As also noted at end of next week we will then agree a timetable to have the 4 remaining rooms (out of the 8) in ward 2a sealed and tested.
The proposal to do additional estates work on say 2 of the 8 rooms (meet the LEeds spec) will require further discussion which estates colleagues agreed to take up direct with Gillon in the first instance.

Jamie

From: Redfern, Jamie
Sent: 09 September 2015 14:38
To: Hunter, William
Cc: 'Gillon Armstrong'; Dawes, Heather
Subject: RE: Sealing of Suites within Childrens Hospital Ward 2A

A49525252

Hi Billy

I did a walk round each ward area TODAY in RHC where sealing / permeability testing in cubicles remains outstanding.
Gillon has now met the senior charge nurse for each area and agreed a provisional plan for the majority of these rooms.
He seemed very happy with the progress we have made.
Included in this is a draft plan next week to seal and test two further rooms in ward 2a.
This would be 1 room Tuesday / Wednesday and the 2nd room Thursday Friday.
So by close of play next Friday we would aim to have 4 rooms sealed and tested in this ward as per agreement at Monday's meeting.
For the two additional rooms would then look for microbiology to do their additional testing.
At the end of next week we will review progress in 2a and look to agree a plan with Gillon to do the 4 remaining rooms in 2a and what remains outstanding across rest of hospital which should in effect be 2 rooms in critical care.
Hopefully this makes sense. Gillon is going to provide a spreadsheet which highlights this in a more structured fashion.
Cheers

Jamie

From: Hunter, William
Sent: 08 September 2015 09:19
To: Redfern, Jamie
Cc: 'Gillon Armstrong'
Subject: Sealing of Suites within Childrens Hospital Ward 2A

Jamie,

I have spoken to Gillon Armstrong this morning in connection with above and he is keen to complete the job of sealing all suites within ward 2A, to reflect the level of air permeability within which has been achieved within the two BMT suites.

Gillon, on behalf of Brookfield, requires access to these rooms and I had suggested that you may be best placed to arrange this. I also understand that you guys are scheduled to meet tomorrow therefore it would be helpful if access arrangements could be agreed which would then go some way to support our risk migration strategy as described last night by the Medical Director.

Can you please drop me an email to confirm that above request is ok.

Regards
Billy

William Hunter \ General Manager \ South & Clyde Sector Facilities Directorate \ NHS Greater Glasgow & Clyde \ New Laboratory Medicine & FM Building, Southern General Hospital \ Tel: [redacted]) \ Fax: [redacted] \ email: [redacted]

RE: Sealing of Suites within Children's Hospital Ward 2A

McNamee, Sandra [redacted]

Fri 11/09/2015 09:43

To Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]

Teresa - I have some additional information could you call me urgently.
kind regards
Sandra

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]
Sent: 10 September 2015 15:43
To: McNamee, Sandra
Cc: Joannidis, Pamela; Balfour, Alison; Jones, Brian
Subject: RE: Sealing of Suites within Childrens Hospital Ward 2A
Importance: High

Dear Sandra ,

I have not been involved in any discussions or attended any meetings regarding childrens BMT and I have not received a handover. This is a complex issue and, ideally, any decision should be made in conjunction with estates colleagues, Prof Williams (ICD for RHC) and Dr John Hood (local ventilation expert who has been closely involved).

Pamela, Alison and myself met today and reviewed the particle counts from Friday 4th September and these are still elevated in rooms 18 and 19 . Pamela has reviewed the unit today and has expressed concerns re practice and procedures. Pamela has also noted outside construction work in close vicinity to the unit.

Whilst particle counts are only one parameter , they would indicate that further investigations are necessary to ensure safety for patients. It would be helpful to have sight of the following ;

1) Validation reports including leak test results
2) Minutes from relevant previous meetings
3) The most recent report and recommendations from Dr Hood

In light of the information currently available to us , Alison, Pamela and I feel that we must err on the side of caution and cannot recommend that the unit is safe for transplant procedures.

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: McNamee, Sandra [redacted]
Sent: 09 September 2015 16:05
To: Redfern James (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: pamela.joannidi[redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20); alison.balfou[redacted]
Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

Hi Jamie
I am acting up for Tom so could you cc me into any correspondence regarding this issue.

In response to your e mail:

- My understanding is that the ICDs who will give advice after reviewing the results of this weeks testing will be Dr. Alison Balfour (Thursday) or Dr T Inkster (Friday). We will let you know when these are available.
- Craig will be back on Monday and can advise on the testing of the other rooms due to be sealed next week.
- Pamela is meeting with Billy tomorrow to progress the issues regarding the cleaning of the unit.

Thanks
Sandra

Sandra McNamee
Associate Nurse Director

Infection Prevention & Control
[redacted]

From: Hamilton, Pauline
Sent: 09 September 2015 15:41
To: McNamee, Sandra
Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

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To: Joannidis, Pamela
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Jamie

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Subject: FW: Sealing of Suites within Childrens Hospital Ward 2A

Dear all

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I will keep you updated on progress of this and also liaise direct with microbiology around additional testing they will be looking to do on the newly sealed rooms. As also noted at end of next week we will then agree a timetable to have the 4 remaining rooms (out of the 8) in ward 2a sealed and tested.
The proposal to do additional estates work on say 2 of the 8 rooms (meet the LEeds spec) will require further discussion which estates colleagues agreed to take up direct with Gillon in the first instance.

Jamie

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To: Hunter, William
Cc: 'Gillon Armstrong'; Dawes, Heather
Subject: RE: Sealing of Suites within Childrens Hospital Ward 2A

Hi Billy

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He seemed very happy with the progress we have made.
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Hopefully this makes sense. Gillon is going to provide a spreadsheet which highlights this in a more structured fashion.
Cheers

Jamie

From: Hunter, William
Sent: 08 September 2015 09:19
To: Redfern, Jamie
Cc: 'Gillon Armstrong'
Subject: Sealing of Suites within Childrens Hospital Ward 2A

Jamie,

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Gillon, on behalf of Brookfield, requires access to these rooms and I had suggested that you may be best placed to arrange this. I also understand that you guys are scheduled to meet tomorrow therefore it would be helpful if access arrangements could be agreed which would then go some way to support our risk migration strategy as described last night by the Medical Director.

Can you please drop me an email to confirm that above request is ok.

Regards
Billy

William Hunter \ General Manager \ South & Clyde Sector Facilities Directorate \ NHS Greater Glasgow & Clyde \ New Laboratory Medicine & FM Building, Southern General Hospital \ Tel: [redacted] \ Fax: [redacted] \ email: [redacted]

Dear All

I Can now confirm the above meeting for **today at 12 Noon** in Jamie's Office, Ground Floor, Royal Hospital for Children, Govan Road, Glasgow.

Jamie's office is located off the main entrance. Passed Radio lollipop on the right hand said. Left at the patient information office and Jamie's office is second last door on the right.

Thank you.

Jacquie Bruce
PA to Kevin Hill, Director, Women & Children's Directorate and
Jamie Redfern, General Manager, Hospital Paediatrics & Neonatology
Zone 2, Area 2, Office Block
SGUH
Govan Road, Glasgow, G51 4TF
Tel: [redacted]
Email: [redacted]

PS. I've signed up to improving our email culture

From: Redfern, Jamie
Sent: 11 September 2015 08:40
To: McNamee, Sandra; Bruce, Jacquie
Cc: Hunter, William; Bruce, Jacquie
Subject: Bmt

Hi Sandra
I spoke to Grant earlier today.
He is not available just now
Can we meet urgently today with the microbiologist who was working on this yesterday with Billy Hunter to discuss bmt. We may have to meet Grant later. My secretary will try to coordinate.
In meantime I will also try to get a hold of Brenda Gibson.
Your help with this much appreciated.
Cheers
Jamie

Jacquie
Asap for today as early as possible can you liaise with Sandra and Billy to get us in my office to discuss. Sandra can link you to microbiologist. Check too if Alan is about. If not we need to go without him and I'll brief him later.
Cheers
Jamie

Sent from my Samsung device

Re: BMT service at Royal Hospital for Children

Mathers, Alan [redacted]

Fri 11/09/2015 16:32

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Cc: Gibson, Brenda [redacted]; Redfern James (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted]; brian.jone[redacted] [redacted] Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE - SGA20) [redacted];

Thanks : very helpful

Sent from my BlackBerry 10 smartphone on the EE network.

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)
Sent: Friday, 11 September 2015 15:58
To: Mathers, Alan; Williams, Craig
Cc: Gibson, Brenda; Redfern, Jamie; Jones, Brian; McNamee, Sandra
Subject: RE: BMT service at Royal Hospital for Children

Dear Alan,

Thanks for your email . I appreciate that this is a difficult risk assessment. Whilst I cannot comment on the haematological risk, from my perspective, based on available evidence as discussed this morning, I am unable to state that the rooms are microbiologically safe.

Antifungal prophylaxis is not 100% effective. Furthermore the efficacy of prophylaxis would be reduced in an environment with an increased fungal burden . The prevention of invasive fungal disease in SCT patients is achieved through a combination of both antifungal chemoprophylaxis and the provision of a clean air environment.

I hope this advice is useful and I would be happy to discuss further.

Please find attached a spreadsheet and lab reports of fungi grown from June onwards. We are awaiting mycology reports from fungi grown in August/September .

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor

Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Mathers, Alan [redacted]
Sent: 11 September 2015 14:53
To: Williams Craig (NHS GREATER GLASGOW & CLYDE - SGA20); Inkster Teresa (NHS GREATER GLASGOW & CLYDE - SGA20)
Cc: Gibson, Brenda; Redfern James (NHS GREATER GLASGOW & CLYDE - SGA20)
Subject: BMT service at Royal Hospital for Children

Dear Teresa,

Thanks for input today.
Appreciate that you were catapulted into a difficult situation.

"We" (ie local team) have to weigh up a whole range of risks as you appreciate from, in particular the acute patient situation. There is inherent mortality risk and this escalates with time passing and in addition the donor is being worked up and there is a risk that we lose them. So: risk assessment continues to evolve.

Would you be able to send a list of the fungi grown and the site and provide a view as to how effective anti-fungal prophylaxis would be (there is a Double prophylaxis option too)?

The use of another place in Glasgow (such as Beatson) is considered untenable for the patient foremost in our thoughts due to lack of Paediatric Intensive care.

A meeting on Monday will be convened and so info for then would be very helpful.

Appreciate if you can reply to all.

Kind regards

Alan

Dr Alan M Mathers
Chief of Medicine Women and Children
Consultant Obstetrician and Gynaecologist
Greater Glasgow and Clyde Health Board
PA: Janice.Hackett [redacted]
[redacted]
alternative: email [redacted]

Re: BMT RHC

McNamee, Sandra [redacted]

Mon 14/09/2015 08:25

To alan.mathers[redacted]; Archibald Grant (NHS GREATER GLASGOW & CLYDE)[redacted]; Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE)[redacted];

Cc:Redfern James (NHS GREATER GLASGOW & CLYDE)[redacted]; Archibald Grant (NHS GREATER GLASGOW & CLYDE)[redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE)[redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE)[redacted]

Hi to be fair, additional information regarding the type of fungal spores became available between these conversations. Sandra
Sent from my BlackBerry 10 smartphone on the EE network.

From: Mathers, Alan
Sent: Monday, 14 September 2015 08:17
To: Archibald, Grant; Armstrong, Jennifer
Cc: Redfern, Jamie; McNamee, Sandra; Archibald, Grant
Subject: Re: BMT RHC

Dear All
I am doing a theatre list this morning at GRI and will be over for an already packed afternoon at RCH around 2pm providing theatre goes to plan.
I sense that none of the local measures that could be / are being put in place will militate against the risk that the majority bacteriological advice is providing and there is a matter of determining whose opinion trumps others: every time the advisory circle increases and different people are round the table there is more heat than light.

I was quoted very different risks from bacteriological about some of the organisms last Friday and obviously the context of how they might reach the patient is critical.
Kind regards

Alan

Sent from my BlackBerry 10 smartphone on the EE network.

From: Archibald, Grant
Sent: Monday, 14 September 2015 07:57
To: Armstrong, Jennifer

Cc: Mathers, Alan; Redfern, Jamie; McNamee, Sandra; Archibald, Grant
Subject: Re: BMT RHC

In on site now and this an if discussions are required

Grant Archibald
Chief Officer

On 14 Sep 2015, at 6:58 am, Armstrong, Jennifer [redacted] wrote:

> Just for clarity, what I asked for is that the estates team and the infection control team work together over the weekend to urgently address the issues identified in the unit. They would then put in place any additional measures to mitigate the risks. I was keen that we engender a sense of urgency to address the problem. However I note further meeting today so hopefully there may be some progress and review of all the data with a risk assessment of different courses of action.
> J
>
> Sent from my BlackBerry 10 smartphone on the EE network.
>
> **From:** Mathers, Alan
> **Sent:** Friday, 11 September 2015 17:52
> **To:** Redfern, Jamie; McNamee, Sandra
> **Cc:** Armstrong, Jennifer; Archibald, Grant
> **Subject:** RE: BMT RHC
>
> Dear Jamie,
>
> Just spoke with Brian Jones, listened and have advised him to organise further testing over weekend irrespective of any pre-conceived perceived doubts about value.
> He quoted different lethality of some of the Fungi described earlier in day but isn't hopeful for a bacteriology clean bill of health (no pun at all intended).
>
> Interim results from plates placed on Saturday would be available Wednesday / Thursday.
>
> Kind regards
>
> Alan
>
> **From:** Redfern, Jamie
> **Sent:** 11 September 2015 16:30
> **To:** McNamee, Sandra

Cc: Armstrong, Jennifer; Mathers, Alan; Archibald, Grant
Subject: BMT RHC

HI Sandra

I have just spoken to Jennifer A and she has asked that infection control be instructed to carry out further particle and fungi tests on cubicle 18 and 19 in RHC ward 2a over the weekend. She is also keen that we get the reported results on these tests as quickly as possible into next weekend preferably ahead of when the child arrives on Thursday night to hospital for treatment beginning on the Monday 21st. Can you please put the processes in place to make this happen and confirm to all ccd into this email when actioned. Thanks

Jamie

PS: I will try to follow this email up by phone call to you

FYI

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

Mark as unread

Redfern, Jamie [redacted]
Sat 24/10/2015 14:47
Brenda
I will arrange a meeting on Monday with you, Ian Powrie, jean, heather and Craig. Anyone who thinks they also need to be involved let me know.
Jamie

Sent from my Samsung device

-------- Original message --------
From: "Gibson, Brenda" [redacted]
Date: 24/10/2015 12:56 PM (GMT+00:00)
To: "Kirkwood, Jean" [redacted], "Powrie, Ian" [redacted], "Redfern, Jamie" [redacted], "Dawes, Heather" [redacted], "Williams, Craig" [redacted], "Inkster, Teresa (NHSmail)" [redacted], "Loudon, David" [redacted], "Kane, Mary Anne" [redacted], "Hunter, William" [redacted], "Ewins, Anna-Maria" [redacted], "Hutton, Melanie" [redacted]
Cc: "MacKinnon, Yvonne" [redacted]
Subject: RE: Critical care rooms

Sorry , I have just returned from Toronto but had heard about this problem before reading this e-mail. I have to join Jean Kirkwood in asking whether these rooms are fit for purpose. I have also been told that the negative pressure was first noted by a parent , which if true is unacceptable. I am aware that there has been a meeting about this issue , but would like another to understand the extent of the problem and the long term consequences.

B.W.

Brenda

Prof Brenda Gibson
Consultant Haematologist
Schiehallion Ward (Ward 2A)
Royal Hospital for Sick Children
1345 Govan Road
GLASGOW G51 4TF

Tel: [redacted] (work mobile)
Tel: 0141 -201 0000 (Switchboard) Page [redacted]
Tel: [redacted] (personal)

From: Kirkwood, Jean
Sent: 23 October 2015 09:24
To: Powrie, Ian; Redfern, Jamie; Dawes, Heather; Williams, Craig; Inkster, Teresa (NHSmail);Loudon, David; Kane, Mary Anne; Hunter, William; Ewins, Anna-Maria; Hutton, Melanie
Cc: MacKinnon, Yvonne; Gibson, Brenda
Subject: RE: Critical care rooms

Sorry, are these rooms fit for transplant patients to be in?

Many thanks
Jean

From: Powrie, Ian
Sent: 23 October 2015 08:08
To: Redfern, Jamie; Dawes, Heather; Kirkwood, Jean; Williams, Craig; Inkster, Teresa (NHSmail); Loudon, David; Kane, Mary Anne; Hunter, William
Subject: FW: Critical care rooms

Jamie,

Further to our discussion last night regarding ward 2a isolation bed room 18, which had lost its lobby positive pressure, as indicated the ventilation plant was reset and restored at approximately 18:00hrs.
However following this the ventilation plant for isolation bed room 19 failed, which I believe you are moving a transplant patient into this morning?
Unfortunately my team nor I could return this plant to service as the controls where holding it off line, I implemented our emergency call out procedure for Schneider control s support provider who returned to site by 21:00 hours, the during their investigations a further 4 ventilation supplying war 2A also failed in the manner, this is believed to be a network problem but could not be confirmed with the resources available last night. The 5 affected units where place in manual and the pressures set by hand for each isolation suite(at between 10 – 15pa) in order to maintain an isolation capability in these suites.

The isolation suites affected by this common fault are:

Isolation Bed No 10.
Isolation Bed No 11.
Isolation Bed No 20.
Isolation Bed No 19.
Isolation Bed No 18.

The engineer completed these works at 03:30 this morning, the Controls network engineer will investigate further this morning.
I will keep you up to date on progress made.

Regards

ian

[redacted]
Sector Estates Manager (South & Clyde)
Queen Elizabeth University Hospital Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,
Direct : [redacted]
Mob: [redacted]

From: Guthrie, James
Sent: 23 October 2015 05:33
To: Powrie, Ian
Subject: Critical care rooms

HI IAN,

Here is the list of the 36 isolation room figures. Most of the pressures look ok even though the guys say the filters are dirty but everybody interprets that differently.
The room pressures are still being taken daily in the critical care wards but 4 times a day in schiehallion and have been for a while.

The Schneider tech jim came out and also Paul the manager to help. They were here until 3.30 AM but had a lot of issues. While working on 41AHU 31 the lads were inspecting the system and found 2 more units beside this one to be off. Paul checked this and then a fourth and fifth went offline. They worked on it but it has baffled them. They believe but are not sure, there could be a network problem that has stopped the signal getting to the inverters to command them to start but still unsure. Subsequently we had to put the five AHUs on hand and have balanced the speed to get a good pressure. We are monitoring the pressures constantly and the guys are adjusting the frequency to do this. If we did not we would have had 5 rooms down. Paul is briefing Kenny when he comes in.The AHU`s that have been put on hand are:

41A AHU 19

41A AHU 23

41A AHU 26

41A AHU 29

41A AHU 31

I will email David a list of Filters required that are starting to run low.

Regards jim

From:	Peters, Christine on behalf of Peters, Christine
To:	Stewart, David
Subject:	FW: ITU isolation rooms
Attachments:	ITU isolation rooms.docx
Sent:	07/10/2015 17:25:00

FYI

From: Peters, Christine
Sent: 15 September 2015 18:01
To: Williams, Craig; McNamee, Sandra; Walsh, Tom; Inkster, Teresa (NHSmail)
Subject: ITU isolation rooms

Dear Craig,

Using SHPN o4 as a guide and restricting myself to the rooms on ITU which are being monitored by Ian Thomson,(ie not the renal isolation rooms) I attach a list of the requirements and the gaps as far as I can make out from the information available to me at present. Arising from this analysis I have a number of questions:

1. In terms of placement of immune- compromised BMT patients the only HEPA supply rooms are bed 31 and bed 50. Is the policy to accommodate BMT patients exclusively in these rooms?
2. With regard to the rooms that have had observed loss of pressure – are we to consider these rooms as adequately commissioned , or is there further work to be done with regard to the commissioning process?
3. Is there a plan to put in place an alarm system as stipulated by SHPN 04?
4. With regard to daily monitoring of pressures – what is the agreed action for nursing staff with regard to failure?
5. With regard to decontamination : is there a method statement in place?
6. Bed 24 has no HEPA extract – is the expectation that this will not be used for infective patients?
7. Do we have assurance that the en-suites (where they exist) are negative pressure to the patient room?
8. Are the baffles being tested as part of the permeability testing as described in SHPN 04 ? If so the ones that have passed still have issues with the baffles.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From:	Redding, Penelope on behalf of Redding, Penelope
To:	Peters, Christine
Subject:	RE: Infection Control / Isolation rooms
Sent:	06/10/2015 13:11:29

Think it would be a good idea to summarise you and Teresa your positions for the record and then send it on. One joint document would be best.
I am thinking about a response at the moment

From: Peters, Christine
Sent: 06 October 2015 12:42
To: Redding, Penelope
Subject: RE: Infection Control / Isolation rooms

Hmmmm. Interesting. If there is a process neither Teresa or I have been asked to summarise our views. Who has been commissioned? What experts opinions are being sought?

C

From: Redding, Penelope
Sent: 06 October 2015 09:25
To: Peters, Christine
Subject: FW: Infection Control / Isolation rooms

Thoughts?

From: Archibald, Grant
Sent: 21 September 2015 08:49
To: Redding, Penelope; Stewart, David
Subject: RE: Infection Control / Isolation rooms

Penelope

thank you againn for your interest and your observations.

As you are aware there have been many opinions sought and given regarding this matter. I think it is important that these views are commentary are assessed and distilled through the appropriate clinical and professional structures. Jennifer has commisioned a piece of work which aims to summarise the views of the various professional and expert opinions that then shall be used to inform the decision making.

However, as part of that process I will share your additional comments

thank you again

Grant Archibald
Chief Officer
Acute Services

I am moving to J B Russell House on Friday 4th September 2015. My new phone number will be [redacted] (internal [redacted])

From: Redding, Penelope
Sent: 16 September 2015 11:32
To: Archibald, Grant
Cc: Stewart, David
Subject: Infection Control / Isolation rooms

Dear Grant,

Thank you for sparing me so much of your time on Monday.

I believe there is still a complete lack of clarity about the isolation rooms acrosss the QEUH site. The clinicians are still asking questions.
I have been unable to see a document that demonstrates all the results for all the parameters that require to be measured.
Some of the tables say that a test has been done but not give you the standard and that the test is compliant with these standards.
Other parameters do not appear to have been measured.

As far as the isolation rooms are concerned we urgently need to know which rooms are suitable for which category of patient requiring protective or source isolation. This will enable the clinicians to have confidence in the management of their high risk patients.

There appears to be a table with 36 rooms identified as isolation suites. I think it is esssential that for each of these rooms all the requirements / measurements listed in SHPN 04 are recorded accurately.

I agree with what you said on Monday that there are too many voices offering opinions and I do not want to had to this confusion.

I re-itterate my view that a respected expert from outside GG+C might help to clarify the situation and give you the re-assurance you need.

You need to have confidence in the advice you are being given so that the right decisions can be made.

I look forward to hearing from you.

I go on annual leave on 23rd for a week.

Kind Regards

Penelope

Informal Review of Infection Control Issues

1. Background

During the course of August/September 2015 the Deputy Medical Director and Head of People and Change, Corporate Services met informally with a range of individuals (9 in total) to develop an understanding of the main issues surrounding the resignation of Infection Control Doctors in June 2015 and to determine what, if any, further actions might be required.

A number of issues emerged through discussions which have been categorised for ease under 4 broad themes as outlined in Table 1 below with remedial actions for consideration.

2. General Findings:

1. Issues are, in the main, restricted to medical management.
2. Other than historical examples, which appear to have been addressed previously, there was little evidence presented to support any concerns of ongoing bullying and harassing behaviours. Events described appeared isolated and centred around particular issues of high focus. Individuals were advised of the availability of the Dignity at Work Policy but there was no expressed desire follow this route.
3. There is ongoing tension in the relationship between the Infection Control and Microbiology Leads. This appears to be historical and exacerbated by the current operational structure (see below). Relationships in general appear to have become more difficult in the recent past and in particular around the opening of the New Hospitals on the Southern Campus and the movement of ICDs flowing from this.
4. On an individual basis leadership style/management skills was an ongoing theme that emerged with ICDs reporting concerns around lack of communication and governance arrangements. It appears these were raised in the last 4-6 months with the Infection Control Manager with a set of actions put in place to address these.
5. There is the need for greater clarity around roles and responsibilities and reporting arrangements. There are no clear job descriptions in place for ICDs. The line management arrangements for the Lead ICD are complicated by the fact that the role is managerially accountable to the Infection Control Manager but the job plan is agreed with the Clinical Director for Microbiology. There are examples of ICDs raising matters of concern relating to the ICD role through the microbiology line manager route with the potential to undermine the status of the Infection Control Manager. More formal joint working between the General Manager for Microbiology and the Infection Control Manager may help to address this issue.
6. There is also the need for greater clarity around levels of accountability in the decision-making process, especially where there are conflicting views/opinions. On the one hand there are reports from ICDs of having their professional authority undermined by the over-turning of decisions by the IC Management Team whilst on the other there are reports of ICDs not taking decisions when given authority to do so. Whilst it is clear that concerns for patient safety is the primary motivator for ICDs when arriving at decisions, there appears on occasion to be a lack of appreciation by some ICDs of the need to risk-assess decisions from an organisational/political perspective.

7. Linked to 5. And 6. above is a sense that, given where it sits in the organisational structure, Infection Control does not have the same degree of senior managerial oversight as applies to other acute service directorates and hence a perception by others that the service operates in a vacuum.
8. Whilst the two services are managed separately, current appointment arrangements mean that Infection Control Management has little influence on the appointment/organisation of ICDs which appears to be anomalous with the line management responsibilities of the Infection Control Manager. The IC Service is reliant on effective cover being organised by Microbiology – eg. Infection Control Management has no role in the approval of annual leave. This is an area which we consider would benefit from review.

Table 1

Theme	Issues	Remedial Actions
Culture and Behaviours	• Shouting (historical examples) • Reacting without taking time to gather the facts (historical examples) • Colleagues scared to speak up • Threatening Email communications (re public notice) • Undermining colleagues • Petty behaviours - ICDs not talking to each other • Conflict between Leads (CW/BJ)	Informal/Formal DAW Policy for personal complaints (explained option but no uptake) DAW Awareness Workshop Individual - Setting behavioural objectives through appraisal (all) Attitudes Behaviours and Values Interventions (L&E) Revisit formal meetings with IN/BJ and TW/CW
Leadership Style/ Management Skills	• Lead ICD not a good team player • Lack of Communication • Not responding to emails • Lack of handovers/annual leave arrangements • Lead ICD doesn't attend meetings • Lack of formality around processes • Lead ICD not collaborative, collegiate • Lead ICD Extreme risk-taker	Mentorship – setting objectives through appraisal OD intervention
Team Functioning/Structure	• Lack of clarity around Roles and Responsibilities • No job descriptions • Lack of clarity around decision-making – escalation processes • Role of Directors needs explored • Status of Lead ICD/ICM amongst ICDs eg. ICDs raising IC concerns via Microbiology mgt structure	Clarify roles and responsibilities Develop Job descriptions Review reporting arrangements for Lead ICD/ICDs Map out Decision-Making/Escalation Route – including role of Directors. **Ensure transparent process for reconciling conflicting advice / opinions.**

	• Lack of Meetings • Lack of recording of outputs • Lack of follow-up • Lack of political/big picture awareness of some ICDs • Unrealistic Expectations eg. Gold Standard • Decisions of ICDs not based on wider risk assessment eg. limitations of old buildings • Issues being escalated without clarifying facts • Minor Issues being escalated without opportunity for local resolution • IC has no input to appointment of ICDs/approval of ICD leave	Review Operational Structures eg. roles of GM/Services in decision-making Review/develop SOPs Develop closer working between GM/ICM – formal arrangements OD Interventions eg. FTFT Effective Teams Framework; Team Development Workshop - including organisational/political awareness Review recruitment arrangements for ICDs
Service/Patient concerns	• Not taking concerns seriously • Putting a lid on things • Safety issues around building eg. holes in ceiling, dust, rooms not being sealed etc • No air testing • Cleaning issues – ICDs cant institute cleaning • Commissioning of rooms for SG not done appropriately • No IC Out of Hours Cover	Local Management Review/ Interventions Whistle-blowing Policy Review Out of Hours arrangements

27b. email

Julie Rothney

From: Bell, David
Sent: 08 October 2015 14:48
To: Peters, Christine; Harkness, Anne; McFarlane, Cath; Thomson, Iain; Williams, Craig
Cc: Emma Thomson ([redacted]); Fox, Ray; MacConnachie, Alisdair; Peters, Erica; Seaton, Andrew; 'Thomas Evans'
Subject: RE: ?MERS patient

Anne, Craig

We really need a response to this. There was a second patient who returned from the Haj in IAU this morning. I am not sure what has happened since, but we need to know now the condition of these rooms. Are they all signed off as usable for a ?MERS patient? Is the door to the mHDU room fixed?

David

From: Bell, David
Sent: 07 October 2015 13:30
To: Peters, Christine; Harkness, Anne; McFarlane, Cath; Thomson, Iain; Williams, Craig
Cc: Emma Thomson ([redacted]); Fox, Ray; MacConnachie, Alisdair; Peters, Erica; Seaton, Andrew; 'Thomas Evans'
Subject: RE: ?MERS patient

Speaking for the ID team, this uncertainty and back and forward arguments about these rooms is causing us a huge amount of difficulties. We need to be able to manage highly infectious patients somewhere that is safe for the patient, other patients and safe for the staff. At the moment I have no confidence that this is the case. The issues are:

1. The 2 HDU and 2 ITU negative pressure rooms. Have these rooms passed the infection control team assessment that they are usable for ?MERS? Who has signed this off? Who is keeping an eye on them – this morning we are told the door to the room with the ?MERS patient does not close properly
2. Nursing staff for ?MERS / Resp Infection patients in HDU / ITU. I have already had this argument with Cath and was told that the ID nurses were not required to help with a highly infectious patient in HDU. I think that this is the wrong decision and events last night have borne this out. There was no PPE kit on the ward – no FFP3 masks, no waterproof gowns. We had to bring the kit from 5C. One of the nurses in HDU walked into the room without wearing eye protection. Liz Hughes came to help voluntarily. I spoke to Chris Wright (HDU lead Consultant) and Roisin Parker (lead nurse) and they are both saying they want ID nurses involved in the care of these patient. The ID consultants want to have nurses working with them who are experienced in the care of these patients.

We need to urgently address these issues. The Haj is just finishing and there could be another ?MERS anytime

David

Consultant in Infectious Diseases and General Medicine
South Glasgow University Hospital
1345 Govan Road
Glasgow
G51 4TF

Telephone:
Direct:

Secretary: [redacted]

From: Peters, Christine
Sent: 07 October 2015 12:29
To: Harkness, Anne; Bell, David; McFarlane, Cath; Thomson, Iain
Subject: RE: ?MERS patient

Sorry to be pedantic – does this include the rooms in HDU?

From: Harkness, Anne
Sent: 07 October 2015 12:24
To: Peters, Christine; Bell, David; McFarlane, Cath; Thomson, Iain
Subject: Re: ?MERS patient

All the rooms in critical care have passed. To arrange access contact needs to be the c care flow coordinator or via iain the lead nurse.

A
****
Sent from a NHSGG&C BlackBerry device
****

From: Peters, Christine
Sent: Wednesday, October 07, 2015 12:04 PM GMT Standard Time
To: Harkness, Anne
Cc: Bell, David
Subject: ?MERS patient

Dear Anne,

I understand that there are certain rooms that have been identified for high grade pathogen isolation that have passed all the commissioning tests.

We currently have a patient with ?MERS in room 44 and need to identify a further room for a procedure on a previously positive VHF patient.

Please could you let me know which rooms have been identified as safe for isolating such cases by meeting all the requirements for these suites.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile: [redacted]

From:	Cruickshank, Anne on behalf of Cruickshank, Anne
To:	Peters, Christine
Cc:	Inkster, Teresa (NHSmail); Jones, Brian;
Subject:	RE: Update
Sent:	08/10/2015 12:50:04

Dear Both

Further to my call to Christine, I've heard back from David Stewart. He expects to send out a communication on his return from leave on 22/10.

Regards

Anne

From: Peters, Christine
Sent: 08 October 2015 10:35
To: Cruickshank, Anne
Cc: Inkster, Teresa (NHSmail)
Subject: Update

Dear Anne,

I hope you had a good holiday.

I know you will be busy catching up, but both Teresa and I would appreciate an update on a time line regarding our urgent job plan reviews with respect to our Infection Control duties.

We are both around today – I will be leaving about 1pm – if you had the opportunity to have a quick chat that would be very much appreciated. We are both on annual leave next week.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

22. email

Julie Rothney

From: Redding, Penelope
Sent: 21 October 2015 14:48
To: Peters, Christine
Subject: FW: Infection Control

In confidence

From: Redding, Penelope
Sent: 21 October 2015 11:28
To: Stewart, David
Subject: Infection Control

Hi David

Thank you very much for sparing me so much of your time last week.
I know GG+C are taking things seriously and I understand how difficult it is to try and understand all the conflicting opinions that appear to be in the mix at the moment.
As you are aware there are several microbiologists who have serious concerns about the present position. As I explained the most urgent matter is to be clear which rooms are fit for isolating the different patient categories. Both the microbiologists and ID teams have to try and manage these queries on a daily basis. It is particularly challenging out of hours. This needs an answer without delay .
You are aware of the ICD's concerns about the lack of understanding of their baseline responsibilities. They feel they require this in order to provide a safe infection control service to the patients and staff.

I hope that GG+C recognise the incidents that have been managed and averted over the last few weeks as a result of the ICDs identifying problems and acting on this information to ensure the safety of patients and staff. Infection control, I believe, has a responsibility to double check some of the information that is given to them. ICDs know from experience that they need to see the proof. This was well illustrated recently when patients were put in rooms said to be functioning which in fact, on checking, were not. Recent examples have included a possible MERS, Multiply drug resistant TB and a neutropenic patient.

I believe that infection control needs to sure that areas meet the required standards. When the new Victoria opened infection control had already identified several problems, before the hospital opened, and addressed these. This was easier to do before patients started arriving. The lessons learnt from the VIC project resulted in GG+C involving infection control at the very earliest stages of the project. I can remember you and I both being included in the planning meetings from the outset. These projects are about working as a team with all the interested parties to ensure there was no confusion about the requirements of a particular area. This is a process which has to be ongoing throughout the project with regular reviews. There also has to be a laborious checking and signing off mechanism with all involved. This must include infection control where appropriate. ICD experience teaches you that you cannot always accept information at face value. If there is any debate about the standards then I believe an independent expert should be consulted. We all know that the Gold Standards cannot always be achieved and that is not what is being asked for in these present discussions.

As ICD my priority was always to try and prevent a problem before there was a bigger issue. Not always possible in the real world, but we sometimes forget about crediting people for the preventative actions they successfully put in place. There are clear examples of this happening in the last few weeks. ICDs have been happy to come in on their days off or take calls even out of hours.

As you are aware for me this is about my worries for patient and staff safety. I hope that GG+C are able to resolve the concerns as soon possible. I still believe that some independent advice would benefit the organization. This would stop the internal debate, which is stressful for everyone, and allow efforts to concentrate on moving forward.

I hope your Singapore was not too stressful.

Kind Regards

Penelope

Infection Control Team

Stewart, David [redacted]

Fri 30/10/2015 10:49
To:Bagrade Linda (NHS GREATER GLASGOW & CLYDE) [redacted]; alison.balfour[redacted]; Changez Huma (NHS NATIONAL WAITING TIMES BOARD) [redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; 'Christine.peters[redacted]' [redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE) [redacted]; Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE) [redacted]; Cruickshank Anne (NHS GREATER GLASGOW & CLYDE) [redacted]; brian.jones[redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted]; Neil Catherine (NHS GREATER GLASGOW & CLYDE) [redacted];
Cc:Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE) [redacted]; Maclennan Aileen (NHS GREATER GLASGOW & CLYDE) [redacted]; Howat Bridget (NHS GREATER GLASGOW & CLYDE) [redacted]; Green Rachel (NATIONAL SERVICES SCOTLAND) [redacted]; McQueen, Juli [redacted];
Importance:High
Categories:Green Category
1 attachment
ICT OD.docx;

Dear All

Please see attached letter.

Kind regards

David

Dr David Stewart
Deputy Medical Director
NHS Greater Glasgow and Clyde
[redacted]

Dear colleague,

Bridget Howat, Head of People and Change, Corporate Services and I have taken the opportunity during August and September to meet informally with a range of individuals from within the medical and management teams of Infection Control and Microbiology to gain a better understanding of the current climate, how the team works, and team dynamics and to offer a view on how this might be supported going forward.

Through these discussions we have identified some areas where we believe there is potential for improvement and, with the support of colleagues in Human Resources and Organisational Development, we are now looking to engage everyone in a process which will allow us to bring about these improvements for the benefit of the team and the service. Some of the general issues highlighted can be summarised under the following headings:

Team Functioning/Structure

- Clarity of our own and each others' roles and responsibilities and reporting arrangements
- How staff are involved in the decision making process and levels of accountability particularly where there are conflicting views or opinions

Leadership and Governance

Culture and Behaviours

Recognising the critical role that effective team working and inter-team relationships play in the delivery of excellent healthcare services, which all of the above touch on, we wish to begin this process by inviting staff along to a facilitated workshop on the afternoon of 25th November (details to follow). The intent of the workshop is to:

- Review our current Team structure and processes
- Explore, discuss and agree where areas for improvement exist
- Begin to identify the actions we need to take to make these improvement happen

An intended output from the session will be to begin the development of an action plan all are committed to taking forward within the service area.

I look forward to working with you on this and if you have any questions please do not hesitate to contact me.

[redacted]

David Stewart
Deputy Medical Director
NHS Greater Glasgow and Clyde

RE: Infection Control Team

Stewart, David [redacted]

Mon 02/11/2015 12:32
To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];
Categories:Green Category

Dear Teresa

You raised concerns about communication, behaviours, clarity of roles and transparency of decision making: these are the issues we intend to address at the meeting.

With regards to specific safety concerns, your main worry was around estates and, in particular, the functioning of the isolation facilities; whether they were fit for purpose and how this was validated. I understand that significant progress has been made with respect to this and that there is now more confidence in these facilities, albeit work continues. If, despite this, you believe that there are ongoing safety issues I would be grateful if you could elaborate on what these are.

Kind regards

David

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 30 October 2015 13:12
To: Stewart, David
Subject: RE: Infection Control Team

Thank you for this

How will the patient safety concerns that I raised be addressed?

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Stewart, David [[redacted]]
Sent: 30 October 2015 10:49
To: Bagrade Linda (NHS GREATER GLASGOW & CLYDE); alison.balfour[redacted]; Changez Huma (NHS NATIONAL WAITING TIMES BOARD); Inkster Teresa (NHS GREATER GLASGOW & CLYDE); 'Christine.peters[redacted]:'; Williams Craig (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE); Cruickshank Anne (NHS GREATER GLASGOW & CLYDE); brian.jones[redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE); Neil Catherine (NHS GREATER GLASGOW & CLYDE)
Cc: Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE); Maclennan Aileen (NHS GREATER GLASGOW & CLYDE); Howat Bridget (NHS GREATER GLASGOW & CLYDE); Green Rachel (NATIONAL SERVICES SCOTLAND); McQueen, Juli
Subject: Infection Control Team

Dear All

Please see attached letter.

Kind regards

David

Dr David Stewart
Deputy Medical Director
NHS Greater Glasgow and Clyde
[redacted]

From:	Peters, Christine on behalf of Peters, Christine
To:	Stewart, David
Cc:	Inkster, Teresa (NHSmail)
Subject:	RE: Infection Control Team
Sent:	02/11/2015 12:40:00

Dear David,

Teresa and I are working on a document delineating current and past patient safety issues that pertain to Infection control management within the organisation. We are doing this in collaboration with other colleagues and will forward to you as soon as we have completed it.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Stewart, David
Sent: 02 November 2015 12:27
To: Peters, Christine
Subject: RE: Infection Control Team

Dear Christine

Much of our discussion was around communication, behaviours, clarity of roles and transparency of decision making: these are the issues we intend to address at the meeting.

With regards to specific safety concerns, your main worry was around the functioning of the isolation facilities, whether they were fit for purpose and how this was validated. I understand that significant progress has been made with respect to this and that, although work continues, there is now more confidence in these facilities. I am therefore concerned that you believe that there are ongoing safety issues and would be grateful if you could elaborate on what these are.

Kind regards

David

From: Peters, Christine
Sent: 30 October 2015 12:04
To: Stewart, David
Subject: RE: Infection Control Team

Dear David,

Please could you clarify whether I am to expect an individualised response to the concerns I raised in my resignation letter and my interview with you and HR,, most particularly in relation to ongoing patient safety issues?

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Stewart, David
Sent: 30 October 2015 10:52
To: Peters, Christine
Subject: FW: Infection Control Team
Importance: High

Apologies - I typed the wrong email address.

David

From: Stewart, David
Sent: 30 October 2015 10:50
To: Bagrade, Linda (NHSmail); Balfour, Alison; 'hchangez[redacted]'; Inkster, Teresa (NHSmail); 'Christine.peters[redacted]:'; Williams, Craig; McNamee, Sandra; Cruickshank, Anne; Jones, Brian; Walsh, Tom; Neil, Isobel
Cc: Armstrong, Jennifer; MacLennan, Aileen; Howat, Bridget; Green, Rachel (NHSmail); McQueen, Juli
Subject: Infection Control Team
Importance: High

Dear All

Please see attached letter.

Kind regards

David

Dr David Stewart
Deputy Medical Director
NHS Greater Glasgow and Clyde
[redacted]

09/11/2015

Dear Dr Stewart

Further to the outcome of your investigation on 30/10/15 into concerns we raised regarding patient safety we feel it necessary to write to you to reiterate these concerns. Whilst we acknowledge there are issues within the infection control team with respect to functioning , governance, behaviour and cultures the focus of our concerns was and remains patient safety. It is unclear to us how the OD event later this month will adequately address these concerns. A brief summary of ongoing issues and patient safety concerns are detailed below.

QEUH new build

There was minimal involvement from the Infection Control Team (ICT) with regards to the new build design. SHFN 30 clearly delineates the roles and responsibilities of the ICT at each stage from planning to handover and ongoing monitoring. In summary plans for ventilation specifications were not signed off, validation reports were unchecked and monitoring prior to and after patients moving in was not undertaken. As a result essential components were missing from the design putting patients at risk. We have no had assurances that these deficiencies have been addressed in the following areas;

A) **Adult BMT** - ward 4B QEUH was moved back to the Gartnavel site in July 2015 .The BMT rooms in 4B were not fit for purpose. During our involvement with the process of moving the unit back specification plans and validation reports were not made available to us. No environmental monitoring took place prior to patients moving in . Air monitoring subsequent to patients moving in revealed high levels of fungus in the environment . Please note that on two occasions reference to CDC guidance on specification was forwarded to the design and infection control teams by Dr Inkster at least a year prior to the move. Ward 4B has now been handed back to the users. The last involvement either of us had was the meeting on Friday July 10th when the decision was made to move the patients back to the Beatson. We were not invited to the follow up meeting on the Monday and have had no correspondence regarding the process of remedial work until Dr Inkster was informed on Monday 2nd November that the building was being handed back and she was now Leading for infection control regarding the move back from the Beatson. Our concerns have yet to be adequately addressed.

B) Children's BMT –In contrast air monitoring was performed in the children's BMT prior to patients entering the unit. Despite fungus being found on air sampling and holes present in the ceiling where light fittings were missing, patients were moved in and transplants allowed to proceed. Whilst remediation works are taking place transplants continue to take place and air sampling results have continued to be positive. Highly pathogenic fungi were frown in the environment eg Mucor and Aspergillus.

C) **Isolation rooms in critical care** – On several occasions we have been informed by senior management that these rooms are safe. In July BICC were assured that these rooms met the national specs, however in June Dr Peters had pointed out to IC management that this was not the case as permeability testing was not carried out and she had concerns around the design and commissioning process. Furthermore on inspection pressures have been wrong (-30 Pa instead of +10Pa), baffles were jammed shut, and rooms are not sealed. There are no alarms in place which is a specific stipulation in the SHBN-04 for consideration of these rooms to be fit for purpose. We continue to experience calls regarding safe placement of patients with infectious conditions with no assurances that these rooms meet the required specification. There continues to be confusion regarding which rooms have been "fixed" and we are not in receipt of any documentation that gives us assurance that this is the case.. In addition to patient safety issues there are issues with staff safety should these rooms not be functioning.

D) **Other clinical areas**
– there had been shortcomings in design and commissioning with regard to the decontamination room in A+E which was identified as the place to admit ?VHF patients
- Respiratory clinics did not have adequate decontamination facilities with buckets of water being used as decontamination sinks were not provided in the design.
- We have heard rumours regarding other defects in ventilation and design, but have no access to the information or the discussion surrounding the design and commissioning of these units eg dental facilities, audiology units etc..

Old Build

A)**Neurosurgical theatres**– there have historically been recurrent sewage leaks in these theatres. During investigation of a recent leak fungus was

identified on air sampling and wet mouldy materials removed from ceilings above theatres. Major issues were noted with theatre layout and practice and these have been escalated but not actioned. Of particular note is that sterile stores for instruments do not meet recommended standards with respect to ventilation . One such store has missing ceiling tiles with evidence of water damage but is still in use. A recent review of spinal surgery rates indicate that NHS GGC rates are up to six times higher than the literature on the subject quotes.

Outbreaks/Incidents

A) **NICU** – there has been a recent death due to Serratia bacteraemia in NICU. We are aware from attendance at team meetings that Serratia has been present in the unit since July. Despite asking we were given minimal information as we do not have ICD responsibility for this area . Screening for a source was suggested by us in August however we were told that this was not felt necessary until further cases emerged. Other environmental organisms such as Acinetobacter , Pseudomonas and Burkholderia have also been identified. . There has been a death due to Pseudomonas bacteraemia. This would suggest major failings with the environment . Furthermore there have also been a number of SABs, and genotyping of isolates has been suggested, but not carried out to date which would clarify whether these are the same strain or not. Whilst this is not our area of responsibility, we do cover the unit out of hours and have concerns that IC issues have not been resolved.

B) **EBOLA**

IC planning for the care and isolation of ?VHF cases has lacked clarity. The decon room in A+E was identified as an appropriate place to care for high risk patient, however the room was not functional, with doors not shutting , temperature control being inadequate and the floor difficult to decontaminate due to rough surface, among other issues. That room was designed for radiological and chemical incidents, with completely different requirements from infectious agents. There is confusion around which level of the IPCT is responsible for the full planning of such incidents and decisions are made without being communicated to local teams which had a direct adverse consequence in the recent Ebola case as well as with ?MERS cases admitted recently.

In conclusion we do not have reassurance that these situations are being adequately addressed/ resolved . We are concerned that local colleagues with expertise have also raised concerns regarding these issues. We suggest that it may be beneficial to have an external expert opinion with regard to these situations in order to give the organisation comfort that patients are not being put at risk.

Dr Teresa Inkster MBChB, BSc (Hons), FRCP, DTMH, MPH, FRCPath
Consultant Microbiologist and Infection Control Doctor
Training Programme Director, Medical Microbiology.
Dept of Microbiology
Queen Elizabeth Hospital
Glasgow

Dr Christine Peters MBChB, BSc (Hons), DTMH, FRCPath
Consultant Microbiologist and Infection Control Doctor
Dept of Microbiology
Queen Elizabeth Hospital
Glasgow

From:	Cruickshank, Anne on behalf of Cruickshank, Anne
To:	Peters, Christine
Subject:	RE: Resignation
Sent:	23/11/2015 18:40:11

all duly noted

A

From: Peters, Christine
Sent: 23 November 2015 15:52
To: Cruickshank, Anne
Cc: Inkster, Teresa (NHSmail)
Subject: Resignation

Final email for today Anne,

The evening after I resigned the public statement, which I was not asked to comment on prior to release read:

A spokeswoman for NHS Glasgow and Greater Clyde said: "As a precautionary measure, while we explore remedial measures, we have decided to return this service to the Beatson West of Scotland Cancer Centre from the Queen Elizabeth University Hospital together with the intensively treated acute leukaemia patients.

"This is temporary measure to enable us to identify and implement what may be necessary to ensure air quality purification levels are optimal for this group of patients."

Dr Anne Parker, lead consultant for haemato-oncology, said: “In consultation with colleagues from various disciplines, it has been agreed that 18 patients will move to the Beatson West of Scotland Cancer Centre for an interim period.

"This will enable remedial work to take place without disrupting patient care. This is purely a precautionary step and we have no evidence that any patient has been adversely affected as a result of the environment issues. We are fortunate that the Beatson is available to us and we are working with our critical care colleagues in the new High Acuity Unit which has been established there.”

Bone marrow transplant services at the Royal Hospital for Children Glasgow are unaffected.

I did not agree with this statement as I knew there had been issues with air quality in Schallion, however I was out of the country the following day and was not included in any further communications. I was, and remain concerned regarding air quality in the children’s isolation facilities, and although this is not in my current remit, I would be strongly of the opinion that this needs to be further examined.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From:	Peters, Christine on behalf of Peters, Christine
To:	Peters, Erica
Subject:	RE: Draft letter
Sent:	01/02/2016 09:55:00

Hi Erica, appreciate all you are doing. Yes I had picked up on that and was going to go over all the rooms with Ian, need to rearrange now as was ill last week.
C

From: Peters, Erica
Sent: 27 January 2016 13:12
To: Peters, Christine; Hughes, Liz
Subject: RE: Draft letter

No...I think the other pressures are taking over. I'll work on the TB draft and use this as leverage.
I was in HDU yesterday. They have put a handle on the door of the room there but it is on the wrong side. Can infection control put some pressure on estates to fix this?

Thanks

From: Peters, Christine
Sent: 17 January 2016 15:33
To: Peters, Erica; Hughes, Liz
Subject: RE: Draft letter

Any progress /response from Anne?
Thanks,
Christine

From: Peters, Erica
Sent: 14 December 2015 23:04
To: Peters, Christine; Hughes, Liz
Subject: RE: Draft letter

Hi,
Thanks-I saw your mail.
I'll make the adjustments and send it off to Anne and A&E. Will we do that first before passing it to the Infection Control Committee? I'm guided by you on this Christine.
Any chance you are both free this Fri for 30min to discuss other IC issues and where we are with them? I'd like to try and tidy up a few things for the new year.
Would 8.30 or 2.30 be any use? I'll buy you a festive coffee.
Erica

From: Peters, Christine
Sent: 07 December 2015 15:34
To: Peters, Erica; Hughes, Liz
Subject: RE: Draft letter

Thanks a lot Erica, I think that sums up the options –

Just a xouple extra cons to the decon room is the spiky floor which would be hard to decontaminate and the temperature control seems to be poor – everyone complaining that it is icy cold.

I will get in touch with Ian Powrie re the tank.

Bw
Christine

From: Peters, Erica
Sent: 03 December 2015 10:50
To: Hughes, Liz; Peters, Christine
Subject: Draft letter

Hi
See attached and my draft email which I thought we would send to A&E lead and Anne Harkness. It will clearly have to go out to others but I feel the wider we spread the net the harder it will be to get a rapid solution.
Can you edit as you see fit.
Christine-It would be helpful if you could put some more info about the tank and potential cost and also can you let me know the name of the portable isolator that was recommended? I can try and get a ball park price. It would solve no end of woes.

Draft email

I think in light of the recent case and the move to the new hospital it was important to have a fresh look at potential locations for management of an adult case. I recently walked round the external periphery of the new build to see if there were any areas that we had not previously considered. This was done with our senior ID nurse and an Infection Control consultant.
We also looked at other solutions suggested by other staff members. We have considered all options.
At first glance the most suitable area to manage a high risk VHF patient in our opinion was solution 5, the clinical nurse practitioners area at the end of ARU5.

Please see the list of possible areas attached

Thanks

Dr S Erica Peters

Consultant
Infectious Diseases and General Medicine

Administrative Building
Queen Elizabeth University Hospital
1345 Govan Road
Glasgow G51 4TF

Secretary Infectious Diseases: [redacted]
Secretary Hepatitis: [redacted]

Fw: 20151210 (09.58) Peter Hoffman RE: HPS SBAR BMT

Inkster, Teresa [redacted]
Fri 20/05/2022 11:02
To: Inkster, Teresa [redacted]

From: Williams, Craig [redacted]
Sent: 21 December 2015 10:39
To: Harkness, Anne [redacted]; Jenkins Gary (NHS GREATER GLASGOW & CLYDE) [redacted]
Cc: Cruickshank, Anne [redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Walsh, Tom [redacted]
Subject: FW: 20151210 (09.58) Peter Hoffman RE: HPS SBAR BMT

Dear Anne

I wonder if you could let me know how you and Gary would like to take this forward.

Best wishes

Craig

Prof Craig Williams
Consultant Microbiologist Royal Hospital for Children, Glasgow
Lead Infection Control Doctor, NHSGGC
Professor of HAI, UWS

t. [redacted]
w. www.uws.ac.uk/hai

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 18 December 2015 14:09
To: Walsh, Tom; Williams, Craig; Cruickshank, Anne
Subject: FW: 20151210 (09.58) Peter Hoffman RE: HPS SBAR BMT

Dear all - Annette Rankin from HPS has forwarded me the email below from Peter Hoffman. There are comments regarding the ICU rooms and isolation rooms in renal where BMT patients may be admitted to .

Melanie Mccolgan informed us at Mondays adult BMT meeting that these areas were outwith the remit of the group.

I know Anne Harkness had been leading on the critical care rooms - is this still the case and should these concerns be addressed by that group?

Kind Regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor

Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Rankin Annette (NATIONAL SERVICES SCOTLAND)
Sent: 17 December 2015 12:09
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: FW: 20151210 (09.58) Peter Hoffman RE: HPS SBAR BMT

From: Peter Hoffman [redacted]
Sent: 10 December 2015 09:58
To: Rankin Annette (NATIONAL SERVICES SCOTLAND); Lockhart Michael (NATIONAL SERVICES SCOTLAND)
Subject: 20151210 (09.58) Peter Hoffman RE: HPS SBAR BMT

Thanks for the reminder Annette. My answers are:

"The Critical care rooms (are lobbied) and will house patients who require intensive care however whilst they are lobbied rooms I don't think they are positive pressure/HEPA filtered. One of our recommendations will be is that there should be a facility within critical care that offers the same protection for these patients as the BMT unit: do you agree?" In the ideal world: Yes – at least one of the ITU rooms would offer the same protection as the BMT rooms. The (clinically assessed) alternative would be that BMT patients on ITU are given fungal prophylaxis. It could be that the local decision is based on a) efficacy of such prophylaxis and b) the need for intensive care for BMT patients. If there is a fairly regular need, then at least one suitable room on ITU seems entirely reasonable. It may well be that the prophylaxis alternative may also come into play when there are two BMT patients in need of intensive care of if an airborne infectious BMT patient needs to be cared for on ITU. There could always be the option of a HEPA-supply positive pressure room with a negative pressure lobby as a (partial?) solution. This would contain most of the air but with the possibility of small leaks to areas adjacent to the positive pressure room.

"There is a pentamidine room which is required to be at negative pressure (currently its not: however being reviewed) : my understanding is the pressure should be between -1 and -2: is this correct and are there any other controls required within this room?" This is a matter of chemical safety and outside my IPC remit, but I would have thought that pressures as low as 1-2 pascals give unreliable protection a) as they would easily be reversed by outside forces (moderate to high winds) and were unreliable to measure e.g. if a micromanometer's zero setting slips a bit, say to a reading of -3, then a room that appears negative could actually be positive. I would have thought that 10 – 20 pascals was more robustly safe. This facility would probably be classed as "local exhaust ventilation" under health safety law: http://www.hse.gov.uk/pubns/priced/hsg258.pdf particularly paragraphs 110 onwards.

"For patients who are in the positive (non lobbied) rooms that are considered infectious: as there are no lobbied rooms within this unit, the proposal would be that these patients would be transferred to the renal unit: which has a positive pressure room with a DH positive pressure ventilated lobby. What is your thoughts on the suitability of these rooms for this purpose?" If all the patients are in positive pressure rooms, then if one of them were an airborne infectious risk to the others, these others would all be in their protective positive pressure room and protected from the infectious patient. If the infectious patient were a risk to the staff, then moving that patient to a room where the infectious aerosol were contained and diluted would be appropriate. I don't understand "a positive pressure room with a DH positive pressure ventilated lobby". If this is an HBN4 supplement 1 suite, then the patient room is "neutral" pressure, meaning neither intentionally positive or negative but it will be (unpredictably) one or the other. If the air supplied to the lobby is not HEPA filtered, the patient is not protected against fungal spores. If the room is at any negative pressure, the patient is not protected against fungal spores. If I have understood the situation correctly, such rooms would not offer protection.

"We have also been asked to comment on the validation of each of these rooms as the guidance relating to validation in HBN 04-01 refers to PPVL rooms; and these rooms are not PPVL". The validation would be locally determined (there being no national guidance) and would depend on the eventual specification of "these rooms". If the rooms are as I am currently envisaging, it would be along the lines of: HEPA filters do not allow the passage of particles (standard test on fitting HEPAs); the rooms are monitored as being positive pressure with a local alarm if pressure falls with a (5 minutes?) delay; the rooms leak outwards via all gaps in their fabric (bespoke testing: a) finding such gaps and b) looking at smoke movement direction through those gaps. Probably best done by someone who is skilled at assessing micro containment level 3 labs for ability to be safely fumigated. Can discuss in more detail later); fungal active air sampling would be reassuring. Advise do not specify validation until design established.

Regards,
Peter

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26. email

Julie Rothney

From: Peters, Christine
Sent: 29 December 2015 17:07
To: Stewart, David; Inkster, Teresa (NHSmail)
Cc: Cruickshank, Anne
Subject: RE: Infection control concerns

Dear David,

Thank you for your response to our letter regarding concerns for patient safety with regard to infection control.

My concerns remain and in fact further issues have arisen.

Primarily we had requested that there would be an external review of the issues raised – particularly with regard to the new build. HFS and HPS have become involved to a degree with the adult BMT, through consistent and hard work by Teresa, but without a clear mandate from the Board to do this and as I understand it has met with resistance at many levels. To my knowledge HPS and HIS have not been asked for their expert input into Theatre design and commissioning, the Infectious patients isolation suites or children's BMT.

The key here is that we are now picking up problems with regard to the building and continue to have question marks over the suitability of the accommodation with regard to specialist areas namely the ID unit, isolation rooms, theatres, BMT in children and adults. This is a highly complex area and input from external experts is critical to ensuring that the best possible solutions are put in place.

It would be very helpful to understand how this has been addressed by the Board and what precisely our remit is in taking this forward.

Regards,

[redacted]

Dr Christine Peters
Consultant Microbiologist
Southern General Hospital
GGC
Ex[redacted]
Mobile: [redacted]

From: Stewart, David
Sent: 22 December 2015 13:10
To: Peters, Christine; Inkster, Teresa (NHSmail)
Cc: Cruickshank, Anne
Subject: Infection control concerns

Dear Christine and Teresa

I am conscious that we have not yet replied formally to your letter in which you documented your outstanding concerns regarding infection control issues on the QEUH campus. I was mindful that events were moving on at some pace and that many of the issues you had raised were being actively looked at. Pertinent to this of course is the recent involvement of HFS and HPS.

Given the work that has been undertaken or is planned, could you please confirm if your concerns have been addressed or what, if anything remains an outstanding issue?

Kind regards

David

Dr David Stewart
Deputy Medical Director
NHS Greater Glasgow and Clyde

Adult BMT - Note from Grant Archibald

Calderwood, Joanne [redacted]

Mon 11/01/2016 14:36

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Moir Peter (NHS GREATER GLASGOW & CLYDE) [redacted]; Marshall Julie (NHS GREATER GLASGOW & CLYDE) [redacted]; Powrie Ian (NHS GREATER GLASGOW & CLYDE) [redacted]; Parker, Anne [redacted]; McArdle, Alyson [redacted]; Campbell Myra (NHS GREATER GLASGOW & CLYDE) [redacted]; Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE) [redacted]; McQuaker, Grant [redacted]; Boyd Robert (NATIONAL SERVICES SCOTLAND) [redacted]; brian.jones [redacted]; Cruickshank Anne (NHS GREATER GLASGOW & CLYDE) [redacted]; Freel Joanne (NHS GREATER GLASGOW & CLYDE) [redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted]; Williams Craig (NHS GREATER GLASGOW & CLYDE) [redacted]; Rankin Annette (NATIONAL SERVICES SCOTLAND) [redacted];

Cc: Dick, Carol [redacted];

Importance: High

Dear All,

Thanks for setting out the recommendations of HPS. David Loudon and his team will discuss the implications of these recommendations with the contractors within the next week or so. It is important to re-iterate the previously agreed process following David's meeting with the contractors: the outcome of these discussions will be discussed with a multidisciplinary group comprising infection control, BMT clinicians, estate colleagues and managers and form part of a risk assessment process which will review the current unit at the Beatson, the proposals at the QEUH and the estate and clinical outcomes. I have asked Gary Jenkins as the Director of the Service along with David Stewart to also attend the meeting in order to provide senior support and advice to this complex issue. The conclusions will then be shared with me for review.

Kind Regards

Grant Archibald
Chief Officer
Acute Services

[redacted] ***(internal*** [redacted]***)***

Bone Marrow Transplant Unit – Ventilation specification options

Option 1 – GOLD STANDARD	Rooms must be positively pressured - **10 PA** . (SHTM 0301, HPS) HEPA filtered corridor (HPS, CDC) Air changes should be **10 PA** (HPS, SHTM 03-01, note CDC >12) Bathrooms should be fully sealed (HPS, CDC)
Option 2	Rooms must be positively pressured at **10 PA** . (SHTM 0301, HPS) Air changes should be **10 PA** (HPS, SHTM 03-01, note CDC >12) Bathrooms should be fully sealed (HPS, CDC)
Option 3	Corridor should be HEPA filtered (HPS, CDC) Bathrooms should be fully sealed (HPS, CDC) Room pressures **2.5 -8 PA** (CDC) ACH **6/hr** (Peter Hoffman, PHE)

Guidance consulted

SHTM 03-01 2013
HPS SBAR for BMTU 2015
CDC Guidelines for Environmental Infection Control 2003

JACIE standards 2015, BSH standards 2009 and NICE Haematological cancers ; improving outcomes, draft consultation 2016 were also consulted but do not provide details on ventilation specification for BMTUs

BMT summary

Walsh, Tom [redacted]

Tue 01/03/2016 08:18

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Hi Teresa

Jenifer has requested a summary timeline of the external advice and subsequent changes to the building and operational spec for the BMT(s) for a meeting with Robert Calderwood. As I understand it this is a summary of the information we already have so Robert can review this with Jennifer and David Loudon.

I has asked Craig to prepare something covering the time until you picked this up, and I wondered if there was anything you could perhaps assist with from the point of your first input to the present?

What I had in mind was a brief setting out the date, the advising agency (HPS, HFS, Peter Hoffman etc), and the recommendation/ change to spec.

I'm in meetings until 11:30am today but free thereafter

KR

Tom

Timetable of events in relation to adult BMT unit – Dr T Inkster

25th June	Prof Williams had asked me to cover his annual leave so I attended a meeting as acting lead ICD at the request of the site ICD (Dr Peters). This was at QEUH with estates and engineers for an update on specialist ventilated areas on the site. We were told at the meeting that BMT patients had moved to QEUH from Beatson.
June 29th	Gap analysis of new unit spec vs Beatson spec , SHTM 03-01 and CDC guidance (prepared and circulated by Dr C Peters) • Corridor not HEPA filtered • Air changes per hour – no info • Positive pressure in rooms – no info • Ceilings in bedrooms and bathrooms not sealed. • No visual pressure indicators on rooms • No alarm system for pressure failure In addition fungus grown on air testing .
3rd July	Meeting with clinical colleagues , estates and managers . Recommendation was to move BMT patients back to Beatson in order for concerns re spec to be addressed. Prof Williams returned from annual leave and then took over.
29th October	Email from Prof Williams requesting attendance at a meeting to discuss transfer of BMT patients back to QEUH as I was Regional ICD by this point.
12th November	Meeting held with clinical colleagues regarding move back to QEUH. No specification available at the meeting , no confirmation of infection control sign off. Validation reports issued at the meeting. On review of available info; Initial specification for the unit in 2009 written by Dr Hood was for a haemato-oncology ward with no BMT patients . Change order submitted in 2013 for a BMT unit – no apparent upgrade of specification. Remedial spec from July 2015 not compliant with guidance available in 2013 – SHTM - 0301. Not all points highlighted in gap analysis had been addressed i.e. HEPA filtration, air changes, pressures and sealing of bathrooms.

	At this point I requested support from HPS in order to officially involved Dr Peter Hoffman, PHE who had been involved in email discussions with Prof Williams .
4th December	SBAR received from HPS with recommendations based on HTM 0301, input from Health Facilities Scotland and Dr Peter Hoffman . Key points : ▪ Rooms must be positively pressurised at 10PA ▪ All air entering the rooms must be HEPA filtered ▪ Rooms must be completely sealed including bathrooms ▪ Air changes of 10 ACH in each room
19th January	Meeting chaired by Dr David Stewart with estates colleagues and Dr Anne Cruickshank to look at feasibility of HPS recommendations. Recommendations for 10 ACH and 10 PA in bedrooms were acknowledged as unachievable. Alternative proposed by myself was HEPA filtration of the corridor air and sealing of the bathrooms. If achievable a reduction in the recommended air pressure and air changes could be accepted. Feasability study planned to look at this option.

RE: BMT Unit

Parker, Anne [redacted]

Tue 01/03/2016 13:59

To: Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE) [redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Stewart David (NHS GREATER GLASGOW & CLYDE) [redacted]; Jenkins Gary (NHS GREATER GLASGOW & CLYDE) [redacted]; McQuaker, Grant [redacted];

Thanks Melanie

I have copied Grant in as well as he is the BMT Director not me and needs to be part of this process.

I think this is the document we saw before Xmas when my understanding was that the following were the 3 outstanding issues that would allow us to meet the HPS requirements and it was going to be looked as to whether these were achievable

1. The rooms must be positively pressured at 10 pa
2. Bedroom Air changes of 10 ACH must be achieved
3. The walls and ceilings within the rooms and ensuite must be sealed.

I'm presuming the first 2 aren't achievable but have seen no written information to confirm that and that the corridor HEPA filtration is also not possible? I had hoped that was going to be discussed today. I think it would be helpful for us to see what the result of the review by estates was on these issues, otherwise why have we been waiting for 4 months.
I think we are caught whichever way we go, as the Beatson is too small, lack of speciality support and is starting to wear out and the QEUH doesn't have good air quality and has masses of building work going on so that the risks are high wherever we are.

Regards

Anne

Dr Anne Parker, Consultant Haematologist
Dept Haematology
Queen Elizabeth University Hospital
Tel [redacted]
Mobile [redacted]

From: McColgan, Melanie
Sent: 01 March 2016 13:38
To: Parker, Anne; Inkster, Teresa (NHSmail)
Cc: Stewart, David; Jenkins, Gary
Subject: FW: BMT Unit

Hi
Further to David's email, this is what was sent by way of commissioning document pre Christmas, can we meet to revise and sign this off in the light of the meeting David refers to. Is there anytime this week both of you could make?
Regards
Melanie

From: McColgan, Melanie
Sent: 24 December 2015 16:14

Re: BMT SPEC

Inkster Teresa (NHS GREATER GLASGOW & CLYDE)

Thu 15/09/2016 16:08

To: Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE) [redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Campbell Myra (NHS GREATER GLASGOW & CLYDE) [redacted]; Jenkins Gary (NHS GREATER GLASGOW & CLYDE) [redacted];

Hi Melanie

If purely to initiate discussions this is a desirable spec, apart from the first item '4 rooms negatively pressured with anteroom for infected patients' .

This should read ' 4 rooms positively pressurised with anterooms for infected patients' . This bit requires much more detailed spec around direction of airflow between anterooms and corridor/patients room , pressures and air changes. I expect this is a discussion further down the line at the initial planning stage and would involve me sitting down with a ventilation engineer

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: McColgan, Melanie [redacted]
Sent: 15 September 2016 15:05
To: Walsh Thomas (NHS GREATER GLASGOW & CLYDE); Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Cc: Campbell Myra (NHS GREATER GLASGOW & CLYDE); Jenkins Gary (NHS GREATER GLASGOW & CLYDE)
Subject: RE: BMT SPEC

I think it is purely to initiate discussions
M

From: Walsh, Tom
Sent: 15 September 2016 15:04
To: McColgan, Melanie; Inkster, Teresa (NHSmail); Walsh, Tom
Cc: Campbell, Myra; Jenkins, Gary
Subject: Re: BMT SPEC

Hi Melanie

Teresa will have a look at this and comment.

Can I just check if this is purely for an advert or inviting expressions of interest?

A49525252

Clearly a design spec for a BMT will require a greater degree of discussion and planning?

T

Sent from my BlackBerry 10 smartphone.

From: McColgan, Melanie
Sent: Thursday, 15 September 2016 14:49
To: Inkster, Teresa (NHSmail); Walsh, Tom
Cc: Campbell, Myra; Jenkins, Gary
Subject: FW: BMT SPEC

Hi
We have been asked to produce a specification for a BMT unit by tomorrow and have produced the attached from previous discussions. Is there anything missing you would wish to add or are you happy to confirm your agreement with this,
Many thanks
Melanie

FW: BMT PROCESS

Inkster, Teresa [redacted]

Wed 29/07/2020 10:50

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

From: Inkster, Teresa
Sent: 04 October 2016 14:36
To: Jenkins, Gary [redacted]
Cc: McColgan, Melanie [redacted]
Subject: RE: BMT PROCESS

Hi Gary

Air sampling is a quality assurance check . What matters is the ventilation specification . I have discussed the pros and cons of air sampling at various meetings. If air sampling is positive then that makes it easy - it was air sampling that alerted us to the problems with specification last year. However, negative air sampling does not provide reassurance . Fungal spores are released in bursts - air sampling might not capture that. We can only sample 1 cubic metre at a time over 2 minutes.

The Beatson already has monthly air sampling performed. We could only sample 4B if empty of medical patients and positive pressure turned on.

Regardless of air sampling results I would not change my recommendation ,which is to keep patients at the Beaston because the specification of 4B is suboptimal. From the survey that Robert Boyd did there were a couple of high spec units that do not undertake regular air sampling because they have confidence in the spec and are satisfied with annual validation - it really is just an additional quality assurance check

Kind regards
Teresa

From: Jenkins, Gary
Sent: 04 October 2016 08:17
To: Inkster, Teresa
Cc: McColgan, Melanie
Subject: BMT PROCESS

Teresa,

I think Anne H may have briefed you about this as we discussed yesterday.

In my performance review, we touched on BMT again and in particular the 4th floor at QEUH. One of the additional options that Robert thought would be helpful to progress was air sampling of the unit at QEUH and comparable air sampling of the BMT unit at the Beatson. This is to essentially allow an informed clinical debate on the risk process associated with each model.

Could we discuss how we might take this forward and what your thoughts are around this?

A49525252

Thanks
Gary

Gary Jenkins
Director: Regional Services Directorate
NHS Greater Glasgow & Clyde
[redacted]

Regional Services Directorate:
Neurosurgery / Neurosciences / Spinal Injuries / PDRU & YPD
Westmarc / OMFS / Plastic Surgery / Burns / CIC / Renal /
Specialist Oncology Services / BWoSCC / Clinical Haematology /
BMT / Forensic Mental Health Services

A49525252

BMT Specification

McColgan, Melanie [redacted]

Wed 16/11/2016 11:16

To: Campbell Myra (NHS GREATER GLASGOW & CLYDE) [redacted]; McQuaker, Grant [redacted]; RANKIN, Annette (NATIONAL SERVICES SCOTLAND) [redacted]; INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted]; Russell Steven (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Jenkins Gary (NHS GREATER GLASGOW & CLYDE) [redacted]; Mcintyre Hazel (NHS GREATER GLASGOW & CLYDE) [redacted];

1 attachment

3470 Notional 24 bed SoA ISSUE 2.pdf;

Dear all
Thanks for meeting today, brief note as agreed:

- MMcC advised 4B now recognised as unlikely to provide long term solution for BMT
- The plan remains to move BMT to QEUH campus and therefore, high level option appraisal being undertaken by capital team regarding alternative options utilising retained estate
- High level options have been provided for Maternity and Neurology Buildings
- MMcC to check with capital team that these can be circulated to HPS and ICT for review
- High level schedule of accommodation tabled at meeting
- TI and AR agreed to review this and provide feedback e.g. numbers of lobby rooms
- MMcC to circulate electronic version of schedule of accommodation (attached)
- AR to review SBAR provided by HPS in 2015 and update for any recent guidance to include requirements for whole unit, not just ventilation/patient rooms
- MMcC to ensure TI included in circulation list for Project Board (Actioned)
- SR to discuss option for modular build with capital projects team to be included as one of the options.

Please let me know if I have missed anything,
Many thanks
Melanie

General Manager
Specialist Oncology and Clinical Haematology
NHS Greater Glasgow and Clyde
[redacted]

A49525252

RE:

Loudon, David [redacted]

Tue 08/03/2016 12:09

To: Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Jenkins Gary (NHS GREATER GLASGOW & CLYDE) [redacted]; Stewart David (NHS GREATER GLASGOW & CLYDE) [redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Parker, Anne [redacted]; McQuaker, Grant [redacted]; Campbell Myra (NHS GREATER GLASGOW & CLYDE) [redacted]; Forsyth Graham (NHS GREATER GLASGOW & CLYDE) [redacted]; Mcintyre Hazel (NHS GREATER GLASGOW & CLYDE) [redacted]; Frew Shiona (NHS GREATER GLASGOW & CLYDE) [redacted];

Dear Melanie

Thank you for your message.

I will now arrange to have a PMI issued to Brookfield Multiplex to progress the first bullet point in the design review process. I will also request a timescale to deliver the design review and will advise you accordingly on receipt.

David

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning
NHS Greater Glasgow & Clyde
Corporate Headquarters
JB Russell House
Gartnavel Royal Hospital
Glasgow
G12 0XH

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

From: McColgan, Melanie
Sent: 08 March 2016 11:44
To: Loudon, David
Cc: Jenkins, Gary; Stewart, David; Inkster, Teresa (NHSmail); Parker, Anne; McQuaker, Grant; Campbell, Myra; Forsyth, Graham; McIntyre, Hazel
Subject: RE:

Dear David,
I have detailed our response to your two bullet points below,
Melanie.

From: Loudon, David
Sent: 07 March 2016 15:45
To: McColgan, Melanie
Cc: Jenkins, Gary; Stewart, David; Inkster, Teresa (NHSmail); Parker, Anne; McQuaker, Grant; Campbell, Myra; Forsyth, Graham; McIntyre, Hazel
Subject: RE: 9525252

Glasgow
Direct dial : [redacted]

From: Cruickshank, Anne [redacted]
Sent: 03 March 2016 12:07
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: RE: BMT

ps I'd make sure Melanie gets a copy of your paper too

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 02 March 2016 14:26
To: Cruickshank, Anne
Subject: RE: BMT

Yes exactly - feel like we are going round in circles , BSH guidance has no relevance here - there is no ventilation spec. The relevant documents are the SHTM 03-01 and HPS SBAR.
T·

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Cruickshank, Anne [redacted]
Sent: 02 March 2016 09:02
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: RE: BMT

Fine - though I thought you'd actually already done that at the meeting with Peter Moir, and that this was what "Estates" had already agreed to do.

A

From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 02 March 2016 08:38
To: Cruickshank, Anne

10/6/2019 RE: BMT - INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)

Subject: FW: BMT
Importance: High

FYI

Dr Teresa Inkster
Consultant Microbiologist and Infection Control Doctor
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Stewart, David [redacted]
Sent: 01 March 2016 13:00
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE); Parker, Anne; Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE)
Cc: Jenkins Gary (NHS GREATER GLASGOW & CLYDE)
Subject:

Dear All

Further to our meeting this morning, there was another meeting of relevant Directors to discuss how to take this forward. The plan is for Theresa and Anne to agree a clinically appropriate specification for the BMT, taking into account the BSH guidance for a level 3 facility, and for this to be passed as a commission to Estates for a feasibility and cost analysis.

In a previous meeting we had already agreed that Theresa's suggestion of a HEPA filtered corridor would potentially allow for a lower specification for the pressure / air changes in the rooms and this should be further explored (along with sheeting the bathroom ceilings). In order for this to happen can we please do the following:

- Theresa to describe the required specification for the rooms / corridor
- Anne to agree whether this is clinically appropriate
- Melanie to coordinate a commissioning document describing the requirements signed off by all parties to pass to Estates.

Clearly the sooner this can be done, the better.

Happy to discuss.

Kind regards

David,

Dr. David Stewart
Deputy Medical Director
NHS Greater Glasgow &Clyde

NHSGG&C Disclaimer
The information contained within this e-mail and in any attachment is confidential and may be privileged. If you are not the intended

RE: Adults Hospital - Ward 4B

Russell, Steve [redacted]

Fri 15/04/2016 13:58

To Alasdair,Ferni[redacted]

Cc Loudon David (NHS GREATER GLASGOW & CLYDE) [redacted]; Grant.Wallace[redacted], David.Wilso[redacted]; Gillon.Armstrong[redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE)[redacted];

Alasdair,

Further to your queries and from my recollection of the meeting on 23rd March it was agreed that the airlock lobby with interlocking doors would be required. As I recall Brookfield had identified one room off the large corridor that maybe suitable, however, they were to check that this could accommodate a bed and two staff in the interconnecting lobby space and if not suitable offer alternative solutions.

The 6 air changes per hour air change rate in the corridor was confirmed as being acceptable. Discussion ensued around the practicalities of supplying additional HEPA filtered supply air into the corridors, however, it was accepted that was likely to be prohibitive due to the limited space available within the ceiling void to take the required additional ductwork, not to mention the increase in plant size. Since the air flow patterns at present are such that the air cascades from the rooms through the departmental corridors to the surrounding environment, it could be we already have the 6 air changes of HEPA filtered air through the corridors at present? Brookfield were to their designers to run some calcs in order to check this.

What was apparent and unacceptable is several positively pressured rooms that are not bedrooms and which have positively suppled air that is not HEPA filtered, this situation leads to the contamination of the corridors. Brookfield were to check if this could be addressed by making these rooms negative to the corridor with the exception of the prep room whose air supply is required to be no less a standard than that of the bedrooms, (positive to corridor, HEPA filtered and 6 air changes at 2.5 - 8pa differential).

Lastly, there was to be assessment made on the possibility of providing an additional standby ventilation unit to maintain some if not all the required air during periods of plant maintenance/failure etc.

Can you confirm please this information clarifies your queries?

Regards

[redacted]
Senior Project Manager

Tel: [redacted] (Int [redacted])
Fax: [redacted]

From: Alasdair Fernie [mailto[redacted]]
Sent: 12 April 2016 17:14
To: Loudon, David
Cc: Grant Wallace; David Wilson; Gillon Armstrong
Subject: Re: Adults Hospital - Ward 4B

David

I've asked Gillon for an update on this as follows:-

With regards the costs and programme details for the works to ward 4B cannot be finalized until the full requirements / options that the NHS require have been confirmed. At the BMT upgrade meeting held 2 weeks ago the majority of queries were addressed sufficiently to allow the feasibility study to progress.

There are 2 decisions that the NHS are still required to make following a review of the study to allow the costs and programme to be finalized. These are as follows;

1. Confirmation of the location of the interlock lobby – this item will have relatively minor impact on cost and programme.

2. Confirmation if current air change rate in corridors is sufficient (the NHS requested that the corridors be supplied with 6 air changes per hour via HEPA filters. At the moment there is no supply air direct into the corridor as the current design is for the HEPA filtered air to cascade from the bedrooms into the corridor and then into the rest of the hospital.) If it is deemed that the current air change rate is not sufficient then the works associated with providing this additional ventilation will be considerable, if indeed possible at all. Also the knock on effect that this

would have on the differential pressure between the corridor and the bedrooms would need to be reviewed as providing that level of ventilation into the corridor may require all the bedroom ductwork to be upgraded also.

Regards

Alasdair Fernie BSc (Hons) MRICS FCIOB
Project Director

On 12 Apr 2016, at 15:38, Loudon, David [redacted] wrote:

Alasdair

Thanks for the update. Can I safely assume that the feasibility study due back at the end of next week will include costs and programme?

Regards

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning
NHS Greater Glasgow & Clyde
Corporate Headquarters
JB Russell House
Gartnavel Royal Hospital
Glasgow
G12 0XH

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

From: Alasdair Fernie [redacted]
Sent: 12 April 2016 15:33
To: Loudon, David

Cc: Grant Wallace; David Wilson; Gillon Armstrong
Subject: Re: Adults Hospital - Ward 4B

David

Current position on the above is as follows:-

- Architectural layouts are due back from Nightingales by the end of tomorrow showing options for the interlocking lobby.
- We met with WW on Friday following their review of the plantrooms and service route logistics. They are now compiling a brief detailing the options that the NHS have requested. This will be finalized on receipt of NA details later this week.
- Mercury are working in the background pricing the items of plant that will be required regardless of which options the NHS choose.

We have another meeting scheduled for Tuesday next week once David Wilson is back from holiday we will pull all the information together. We should be in a position to issue the feasibility study by the end of next week.

I hope that is enough information at the moment.

If you need anything else in the interim let me know.

Regards

Alasdair Fernie BSc (Hons) MRICS FCIOB
Project Director

On 11 Apr 2016, at 13:40, Loudon, David [redacted] wrote:

Alasdair

In David's absence, are you able to provide an update?

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning
NHS Greater Glasgow & Clyde
Corporate Headquarters
JB Russell House
Gartnavel Royal Hospital
Glasgow
G12 0XH

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

RE: Adults Hospital - Ward 4B

Inkster Teresa (NHS GREATER GLASGOW & CLYDE)

Mon 25/04/2016 10:44

To:David Wilson [redacted]; Russell Steven (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc:Loudon David (NHS GREATER GLASGOW & CLYDE) [redacted]; Grant Wallace [redacted]; Gillon Armstrong [redacted]; Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE) [redacted]; Alasdair Fernie [redacted];

Just a comment regarding the HEPA filtered corridor. This was requested because we have no anterooms and the room pressures are 6PA rather than the recommended 10 PA for neutropenic rooms. As the rooms open directly onto the corridor these is a risk of ingress of contaminated air. Ideally the corridor should have have a supply of HEPA filtered air but it sounds like this will be challenging. The alternative is to increase room pressures to 10PA and air changes to 10/hr.

Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: David Wilson [redacted]
Sent: 18 April 2016 09:04
To: Russell Steven (NHS GREATER GLASGOW & CLYDE)
Cc: Loudon David (NHS GREATER GLASGOW & CLYDE); Grant Wallace; Gillon Armstrong; Inkster Teresa (NHS GREATER GLASGOW & CLYDE); Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE); Alasdair Fernie
Subject: RE: Adults Hospital - Ward 4B

Morning Steve,

We are working on the feasibility as per the agreed document which is in line with your comments below. We will provide costs and programme information as far as we can, however some options will need to be fully designed after the feasibility study has been concluded (in order to pull together accurate costs and timescales) which is what Gillon was referring to in the email he issued via Alasdair.

Regards
David

David Wilson
Commissioning Manager - Construction

Brookfield MULTIPLEX BM [redacted]

Brookfield Multiplex Construction Europe Ltd
Fairfield - Suite 12
1048 Govan Road
Glasgow, G51 4XS, United Kingdom

16 5 24 JAletterBMTfinal

Parker, Anne [redacted]

Tue 24/05/2016 11:06

To: Clark, Andrew [redacted]; Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE) [redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Campbell Myra (NHS GREATER GLASGOW & CLYDE) [redacted]; McArdle, Alyson [redacted]; Irvine, David [redacted]; McQuaker, Grant [redacted]; Novitzky-Basso, Igor [redacted];

1 attachment

16 5 24 JAletterBMTfinal.docx;

Dear All
I attach final version with some slight tweaks and Grants changes.
I would propose emailing this to Jennifer at about midday unless I hear to the contrary from anyone.

I have included Andy on the list of signatories (copied him in to this email) - if anyone feels this is inappropriate please let me know.

I had emailed Jennifer Armstrong yesterday to ask to talk to her in advance of the board meeting tomorrow and explained that we would be writing a letter. She has asked to meet with Theresa, Steven Bell and myself at 2pm in JRR house and I will push that we need to move back soon.

Anne

FW: 16 5 24 JAletterBMTfinal

Armstrong, Jennifer [redacted]

Tue 24/05/2016 12:37

To: Loudon David (NHS GREATER GLASGOW & CLYDE) [redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

1 attachment

16 5 24 JAletterBMTfinal.docx;

FYI

From: Parker, Anne
Sent: 24 May 2016 12:32
To: Armstrong, Jennifer
Subject: 16 5 24 JAletterBMTfinal

Dear Jennifer
Thank you for organising to meet to discuss the way forward for the BMTU to move back to the QEUH. I attach a letter from the 5 consultants detailing our concerns which I hope will help aid the discussion.

Regards
Anne

Dr Anne Parker, Consultant Haematologist
Dept Haematology
Admin Block floor 1
Queen Elizabeth University Hospital
1345 Govan Rd
Glasgow
G51 4TF
Tel [redacted]
Mobile [redacted]

A49525252

In-Patient Adult Haematopoietic Stem Cell Transplant Service

We are concerned about the lack of definitive plan and date for the return of the service to the QEUH. The effort required by all members of the BMT service and BWOSCC High acuity team to maintain a safe service on the GGH is immense. The ongoing requirement for frequent transfers of patients to the QEUH is detrimental to our patients well being and compromising the service we provide. It is now nearly a year since we returned to the BWOSCC and no definitive plan is impacting on staff morale.

Background

The adult haemopoietic stem cell transplant service moved to the QEUH in May 2015, because of concerns that the planned level of support for acutely unwell patients on the GGH site would be insufficient to support such a high intensity speciality, particularly out of hours, and would not meet the JACIE accreditation standards. The level of high intensity support provided at GGH prior to May 2105 was already far from ideal and any reduction would make it extremely difficult to maintain a safe service for patients. It was known in May 2013, at the time of the decision to move the BMTU to the new unit at the QEUH, that the corridor would not be HEPA filtered, but it was expected that the rooms provided would be of an acceptable standard for highly immunocompromised patients with appropriate HEPA filtration, room pressures and air exchange rates. Given the frequent requirement for support from HDU, ICU and other acute specialities it was agreed that this need should be prioritised when balanced against the lack of HEPA filtration in the corridor.
Unfortunately, the unit had to return to the Beatson, West of Scotland Cancer Centre in July 2015 because of the identification of extremely poor air quality in the new transplant unit. This return was predicated on it being short-term with remedial works to improve the air quality in ward 4B, QEUH to acceptable levels. The BMT team agreed to work closely with the BWOSCC high acuity and QEUH teams to minimise the risk to critically unwell patients whilst at the BWOSCC.

Remedial Works Required

The GGC Infection control lead, Dr T Inkster, asked advice from Health Protection Scotland about the changes required to ward 4B to establish the current standards for highly immuncompromised patients review how they could be met. HPS in their document (SBAR_BMT_NHSGGC_PDF_version 52) detail what these should be. Some work has already been done and plans have been drawn up to achieve virtually all the other requirements. A feasibility analysis has been carried out and remedial action outlined which will improve the air quality in ward 4B, QEUH. However, this is still below the specifications set out in the HPS document. The major issues are

- Frequency of air exchange is below the recommended 10/hour
- The corridor is not directly HEPA filtered although all air entering will be

It should be noted that in the above document HPS the state that *"Ideally the corridor should also be HEPA filter supplied, however, this is normally only achieved in a purpose built unit and is less important if the rooms are appropriately ventilated and achieve positive pressure in comparison to the corridor."*

Risks of Suboptimal Air Handling

The main risk poor air quality poses to patients is significant invasive fungal infection. It is impossible to quantify if there will be an increased risk incurred by moving back to the QEUH compared with the current provision at BWoSCC once the planned upgrade in air handling provision has been completed, given that there will be suboptimal air exchanges and no direct HEPA filtration of the corridor. Until the proposed changes have been made we cannot do settle plates or particle counts to look for fungal colonies. However, we can to reduce the risk of invasive fungal infection by using well tolerated and effective anti fungal prophylaxis such as posaconazole. With the measures that have been taken already, and further measures that are being planned, the air quality is almost certainly going to be adequate, albeit the specification does not fully meet HPS requirements.

Risks of Remaining at the BWoSCC

The failure to completely meet the HPS standards at QEUH needs to be balanced against the following which are incurred whilst we remain at the QEUH

- Lack of HDU/ITU at BWoSCC
    - Requirement for early transfer to QEUH to reduce risk of critically unwell patient at BWOSCC site. This means patients are being transferred to the QEUH who would normally be managed on the ward.
    - Exposure to an unprotected environment during transfer
    - Potential for significant compromise in outcome due to lack of rapid access to these staff and facilities.
- On-going concern about ensuring optimal care for patients who have been transferred from the BWOSCC transplant unit to the QEUH due to lack of on site nursing, pharmacy and AHP expertise.
- Significant psychological effects on patients moved to QEUH, who require to remain there for long periods of time, due to concerns about general stability of condition, but who could be managed in the BMTU if onsite at the QEUH
- Difficulty in obtaining medical and surgical opinions at BWOSCC, particularly OOH. Patients require transfer to QEUH.
- Lack of beds at the BWOSCC delaying admissions and increasing risk of disease progression
- Single Air handling plant at the BWoSCC which cannot be serviced and has failed several times in the last few months

We feel that the current proposals will ensure an adequate solution in the short to medium term. Further delay to assess the feasibility of providing increased air exchanges to the rooms and HEPA filtration of the corridor will delay our return to QEUH by a minimum of 8 weeks just to assess feasibility and the cost is likely to be exorbitant assuming there is a solution, which is not at all certain. Even if this work is performed, the current facility will not meet HPS standards and it is not clear if it will provide any meaningful clinical benefit. Meanwhile we continue to provide a suboptimal service to our patients with no realistic return date to the QEUH.

The current haemato-oncology in patient configuration with 2 sites is not sustainable in the long term and the Beatson site does not meet haemato-oncology standards due to lack of renal and ITU on site. The in patient service needs to be consolidated on a single site to allow maximum efficiency and effectiveness in staff utilisation such as nursing, pharmacy and junior doctors. In addition new therapies such as CAR-T cells and some antibodies are unsuitable to be given on sites without ITU facilities. We would suggest that the best solution would be to complete the current planned programme of work as soon as possible, but with the aim of developing a longer term business plan for a single site haemato-oncology unit, which would meet the latest HPS standards and allow the development of new ways of working with increased use of day case and hotel accommodation to support haemato-oncology patients for Glasgow/West of Scotland and transplant for the whole of Scotland.

Anne Parker
Grant McQuaker
David Irvine
Igor Novitzky-Basso
Andrew Clark

Fw: RE:

Inkster, Teresa [redacted]
Fri 20/05/2022 11:43
To: Inkster, Teresa [redacted]

From: McColgan, Melanie [redacted]
Sent: 16 June 2016 09:07
To: Armstrong, Jennifer [redacted]
Cc: Parker, Anne [redacted]; Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Loudon David (NHS GREATER GLASGOW & CLYDE) [redacted]; Jenkins Gary (NHS GREATER GLASGOW & CLYDE) [redacted]
Subject: RE:

Hi
The document was signed off by the clinical team and ICT and confirms this would be a safer environment for patients, probably clearer if I draft a letter to that effect? I haven't got that yet from HPS, assuming we do (big assumption) I will ask them to put it in writing or at least ensure any meeting/agreements are minuted?
M

From: Armstrong, Jennifer
Sent: 15 June 2016 17:59
To: McColgan, Melanie
Cc: Parker, Anne; Inkster, Teresa (NHSmail); Loudon, David; Jenkins, Gary
Subject: RE:

melanie
thanks for this; I think I did suggest that there needed to be a note from the clinical team, along with sign off from HPS and ICT, which set out that they were content with the proposed unit would represent a safe environment for patients (understand the particle count is key) but as I mentioned this is one of the issues wihich Robert keen to know the view? is this possible?
j

From: McColgan, Melanie
Sent: 15 June 2016 17:15
To: Armstrong, Jennifer
Cc: Parker, Anne; Inkster, Teresa (NHSmail); Loudon, David; Jenkins, Gary
Subject:

Dear Jennifer
Please see attached following our meeting last Tuesday. Our one outstanding action is our engagement with HPS. I have spoken with Peter Croan of NSD today who will engage with Mike Winter and HPS team and get back to me. He appreciates time is of the essence!
Regards
Melanie
****

Glasgow
Direct dial : [redacted]

From: Loudon, David [redacted]
Sent: 16 June 2016 09:36
To: Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE); Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE)
Cc: Parker, Anne; Inkster Teresa (NHS GREATER GLASGOW & CLYDE); Jenkins Gary (NHS GREATER GLASGOW & CLYDE)
Subject: RE:

Melanie,

I don't think that the content of your document is completely an accurate reflection of events leading to the current status of Ward 4B at the QEUH.

Firstly, the hospital was not designed for BMT as this was not part of the clinical brief for the project so, there is no complete failure. Around March/ April 2013 the Project Team were requested to extend the number haemato –oncology rooms to the same specification as the rooms already included in the project. This variation cost c£900K

I would note that the ICT lead in place at the time of the most recent alterations to Ward 4B was in the process of signing the works but owing to a change in personnel, this did not occur.

I would also suggest that your note to the HPS, confirms that the Board has already undertaken a feasibility study to ascertain if the comprehensive specification agreed with ICT was deliverable and concluded that it is not. The costs of this open in nearer to £4-5M.

I would also suggest that if the CEO is prepared to fund the second option (£1M) assuming that the proposed specification is clinically signed off by all then, he would anticipate that it is not a shot term solution.

Happy to discuss

Regards

David

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning
NHS Greater Glasgow & Clyde
Corporate Headquarters
JB Russell House
Gartnavel Royal Hospital
Glasgow
G12 0XH

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

From: McColgan, Melanie
Sent: 15 June 2016 17:15
To: Armstrong, Jennifer
Cc: Parker, Anne; Inkster, Teresa (NHSmail); Loudon, David; Jenkins, Gary
Subject:

Dear Jennifer
Please see attached following our meeting last Tuesday. Our one outstanding action is our engagement with HPS. I have spoken with Peter Croan of NSD today who will engage with Mike Winter and HPS team and get back to me. He appreciates time is of the essence!
Regards
Melanie

RE:

Inkster Teresa (NHS GREATER GLASGOW & CLYDE)

Thu 16/06/2016 15:07

To:Loudon, David [redacted]; Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE) [redacted]; Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE) [redacted]

Cc:Parker, Anne [redacted]; Jenkins Gary (NHS GREATER GLASGOW & CLYDE) [redacted]>; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted] Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE) [redacted]

Importance: High

Hi all ,

We discussed this document at our Infection Control SMT this morning.

It is very difficult for the ICT to give assurances of a safe environment.

The benchmarking table is a concern. The crucial elements of the design are the first 5 columns - HEPA rooms, HEPA corridor , pressure, air changes and sealed rooms. Even with the modifications we only meet 2 of the 5 . The other units apart from Nottingham have 4 or 5 . Units that don't have a HEPA corridor do have 10 PA and ACH of 10 .

We appreciate the risks associated with the lack of ICU on site however after the proposed modifications our spec , of those tabled , is the least compliant with guidance. Whilst this might be ok in the short term the anticipated shelf life of this unit is ~20 years. .

We would welcome the opinion of NSD/HPS on this matter before ICT sign off

Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital

RE: QEUH - Ward 4B BMT

McNamee, Sandra [redacted]

Fri 24/06/2016 13:44

To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Hi Teresa
I understand their position but 'we' are right. Looking at the table there is no doubt about this - shocking really that this new unit is so far off basic standards to ensure safety. I wouldn't want any of my family in there and thats always a sense test for me. I promise we will hold the line when you are away.
Have a brilliant time and please come back!!
Sandra

Sandra McNamee
Associate Nurse Director
Infection Prevention & Control
[redacted]

-----Original Message-----
From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 24 June 2016 13:35
To: McNamee, Sandra; Walsh, Tom
Subject: FW: QEUH - Ward 4B BMT

FYI

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology Dept of Microbiology Queen Elizabeth University Hospital Glasgow Direct dial : [redacted]

From: Parker, Anne [redacted]
Sent: 24 June 2016 13:01
To: Loudon David (NHS GREATER GLASGOW & CLYDE); Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE); Inkster Teresa (NHS GREATER GLASGOW & CLYDE); Jenkins Gary (NHS GREATER GLASGOW & CLYDE); Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE); McQuaker, Grant
Cc: Clark, Andrew; Irvine, David; Novitzky-Basso, Igor
Subject: RE: QEUH - Ward 4B BMT

Thanks David and everyone else for the time yesterday Apologies for letting my frustration show yesterday, but we are not much further forward than we were a year ago and still have no time frame for our return to the QEUH site.

As a thought we discussed that all eventualities should be looked at

- One option that has been raised previously, but was not discussed yesterday was moving the unit up to the 11th floor of the QEUH and swapping with one of the wards up there. This I would have thought would be less disruptive to the rest of the hospital and move us nearer the plant room and maybe allow some further improvement in the design.

Our immediate concerns are about the safe everyday management of acutely sick patients and rapid review of these patients on the GGH site. We are compromising care all the time we stay there, there have not been any obvious disasters, but this by dint of shuttling patients to and fro between the sites, which in itself brings risk. We are faced every day with the choice of moving patients to unfiltered areas to be managed in the Beatson high acuity unit or off site in an ambulance to HDU/ITU with all the inherent concerns about communication, drugs etc. when moving to a new nursing team at a time of high stress for patients. We are going to have to make hard decisions about who it is safe to transplant on the Beatson site and some patients will either have to go south of the border or not be transplanted.
Regards
Anne

Dr Anne Parker, Consultant Haematologist Dept Haematology Queen Elizabeth University Hospital Tel [redacted] Mobile [redacted]

From: Loudon, David
Sent: 23 June 2016 14:24
To: Armstrong, Jennifer; Inkster, Teresa (NHSmail); Parker, Anne; Jenkins, Gary; McColgan, Melanie
Subject: QEUH - Ward 4B BMT

Colleagues

As agreed at out meeting this morning, I have agreed to:

- Confirm the capability and capacity of the existing M&E system to provide positive room pressure at a range of 8 - 10 pascal
- Confirm the capability and capacity of the existing M&E system to provide room air changes per hour at a minimum of 10
- The provision of a solid ceiling in the ensuite rooms will be straight forward

I agree to endeavour to provide initial feedback at the end of business tomorrow and have subsequently arranged a meeting with the contractors design manager at 4pm today

Regards

5/17/2019 RE: QEUH - Ward 4B BMT - INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)

David

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning NHS Greater Glasgow & Clyde Corporate Headquarters JB Russell House Gartnavel Royal Hospital Glasgow
G12 0XH

Direct Line: [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

****

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Re:

Inkster Teresa (NHS GREATER GLASGOW & CLYDE)

Mon 08/08/2016 09:42

To:Mccolgan Melanie (NHS GREATER GLASGOW & CLYDE) [redacted]; Jenkins Gary (NHS GREATER GLASGOW & CLYDE) [redacted];

Hi both,

I think we need to wait for the long term solution . Not sure if you are aware but last week we had two hospital acquired cases of Aspergillus in ward 2A , paediatric haematology patients. Contributing factors are likely to be issues with ventilation in the ward itself and the construction work on site. In light of this I can't recommend a move back at the moment.

The top floor of the Beatson is the safest place for these adult patients from an IC point of view.

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: McColgan, Melanie [redacted]
Sent: 03 August 2016 11:09
To: Jenkins Gary (NHS GREATER GLASGOW & CLYDE); Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Subject:

Hi
Just met with Anne and Grant to feedback our discussions on Friday. Teresa, I advised them that the 4th floor with some minor works could be signed off as an interim solution pending the longer term solution on the QEUH site. The clinicians would very much a move back to QEUH as soon as is practicable even if it involves a second move at some point. I had asked capital projects for an indication on what it would take to replace and seal the ceilings, ball park they are suggesting £25k + VAT which would seem much more feasible as short term fix.
M

General Manager
Specialist Oncology and Clinical Haematology
NHS Greater Glasgow and Clyde
[redacted]

****

A49525252

To: Loudon, David; Moir, Peter
Cc: Inkster, Teresa (NHSmail); Jenkins, Gary
Subject: BMT Unit

Dear David/Peter
Please see find attached change control document and final SBAR,
Regards
Melanie

General Manager
Specialist Oncology and Clinical Haematology
NHS Greater Glasgow and Clyde
[redacted]

FW: Ward 2a BMT cubicles

Peters, Christine [redacted]

Mon 22/06/2020 15:46

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

From: Jones, Brian
Sent: 02 February 2016 14:44
To: Inkster, Teresa (NHSmail) [redacted]; Peters, Christine [redacted]
Subject: FW: Ward 2a BMT cubicles

See below. Can we discuss?
BJ

From: Redfern, Jamie
Sent: 02 February 2016 10:54
To: Jones, Brian
Cc: Williams, Craig; Gibson, Brenda; Kirkwood, Jean
Subject: FW: Ward 2a BMT cubicles

Hi Brian

Just following up on an action I had from meeting held last Thursday with ward 2a bmt team, estates and infection control.
There are two matters that need resolved and Craig W suggested I contact you
First, we have two BMT cubicles in ward 2a which continue to await microbiology test results following them being sealed way back in November. Without these results we have not managed to put the cubicles into use for BMT. Do you have these results and or should we retest the two cubicles? Jean Kirkwood SCN for the ward would be your point of contact for this.
Second point ois on going microbiology testing of the 8 sealed cubicles. We need to agree an operational plan for this which meets your capacity but gives us assurance the rooms are being appropriately re tested. Again CW suggested it was you guys we needed to contact. We thought 1 cubicle each month with results sent to infection control (CW) and SCN for the ward. CW agreed that he would analyse the test results on our behalf.
Can you get back to me with how we might take this forward or any concerns you have in interim around what I am suggesting?
Cheers

Jamie

From: Redfern, Jamie
Sent: 28 January 2016 13:32
To: Williams, Craig; Powrie, Ian; Joannidis, Pamela; Gibson, Brenda; Kirkwood, Jean
Cc: Dawes, Heather
Subject: Ward 2a BMT cubicles

Hi Folks

Attached are the key actions that I have listed from today's meeting at 11AM in ward 2a discussing BMT cubicles of which you all attended.

1. Microbiology Testing

It was noted that there remained outstanding results from labs for last 2 BMT cubicles in unit that were sealed last November. It was also noted there had been no routine microbiology screening of the other 6 BMT cubicles for a number of weeks.

Agreed JR would contact Brian Jones to confirm results of last two cubicles and also agree a routine screening schedule for all 8 rooms for calendar year 2016.

On routine screening JR would suggest to BJ that 2 cubicles should be screened monthly on a rolling basis. Results should be sent to the clinical team and CW. The latter would interpret the results received and feedback to the team if there were any concerns raised from findings.

2. Blinds

Noted there were three issues with current blinds in BMT cubicles. These were those attached to doors, external and partitions.

On doors IP noted the plan to take forward refurbishment of doors to these cubicles with new supplier Brookfield had identified. CW was concerned on impact this plan might have on air permeability results for cubicles. IP would check before proceeding and feed back to CW.

On the remaining issues IP was taking forward plans to resolve. There needed to be a discussion on the problem with external /partition blinds as to whether this was user error or product defect. IP would discuss with Brookfield. JK / BG noted the current blind specifications for cubicles did not meet laser proofing (particular to dentistry) specifications.

3. Enhanced Estate Work

In summer 2015 when commissioning the 8 BMT cubicles an SBAR report had been agreed with various parties including Board Executive.

On this report was consideration to be given for a proportion of the 8 cubicles to have enhanced estate work completed as a second layer of support to protect air permeability results in rooms.

Cost was circa 35K per cubicle with implementation taking 6 – 8 weeks at which times cubicles would be out of use. These assumptions needed to be checked. JR would with Kevin Hill discuss with David Loudon in first instance.

Implementing this facility change would mean that the cubicles were equivalent in specification to those used in Leeds and Sheffield.

4. Pseudomonas

IP indicated that the South Water Board group had requested that water sampling was carried out in the 8 cubicles for legionaries and pseudomonas. CW wanted to check the need for this against national policy as he thought only nic and pics needed to have this routine screening carried out; and that BMT cubicles would only be completed after a risk assessment on need for such action. Nothing to happen until matter clarified. Noted there is a GGC Water Board meeting on Tuesday next week where can be discussed.

5. Automatic control of rooms for pressure

IP confirmed Brookfield had identified the fault which was causing the isolation room pressures to vary unpredictably and had now resolved it. He noted this was traced to control device address duplication in the software. The formal report on these findings was awaited but agreed on information to date would start a pilot on one cubicle to check the automatic process was working. If yes all remaining cubicles would be taken off manual control and put back on corrected automatic process.

A49525252

Jamie

FW: Ward 2a BMT cubicles - testing

Cruickshank, Anne [redacted]

Mon 18/04/2016 16:05

To:Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

!!

From: Cruickshank, Anne
Sent: 25 February 2016 12:53
To: Williams, Craig
Cc: Walsh, Tom
Subject: RE: Ward 2a BMT cubicles

Craig, please advise ward staff what testing needs to be done for these 2 cubicles, ask them to liaise with Sally Dallas to organise, and then review the results.

Anne

From: Williams, Craig
Sent: 25 February 2016 12:25
To: Cruickshank, Anne
Cc: Walsh, Tom
Subject: RE: Ward 2a BMT cubicles

Dear Anne

I am happy to advise on the sampling regime, the problem lies in co-ordinating the availability of the cubilcles, Known by the SCN on the ward and the BMS staff from the Royal. Since this was centralised at the Royal there have been a number of occasions where BMS staff are not available. I will forward on an e mail trail from neuri theatres as an example.

Best wishes

Craig

Prof Craig Williams
Consultant Microbiologist Royal Hospital for Children, Glasgow
Lead Infection Control Doctor, NHSGGC
Professor of HAI, UWS

t. [redacted]
w. www.uws.ac.uk/hai

From: Cruickshank, Anne
Sent: 25 February 2016 10:07
To: Williams, Craig
Cc: Walsh, Tom
Subject: FW: Ward 2a BMT cubicles

Craig A49525252

You are the ICD for the unit. Surely it is your job to advise on testing protocols and liaise with micro?

Anne

From: Jones, Brian
Sent: 19 February 2016 14:01
To: Kirkwood, Jean; Dallas, Sally; Redfern, Jamie
Cc: Powrie, Ian; Gibson, Brenda; Joannidis, Pamela; Millar, Pat; Mallon, John; Hutton, Melanie; Walsh, Tom; Williams, Craig; Cruickshank, Anne
Subject: RE: Ward 2a BMT cubicles

Dear All,

Please see my original response

When were the samples taken and have IPC contacted the lab to request the results? It would now seem prudent to retest the rooms given the time elapsed.

I think IPC need to recommend what testing protocol is appropriate to allow safe functioning of the rooms and discuss with microbiology to ensure this takes place - the ICD covering the unit should be the link person with the lab in order to ensure appropriate and timely results interpretation. The contact in the GRI microbiology lab is Sally Dallas (lab manager).

Can IPC please provide guidance on a testing protocol that microbiology can work to.

Regards

Brian

Professor Brian L. Jones
Consultant Medical Microbiologist, NHS GGC

From: Kirkwood, Jean
Sent: 19 February 2016 09:02
To: Dallas, Sally; Redfern, Jamie; Jones, Brian
Cc: Powrie, Ian; Gibson, Brenda; Jones, Brian; Joannidis, Pamela; Millar, Pat; Mallon, John; Hutton, Melanie
Subject: RE: Ward 2a BMT cubicles

Hi there,
I am still waiting from results from December on 2 cubicles!
I require someone to advise what sampling and when it is required.
Why does the same sampling system, which was establishe at Yorkhill, not just transfer to the new hospital.
It was never my responsibility to request sampling, only respond to any issues from the mothly monitoring
many thanks
Jean

From: Dallas, Sally
Sent: 18 February 2016 16:36
To: Redfern, Jamie; Jones, Brian
Cc: Kirkwood, Jean; Powrie, Ian; Gibson, Brenda; Jones, Brian; Joannidis, Pamela; Millar, Pat; Mallon, John
Subject: RE: Ward 2a BMT cubicles

A49525252

Hi Jamie,
The sampling hasn't been carried out as we were waiting on the request details to carry out the work. I've copied in Pat Millar who is the Technical manager in charge of the Environmental lab. We would always try to carry out sampling as soon as possible after the request but need at least 24 hrs notice as we have to prepare equipment and ensure trained staff are available. We won't be able to do any sampling this week but if you or the appropriate person lets us know possible dates/times, we can get it arranged ASAP.
Hope this helps
Kind regards
Sally

Sally Dallas
Microbiology Operations Manager
Microbiology
North sector
Extns. [redacted]
[redacted]

From: Redfern, Jamie
Sent: 18 February 2016 13:57
To: Dallas, Sally
Cc: Kirkwood, Jean; Powrie, Ian; Gibson, Brenda; Jones, Brian; Joannidis, Pamela
Subject: FW: Ward 2a BMT cubicles

Any update on this Sally?

From: Redfern, Jamie
Sent: 04 February 2016 17:11
To: Jones, Brian
Cc: Williams, Craig; Gibson, Brenda; Kirkwood, Jean; Dallas, Sally
Subject: RE: Ward 2a BMT cubicles

Thanks Brian

Craig/ Jean / Sally

How do we take this forward in particular getting a clean bill of health declared for remaining 2 cubicles and an appropriate on-going monitoring process in place across the unit?

Jamie

Jamie Redfern
General Manager, Hospital Paediatrics & Neonates

Patient safety starts and ends with the person we serve.

From: Jones, Brian
Sent: 04 February 2016 11:18
To: Redfern, Jamie
Cc: Williams, Craig; Gibson, Brenda; Kirkwood, Jean; Dallas, Sally
Subject: RE: Ward 2a BMT cubicles

Hi Jamie,

Re the two matters you raise:

When were the samples taken and have IPC contacted the lab to request the results? It would now seem prudent to retest the rooms given the time elapsed.

I think IPC need to recommend what testing protocol is appropriate to allow safe functioning of the rooms and discuss with microbiology to ensure this takes place - the ICD covering the unit should be the link person with the lab in order to ensure appropriate and timely results interpretation. The contact in the GRI microbiology lab is Sally Dallas (lab manager).

Cheers,

Brian

From: Redfern, Jamie
Sent: 02 February 2016 10:54
To: Jones, Brian
Cc: Williams, Craig; Gibson, Brenda; Kirkwood, Jean
Subject: FW: Ward 2a BMT cubicles

Hi Brian

Just following up on an action I had from meeting held last Thursday with ward 2a bmt team, estates and infection control.
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Can you get back to me with how we might take this forward or any concerns you have in interim around what I am suggesting?
Cheers

Jamie

From: Redfern, Jamie
Sent: 28 January 2016 13:32
To: Williams, Craig; Powrie, Ian; Joannidis, Pamela; Gibson, Brenda; Kirkwood, Jean
Cc: Dawes, Heather
Subject: Ward 2a BMT cubicles

Hi Folks

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Jamie

Royal Hospital for Children

Ward 2A Isolation Room Facilities

Proposed Revised Specification

16th March 2016

This specification has been developed with an aim of addressing concerns raised by infection control colleagues and the clinical team over the ongoing reliability of the of the existing isolation arrangements for clinical care of Paediatric Bone Marrow Transplant (BMT) patients who are Neutropenic. While these suites have been designed and validated to SHPN 04:01 they currently seems overly reliant on the room seal remaining intact. Rebalancing the ventilation so that the patient bedroom and en-suite are at positive pressure to the void is required to provide additional assurance during the operation of these rooms.

NHS Greater Glasgow & Clyde (The Board), seek a redesign submission and preparation of quotes to deliver the following two options to address the above concerns:

Option 1:

This specification is based on the requirements of the extant NHS design guidance "Scottish Health Planning Note SHPN 04: Supplement 1: Isolation Facilities in Acute Settings" utilised the under the construction contract.

The Basic Design Requirement is that the ventilation system should be designed on the basis that its entire constituent parts, as described in Table 1 (below), work together to form an integrated system. Where; air to the suite is supplied at high level in the lobby, with the full extract in the en-suite bathroom. This ensures good airflow through the entire isolation suite. Similarly, the volumetric airflow rate in the lobby is determined by the number of air changes required in the patient's bedroom. **Modifying or failing to provide one element of the system as detailed in the above guidance will jeopardise the performance of the system as a whole.**

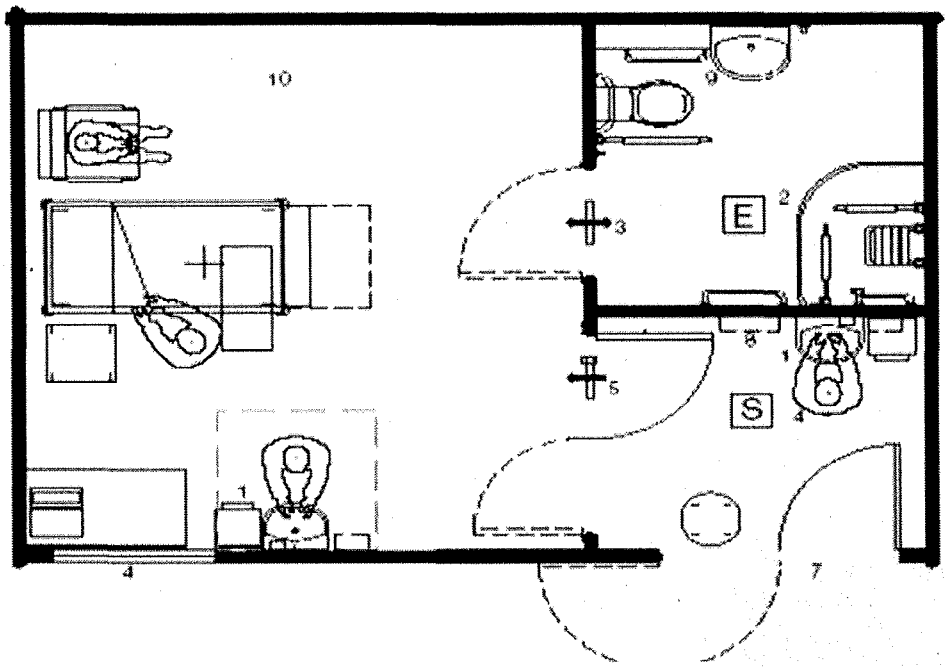
The redesign should therefore follow the ventilation parameters laid out in table 1 below with the exception of the following caveat: **(If extract is fitted in the isolation room this reduces to 45 l/s in the en-suite with 113 l/s extract in the isolation room)** which does not meet the design intent for this patient group.

Room	Parameter	Nominal Design Values
Lobby	Room volumes Bed access lobby (5m2 x 2·7m) Personnel access lobby (4m2 x 2·7m)	 13·5 m^3 10·8 m^3
	Pressure differential to corridor	Nominally 10 Pascals
	Supply air flow (for a room of this size)	Bed access lobby - 238 l/s Personnel access lobby - 208 l/s
	Air change rate	Bed access lobby – 63 per hour Personnel access lobby – 69 per hour
Isolation Room	Room volume (19m2 x 2.7m)	51.3m^3
	Pressure differential to corridor	Nominally zero
	Room air flow (for a room of this size)	158 l/s
	Air changes rate	10 per hour
En-suite	Room volume (6m2 x 2·7m)	16·2m^3
	Pressure differential to isolation room	Negative
	Extract air flow (for a room of this size)	158 l/s (If extract is fitted in the isolation room this reduces to 45 l/s in the en-suite with 113 l/s extract in the isolation room)
	Air change rate	At least 10 per hour

Table 1: Isolation Suite – Ventilation Parameters

Sheet 2 below is an extract from the above guidance for a new-build enhanced single room with en-suite facilities and ventilated lobby, with bed access through the lobby including clarification in italics on the Boards requirements.

Sheet 2: New build single room with en-suite facilities and bed-access lobby (isolation suite)



Minimum requirements:

The Bulleted numbers reference the elements detailed in the above suite layout:

2. Provide suitable extract (***an extract terminal should be fitted at high level within the en-suite room en-suite)***
3. Install transfer grille (***at low level in the door between the bedroom and en-suite room to, aim is for the en-suite to be –ve to the isolation room to achieve stated ACR while ensuring that the en-suite is +ve to external of the en-suite envelope conditions i.e. IPS/ceiling voids this is required to ensure no external air ingress which could compromise Neutropenic patients safe environment)***.
4. Supply air (***via access lobby)***
5. Pressure stabiliser ***(balanced blade type, set to operate at 10 Pascals, should be fitted above the door between the lobby and the bedroom. The stabiliser should be visible so that its correct operation can be seen. It should be of a style that will operate silently, and be correctly sized and positioned so that it does not cause a draught that would be uncomfortable for patients.)***

Replace the existing Magna-helix differential pressure gauge with:

- A direct reading electronic digital gauge showing the pressure in the lobby with respect to the corridor, mounted at eye level on the corridor wall adjacent to the lobby entry door.
- The gauge and lobby entry door must be clearly marked to identify the isolation suite to which they refer,
- Audio and visual alarms must be located at the entrance to the lobby and bedroom to warn nursing and maintenance staff of potential unsafe conditions.
- Continuous monitoring should be provided with remote indication at nurses stations, interlinked to the Building Management System with time delay (adjustable by Estates

personnel) to take account of running-up of standby motors or damper operations or other plant items that may take time to open or close.
- Alarms based on sensing airflow failure should be provided rather than electrical failures.
- Alarm sound levels should be sufficient to attract attention without distress or annoyance and, if muted, should re-activate at 5-10 minute intervals

The full suite will require to be revalidated after implementation of design changes.

All works will require to be conducted within the existing conditions of contract under the Employers Requirements.

Enhanced HAI SCRIBE risk assessments will be required due to the nature of clinical services provided within this unit?

Option 2:

Provide a design option based and upon "Scottish Health Technical Memorandum (SHTM) 03-01 Ventilation for healthcare premises Part A – Design and validation" for Neutropenic Patients.

With aim of providing a +ve isolation room envelope and pressure cascade principles detailed in the above SHTM 03-01 design guidance.

This design option should also include the requirement for local and remote alarm condition reporting and monitoring as detailed in option 1.

RE: Pediatric BMT Neutorpenic ventilation

Inkster Teresa (NHS GREATER GLASGOW & CLYDE)

Thu 28/04/2016 20:30

To:Powrie, Ian [redacted];

Hi Ian - yes I will be signing this off Option 2 is my preference.
Kind Regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Powrie, Ian [redacted]
Sent: 25 April 2016 09:39
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE); Williams Craig (NHS GREATER GLASGOW & CLYDE)
Subject: RE: Pediatric BMT Neutorpenic ventilation

Hi Teresa,

I don't have any minutes etc, I was asked by David Loudon (DoF) to prepare a specification to meet the recommendations discussed at a review meeting with Robert Calderwood, and the senior management team on the 5th Feb 2016, where the proposal was betterment toward meeting the intent of SHPN 04 supplement 1, and remove the reliance on the integrity of the rooms seal to protect against potential contaminants. Hence my specification being built around this guidance.

Craig recommended that this should be checked against the design and successful infection free operation of the Nottingham & Leeds Paediatric BMTU's, and latterly Birmingham's proposed design?"

I have attached an investigative trial (commissioning report) which I carried out to ensure that this option could physically be achieved, Please note that this option requires additional air balanced transfer grilles between the isolation room & the en-suite.

However, when preparing this report I realised that the Builder (Brookfield) would probably redesign the duct sizing to accommodate these changes in order to meet ventilation design criteria and therefore the cost to move to an SHTM 03-01 design compliance may not require a significantly greater investment to deliver?

Therefore I included option 2 in my proposal.

David Loudon, is not prepared instruct a design review to develop costs without sign off from the appropriate IC lead, which I assume would now be yourself.

Regards

Ian

I. Powrie
Sector Estates Manager (South & Clyde)
Queen Elizabeth University Hospital Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,
Direct : [redacted]
Mob: [redacted]

-----Original Message-----
From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 25 April 2016 08:39
To: Powrie, Ian
Subject: RE: Pediatric BMT Neutorpenic ventilation

Hi Ian

As you know I have not been involved in the paediatric BMT so I do not have the full background here. Has option 2 been discussed and can we work it up.

Re option 1 - as with the adult BMT there is an exclusion in SHPN 0401 for severely immunosuppressed patients. I appreciate they promised future guidance and that this never came. We should therefore have deferred to SHTM 03-01 for neutropenic rooms .

Do you have any info other than this spec - emails or minutes of meetings that would be useful

Thanks
Best wishes
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology Dept of Microbiology Queen Elizabeth University Hospital Glasgow Direct dial : [redacted]

From: Powrie, Ian [redacted]
Sent: 21 April 2016 18:05
To: Inkster Teresa (NHS GREATER GLASGOW & CLYDE)
Cc: Williams Craig (NHS GREATER GLASGOW & CLYDE)
Subject: Pediatric BMT Neutorpenic ventilation

Hi Teresa,

As discussed today, can you please review the proposed specification attached and advise if you are satisfied that this would meet with your expectations for ventilation of the above isolation facilities?

David Loudon (DoF) requires sign off by the lead ICD before he can progress this proposal?

Let me know if you have any amendment to this revised specification before signing it off?

Regards

Ian

I. Powrie
Sector Estates Manager (South & Clyde)
Queen Elizabeth University Hospital Campus,
1345 Govan Rd,
Glasgow,
G51 4TF.
Direct : [redacted]
Mob: [redacted]

Re: Pediatric BMT Ward 2A Neutorpenic ventilation

Mathers, Alan [redacted]

Fri 06/05/2016 14.10

To Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE) [redacted]; Loudon David (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Redfern James (NHS GREATER GLASGOW & CLYDE) [redacted]; Hill Kevin (NHS GREATER GLASGOW & CLYDE) [redacted]

Dear Jennifer
Noted.
Will speak to Jamie next week
Kind regards
Alan

Sent from my BlackBerry 10 smartphone on the EE network.

From: Armstrong, Jennifer
Sent: Friday, 6 May 2016 13:59
To: Loudon, David
Cc: Inkster, Teresa (NHSmail); Mathers, Alan; Redfern, Jamie; Hill, Kevin
Subject: FW: FW: Pediatric BMT Ward 2A Neutorpenic ventilation

David
Many thanks for your email. I wonder if we can ensure that Dr Gibson along with Dr Inkster and the directorate team, can review the specification and provide advice so we can request the process from Brookfield.
Jamie/Alan: can you perhaps take this forward with Dr Gibson/ Dr Inkster and provide advice to David L/me so we can proceed
J

From: Loudon, David
Sent: 03 May 2016 09:09
To: Armstrong, Jennifer
Subject: FW: FW: Pediatric BMT Ward 2A Neutorpenic ventilation
Importance: High

Jennifer,

This is the specification that was drawn up with Craig Williams and now approved by Teresa Inkster. Can you confirm that you are content for me to now request process form Brookfield Multiplex?

D

David W. Loudon, MCIOB, CBIFM, MBA
Director of Facilities and Capital Planning
NHS Greater Glasgow & Clyde
Corporate Headquarters
JB Russell House
Gartnavel Royal Hospital
Glasgow
G12 0XH

Direct Line [redacted]
Mobile Phone: [redacted]
E mail: [redacted]

From: Powrie, Ian
Sent: 29 April 2016 07:24
To: Loudon, David
Subject: FW: Pediatric BMT Ward 2A Neutorpenic ventilation

David,

Please see e-mail below, after discussions with Teresa and providing her with a copy of the pilot study commissioning report along with the proposed revised specification Teresa has advised that her preference is option 2 i.e.:

"Provide a design option based and upon "Scottish Health Technical Memorandum (SHTM) 03-01 Ventilation for healthcare premises Part A – Design and validation" for Neutropenic Patients.

With aim of providing a +ve isolation room envelope and pressure cascade principles detailed in the above SHTM 03-01 design guidance.

This design option should also include the requirement for local and remote alarm condition reporting and monitoring as detailed in option 1" including

- A direct reading electronic digital gauge showing the pressure in the lobby with respect to the corridor, mounted at eye level on the corridor wall adjacent to the lobby entry door.
- The gauge and lobby entry door must be clearly marked to identify the isolation suite to which they refer,
- Audio and visual alarms must be located at the entrance to the lobby and bedroom to warn nursing and maintenance staff of potential unsafe conditions.
- Continuous monitoring should be provided with remote indication at nurses stations, interlinked to the Building Management System with time delay (adjustable by Estates personnel) to take account of running-up of standby motors or damper operations or other plant items that may take time to open or close.
- Alarms based on sensing airflow failure should be provided rather than electrical failures.
- Alarm sound levels should be sufficient to attract attention without distress or annoyance and, if muted, should re-activate at 5-10 minute intervals

Regards

Ian

[redacted]
Sector Estates Manager (South & Clyde)
Queen Elizabeth University Hospital Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,
Direct : [redacted]
Mob: [redacted]

NHS
Greater Glasgow and Clyde

Notes from the meeting to discuss the Maintenance and Verification Process for the BMT Rooms, Ward 2A, RHC
Tuesday 9th August 2016 at 1pm, Ward 2B, RHC

Present: Heather Dawes (HD), Clinical Services Manager, RHC
Ian Powrie (IP), NSGH Estates Manager
Jean Kirkwood (JK), Senior Charge Nurse, Ward 2A, RHC
Angela Johnson (AJ), Senior Infection Prevention & Control Nurse (Notes)

		ACTIONS
1.	**Apologies**	
	None	
2.	**Background**	
	Four BMT rooms (18, 20, 23, 24) are currently closed following air sampling results and required repair work. The Microbiology and Estates issues are interdependent and have contributed to the continued closure of the rooms. It was acknowledged that guidance on the closure and re-opening of BMT rooms would be helpful. The log book format (maintenance folders), for the BMT rooms, is agreed but not yet in use. IP confirmed that there will be one log book for each BMT room containing the relevant information and recording sheets for maintenance and verification of each room. IP agreed to provide all log books and maintenance schedules for JK by next week. JK and IP agreed that storage of the log books in Alanna McVeigh's (AM) office is appropriate as the Nurse in Charge will always be aware of how to access the folders when required by Estates. AM is involved with air sampling and the JC accreditation process for the BMT rooms. Willie Madden will commence work as the responsible Estates Officer for managing the BMT room log books, and related work; at the point they are implemented.	**IP**
3.	**Current situation**	
	Air sampling has been carried out in the four closed BMT rooms Integral blind mechanisms are to be replaced in the windows of two BMT rooms. Room 24 - torn ducting in ceiling void is repaired Room 24 - breaches of room integrity caused by additional fixtures in the room have now been sealed	

	Room 24 – re-sampled on 09.08.16 IP mentioned that there is also work to be carried out on the installation of a door alarm system to notify the staff of opened BMT doors. It was confirmed that an HAI-SCRIBE will be required for this work.	**IP/AJ**
4.	**Servicing and Verification of BMT Rooms**	
	IP informed the group that the servicing of the BMT rooms is carried out immediately before the annual verification process. This is currently placed on hold due to ongoing air sampling results and outstanding repair work to the integral window blinds. The group agreed: • Teresa Inkster is to be invited to the next meeting to provide confirmation of the air sampling process and interpretation of results. • IP to provide an update for completion of all work in the rooms	**HD/AJ** **IP**
5.	**Outside of the meeting**	
	Teresa Inkster has asked IP to check the ventilation plans. Teresa will visit the ward with an Estates officer on 10th August to look at the ceiling voids.	**TI / IP**
6.	**Next Meeting**	
	Thursday 18th August at 11.00am, Ward 2A, RHC	

	ACTION LIST	**NAME**
1.	All log books for BMT rooms to be supplied to Ward 2A.	**IP**
2.	Status update on repair work for all BMT rooms.	**IP**
3.	Confirmation of air sampling process for BMT rooms and interpretation of results.	**TI**

NHS
Greater Glasgow and Clyde

Notes from the 2nd meeting to discuss the Maintenance and Verification Process for the BMT Rooms, Ward 2A, RHC
Thursday 18th August 2016 at 11am, Ward 2B, RHC

Present: Heather Dawes (HD), Clinical Services Manager, RHC
Ian Powrie (IP), NSGH Estates Manager
Jean Kirkwood (JK), Senior Charge Nurse, Ward 2A, RHC
Angela Johnson (AJ), Senior Infection Prevention & Control Nurse (Notes)
Melanie Hutton (MH), Lead Nurse, RHC

		ACTIONS
1.	**Apologies**	
	Teresa Inkster (TI), Infection Control Doctor, RHC	
2.	**Background**	
	Four BMT rooms (18, 20, 23, 24) are closed following air sampling results and a range of repair work. The Microbiology and Estates issues are interdependent and have contributed to the continued closure of the rooms.	
3.	**Current situation**	
	Professor Gibson has expressed concern that there are patients being conditioned in preparation for transplant and one further patient pending transfer from Cambridge who will require the use of the BMT rooms. Four BMT rooms (18, 20, 23, 24) remain closed pending an update from TI and IP on resolution of Microbiology and Estates issues respectively. TI e-mailed an update for the group: • There is no evidence of any water damage or mould in the ceiling void in the TCT part of the ward • Air sampling results were negative for the chilled beams - only 1 settle plate out of 10 grew a single colony of Penicillium - and is not considered significant. • Air sampling in the unit has detected fungi which will take until 22nd August to be identified. The air sampling was in the non- HEPA filtered area of the ward. Fungi are ubiquitous in the environment and it is not unexpected to find them in non-HEPA filtered areas. • The BMT rooms can be used as soon as IP can confirm that all Estates issues and inspections are satisfactory • No further air sampling is required before the BMT rooms can be	IP

	Room 23 for validation on Sunday 21st August Rooms 18 and 20 – to be sealed on Monday 22nd August with a possibility of validation on the same dayAll of the above are on the instruction of IP. No rooms to be opened in the meantime. E-mail update from IP on 19.08.16 informing the group on the arrival of the upgraded Hepa filters that are due for delivery today and scheduled for installation on 20th/ 21st August. The mobile heap filters are ready for collection and can be in place by Monday 22nd August	
6.	**Next Meeting**	
	Friday 26th August at 11.00am, Venue to be arranged	

	ACTION LIST	**NAME**
1.	All log books for BMT rooms to be supplied to Ward 2A.	**IP**
2.	Status update on all Estates work and status of verification process for all BMT rooms.	**IP**
3.	Confirmation of air sampling process for BMT rooms and interpretation of results.	**TI**

FW: Ward 2a bmt cubicles

Inkster, Teresa [redacted]

Thu 23/07/2020 16:37

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

From: Powrie, Ian
Sent: 09 December 2016 12:26
To: Redfern, Jamie [redacted]; Hunter, William [redacted]
Cc: Hill, Kevin [redacted]; Inkster, Teresa [redacted]; Mathers, Alan [redacted]
Subject: RE: Ward 2a bmt cubicles

Jamie,

It was my understanding from the meeting that you would produce a report for submission to Jennifer Armstrong (copied to the group) to allow her to authorise the modifications to proceed and confirm the source of funding?

I have discussed this with David, and neither of us have received a copy of the report or any further indication of the proposed works or source of funding?
Can you please advise?

Regards

Ian

I. Powrie
Sector Estates Manager (South & Clyde)
Queen Elizabeth University Hospital Campus,
1345 Govan Rd,
Glasgow,
G51 4TF,
PA Elaine McNeil: [redacted]
Direct : [redacted]
Mob: [redacted]

From: Redfern, Jamie
Sent: 09 December 2016 08:35
To: Powrie, Ian; Hunter, William
Cc: Hill, Kevin; Inkster, Teresa; Mathers, Alan
Subject: Ward 2a bmt cubicles

Hi Ian
I was wondering if there had been any further discussion at capital level regarding proposal to upgrade 4 of the BMT cubicles? Would it be better I go direct to David L via Kevin?
Jamie

Sent from my BlackBerry 10 smartphone on the EE network.

A49525252

hulley & kirkwood
consulting engineers

Queen Elizabeth University Hospital
And the Royal Hospital for Children
Isolation Room Review

March 2017

A49525252

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Prepared By:	Colin Peacock
Authorised By:	John McEwan
Revision:	01
Date:	March 2017
File Location:	K:\Documents\70520

Queen Elizabeth University Hospital And the Royal Hospital for Children Isolation Room Review

March 2017

REV	DESCRIPTION	PREPARED BY	DATE
Issue No. 1	First issue	C.Peacock	March 2017
Rev 01	General Update	J McEwan	March 2017

Index:

1.0 Introduction 5

2.0 Existing Systems Overview 6

3.0 Modification from PPVL to Positive Pressure Isolation within Ward 2A 7

4.0 Modification to PPVL Within Adults to Achieve Compliance 8

5.0 Modification to PICU Isolation Rooms Ward 1D 10

6.0 Cost Plan Summary 11

APPENDICES 12

Appendix A – Positive Pressure Isolation Schematic 12
Appendix B – Cost Plan 13

1.0 Introduction

Patient isolation facilities are required in healthcare premises to prevent Healthcare Associated Infection (HAI). There are two main types of patient isolation:

(a) Isolation to protect other patients and staff from a patient with an infection.

(b) Isolation to protect patients from exposure to infection.

SHPN 04: Supplement 1: Isolation Facilities in Acute Settings was published in 2008 and offers guidance on single bedroom isolation facilities including guidance on "enhanced" single rooms with positive pressure ventilated lobbies (PPVL) that offer effective isolation for both types of patient group as noted above. However clause 1.10 of SHPN 04: Supplement 1 states "This supplement does not describe the specialist facilities required in infectious disease units or on wards where severely immune-compromised patients are nursed. Guidance for these facilities shall follow in a further Supplement to SHPN 04." At the date of writing Hulley & Kirkwood are not aware of this additional guidance document being available.

Notwithstanding this guidance does state that ***"the room can be used by both infectious patients and those at risk of infecting others"*** which intimates that the room if constructed in compliance with the guidance and clinically managed then it should be suitable for Hazard Group 3 classification. We are currently seeking guidance from both Public Health England (PHE) and the Department of Health for expert opinion on this issue as they had input to the original research .

Construction of the QEUH & RHC commenced in 2011 and the hospital became fully operational in 2016. There are a number of single bed isolation facilities throughout the facility both in the Adult and the Children's Hospitals.

Hulley & Kirkwood have been asked by Greater Glasgow & Clyde NHS Estates to review the following and we identify scope is limited to these rooms:

(a) Changing of 4No. PPVL isolation rooms (17,18,19 & 20) within Ward 2A to positive pressure isolation rooms for the continued use for transplant and severely immune-compromised patients.

(b) Review of PPVL isolation rooms (43 & 44) within Adults ICU for compliance against HBN 04-01 Supplement 1 (Base Build Specification). However SHPN 04 Supplement 1 will be utilised as this is specific guidance for Scottish Healthcare Facilities. Where any differences are evident these will be identified in ***bold italics***).

(c) Review 2No. Isolation rooms (5 & 12) within PICU and provide comment on compliance.

(d) Coordinate with Department of Health to assist with obtaining confirmation on what Hazard Classification of patient can be nursed within PPVL Isolation Rooms that comply with SHPN/HBN 04-01 Supplement 1.

2.0 Existing Systems Overview

The existing isolation rooms fall into two categories:

(a) Single bed rooms with PPVL and en-suite.

(b) Single bed rooms with PPVL and no en-suite.

The latter type is common in hospital departments where the patient group would be unable to utilise en-suite facilities due to their state of health e.g. intensive care.

All of the facilities are provided with dedicated supply air handling units partnered with dedicated extract systems. The ventilation plant configuration and duty capability is generally in compliance with HBN 04: Supplement 1 however there is no evidence that the supply systems were commissioned taking into consideration the future pressure drop when a Hepa filter would be inserted.

The following typical items are noted as requirements that are either not evident within the installations or are contrary to the guidance in the document. These are discussed further within sections 3.0, 4.0 & 5.0 including scope / cost required to meet requirements identified within section 1.0

- Rooms of type (a) have been provided with the majority of the extract ventilation taken from the bedroom at ceiling level with a lesser volume extracted from the en-suite at ceiling level. This is contrary to clause 4.12 which requires all extract to be taken from the en-suite unless clinical requirements determine that some extract is to be taken from low level at the bedhead.
- Rooms of type (a) have no low level air transfer grilles installed within the door to the en-suite. This is contrary to clause 4.13.
- Excessive access hatches have been installed on the supply and extract ductwork. This is contrary to clause 4.15.
- There appears to be no provision for a gas tight shut off damper or spectacle plate on the extract systems prior to the extract fans. This is contrary to clause 4.14. (Note that al survey of above ceiling runs was not achievable due to operational issues.)
- There are no audio and visual alarms located outside the room lobbies to warn staff of unsafe conditions. This is contrary to clause 4.22.
- There is no provision for a common alarm panel located at the nurse station. This is contrary to clauses 4.6 and 4.22.
- The supply and extract duct access hatches have not been identified as a bio-hazard. This is contrary to clauses 4.15 and 4.19.
- The supply and extract plant and duct systems have not been identified with the rooms that they serve. This is contrary to clauses 4.15 and 4.19.
- Where safe change filter housings have been provided as opposed to vertical discharges they have not been installed external to the building. This is contrary to clause 4.16. Fire compartmentation strategy will require reviewed taking the above into consideration.
- The existing dial pressure gauges monitoring lobby positive pressure are inappropriate for monitoring a 10Pa pressure differential. 30-0-30 Pa is preferred as what has been installed within PICU.
- No envelope permeability test carried out.

3.0 Modification from PPVL to Positive Pressure Isolation within Ward 2A

As noted in the introduction there would not appear to be any published UK NHS guidance on the design of Positive Pressure (PP) Isolation rooms. However it is reasonable to take guidance from SHTM 03-01 and in particular the guidance pertaining to operating theatre ventilation system design.

SHTM 03-01 Part A Table A4 offers advice on air volume flows through doorways between rooms of different cleanliness in order to control cross-contamination. The table advises that an air flow of 0.28m3/s is adequate to offer protection to a single doorway between a room and another one level lower in the hierarchy of cleanliness. With reference to SHTM 03-01 Part A Table A2, if one assumes the patient bedroom to be 'Sterile', the lobby as 'Clean' and the ward corridor as 'Transitional' then it can be concluded that a cascading air flow from the isolation room to the ward corridor at a rate of 0.28m3/s is adequate to prevent cross-contamination. This is based on the premise that when the rooms are in use there will be a management procedure in place such that the 'corridor to lobby' and the 'lobby to bedroom' doors are not opened coincidentally. Furthermore it is assumed that the half door of the 'pair and a half' door sets is only used for bed transport and when the room is in use only the single door is opened.

Since the supply air plants appear to be capable of delivering at least 0.3m3/s to the rooms it is reasonable to allocate 0.28m3/s of this volume to the door protection leaving 0.02m3/s to the en-suite extract. While the 'en-suite' may be classed as 'dirty' in the hierarchy of cleanliness and hence requiring an air flow of 0.47m3/s for 'sterile' to 'dirty' protection, according to SHTM 03-01 Part A Table A4, it is assumed that because the en-suite is only used by the patient it does not present a risk to the patient. The extract rate of 0.02m3/s from the en-suite will maintain the room at a negative pressure with respect to the bedroom and will significantly exceed the air change rate stated in SHTM 03-01 Part A Table A1 for a single room en-suite.

As the rooms have been identified as accommodating severely immune-compromised patients and in order to create the cascade of door protection it is proposed that the existing supply system be modified to re-locate the HEPA filtered supply terminal to the bedroom. (Refer to Drg:70520(57)01 within Appendix A).The existing pressure stabiliser damper installed over the 'lobby to bedroom' door shall be reversed to allow air flow from the room to the lobby at a 10Pa pressure differential. A new pressure stabiliser damper sized for 10Pa differential pressure shall be installed in the wall between the lobby and corridor. The lobby will have a positive pressure differential from lobby to corridor. This provision will create a continuous air flow from the bedroom to the corridor with a target 20Pa positive pressure differential between the bedroom and the ward corridor.

The extract system shall be altered to divert the extract duct currently extracting air from the bedroom to instead extract from the corridor. This will balance the supply air flow and ensure that the other ventilation systems serving the ward are not adversely affected. For room type (a) the extract terminals shall be replaced with terminals with integrated volume control dampers that can be accessed from below through the grilles such that the existing duct mounted volume control dampers can be removed along with any associated ceiling access hatches.

The existing dial pressure gages shall be replaced with gauges with a - 30/0/30Pa scale and shall have the room side impulse tube replaced from the lobby to the patient bedroom to give visual indication of the maintained positive pressure within the bedroom to corridor.

4.0 Modification to PPVL Within Adults to Achieve Compliance

2No. rooms (Bedrooms 43 & 44) within Adults ICU on Level 1 of the adult's hospital have been selected for compliance review. These rooms are new isolation suites comprising in each case an entry lobby, patients single room and en-suite all to be in compliance with HBN 04-01 Supplement 1. However it is likely that observations and recommended modifications identified will be relevant to "all" PPVL isolation rooms with en-suite within the hospital. As they have not been constructed in line with PPVL guidance we would not consider these rooms to be compliant PPVL isolation rooms and as such cannot be validated to same. The rooms do provide isolation given the lobby pressures however the dilution success of the bedroom is called into question with the current extract ventilation grille arrangement.

Ventilation for each suite is provided by a single supply Air Handling Unit (Bedroom 43 – AHU 21/17 and Bedroom 44 – AHU21/16).

Extract is individual from each suite provided by fans located internally within plantroom 21. (21-17-EF01 & 21-16-EF01). Each fan has filter safe change housing. There is no heat recovery.

Supply ventilation to each suite is by a ceiling diffuser within the lobby, complete with HEPA Filter box. Air passes from lobby to the patient's room via a pressure stabiliser at high level above the door, set at 10Pa. No Hepa filter installed at this stage. Extract is from the patient's room through a ceiling mounted extract grille and from a ceiling mounted grille within the en-suite.

Validation Method

The Air Handling Unit and distribution was inspected for compliance with the minimum installation standard set down in SHTM 03-01: Specialised Ventilation for Healthcare Premises, issued by Health Facilities Scotland. This is designed to ensure safe access, permit routine maintenance and reduce the risk of the plant becoming a source of Legionellosis. It was not possible to turn the AHU off so only a limited visual inspection was undertaken. Room was inspected for compliance with SHPN 04 - 01 Supplement 1.

The following non-compliances were identified:

(a) No clear identification of the ventilation plant and what associated suite it serves was evident. Non-compliance with SHPN 04 – Supplement 1 clause 4.15 & 4.19. This has been raised as part of the construction defect monitoring, however solution and programme have yet to be confirmed.

(b) No ductwork was identified throughout its distribution. Inclusive of bio-hazard warning labels. Non-compliance with SHPN 04 – Supplement 1 clause 4.15 & 4.19. This has been raised as part of the construction defect monitoring, however solution and programme have yet to be confirmed.

(c) Although ceiling voids could not be accessed within the rooms it was evident that final connections to grille boxes was by the use of flexible ductwork in lieu of a bend. This is non-compliant to SHTM 03-01 A – Section 5.55

(d) The extract ventilation is not in compliance with SHPN 04- Supplement 1 section 4.12 as extract has been mounted within the patient room ceiling. Example below for bedroom 44 indicates that supply air has a direct path to the ceiling mounted extract within the patient room.

Bedroom 44 – Patient Bedroom Extract Grille as Viewed from Lobby

(e) The isolation suite lobbies are fitted with magnahelic gauge to allow a visual identification of the lobby to corridor pressure. Which is nominally 10pa +ve. No alarm has been installed locally or repeated at the ICU nurse station. This means that key monitoring conditions such as door left/held open, pressure failure and plant failure will not be known until the nursing staff has a reason to visit the room. Non-compliance with SHPN 04 – Supplement 1 clause 4.22

(f) The door between the lobby and isolation room opens inwards so the air flow from the lobby tends to keep it open. It should have been hung the other way so that the air flow tends to shut it in compliance with SHPN 04 – Supplement 1.

(g) Inconsistency with door closers fitted to doors. Non-compliance with SHPN 04 – Supplement 1.

(h) En-suite doors are not fitted with door transfer grilles. Non-compliance with SHPN 04 – Supplement 1 clause 4.13.

(i) Excessive access hatches have been installed on the supply and extract ductwork. This is contrary to clause 4.15.

(j) There appears to be no provision for a gas tight shut off damper or spectacle plate on the extract systems prior to the extract fans. This is contrary to clause 4.14. (Note that a survey of above ceiling runs was not achievable due to operational issues.)

(k) Where safe change filter housings have been provided as opposed to vertical discharges they have not been installed external to the building. This is contrary to clause 4.16. It also breeches the fire compartmentation of the building because the filter housing if not enclosed within a fire rated structure as all the extracts have been grouped together. The strategy requires further review.

(l) The existing dial pressure gauges monitoring lobby positive pressure are - 60/0/60Pa scale and are inappropriate for monitoring a 10Pa pressure differential. 30/0/30 would offer better visual identification.

(m) No envelope permeability test carried out.

Section 6.0 identifies cost plant to allow the suites to be made compliant.

5.0 Modification to PICU Isolation Rooms Ward 1D

2no rooms (Bedrooms 12 & 5) within PICU on Level 2 of the children's hospital have been selected for review. These rooms are new isolation suites comprising in each case an entry lobby and patients single room.

Ventilation for each suite is provided by a single supply Air Handling Unit (Bedroom 12 – AHU 41/15 and Bedroom 5 – AHU41/13).

Extract is individual from each suite provided by fans located externally outside plantroom 41. (41-15-EF01 & 41-13-EF01) There is no heat recovery.

Supply ventilation to each suite is by a ceiling diffuser within the lobby, complete with HEPA Filter box. Air passes from lobby to the patient's room via a pressure stabiliser at high level above the door, set at 10pa. No Hepa filter installed at this stage. Extract is from the patient's room through a ceiling mounted extract grille at the far corner of the room.

VALIDATION METHOD

The Air Handling Unit and distribution was inspected for compliance with the minimum installation standard set down in SHTM 03-01: Specialised Ventilation for Healthcare Premises, issued by Health Facilities Scotland. This is designed to ensure safe access, permit routine maintenance and reduce the risk of the plant becoming a source of Legionellosis. It was not possible to turn the AHU off so only a limited visual inspection was undertaken. Room was inspected for compliance with SHPN 04 - 01 Supplement 1.

The following non-compliances / remedial works were identified:

(a) No clear identification of the ventilation plant and what associated suite it serves was evident. Non-compliance with SHPN 04 – Supplement 1 clause 4.15 & 4.19. This has been raised as part of the construction defect monitoring, however solution and programme have yet to be confirmed.

(b) No ductwork was identified throughout its distribution. Inclusive of bio-hazard warning labels. Non-compliance with SHPN 04 – Supplement 1 clause 4.15 & 4.19. This has been raised as part of the construction defect monitoring, however solution and programme have yet to be confirmed.

(c) Although ceiling voids could not be accessed within the rooms it was evident that final connections to grille boxes was by the use of flexible ductwork in lieu of a bend. This is non-compliant to SHTM 03-01 A – Section 5.55

(d) It was not clear what patient group the rooms were being utilised for however as compliance with SHPN 04 – Supplement 1 had not been achieved this guidance cannot be utilised.

(e) The isolation suite lobbies are fitted with magnahelic gauge to allow a visual identification of the lobby to corridor pressure. Which is nominally 10pa+ve. No alarm has been installed locally or repeated at the PICU nurse station. This means that key monitoring conditions such as door left /held open, pressure failure will not be known until the nursing staff have reason to visit the room.

(f) The door between the lobby and isolation room opens inwards so the air flow from the lobby tends to keep it open. It should have been hung the other way so that the air flow tends to shut it.

(g) No door closers fitted to "any" doors.

6.0 Cost Plan Summary

Detailed cost plan is contained within Appendix B. High level costs are identified below:

(a) Positive Pressure Isolation Rooms Ward 2A

- Room 17: £7316.50
- Room 18: £7316.50
- Room 19: £7316.50
- Room 20: £7316.50
- Common Costs: £9000
- Contingency: £5739.90
- Uplift for Live Working: £7653.20

Total: £51659.10

Nurse central alarm panel should be sized to include the 8no isolation rooms currently within the facility. This gives the option to monitor the PPVL rooms (4no) which are also within the department. Budget Cost £ 8k

(b) PPVL Works to Achieve Compliance to Adults

- Room 43: £6545
- Room 44: £6545
- Common Costs: £9000
- Contingency: £3113.50
- Uplift for Live Working: £4418

Total: £29,821.50

We would recommend that Nurse central alarm panel should be sized to include the 10no isolation rooms currently within the facility. This gives the option to monitor all isolation rooms within the department. A review of how the rooms are managed will be required to determine how many panels will be required. Budget Cost £ 8k

(c) PICU Isolation Rooms

- Room 12: £2225
- Room 5: £2225
- Common Costs: £7000
- Contingency: £1717.50
- Uplift for Live Working: £2290

Total: £15,457.50

Nurse central alarm panel should be sized to include the 4no isolation rooms currently within the facility. This gives the option to monitor all isolation rooms within the department. Budget Cost £ 4k

APPENDICES

Appendix A – Positive Pressure Isolation Schematic

Double click to launch application

70520(57)01-HK_A2.
pdf

Appendix B – Cost Plan

Isolation Rooms Cost Plan Appendix B.xlsx

29. email

Julie Rothney

From: Peters, Christine
Sent: 13 June 2016 10:23
To: Inkster, Teresa (NHSmail)
Subject: RE: ventilation QEUH

Queries re QEUH Ventilation

1. What are the ventilation parameters as per design for out patient clinic rooms and treatment rooms and what is the validation data?- especially critical for CF and other respiratory clinics 2. All single rooms - apparently 3 ACH , neutral pressure - is there scope to increase this to 6 ? Note some CF units have 15ACH for M abscessus patients, and this is also critical for ID unit. Does all the supply air to single room get extracted through the toilet by design?
3. RE Corridor ventilation - grills in ceiling - are these extracts/supply/ open to ceiling void? If latter why?
4. Are the extract ducts from the respiratory ward (7th level), 5C and 5D where TB cases are accommodated, vented at a safe height above building OR have HEPA filters and permit to work system for replacement?
5.Isolation rooms - I would appreciate being copied in to any correspondence regarding these with HFS as I have been highlighting the issues since last June 6. Cardiac intervention rooms - what are the ventilation specs and validation reports?
7. Endoscopy suites - what are the ventilation specs and validation - are these alarm systems or mechanism for monitoring pressures?
8. Dirty utility rooms - are these at negative pressure to corridors?
9. Theatres - what is the programme of works for interlocking doors and automatic door fixes?
10. Interventional radiology - how many rooms and what are the ventilation parameters?

I have not included renal

Christine

-----Original Message-----
From: Inkster Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 12 June 2016 13:10
To: Peters, Christine
Subject: ventilation QEUH

Hi - can you put together a list of ventilation queries you have for QEUH and in order of priority. I will add to this for RHC. I have been asked to email Billy Hunter with this info who will then discuss with Ian Powrie. Isolation rooms are being dealt with and meeting with HFS is tomorrow.
Thanks
T

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology Dept of Microbiology Queen Elizabeth University Hospital Glasgow
Direct dial : [redacted]

Louise Mackinnon

From: Peters, Christine
Sent: 25 July 2016 10:47
To: Inkster, Teresa (NHSmail)
Subject: Infection COntrol HAndover 25july
Attachments: Infection COntrol HAndover 25july.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Teresa,

Please find attached a brief handover of IC issues encountered over last 3 weeks.

I can send on all notes and relevant emails as required – I don't want to deluge you immediately.

Kr
Christine

HANDover July 25/07

Dr Christine Peters – Acting ICD lead for 3 weeks

Updates in BLUE from previous June Handover

Woman's and children's

1) **Cupriavidus pauculus in aseptic pharmacy RHC**

Colonisation of water from 2 sinks (corridor and changing room) persisting for several months. One patient related bacteraemia – child on TPN – typing revealed same strain as water samples. IMT held 21/06 . Practice issues – dirty water and TPN discarded down HH sink amongst others. Water to be dosed with Sanosil and resampled. Temporary alert on ICNet for Cupriavidus bacteremia . Further IMT will be required if any more patient cases. Pamela has all the details relating to this incident.

Sometimes after dosing and biofilm disruption counts can be very high – if so I would resample in first instance to see if coming down. If not dose again .

No update

2) **Fungal infections haematology**

Brenda Gibson, Cons haem asked for review of 5 patients with suspected fungal infections. 3 of these were considered possible based on radiology and reviewed further by ICT. All 3 colonised with Candida sp + one with positive Candida BC – I have suggested to Brenda that all might be explained by Candida rather than Aspergillus which she was concerned about. Aspergillus PCRs are negative. Pamela has patient details if any questions.

No update

3) **Acinetobacter in PICU**

2 x Acinetobacter in PICU from weekend of June18/19, same antibiogram. Patients at opposite ends of units. Both had bronchoscopy – procedures being reviewed. If 3rd case a meeting to discuss would be appropriate. Pamela aware.

I have not been informed of any new cases

4)Mycobacterium in cardiac bypass water coolers

Positive result last month for the first time at RHC. Machine out of use. Protocols for sampling being written by me – these can wait until I get back. No risk to patients as machine out of use. If any more positives take machine out of use and follow decontamination protocols which perfusionists have.

No update

5) Increased C section SSIs

Meeting held June 15th to discuss increased C section SSIs in PRM and QEUH in April. Lots of actions including review of antibiotic prophylaxis which is ongoing. Next meeting in August unless further increases in cases. Sandra has minutes.

No further actions

6) Paediatric BMT

2 options for ventilation spec provided - either modification of PPVL rooms or conversion to positive pressure rooms. I have requested spec for positive pressure rooms – this would be the preferred option and no difference in cost apparently. Meeting to be held with clinical team to discuss. I would try to delay this until I get back if possible.

Monthly air sampling is in place on the unit. Room 24 currently has high fungal counts - 15 colonies – ID awaited and I have placed it out of use. It will be cleaned and resampled. Rooms 20 + 23 are also out of use - I am not sure why , I have asked estates to clarify if there is an issue with the ventilation. Clinical team keen to open but I would check with Ian Powrie first if asked.

Room 24 had a second post clean high fungal count, I requested that Estates investigate this by checking ventilation parameters and filter checks . DOPS testing showed that the media was not passing through the HEPA filter but was ingressing into the room. I requested that this result be investigated by examination of the vent ducts and on opening the hatch Estates identified:

1. A large tear in a flexible section of ducting
2. A number of points that had not been sealed

This means that unfiltered air had been ingressing into the patient bedroom and would explain the high particle and fungal counts. The room remains closed.

Room 20 and 23 were closed due to the need to have the doors changed due to the blinds being broken. This work was not completed and we agreed that only when the work was completed and the air re sampled could these rooms be re-opened.

Routine testing regime identified fungus in room 18. This room was cleaned and re-sampled.

I was informed that you have a meeting with David Louden to discuss these rooms and therefore further actions were not taken. I think the information regarding the missing seals will need to be taken into consideration.

7) Serratia

4 new cases of Serratia in NICU last week. IMT to be held Friday 23rd – I will update after

3 IMTS were held – all chaired by Sandra. Last update I had 8 cases were identified and SG asked for a report despite green HIATT.

After the 6th case further environmental sampling took place. My only involvement has been to organise extended water testing – as previously only 4 taps in room 5 were tested. All outlets are now being tested on the unit, and I am waiting to hear if this has been completed. Pre and post flush regime was used and plates for Serratia and Pseudomona only. TVCs had been done previously and were high. I asked Ian about this, but this is an outstanding matter.

8. PICU staff member has been identified with a boil MRSA PVL positive and I have advised stay off work until decolonisation and 2 negative screens as per policy. No cases in PICU identified, Carol, Kathleen and Pamela all aware, but no details regarding name has been shared – Pauline dealt directly with GP.

9. Big issue with condensation occurring on chiller beams in patient rooms throughout RHC and QEUH adults last week due to hot humid weather and a fault in the BMS system. This meant that water was condencing onto the beams, and dripping through dirty grills into the patient rooms. Pamela was heavily involved at RHC site and will update you.

8. PICU

HAI pseudomonas – Pamela followed policy and tested water regimes. No further testing carried out.emails available.

Regional

1 Neurosurgical theatres

No recent water leaks. HPS signed off all theatres for use. Surveillance for SSIs ongoing. Meeting was held to discuss SSI rates – follow up meeting when I get back unless spike in cases. Attending meeting Friday 23rd to sign off plans for new neurosurgical theatres in ICE buildings – not expecting any problems – plans are now fully compliant with HBN 24.

Spike in cases – post spinal 6 cases in june , giving 6.8% rate. IMT called – minutes will be sent to you. None of these cases were picked up by surveillence due to codes not being included. Neuro surgeons raised concerns re rates and being missed by surveillance. Surveillance nurse started and now all codes are included from 1st July.

Lots of issues with HAISCRIBES and the amount of work going on in that building – details will be sent separately, but it was clear that negative pressure was NOT being used in the area adjacent to the theatres. Contractors agreed to ensure negative pressure for all future works in that area.

Minutes and actions awaited from Calum.

2. Critical care isolation rooms

ID physicians wrote letter expressing concern about these PPVL rooms. They are currently under review by HPS/HFS. Questions asked were – are these rooms suitable for ID patients with airborne infection particularly MERs and MDRTB. If so are they suitable with the design modifications that we have made. If the answers are no Anne Harkness plans to chair a meeting on contingency planning with ID and ICU physicians. Sandra/Tom have SBAR if needed.

I HAVE HAD NUMEROUS QUERIES RE THESE ROOMS, Tom and Sandra said no SBAR available.

I am doing walk round re MERS planning so it would be good to have an update

3. Air changes in QEUH

Decision was made to reduce air changes in all patient rooms from 6/hr to 3/hr. High risk areas have been identified and appropriate measures implemented. Sandra/Tom have SBAR if needed

No SBAR – I asked as again TB isolation is a problem. We need a very clear message re this.

4. Legionella level 4 renal

Low level Legionella colonisation of water supply in level 4 renal . Legionella species not serogroup 1 or 2-14, so low risk to patients. System dosed with Sanosil – again repeat counts might be high so I would resample if that's the case. If need to repeat dose need to make sure emergency dialysis points (5 of them) are not in use as Sanosil can lead to fatal haemolysis in dialysis patients. John Hood should be able to advise if any probs.

Repeat testing still high, repeat dosing carried out.

I requested that the work to test for magnetic bits of piping be followed through, and taps be disinfected.

Noted that there are other dialysis points that are attached to mains supply and not RO.? In ITU

I have asked Ian to identify these so that risk can be managed through water safety and renal quality management

5. Adult BMT

Teleconference with medical director, facilities and clinicians held to discuss on 23/6/16. ICT not in a position to sign off unless following criteria met – solid ceilings in bathrooms - solid with access hatch(tiles with sealant not acceptable) , air changes of **minimum** 10/hour and positive pressure 8-10PA. David Loudon to look at feasibility. I would not sign this off – leave any decision until I get back . Sandra and Tom aware of details.

No update

6. Beatson, GGH

Lots of building construction and demolition due to take place on site. Recommendation from ICT is to close front entrance of BOC and have patients coming in either side entrance or Tom Wheldon building. Monthly air sampling on top floor of BOC will continue. I have asked contractors to provide ICT with demolition methods statement which should contain details of dust and vermin control measures. Alison attending meeting on my behalf June 28th to discuss further.

No update on these building works

IMT called due to spike in VRE blood culture results – 6 in a month , with a background rate of less than 1 a month, all from PICC/Hickman lines.

Screening of environment and all patients on top floor. Environmental all negative. 10/21 positive

All isolates sent for typing. HIATT Green at meeting, however may need rapid review to amber with screening results

Line insertions – issues with treatment room used picked up by Aleks doing walk around

Minutes and actions available

Aleks has agreed to be the point of contact for any results from the GRI environmental lab that would normally come to me.

QEUH

1. ITU Damp remediation work – black mould found on window frame. All work completed with excellent HAISCRIBE measures in place. No further cases that I know of
2. PICC line infections – concerns re PICC line infection rates raised by Neil Ritchie. I think we need a good review of line insertion practices. Widespread concerns re use of vygon lines and access points. Would be good for ICD to go to PICC line subgroup along with Sandra
3. Opthalmitis – 1 case post intra vitreal injection infection identified by ALeks, – list generated – Aleks looking into 4 further cases across sites. Walk round treatment room identified questions regarding ventilation.
4. M abscessus , further IMT, no new cases, interim policy to be circulated.
5. Renal unit- in checking VREs to compare with Beatson noted that BCs in renal not included in SPC charts, ICNs close case if no loose stool - ? need to review
6. C diff trigger due to 2 cases on ITU – typing outstanding , opnly action was to instigate ventilation grille cleaning schedule – HAISCRIBE to be written

CLYDE

1. C-Section rates high again and IMT called – Linda and Joan dealt with it – I have no updates
2. Legionella Sero group 01- in Inverclyde water outlets – actions in place as per policies but I think need a more definitive approach

FW: hickman lines

Inkster, Teresa [redacted]

Wed 29/07/2020 09:40

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

From: Inkster, Teresa
Sent: 15 August 2016 11:17
To: Bradnock, Timothy [redacted]; Dawes, Heather [redacted]; Walker, Gregor [redacted]; Gibson, Brenda [redacted]; Joannidis, Pamela [redacted]
Cc: Andrews, James [redacted]; Brindley, Nicola [redacted]; Cascio, Salvatore [redacted]; Constantinos [redacted]; Davis, Carl [redacted]; Flett, Martyn [redacted]; Graham Haddock [redacted]; Lee, Boma [redacted]; O'Toole, Stuart [redacted]; Sabharwal, Atul [redacted]
Subject: RE: hickman lines

Dear all,

I think it would be useful to set up a group to discuss this issue further

From the laboratory data we have seen an increase in the rates of CNS positive blood cultures as follows; 2013- 3%, 2014 - 4.7%, 2015 - 4.4% , 2016-7.6% 1st 7 months.

As I explained in my original email this is not just about line infections . We have an increase in VRE positive patients which is most likely being driven by an increase in glycopeptide usage which we have evidence from pharmacy for. The opinion of the clinical team and microbiologist covering the unit is that the increase in antibiotic usage is due to increased line infections. In addition staff using the lines reported mechanical issues with them. Other than a change in line product there have been no other changes in practice highlighted to the infection control team.

At no point did infection control instruct theatre staff to stop using the lines however in the meantime if there are still supplies of the original product available it might be prudent to use these until we have a greater understanding of the problem. My concern is that a new line has been introduced without education of everyone involved in line care , particularly around cleaning and removal of the fixation device.

Kind regards
Teresa

From: Bradnock, Timothy
Sent: 11 August 2016 15:50
To: Dawes, Heather; Walker, Gregor; Inkster, Teresa; Gibson, Brenda; Joannidis, Pamela
Cc: Andrews, James; Brindley, Nicola; Cascio, Salvatore; Constantinos; Davis, Carl; Flett, Martyn; Graham Haddock; Lee, Boma; O'Toole, Stuart; Sabharwal, Atul
Subject: RE: hickman lines

Dear Teresa and Heather,
I am back at work and have been catching up on emails after my clinic. I am sorry to hear about the issues with CNS infection. I wish to clarify a few things regarding this. Firstly, the lines were not changed because of issues with procurement but because we had a flurry of early displacements. The Vygon line has an alternative fixation device which we had hoped would reduce the likelihood of this occurring. So, having made a change to prevent one complication, we now find ourselves facing another.

The first thing to say is that we would have no objections making a change back to Bard, provided this is based on good evidence. I would however caution very strongly making assumptions that the type of plastic is directly responsible for the increased CNS infection rate. As I am sure you both know, most infections are not picked up during insertion of the line but during subsequent usage in the ward or home environment. I recently met with the Angela Howat and one of the nurses on Schiehallion to discuss another problem they have had with the new lines, which was related to line blockages. This is an issue that I find hard to relate to any intrinsic property of the Vygon line. When we explored the issue further, I was told that Schiehallion have a number of new phlebotomists starting recently and the nurses have noticed some issues around the way the lines were being sampled. This is a much more plausible explanation for the deposition of a small amount of residual blood in the lumen which may subsequently cause a blockage. It may also be an avenue worth examining if we are concerned about a higher than normal infection rate. Can you confirm that the new phlebotomists have had a full training program regarding the accessing and sampling of CVLs with aseptic technique? It is not just the lines that have changed and we should be cognisant of other factors that may be at play here. Similarly, the way that these lines are accessed when patients go down to theatre for subsequent procedures, is another area that we should look at.

I want to be very clear, that I am certainly not pointing the finger at any one group of people but I use this to illustrate the fact that we may just be barking up the wrong tree in attributing the CNS infection rate to an intrinsic problem with the Vygon line. Edinburgh have used these lines for a long time with prospective audit and no issues significant enough to prompt a change of line...

I have spent a lot of time trying to engage with the main users of the line service and we have recently instigated a new referral proforma to try and deliver a better service for our users. These forms are being filled in on an inconsistent but slowly improving basis. From a service delivery perspective, I also have no doubt that trying to establish a weekly line INSERTION list would help to drive consistency in practice and by allowing these cases to be done in daylight hours on a non-emergency list basis, would in my opinion, have a far greater impact on line infection rates. There is also good evidence to support this in the literature. I have discussed this aspiration before, but wonder whether we should revisit this in the light of these issues, although I recognise that the theatre schedule is likely to preclude this for some time...

Finally, is there a hospital CVL group who can discuss these issues, as it all seems a bit ad-hoc at the moment. If there is not, I would really like to get this going, with representation across the specialities, particularly as I received an email today asking to help update the CVL guidelines for the hospital which had originally been sent to a neurosurgeon!

I look forward to your response to this email and also to Gregor's questions.

With best wishes,
Tim

From: Dawes, Heather
Sent: 10 August 2016 13:40
To: Walker, Gregor; Inkster, Teresa; Gibson, Brenda; Joannidis, Pamela
Cc: Andrews, James; Bradnock, Timothy; Brindley, Nicola; Cascio, Salvatore; Constantinos; Davis, Carl; Flett, Martyn; Graham Haddock; Lee, Boma; O'Toole, Stuart; Sabharwal, Atul
Subject: RE: hickman lines

HI Gregor,
It would be helpful to know who in theatre informed you of this instruction? as no decision was taken nor communicated to theatres to this effect.
Teresa emailed Tim as you can see and specifically asked to await his return and discuss with him tomorrow. Theatres were asked to confirm if they still had a supply of the lines if a change required.

A49525252

I let Nicola know this yesterday as general surgical Lead and to alert the team that this had arisen.
Happy to discuss
Regards
Heather

From: Walker, Gregor
Sent: 10 August 2016 11:37
To: Inkster, Teresa; Gibson, Brenda; Dawes, Heather; Joannidis, Pamela
Cc: Andrews, James; Bradnock, Timothy; Brindley, Nicola; Cascio, Salvatore; Constantinos; Davis, Carl; Flett, Martyn; Graham Haddock; Lee, Boma; O'Toole, Stuart; Sabharwal, Atul
Subject: RE: hickman lines

Hi Teresa,

In Tim's absence, I can reply to some of the questions in the original email you sent earlier this week.

I was aware of this concern, as I was informed by the theatre staff on Monday afternoon that they were instructed to order all sizes of Bard lines because the Vygon lines were not to be used any longer. Obviously, this had not been communicated with either James Andrews or myself as the 2 surgeons that are on-call this week. I can see from your email on Tuesday that you tried to communicate this with Tim.

We began transitioning to the Vygon lines on the 18th August 2015. Some Bard lines have continued to be inserted since then for specific cases.

I see that the reason for your concerns relate to an increase in the number of Coagulae Negative Staphylococcal infections and that you have data that support this from the lab. I would be grateful if you could send this to me prior to our consultant meeting on Friday when we will dicsuss this matter. Obviously, we insert central lines for other users and it would be important to know if the coag-negative staph increase is being seen across all central lines, or only in the haemato-oncology patients.

You also state that there has been increase in the "number of line tips sent". For some time, I have been informed that the lab were no longer accepting line tips for culture, so I am not sure that this is a credible surrogate for increased infection rates.

I am sure that you have considered the impact of other changes in practice other than the line manufacturer before these steps have been taken. It would be useful to know the results of these investigations prior to our discussion on Friday as well.

Best wishes

Gregor Walker

From: Andrews, James
Sent: 10 August 2016 10:05
To: Bradnock, Timothy; Brindley, Nicola; Cascio, Salvatore; Constantinos; Davis, Carl; Flett, Martyn; Graham Haddock; Walker, Gregor; Lee, Boma; O'Toole, Stuart; Sabharwal, Atul
Subject: FW: hickman lines

FYI, we should discuss this at Friday's meeting.

James

From: Dawes, Heather
Sent: 10 August 2016 09:47
To: Andrews, James
Cc: Johnston, Elaine
Subject: FW: hickman lines

HI James FYI Jamie mentioned that you asked about this yesterday. In Tim's absence I caught up with Nicola and let her know that Teresa was happy to wait unitl Tim returned from leave.
Elaine J has confirmed thst she has supply of the original lines in theatre.
Happy to discuss.
Heather

From: Dawes, Heather
Sent: 10 August 2016 09:26
To: Bradnock, Timothy; Brindley, Nicola
Cc: Gibson, Brenda; Joannidis, Pamela; Inkster, Teresa; Kirkwood, Jean
Subject: RE: hickman lines

HI NIcola, FYI as discussed yesterday will pickup with Tim when he gets back tomorrow.
Thanks for your help.
Heather

From: Inkster, Teresa
Sent: 09 August 2016 10:29
To: Bradnock, Timothy
Cc: Gibson, Brenda; Dawes, Heather; Joannidis, Pamela
Subject: hickman lines

Hi,

We had a meeting yesterday to discuss VRE numbers on ward 2A and an increase in the use of Glycopeptide antibiotics which is likely driving these numbers. It would appear that the increase in glycopeptides is due to an increased number of hickman lines infections with Coagulase Negative Staphylococci. We have lab data to support this and also have seen an increase in the number of line tips being sent.

It would appear that the only thing that has changed is the type of line . Staff have been reporting other issues with these lines which I believe you have been made aware off. Do you know exactly when you moved across to the new product and was there a reason?

Would it be possible to revert back to the original lines? My concern is in relation to plastic material associated with these new lines which staff report is blood stained and difficult to clean. This would certainly promote biofilm formation and would explain the numbers of CNS infections. If there is a supply issue then infection control would be happy to advise on an alternative product.

Kind regards
Teresa

Inkster, Teresa

From: Dodd, Susie
Sent: 10 March 2017 15:00
To: Inkster, Teresa; McNamee, Sandra
Subject: RE: 2A bacteraemia

Sorry Teresa, I'm only getting round to reading this now.

I agree with email trail below also. What I thought we might do at our end is go through the process of line care for starters. Look at their aseptic technique, where they set up the trolley etc etc. On the back of that I can have a look at the adult vascular access policy to compare the two and see if there are any obvious show stoppers in the first instance.

Susie

Susie Dodd
Lead Nurse
Infection Prevention and Control - Paediatric Services
RHC
[redacted]

From: Inkster, Teresa
Sent: 08 March 2017 15:48
To: McNamee, Sandra; Dodd, Susie
Subject: 2A bacteraemia

Hi both - see below FYI. Do you agree? I have not seen any output from SLWG as yet.
Jen Rodgers might be in touch

KR
Teresa

From: Inkster, Teresa
Sent: 08 March 2017 15:47
To: Redfern, Jamie
Subject: RE: Minutes from IMT - Aspergillus ward 2A, RHC

Hi - yes that's an accurate account of what we discussed, thanks.

I have attached the SPC chart.

You can see a breach in the upper control limit back in July which is when we first held discussions re the SLWG and concern was expressed about the lines.

For January we are sitting on the upper control limit . We still don't have all of the Feb data on the chart but it is looking like it is heading towards that limit too.

So those numbers for two consecutive months are a worry

The staff have expressed concerns about the environment and we did do a deep clean last week . However not all the organisms are environmental in nature. There are also a lot of Gram positive skin type organisms which are more likely to reflect line care as the issue. There is no one common organism so I think we can exclude a colonised healthcare worker as being the issue.

We did discuss the departure of Nan McIntosh and whether that might play a part . Appreciate that SLWG has been established and work ongoing but I think we need to do something a bit more urgently in 2A based on this data.

Thanks for your support

Kind regards
Teresa

From: Redfern, Jamie
Sent: 08 March 2017 15:22
To: Inkster, Teresa
Subject: FW: Minutes from IMT - Aspergillus ward 2A, RHC

Does email below summarise the points discussed yesterday Teresa?

Do you have any data on the problem we face that I can share with colleagues and then use as a baseline for how we track improvement once changes implemented?

Jamie

Jamie Redfern
General Manager, Hospital Paediatrics & Neonates

Patient safety starts and ends with the person we serve.

From: Redfern, Jamie
Sent: 08 March 2017 15:20
To: Mathers, Alan; Rodgers, Jennifer
Cc: Hill, Kevin
Subject: FW: Minutes from IMT - Aspergillus ward 2A, RHC

On speaking to TI yesterday she expressed concerns about line infections for patients in w2a.

She queried three specific things

1. Update on the SLWG that was looking at lines (think Tim B from general surgery)
2. Should we have a clinical nurse lead in W2a for Vascular Access (something similar to role Nan McIntosh used to do before she retired)
3. Should we look to develop a dedicated VA team?

It might be 2 and 3 come out of the SLWG

Jamie

Jen is it Tim B that is leading on this work stream

Jamie Redfern
General Manager, Hospital Paediatrics & Neonates

Patient safety starts and ends with the person we serve.

Increase in Vascular Access Device related Bacteraemias and associated Increase in Vancomycin Resistant Enteroccocus Colonisation, Haemato oncology ward (2A), RHC

Action plan for Improvement

April 2017

	Action required	Lead	Date for completion	Progress
1	*Aseptic Technique Review*			
	Ongoing audit of practice	Gillian Paton, Jean Kirkwood, Angela Howat	30th May 2017	
	Further training/education where poor practice identified	Gillian Paton, Jean Kirkwood, Angela Howat	30th May 2017	
	Order stainless steel trolleys to use as sterile field	Gillian Paton & Jean Kirkwood	To be put into use as soon as order arrives.	
2	*Review of Environment*			
	Walk round of ward to assess for suitable spaces/solutions for reconstitution of IV meds.	Jean Kirkwood, IPCT	30th May 2017	
	Monitor treatment room to ensure no inappropriate items stored here and cleanliness is maintained.	Jean Kirkwood & Angela Howat	Ongoing	
3	*Antimicrobial Prescribing*			
	Audit of antimicrobial prescribing within haemato – oncology population	Antimicrobial pharmacist	30th May 2017	
4	*Lab monitoring/investigations*			
	VRE isolates sent for typing	Kathleen Harvey Wood	Already requested – results awaited	
	Ongoing monitoring of line associated bacteraemias within 2A/B	Kathleen Harvey Wood/IPCT	Ongoing	
	Ongoing monitoring of new VRE isolates from stool samples or invasive sites within	Kathleen Harvey Wood/IPCT	Ongoing	

	2A/B			
5	*Education*			
	Roll out of Bristol Stool Chart for use on all patients	Jean Kirkwood & Angela Howat (if patient to be admitted)	With Immediate effect. 5th May 2017	
	Hand hygiene training	IPCT	15th May 2017	
6	*Research/Product Review*			
	Review of line components (VAD & Smart Site) Dates of change Reason for change	IPCT	15th May 2017	
	Review of biopatch use – How and where is it being used?	IPCT & Gillian Paton	15th May 2017	
	Liaise with IPCT in Royal Marsden re. line care practice & methods used to reduce line associated bacteraemias.	IPCT	30th May 2017	
	Contact WoSCC and query use of line components/biopatch	IPCT	15th May 2017	

FW: Ward 2A - audit results

Inkster, Teresa [redacted]
Fri 24/07/2020 10:04

To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]

From: Rodgers, Jennifer
Sent: 02 June 2017 13:18
To: Redfern, Jamie [redacted]; Hunter, William [redacted]; Inkster, Teresa [redacted]
Cc: Dawes, Heather [redacted]; Dodd, Susie [redacted]; Leighton, Sheenagh [redacted]; Coyne, Patricia [redacted]
Subject: RE: Ward 2A - audit results

Tuesday afternoon?

Jen

From: Redfern, Jamie
Sent: 02 June 2017 12:38
To: Hunter, William; Inkster, Teresa
Cc: Rodgers, Jennifer; Dawes, Heather; Dodd, Susie; Leighton, Sheenagh; Coyne, Patricia
Subject: Re: Ward 2A - audit results

I will make myself available Teresa
When do you want to do it?

Sent from my iPhone

On 2 Jun 2017, at 10:49, Hunter, William [redacted] wrote:

> Teresa - I am. It in site just now but it would be helpful to understand what the cleaning related issues are ?
>
> Can you pls clarity
>
> Regards
> Billy
>
> Sent from my iPhone
>
> On 2 Jun 2017, at 10:26, Inkster, Teresa [redacted] wrote:
>
> > Hi all - see email below from Susie. I am concerned about this ward. We did this audit following the PAG earlier in the week for another incident - two cases of HAI Norovirus
> >
> > As you can see there remain issues with cleaning and staff knowledge. We will arrange to provide some education of staff but I am worried about the lack of progress and these recurring themes.
> >
> > Can we all meet to discuss?

KR
Teresa

From: Dodd, Susie
Sent: 02 June 2017 08:24
To: Inkster, Teresa
Subject: Ward 2A - audit results

Morning Teresa,

The girls completed another IPCAT audit on 2A yesterday and it didn't score well. Overall 74% which is in the Amber range. Breakdown of sections;
SICPs 69%
SPE 69%
TBPs 94%
QA 50%

Some of the main failures include;

- CHWBs in patient rooms are cluttered with items, mainly parents toiletries.
- Staff walking around main ward in PPE and one disposed of dirty PPE into pocket.
- High levels of dust in patients rooms! Particularly behind panels and lights behind beds.
- Patient bathrooms cluttered with toys.
- Poor staff knowledge re. cleaning of blood spillage, cough etiquette and single use items.
- Communal bathrooms used for storage of items.
- IV pumps and stands dirty and dusty
- Using detergent wipes to clean isolation rooms rather than Actichlor plus.

This score is significantly lower than the previous audits carried out in April (overall 87%) and the one prior Feb 2016 (overall 91%). I should say that in both audits, significant environmental dust levels were found as was the case with yesterdays audit however undoubtedly there are issues with clinical staff practice also.

Kind regards,
Susie

Susie Dodd
Lead Nurse
Infection Prevention and Control - Paediatric Services
RHC
[redacted]

FW: Positive blood cultures May 2017

Inkster, Teresa [redacted]

Wed 29/07/2020 12:20

To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]

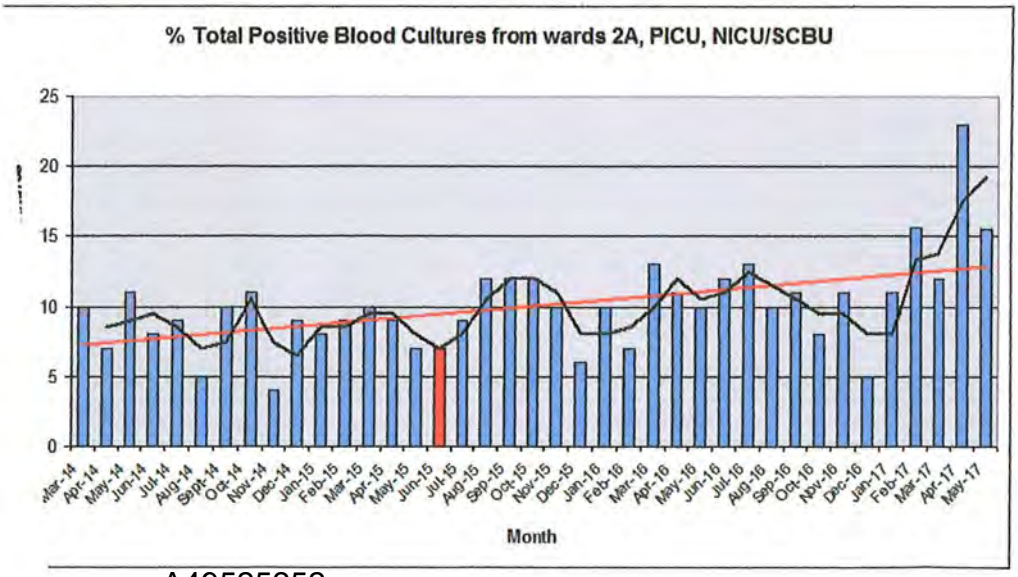
From: Inkster, Teresa
Sent: 09 June 2017 16:08
To: Peters, Christine [redacted]
Subject: FW: Positive blood cultures May 2017

FYI

From: Harvey-Wood, Kathleen
Sent: 07 June 2017 15:17
To: Inkster, Teresa
Subject: Positive blood cultures May 2017

Hi Teresa

There has a been a reduction in the percentage positive blood cultures from 2A patients in May 2017, although still high at 18% positive blood cultures this compares with a 26% positive blood culture rate in April .
- will ask Kate to look at the Vancomycin usage during May.
Acute wards total percentage positive blood cultures has fallen from 23 % in April to 15.5 % in May, mainly due the reduction in NICU blood cultures from 19% in April to 4 % in May
From the graphs it looks like something changed/happened in RHC at the beginning of 2017 as there was a total percentage positive blood culture rate of only 5% in Dec 2016.



Fw: Ward2a

Inkster, Teresa [redacted]

Tue 29/03/2022 11:18

To: teresa inkster [redacted]

From: Inkster, Teresa
Sent: 13 June 2017 08:13
To: Redfern, Jamie [redacted]; Rodgers, [redacted];
Dodd, Susie [redacted]; Hunter, William [redacted]
Subject: Re: Ward2a

Fine with me. Fridays suit better apart from 1-2pm as I do 2a MDT then
Teresa

Sent from my BlackBerry 10 smartphone on the EE network.
Original Message
From: Redfern, Jamie
Sent: Monday, 12 June 2017 4:31 PM
To: Inkster, Teresa; Rodgers, Jennifer; Dodd, Susie; Hunter, William
Subject: Ward2a

Hi folks

I spoke with Dr Armstrong today around ongoing concerns to ward 2a.
We both felt it useful that there was a weekly mdt established to review position of ward.
My thoughts were that I would chair this. We would have it at a set time every week. A bullet point Action note would be routinely produced. This would be fed back to senior Directors including KH, JB, MM, DL and JA.
Are you all happy to be involved (or represented) along with senior medic, SCN and lead nurse.
My intention was to kick this off on Thursday or Friday this week.

Jamie

Sent from my iPhone

RE: BMT Specification

Peters, Christine [redacted]
Mon 21/08/2017 16:14
To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]

Perfect.
Thanks for all your handover information Teresa,

Please be assured that I will follow up on this BMT issue and you can feel very content that you have handed over valuable information, and now please concentrate on getting better so you can come back to us in full health :)

Kr
Christine

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 21 August 2017 16:09
To: Peters, Christine
Subject: Fw: BMT Specification

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: McColgan, Melanie [redacted]
Sent: 16 November 2016 11:15
To: Campbell Myra (NHS GREATER GLASGOW & CLYDE); McQuaker, Grant; RANKIN, Annette (NATIONAL SERVICES SCOTLAND); INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE); Walsh Thomas (NHS GREATER GLASGOW & CLYDE); Russell Steven (NHS GREATER GLASGOW & CLYDE)
Cc: Jenkins Gary (NHS GREATER GLASGOW & CLYDE); Mcintyre Hazel (NHS GREATER GLASGOW & CLYDE)
Subject: BMT Specification

Dear all
Thanks for meeting today, brief note as agreed:

- MMcC advised 4B now recognised as unlikely to provide long term solution for BMT
- The plan remains to move BMT to QEUH campus and therefore, high level option appraisal being undertaken by capital team regarding alternative options utilising retained estate
- High level options have been provided for Maternity and Neurology Buildings
- MMcC to check with capital team that these can be circulated to HPS and ICT for review
- High level schedule of accommodation tabled at meeting
- TI and AR agreed to review this and provide feedback e.g. numbers of lobby rooms
- MMcC to circulate electronic version of schedule of accommodation (attached)
- AR to review SBAR provided by HPS in 2015 and update for any recent guidance to include requirements for whole unit, not just ventilation/patient rooms
- MMcC to ensure TI included in circulation list for Project Board (Actioned)
- SR to discuss option for modular build with capital projects team to be included as one of the options.

Please let me know if I have missed anything,
Many thanks
Melanie

General Manager
Specialist Oncology and Clinical Haematology
NHS Greater Glasgow and Clyde
[redacted]

From: Peters, Christine
To: Inkster, Teresa (NHSmail)
Subject: FW:
Attachments: M abscessus Investigations SBAR.pdf

From: Peters, Christine
Sent: 19 January 2017 13:04
To: Cruickshank, Anne [redacted]; Jones, Brian [redacted]; Inkster, Teresa (NHSmail) [redacted]
Subject:

Dear Anne, Brian, and Teresa,

Please find attached an SBAR on the concerns I have regarding the conduct of members of the IPCT and Microbiology in regard to information and management of the investigation into *M abscessus* cross transmission in CF patients.

The appended evidence is a large file (31 pages with inserted files!)and cannot be sent in word format so I will send a PDF and then the pages in word Format so that you can access the files inserted.

Please be aware that I have endeavoured to be as accurate as possible and this reflects my current understanding of the facts according to the information I have available to me. I would have liked to spend more time polishing and checking, however I think as things stand I need to get this too you now.

Please also be aware that I have more emails to back up my conclusions and should you wish further supporting evidence do not hesitate to ask.
Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Queen Elizabeth University Hospital,
GGC
Ex [redacted]
Mobile: [redacted]

Investigation of *Mycobacterium abscessus* Cross transmission in CF services in GGC

Dr Christine Peters 19/01/2016

Situation

An increase in the incidence of *M abscessus* infections in adult CF patients has been the subject of investigation by Dr Christine Peters, as Microbiologist for Adult CF (May2015 – present), and ICD for QEUH (August 2014 – October 2016). It has become clear that this investigation has been hampered by the withholding of relevant information by members of the infection control team and microbiology colleagues**,** and that key interventions regarding decontamination of equipment were not taken in a timely manner.

Background

Mycobacterium abscessus is a bacterium that is present in the environment globally and has been identified as an increasing problem for patients with the genetic disease cystic fibrosis. Incidence of infection has increased globally in this patient group and evidence has accumulated that clones have spread across different countries with a number of outbreaks in CF centres requiring increased infection control precautions. The consequences of acquisition of this bacterium are increased morbidity and mortality , with a contraindication to lung transplant which can have severe life limiting implications.

The CF Trust issued a warning regarding *M abscessus* and cross transmission in 2013 to CF centres and stringent Infection Control Guidance was published.

In GGC the CF service has been run separately as a paediatric service at Yorkhill , moving to the RHC in May 2015, and Adult CF at Gartnavel General Hospital, moving to QEUH in June 2015. As a tertiary referral centre GGC has shared care of patients with Wishaw General Hospital, Crosshouse, Dumfries, and RAH with patients occasionally being admitted from these centres and staff and equipment being shared with the Glasgow Paediatric service over the past decades.

Microbiology liaison was provided to both adult and paediatric services by Professor Craig Williams until June 2015 when Christine Peters took over the clinical MDT liaison for the adults , and April 2016 when he left GGC. There was a gap in consultant Microbiology cover until October 2016 when Christine took on the role. Carol Lucas, a Clinical Scientist covered CF from a laboratory point of view and kept data pertaining to paediatric patients until her retirement in June 2016.

For infection Control advice Professor Williams was the Lead ICD until his departure in April 2016 and oversaw the CF infection Control liaison.

Since then Teresa Inkster has had ICD responsibility for the paediatric service and Dr Christine Peters for the Adult CF service.

The issue of an increase in cases of *M abscessus* was raised with Christine Peters in March 2016 and an initial audit indicated that 25 adults had *M abscessus* in total, with 6 new cases since the opening of the new building.Paediatric data was not forthcoming.

A paper published in November 2016 in the journal Science concludes on the basis of Whole Genome sequencing that cross transmission of *M abscessus* has occurred in GGC. This paper was known about in February 2016, and a paper with the decoding of the original samples verifies that this is the case – which was part of Carol's files which were sent to us in August. This information was discussed by a mother of a child with CF with Professor Flotto , and this mother has been raising her concerns regarding infection control procedures in the adult and paediatric services.

Assessment (Evidence appended)

After piecing together the information which has appeared piecemeal to date, it now seems that there has been a total of 61 CF patients since 2001 in GGC who have have had *M abscessus* and that investigations into cross transmission were undertaken in 2005, 2014, 2015 and at the start of 2016. Posters and an abstract were published which presented data on typing and referred to the fact that WGS had been carried out in 2015 , but his data was not known by Dr Inkster or Dr Peters until August 2016 and the provenance of the information has taken some time to discern. A timeline with relevant documents and quotes is presented as an appendage. My conclusions are:

1. It is clear that there is evidence of historical cross transmission of *M abscessus* within the CF paediatric and adult services. The magnitude and timescale is not fully elucidated to date.
2. There were omissions of key patients in the timelines and typing results when the issue of cross transmission was investigated previously, and the information regarding those investigations was not shared with myself , despite raising the issue repeatedly with the Microbiology and Infection Control teams.
3. Whole Genome sequencing was carried out which was highly conclusive of cross transmission in 2015, this information is mentioned in a Poster at an international conference (although it states that WGS ruled out cross transmission), however was not shared with SMT, and neither was its existence mentioned to Dr Inkster or myself. This was only discovered when Carol's files were forwarded by Dr Wilkinson in August 2016. Two of the patients were in the adult cohort at the time of the investigations.
4. Deficiencies in the decontamination of respiratory equipment has been investigated over a number of years however at present there is no proper decontamination facility for either the adult or paediatric respiratory laboratories and the SOPs are requiring a complete overhaul. This can only be viewed as a clear risk for the possibility of cross transmission of adapted *M abscessus* clones within the CF population. I had been informed that this

matter was in hand and was dealt with by the decontamination group yet the outputs are still outstanding and Dr Inkster has had to re-initiate the process.

5. Data which pertained to current paediatric and adult patients were held by Carol Lucas , and there was no arrangement in place for this to be handed over to the remaining paediatric microbiology consultants despite her retirement being known about for a number of months . These files were deleted and only reappeared after I raised it as a data governance issue. The consultants at the QEUH had repeatedly asked regarding the arrangements for the handover from both Professor Williams and Carl Lucas prior to their departure and how the gap would be managed.
6. Files regarding all aspects of the *M abscessus* investigations by the IPCT had been deleted from the common folder, and have reappeared over the recent months, some seem to have been altered, although it has been hard to keep abreast of what has been happening to these.

Recommendation

1. Senior management investigate the evidence presented to assess professional probity issues of those involved with regard to publications, and withholding information from colleagues both in Microbiology and Infection Control.
2. Clear policies are developed for Microbiology staff regarding the handover of data on leaving the organisation with data governance prioritised.
3. The infection Control team consider organisational means to prevent the loss of important decisions and actions over time.
4. There is an investigation into the governance of information stored on the shared Infection Control Drive with regard to altering of records and deletion and appearance of key files with regard to *M abscessus* and CF patients.
5. There is an organisational consideration of the messages that have been communicated to CF patients and their parents with regard to previous investigations of *M abscessus* cross transmission.
6. The infection control remit over research facilities is clarified.

References

Cystic Fibrosis Trust (2013). Cystic Fibrosis Our Focus. Mycobacterium abscessus – Suggestions for the infection prevention and control (interim guidance – October 2013) *Report of the Cystic Fibrosis Trusts Mycobacterium abscessus Infection Control Working group.* Available at: http://www.cysticfibrosis.org.uk/news/latest-news/draft-interim-ntm-guidelines

Saiman L and Siegel J (2004). Infection Control in Cystic Fibrosis. Clinical Microbiology Reviews: 17 (1); 57-71.

Bryant *et al* (2013). Whole-genome sequencing to identify transmission of *Mycobacterium abscessus* between patients with cystic fibrosis: a retrospective cohort study. Lancet: 381(9877):1551-60.

Griffith et al (2007). An Official ATS/IDSA Statement: Diagnosis, Treatment, and Prevention of Nontuberculous Mycobacterial Diseases. Am J Respir Crit Care Med: 175; 367–416 brosis: a retrospective cohort study'. *The Lancet* vol 381 May 4 2013, p 1551-1560.

Bryant et al (2016) Emergence and spread of a human-transmissible multidrug-resistant non tuberculous mycobacterium Science 354 6313 751-757

Evidence

Time line	When I knew	Information	Issues
2005	Files from JW Sept 2016	MAB identified in 7 patients ([redacted])	No evidence of IC investigations available
2013 CF Trust Issue Guidelines for infection Control		 CC15 - NTM guidelinesv3.pdf	
CF Unit Policy	12/2015	 QEUH Adult Cystic Fibrosis Protocol June	Infection control mentioned in different parts ,but does not sit as an infection control policy
8/1/2014 Infection Control Decontamination Subgroup Meeting Decontamination of Respiratory Research Equipment	December 2016 : Shared drive ? recently added	Agenda available but no minutes seen : Specifically to discuss : Sonix 2000 Ultrasonic Nebuliser Omron Micro Air Pocket Nebuliser Carefusion Microlab Spirometer Vitalgraph Model 6000 Spirometer	I now realise that 2 patients involved in a CF research study may have been involved in cross transmission after these meeting s however will need to await typing to see . However no records of investigations in adult setting. I need to look more closely at the potential role of the research setting in our epidemiology.
18/01/2013 Request for Advise on Decontaminating medical devices : Spiro Air Machine Susie Dodd	December 2016 Shared drive, not seen before,	Tubing noted to be used for 1 week the removed and washed in detergent and left to air dry. Incomplete	Variable files appearing on shared drive in regard to decontamination

21/01/2014 Yorkhill Time lines AND visit to OPD, PHYSIO DEPARTMENT: Angela and Clare	December 2016	• Four patients investigated ([redacted]) • Clear record of overlap in hospital – different wards mk , mmC • Percussionairre identified as being used from [redacted]/11/13, used on [redacted] on ward and outpatients, also on [redacted] ? when • Issues with Percusionaire decon	[redacted] Physio notes not reviewed [redacted] link to wishaw pos patients missed No time lines for other MAB positive patients at this point Hospital overlaps within timeframe of [redacted] and [redacted], Potential unexplored overlap in lung function To date issues with percussionaire have not been resolved
Email Clare to Angela and Peter Anderson	On shared drive December 27/12/16	•  FW Physiotherpay Percussionaire equipment.msg	
29/01/2014 Infection Control SMT Chair :Tom Walsh		• Clare Mitchell reported had been asked to look into M abscessus in Paediatric CF patients. Equipment brought for trial in November but there appears to to be little decontamination of the equipment. Asked to stop using until further investigation •	Note previous documents done in feb 2014 and feb 2015 it now seems from shared drive.
MICRO TYPING VNTR results available02/14	December 2016	• One Bolleti, [redacted] cluster 1, similar to [redacted] and others	
17/04/2014 Decontamination Subgroup Chair Sarah Whitehead Apologies Dr Balfour		• Under matters arising: • Respiratory Research Equipment _ Margaret Ann stated the trial has now come to an end and the equipment is no longer in use. The group advice is in future any respiratory equipment purchased should use single – use filters	

26/03/2014 and 30/04/2014 Infection Control SMT Chair Tom Walsh		• Not mentioned	
SWInfection Control Team (weekly) Chair Clare Mitchell	Present	• Katrina Black mentions Decontamination Group Update:"Decontamination room for respiratory medicine does not have a clinical wash hand basin"	
23/04/15 Decontamination Subgroup Chair Craig Williams Present Alison Balfour Katrina Black		• Assistant director of clinical research to discuss governance of department. • KD asked in terms of infection control what is expected when purchasing new equipment. CW gave advise	
15/05/14 PHE Report on 6 VNTRs to Carol Lucas	December 2016	• [redacted]	Note : [redacted] known positive not included, ([redacted] patient – personnel and equipment shared)
10/07/2014 Decontamination SubGroup Chair Sarah Whitehead Apologies Alison Balfour Jackie Barmanroy present		• JB highlighted a query raised in the SW ICT relating to a Percussionaire product purchased by respiratory physiotherapy department without seeking IC advice. The device is used on CF patients to help bring up mucus secretions. The tubing which is attached between the handset and the machine can become contaminated with the patients own secretions. JB tabled the local decontamination protocol written by Clare Mitchell and the respiratory physiotherapists for the unit which was passed by the group. The protocol states after each patient use the tube should be sent to CSSD to be cleaned and dried. The group agreed this procedure will need to be passed via Alan Stewart at CSSD. JB will update the group on progress made.	

20/06/14 ICD meeting Chair Craig Williams		• Not mentioned	
25/06/14 Infection Control SMT Chair Tom Walsh		• Not mentioned	
SGH Poster Event August 2014 C Lucas, C Williams A Balfour	December 2016	• 9 patients VNTR results • 4 patients with ST26 • 1 patient similar (known to be one event different) • 2 other linked cases • States that until epidemiological investigation it is premature to exclude cross infection except in the unique strains	
14/08/14 Decontamination sub group Chair Sarah Whitehead Present Alison Balfour Katrina Black	Read December 2016	• Percussionaire (Respiratory Physiotherapy) • This device is used on CF patients to help bring up sticky mucus seretions. The SOP is in place for the decontamination of this equipment however there is still an issue with the cleaning of a small piece of tubing that can possibly become contaminated . The manufacturer states it is not viable for them to produce single –use tubing . JB advised the group Clare Mitchell had previously discussed decontamination solutions with Ian McIvor at Cowlairs CDU. Alan Stewart will follow this up with Ian McIvor. ALsion Balfour will discuss this with Jane Wilkinson the CF Specialist at Yorkhill Hospital.	? outcomes of these discussions
27/08/14 Infection Control SMT Chair Tom Walsh First attendance after appointment	Present at meeting	• NO mention • Updates from Decontamination Group by Alison Balfour	

by Christine Peters			
08/09/14	December 2016	• Respiratory Medicine ICN visit	Clear attendance on same day
09/09/14 Increased incidence of Myciobacteria Abscessus meeting Chair; C Williams Clare Mitchell, Jane Wilkinson, Calum MacLeod, Peter Anderson, Jane Wilkinson, Carol Lucas	December 2016	• 4 Cluster 1 patients identified, 8 have unique types • Timelines [redacted] • Agreed no cross over	[redacted] Missed out , [redacted] and [redacted] already found to have similar strains and [redacted] link to wishaw as does [redacted] . [redacted] from [redacted], equipment shared and also had OP and inpatient appointments at YH through 2013. Further 8 patients not mentioned (one had recently died in adults) no mention of January investigations and typing Identified that Pneumotach not disinfected between patients at Wishaw Clear cross over in: Spirometry specifically [redacted] (negative) followed [redacted] (positive) 19/04/12 Ward 3A : [redacted] (-)and [redacted] (+) for 4 days [redacted] (-) and [redacted] (+) overlap in hospital march 2011 [redacted](+) and [redacted] overlap in hospital august 2013

			Incomplete information on Gym attendance No mention of [redacted] patient [redacted] – shared care NOTE Adult with Abscessus who had been in YH not included in typing exercise.
9/10/2014 IClead Nurses Chair Sandra McNamee	Dec 2016	• "Yorkhill has a cluster of Mycobacterium abscessus in CF patients. An incident meeting was held on 9/9/14 chaired by Craig Williams. Timeline shows there are no apparent links in time or place . Clare explained that the organism is not that common however iti is a problem in a patient with CF as they are then taken off the transplant list. Clare will look into the possibility that the problem may lie with equipment which is shared between yorkhill and wishaw general. Respiratory Medicine have an excellent date and time record for this shared equipment however it also shoes very little time allowed between patient use. Another meeting will be arranged.	
21/10/2014 Incident meeting 2 Craig Williams Jane Wilkinson Clare Mitchell	December 2016	Updated timeline, overlap in 3A identified Pneumotach identified as issue and further meetings arranged w=for Clare Mitchell and respiratory Audit of respiratory equipment raised at Leads ICN meeting - no decision as no Sandra Further Typing is mentioned To investigate ward overlap	Hospital overlap not considered Not declared outbreak despite VNTR typing linking 4 patients and overlaps found Leads Meeting Minutes same day state no links in time or place, no audit mentioned Further case not identified –

		Further Case identified Craig to meet with Dr Davies re respiratory Equipment decon ? HIATT discussed at SMT	assume LaMi
23/10/2014 Decontamination Sub group Chair Sarah Whitehead		• Sarah had contacted the physiotherapy department . SW updated there is a lot of parental pressure to continue using this device. CDU have stated they cannot clean/dry the small piece of tubing that is problematic and the manufacturer state it is not viable for them to provide single use tubing. The group need to ensure that the department maintain best practice. Both SW and AS will look at the device again post meeting	
24/10/2014 Infection Control SMT Chair Craig Williams	Present at meeting	• Craig states Clare is working with Jane re M abscessus in CF • Stated that looking at typing in paeds and no common factor and no cross infection • Meeting arranged for Friday to see respiratory equipment to look how these are decontaminated	Common factor is respiratory equipment with concerns re decontamination , as well as cross overs in hospital
7/11/14 Visit to Respiratory Medicine	December 2016	• issues identified : contamination keyboards • Issues with previous kit going to Wishaw for decontamination • Pneumotach ultrasonic machine • Looking into washer disinfector • Dumfries shared equipment • AA share equipment	
11/11/2014 Incident Meeting 3		Noted [redacted] in single room, and [redacted] in 4 bedded bay Spirometry of MAB patients to be carried out in bedrooms	Numbers not updated Still consider no epidemiological link

Jane Wilkinson Carol Lucas Peter Anderson Linda Cassidy Clare Mitchell		No conclusions noted re SPirometry and Pneumotach WGS of 4 isolates requested from PHE	Note WGS is done as outbreak investigation , not research
9.12.14 Incident Meeting 4 Jane Wilkinson Carol Lucas James Paton Paul Burns Clare Mitchell	December 2016	Incomplete minutes Awaiting WGS Ventilation in the NEW Hospital – CM to discuss with Craig Williams re respiratory labs, physio and patient rooms	Never updated on most recent case LaMi "Pauls notes" not added re spirometry in rooms
18/12/14 Decontamination Sub Group Chair Craig Williams Present Alison Balfour Clare Mitchell	December 2016 read through minutes	Cm will contact Anderson Caledonia to enquire if they can clean/dry the piece of tubing that Cowlairs cannot process. The group agreed if this is not a viable option the tube should be purchased as single patient use. CM will also enquire if the handset can be autoclaved at CSSD	This entire process has had to be revisited in December 2016 by Dr [redacted] as the procedures were not followed in Paediatric CF physio, 2 years after this decision of the decontamination group was made.
6/1/2015 ICD meeting Chair Craig Williams	Present	Not mentioned	
17/02/2015 ICD Meeting Chair Craig Williams	Present		
28/01/15 Infection Control SMT Chair Tom Walsh Craig Williams	Present	No mention	
12/02/2015 Decontamination Subgroup Chair Craig Williams		• CM contacted Andersen Caledonia CDU who will decontaminate the equipment by ethylene oxide. They will charge per box of equipment. The department will purchase more equipment as there will ne a 2-3 week	Clear decision re Percussionaire – followed in adults but not paediatric service – unsure how this discrepancy could have arisen?

Present Alison Balfour		turnaround for this method of decontamination . Katherine Sharp has taken over the management of this and will update the decontamination policy . The department plan to use this equipment of more patients but only if a robust decontamination process is in place	
17/02/2015 ICD Meeting Chair Craig Williams Alison Balfour present	Present	"Craig explained there are potential problems in relation to Chapter 2 of the National IPC Manual and what constitutes AGPs. Meetings to be arranged the first couple of weeks in March with physiotherapists, IPCTs ad CF clinicians to cross reference against the CF guidelines. PJ and SM will have the response to Chapter 2 by the end of March and this response will be included in the CF Guidelines. Linda will forward the Clyde protocol to Christine	
25/02/2015 Infection Control SMT Chair Tom Walsh Craig Williams	Present	Craig Noted ICD meeting discussed need for CF Unit policies to belong to Infection Control , he said a meeting had been arranged with infection control and clinicians to consider the policy	What is not minuted is that I asked to be involved as the CF unit was coming over to QEUH where I was ICD . I was told CF was Craig's remit.
25/03/2015 Infection Control SMT Chair Tom Walsh Craig Williams	Present	No mention	
17.04.2015 CF Microbiology Meeting J Wilkinson Craig Williams Carol Lucas Claire Mitchell Linda Cassidy	December 2016	Equipment – asthma boxes to be checked by CM Air Exchanges re New build physio noted to be 7 ACH, and that clinic rooms have 3.5 ACH , to be kept on agenda UPDATE NTM : Colindale reculturing " Clusters 1 and 2"	This information was not incorporated into policy regarding leaving empty for longer post M abscessus patients

21.04.2015 Key Policies Meeting for Cystic Fibrosis Jane Wilkinson Karen Cassidy Jane Young Clare Mitchell	April 2015 Tried to attend but dates were made on holiday time , no notes sent to me, verbally told this was not my remit	Prof Williams to be involved to the group Hands, Aprons and Gloves discussed Aim to standardise CF infection control across adults and Paeds prior to entry into new build ? RAH to be included – Clare to discuss with Craig	
29/04/2015 Infection Control SMT Chair Tom Walsh	Present	No mention	
May 2015 ESPID Conference Poster Presented: C Lucas, C Williams A Balfour	December 2016	5/14 Paediatric Patients with M abscessus harbour ST26, No epidemiological evidence of cross infection. Remaining isolates distinct	2 were transitioning to adult setting [redacted] and [redacted] Note Furtehr positive Case [redacted] – not noted this case not on timelines
10/05/15 Cystic Fibrosis Microbiology Meeting Jane Wilkinson Pamela Joannidis Angela Johnson Carol Lucas And others	December 2016	RHC CF Infection Control Policy Update: To incorporate guidance from the GGC CF infection Control Document PJ/AJ – infection control to update Note meeting chaired by me 29/04/16 re draft GGC CF IC Policy Noted by PJ that the gowns currently being proposed for use with CF patients with NTM are not currently used with TB patients . This will be discussed with Dr Peters at next GGC CFC infection control meeting Dumfries Lung function equipment – need to look at how this is	Note TB is not droplet/fomite spread , but airborne.

		handled and cleaned. NTM update 7 CF patients with current M abscessus PJ has looked at timelines from 2011-2016 in patients with Cluster 1 types. No evidence of cross infection seen on spread sheet.	
12/05/15 Craig Williams Alison Balfour present	Present	Not discussed	
April/May 2015		NEW HOSPITAL OPENS Christine Peters takes on Clinical Microbiology role for CF – although unclear re CF IC responsibilities	
27.05.2015 IC SMT Chair Tom Walsh	Present	No Mention	
3/6/15 Lead ICn Meeting Chair Sandra Macnamee Lynn Pritchard present	December 2016	• Paediatric decontamination room (respiratory medicine) has no sink so they plan to move to another physiotherapy area. Clare has advised that they consider disposable kit.	
9/06/2015 ICD Meeting CW	Present	Not discussed	
		•	
Abstract Conference; June 2015 Published C Lucas, J Wilkinson, C Mitchell, D Kenna, J Turton, N Mustafa, C Williams http://www.sciencedirect.com/scien		• 13 Paediatric patients referred to • 5 ST26, assumed [redacted] • No epidemiological evidence of periods when cross infection could have occurred • WGS was performed on 5 patients • Conclusion states WGS may required to exclude	Again – no mention of ward cross over, equipment and decontamination issues WGS mentioned as being done however the detail of low SNP number differences NOT

ce/article/pii/S1569199315302320		possibility of hospital acquisition.	reported [redacted] not included although positive , 2 other linked not highlighted ([redacted] and [redacted]) WGS show [redacted] and [redacted] ONLY 1 snp APART !!! [redacted] AND [redacted] ONLY 1 snp APART [redacted] AND [redacted] ONLY 3 snp APART Note [redacted] SAMPLE IS 3 YEARS OLDER THAN OTHERS, AND [redacted] IS 1 YEAR OLDER .
24/06/15, 26/08/2015 SMTS Chair Tom Walsh	Present	No Mention	
POSTER SGH Event ?August 2015 Alison Balfour, Carol Lucas Craig Williams	December 2016	• Published VNTR data • Epidemiological investigation has not identified a conclusive link " cross infection seems unlikely" • States 2 patients overlapped in hospital but on different wards • Mentions WGS is underway	More overlaps in hospital than noted and shared equipment and decontamination issues not mentioned 2 patients actually overlapped on same ward as per incident meeting minutes
30/9/15 SMT Chair Tom Walsh	Present	"In Paediatrics they have asked for a small decontamination room to be identified and Clare said that Katrina is looking into this"	AT the height of all the other concerns re the building
01/10/2015 South ICT meeting Chair Clare Mitchell Angela Johnstone present	Not present	"Clare is to obtain a list of the agreed items to be decontaminated in the proposed decontamination room in RHC"	

5/10/15 Paper on Decontamination Room for Paediatric Therapies Centre RHC	December 2016 – not seen before	Notes that "currently the dirty utility is being used but this is an inadequate facility as there is no cleaning sink available for washing equipment and there is a macerator present for disposal of body fluids which is not required." Summary of Scottish Health Planning requirements form HFS 2008 Notes the respiratory lab and physiotherapy departments will provide a list of equipment to be decontaminated and frequency for decontamination. The department to provide SOP /guidance for cleaning and decontamination .	? where is the follow through and action?
6/10/2015South IPCT Meeting	Present	Clare and Katrina are to visit the respiratory team regarding the asthma boxes to make sure they are following the guidance that was agreed at the decontamination group	
15th October 2015 Decontamination subgroup Chair Craig Williams Alison Balfour Katrina Black		"CPET equipment: CW stated that a generic departmental SOP needs to be drafted for respiratory equipment that cannot be sterilised at CDU Respiratory Research Decontamination On the back of the CPET query the respiratory Labs at QEUH and RHSC were visited by the South Glasgow IPCT and several issues were raised with the area/methods that the department were using to decontaminate equipment. The need to identify safe and effective areas to decontaminate respiratory equipment has been noted GGC wide as the current practices are not up to HEI standards and this should be	

		added to the risk register . There is a plan to establish a decontamination area in the children's hospital and the adult site will also be looked at. Alan Stewart stated any plans should go through the HFS Decontamination Services. It was also noted many decontamination issues raised by respiratory research need input from Procurement department and their representation on this group needs to be reviewed.	
28/10/15 IC SMT Chair Sandra McNamee Criag WIlliams 28/01/16 IC SMT Chair Anne Cruikshank 25/02/2016 Chair Tom Walsh	Present Present Present	No mention	
1/12/2015 South IPCT Chair Lynn Pritchard	Present	"A risk register of all areas that locally decontaminate equipment and have a risk assessment set up is being proposed. Lynn suggested that this is a large piece of work, perhaps a short life working group should be formed"	
ICN Leads Meeting 13/01/2016 Chair Pamela Joannidis Lynn Pritchard present	December 2016	Lynn updated today in relation to decontamination of respiratory equipment in the south that she has contacted CSM of the area but has had no response to date. Lynn will send a follow up email at the end of the week if necessary. Pamela will discuss the paediatric plan already prepared with Craig Williams on his return 18/01/15 and if he agrees Pamela will then forward the plan to Geraldine O'Brien at HFS for approval.	
19/01/2016 SGIPCT Meeting	Present	" Dr Peters has requested that an ICN attends the	

Chair Lynn Pritchard		weekly CF meeting on the 7th floor on Wednesday at 9 am Dr Peters has requested a patient journey of CF patient of when they attend the respiratory out patients	
21/01/2016 Decontamination Sub Group Chair Craig Williams Katrina Black		As contacted Procurement . Head of Procurement added to email list. The respiratory Department at QEUH and RHC to send plans for reconfiguration to HFS KB to ask for Peak Flow meter SOP . Can be used up to 50 times.	
2/02/2016 SG ICPT Meeting	Present	Under Decontamination Group Katrina is meeting the lead nurse of respiratory to discuss peak flow meters Nargis Mustaffa is working on a risk register of equipment that is decontaminated locally in the respiratory lab	
17/02/2016 ICN Leads Meetings Chair Sandra McNamee Pamela and Lynn also present		Lynn updated that she has contacted someone else in relation to decontamination of respiratory equipment across NHSGGC but is waiting on a response	Who? I was never told about this
Email From Craig to Christine		 Re Mycobacterium Abcessus.msg • I ask for information from Craig re Floto paper and Cf patient mothers complaints	. Uninformative communication
CF MICRO MEETING 08/03/16 Jane Wilkinson Anne Devenny Linda Cassidy	28/12/16	 CF Microbiology Meeting 080316.doc	Craig decides to carry out timelines for those with most similar results apparently <10% cut off . ? does he mean SNPS?

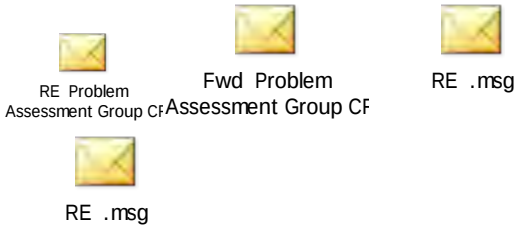
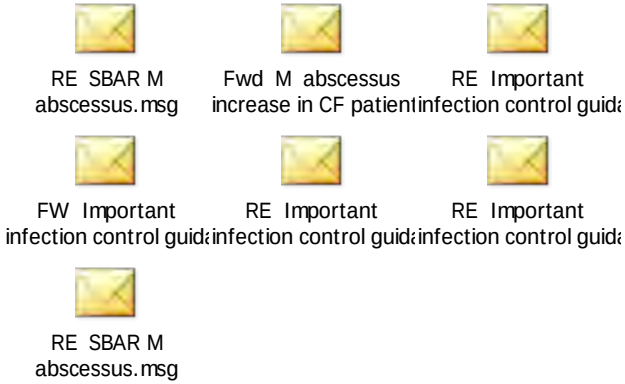
Jane Davis Craig William Pamela Joannidis Carol Lucas Kirstin Marchbanks Triggered by Email from Craig to Carol Lucas, Pamela and Jane that WGS much awaited is back		Update on NTM typing [redacted]	Dr Denney to discuss with Lothian M abscessus policy Dr Devanney to contact Flotto re advice given to patients PJ to carry out timeline for 4 patients: NOTE timelines previously done – but not for [redacted], [redacted] missed out NOTE AIRECHANGES not mentions Not clinic template discussed – not seen these and not shared with adults
ICD Meeting 08/03/16 Craig Williams Alison Balfour present	Present	"Christine asked if there was any further development in relation to the recent audit in both adult and paediatric respiratory labs . Craig believes Ian Powrie is seeking advice from HFS and the labs will be audited against new build standards for sign off by HFS. Christine asked about plans for IPC policies specifically in relation to cystic fibrosis and also asked about the mother of the CF patient who is keen to meet with IPC. Craig and Anne Devenney have arranged to meet with the patient's mum on 10.03.16 . Criag explained that concern had been expressed about paediatric to adult clinic and isolation of patients.	
10/03/16 Meeting with Parent Mrs	March 2016	No records kept, however on request Dr Devenny produced	[redacted] informed By Craig

[redacted] Craig Williams Linda Cassidy and Dr Devenny		notes Inset Emails re [redacted]	Williams that current infection control policy there had been "no significant spread of organisms of any type between patients " and that no links to hospital had been found. I do not agree with this. Given all the information above Adult clinic arrangements (set up under Craig's time as CF Micro lead and Lead ICD) were criticised and this was not discussed with the adult team .
10/03/2016 Chair Craig Williams	Not present	No mention	
23/3/16 Sofie Singn and Christine Peters	Report walk around	 CF Outpatient Clinic Walkround (04.03.16	
23/3/2016		Draft of Science paper shared – clearly implies cross transmission in GGC	
31/03/2016ICSMT Chair Tom Walsh	Not present	Not mentioned	
4/04/2016 email		 FW Infection Control Guidance on (Forwarded to Anne Cruikshank to highlight the need for Craig to handover the information	The WGS at HPA was NEVER handed on to me until we got Jane's files

5/4/16 I request data from ref lab re all M abscessus			
5/04/16 Cyftic Fibrosis Microbiology Meeting J Wilkinson Craig Williams Carol Lucas Pamela Joannidis Caroline King Fiona Collins Linda Cassidy Angela Johnstone	September 2016 Found on common drive	Note a meeting I had attended 30/03/16, when Flotto paper was discussed Craig to contact FLotto today and advised Philip Davies be informed Pamela's Time line demonstrated no cross over Note re updating CF infection Control Policy , Caroline king to contact Dumfries re decontamination there	Note Further patient positive [redacted] march 2016 Only 4 patients looked at – who are they? Missed out [redacted], Also [redacted] and [redacted] overlapped, in outpatient setting ,
5/04/2016	19/09/2016	Fw M abscessus cross infection.msg Emails from Andre Flottto to Craig explaining why clones can spread despite apparently no epidemiological links . Pamela, Jane and Carol copied in Craig states "VNTN then WGD and have 4 patients with strains indistinguishable using WGS but we are unable to find an epidemiological link"	It is hard to believe that this conversation was not shared with me at the time.
6/04/2016 Lead ICN Meeting Chair Sandra McNamee Lynn Pritchard Present	December 2016	Pamela attended a CF meeting on 5/4/16 to discuss M abscessus . This was a combined adults and paediatrics meeting . From 2011 there has been a cluster in the paediatric population. There had been 6 cases from 2 crossed-over however these were different types but there are 4 that look similar so these have been sent for further typing and a timeline is currently being done. It was noted however that there was no apparent crossover . The concern seems to be supported by a paper referred to at the meeting . These concerns were raised by the adult team that IPC are not robust. Craig Williams has	I was never informed about this meeting , however the ICNS and Craig and Carol Lucas were fully aware. Minutes do not make sense Note most recent case moving over to adults

		explained how the general environment and fomites are the source of this contaminant. It was noted that this may impact on the South Glasgow Adults IPCT and Pamela will let Lynn know if she should attend any future meetings .	Not a contaminant – its a pathogen with serious consequences. Understanding the importance of fomites actually brings into question the entire validity of the ruling out of cross infection by the timelines produced
18/04 2016 Medical student Audit provisional results		Identified 25 patients in adult services who previously had M abscessus	
20/04/2016 Noted that [redacted] was not included in WGS		 RE [redacted] m abs 1605035467 .msg	
19/04/2016ICD Meeting Chair Teresa Inkster Alison Balfour present	Present	"Christine reported re paper about to be published in relation to cross-transmission of M abscessus in CF patients. Christine explained that the author had obtained anonymised data from the ref lab which suggests cross transmission. Christine stated that the CF Trust did provide guidance about a year ago but is unsure if it is being adhered to. Previously Craig Williams, Pamela Joannidis and Clare Mitchell worked on an IPC policy document and Pamela has agreed to work more on this for both adults and paediatrics. There is expected to be more detailed looking at organism bas. Christine will forward the draft document to Linda . Also a meeting is being arranged for both adult and paediatric CF staff. Of note respiratory wards are neutral pressure in QEUH therefore a lot of work is still to be done around CF isolation. Teresa asked about OPD clinics. Christine described how patients are organised to attend clinic and that OPD do not have completely separate clinics . The main issue is it is unknown how long exchanges are	Alison Balfour did not mention any information regarding previous VNTR typing and WGS of CF M abscessus isolates, despite a lengthy discussion regarding this .

20/04/2016 Noted that [redacted] was not included in WGS		 RE [redacted] m abs 1605035467 .msg	
28/04/16 IC SMT Chair Teresa Inkster amela Joannidis present	Present	Not mentioned	
6/05/16 Multiple email threads relating to CF and infection control		 FW Infection Control Guidance on ( Re Query CF and M abscessus.msg  FW Query CF and M abscessus.msg  RE Query CF and M abscessus.msg  RE Query CF and M abscessus.msg  RE Query CF and M abscessus.msg	
10/05/2016 ICD meeting Chair Teresa Inkster Alison Balfour	Present	Christine reported that she had undertaken to write the CF policy by the end of June 2016 for the recently amalgamated paediatric/adult CF group. The policy will be presented to the SOP group in the first instance ad will then go to the IPC SMT for full discussion and agreement . The policy will then need to go through the policy process ie distributed to the IPC committees for wider consultation.	
10/05/16 Medical student audit reports NTM audit results for Adult CF patients Steve Bicknell and Christine Peters supervising		 Respiratory Medicine SSC - Audit Report Al Identified 26 patients who ever had M abscessus, 3 died, 11 still culturing positive , 11 no recent positives	 Abscessus and MAC Patients Info.msg  Conference on Mycobacterium absce Actioned in lab to ensure new cases can be rapidly identified
17/05/2016 emails trail form Pamela to Teresa		 FW NM AAFB.msg	Pamela denies knowledge of Cluster 1
17/05/2016 emails from Carol Lucas		 NTM CHIs.msg  RE NTM CHIs.msg	I asked on many occasions for information from Carol regarding M abscessus in paediatrics but this

			was all the information I was given.
18/05/16 PAg is organised			
23/05/16 [redacted]			
23/05/2016 Summary of Craigs meeting with [redacted] sent from Anne Devveny			I do not agree with the advice given re no cross transmission Furthermore while Prof Williams commented on the adult service having incorrect clinics and segregation policy this was not relayed to the adult team, or to the managers to my knowledge
24/05/2016 PAG held and SBAR sent to HPS Dr Peters meets with [redacted] and reports to Tom Wlash and Teresa Inkster			
26/05/2016ICSMT	Present	“Pamela reported that CF Paeds team have been monitoring M	Note all IC policy for CF paeds and

Chair Tom Walsh		abscessus for a number of years and have a segregation policy . At no time have patients been in the same room or clinic at the same time. Alison commented that there may be a breakdown when a patient transfers from paeds to adult care and the patients may not have the same screening carried out. Christine advised that a policy is being prepared for adult and paeds and for a process to be agreed as there is no joint policy at present . The policy will go to the policy group to discuss nd then to the committees for approval and Tom suggested that there may be a recommendation that this policy is not owned by infection control"	adult prior to Craig leaving had been Craig's remit, including any screening. No mention made of WGS investigations , or incident meetings as recently as October, as well as discussions at the CF Paediatric CF Microbiology meetings in April where Pamelas timelines had been discussed
6/06/2016 Information re Flotto paper	December 2016	Dr Ian Laurenson send data re the Flotto paper to Christine, Carol Lucas, Jim McMennimin and Gordon McGregor  FW Confidential M abscessus in CF patients..htm Carol responds to this but excludes my name form the group .	The data is non-sensical to me as the names do not relate to adult patients that I have on my database and it is too complex to decode.
14/06/2016 ICD meeting Chair Teresa Inkster Alison Balfour	Present	Discussions are ongoing in CF in relation to \m abscessus	
13/06/2016 HPS rapid literature review	 Rapid Review - Decontamination c	  M abscessus literature review requ RE M abscessus literature review requ	
22/06/2016 Draft CF document for M abscessus	 CF Patients and abscessus (2).do	  FW CF Patients and M abscessus.msg CF Patients and M abscessus.msg	

Reference lab involved	RE fyi.msg		
29/07/2016 CF Adult Abscessus policy finalised	CF Patients and I abscessus finaldra	CF Patients and M abscessus finaldraft 2 Interim Infection Control Procedures fc	
28/07/2016 IC SMT Chair Tom Walsh Sandra MacNamee Alison Balfour	Present	"CF Meetings ongoing"	
19/082016 Discussion re use of medicinema for m abscessus patients		RE Medicinema infection control ques	
19/9/2016 email Christine to Tom Walsh		FW Mycobacterium Abcessus.msg Raises my concerns re IPCT with holding and information	Meeting not held till December after I repeatedly asked for a date.
21/09/2016 emails from Lynn Pritchard		RE M abscessus.msg	Loss of knowledge and record of Katrina and Clare's work on Respiratory decontamination
26/08/2016 CF Society Meeting in Dunblane – co-organised by C Peters, HPS reps present and Ian Laurenson from ref lab.		SCFG Abscessus Meeting 110716.doc	

30/08/2017 email sent requesting data for CF paediatrics		CF data.msg RE CF data.msg RE CF data.msg RE CF data.msg RE CF data.msg	
31/08/2016 email for Jane Wilkinson with Carols files		RE CF data.msg RE CF data.msg	This was the first access I had to a whole lot of data and it has been very difficult to understand all the different data sets .
12/09/2016 Paediatric team asked to review adult M abscessus policy		FW Interim Infection Control Procedures fc	
13/09/16 discover on shared drive notes from meetings re 2014 incident		Cystic Fibrosis Microbiology Meeting	
16/09/2016 Report Issued By Teresa Inkster re M ABscessus	September 2016	Concludes that there is Evidence of cross transmission based on 2 sets of WGS and links in time and place. Fw report.msg FW Interim Infection Control Procedures fc FW Abscessus WGS.msg Timelines [redacted]	
4/10/2016 SGIPCT Chair Lynn Pritchard	Present	"Genome sequencing of the 28 M abscessus in CF patients should be completed within the next few weeks. Dr Peters informed the group that 5 of the patients acquired the abscessus while in paediatric care. Lynn has been sent a list of all equipment that is decontaminated within the respiratory	

		area and is going to visit the decontamination area some time this week	
Letter written to Tom Walsh re concerns		 FW Mycobacterium Abcessus.msg I raise my concerns re information not being available to me and issues with the IPCT	
21/09/2016 Information from local team lost		 RE M abscessus.msg	
10/2016 Trying to set up a new meeting		 RE Paediatric & Adult Cystic Fibrosis M  FW Interim Infection Control Procedures fo  PAG M abscessus Meeting Notes.msg  RE Paediatric & Adult Cystic Fibrosis M  Greater Glasgow and Clyde Health Board C  RE Paediatric & Adult Cystic Fibrosis M  Draft CF Action List.msg  FW PAG M abscessus Meeting No  FW Cystic Fibrosis Action Plan.msg	
11/2016 Science paper is published		 2016 Science Bryant et al abscessus transl  2016 Science Bryant-Supplementar  science 2016 comment abscessus c	
		 RE Paediatric & Adult Cystic Fibrosis M	
19/12/2016	Information WGS from St Andrews	Early indications confirm Flotto paper conclusions.	

[redacted] Table of Actions

No.	Department/Area	Su Ec
1.	Respiratory Research, QEUH	R fu ec
2.	NICU, PRMH	G O In H
3.	Respiratory Research, QEUH	P &

From: Hunter, William
Sent: 21 March 2017 07:09
To: Wilson, Andy
Subject: Fwd: water damage Critical care QEUH

Andy - can you pls draft a response

Sent from my iPhone

Begin forwarded message:

> **From:** "Loudon, David" [redacted]
> **Date:** 20 March 2017 at 21:35:40 GMT
> **To:** "Hunter, William" [redacted]
> **Subject: Fwd: water damage Critical care QEUH**
>
> Billy
>
> Are you aware of this incident? What is the current status?
>
> Thanks
>
> David
>
> David W Loudon
> Director
> Property, Procurement & Facilities Management Directorate
> NHS Greater Glasgow & Clyde
>
> Begin forwarded message:
>
> > **From:** "Armstrong, Jennifer" [redacted]
> > **To:** "Loudon, David" [redacted]
> > **Subject: FW: water damage Critical care QEUH**
> >
> > FYI
> >
> > ---
> >
> > **From:** INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
> > **Sent:** 20 March 2017 18:49
> > **To:** Armstrong, Jennifer
> > **Subject:** Fw: water damage Critical care QEUH
> >
> > See email below FYI. We have had to close 3 beds in QEUH ICU due to mould penetrating through a wall following a leaking dialysis point. Other ICUs aware that capacity at QEUH is reduced. Could become more problematic if we find that other dialysis points are the same.
> >
> > KR
> > Teresa
> >
> > Dr Teresa Inkster
> > Lead Infection Control Doctor NHSGGC
> > Training Programme Director Medical Microbiology
> > Dept of Microbiology

Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 20 March 2017 15:11
To: Kennedy Julie (NHS GREATER GLASGOW & CLYDE); Thomson Iain (NHS GREATER GLASGOW & CLYDE); Brattey David (NHS GREATER GLASGOW & CLYDE); Guthrie James (NHS GREATER GLASGOW & CLYDE); Hamilton Catriona (NHS GREATER GLASGOW & CLYDE); Walsh Thomas (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE)
Cc: Pritchard Lynn (NHS GREATER GLASGOW & CLYDE); [redacted]
Subject: water damage Critical care QEUH

Dear all

Infection control were alerted this morning to a leaking dialysis point in Room 40 Critical care, QEUH. On removal of the panel there is visible mould which has extended along the wall and through to the other side (picture).

We had a meeting with Julie Kennedy and estates colleagues on the unit this afternoon and the following actions were agreed;

-We have advised estates to seal the room and switch of the positive pressure - this will reduce the risk of dispersion of fungal spores into the unit.

-It is likely that a significant proportion of the wall will need removed. To do so safely will require three ICU beds to be closed.

-The area will be sealed off from the rest of the unit and HAI scribe measures will be implemented i.e. negative pressure, HEPA vacuuming. All materials will be double bagged, placed in carts and removed through the HDU part of the unit.

-Exact timescales are awaited - estates are in discussion with a contractor who is on site today

- Once this work is completed the other dialysis points in the unit will need to be checked

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

Inkster, Teresa

From: Inkster, Teresa
Sent: 19 May 2017 18:51
To: Armstrong, Jennifer; Loudon, David
Subject: Re: leaking dialysis points

Approx 136 in QEUH. 21 in RHC -all ok
T

Sent from my BlackBerry 10 smartphone on the EE network.

From: Armstrong, Jennifer
Sent: Friday, 19 May 2017 6:14 PM
To: Inkster, Teresa; Loudon, David
Subject: RE: leaking dialysis points

Thanks Teresa; do you know how many dialysis points there are in QUEH?

From: Inkster, Teresa
Sent: 19 May 2017 17:58
To: Armstrong, Jennifer; Loudon, David
Subject: FW: leaking dialysis points
Importance: High

See below FYI.

KR
Teresa

From: Inkster, Teresa
Sent: 19 May 2017 17:57
To: Pritchard, Lynn; McKillop, Gus; Burns, Anne Marie; McLucas, Margaret
Cc: Powrie, Ian; Brattey, David; Hunter, William
Subject: leaking dialysis points
Importance: High

Dear all ,

Following a recent leaking dialysis point in ICU which required the removal of mouldy damp material it was agreed by estates colleagues to do a survey of all dialysis points in the QEUH to establish whether this was a more widespread problem.

Estates colleagues have competed this survey today and have found 10 leaking dialysis points and on initial limited inspection ,evidence of mouldy material .

Two of the dialysis points are in ward 4D and 8 are in the level 2 dialysis centre

You will have received an invite to a meeting on Monday morning to discuss how we proceed with determining the extent of the problem , removing the material safely and the appropriate infection control precautions that we will need to put in place.

There are no actions required over the weekend - we advise against opening these panels up fully to stop the leak at the moment as this may lead to dispersal of fungal spores.

Please get in touch if you have any questions

Would it be possible for the renal team to forward this email to colleagues I may have missed - I am unsure who the lead technician on level 2 is

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programe Director, Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
[redacted]

Health Board
Corporate Services

NHS
Greater Glasgow and Clyde

Incidence Meeting Regarding
Dialysis Points in the QEUH
Lab Building, Ground Floor
Monday 22nd May 2017

Present: Dr Teresa Inkster (TI), David Brattey (DB), Ian Powrie (IP), Billy Hunter (BH), Lynn Pritchard (LP), Jenny Ritchie (JR), Ian Miller (IM), Anne Marie Burns (AMB), Calum MacLeod (minutes)

Actions

Welcome & Apologies

Dr Inkster welcomed everyone to the meeting and introductions were made.

Confidentiality

Everyone is reminded that all patient identifiable information and discussions are confidential.

Background to Meeting

Extensive mould and damp was found behind a dialysis point in ITU after a water leak.

It was agreed that all 154 dialysis points should be checked within the adult QEUH campus to see if any more point were affected. Estates have found 10 more dialysis points affected with mould/dampness.

Investigations

Ian Powrie showed the group pictures he had taken of the 10 affected dialysis points highlighting the extensive dampness and mould. Some of the points were worse affected than others.

The reason for the mould and dampness is due to the T piece water connectors not being tightened properly so water has been slowly leaking over time.

Areas affected
Ward 4D – Rooms 47 & 48 (dialysis points back to back with each other).
Level 2 – Bay 3, dialysis points 23, 28, 29, & 30 (this area is currently used as a store)
Level 2 – Bay 1, dialysis point 14
Level 2 – Run up area - 1 point
Level 2 – Lab Room – 2 dialysis points in this 7 point area

It has been proposed that Bay 3, (points 23,28,29 and 30) will be undertaken first and the this area can be used when Bay 1 needs vacated. There will be no loss of "in use" dialysis points when this is undertaken.

The HAI scribe used to carry out the work on the dialysis point in ITU could be used as a draft for IPCT and estates to complete.

Estates informed the group that the work would take around 3 weeks for each area depending on how much the dampness and mould has spread.

This should of been carried out by Brookfield as a latent defect of the new build hospital but in order to get his rectified quickly, work will be undertaken as soon as possible and a latent defect report will be sent to Brookfield.

Ian Miller asked if the IPS access panels 4&5 could be moved to allow easier access. Ian Powrie informed the group that he wanted the IPS access panels to be put on hinges, locked and sealed so that they can be easily accessed for any future work.

Control Measures

In the interim the IPS panels will be sealed. Ian Powrie will arrange for the panels to be sealed to maintain a level of control of the mould while awaiting the work being undertaken.

Dr Inkster confirmed there will be no air sampling carried out after the work has been complete due to the lack of interpretative guidance for a non specialist ventilated area and continued construction work throughout the QEUH campus.

A deep clean of the area will be carried out after the work has been completed.

Anne Marie Burns said there is no other inpatient area within Glasgow for the Renal patients to be moved to, and that Ward 4D receives patients who have in the past had transplants and patients who remain immunosuppressed.

IPCT will undertake a look back on patients within Renal who have experienced any fungal infections. Initially this will be looking at +ve aspergillus results.

Communications

Dr Inkster informed the group that HIIAT will not be completed and HPS will not be informed as there are no confirmed patients affected by this. This will be reassessed if patient cases identified

The Infection Control & Prevention Team will liaise with estates to complete the HAI scribe.

Estates will contact domestics when work has been completed within the areas so that a deep clean can be carried out.

AOCB

Ian Miller informed the group of broken drain connectors at bed space 6 and 10 that he would like to be fixed. Ian Powrie informed him that this will need to brought up through estates as a separate HAI scribe will need to be completed

No further meetings have been arranged

NHS Greater Glasgow and Clyde	**NHS Greater Glasgow & Clyde** **Infection Prevention and Control Team**
Purpose:	Problem Assessment Group (PAG)
From:	Infection Prevention and Control Team
To:	IPCT SMT
Date:	22.05.17
Subject / Situation:	In March / April 2017 a flood was reported in a single room in ITU 2. It was found to be due to a leaking dialysis point. Following this all dialysis points were checked in the adult hospital were checked and a further 10 were found to be leaking with signs of visible mould.
Background:	In March / April 2017 a flood was reported in a single room in ITU 2. It was found to be due to a leaking dialysis point. Following this all dialysis points were checked in the adult hospital were checked and a further 10 were found to be leaking with signs of visible mould.
Discussed with / Communications:	Dr Inkster (ICD) Lynn Pritchard (Lead IPCT)
Recommendation / Options:	Meeting with medical staff, surveillance nurse, clinical educator, theatre co-ordinator and lead nurse to discuss. • No issues highlighted with audits in ward or theatre area • Theatre Co-ordinator (P Philp) will ensure that the Tegederm dressing is used for all spinal procedures. • Clinical educator advised that all patients are showered prior to surgery. • Theatre Co-ordinator (P Philp) has looked at the theatre pack numbers and there is no common pack used for the patients. • 3 staff members (2 medical staff and 1 nursing staff) have been involved in more than one patient during theatre. The 3 staff members will be advised to attend Occupational Health for screening for MSSA. This will be followed up by Dr Inkster and

HIIAT	**Green** Moderate impact on Patients Minor impact on Services Minor impact on Public Health Minor impact on Public Anxiety.
IPCT Members:	Dr Inkster (ICD) Ann Kerr (Lead Nurse Surveillance) Lynn Pritchard (Lead IPCT)

RE: leaking dialysis points

Romeo, Thomas [redacted]

Thu 15/03/2018 12:16

To: Pritchard Lynn (NHS GREATER GLASGOW & CLYDE) [redacted]; INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Powrie Ian (NHS GREATER GLASGOW & CLYDE) [redacted]; Devine, Sandra [redacted]; McConnell, Donna [redacted]; Singh, Sofie [redacted]; Barmanroy, Jackie [redacted]; Geddes Robert (NHS GREATER GLASGOW & CLYDE) [redacted];

1 attachment

HAI SCRIBE QEUH W4D Rm 41 15 03 2018.docx;

Hi All

please find attached for your attention a copy of the HAI Scribe for the repair to water damaged wall behind IPS panel, can this HAI Scribe to used for QEUH, W4A Rm 3 as well once signed off.

Regards
T Romeo BEng (Engineering Management)
Estates Manager
QEUH Campus
1345 Govan Rd
G51 4TF
[redacted]

From: Pritchard, Lynn
Sent: 15 March 2018 09:17
To: Inkster, Teresa (NHSmail)
Cc: Powrie, Ian; Devine, Sandra; McConnell, Donna; Singh, Sofie; Barmanroy, Jackie; Romeo, Thomas
Subject: leaking dialysis points

HI Teresa
See below a summary of the 2 renal leaks and could you call me when you are free if you need further information or want to discuss further. I am aware that Ian is on annual leave and I have included Thomas Romeo as I believe that he is dealing with this.

Ward 4A
Room 3 – Initially thought that this was a leak from the sink, but Estates have reviewed. It is a burst pipe at the dialysis point and there is extensive wall and skirting damage. We have been informed that this work will take several weeks to repair.

Ward 4D
Room 41 – leaking dialysis point at the L connector. Unclear of the damage at this stage.

IPCT will be available to review and sign off the SCRIBE when available.

07/2020

Thanks
Lynn

Lynn Pritchard
Lead Infection Prevention & Control Nurse - South Sector
Queen Elizabeth University Hospital
Zone 2 - 1 Office Block
Govan Rd
Glasgow
G51 4TF
[redacted]

sewage leak QEUH

INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)

Wed 17/10/2018 11:14

To: Stewart David (NHS GREATER GLASGOW & CLYDE) [redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted]; Devine, Sandra [redacted]; Harkness Anne (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Connelly Karen (NHS GREATER GLASGOW & CLYDE) [redacted]; Barmanroy, Jackie [redacted]; Dell Mark (NHS GREATER GLASGOW & CLYDE) [redacted]

Importance: High

Hi,

Just to make you aware infection control were alerted to a sewage leak in ward 2A QEUH (care of elderly/dermatology) this morning. This is originating from a pipe which runs the length of the building and has a bend in it at level 2 - estates are investigating

There is extensive sewage ingress into ward 2A which is currently being cleaned up. We have advised moving two immunosuppressed patients out of the ward

There is also ingress of sewage into the canteen below on level 1 and we have recommended closure of the seating areas to facilitate estates colleagues accessing the roof space and cleaning the area. The kitchen remains open for the time being

Furthermore there is ingress into the atrium at the front entrance to the QEUH with some tracking evident along the roof space. We have therefore recommended closure of this entrance. The food outlets in the vicinity have been made aware.

There was a distressed member of the public who mentioned contacting the media and from speaking to Mark , the Evening times have already been in touch.

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

Inkster, Teresa

From: Pritchard, Lynn
Sent: 20 May 2019 09:51
To: Inkster, Teresa
Cc: Barmanroy, Jackie
Subject: RE: Significant Sewage flood Ground floor OPD Waiting Area B QEUH

Morning Teresa
Is there anything further that you want me to do.
LP

Lynn Pritchard
Lead Infection Prevention & Control Nurse - South Sector
Queen Elizabeth University Hospital
Zone 2 - 1 Office Block
Govan Rd
Glasgow
G51 4TF
[redacted]

From: Glancy, Joan
Sent: 20 May 2019 07:41
To: Donaldson, Margaret; MacLeod, Alison; Pritchard, Lynn; McEwan, Katie; Wright, Pauline; Barmanroy, Jackie; Inkster, Teresa; MacKay, Karen
Subject: Significant Sewage flood Ground floor OPD Waiting Area B QEUH

Good morning

Last night Facilities Manager contacted CNC @ 2240 to inform of a significant sewage flood in the above department ; the areas affected were Consultant Rooms 12,13,14,15 and 16 ; Clinical Clean, Dirty Utility , Measurement Bay, x 2 Disabled toilets, reception and corridors. When I visited the area , plumbers were still on site attempting to clear the blockage of paper towels and wipes in a drain; there was evidence of sewage over large parts of the department , including those specified above - I contacted the On Call Microbiology Registrar to update him of the situation – he has asked me to call the On Call Consultant before I finish shift this morning – Definitive attended overnight to provide a deep clean and then the Domestics followed this up with a terminal clean using Atichlor - access to the affected area has been restricted until the Infection Control Team can assess whether the rooms and equipment in the rooms affected can be used; the On call Microbiology Registrar will inform the Infection Control Team by email of this incident . Another issue raised is that the Facilities Manager is not convinced that the entire area has been cleaned to the correct standard - he has contacted the Company Manager to express his concerns and has informed the Professional Lead for Domestic Services, Patricia Coyne – there is still an obvious odour evident this morning from the department. I have updated Pauline Wright Consultant Microbiologist this morning at 0705. I have also requested that Facilities Manager go to the OPD clinic this morning @ 0800 to ensure the above is passed on. I have also left a note on the door of the clinic with a brief description of the above.

Regards

Joan Glancy
Clinical Nurse Co-ordinator
QEUH

FW: Visualisation of water damage in 7A Room 4 on 30/1/19

Inkster, Teresa [redacted]

Wed 19/08/2020 11:18

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

3 attachments

IMG_0529.jpg; IMG_0531.jpg; IMG_0532.jpg;

From: Hood, John
Sent: 31 January 2019 17:05
To: Inkster, Teresa [redacted]
Subject: Visualisation of water damage in 7A Room 4 on 30/1/19

Dear Teresa,

Under controlled conditions we investigated the shower and toilet area of room 4 in 7A in which an air sample had grown exphiala (black fungus). This fungus as you know, often may just colonise patients but can cause problems in CF patients pre and post lung transplantation.
Please see the enclosed photographs of the significant problem of this black fungus under the vinyl floor covering – indeed there were pools of black water sitting under the vinyl.
It should also be noted that there was very little evidence above, of what was going on under the vinyl, just a little crack in the corner of the vinyl. This problem is essentially a manifestation of a very poor finish.
Compared to similar areas in Ward 6A, that had the same issue with water damage behind the vinyl, it did not seem in this room to have significant or any water damage to the plaster board – in 6A this was replaced with water retardant plaster board.
I would recommend that the flooring contactor approached this room, and subsequent rooms in 7A, as those in 6A - including replacement with water resistant plaster board even if it looks OK (up to the same level as in 6A), with removal and replacement of vinyl up to clear areas where no black fungus or water damage is obvious and in the same way and quality as in 6A.

Kindest regards

John Hood

Consultant Microbiologist

FW: 2a leak rooms 15 & 16

Inkster, Teresa [redacted]

Wed 19/08/2020 11:50

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

8 attachments

20190607_143528_resized.jpg; 20190607_143532_resized.jpg; 20190607_143538_resized.jpg; 20190607_143544_resized.jpg; 20190607_143559_resized.jpg; 20190607_143720_resized.jpg; 20190607_143713_resized.jpg; -855018704_20190607_144437_4353425_resized.jpg;

From: Inkster, Teresa
Sent: 10 June 2019 09:17
To: Dodd, Susie [redacted]
Subject: FW: 2a leak rooms 15 & 16

From: Powrie, Ian
Sent: 07 June 2019 18:00
To: Inkster, Teresa
Cc: Purdon, Colin; Connelly, Karen; Kane, Mary Anne; Gallacher, Alan
Subject: FW: 2a leak rooms 15 & 16

Hi Teresa,

Further to our discussion this afternoon regarding the water penetration of the flooring and IPS in ward 2A resulting from the shower auto flush protocol.
I have attached some initial images of the mould found within the IPS area, the rooms affected have been seal off, see last image.

I have also discussed with Colin and requested that he liaise with you on Monday to review the situation and assess if this has occurred over the last 4-6 weeks since the auto flushing has been in place?
In addition we need to lift the affected flooring and replace the damaged building materials and make good the affected structures in the rooms.

I have also recommended that All IPS's be exposed and inspected along with the flooring in all bed rooms and En-suite area's to assess if this is a one off incident or if this is indicative of a wider flooring issue?
If another one area is affected in the same way then we need to consider exposing the BMTU isolation room IPS's however if this incident is a one off I would be mindful of opening the partitions in these rooms as this would require re-verification of the room integrity & air permeability.

Once you and Colin have reviewed this feel free to call me if you need any input support from me? I would be interested in your views on this.

Regards

Ian

A49525252

RE: Ward 4d

Pritchard, Lynn [redacted]

Fri 26/07/2019 14:38

To:Morris, Scott [redacted]; Mckillop Angus (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc:Macmillan Melville (NHS GREATER GLASGOW & CLYDE) [redacted]; Macer Scott (NHS GREATER GLASGOW & CLYDE) [redacted]; INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Afternoon
The IPCT will be checking all dialysis points within the QEUH site from Monday for similar issues and we also plan to check all shower rooms on Level 4 for breaches in the integrity of the flooring. We will report our findings to the Estates team.

I am sorry that I cannot give you a specific time scale for the work, but I understand from Estates that they plan to undertake the jetting of the drains this afternoon and I would assume that they will clean the dialysis drain at the same time. The flooring company is always on-site so should be able to start as soon as the plumbing work has been done. I have asked that the dye is flushed through the system following the plumbing to ensure that the blockage is dispersed and not just moved further along in the ward.

I have included Mel MacMillan to see if her can advise time scales.

Thanks
Lynn

Lynn Pritchard
Lead Infection Prevention & Control Nurse - South Sector
Queen Elizabeth University Hospital
Zone 2 - 1 Office Block
Govan Rd
Glasgow
G51 4TF
[redacted]

From: Morris, Scott
Sent: 26 July 2019 14:24
To: McKillop, Gus; Pritchard, Lynn
Subject: RE: Ward 4d

This is concerning. Do we know if all the other rooms in the ward have been checked for similar problems?
How long will the 3 rooms be out of action?
Regards
Scott

From: McKillop, Gus
Sent: 26 July 2019 10:41
To: Pritchard, Lynn
Cc: Morris, Scott
Subject: RE: Ward 4d

Thanks for update Lynn

Scott – for info

Gus

From: Pritchard, Lynn
Sent: 26 July 2019 09:36
To: Sinclair, Pamela; Burns, Anne Marie
Cc: Inkster, Teresa (NHSmail); McKillop, Gus; Burt, Elaine; Joannidis, Pamela; Barmanroy, Jackie; MacMillan, Melville; Macer, scott; Balfour, Alison; Kelly, Allana
Subject: Ward 4d

Morning
Just wanted to update you on the rooms reviewed yesterday by IPCT. I have asked both Estates and ward staff to ensure that IPCT are informed of all similar issues to ensure that we can deal with them promptly and ensure that the correct procedures are in place.
The following rooms were reviewed and the following found / advised by staff members and Estates

Room 32
There was significant water ingress from shower drain causing water to cover both shower and bedroom floor. There is breaches in the vinyl flooring at the door into the ensuite with the risk that water has breached at this point.

Room 33
Reports that at the weekend there was water discharged from the toilets and the dialysis drain. Estates staff had removed the blockage at the weekend and staff thought that the issue had been resolved. There is breaches in the vinyl flooring at the door into the ensuite with the risk that water has breached at this point.

Room 34
There was significant water ingress from the toilet (previously) and again staff stated that this covered both ensuite and bedroom floor. There is breaches in the vinyl flooring at the door into the ensuite with the risk that water has breached at this point. On Wednesday water was coming up via the dialysis drain.

Initial works
Estates staff managed each report of water ingress as it happened, but due to the number of blockages they agreed to discharge a dye into a toilet and follow to see where the main blockage was. This dye was not seen out with the ward and therefore it was agreed that the blockage was at a local level.

Plan ongoing
3 rooms have been closed off and will not be used.
Swab taken on dialysis drain in Room 33 and results awaited.
Estates will remove the IPS panel below the dialysis drains and remove the bottom of the drain pipe work and initially brush clean. They plastic pipe work will be capped off and a solution of Actichlor will be poured into the drain and left for approx 30minutes. The cap will be removed and the original fitting will be replaced.
Flooring will be reviewed by flooring company and replaced where required.
SCRIBE has been completed for this work.

13:35

[redacted]

iMessage
21 Apr 2017, 11:12

Thank you for your call yesterday
There are reports and documents available if you would find them helpful
Penelope

21 Apr 2017, 20:53

Thanks - I have been discussing the issues with colleagues today and asked them to consider appropriate issues / actions so will make contact next week.
Thanks
Jane

21 Apr 2017, 22:06

Thanks

28 Apr 2017, 18:03

Just to let you know that a review of the paed ward situation is underway to ensure appropriate learning is taken on board. I have asked the managers to ensure you have the opportunity to contribute. Hope that's Ok. Jane

iMessage

13:35

[redacted]

28 Apr 2017, 18:03

Just to let you know that a review of the paed ward situation is underway to ensure appropriate learning is taken on board. I have asked the managers to ensure you have the opportunity to contribute. Hope that's Ok. Jane

Thanks for update
I have heard things are happening
Just sitting onITU sorting a patient repatriated from France and using my bilingual skills
Hope you are not too overwhelmed with issues
Really appreciate your input and so do a lot of others
Enjoy your weekend
Penelope

27 Sep 2017, 17:46

I feel I need to let you know that I have had to contact Jennifer Armstrong and David Stewart to alert them of my concerns in relation to infection control
The number of problems are increasing and I have been in twice from my annual leave to contact

iMessage

13:36

[redacted]

27 Sep 2017, 17:46

I feel I need to let you know that I have had to contact Jennifer Armstrong and David Stewart to alert them of my concerns in relation to infection control
The number of problems are increasing and I have been in twice from my annual leave to contact them. They were not expecting me back until 5th October so have not responded in writing.

Today I alerted them that I feel I will need to go to stage 2 of the Whistle Blowing Policy if a meeting is not arranged by11th October to ensure that there is a record of all the current concerns being raised by a number of consultants with an action plan.
I have offered to speak to them with a colleague before any meeting. I will make myself I available to come in from leave.
I am abroad Friday and Monday.
I felt since you were kind enough to listen to my concerns previously it wouldn't be reasonable if me not to keep you up to date.
A meeting needs to happen as I

iMessage

[redacted]

A meeting needs to happen as I have outlined. I do not want to take this to Stage 2.
Sorry to add to your pressures but these issues need to be understood and reasonable action plans put in place. This is not the situation today.

Regards

Penelope Redding

27 Sep 2017, 20:27

Thanks for your text. Jennifer had already updated me on the emerging issues and I know she plans to be in touch with you shortly to arrange a meeting. I have asked her to keep me updated on progress to ensure the issues are addressed. Kind regards Jane

It is reassuring that you have been updated with the issues.
I will look forward to hearing from Jennifer. I am sure you understand how serious the concerns are.
Thanks forget getting back to me
Kind Regards
Penelope

iMessage

[redacted]

this to Stage 2.
Sorry to add to your pressures but these issues need to be understood and reasonable action plans put in place. This is not the situation today.

Regards

Penelope Redding

27 Sep 2017, 20:27

Thanks for your text. Jennifer had already updated me on the emerging issues and I know she plans to be in touch with you shortly to arrange a meeting. I have asked her to keep me updated on progress to ensure the issues are addressed. Kind regards Jane

It is reassuring that you have been updated with the issues.
I will look forward to hearing from Jennifer. I am sure you understand how serious the concerns are.
Thanks forget getting back to me
Kind Regards
Penelope

Delivered

iMessage

Re: Fw: RHC Ward 2a Draft Tender Document

John.McEwan [redacted]

Thu 11/05/2017 21:43

To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]

Cc: Powrie Ian (NHS GREATER GLASGOW & CLYDE) [redacted] Peters Christine (NHS GREATER GLASGOW & CLYDE) [redacted]

Project: Queen Elizabeth University Hospital MEP Support
Our Ref: 70520/GLA/OEML/0028

Teresa,

Apologies for delay i have been on the Dumfries site all day. Regarding Christine's points see responses below:

1. There is a drawing schematic within the tender package Appendix A. 70520(57)01 and if you look at proposed schematic it has the following:

2. DAL DAUBE AT CORRIDOR SIDE OF LOBBY TO INDICATE ISOLATION ROOM PRESSURE (-30/0/+30Pa)

I prefer the magnehilic with the appropriate safe zone coloured green. Less can go wrong when compared against digital alternatives.

8. CENTRAL ALARM PANEL WITH VISUAL FOR EACH ROOM, ROOM HEPA CONDITION AND COMMON SOUNDER/MUTE

This is a central panel monitoring all rooms ad will give a status for each room including air flow failure. Note each room has its own dedicated supply and extract.

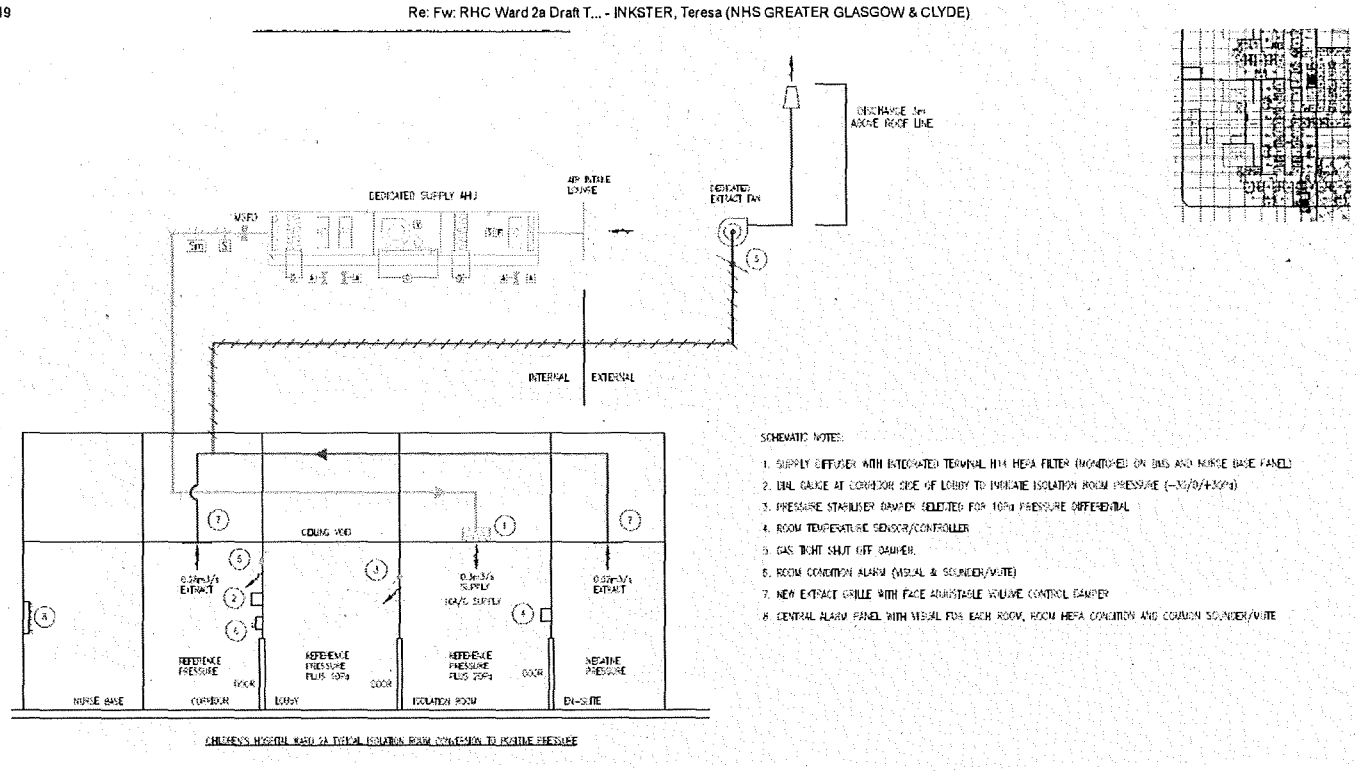
Not withstanding the above we will agree the monitoring so it is as simple as possible while meeting the needs of the users.

2. As the room used to be PPVL we had the opportunity to give some improved protection on the basis that one single door opens at a time other that if bed is being moved into room. The pressure is from room to comdor and this is what will be monitored.

3. Room ACR is 10 No. The ensuite is 0.02m3/s i will check air change.

4. Hepa will be fully challenged. We will be putting a challenge port within the supply ductwork so to simplify future verification requirements.

5. No extract in lobby. We have used lobby as extra level of protection between comdor and room. We have also taken the opportunity to remove most of the ceiling access hatches that were installed under the original contraction See extract fro schematic below.



CHILDREN'S HOSPITAL WARD 2A TYPICAL ISOLATION ROOM CONFIGURATION TO POSITIVE PRESSURE

6. Agree Looking at a 4-way diffuser above bed. Existing room layouts means we have the opportunity to re-locate the supply diffuser which is within the current lobby with the original design being PPVL. This will reach the room corners, also toilet extract will provide good path for the corner of the room with it being negative to room. This gives good dilution prior to the air path through lobby into comdor. As each room has its own supply air handling unit the off coil temperature can be controlled to maintain comfort levels. We are also going to carry out a room integrity test to ensure room is well sealed and only controlled air paths are maintained.

Hope this assists with a better understanding. If any further clarification required either drop me another email or call me on [redacted].

Regards

John

From: "INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)" [redacted]
Received: Thursday 11/05/2017 13:10
To: "Powrie Ian (NHS GREATER GLASGOW & CLYDE)" [redacted] "John McEwan" [redacted]
Cc: "Peters Christine (NHS GREATER GLASGOW & CLYDE)" [redacted]
Subject: Fw: RHC Ward 2a Draft Tender Document

Hi Ian and John - I sent this document to my colleague Christine for comment and 2nd opinion. Are you able to answer the queries

KR
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial [redacted]

From: Peters, Christine [redacted]
Sent: 11 May 2017 11:58
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: RE: RHC Ward 2a Draft Tender Document

Interesting –some issues on brief read through

1. There is no mention of an alarm system should there be a drop in pressure or airflow into the room.
2. I don't think it is analogous to a theatre suite – although I can see the logic. There may be excessive air flow in terms of draft over patient within the bedroom. I do not understand why there would be a cascade of pressure as all air going through the lobby would now go out to the corridor. Unless there was an extract in the lobby also. if the room is 20 pa to the corridor, the lobby will also be 20 pa to the corridor and the baffles should be set accordingly.
3. There is no calculation of Air exchange rate which is required for both bedroom and en-suite. I think it will be a large number with the volume coming in – but would need to have the calculations stipulating what the expected number is as that a key parameter
4. Good idea to put HEPA in supply to room – would need proper commissioning
5. It is unclear if there is to be an extract in the lobby at all
6. The location of the supply in bedroom will need to ensure proper air mixing and no short circuit to the pressure stabilisers on top of the room lobby door which may occur if they use the current location of the supply and may be different in each room. I am not as familiar with these rooms as the adult rooms.

That's it for now. It would be good to chat through with Ian if he has designed this .
C

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 11 May 2017 11:01
To: Peters, Christine
Subject: Fw: RHC Ward 2a Draft Tender Document

Would you mind reading section 3.0 of this document for me
T

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Inkster, Teresa [redacted]
Sent: 05 May 2017 15:35
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: FW: RHC Ward 2a Draft Tender Document

From: Powrie, Ian
Sent: 05 May 2017 14:27
To: Inkster, Teresa; Redfern, Jamie; Dawes, Heather; Gibson, Brenda; Hunter, William
Cc: 'John.McEwan [redacted]
Subject: FW: RHC Ward 2a Draft Tender Document

Dear all,

I would be grateful if you could review the attached tender specification for the conversion of 4 isolation rooms within ward 2A to positive pressure rooms from the current PPVL.
In order to allow me to progress to tender stage next week I would be grateful if you would formally sign of on this tender specification confirming that it meets with you clinical and HAI requirements?
The tenders are scheduled for issue to the market next week, I would therefore be grateful if you could copy your acceptance of this specification to John McEwan of Hulley & Kirkwood to allow him to progress the tender in my absence next week(as I am on A\L) .

Please advise if there are any relevant amendments or changes that you feel should be incorporated in this specification?

Regards

Ian

[redacted]
Deputy General Manager (Estates)

Queen Elizabeth University Hospital Campus
Property, Procurement & Facilities Management Directorate
Facilities Corporate Services Dept
CMB Building
Glasgow
G51 4TF

PA Elaine McNeil: [redacted]
Direct : [redacted]
Internal [redacted]
Mob: [redacted]

****
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Re: Ward 2A\2B ventilation strategy review meeting.

HOOD, John (NHS GREATER GLASGOW & CLYDE)

Fri 02/11/2018 13:40

To INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Dear Teresa,

Thank you for this.....it is quite frankly unbelievable!
The real worries are:
Why was this area not designed properly in the first place?
Why were these findings above, not picked up at the commissioning stage?
What other nasty surprises exist in other crucial areas?

Kindest regards

John

Dr John Hood BSc(Hons) PhD MBChB MRCP(UK) FRCPEdin FRCPGlas FRCPath
Fellow of the Society of Healthcare Epidemiology of America (SHEA)
Consultant Microbiologist
GRI and GJNH

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 31 October 2018 15:30
To: HOOD, John (NHS GREATER GLASGOW & CLYDE)
Subject: Fw: Ward 2A\2B ventilation strategy review meeting.

Hi - I was sent this ventilation report yesterday and attended a meeting with estates today

I have recommended that 2a patients cannot be moved back to the ward based on the report findings
Also advised checking the adult ward they are in and the adult haem-onc (non bmt) ward as a matter of urgency

I trust you agree

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Inkster, Teresa [redacted]
Sent: 30 October 2018 16:20
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: Fw: Ward 2A\2B ventilation strategy review meeting.

Sent from my BlackBerry 10 smartphone on the EE network.

From: Powrie, Ian [redacted]
Sent: Tuesday, 30 October 2018 3:24 PM
To: 'Heggarty, Emma'; STEELE, Tom (NHS GREATER GLASGOW & CLYDE); Kane, Mary Anne; Gallacher, Alan; Wilson, Andy; Inkster, Teresa; Purdon, Colin; Connelly, Karen; 'James.cumming[redacted]'; Leiper, Jim
Subject: Ward 2A\2B ventilation strategy review meeting.

Good afternoon,

Please find attached the ventilation assessment reports from Mathew Lambert (Innovated Design Solutions) for your review and consideration for above meeting scheduled for tomorrow.

Regards

Ian

I. Powrie
Deputy General Manager (Estates)

Queen Elizabeth University Hospital Campus
Property, Procurement & Facilities Management Directorate
Facilities Corporate Services Dept
CMB Building
Glasgow
G51 4TF

PA Elaine McNeil: [redacted]
Direct : [redacted]
Internal [redacted]
Mob: [redacted]

SUSTAINABILITY ACTION
Our NHS Our People Our Planet

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NHS Greater Glasgow and Clyde	**Property, Procurement & Facilities Management Directorate - SBAR**
Purpose	*Ward 2A\2B Ventilation review*
From	*Ian Powrie, Deputy General Manager (Estates)*
To	*Tom Steele, Director of Property Planning & Facilities Management (PPFM)*
Date	*12\11\2018*
Situation	*Single bed room accommodation has a nominal Air Change Rate (ACR) of 2.5 Air Changes per Hour (ACH) with the single rooms being neutral to negative pressure relative to the ward corridor, this combined with the potential risk of air recycling from en-suite WC's to the supply air stream via air passing through bypassing the thermal wheel heat recovery unit introduce a potential for cross contamination between single room suites.*
Background	*General ward single room ventilation design was derogated from national guidance requirements 6 ACH to 2.5 ACH, in order to adopt Chilled beam technology to meet BREAM energy performance targets, on the basis that the fresh air provision of "40 litres per second per single room (8 litres per person per second) for one patient and four others" with the 'proviso' "Negative pressure to be created in the design solution. "* *In practice the single room ventilation rates are 2.5 ACH with neutral to very slightly negative pressure with relative to the ward corridor.* *This derogation seems to have been applied universally across an all single room accommodation regardless of the patient risk group with no allowance for Neutropenic patient groups.* *During investigation of this issue to develop a solution the following issues were also identified:* *a) The Supply and extract Air Handling Units (AHU's) are fitted with thermal wheel heat recovery units. Permissible under SHTM 03-01 Pt A, Para 1.144 "Thermal wheels may be used providing they are fitted with a purge sector. The small amounts of air leakage across those devices are not considered significant."* *b) The supply AHU is cross connected to the toilet extract system via the thermal wheel, by design.* *The design of this thermal wheel combined with the potential for toilet extract bypass air to enter the supply air stream introduces a risk of cross contamination into the patient environment.*
Action	*a) Assessed feasibility of modifying existing system to improve patient environmental containment. Outcome:- due to limitations of existing installed AHU, duct work & chilled beam capacities as well as the building fabric air permeability leak rate this is not a viable option.* *b) Assess the scope of works required to redesign and install suitable ventilation plant and distribution to provide a safe environment for Neutropenic patients.* *c) Review the ventilation arrangements for all other high risk ward area's to assess if this ventilation configuration is applied in these areas.*
Recommendation	*Decant patients from ward and commission a full feasibility study, re-design and prepare tender specification to meet the requirements of this patient group:* **Duration 3-6 months.** *Implement project to reproved a resilient ward ventilation strategy including-, new supply and extract plant (Including High Efficiency Particulate (HEPA) filtration), distribution ducting and associated heating & cooling circuit re-distribution to allow for a suitable comfortable and protective patient environment at +10 pa positive pressure and 10 ACH, including the removal of the chilled beam technology and separation of supply and extract systems with new dedicated general and sanitary extract systems.* *Budget costs £1 – 1.5m* *Duration 6 – 9 months* *Overall Patient decant period 12 – 15 months*

RE: ventilation question

Peter Hoffman [redacted]

Tue 08/01/2019 11:01

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc:John.Hood[redacted] [redacted];

Happy new year to you too Teresa.

Forgive me if I address questions wider than your specific one (but that will be in there somewhere).

This is about protection of haematology patients. This group of patients is unusual in that it contains individuals with severely compromised immunity who require protection from infection from an unusual source – fungal spores derived from outdoor air. This is not addressed in guidance, either SHTM 03-01 or (I can't find the Scottish equivalent SHPN4 supplement 1) HBN4 supplement 1 (from executive summary "**1.6** This Health Building Note does not describe the specialist facilities required in high security infectious disease units, isolation wards for cohorting groups of infectious patients, protective isolation for severely immuno-compromised patients, critical care areas and special care baby units.").

I think the recommendations you sent me may be based on what was considered the nearest "best fit" guidance rather than from first principles addressing this specific problem. It uses the figures from SHTM 03-01 part A Appendix 1 which are "recommended" air change rates but not evidence based and the applications are poorly described. I know the main author is unhappy with this section and think it is best treated as a starting point for a thought process, rather than definitive guidance in itself. There is no guidance here for isolation rooms for neutopaenic patients (oddly only for such wards).

What is necessary for these specific isolation rooms is that 100% of the air the patient breathes has passed through a HEPA filter. This can only be achieved by supplying HEPA filtered air in substantial excess to any extraction from that room (and no opening windows). That excess air passes outwards through the inevitable gaps in the integrity of the room. If air is passing outwards, it means that unfiltered air in surrounding areas cannot pass inwards, hence only fungal spore free HEPA filtered air will be present. This is a constant requirement and has to take priority.

Protection of these patient from airborne infection from other patients is a more minor consideration – most such infection will be in droplets which will fall rapidly out of the air in the room in which they are generated. If there is a truly airborne element in the very occasional infection, then each patient in a ventilated room will in effect be in their own protective positively pressured bubble. Perhaps starting afresh there could be more complex approaches but from what I read as your current position, this will provide good protection in those occasional situations.

With this patient group, there is a requirement to exclude airborne contamination; there is no requirement to dilute airborne contamination. The airborne microbes in a patient's room will be their own skin microflora and that of the staff and visitors. These are not a risk. The air change rate is for patient comfort – temperature control and dilution of odours. I do not see patient protection as a valid reason to increase air supply rates in the ward in question.

My comments on section of the report are below with passaged of interest highlighted in red and my comments [*in red in brackets*].

3.01 "Bedrooms were apparently designed and commissioned to operate under a slightly negative pressure relative to adjacent Corridors". [*This is a fundamental problem*]

3.02 (below table) "Air volumes above are related to increasing air change rates only, and are not intended to rectify any potential problems associated with the current ventilation strategies, in terms of positive/negative differential pressures" [*I see this as addressing an incidental perceived problem and not related to patient safety*]

4.01 "The AHU was manufactured in accordance with Class B leakage standard". [*The ductwork and sections of AHU will be under negative pressure before the fan and positive pressure after – it will leak inwards before the fan and outwards after. No matter what standard the AHU was manufactured to, its integrity will degrade over years of use. It is important that the final filters are located after the fan – that way any air ingress will be before the final filter. If the final filter is before the fan, there will be an AHU section under negative pressure after the final filter. I have found high fungal spore loads in the air supplied by such systems. This is of some importance with the system now, but vitally important if HEPA filters are to be installed*].

6.02 "**6.03 Enhanced Single Rooms (Positive Pressure)** In the absence of providing numerous positive pressure ventilated lobbies [*These are irrelevant and should not be considered*], and with a view to improving patient protection from infection, we recommend consideration be given to creating a positive pressure directly within each Bedroom space (i.e. all Mid-Ward & TCT). This strategy would typically involve the delivery of supply air directly into each Bedroom with air cascading into the adjacent Corridor(s), where a lower/negative pressure would be maintained, whilst also extracting a proportion of air via the associated En-Suite. This strategy would also necessitate air transfer facilities between the TCT and Ward 2A Corridors. [*This only works if the air is HEPA filtered*] It should be emphasised that this option would not afford comprehensive Isolation Suite facilities, nor be deemed completely appropriate to provide adequate protection for use by immune-compromised patients [*I cannot follow this logic. This is an isolation requirement distinct from that in SHPN4 suppl 1*]. However, we believe it would essentially provide Enhanced Single Room (with En-Suite facilities) accommodation more appropriate for the intended purpose"

6.02 "The potential use of HEPA filters, which could be installed centrally within the AHU or locally to each supply air terminal". [*If I have understood the patient group correctly, I see this as essential rather than potential*].

Now to the thermal wheel. This is a rotating honeycomb, the material of which absorbs heat (or "coolth") from the outflowing air and passes that on to the incoming air. Reasonable background in: https://en.wikipedia.org/wiki/Thermal_wheel "Disadvantages: Thermal wheels are not suitable for use where total separation of supply and exhaust air streams is required, since air will bypass at the interface between the air streams at the heat exchanger boundary, and at the point where the wheel passes from one air stream to the other during its normal rotation. The former is reduced by brush seals, and the latter is reduced by a small purge section, formed by plating off a small segment of the wheel, normally in the exhaust air stream."

Whilst the SHTM 03-01 part A says "4.144 For systems in healthcare premises, a plate heat exchanger or 'run-around coil' system is suitable. Thermal wheels may be used providing they are fitted with a purge sector. The small amounts of air leakage across those devices are not considered significant." my take on this is that this is for general, rather than specialist systems, which have to be considered on a case-by-case basis. There is no mention of a purge section in the existing wheel. If the wheel were located prior to the final filter, I don't think there is a problem.

If I have understood the patient group correctly, I see the requirement for HEPA filtration and positive pressure in rooms (not lobbies) to be a priority over increasing air change rates. My preference would be to have the HEPAs as a third set of filters in the AHU rather than terminal in each room. This will require a far more powerful AHU fan than is likely to be there at present. This is outline and I'd be happy to discuss detail should matters progress.

Happy to discuss further.

Regards,
Peter

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 07 January 2019 21:54
To: Peter Hoffman

A49525252

Cc: John.Hood[redacted]
Subject: ventilation question

Confidential

Hi Peter, Happy New Year!

I have yet another ventilation question! The attached report is from our paediatric haemato-oncology ward. The patients have been decanted to another area until we can upgrade this ward.

At the bottom of the page 1 summary there is reference to extract ductwork distribution and an abnormal strategy. I am told that the hospital utilises thermal wheel technology which is acceptable as per HTM and that this is not a design error as such.

I am struggling to understand how this could be acceptable ? How are thermal wheels related to the ductwork distribution ? Do we have two separate issues here? I am worried this may be duplicated elsewhere within the building but have been assured this design is acceptable.. can you help?

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

FW: [ExternaltoGGC]Consultant Appointment Addendum - Ward 2A BMT & Ward 2B

Inkster, Teresa [redacted]

Thu 23/07/2020 16:28

To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

From: Powrie, Ian
Sent: 28 March 2019 11:51
To: Inkster, Teresa [redacted]; Russell, Steve [redacted]
Cc: McIntyre, Hazel [redacted]; Riddell, Mark [redacted]
Subject: RE: [ExternaltoGGC]Consultant Appointment Addendum - Ward 2A BMT & Ward 2B

Hi Teresa,

HEPA filtration is proposed to be installed centrally on the general ventilation plant that will cover all ancillary areas of ward 2A BMT including both the Prep & Treatment rooms, ensuring that all air supplied to ward 2A ancillary rooms is of HEPA filtered quality with no need for terminal HEPA within these room.
The reason for this is that the added resistance at the terminal vents cannot be accommodated in the existing duct work. This will be covered in the design proposal for our collective approval.

With respect to your discussion with Steve regarding solid ceilings, Building fabric integrity to achieve the required room air permeability is included in the spec for; ward 2A Haemato-oncology/TCT ventilation upgrade, required to achieve 10 ACH @ 10 Pa differential pressure to the corridor.
In this respect you may recall that previously HPS recommended within the ward 4b SBAR that air permeability testing should be carried out to new BISRIA guidance standards at ±50 pa, in practice this is not viable in an operational hospital environment and I would propose reverting to the SHPN 04 supplement 1 guidance for air permeability testing of isolation facilities of ±20 pa. I would be grateful if you could seek approval on this from HPS of inclusion in the contract tender specification going forward.

Please note I have raised this concern with Annette at the water technical group and with HPS at the ventilation SLWG, but we need a formal position on this matter.

Steve: Based on Teresa's approval below, can you please issue and instruct WGM consultants to include this addendum to the existing scope of works.

Many Thanks

Regards

Ian

I. Powrie
Deputy General Manager (Estates)

A49525252

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Property, Procurement & Facilities Management Directorate
Facilities Corporate Services Dept
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Internal [redacted]
Mob: [redacted]

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Our NHS Our People Our Planet

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From: Inkster, Teresa
Sent: 19 March 2019 14:33
To: Powrie, Ian
Cc: Russell, Steve; McIntyre, Hazel
Subject: RE: [ExternaltoGGC]Consultant Appointment Addendum - Ward 2A BMT & Ward 2B

Thanks Ian

Agree with all of that. Can the treatment room in 2A be HEPA filtered as well as prep room
I met Steve in the ward earlier and mentioned that in addition to solid ceilings in the bedroom they should be solid in the bathrooms as well

Kind regards
Teresa

From: Powrie, Ian
Sent: 16 March 2019 08:04
To: Inkster, Teresa
Cc: Russell, Steve; McIntyre, Hazel
Subject: Fwd: [ExternaltoGGC]Consultant Appointment Addendum - Ward 2A BMT & Ward 2B

Hi Teresa,

I would be grateful if you could review and approve the attached proposed addendum to the Ward 2a Haemato-oncology/TCT scope of works to achieve the associated inclusion of HEPA filtration protecting all of ward 2b and ancillary areas of ward 2A BMT (including Prep room).

Once you have reviewed, in my a sense I would be grateful if you could send your approval or recommendations to Hazel McIntyre/Steve Russell (Capital Project team) for inclusion within the existing scope of work for Ward 2A Haemato-oncology?

Regards A49525252

We could add:

A single case of an infection (about which we'll not go in to any detail because of patient confidentiality) was treated and has been discharged. The water supply was looked into as a possible source but this bacteria was not found in the water.

Mark Dell
Senior Media Relations Officer
NHS Greater Glasgow and Clyde
JB Russell House
1055 Great Western Road
Glasgow G12 0XH

Office: [redacted]
Direct: [redacted]
Email: [redacted]

Health Protection Scotland

NHS National Services Scotland

Situational Assessment
Wards 2A/B
Royal Hospital for Children
NHS Greater Glasgow and Clyde

Status: Confidential Draft

Contents

Background 3
Introduction 3
Wards 2A/B Assessment 4
Line Management 6
Summary 6
Recommendations 6
Appendix 1: Timeline of cases 8
Appendix 2: Ward Floor Plan 2A 10
Appendix 3: Ward Floor Plan 2B 11
Appendix 4: Health Protection Scotland - Epidemiology Report, December 2018 12
References 20

Background

NHS Greater Glasgow and Clyde (NHSGGC) are currently investigating and managing a contaminated water system across the Queen Elizabeth University Hospital (QEUH) and Royal Hospital for Children (RHC) with probable linked cases of bloodstream infections associated with wards 2A/2B RHC. During this investigation it was identified that there was a higher than expected level of Healthcare Associated Incidents (HCAI) linked to wards 2A/2B. The National Support Framework (http://www.nipcm.scot.nhs.uk/documents/the-national-support-framework-2017//) was invoked by the Scottish Government HAI/AMR Policy Unit to request Health Protection Scotland (HPS) undertake a review of Ward 2A/2B.

Due to the ongoing water contamination investigation and resultant summary report being prepared by HPS for Scottish Government it was agreed that whilst the review of wards 2A/2B was ongoing the report would not be undertaken until final submission of the water investigation report was completed. The final submission of this report was on 21st December 2018.

Wards 2A/2B RHC is a paediatric haemato-oncology unit, also known as Schiehallion, and houses the National Bone Marrow Transplant (BMT) Unit. The RHC is a 256 bedded childrens hospital which was handed over to the Board on 26th January 2015 with migration of patients occurring between 10th and 14th June 2015 from the previous Yorkhill site. The RHC was fully occupied from 15th June 2015.

All water related issues linked to wards 2A/B are discussed in the water incident report submitted to Scottish Government 21st December 2018 and not within this report. In addition a ventilation review of wards 2A/2B is currently being undertaken and will be covered within a separate NHSGGC report.

Wards 2A/2B closed on 26th September 2018 to allow for a works relating to water contamination to be completed. At this time the opportunity was taken to review the ventilation. Patients were transferred to wards 6A/4B at the Queen Elizabeth University Hospital.

Introduction

Since January 2016 NHSGGC have reported 15 Healthcare Infection Incident Assessment Tool (HIIAT) incidents/outbreaks within wards 2A/2B RHC. Comparative data for this setting (all paediatric hospitals) within NHSScotland identified no reported incidents or outbreaks outwith NHSGGC. The HIIAT allows NHS boards to assess the impact of a healthcare infection incident/outbreak on patients, services and public health and should be used by the Infection Prevention and Control Team (IPCT) or Health Protection Team (HPT) in their assessment of any incident/outbreak within a healthcare setting. In addition it supports a single communication channel for infection incident/outbreak assessment and reporting both internally within an NHS board area and externally to Health Protection Scotland (HPS) and Scottish Government Health and Social Care Department (SGHSCD).

Mandatory HIIAT Green (non-norovirus) reporting for NHS boards was introduced in April 2016; providing a more robust epidemiological picture of incidents and outbreaks across acute healthcare in NHSScotland. A HIIAT assessment is scored Red, Amber or Green according to a four part criteria:

- Severity of illness
- Impact on services

- Risk of transmission
- Public anxiety

Of the 15 HIIATs reported from 2A/2B since 2016 there have been 5 reds, 2 ambers and 8 greens reported to Health Protection Scotland (HPS). Details of the incidents reported are contained in appendix 1. Four of these HIIATs (2 red and 2 green) are attributed to the ongoing water incident. It could be hypothesised that ventilation may have been a contributory factor in several incidents however this cannot be confirmed until a full ventilation review has been completed.

Wards 2A/2B Assessment

Observational assessment walk rounds of wards 2A/2B was undertaken by a Senior Nurse Infection Control from HPS on 18th to 22nd June, 2nd July and 8th August 2018.. During these walk rounds practice and environmental hygiene were observed.

A meeting was held between the Chief Nurse Hospital Paediatrics and Neonatology, Consultant Surgeon and two Nurse Consultants Infection Control (HPS) to discuss ongoing work into central line-associated blood stream infections (CLABSI). This meeting took place on 17th July 2018.

It is noted that overall practice was described as good with no major issues observed or reported. Compliance with standard infection control precautions (SICPS), particularly hand hygiene, use of personal protective equipment and environmental cleanliness was observed to be good. Awareness of infection control practices were high with noteable visibility of the local infection prevention and control team (IPCT).

Ward 2A Overview (Floor plan appendix 2)

- Ward 2A consists of 25 ensuite single rooms.
- There are three distinct areas to the ward; the BMT bedrooms, standard rooms and the remaining Teenage Cancer Trust (TCT) and haemato-oncology rooms.
- The main entrance to the ward is through the entrance at the BMT section of the ward.
- Children with haemato-oncology and haematology disorders are the main patient population within this ward.

Ward 2B Overview (Floor plan appendix 3)

- Ward 2B consists of five consultation rooms and two 4-bed-bay areas.
- Ward 2B has a main waiting area at the reception of the ward with a TCT waiting area beside the TCT bay area.
- Ward 2B cares for children with haemato-oncology and haematology disorders on a Monday to Friday day care basis.

Water
A detailed summary report was prepared and submitted to HAI/AMR Policy Unit on 21st December 2018. This summary report documents all the findings from water-related investigations carried out until the decant of patients from Ward 2A/2B.

Ventilation
Work has been undertaken to convert the positive pressure ventilated lobbied rooms (PPVL) used predominantly for bone marrow transplant recipients into specification compliant positively pressured isolation rooms.

Ventilation within these wards is subject to a review by NHSGGC and will be covered in the resultant report. An SBAR covering initial findings has been prepared at the request of Scottish Government (SG) and submitted to SG by NHSGGC (November 2018).

Chilled beams
Chilled beams were noted to have significant level of dust present in two separate rooms (Ward 2A) there was also discolouration to the edges of the ceiling around the supply. This is potentially due to water contamination and was under review by estates department.

Dripping from the chilled beams had been observed by staff on a number of occasions. This was reported to estates and it has been identified that there were no dew point controls on the chilled beams. A dew point control has been fitted to the central system to alleviate the issue.

Temperature
Ward 2A was observed to be very warm and humid on the day of the visit and staff reported this was common for the ward.

HEPA filtration
The corridors within these wards are not HEPA filtered. The previous facility within Yorkhill hospital was reported to have 8 HEPA filtered rooms with all other rooms being conventionally ventilated.

Pressure stabilisers
Pressure stabilisers were noted in the rooms and also to the corridor of all the BMT rooms. There was no noted issue with overall pressures during this time however some of the stabilisers were noted to have no oscillation when the doors were opened.

Air Changes
It is noted from an SBAR prepared by NHSGGC on 12th November 2018 that the single room accommodation has a nominal air change rate of 2.5 air-changes per hour (ACH).

Air flow/pressure
The single rooms are negative to neutral pressure relative to the ward corridor. There is a further potential risk whereby extract air via the ensuite toilets may combine with the air supply passing through the thermal wheel which may result in an increased chance of cross contamination between single rooms.

All aspects of ventilation including the mixing of extract air with air supply and the potential resultant cross contamination risk will be explored as part of the ventilation review by NHSGGC.

Standard Infection control precautions (SICPs)
Compliance with SICPs was noted to be good, including hand hygiene and the use of personal protective equipment. A programme of monthly SICPs monitoring is in place. All SICPs audits reviewed at the time of the visit were of an optimal score. The IPCT undertake environmental audits in line with the agreed NHSGGC IPCT monitoring programme. At the time of the walkround it was reported that both wards had been given a GREEN audit score at the last IPCT audit. Follow up audit results from August 2018 have been reported as 96% (GOLD) for ward 2A and 98% (GOLD) for ward 2B.

Central Venous Line Management

Significant work has been undertaken across RHC relating to line management. A central venous line quality improvement project steering group was formed in May 2017 following a noted increase in line infections. The group collected data on central line-associated blood stream infections (CLABSI) on a week-by-week basis on lines inserted on the RHC site and includes all patients within the haemato-oncology cohort (including those cared for at home, shared with other hospital sites and inpatients). It was reported that the figures for CLABSI (outwith the BSIs identified as part of the water related incident) are reducing. The group is led by the Chief Nurse (RHC) and a consultant paediatric surgeon.

HPS undertook an epidemiological review of all positive blood samples from patients recorded as being admitted to wards 2A/2B and compared these to samples obtained prior to the move from Yorkhill and those obtained from patients in other areas of the hospital. A detailed report on the findings is included in appendix 4.

Summary

Any issues identified during the walkround visits were reported to staff at the time to ensure they were addressed. Overall there were no significant practice related concerns identified and awareness of infection prevention and control by all staff was high. There was a good presence of the infection prevention and control team on both wards with daily visits (Monday to Friday) being undertaken. A joint weekly walkround with infection control staff, nursing staff, facilities and estates staff is undertaken in an attempt for early identification of any issues which require to be addressed.

Based on the ward reviews and the epidemiological data presented in this report it is hypothesised that the increased number of HIIAT reports could all be linked to environmental factors and are not considered to be indicative of poor or compromised practice.

Recommendations

Consideration should be given to:

- The ventilation review underway within wards 2A/2B is completed with the involvement of the IPCT.
- A ventilation review is undertaken in other areas across RHC/QEUH in particular areas where high risk patients are to ensure compliance with national guidance.
- Issues identified within the ventilation review which are considered by the IPCT to pose an increased risk of cross infection should be addressed and signed off by the IPCT prior to repatriation of the patients.
- High visibility of IPCT within the wards should continue.

- CLABSI work continues.
- IPCT continue to observe infection rates and trigger breaches and report as per HIIAT where required.

Appendix 1: HIIAT Assessments

NHSScotland Incident and Outbreak Summary Ward 2A RHC (January 2016- Dec 2018).

NHS Greater Glasgow and Clyde have reported a total of 10 outbreaks and incidents for the clinical setting paediatric haemato-oncology. Of the 15 incidents and outbreaks HIIAT assessed; 5 were Red, 2 were Amber and 8 were Green. The data is displayed in the tables below providing a breakdown of the outbreaks reported by annual period with exception of the current period to date for 2018 and HIIAT Green in 2016 following introduction of mandatory report (non-Norovirus) from April 2016. Comparative data for this setting within NHSScotland identified no reported incidents or outbreaks outwith NHS Greater Glasgow and Clyde.

2018:

Table 1 NHS Greater Glasgow & Clyde, RHC haemato-oncology (ward 2A), HIIAT RED 2018 – Total (2)		
Date reported	**Organism**	**Infection Category**
01/03/2018	*Pseudomonas aeruginosa* or *Cupriavidus pauculus*	BSI
18/05/2018	*Stenotrophomonas maltophilia*	BSI

Table 2 NHS Greater Glasgow & Clyde, RHC haemato-oncology (ward 2A), HIIAT AMBER 2018 – Total (1)		
Date reported	**Organism**	**Infection Category**
10/04/2018	Astrovirus	Respiratory

Table 3 NHS Greater Glasgow & Clyde, RHC haemato-oncology (ward 2A), HIIAT GREEN 2018- Total (4)		
Date reported	**Organism**	**Infection Category**
03/05/2018	Vancomycin- Resistant *Enterococci*	GI
18/05/2018	*Enterobacter cloacae*	BSI
20/07/2018	*Aspergillus fumigatus*	Respiratory
05/09/2018	Various	BSI

2017:

Table 4 NHS Greater Glasgow & Clyde, RHC haemato-oncology (ward 2A), HIIAT RED 2017 – Total (3)		
Date reported	**Organism**	**Infection Category**
07/03/2017	*Aspergillus fumigatus*	Airborne
13/04/2017	Rotavirus	GI
26/07/2017	*Stenotrophomonas*	BSI

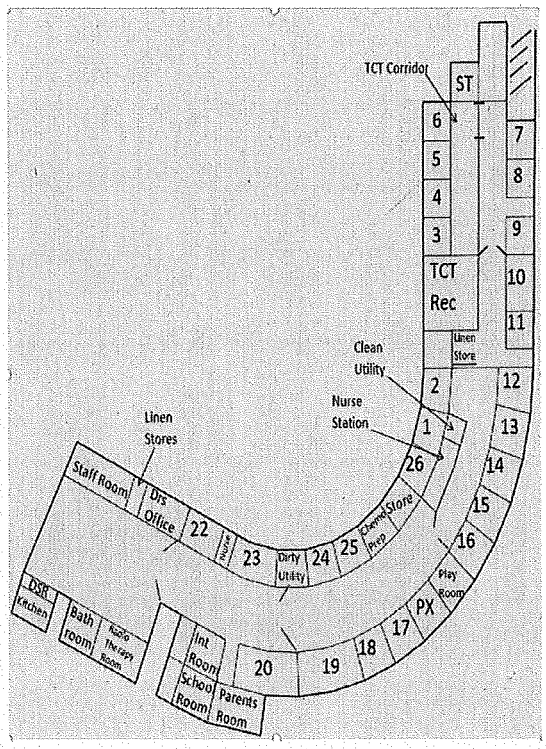
Table 5 NHS Greater Glasgow & Clyde, RHC haemato-oncology (ward 2A), HIIAT GREEN 2017 – Total (3)		
Date reported	**Organism**	**Infection Category**
03/03/2017	*Elizabethkingia miricola*	BSI
03/03/2017	Mixed	BSI
31/05/2017	Norovirus	GI

2016:

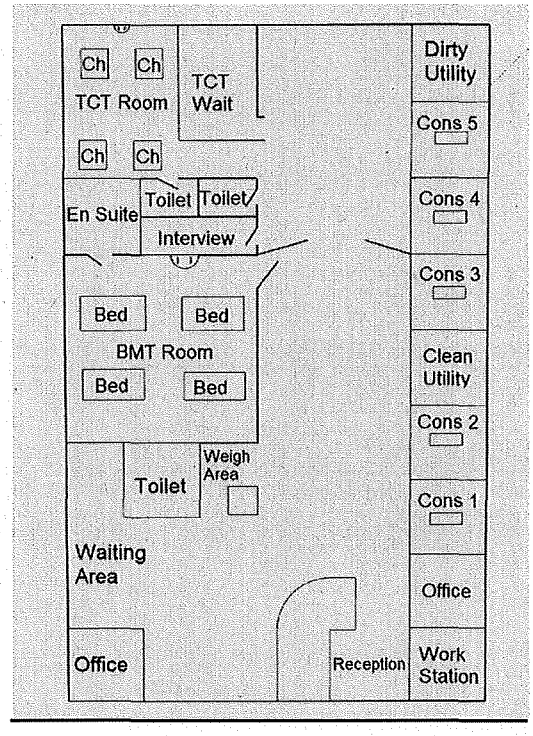
Table 6 NHS Greater Glasgow & Clyde, RHC haemato-oncology (ward 2A), HIIAT AMBER 2016- Total (1)		
Date reported	**Organism**	**Infection Category**
05/08/2016	*Aspergillus*	Respiratory

Table 7 NHS Greater Glasgow & Clyde, RHC haemato-oncology (ward 2A), HIIAT GREEN 2016- Total (1)		
Date reported	**Organism**	**Infection Category**
04/08/2016	Vancomycin- Resistant *Enterococci*	GI

Appendix 2: Ward Floor Plan 2A



Appendix 3: Ward Floor Plan 2B



Appendix 4: Health Protection Scotland - Epidemiology Report, December 2018

Royal Hospital for Children, NHS Greater Glasgow & Clyde

Background

Health Protection Scotland (HPS) were asked to support NHS Greater Glasgow and Clyde (NHSGGC) with the ongoing investigation of the potentially contaminated water system at the Royal Hospital for Children (RHC). The RHC opened in June 2015 replacing Yorkhill Hospital (YH). The patient population that was cared for in Schiehallion ward and Ward 7A of Yorkhill Hospital are now cared for in Wards 2A and 2B of RHC. The purpose of this report is to describe the incidence of positive blood cultures in the patient population cared for in these wards and more widely across RHC/YH hospitals, before and after the move to the RHC.

Methods

For the purposes of this report, the patient population was categorised into two groups:

- 2A/2B Group
    - Patients cared for in Yorkhill Hospital (YH) Schiehallion or Ward 7a; Royal Hospital for Children (RHC) Wards 2A and 2B; patients cared for in haematology/oncology specialties including A&E admissions with previous admission to RHC haematology/oncology specialties.
- RHC Other Group:
    - Patients cared for in other specialties in RHC/YC

Case and episode definitions

Data were extracted from the Electronic Communication of Surveillance in Scotland (ECOSS) system. An extract of all positive blood cultures for any patient under 16 years of age in NHSGGC was taken from ECOSS on the 13th June 2018 with an update taken on 20th August 2018. The case definition was a positive blood culture reported in patients aged less than 16 years in RHC/YC between July 2013 and June 2018. An episode was defined as one positive sample per species in a rolling 14-day period.

Microbiology

Positive blood cultures of the following micro-organisms were included:

- Gram-negative bacteria
- Gram-positive bacteria
- *Staphylococcus* species
- Environmental bacteria (all species of the following: *Achromobacter; Acinetobacter; Aeromonas; Brevundimonas; Brevibacillus species; Brevundimonas; Burkholderia; Chryseobacterium; Citrobacter; Cupriavidus; Delftia acidovorans; Elizabethkingia; Enterobacter; Klebsiella; Pantoea; Pseudomonas; Rhizobium; Rhodococcus; Serratia; Sphingomonas; Stenotrophomonas).*

- Non environmental bacteria (all species of the following: *Abiotrophia; Actinomyces; Aerococcus; Bacillus; Bacteroides; Bifidobacterium; Brevibacterium; Capnocytophaga; Clavibacter; Clostridium; Corynebacterium; Dermacoccus; Dietzia; Enhydrobacter; Enterococcus; Escherichia; Fusobacterium; Gemella; Granulicatella; Haemophilus; Kingella; Kocuria; Lactobacillus; Lactococcus; Leclercia; Leuconostoc; Microbacterium; Micrococcus; Moraxella; Mycobacterium; Neisseria; Paenibacillus; Propionibacterium; Proteus; Raoultella; Roseomonas; Rothia; Salmonella; Staphylococcus; Streptococcus; Veillonella).*
- Fungi (all species of the following: Candida; Rhodotorula).

The following species were previously isolated in water samples from 2A/2B: *Achromobacter;Acinetobacter; Brevundimonas;Burkholderia; Chryseobacterium; Comamonas; Cupriavidus; Delftia acidovorans; Elizabethkingia; Pantoea; Pseudomonas; Rhizobium; Sphingomonas;Stenotrophomonas.*

The following species were previously isolated in drain samples from 2A/2B: *Citrobacter; Cupriavidus; Delftia acidovorans; Enterobacter; Klebsiella; Pantoea; Pseudomonas; Serratia; Stenotrophomonas.*

Analytical methods

The total numbers of episodes of positive blood cultures in the included micro-organisms were described and polymicrobial episodes, where more than one species was identified in the blood sample, were compared in the 2A/2B Group with the RHC Other Group. Monthly incidence rates were calculated using bed-days at specialty level as the denominator. These data were obtained from the Information Services Division ISD(S)1 data source. The denominators for the 2A/2B Group were the monthly number of bed-days for haematology/oncology specialties in RHC/YH. The monthly bed-days for all other specialties in RHC/YH were used as the denominators for the RHC Other Group.

The incidence rates between July 2013 and June 2018 were analysed using statistical process control (SPC) U charts.[1] The SPC charts describe the incidence of positive blood cultures over time with the opening of the RHC represented in the charts with a vertical black line. In addition, the following control measures have been added to the 2A/2B chart – filters added to taps marked as an orange vertical line and cleaning of drains marked as purple vertical line.

The incidence rates for Gram-negative bacteria, Gram-positive bacteria, environmental bacteria and fungal blood cultures before and after the move to RHC were calculated and compared using rate ratios. In addition, two SPC charts were created each for Gram-negative, Gram-positive and environmental bacteria positive blood cultures; one for 2A/2B Group and one for the RHC Other Group. The centreline of the SPC was calculated as the median of the monthly rates between July 2013 and June 2018. The following SPC rules were applied:

TABLE 1: Statistical Process Control (SPC) rules

Rule	Description	Marker
Outlier	Data point(s) exceeding the upper or lower control limit (as 3 standard deviations)	Red diamond
Trigger point	Data point(s) exceeding the upper or lower warning limit (as 2 standard deviations)	Yellow triangle
Shift	A run of 8 or more consecutive data points above or below the centreline	Circle drawn round points
Trend	A run of 6 or more consecutive data points either increasing or decreasing.	N/A

The incidence rate of positive blood cultures over the 5-year period and the latest two-year period were compared with the combined incidence rate of the other two Scottish children's hospitals (Royal Aberdeen Children's Hospital (NHS Grampian) and Royal Hospital for Sick Children (NHS Lothian)). These were compared by calculation of rate ratios and accompanying p-values.

Results

Episodes

A total of 1,786 episodes were identified in 1,149 patients in RHC/YH over the five-year period from July 2013 to June 2018. In the 2A/2B Group, there were 542 episodes in 234 patients (range 1 - 23 episodes per patient) with a median age of 4 years. In the RHC Other Group there were 1,244 episodes in 927 patients (range 1 – 17 episodes per patient) with a median age < 1 years. The number of episodes in each patient group is described in TABLE 2. As the episode definition is by species, a patient could have more than one episode at any one time. TABLE 2 also describes the number of polymicrobial episodes when more than one species was identified in blood sample(s). Patients in the 2A/2B group were more likely to have a polymicrobial episode of positive blood culture ($p<0.001$).

TABLE 2: Total number of episodes (n=1,786) broken into each subgroup of 2A/2B Group and RHC Other Group over 5 years

	2A/2B Group			RHC Other Group		
	Monomicrobial (n = 413)[1]	Polymicrobial (n = 129)[2]	Total (n= 542)	Monomicrobial (n = 1,101)[1]	Polymicrobial (n = 143)[2]	Total (n=1,244)
Gram-negative bacteria	110 (65%)	59 (35%)	169	193 (85%)	35 (15%)	228
Gram-positive bacteria	291 (82%)	66 (18%)	357	884 (89%)	105 (11%)	989
Staphylococcus species	208 (87%)	30 (13%)	238	643 (94%)	41 (6%)	684
Environmental	77 (61%)	50 (39%)	127	101 (81%)	23 (19%)	124
Non-Environmental	324 (81%)	75 (19%)	399	976 (89%)	117 (11%)	1,093
Fungi	12 (75%)	4 (25%)	16	24 (89%)	3 (11%)	27

[1] Monomicrobial was only one species isolated on the episode reporting date.

[2] Polymicrobial if more than one species was isolated from cultures of blood samples on the same day as the episode reporting date.

Incidence rates

Figures 1 to 3 describe the incidence rates using SPC charts showing the incidence of positive blood cultures before and after the move to the RHC (23 months of data from YH and 37 months from RHC).

Figure 1 describes the incidence of Gram-negative blood cultures in both patient groups. The incidence of Gram-negative blood cultures in the 2A/2B Group prior to the move and in the months following were below the centreline of the SPC.

From March 2017, there was a run of 10 months/data points above the centreline identifying an upward shift in the rate with one point above the upper warning limit (UWL).

In March and May 2018, the 2A/2B Group had a rate above the upper control limit (UCL) highlighting a higher than expected incidence of positive blood cultures.

No shift in rates was observed in the RHC Other Group however the rate was above the UWL in April 2014, February 2016 and April 2017. In addition, comparison of the overall incidence of Gram-negative blood cultures before and after the move to RHC indicated the rate was higher after the move in the 2A/2B Group (RR = 1.47, CI: 1.05 to 2.04, p = 0.023) and did not change in the RHC Other Group (RR = 1.15, CI: 0.87 to 1.52, p = 0.34).

FIGURE 1: SPC charts of Gram-negative blood culture incidence rates per 1,000 total occupied days for 2A/2B Group and RHC Other Group.

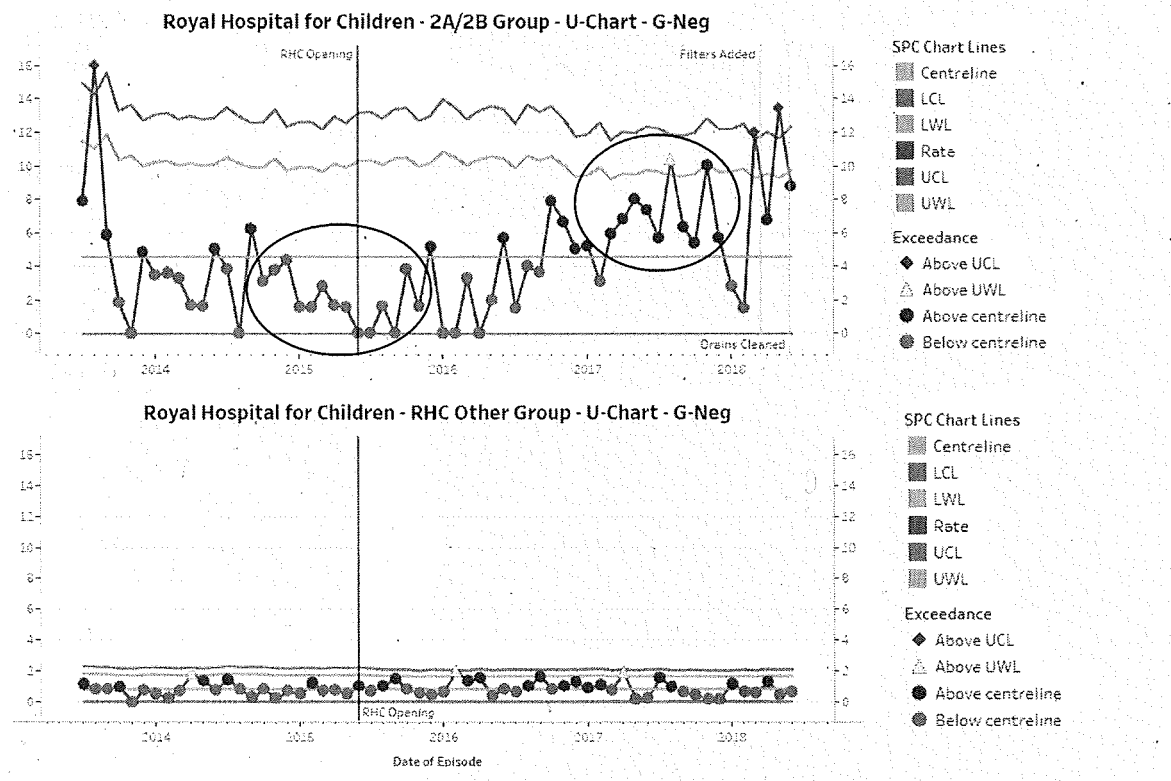
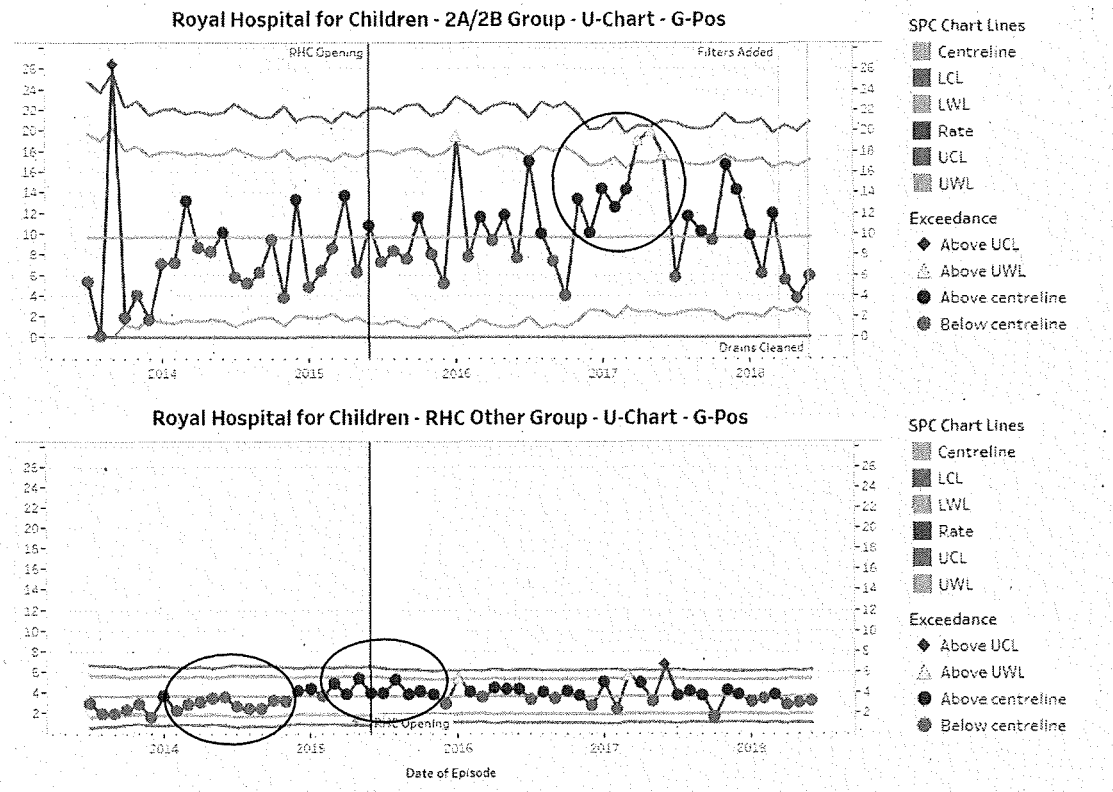


Figure 2 describes the incidence of Gram-positive blood cultures in both patient groups.

There was an upward shift in incidence of Gram-positive blood cultures in the RHC Other Group prior to the move with rates above the UWL in January 2016 and March 2017 and an outlier (above the UCL) in June 2017.

In 2A/2B Group, there was an upward shift after the move and the rate was above UWL in January 2016, and in April, May and June 2017. *Staphylococcus* species accounted for 52% of the Gram-positive blood culture episodes with 45% of those being *Staphylococcus epidermidis*. In addition, comparison of the overall incidence of Gram-positive blood cultures before and after the move to RHC indicated the rate was higher after in both the 2A/2B Group (RR = 1.43, CI: 1.14 to 1.81, p = 0.002) and the RHC Other Group (RR = 1.23, CI: 1.07 to 1.41, p = 0.003) .

FIGURE 2 SPC charts of Gram-positive blood culture incidence rates per 1,000 total occupied days for 2A/2B Group and RHC Other Group.



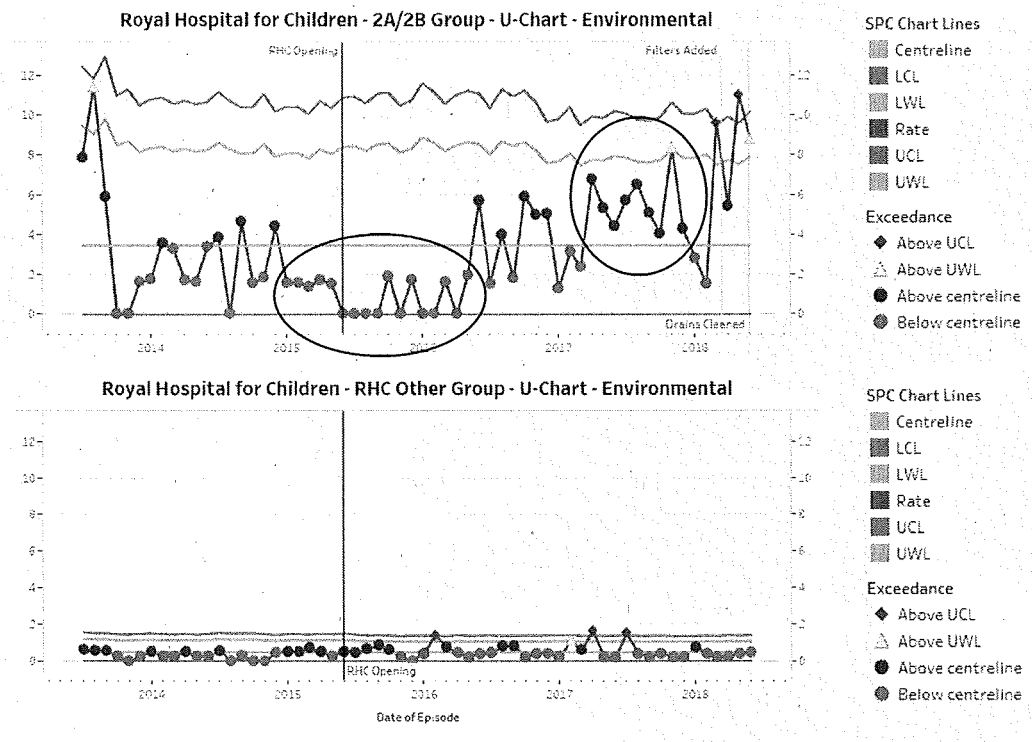
The incidence of positive blood culture caused by species of environmental bacteria (described in the methods section) which included all species isolated in water or drain samples taken from 2A/2B are shown in Figure 3.

In the 2A/2B Group, the SPC chart shows a shift below the centreline for 17 months from January 2015 to May 2016, then a shift above the centreline from April 2017 to December 2017. The rate was also above the UCL, and therefore higher than expected, in March and May 2018 and was above the UWL in November 2017 and June 2018.

There were no shifts in the incidence rates in the RHC Other Group, though the incidence was above the UCL in February 2016, April 2017 and July 2017 and above the UWL in February 2017.

In addition, comparison of the overall incidence of environmental bacteria positive blood cultures before and after the move to RHC indicated the rate was marginally higher in both the 2A/2B Group (RR=1.45, CI 0.98 to 2.13, p=0.06) and RHC Other Group (RR = 1.52, CI: 1.02 to 2.29, p=0.04) however the 2A/2B group the increase was not significant (p >0.05) which may be due to the small sample size.

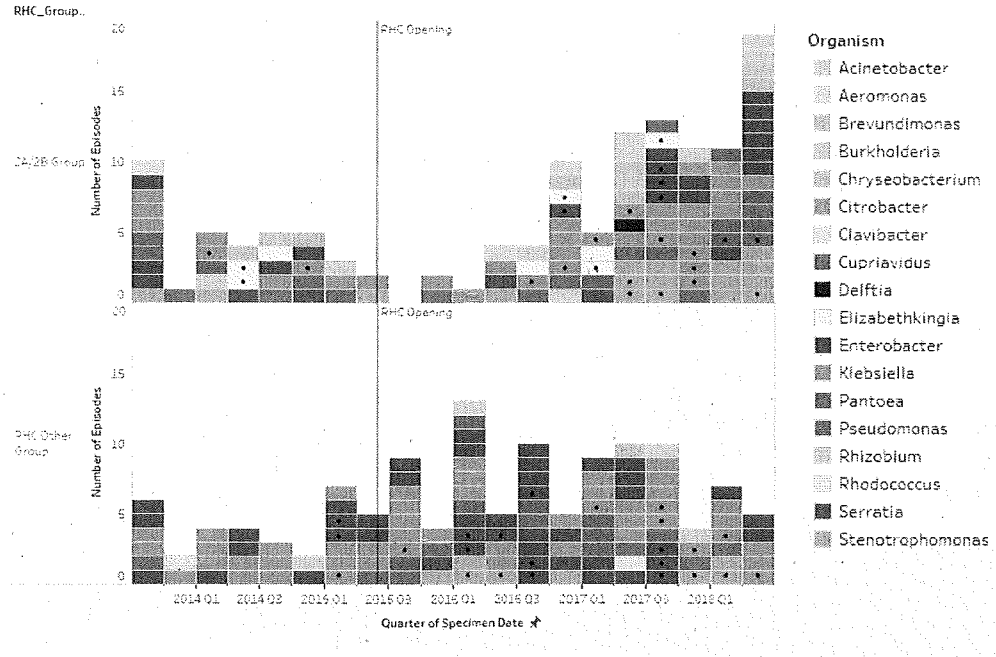
FIGURE 3: SPC charts of environmental bacteria blood culture incidence rates per 1,000 total occupied days for 2A/2B Group and RHC Other Group.



A comparison of the overall incidence of fungal positive blood cultures before and after the move to RHC indicated the rate did not change after the move in either group (2a2b group RR = 1.65, CI: 0.53 to 5.12, p = 0.40; RHC Other group RR = 0.86, CI: 0.40 to 1.89; p = 0.71).

Figure 4 describes the environmental bacteria blood culture isolates in both groups. The episodes with dots represent the first and recurrent episodes of the same species in the same patient. There were 20 patients with two episodes, one patient with three episodes and one patient with five episodes.

FIGURE 4: Quarterly episodes of environmental organism blood cultures in 2A/2B group and RCH other group. Dots represent the first and recurrent episodes of the same species from the same patient.



Comparison with other health boards

When comparing the overall rate over 5 years at RCH/YH to the combined rate of the other two Scottish children's hospitals (Royal Aberdeen Children's Hospital (NHS Grampian) and Royal Hospital for Sick Children (NHS Lothian)), the incidence of positive blood cultures in RCH/YH was higher compared with the other hospitals for environmental bacteria (RR = 1.70, CI: 1.34 to 2.16, p < 0.001) and fungi (RR = 5.36, CI: 2.12 to 13.53, p < 0.001), but lower for Gram-positive bacteria (RR = 0.71, CI: 0.66 to 0.77, p < 0.001) and non-environmental bacteria (RR = 0.79, CI: 0.73 to 0.85, p = 0.001). There was no difference in the rates of Gram-negative blood cultures (RR = 1.12, CI: 0.95 to 1.33, p = 0.16).

When compared over 2 years (July 2016 to June 2018), the rate of positive blood cultures was higher in RCH/YH for environmental bacteria (RR = 2.74, CI: 1.47 to 5.10, p < 0.001), Gram-negative bacteria (RR = 1.29, CI: 1.01 to 1.66, p = 0.038) and fungi (RR = 12.26, CI: 1.65 to 90.97, p < 0.001)) and lower for Gram-positive bacteria (RR = 0.81, CI: 0.72 to 0.92, p = 0.001) , and non-environmental bacteria (RR = 0.79, CI: 0.70 to 0.89, (p<0.001).

Summary and Recommendations

In summary, the overall incidence of Gram-negative, Gram-positive and environmental bacteria blood cultures increased in the 2A/2B Group after the move to the RHC. The RHC Other Group, the incidence of Gram-negative bacteria and fungal blood culture did not change and the incidence of Gram-positive and environmental bacteria blood cultures increased. SPC charts provide an alternative method of analysis that identifies variation at a level of detail not provided by comparison of incidence rates before and after the move to RHC. The SPC charts indicated that the Gram-negative, Gram-positive and environmental bacteria blood culture incidence rates in the 2A/2B Group were higher than expected following the move to RHC. The same changes in the incidence of blood cultures were not observed in the RHC Other Group. Whilst this conclusion must be interpreted with some degree of caution, as changes in the patient population have not been accounted for in this analysis, the shift in the incidence identified by the SPC charts indicates that the trends in blood culture incidence changed after this time.

Patients in the 2A/2B Group were more likely to have a polymicrobial episode than patients in the RHC other group. This was highest in the patients with a positive blood culture of environmental bacteria where nearly 40% had a polymicrobial blood culture. This is similar to figures reported in the literature with higher risk of polymicrobial bloodstream infection being associated with younger age groups and presence of central venous catheter.[3-6] The rate of environmental bacteria and fungal blood cultures were higher at RHC/YH than the other Scottish paediatric hospitals over 5 years and over the latest 2-year period. In contrast, the incidence of Gram-positive blood cultures, often considered to be associated with devices and device care, was lower in RHC/YH compared with the other Scottish paediatric hospitals.

Ward 2A and 2B have been closed since the 26th September 2018. It is recommended that when the wards re-open that all positive blood cultures are monitored in particular those related to an environmental organism.

Limitations

There are a number of limitations associated with the use of ECOSS blood culture data. All positive blood samples apart from those reported through mandatory surveillance programmes are non-validated records. The cases may include contaminants, and may include non-blood cases which are incorrectly mapped to a blood sample within either the laboratory system or within ECOSS. From the data collected through the enhanced *Staphylococcus aureus* bacteraemia (SAB) surveillance programme, 10% of episodes in under 16s were classed as contaminants[2] whereas the enhanced *Escherichia coli* bacteraemia (ECB) surveillance the figure was less than 1% (unpublished data).

The cases were identified using only laboratory data without any clinical review of patients. It is not possible to determine whether changes in incidence are confounded by changes in the patient population and their underlying medical conditions. Duplication per species in ECOSS may mean that a patient is recorded as having more than one episode of positive blood culture in a 14-day period leading to an overestimate of the number of episodes. The breakdown of polymicrobial samples only included isolates recorded on the same day as the episode reporting date which may underestimate the numbers of polymicrobial episodes.

In addition, the comparison between RCH/YC and paediatric hospitals in other health boards should also be interpreted with caution. Differences in the patient population between the RHC/YC and the other children's hospitals may introduce bias to the comparison.

References

1. Information Services Division of National Services Scotland, 2018. Statistical Process Control Monitoring Quality in Healthcare. Available at: https://www.isdscotland.org/Health-Topics/Quality-Indicators/Statistical-Process-Control/_docs/Statistical-Process-Control-Tutorial-Guide-180713.pdf

2. Murdoch F, Danial J, Morris AK, *et al.* The Scottish enhanced Staphylococcus aureus bacteraemia surveillance programme: the first 18 months of data in children. *Journal of Hospital Infection* 2017;**97**:127-132.

3. Downes KJ, Metlay JP, Bell LM, McGowan KL, Elliott MR, Shah SS. Polymicrobial bloodstream infections among children and adolescents with central venous catheters evaluated in ambulatory care. *Clin Infect Dis* 2008;**46**:387-394.

4. Onder AM, Chandar J, Coakley S, Abitbol C, Montane B, Zilleruelo G. Predictors and outcome of catheter-related bacteremia in children on chronic hemodialysis. *Pediatr Nephrol* 2006;**21**:1452-1458.

5. Onland W, Pajkrt D, Shin C, Fustar S, Rushing T, Wong WY. Pediatric patients with intravascular devices: polymicrobial bloodstream infections and risk factors. *J Pathog* 2011;**2011**:826169.

6. Zakhour R, Hachem R, Alawami HM, *et al.* Comparing catheter-related bloodstream infections in pediatric and adult cancer patients. *Pediatr Blood Cancer* 2017;**64**.

48. Reflections on recent IPC issues

[redacted]

From: [redacted]

Sent: 05 September 2017 10:57
To: Peters, Christine
Cc: flogar[redacted]
Subject: Reflections on recent IPC issues
Attachments: 201709051004.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Dear Christine,

The 4B/C issue has been a very stressful experience and I am writing this note as an account of my experience while it is still fresh in my mind, [redacted] to give you my perspective and so that I can hopefully put this matter to rest and move forward.

Teresa Inkster went off-sick on 14th of June 2017 suddenly and without handover.

At the start of July, a SCRIBE document was forwarded to me regarding ensuite bathroom ceiling works. I expressed that the patient's risk level needed to be accurate, which would automatically mean the work would need to be done under negative pressure for haem/onc. I also asked for clarification of the stage of work, and why the work was taking place.

I was informed that this was to facilitate bringing the ventilation up to the specification required for Beatson patients.

Lynn and I then tried to arrange going to the ward physically, one one occasion we missed each other, and the second time, neither of us had a clear understanding of the work and hoped for clarification and walkaround with estates.

The above facts are evidenced by the email trails attached.

On no occasion did I sign this SCRIBE, and on no occasion did anybody divulge anything about the discussions and controversies surrounding this work, that had been ongoing for the past two years. Previous issues related to this work was only brought to my attention when you kindly noticed that the work might be going ahead and filled me in; roundabout this time, Teresa also felt able to provide a brief handover, between Friday the 18th of August and Tuesday the 22nd of August. Members of the senior infection control team appear to have been fully aware of all of the issues over the past two years (from what I can discern from previous emails which I have now seen), although nobody told me any of this despite me being expected to sign the work off. This is further evidenced by an attached email trail where Lynn reminds me that I had commented on the SCRIBE, and I then remind her of what happened after this including the fact that Teresa had concerns. Lynn has mentioned that she was not aware that Teresa had wanted HPS input, and it is clear that Lynn was not appraised of all of the issues over the past two years relating to this piece of work, otherwise I am sure she would have told me; therefore I do not wish to bring Lynn into this at all, as was just doing her job from her perspective. She has also acknowledged my email regarding the sequence of events. It was also clear that a meeting relating to this work was taking place without my knowledge, when on the 18th of August, you and I visited the ward to find out more.

On noting all of these issues, and how complex the work and implication of the work really were, you and I brought this to the attention of the Infection control senior management team and estates to take forward. Professor Jones called a meeting on the 23rd of August, in which he expressed his strong desire that the work should go ahead. You and I brought to his attention various technical issues with the SCRIBE along with the fact that the final decision would need to rest with him as we in principle disagreed with the work and had concerns over commissioning and the final decision-making process for Beatson patients to move back. I mentioned that it was clear that even for an experienced ICD such as Teresa, ventilation engineering and the complexity of issues was too high level for me to take forward now that I had kindly been fully appraised of the situation by you. Since then, Sandra has also emailed me a document relating to a meeting on the topic of the work where the IPCT and HPS had raised concerns; I had no idea of any of this beforehand.

To be expected to sign a document without being fully appraised of the complex issues and arguments (that went on for over 2 years), under pressure, to me was unreasonable. Secondly, as mentioned, this is a very specialised and niche piece of work that requires ICD input from someone with much more experience and knowledge; in subsequent communications and and ICD meeting, it was clear that no ICD in GGC would be able to take this further. To be expected to take forward a very specialised and niche piece of work, was also unreasonable.

At AICC on 04/09/2017, it was mentioned that communications were raised with the Medical Director, with regards the above issues. I would very much hope that these communications have been complete and truthful; otherwise I would feel extremely undermined and would seriously question whether it is correct for me to continue working in IPC in the current climate; I have already requested that my IPC sessions be relinquished as there is huge shortage on the clinical rotas too; and it is clear that no other microbiologist (even the more senior ones) are willing to take on IPC which further proves how stressful and difficult a job it is perceived to be - especially in situations such as these when there is a strong risk that one might be used as a fall guy despite not being fully appraised of any given situation. Despite having worked extremely hard, to the best of my ability, to fill in for Teresa and also try and contribute to the clinical rota whenever I could (although you have kindly given me as much time as possible off the rota) for what is now almost three months, I feel extremely demoralised, stressed out, unsupported and vulnerable, and still maintain that I would like to relinquish IPC. These situations take a considerable toll on ones' health and wellbeing and I would really like to be in a position to continue supporting the service in the best possible way without further burnout or stress; I feel the only way to do this is to relinquish IPC sessions for clinical microbiology sessions.

I have also discussed this matter with the BMA who I have copied in to keep them informed.

With many thanks for all your support.

Kind regards,

[redacted]

48b. document with email

RE: Ward 4b En-Suite Ceiling works
Pritchard, Lynn [redacted]
You forwarded this message on 28/08/2017 08:50.
Sent:18 August 2017 16:48
To: [redacted]

Great thanks [redacted].
Lynn

Lynn Pritchard
Lead Infection Prevention & Control Nurse - South Sector
Queen Elizabeth University Hospital
Zone 2 - 1 Office Block
Govan Rd
Glasgow
G51 4TF
[redacted]

-----Original Message-----
From: [redacted]
Sent: 18 August 2017 16:43
To: Pritchard, Lynn
Subject: RE: Ward 4b En-Suite Ceiling works

Thanks Lynn,
After that we went to see the ward and weren't sure how things were going to be placed logistically so thought we'd ask estates to walk us through. In any case, now that we have a bit of background from Teresa we probably need to make sure we fully understand what is going on before the works starts, I think Christine has some insight so will speak to her.
Best wishes,
[redacted]

From: Pritchard, Lynn [redacted]
Sent: 18 August 2017 16:40
To: [redacted]
Subject: FW: Ward 4b En-Suite Ceiling works

Hi [redacted]
Se below the email trail and note that this was reviewed although I wasn't aware that HPS were to be involved.
Thanks
Lynn

Lynn Pritchard
Lead Infection Prevention & Control Nurse - South Sector Queen Elizabeth University Hospital Zone 2 - 1 Office Block Govan Rd Glasgow
G51 4TF
[redacted]

-----Original Message-----
From: Pritchard, Lynn
Sent: 07 July 2017 17:39

To: MacLeod, Calum
Subject: FW: Ward 4b En-Suite Ceiling works

Lynn Pritchard
Lead Infection Prevention & Control Nurse - South Sector Queen Elizabeth University Hospital Zone 2 - 1 Office Block Govan Rd Glasgow
G51 4TF
[redacted]

-----Original Message-----
From: [redacted]
Sent: 06 July 2017 15:28
To: Pritchard, Lynn; Powrie, Ian
Cc: MacLeod, Calum
Subject: RE: Ward 4b En-Suite Ceiling works

Thanks Ian,
As long as all measures compliant with the level and grade of risk , and agree with Lynn's comments.
Would be good to confirm Lynn's question about the stage. The patient risk level is group 4.
Best wishes
[redacted]

From: Pritchard, Lynn [redacted]
Sent: 03 July 2017 13:32
To: Powrie Ian (NHS GREATER GLASGOW & CLYDE)
Cc: [redacted]; MacLeod, Calum
Subject: FW: Ward 4b En-Suite Ceiling works

Hi Ian
I have reviewed the SCRIBE and made a couple of comments. I am not sure if I am reading this correctly, but can you confirm that when Stage 1 is undertaken is this left for the duration of the works?
I have included [redacted] in the email as he is covering for Theresa in her absence.
Thanks
Lynn

Lynn Pritchard
Lead Infection Prevention & Control Nurse - South Sector Queen Elizabeth University Hospital Zone 2 - 1 Office Block Govan Rd Glasgow
G51 4TF
[redacted]

From: Pritchard, Lynn [redacted]
Sent: 07 July 2017 17:12
To: [redacted]
Subject: RE: Ward 4b En-Suite Ceiling works

Hi [redacted]
The work is needing done in preparation for the BMT Beatson Oncology patients moving over. I believe that Theresa had discussed with Ian Powrie in relation to this and we had a meeting arranged, but that was when Theresa first went off sick.
The ventilation in the areas was not of a suitable spec for these patients and the en-suite ceilings require replacing to a solid ceiling to facilitate this. The vent will be checked prior to the patients moving over.
Thanks
Lynn

Lynn Pritchard
Lead Infection Prevention & Control Nurse - South Sector
Queen Elizabeth University Hospital
Zone 2 - 1 Office Block
Govan Rd
Glasgow
G51 4TF
[redacted]

-----Original Message-----
From: [redacted]
Sent: 06 July 2017 17:21
To: Pritchard, Lynn
Subject: FW: Ward 4b En-Suite Ceiling works

Just wanted to clarify why the work was needing done in the first place?
Thanks
[redacted]

[redacted]

Sent: 13 July 2017 14:30
To: Pritchard Lynn (NHS GREATER GLASGOW & CLYDE)

Hi Lynn,

I think I missed you today went up to 4B too. Let me know when suits you to reschedule and hope you are ok.

Best wishes

[redacted]

RE: Ward 4b En-Suite Ceiling works
Pritchard, Lynn [redacted]

Sent:12 July 2017 04:46
To: [redacted]

Hi [redacted]
I have pencilled in 2pm on Thursday if that suits you.
Thanks
Lynn

Lynn Pritchard
Lead Infection Prevention & Control Nurse - South Sector
Queen Elizabeth University Hospital
Zone 2 - 1 Office Block
Govan Rd
Glasgow
G51 4TF
[redacted]

-----Original Message-----
From: [redacted]
Sent: 10 July 2017 09:21
To: Pritchard, Lynn
Subject: RE: Ward 4b En-Suite Ceiling works

Thanks Lynn just let me know and I'll come along too Best wishes [redacted]

From: Pritchard, Lynn [redacted]
Sent: 07 July 2017 17:38
To: [redacted]
Subject: RE: Ward 4b En-Suite Ceiling works

Hi [redacted]
I am going to go up to Level 4 next week if you want to join me. I need to see what rooms they are talking about.
Lynn

Lynn Pritchard
Lead Infection Prevention & Control Nurse - South Sector Queen Elizabeth University Hospital Zone 2

- 1 Office Block Govan Rd Glasgow
G51 4TF
[redacted]

From: [redacted]
To: IMRIE, Laura (NHS NATIONAL SERVICES SCOTLAND)
Cc: Dodd Susan (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE); HPSInfectionControl (NHS National Services Scotland); brian.jones[redacted]; Joannidis Pamela (NHS GREATER GLASGOW & CLYDE); angela.johnson[redacted]; Leanord Alistair (NHS GREATER GLASGOW & CLYDE)
Subject: 2017 07 27 (14:18[redacted]): HIATT RED - NHSGGC Ward 2A Royal Children Hospital
Date: 27 July 2017 14:18:00
Attachments: HAIORT 27.7.17 ward 2A Stenotrophomoans matophilia.docx

Hi Laura,

Further to our discussion, please find attached an updated HAIORT for today for the government. No real change since yesterday but probably too early to comment. At the end I've updated our case definition, please let me know if this is ok. As mentioned, this PAG occurred due to a new policy. We have had a look at previous isolates from recent months and samples are gong for typing if not already done so.

In terms of ongoing data collection/alerts pertaining to this organism on that unit, these organisms I gather should trigger as an alert on ICNET for the ICNs for high risk units such as ITUs and 2A. The new policy would trigger whenever there are two bloodstream infections with this organism within a 2 week period on this unit. Of course, given the fact that we already have two cases now on the unit we are observing carefully for any more and are awaiting typing which might take some weeks. In terms of your question about SPC charts, we currently don't have a lead ICD to get a steer but I've raised this at our IC senior management team meeting and asked for a lookback for denominator rates and some discussion as to the best way forward and am happy to feed back any further comments/guidance that you may have. I have asked our media department to provide the draft holding statement as you have requested and will forward onto you as soon as I have this.

Myself or one of my colleagues will update you tomorrow. I will not be here on Monday but this should be picked up by my ICN colleagues, I've included Prof Leanord as I gather he will be covering IC from a medical perspective on Monday just to keep him in the loop.

Kind regards,

[redacted]

From: IMRIE, Laura (NHS NATIONAL SERVICES SCOTLAND)
Sent: 27 July 2017 11:13
To: [redacted]
Cc: Dodd Susan (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE)
Subject: RE: HIATT RED - NHSGGC Ward 2A Royal Children Hospital

Hi [redacted]

I wonder if you are free to discuss around 1pm today? The HAI policy unit are looking for some further information.

Many thanks

Laura

-----Original Message-----
From: [redacted]
Sent: 27 July 2017 09:19
To: Abigail.Mullings[redacted]; HPSInfectionControl (NHS National Services Scotland); HPSOutbreakGroup
Cc: Dodd Susan (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE)
Subject: RE: HIATT RED - NHSGGC Ward 2A Royal Children Hospital

Hi Abigail,

This morning she is in 2A which is the haem/onc ward, but still under review by the PICU team just in case.

Best wishes,

[redacted]

From: Abigail.Mullings[redacted]
Sent: 27 July 2017 09:07
To: [redacted]; HPSInfectionControl (NHS National Services Scotland); HPSOutbreakGroup
Cc: Dodd Susan (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE)
Subject: Re: HIATT RED - NHSGGC Ward 2A Royal Children Hospital

Grateful if this could be confirmed asap.

Kind regards,
Abigail

Abigail Mullings
AMR & HAI Policy Unit
The Scottish Government

Blackberry: [redacted]
Email: [redacted]
Original Message
From: [redacted]
Sent: Thursday, 27 July 2017 09:06
To: HPSInfectionControl (NHS National Services Scotland); HPSOutbreakGroup
Cc: Dodd Susan (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE)
Subject: RE: HIATT RED - NHSGGC Ward 2A Royal Children Hospital

Hello,

Many thanks. I think the patient who is of concern is under review/watch by the PICU team but not in PICU yet. [redacted] had her line removed and then decomensated.

Kind regards,

[redacted]

From: HPSInfectionControl (NHS National Services Scotland)
Sent: 26 July 2017 17:30
To: HPSOutbreakGroup
Cc: [redacted]; Dodd Susan (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE)
Subject: HIATT RED - NHSGGC Ward 2A Royal Children Hospital

Dear Abigail/Alistair

Please find attached the HIATT RED assessment from NHSGGC received late this afternoon.

In summary:

- Two patients with positive Stenotrophomonas bacteraemia within Ward 2A Royal Childrens Hospital NHSGGC within 8 days
- Both cases considered to be HAI
- One patient is receiving treatment in PICU
- HIATT RED
- HPS will contact NHSGGC tomorrow am for further detail
- Holding press statement being prepared

[redacted]please advise of any errors or omissions.

Kind regards

Laura

Laura Imrie
Nurse Consultant Infection Control

HAI Team
NHS National Services Scotland
Health Protection Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow
G2 6QE

Direct Dial: [redacted]
HPS Reception: [redacted]
Web page: www.hps.scot.nhs.uk<http://www.hps.scot.nhs.uk>

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Appendix 15 –

Healthcare Infection, Incident and Outbreak Reporting Template (HIIORT)

Complete within 24 hours for all HIIAT RED and AMBER;
for HIIAT Green complete only if HPS Support requested.

Section 1 :Contact Details	
NHS Board/Care organisation	NHSGGC
Date and time of reporting	26/7/17 @ 4.30pm
Person Reporting and designation	[redacted] Susie Dodd – Lead IPCN
Telephone number and email	[redacted] Susie Dodd - [redacted]
Section 2: Infection Incident/outbreak Details	
Care facility/hospital	Royal Hospital for Children
Clinical area/ward and speciality	2A – haemato oncology
Total number of beds	25
Total number of beds occupied	
Section 3: Initial assessment	
Type: Incident/outbreak/ data exceedance e.g. Gastrointestinal, decontamination failure	2 Stenotrophomonas maltophilia bacteraemias in an 8 day period.
Infectious agent known or suspected	Stenotrophomonas maltophilia
Case definition	2 positive isolates in a sterile site or 3 colonisations within a 2 week period.
Date of first case (if applicable)	15/7/17

Total number of confirmed patient cases	Total number of probable patient cases	Total number of possible patient cases:	Total number of staff cases:
2	0	0	0

Number of patients giving clinical cause for concern as a consequence of this incident/outbreak	1
Number of deaths as a consequence of this incident/outbreak	0
Was the infectious agent cited as a cause of death on a **death certificate* (**if yes, state which part of the certificate**)**	N/A

Additional information:
e.g. closure of care area, control measures

The following actions are already in place following previous enhanced IPC input on the unit;

- Daily domestic clean of ward carried out with Actichlor plus
- Enhanced monitoring of environmental cleanliness by domestic services
- Hand hygiene audit and training (8 sessions) carried out in June 2017
- Enhanced supervision by IPCT – 3 sessions already carried out and reported back to SCN, chief nurse and general manager. In general, improvement has been noted in all sessions with only minor issues identified.
- QI group focusing on line infection in 2A. Number of interventions to be rolled out in near future including, change to aseptic non touch technique, introduction of the curos port protector, washing of patient prior to line insertion.

Following the 2 positive isolates the following additional actions have been carried out;

- Terminal clean of the 2 rooms occupied by the affected patients.
- Isolates sent for typing.
- Review of environment – enhanced surveillance session to be carried out tomorrow 27th July and action

taken where indicated.

- Parent education has been developed and will commence Monday 31st July.

Section 4: Healthcare Infection Incident Assessment Tool (HIIAT) (link to tool)		
Severity of illness	Minor/Moderate/Major	Major
Impact on services	Minor/Moderate/Major	Minor
Risk of transmission	Minor/Moderate/Major	Minor
Public anxiety	Minor/Moderate/Major	Minor
HIIAT Assessment	RED AMBER GREEN	RED

Section 5: Organisational Arrangements		
PAG/IMT meeting held	Yes	Date: 26/7/17 Chair: [redacted]
Next planned IMT	None unless patient condition deteriorates or any further cases.	Date: 26/07/17
Press statement (send with HIIORT or provide date for receipt)	Holding statement to be prepared. Date: 26/07/17	
HPS support requested	No	Date.....
Other information: e.g. decisions from IMT		

Complete this update section weekly as a minimum or as agreed with IMT and HPS for onward reporting to SGHSCD.

Section 6: Update						
On this date:	27/07/2017					
Cumulative total of confirmed patient cases	2					
Cumulative total of probable patient cases	0					
Cumulative total of possible patient cases	0					
Cumulative total of staff cases	0					
Total number of symptomatic patients today						
Number of patients giving cause for concern	1					
Total number of deaths as a consequence of the incident since last HIIORT report						
Is the ward/services closed	No					
Is a service restricted	No					
HIIAT assessment						

Organisation update certification information)	*Comments (including changes to any control measures, case definition or death)*
Date: 27/07/2017	*Case definition updated to any case of Stenotrophomonas maltophila bacteraemia attributable to ward 2A at RHC starting from our PAG on 26/07/2017*
Date:	
Date:	
Date:	
Date:	

ONCE COMPLETED, EMAIL TO: [redacted]

From:	HPSInfectionControl (NHS National Services Scotland)
To:	HPSOutbreakGroup
Cc:	Dodd Susan (NHS GREATER GLASGOW & CLYDE); [redacted]; Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE)
Subject:	2017-08-01 (14.09 Laura Imrie to Outbreak Group) FW: HIIORT ward 2A, RHC - attached
Date:	01 August 2017 14:07:45
Attachments:	HIIORT 01.08.17 ward 2A Stenotrophomonas maltophilia.docx
Importance:	High

Dear Abigail/Alistair

Please find attached updated HIIORT from NHSGGC.

In summary:

- No New cases
- One patient remains as inpatient in Ward 2A
- Patient remains under monitoring by PICU – patient's condition remains a cause for concern
- HIIAT remains RED
- Update expected tomorrow

[redacted]*/Susie please advise of any errors or omissions*

Kind regards

Laura

Laura Imrie
Nurse Consultant Infection Control
HAI Team
NHS National Services Scotland
Health Protection Scotland
4th Floor Meridian Court
5 Cadogan Street
Glasgow
G2 6QE
Direct Dial: [redacted]
HPS Reception: [redacted]
Web page: www.hps.scot.nhs.uk

Appendix 15 –

Healthcare Infection, Incident and Outbreak Reporting Template (HIIORT)

Complete within 24 hours for all HIIAT RED and AMBER;
for HIIAT Green complete only if HPS Support requested.

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Telephone number and email	[redacted] Susie Dodd - [redacted]
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Care facility/hospital	Royal Hospital for Children
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Infectious agent known or suspected	Stenotrophomonas maltophilia
Case definition	2 positive isolates in a sterile site or 3 colonisations within a 2 week period.
Date of first case (if applicable)	15/7/17

Total number of confirmed patient cases	Total number of probable patient cases	Total number of possible patient cases:	Total number of staff cases:
2	0	0	0

Number of patients giving clinical cause for concern as a consequence of this incident/outbreak	1
Number of deaths as a consequence of this incident/outbreak	0
Was the infectious agent cited as a cause of death on a **death certificate* (**if yes, state which part of the certificate**)**	N/A

Additional information:
e.g. closure of care area, control measures

The following actions are already in place following previous enhanced IPC input on the unit;

- Daily domestic clean of ward carried out with Actichlor plus
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- Hand hygiene audit and training (8 sessions) carried out in June 2017
- Enhanced supervision by IPCT – 3 sessions already carried out and reported back to SCN, chief nurse and general manager. In general, improvement has been noted in all sessions with only minor issues identified.
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Following the 2 positive isolates the following additional actions have been carried out;

- Terminal clean of the 2 rooms occupied by the affected patients.
- Isolates sent for typing.
- Review of environment – enhanced surveillance session to be carried out tomorrow 27th July and action

taken where indicated.

- Parent education has been developed and will commence Monday 31st July.

Section 4: Healthcare Infection Incident Assessment Tool (HIIAT) (link to tool)		
Severity of illness	Minor/Moderate/Major	Major
Impact on services	Minor/Moderate/Major	Minor
Risk of transmission	Minor/Moderate/Major	Minor
Public anxiety	Minor/Moderate/Major	Minor
HIIAT Assessment	RED AMBER GREEN	RED
Section 5: Organisational Arrangements		
PAG/IMT meeting held	Yes	Date: 26/7/17 Chair: [redacted]
Next planned IMT	None unless patient condition deteriorates or any further cases.	Date: 26/07/17
Press statement (send with HIIORT or provide date for receipt)	Holding statement to be prepared.	Date: 26/07/17
HPS support requested	No	Date.....
Other information: e.g. decisions from IMT		

Complete this update section weekly as a minimum or as agreed with IMT and HPS for onward reporting to SGHSCD.

Section 6: Update						
On this date:	27/07/2017	28/07/2017	31/07/2017	01/08/2017		
Cumulative total of confirmed patient cases	2	2	2	2		
Cumulative total of probable patient cases	0	0	0	0		
Cumulative total of possible patient cases	0	0	0	0		
Cumulative total of staff cases	0	0	0	0		
Total number of symptomatic patients today	1	1	1	1		
Number of patients giving cause for concern	1	1	1	1		
Total number of deaths as a consequence of the incident since last HIIORT report	0	0	0	0		
Is the ward/services closed	No	No	No	No		
Is a service restricted	No	No	No	No		
HIIAT assessment	Red	Red	Red	Red		

Organisation update certification information)	*Comments (including changes to any control measures, case definition or death)*
Date: 27/07/2017	*Case definition updated to any case of Stenotrophomonas maltophila bacteraemia attributable to ward 2A at RHC starting from our PAG on 26/07/2017*
Date: 28/07/2017	*Mild overall clinical improvement in patient but has been febrile. Still on ITU watch but further ITU review not needed as yet.* *Case definition updated to any case of Stenotrophomonas maltophila bacteraemia attributable to ward 2A at RHC starting from 13/07/2017*
Date: 31/07/2017	*Review of remaining inpatient this morning on ward round by Dr Brenda Gibson and HIIAT assessment carried out between Dr Gibson and Lead IPCN Susie Dodd in the absence of site ICD. Patient has remained very unwell over weekend and required review by PICU 3 times overnight. She has greatly reduced cardiac output and is too unstable to have her CVC re-inserted (line was pulled as a result of Stenotrophomonas bacteraemia on 25/7/17). Without a CVC she cannot be managed in PICU and as a result is being very closely monitored on ward 2A. Remains febrile and on IV antibiotics.*

Date: 01/08/2017	*Patient giving cause for concern was reviewed by medical staff this morning and HIIAT assessment reviewed by clinical team and ICD ([redacted]). Patient's condition has changed very little since yesterday. Remains under PICU observation, remains febrile and in heart failure. HIIAT will be re-assessed tomorrow.*
Date:	

ONCE COMPLETED, EMAIL TO: [redacted]

RE: Triggers

Walsh, Tom [redacted]

Fri 16/03/2018 11:23

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

I'm free now will I call you?

T

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 16 March 2018 11:21
To: Walsh, Tom
Subject: [ExternaltoGGC]Fw: Triggers

Hi - I need to chat to you about the email trail below , its concerns me
T

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Kerr, Ann
Sent: 04 August 2017 08:16
To: McNamee, Sandra; Dodd, Susie; IC Data Team; Joannidis, Pamela
Subject: RE: Triggers

Sure

Data Team - please action.

Ann

From: McNamee, Sandra
Sent: 03 August 2017 20:41
To: Kerr, Ann
Subject: Fw: Triggers

I need to have a look at some SPCS for the children's Hospital and NICU at the southern. I know you did one for CNS for me could we do one for CNS in NICU PICU and the list environmentals Pamela did the other day for NICU, PICU, Susie can you think what you would need for 2a - the triggers are too sensitive we would now be up to 4 greens and one red for this site and nothing for the rest. Sandra
PS only HAI cases that's what we do with CDI and MRSA
Sent from my BlackBerry 10 smartphone on the EE network.

From: Dodd, Susie [redacted]
Sent: Thursday, 3 August 2017 17:33
To: McNamee, Sandra
Subject: Re: Triggers

I'm thinking the very same thing! Either there's a big problem in RHC or the triggers are too sensitive.

Steno x2 infections 2A RED
Pseudo x2 in PICU GREEN
Staph capitis x4 in NICU GREEN
And now steno x3 colonisations in NICU GREEN

Also, Kathleen emailed with 3 pseudo in NICU late this aft. [redacted] responded talking about PAGs but we don't even know if they are HAIs yet. Will review tomorrow.

Susie

Sent from my BlackBerry 10 smartphone on the EE network.

From: McNamee, Sandra
Sent: Thursday, August 3, 2017 5:17 PM
To: Dodd, Susie
Subject: Triggers

I will ask Ann Kerr to set up SPCs for your high risk units these triggers as is seem to be too sensitive.? The HIIAT report for Monday has three greens and one red for RHC and nothing anywhere else - just can't be right - sure you and your team are under pressure too. Sandra
Sent from my BlackBerry 10 smartphone on te EE network.

FW: Triggers

Inkster, Teresa [redacted]

Fri 24/07/2020 10:54

To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

From: Devine, Sandra
Sent: 17 March 2018 10:50
To: Walsh, Tom [redacted]; Inkster, Teresa [redacted]
Subject: FW: Triggers

Hi Both
Thought it would be useful to list the GREEN HIIATs reported from september to let you see the types of things that were having PAG/IMTs and being reported up to HPS.

1/12 PICU 3 cases of SSI acinetobacter also reported 15/11 as two cases
13/10 Ward 3a RHC three colonisations with acinetobacter
13/10 NICU two cases of colonisation with acinetobacter
14/09 NICU3 cases of e.coli (gent res) in respiratory samples
27/10 NICU case of aspergillus
15/1 PICU three cases of acinetobacter colonisation
15/1 NICU 4 cases of staph capitis Nov, Dec, 3 colonisations and one infection
2/2 Cupravadis associated ? aseptic unit – new case in BC

I haven't listed the HIIATs assocated with flu, rotavirus etc
Kind regards
Sandra

From: Walsh, Tom
Sent: 16 March 2018 11:42
To: Inkster, Teresa (NHSmail)
Cc: Joannidis, Pamela; Devine, Sandra
Subject: RE: Triggers

Hi Teresa

As per our call I agree, in light of current issues in ward 2a RHC it would be helpful to understand the background/ context to any changes to the triggers last August.

We can discuss this next week with Sandra and Pamela.

Kr

Tom

41+42. email

Julie Rothney

From: Walsh, Tom
Sent: 18 August 2017 14:27
To: Peters, Christine; Jones, Brian; [redacted]; Powrie, Ian
Cc: Harkness, Anne
Subject: RE: South Glasgow Weekly Report 18/08/17

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Christine,

Thank you for your email.

Please be assured that IPC have these matters in hand.

Kind regards,

Tom Walsh, Infection Control Manager
Sandra McNamee, Associate Director of Nursing (IPC)
Prof Brian Jones, Head of Microbiology.

From: Peters, Christine
Sent: 18 August 2017 12:08
To: Jones, Brian; Walsh, Tom; [redacted]; Powrie, Ian
Subject: FW: South Glasgow Weekly Report 18/08/17
Importance: High

Hi Tom,

I note from the south weekly report that there is work ongoing in 4B.

Is this in order to upgrade the facility to BMT level protection for patients? Have HPS/HFS approved the final plans? Just before Teresa went off ill she informed me that she was awaiting sign off of the plans from HPS and that she was not happy to sign off herself given her repeated concerns about the design. Who has taken responsibility from ICD point of view to sign off?

Currently [redacted] does not have access to the plans and while he was requested to walk around the site he does not have access to the information regarding the background to these works.

This seems to be an astonishing repition of the situation that Teresa and myself found ourselves in where we were expected to give advice without adequate information and I am sure you will agree is not acceptable.

Please can you give reassurance that the pocess of upgrading of 4B has been fully approved and signed off by ICT and deliniate the extent of responsibility that [redacted] now has in giving ICD input into the ongoing work and how he will be fully appraised of all information pertaining to this work.

regards,

Christine Peters

From: Gallagher, Fiona
Sent: 18 August 2017 10:47
To: Bagrade, Linda; Balfour, Alison; Hamilton, Pauline; IC Data Team; Khanna, Nitish; Lang, Ann; Leanord, Alistair; Macleod, Mairi (NHSmail); McNamee, Sandra; Joannidis, Pamela; Redding, Penelope; Walsh, Tom; Weinhardt, Barbara; Wright, Pauline; Inkster, Teresa (NHSmail); Peters, Christine; 'Huma Changez'; Marek, Aleksandra; [redacted]; Jamdar, Saranaz; Hasnie, Sulman; Valyraki, Kalliopi
Cc: Barmanroy, Jackie; Kelly, Allana; MacLeod, Calum; McConnell, Donna; Pritchard, Lynn; Pugh, Claire; Singh, Sofie; Walker, Janice
Subject: South Glasgow Weekly Report 18/08/17

Good Morning,
Please find attached the weekly report for the South Glasgow Sector.

Kind Regards,
Fiona

Fiona Gallagher
Infection Prevention & Control Nurse
Queen Elizabeth University Hospital
☎: [redacted]

Julie Rothney

From: Peters, Christine
Sent: 23 August 2017 16:40
To: [redacted]
Cc: flogar[redacted]
Subject: RE: Request

Dear [redacted]

Thank you for your email, and please be assured that I will take forward your request urgently with Prof Brian Jones as Head of Service .

I can appreciate the pressure you have been under and I hope we can find a constructive way forward for both clinical sessions and infection control.

Kind regards,

Christine
Dr Christine Peters
Consultant Microbiologist
Head of Department Clinical Microbiology Queen Elizabeth University Hospital, GGC Ex[redacted]
Mobile: [redacted]

-----Original Message-----
From: [redacted]
Sent: 23 August 2017 16:33
To: Peters, Christine
Cc: flogar[redacted]
Subject: Request

Hi Christine,

I would be most grateful if it would be possible to request an urgent job plan review with a view to relinquishing my infection control sessions for clinical work instead which has been understaffed. This is on the basis that since Teresa has left, there has been a clear gap in the leadership structure of IPC and although we have all been working very hard, I am not comfortable with much of the work that fell under her remit of lead, regional and paediatric ICD. I feel as though I am coming into conflict with IC management on various issues, and there is clearly a lot of backstory behind much of the work that Teresa did which I am not fully appraised of. In addition I have not at this stage built up the expertise that she had. Of course, there may be other ICDs who are more than happy to undertake Teresa's work and I in no way wish to criticise or pose an impediment to anybody. I have copied in a member of the BMA team just to keep them informed.

With many thanks,

[redacted]

From:	Cameron, Rosie
To:	Cameron, Rosie
Subject:	FW: question 6.16 timeline
Date:	13 May 2022 14:08:38

From: Peters, Christine
Sent: 21 September 2017 17:18
To: Armstrong, Jennifer [redacted]
Subject:

Dear Dr Armstrong,

Thank you for your response to my email from 23rd August, dated 03/09/17.
I have taken time to reflect on your response and , as you are no doubt aware, the QEUH ICDs sent a joint email to the ICSMT identifying a number of concerns they had on 1/09/17, despite the meeting with the ICDs and SMT which you referred to . I have awaited the outcome of further discussions and delayed response to allow a bedding in period for the interim arrangements for the ICDs.
I still have the following concerns:

- The ICDs roles and responsibility are still unclear – I attach an email trail which demonstrates this.
- With regard to 4B
    a. I do not accept that [redacted] was in receipt of the critical information that he needed to do his job properly when he was involved in the HAISCRIBE – a situation which should not have arisen and placed him in an entirely intolerable and professionally compromised position. Furthermore Dr Inkster was quoted as having approved the document which was not the case. Had I not intervened despite not being an ICD, the work would have gone ahead that would have put patients at risk by effectively turning off their ventilation. The real issue here is poor process and lack of timely and relevant communication within the IC team. I do not have confidence that this root issue has been dealt with.
    b. With regard to water safety, maintenance assurances are not adequate for the commissioning of a new unit that will house high risk patients, water sampling will be necessary.
    c. The validation of the ventilation is not the issue, the *commissioning* of the Unit is. This is where the problems with regard to the QEUH went wrong at the outset – eg the Theatre suite, the isolation rooms, 4B , Schallion, decontamination rooms, the ventilation through out the building as well as 5C – the ID unit. I am glad that external experts will be involved and will be interested to see if they reach different conclusions from Teresa and I.

I have previously raised my concerns regarding infection control through the IC SMT , the AICC, and the Acute clinical governance committees when I was ICD. When I felt that my concerns were not being taken forward , on advice from GMC , MDDUS and BMA I raised issues with my line managers and then higher up the organisation, including a joint letter to Dr Dave Stewart with Teresa two years ago, as well as a full document regarding *M abscessus* at the start of this year which I believe was escalated to yourself. Finally the current correspondence was encouraged by the ICSMT .
My biggest concern is not one I can raise through the usual committees, but one I believe to be the root cause of much that is dysfunctional in infection control. It is a stark fact that in the space of 2 years there have been no less than 5 ICDs , all Consultant Microbiologists at QEUH who have resigned /attempted to resign from their positions and have each cited internal issues within the

IC team as reasons for this including a culture that lacks transparency and accountability and that they have felt professionally undermined and compromised. This raises a very acute problem in that currently I have only one consultant - Dr Balfour - who is willing to place themselves in this position – and even she is not happy to be doing anymore than a single session in partnerships only. I do not accept that the problem lies with the Microbiologists, each of whom are experienced and well respected Microbiologists with excellent track records. It pushes plausibility to consider a mass incompetence or "acopia" on behalf of all these Consultants, rather I think their views need to be fully listened to in order to find a sustainable way forward. I understand that Prof Jones is aiming to have a meeting with Microbiologists in October to look at Microbiology input into Infection control which I look forward to and fully support him in this. However this is only part of the equation. It is clear to me that the current SMT set up is not conducive to the running of an effective and efficient IC service in an organisation this size and I am not alone in this opinion.
I am happy to discuss any on this with you further if you think that would serve a useful purpose, and I can assure you that as far as I am able I will continue to use my Medical and Microbiology training and experience for improved patient outcomes and will always raise concerns if I think patient safety is at risk in line with GMC guidance.
Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Head of Department Clinical Microbiology
Queen Elizabeth University Hospital,
GGC
Ex [redacted]
Mobile: [redacted]

From: McCamley, Pamela **On Behalf Of** Armstrong, Jennifer
Sent: 03 September 2017 19:12
To: Peters, Christine
Cc: Armstrong, Jennifer
Subject: RE: Infection Control and the work on 4B for BMT

Dear Dr Peters

Thank you for your email of 23rd August regarding the planned works in ward 4B at QEUH.
The NHS GGC Board has oversight of the works progressing in ward 4B QEUH. The proposals for the service were developed as a result of a review of options which were evaluated by a multi-speciality team including representatives from the IPCT. A detailed risk assessment formed a key part of this process and this resides on the Regional Services Risk Register. I can assure you that patient safety was the paramount consideration during this process, and that the NHS Board acts upon the recommendations made by the clinical and managerial teams who have primary responsibility for these patients. The future of this clinical service will be fully discussed and monitored through the Regional Services and Acute Clinical Governance Committees and progress reviewed at both Acute and Board Infection Control Committees.
Prof Jones, Tom Walsh, Isobel Neil and Sandra McNamee have been working to ensure the appropriate and sustainable provision of ICD cover across NHSGGC. I note that the service has been under pressure due to the unfortunate absence of Dr Inkster as Lead ICD and I am grateful to those contributing to the work of the IPCT in very trying circumstances. I am advised that the IPCT Senior Team have met with the ICDs to review commitments and provide reassurance around accountability and escalation procedures. Once agreed these arrangements for the IPC Team members will be clearly communicated to all relevant members of the IPC and

Microbiology Management and Clinical Teams.
I am aware that [redacted] had been involved in the HAI Scribe process for these works during June and July 2017 and that Prof Jones arranged the urgent meeting to address an aspect of ventilation control which was subsequently identified on Friday 24th August. I am further advised that Prof Jones will lead the ongoing process relating to the building and commissioning works, including environmental testing in ward 4B from a coordinating ICD perspective and that expertise from other GGC colleagues, HPS and HFS will be sought where required.
As the lead microbiologist for the national allograft programme, Prof Jones will continue to liaise with clinical colleagues on the issues of chemoprophylaxis and monitoring of patients for IFD.
With reference to the Estates element of ward commissioning arrangements, I understand you received a full response on 24th August to the questions you posed at the meeting. As part of this response estates colleagues have confirmed that a full validation and verification exercise around air changes and, where required, pressures within Ward 4B will be undertaken in accordance with SHTM03-01. This action will be managed in accordance with the agreed and final plan of work and copies of the validation reports will be made available to the coordinating ICD.
The response also confirms that a survey of QEUH was undertaken where rooms fitted with dialysis points were reviewed. For clarity and assurance Ward 4B was included within that survey and there was no evidence of leakage or mould growth found within the cavity space. They have also indicated that water quality should not be an issue within this area as a robust planned maintenance schedule is in place supporting the water assets in compliance with SHTM04-01.
Finally, we are awaiting a report from Health Protection Scotland regarding the status of the isolation rooms in ITU. A patient pathway for highly infectious respiratory pathogens has been agreed and implemented in the interim.
I hope the above provides the clarification and assurance you are seeking; if you have further concerns I would encourage you raise these through the appropriate clinical and governance systems and committees.
Kind regards
Jennifer

Dr Jennifer L Armstrong
Medical Director
NHS Greater Glasgow and Clyde

From: Peters, Christine
Sent: 23 August 2017 16:24
To: Armstrong, Jennifer
Subject: Infection Control and the work on 4B for BMT
Importance: High

Dear Dr Armstrong,
I am writing to you with regard to the planned works to 4B at the QEUH.
I became aware on Friday that this work was planned to commence on Monday 21/08. I also received a handover from Teresa regarding the project for me to follow up with infection control . The work was put on hold as it transpired that there had not been ICD sign off of the HAISCRIBE and substantial gaps in information were identified. Brian Jones chaired a meeting this morning which I was invited to and I expressed a number of concerns that I have regarding this work which he asked me to put in writing to yourself.
My concerns are:

1. There is currently no clarity regarding the division of ICD responsibilities between the ICDs. [redacted], Pepi and I have repeatedly requested this in writing from the IC SMT and have not had a response. This is particularly important with regard to the large volume of work

that Teresa was undertaking in her lead role. A direct result of this dubiety is the situation we now find ourselves in with regard to 4B works. [redacted] was expected to sign off a complex piece of work with insufficient information and also had been (verbally) assured repeatedly that Teresa high end jobs would not be his responsibility including "ventilation issues". Given the history of this building with regard to IC sign off it is astonishing to me that we are once again in a position where pressure is being put on an ICD to sign off without information or the clear and helpful backing of the SMT and without knowing what their level of responsibility is for this work. There is obvious danger in having two ICDS unsure of what areas they cover and from a contractual point of view it is not clear what sessional commitment they have.

2. With regard to the HIASCRIBE itself – there are basic flaws in the planned risk mitigation to a Class III/IV work:
    - Moving immune –compromised patients into an area adjacent to work where a high level of dust generation is expected in an area where negative pressure cannot be achieved – this is in contravention of HAISCRIBE recommendations and is now being addressed.
    - a lack of detailed planning around patient movements and impact of changes to the ventilation throughout the phased work potentially exposing high risk patients to changes in ventilation parameters that had not been assessed – eg going down to 1 air exchange per hour which would be unacceptable for any patient group, never mind those at high risk of airborne infection.
    - No mention of critical issues in the unit with regard to water quality, Dialysis points leaking (as in ITU) and prep room ventilation
    - Over all lacked a detailed understanding of the process of the work and impact on patient group.
    - There is no clarity about the commissioning process once the work is completed who , what, when , how?
3. The entire premise of the nature of the work that is being carried out is flawed:
    - I have been told repeatedly that this is a Board decision and the work WILL go ahead as, to summarise, a risk assessment has pitted IC risks against clinical risks and the latter outweighs the former. This worries me as I do not believe infection control risk mitigation is mutually exclusive of clinical risk, rather it is inherent in patient care to prevent infection, particularly when there are longstanding standards that ought to be met , especially in a brand new building.
    - As this is a Board decision, it is vital that at this stage that there is a clear process of how the Board anticipate commissioning of the unit is to be carried out - this must (and does not currently) involve looking at water quality, dialysis points, agreed environmental testing baselines, actions to be taken in the event of failures and a very detailed Board risk register entry regarding the sub optimal status of the ventilation parameters and a clear decision regarding the proposed use of Antifungal s and bio markers as a replacement for building/engineering controls.
    - Two years ago I walked into ward 4B which was housing BMT patients and I rapidly identified that the environment was not protective for them and air sampling confirmed this (importantly not the other way round as has been the impression given in many documents since). This was after 1 million pounds was spent on the unit to ensure it was made suitable for this patient cohort. I made a table of recommendations, which frankly is not far from the document produced by HPS

after a lot of time, and a second amount of money was spent on the unit which still did not achieve an adequate change in the facility to enable IC sign off. We now have an idea that by changing the ceilings in the bathroom , not altering the ventilation and then doing base line testing we will have achieved a substantive change. We will not.

- There needs to be concurrent progress with regard to the levels of protective ventilation achieved in the ICU where these patients are also housed, I have not seen any evidence that this has progressed and neither can anyone in the team advise whether this is in hand or not.

  In conclusion Dr Armstrong, I am fully aware that I am no longer an ICD, and that there are documents/decisions that I am not aware of. However the handovers from Teresa, my direct experience over the last 3 days in supporting [redacted] as his line manager and conversations and lack of information from the ICT, as well my history within this organisation of having raised patient safety concerns related to infection control , mean that I feel that it is my GMC duty to raise my concerns with you as the Medical Director and Lead for HAI within GGC.

  Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Head of Department Clinical Microbiology
Queen Elizabeth University Hospital,
GGC
Ex [redacted]
Mobile: [redacted]

RE: Neutropenics 4B

Powrie, Ian [redacted]
Tue 23/01/2018 09:24

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];Peters, Christine [redacted];Jones, Brian [redacted]
Cc:McQuaker, Grant [redacted];Morrison Anne (NHS GREATER GLASGOW & CLYDE) [redacted];Neil, Isobel [redacted];Devine, Sandra [redacted];Walsh, Tom [redacted]; [redacted]

Hi Teresa,

Unfortunately I was not party to the debate below, however for Clarity all patient rooms within the QEUH Adult & Children's hospitals have taps with flow regulators on the outlet that cannot be removed without introducing other complications, therefore these need to be monitored for Pseudomonas in all high risk patient areas as per the Risk assessment carried out by myself, Sandra Devine and John Green at the time flow regulator issue was first raised, the Pseudomonas guidance was amended by HPS\HFS to acknowledge this issue.

Until now 4b has been occupied by a low risk patient group therefore the ward has not been monitored for Pseudomonas during that time, the monitoring regime will be implemented to meet the Board Policy for the High risk patient group for both Pseudomonas and Legionella in parallel to the TMT maintenance programme.

Regards

Ian

I. Powrie
Deputy General Manager (Estates)

Queen Elizabeth University Hospital Campus
1345 Govan Road
Laboratory Medicine & FM Centre
Glasgow
G51 4TF

PA Elaine McNeil: [redacted]
Direct : [redacted]
Internal [redacted]
Mob: [redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 23 January 2018 09:00
To: Peters, Christine; Jones, Brian
Cc: McQuaker, Grant; Morrison, Anne; Neil, Isobel; Devine, Sandra; Walsh, Tom; [redacted]; Powrie, Ian
Subject: [ExternaltoGGC]Re: Neutropenics 4B

Thanks Christine.
Is there anything I need to take forward?
Re Pseudomonas water testing , as per the NHSGGC water policy and HPS guidance we would not routinely test for Pseudomonas unless the taps have flow straighteners - Ian , can you clarify?

We should be testing for Legionella as per GGC policy regardless of robust maintenance schedules .This is a high risk patient group and we do not have the same control systems in QEUH as the Beatson. We should have this underway prior to BMT patients moving in so that there is time to address any issues.

KR
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Peters, Christine [redacted]
Sent: 12 September 2017 10:32
To: brian.jones[redacted]
Cc: McQuaker, Grant; Morrison Anne (NHS GREATER GLASGOW & CLYDE); Neil Catherine (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE); Walsh Thomas (NHS GREATER GLASGOW & CLYDE); [redacted]; INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: RE: Neutropenics 4B

Hi Brian and Sandra,

Thanks for your response to the issues raised. As discussed with Brian, my concern is to have a clearly communicated stratification of at risk patients within the QEUH and a clear understanding of the parameters of the accommodation we have available in order to best facilitate risk mitigation for our patients. This is in line with JACIE standard B2.1:

"*If non-HEPA filtered rooms are used for lower risk patients or if there is a shortage of HEPA filtered rooms, the SOP(s) on infection control, bio safety, and chemical and radiological safety should indicate how allocation of rooms Is prioritised. Further, auditing of airborne microbial infections in non-HEPA rooms should be performed as part of the QM Program*"

We need to be talking the same language and "protective isolation" is a term that clearly has different meanings to different people. I would only use this term when referring to protection from airborne infections by specialist ventilation in addition to Transmission Based Precautions. I presume when referring to all patients being in "protective isolation" this refers simply TPBs in a single room. These are not equivalent.

With regard to water testing - as pointed out previously when high risk patient groups are involved , the Board Water Policy on pseudomonas will need to be followed.

As agreed I will take this forward with the local team and will contact Anne Morrison separately in order to fully understand what the current situation is.

I copy Teresa in so that on her return she will be able to catch up on these discussions that have involved her directly,

kind regards,

[redacted]

Dr Christine Peters
Consultant Microbiologist
Head of Department
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

From: Jones, Brian
Sent: 30 August 2017 10:47
To: Peters, Christine
Cc: McQuaker, Grant; Morrison, Anne; Neil, Isobel; McNamee, Sandra; Walsh, Tom
Subject: FW: Neutropenics 4B

Christine,

Please see responses to the issues you raised in red below.

Brian & Sandra

From: Peters, Christine
Sent: 27 August 2017 16:19
To: Jones, Brian; McNamee, Sandra
Subject: Neutropenics 4B
Importance: High

Hi Brian,

I went up to 4B today and it seems that there are severely neutropenic patients housed on the ward today.

A couple things about this:

1. What were the parameters agreed to for these patients to move into the ward prior to moving? How was this agreed? Only Teresa can answer this question. We are unaware of the contents of any conversations Teresa may have had with the clinical and managerial teams.

2. I had previously understood that only **non -transplant** haem-onc patients were accomodated at QEUH - [redacted]. Are transplants occuring at QEUH site? We have contacted Grant McQuaker who responded: "These are melphalan only autografts which are the lowest risk and are managed as out-patients in many centres, something we are looking at doing ourselves. They are v low risk and there have never been any concerning infective issues with these patients or the more immunosuppressed and more prolonged myelosuppressed acute leukemia patients that are also managed on QE site."

3. Is there a policy regarding when patients are transferred into protective isolation depending on neutrophil count and is this the same north and south? There is no policy that the IPCT are aware of. This would be lead by Haematology colleagues if they felt it was required. All patients are managed as though they are in protective isolation.

4. Regarding the water - while the system is under routine maintainance - I do not think water testing has been carried out which had been planned as there is a history of legionella in the building water supply, prior to haem onc patietns being admitted. As previously confirmed by estates colleagues "Water quality should not be an issue within this area as a robust planned maintenance schedule is in place supporting the water assets in compliance with SHTM04-01".

Most importantly as do we have any data on fungal infections in the haem-onc setting over the past 2-3 years in terms of incidence and timing of infections?

Brian with your involvement at the MDTs and as MIcrobiology Lead for BMT in Scotland, are you aware of any systematic process for monitoring infections post SCT and whether you have noticed any fungal infections in the QEUH patients?

All infections are discussed by the clinical teams at the relevant quality meetings. Our last formal audit in the allograft population showed an IFD rate of 0% (using EORTC definitions). No other specific issues with infection have been brought to my attention.

regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Head of Department
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

Fw: handover

INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]

Fri 12/01/2018 14:22

To: Peters, Christine [redacted]

Sent from my BlackBerry 10 smartphone on the EE network.

From: Devine, Sandra [redacted]
Sent: Friday, 12 January 2018 2:08 PM
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE); brian.jones[redacted]
Cc: Walsh Thomas (NHS GREATER GLASGOW & CLYDE); Hamilton Pauline (NHS GREATER GLASGOW & CLYDE); MacLeod, Calum
Subject: RE: handover

Hi
Calum can you send the minutes of M Chimaera meeting.
Pauline can you send minutes of minute re M Abscessus (IPCNs do not have any outstanding actions re this).
Plans are in development re ICU rooms and these will be reviewed by HPS/HFS who are aware that we are meeting with contractors but it does look like we will be able to convert 4 rooms to negative pressure in QEUH.
Susie can you send info on 2a on please.
Lynn can you send on anything about ICE theatres or the institute (Christine will have most of this).
Ann can you send link to SSI reports.
Re decon room for CF – the last i heard the ICDs would not participate in any SCRIBE work around this so this is still outstanding we are also waiting on advice from HPS re decon of kit.
2A and 4B work is all signed off by Brian and myself and is progressing as planned.
Regards
Sandra

Sandra Devine
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 12 January 2018 12:34
To: Jones, Brian

Cc: Devine, Sandra; Walsh, Tom
Subject: [ExternaltoGGC]handover

Hi Brian,

Having had a chance to read all my emails it would be useful to have a handover on the following ;

- M Chimaera - any outstanding actions. Has ECMO sampling issue been resolved?
- M Abscessus - any outstanding actions from the IMT
- ICU Rooms - have HPS reviewed and produced a report and what is the plan moving forward
- 2A BMT
- 4B BMT
- 2A in general - line infections, outbreaks, outcome of public health input
- Neuro - SSIs, ICE theatres, water leaks
- Ortho SSIs
- CF - where are the policies at, decon of resp equipment , decon areas in adult and paeds- ? any progress
- Anything else you think is relevant

Thanks
Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

****

FW: QEUH Ward 4A validation reports

Devine, Sandra [redacted]
Tue 30/01/2018 09:42
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
fyi

Sandra Devine
Associate Nurse Director
Infection Prevention & Control
[redacted]

From: Powrie, Ian
Sent: 06 December 2017 18:32
To: 'Rankin Annette (NATIONAL SERVICES SCOTLAND)'
Cc: McColgan, Melanie; Jones, Brian; Kane, Mary Anne; Hunter, William; Gallacher, Alan; Devine, Sandra
Subject: QEUH Ward 4A validation reports

Annette,

Not sure if Ian Storrar has shared this with you (as he is now on A\L), however please find attached the air permeability and room validation test reports for ward 4b following the refurbishment works within the en-suite facilities.
The Air Permeability tests were out in line with SHPN 04-suppliment 1 (2005) guidance and not BSRIA guidance as requested within your SBAR, unfortunately the BSRIA guidance has not yet be formally issued as guidance and I did not have a copy.
I have now received this from BISRA as it is currently out for consultation.

Since completing these works the patient group has been transferred into the ward, however we are now experiencing issues with temperature control which has required further access above ceiling via access hatches under HAI SCRIBE conditions.
This has required us to close half the ward at a time to access the ceilings in each room the test and replace control valves where required, as a result we have repeated air permeability tests for this group of rooms at the BSRIA recommended 50pa, unfortunately the corridors are fitted with Ceiling Space Vent (CSV) grilles, installed under SHTM 02-01 Pt A MGPS design requirements. This second round of air permeability tests per room the increased air volume required to pressurise the room to 50 pa resulted in pulling air from the corridor and the ceiling space via the CSV's which resulted in visible dust discharge from above the ceiling in the corridor.

I have raised this matter with our Authorising Engineer (AE) MGPS with a view to removing these vents from use within this controlled environment and once I have his response will seek consent from HFS on this matter, we will then complete a risk assessment with the support of IC\ICD to justify the removal of these vents.

I have also taken this opportunity to attempt to improve on the isolation room pressure regime by installing adjustable draft control units on to the bottom of the room doors as the undercut seems to be excessive (this was highlighted as a potential during the air permeability testing). This seems to have had the desired effect but requires fine tuning to achieve control at 10pa with the alarm range 8 – 12pa the validation report will be revised to include the final pressure regime detail.

Happy to discuss this in more detail at our meeting in ward 2A on Friday.

Best Regards

Ian

[redacted]

Deputy General Manager (Estates)

Queen Elizabeth University Hospital Campus
1345 Govan Road
Laboratory Medicine & FM Centre
Glasgow
G51 4TF

PA Elaine McNeil: [redacted]
Direct : [redacted]
Internal [redacted]
Mob: [redacted]

RE: Neutropenics 4B

Powrie, Ian [redacted]

Tue 23/01/2018 09:24

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Peters Christine (NHS GREATER GLASGOW & CLYDE) [redacted]; brian.jones[redacted];

Cc:McQuaker, Grant [redacted]; Morrison Anne (NHS GREATER GLASGOW & CLYDE) [redacted]; Neil Catherine (NHS GREATER GLASGOW & CLYDE) [redacted]; Devine, Sandra [redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted];

Hi Teresa,

Unfortunately I was not party to the debate below, however for Clarity all patient rooms within the QEUH Adult & Children's hospitals have taps with flow regulators on the outlet that cannot be removed without introducing other complications, therefore these need to be monitored for Pseudomonas in all high risk patient areas as per the Risk assessment carried out by myself, Sandra Devine and John Green at the time flow regulator issue was first raised, the Pseudomonas guidance was amended by HPS\HFS to acknowledge this issue.

Until now 4b has been occupied by a low risk patient group therefore the ward has not been monitored for Pseudomonas during that time, the monitoring regime will be implemented to meet the Board Policy for the High risk patient group for both Pseudomonas and Legionella in parallel to the TMT maintenance programme.

Regards

Ian

[redacted]

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Queen Elizabeth University Hospital Campus
1345 Govan Road
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G51 4TF

PA Elaine McNeil: [redacted]
Direct : [redacted]
Internal [redacted]
Mob: [redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 23 January 2018 09:00
To: Peters, Christine; Jones, Brian
Cc: McQuaker, Grant; Morrison, Anne; Neil, Isobel; Devine, Sandra; Walsh, Tom; [redacted]

(NHSmail); Powrie, Ian
Subject: [ExternaltoGGC]Re: Neutropenics 4B

Thanks Christine.
Is there anything I need to take forward?
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Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Peters, Christine [redacted]
Sent: 12 September 2017 10:32
To: brian.jones[redacted]
Cc: McQuaker, Grant; Morrison Anne (NHS GREATER GLASGOW & CLYDE); Neil Catherine (NHS GREATER GLASGOW & CLYDE); Mcnamee Sandra (NHS GREATER GLASGOW & CLYDE); Walsh Thomas (NHS GREATER GLASGOW & CLYDE); [redacted]; INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: RE: Neutropenics 4B

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I copy Teresa in so that on her return she will be able to catch up on these discussions that have involved her directly,

kind regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Head of Department
Southern General Hospital
GGC
Ex[redacted]
Mobile:[redacted]

From: Jones, Brian
Sent: 30 August 2017 10:47
To: Peters, Christine
Cc: McQuaker, Grant; Morrison, Anne; Neil, Isobel; McNamee, Sandra; Walsh, Tom
Subject: FW: Neutropenics 4B

Christine,

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Brian & Sandra

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To: Jones, Brian; McNamee, Sandra
Subject: Neutropenics 4B
Importance: High

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All infections are discussed by the clinical teams at the relevant quality meetings. Our last formal audit in the allograft population showed an IFD rate of 0% (using EORTC definitions). No other specific issues with infection have been brought to my attention.

regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Head of Department
Southern General Hospital
GGC
Ex [redacted]
Mobile: [redacted]

BMT Unit Results meeting

9th March 18 at 11am room ED010, Beatson

Attendees:-

McColgan, Melanie (Chair) (MMcC)	General Manager CH & SOS
Myra Campbell (MC)	CH Clinical Service Manager
Teresa Inkster (TI)	Consultant Microbiologist
Peter Croan (PC)	Associate Programme Director, NSD
Colin Clarke (CC)	Health Facilities Scotland
Susan Grant (SG)	Health Facilities Scotland
Lynn Pritchard	Lead Infection Prevention & Control Nurse
Brian Jones (BJ)	Head of Service, Microbiology
Alyson McArdle (AMcA)	CH Lead Nurse
Haley Kane	Infection Control, HPS
Grant McQuaker (GMcQ)	BMTU Consultant
Ian Powrie (IP)	Deputy General Manager, Estates QEUH.
Anke Roexe (AR)	Programme Manager, NSD

Apologies:-

Mike Winter (MW)	Medical Director, Procurement Commissioning and Facilities SBU - NSS.

MMcC thanked everyone for being so flexible with their diaries to rearrange the meeting at such short notice.

Minutes of last meeting – SG made one correction prior to the meeting and minutes amended and circulated.

Background

IP gave a brief report on actions to date:

Recent enabling works completed to include new solid ceilings fitted to the en-suite facilities, heating controls rewired to eliminate control issues and door control devices fitted to improve the pressure differentials of each room to the corridor.

Air Permeability testing was carried out in accordance with HPS recommendations to adopt BSRIA air permeability standards (50 pascals). This probably created a higher air draw volume from the corridor which also pulled air from ceiling vent grills. The introduction of dust through ceiling void requires further HPS guidance for future adoption of BSRIA test methods.

MMCC confirmed that we have been using HPS' updated SBAR as guidance.

SG wanted the group to be mindful that we cannot report at this stage that results according to the SBAR are completely satisfactory. We are currently navigating through the SBAR. The group agreed with MMCC that at present we have clarity on where we are with results monitoring.

Air Particle count

TI gave the following update on the air sampling results to date:

Particle counts are mostly < 1000. Particles include bacteria, fungi, skin, dust etc . The most common reason for elevation is additional people in the room or cleaning in the vicinity, this was noted whilst testing.

Active air sampling has revealed low fungal counts including Aspergillus and Mucor – this is to be expected given the lack of a HEPA filtered corridor.

Settle plates were discontinued following discussion with HPS. This is because we are not operating to a clean room environment and we would expect to see fungus on plates after 5 hours. Continuing with this method is likely to lead to multiple interventions including moving patients in and out of rooms which would not be desirable.

The air sampling results are as expected given the unit specification. It was agreed that sampling would be repeated in 4 weeks time i.e the week commencing 2nd April 2018 and that this would be required for that one week only.

Water testing for Legionella and Pseudomonas is negative. Regular testing will be undertaken. There is a water contamination incident in ward 2A RHC with a Gram negative organism called Cupriavidus. The source has been traced to the taps and showerheads. The same taps/showerheads are in 4B therefore the same control measures will be employed. Shower heads will be changed to disposable and taps will be cleaned, disinfected and have flow straighteners replaced.

Verification reports

Prior to the meeting IP circulated various H&V validation reports from Nov 17 – Jan 18 along with RSK Air permeability reports. It is now confirmed that to complete the AHU Annual Verification report, Estates will need to shut down the plant for approx 12 hours, the patient rooms will then be tested 2 rooms at a time taking approx 1 hour each over a 4 week programme. MC and IP have agreed a programme vacating 2 rooms at a time to allow testing to be carried out.

Mobile Hepa Filtration units (IQ Air) will be brought in during this time. Estates currently own 8 units however the BMT Unit will require 25 dedicated units, one for each patient room plus one for clean prep room. These units have their own test procedures.

Critical ventilation system contingency Plan BMT

IP sent out this draft for consultation prior to the meeting. It details the contingency plan for both planned maintenance and contingency.

SG stated that the Hepa filtration units only clean existing air – they do not provide fresh air. Although in the event of a failure we could monitor CO2 levels she states that as there is no bypass there is a need for a timescale for getting more fresh air in.

IP reported that we cannot put in another air handling unit in. The turnaround for repair to the air handing unit could take in excess of 24 hours dependent on what parts are required. Estates hold critical spares.

It was agreed that the contingency plan was lacking in detail, IP and MC will review and update for circulation to the full group.

Current Situation & Next Steps

4 sets of air monitoring results are available, with the 5th set awaited. As a second cycle four weeks apart is required as per the SBAR, the next air monitoring will be carried out w/c 02.04.18 for one week only.

The group agreed that results to date would enable a recommendation to relocate back to QEUH to be made. Should the results from the week of 02.04.18 be similar, the Service will recommend relocating the BMT Unit back to QEUH.

W/c 16 April a paper including recommendations, timescales and contingencies will be emailed to the group for review and comment before sign off.

MMCC closed the meeting and thanked everyone for the time and effort that they have put into this.

BMT Unit relocation meeting

18th May 2018, Lab Building, QEUH

Attendees:-

McColgan, Melanie (Chair) (MMcC)	General Manager CH & SOS
Myra Campbell (MC)	CH Clinical Service Manager
Teresa Inkster (TI)	Consultant Microbiologist
Annie Latif	BMTU Consultant
Susan Grant (SG)	Health Facilities Scotland
Grant McQuaker (GMcQ)	BMTU Consultant
Annette Rankin	Nurse Consultant, Health Protection Scotland
Ian Powrie (IP)	Deputy General Manager, Estates QEUH.

Blip with air monitoring results discussed, several rooms with fungal counts

1st set of results - low level fungal counts in all rooms – view is operator error.
2nd set of results – fungal counts in rooms adjacent to store room.

Likely causes –

1. store room door open with air / dust going into corridor .
2. Inadequate ward cleaning.

Actions –

1. Store room door closed - sign on door to remind staff door to remain closed at all times.
2. 2 x portable IQ Air Units in store room
3. All rooms and corridors in ward deep cleaned

Outcome-
Fungal counts down – majority of rooms 0 fungal count.

Cleaning
Meeting with Karen Connelly - agreed enhanced cleaning schedules in line with current provision in Ward B8&9 . Karen acknowledged the importance of training domestic staff and ensuring continuity.

Store room
Option to improve air flow in store room discussed – explore option to add hepa filter to store room without compromising clean prep.

Contingency
We have a contingency in place for supply plant failure to rooms.

At present we have no contingency for any other failure e.g. failure of extract from corridor or en-suite. Ian Powrie advised that in this situation the patients are protected as the rooms would remain positively pressured. .
If supply goes down the alarms in the rooms will sound, they are also connected to BMS.
Recommendation is that we arrange a dynamic simulation on contingency as a desk top exercise.

Water
All outlets will have filters fitted. There will be disruption further down the line when pipework and taps require replacement.

Annual verification
As previously agreed 6 hour plant shut down, the programme will be carried out over 2 weeks closing 2 rooms at a time.

Re: SBAR October 2017 - QEUH BMTU

INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Mon 23/09/2019 09:17

To: RANKIN, Annette (NHS NATIONAL SERVICES SCOTLAND) [redacted];Devine, Sandra [redacted]

Cc: IMRIE, Laura (NHS NATIONAL SERVICES SCOTLAND) [redacted];HPSINFECTIONCONTROL (NHS NATIONAL SERVICES SCOTLAND) [redacted];RITCHIE, Lisa (NHS NATIONAL SERVICES SCOTLAND) [redacted];DODD, Susie (NHS NATIONAL SERVICES SCOTLAND) [redacted]

Hi Annette,

Apologies for the delay, I am just back from annual leave today

At the time this SBAR was issued I was off on long term sick leave (June 2017-Jan 2018) . I assume this SBAR was issued to Prof Brian Jones, the covering ICD and senior IC colleagues in my absence.

Sign off, of the ventilation spec and review of validation reports was undertaken whilst I was away. If there are any questions regarding the ventilation recommendations I would suggest contacting Brian.

At the time I came back air sampling was underway, so I can comment on that part. I can confirm the recommendations for air sampling were met . Passive sampling was included initially but was not found to be helpful and it was discontinued following discussion at a meeting with HFS and HPS colleagues.

Annual validation was undertaken in July on the unit

Kind regards
Teresa

Dr Teresa Inkster
Consultant Microbiologist, QEUH
National Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Devine, Sandra [redacted]
Sent: 18 September 2019 14:11
To: RANKIN, Annette (NHS NATIONAL SERVICES SCOTLAND); INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE); teresa.inkste[redacted]
Cc: IMRIE, Laura (NHS NATIONAL SERVICES SCOTLAND); HPSINFECTIONCONTROL (NHS NATIONAL SERVICES SCOTLAND); RITCHIE, Lisa (NHS NATIONAL SERVICES SCOTLAND); DODD, Susie (NHS NATIONAL SERVICES SCOTLAND)
Subject: RE: SBAR October 2017 - QEUH BMTU

Hi Annette
I have passed onto Teresa she was the Lead ICD at the time of the commissioning of the updated BMTU and she should have this info unfortunately Tom is on A/L and I don't have info on this.
Thanks
Sandra

Sandra Devine
Acting Infection Control Manager
NHS Greater Glasgow & Clyde
[redacted] (PA Ann Lang)
[redacted]

From: RANKIN, Annette (NHS NATIONAL SERVICES SCOTLAND) [redacted]
Sent: 18 September 2019 12:42
To: Devine, Sandra [redacted]
Cc: IMRIE, Laura (NHS NATIONAL SERVICES SCOTLAND) [redacted]; HPSINFECTIONCONTROL (NHS NATIONAL SERVICES SCOTLAND) [redacted]; Ritchie, Lisa (NHSmail) [redacted]; DODD, Susie (NHS NATIONAL SERVICES SCOTLAND) [redacted]
Subject: [ExternaltoGGC]SBAR October 2017 - QEUH BMTU

Hi Sandra
In October 2017 HPS produced an SBAR relating to ward 4b adult BMT (attached). The HAI policy unit have been in touch and are looking for an update on all recommendations within this SBAR. Can you confirm the status for each recommendation (completed/not completed/in progress)

Many thanks

Annette

46. record of event

Julie Rothney

From: Peters, Christine
Sent: 28 August 2017 12:34
To: Peters, Christine
Subject: record of event

I am writing in the aftermath of a very unpleasant situation. At this moment I am shaking and feeling a little shell shocked.

I had asked Brian Jones as HOS for a meeting with the QEUH consultants as all the team were concerned regarding infection control provision.

He did not reply to this. I had emailed him about matters of great concern regarding patient safety and again no reply over the weekend.

This morning I saw him in the corridor and politely asked if he had a minute to discuss some things , he did not look at me and walked past, saying "no actually I don't this morning" and walked down to Alisdairs room. I then went into the duty room and [redacted] came up to me and he was shaking and upset and said BJ had just asked to speak to him alone. [redacted] was very uncomfortable to do this, he had recently told me that he felt bullied and intimidated by Brian. I suggested that we all meet with Brian to try to sort out the situation with regard to infection control.

AS Brian had told me he had no time and yet he had asked to see [redacted] , I requested by email that we have a meeting all together.

I saw him come up to the duty room and walk away, I went after him and said to his disappearing back Brian, do you have a moment the library is free. HE turned on his heel (he was near Als door) and pointed his finger at arms length and shouted with aggression and anger "Don't you dare send me an email like that again". I was shocked but said, I will send whatever email I like Brian, I withdrew in to the duty room and sat down stunned and said to Nitish and Pepi, he's just yelled at me in the middle of the lab. Then Pauline came in and said Brian is coming up, so I went out to the corridor again.
At this point he came up striding to where I was standing by the duty room and shouted with finger pointing at my head "I want to talk to you ALONE". I said No brian I am not willing to do that now, and there was a point at which I felt he was about to grab my arm and drag me into a room to yell at me, and I stepped back. He said "what the hell do you think you are doing " and violently pushed the door in the corridor open and pushed it back on me and stormed to the entrance to the lab, where upon he left the department.

I turned round and returned to the duty room. My colleagues quickly realised I was shaken and they kindly took me to a separate office and gave me sweet tea to drink. This all happened around 12 pm today 28/8/2017.

[redacted]
Dr Christine Peters
Consultant Microbiologist
Head of Department Clinical Microbiology
Queen Elizabeth University Hospital,
GGC
Ex[redacted]
Mobile: [redacted]

From:	Armstrong, Jennifer
To:	Shariff, Imran
Subject:	FW: Infection Control - Meeting on Wednesday 4th October 2017 @8am
Date:	18 April 2022 13:36:35
Sensitivity:	Confidential

From: Redding, Penelope
Sent: 03 October 2017 13:11
To: Armstrong, Jennifer [redacted]
Cc: Green, Rachel (NHSmail) [redacted]
Subject: RE: Infection Control - Meeting on Wednesday 4th October 2017 @8am
Sensitivity: Confidential

Dear Jennifer,

Thank you for arranging the meeting tomorrow and taking my concerns so seriously. I am in the process of working on the documentation you have requested with Dr Peters and [redacted].

This will be an SBAR, as requested. Dr Peters still has to format it. I do not have the IT skills to do this.
It covers a number of areas of concern, but is not comprehensive. Tomorrow it will not be possible to discuss in depth all the concerns. I only feel able to go through the document and ensure that everyone understands the issues and have the opportunity to clarify any items that are not clear.

People will then be able to collect information and evidence so there is an understanding of the background, where we are at present, what remedial actions are planned and what needs to be planned for.

I never expected everything to be resolved in one meeting, which is why I had hoped to have a preliminary discussion with a smaller group.

I would hope that another meeting could be arranged within a couple of weeks to have a status report of what progress was being made and ensure that everyone is heading in the right direction to ensure a positive outcome. I am aware that there is a lot happening in the background and hope that this momentum can be maintained. At this stage a decision can be made as to the best way forward.

I hope that everyone feels able to make a positive contribution to the meeting.
I welcome the opportunity to contribute towards achieving the highest possible standards in patient care and services.

Kind Regards

Penelope

From: McCamley, Pamela
Sent: 29 September 2017 16:11
To: Redding, Penelope
Subject: RE: Infection Control - Meeting on Wednesday 4th October 2017 @8am
Importance: High
Sensitivity: Confidential

Dear Dr Redding

I am now able to confirm that the meeting on **Wednesday 4th October 2017** will take place in **Room LO2-001, Teaching & Learning Centre, QEUH.**

Kind regards

Pamela

From: McCamley, Pamela
Sent: 28 September 2017 17:49
To: Redding, Penelope
Cc: McCamley, Pamela
Subject: RE: Infection Control
Importance: High

SENT ON BEHALF OF DR ARMSTRONG

Dear Dr Redding

Thank you for your further e-mail.

I agree with your suggestion that a meeting should be arranged, and having had some initial discussions about your e-mails, had been planning to meet with you, along with some key staff so that we could clearly understand the issues of concern. I am therefore happy to set up a meeting with you, Dr Peters and [redacted], along with senior members of the Infection Prevention and Control Team, Dr Rachel Green, Chief of Medicine for Diagnostics, Jonathan Best, Acting Chief Operating Officer for Acute Services, Facilities/Estates Management colleagues and Dr Margaret McGuire, Nurse Director.

I have noted your availability to meet and am grateful to you for your flexibility around that. I have therefore arranged this meeting for **Wednesday 4th October 2017, from 8am – 10am**; and given the urgency of these issues, I have asked senior colleagues to clear their diaries to attend. In order to meet in the most convenient venue for you, the meeting will take place in the QEUH. I will confirm the exact location as soon as possible.

I was, however, a little unclear from your e-mails what the specific areas of concern are; and therefore in order to ensure the meeting is as productive as possible, it would be helpful if you and Dr Peters could set out in writing clearly the areas of concern in advance of the meeting. The SBAR format is particularly useful, and if possible, I would be grateful if this format could be used. I would be grateful if you could send your paper to Pamela McCamley by **10am on**

Tuesday 3rd October 2017 so that we have time to read the detail prior to the meeting.

My office will contact Dr Peters and [redacted] to invite them to this meeting, but would I be grateful if you would also alert them to the date and time.

Kind regards

Jennifer

From: Redding, Penelope
Sent: 27 September 2017 12:10
To: Armstrong, Jennifer; Stewart, David
Subject: RE: Infection Control

Dear Dr Armstrong and David,

I was going to wait for a reply to my infection control concerns until my return from annual on the 5th October. However the infection control issues are increasing and I feel the matter has now become more serious and urgent.

I would like to avoid going to Stage 2 of the GG+C Whistle Blowing Policy. I need to be sure that the infection control concerns of several consultant microbiologists are understood by the senior infection control management team. This, obviously, includes the Medical Directors with responsibility for Clinical Governance.

There are many contradictory versions of the information relating to the issues of recent and historical events. It is very complex to fully grasp all the facts. I feel a meeting needs to be arranged so that a record, in one document, of all the evidenced issues can be made. This will ensure that the issues are openly understood and addressed with appropriate action plans. This will mean that both the issues being addressed, in the planning stages and yet to be actioned are identified. I worry that some decisions are being made without all the full facts being understood. In the interests of patient safety there needs to be clarity about the facts.

As well as the Senior Infection Control Team others must be present at the meeting, those with the detailed evidenced information. The microbiologists in the best position to do this are Dr Christine Peters and [redacted]. Facilities need to ensure that the appropriate people can present their information.

There will be differences of opinion, evidence based guidelines and expert advice should enable these to be resolved.

There will be financial pressures as well. It is only by understanding and informed risk assessment of the concerns that a prioritised action plan can be drawn up.

I am happy to meet with you both before any group meeting so that you are fully briefed. This should include Dr Peters who has more details than myself. I am also happy to attend the meeting even though I am not an ICD.

I hope that I do not have to take this to Stage 2 of the Whistle Blowing Policy, but feel the urgency of the infection control problems make this a matter of urgency that cannot continue along its present track.

To avoid Stage 2 a meeting needs to be arranged by the Wednesday 11th October. I am available to come in on my non-contracted days. I normally work on Thursday and Fridays. I am abroad on 29th September and 2nd October, but flexible on most other days.

My mobile is; [redacted].

I look forward to hearing from you.

Regards

Penelope Redding

From: Redding, Penelope
Sent: 21 September 2017 21:25
To: Armstrong, Jennifer; Stewart, David
Subject: RE: Infection Control

Hi

It is really worrying that yet more problems which relate to infection control, putting patients at risk, are coming to light.
I fail to understand why infection control were not on top of many of these things throughout the QE planning process.

Lessons were learnt during the planning and commissioning of the New Victoria, when it became clear that early involvement of infection control prevented a lot of bad decisions being made.

Infection control was involved from the outset of the planning process for the QE. I remember sitting on committee meeting after committee meeting where representatives from across the service were involved in ensuring cross disciplinary discussions took place and everything was considered.
In addition to these meetings infection control met with planners , ventilation experts etc. My role as ICD was taken over by Craig Williams and I am not sure what happened after that. I have heard that IC decided that a lot of the areas that we were involved in were not areas of responsibility for IC. This was a grave and irresponsble decision in my view.

I believe that it is only by working as a team, pooling all areas of expertese ensures that correct decisions are made. Estates do not understand the requirements for the different patient groups and need to work with the clinicians, nursing , IC etc to ensure that they build something that is fit for purpose. Estates do not have the knowledge to understand the particular risks to diffent groups of patients. Infection control has to be involved in the commissioning process as well.

The list of IC problems that GG+C need to address urgently is increasing. I feel I have remind you again that Teresa Inkster is the only ICD who has the knowledge and experience GG+C need. While Teresa is on sick leave you must understand that the remaining ICDs do not have the knowledge base to resolve these issues. I do not believe that IC can be a nurse led service. Again IC should be a team led service with ICDs and ICNs working together.

As you are aware I am on annual leave, but such is my concern that, on returning from London, I felt I had to come in this evening to see if there had been any developments. I cannot believe that there are even more issues than the ones the microbiology consultants were already concerned about.

I appreciate that the solutions are not easy, but these matters cannot be ignored.

Regards

Penelope Redding

From: Redding, Penelope
Sent: 15 September 2017 13:59
To: Armstrong, Jennifer; Stewart, David
Subject: FW: Infection Control

Dear Dr Armstrong and David,

I am disappointed that I feel that I have to escalate my concerns to you. I have not even received an acknowledgement of my email. I do understand that Tom Walsh is on annual leave, but someone must be covering his duties.

You will see the email below outlines some of the issues that are worrying me and I feel are a significant risk to patient safety.

In addition I am also aware of several possible outbreaks / cross transmission on several units within the hospital. These units include neurosurgery and cystis fibrosis and neonatal intensive care (five different organisms on this unit alone). In my career I cannot remember so many problems occuring and recuring at the same time, needing thorough investigation. The senior infection control team are aware of the details. [redacted] is the [redacted] with the most up to date information at the moment and keeps the senior IC team up to date.

The pressures faced by all staff within GG+C are enormous. However, in difficult times, a prioritisation of demands needs to be undertaken. The patients concerned are all high risk and vulnerable patients. GG+C has a responsibilty to minimise the risks to all their patients.

If you feel that you need any more information I would be happy to discuss my concerns with you, in the hope that I will not need to take this any further.

I am due to take annual leave until Thursday 5th October.

Yours sincerely

Penelope Redding

From: Redding, Penelope
Sent: 05 September 2017 16:59
To: Walsh, Tom; McNamee, Sandra; Jones, Brian
Subject: Infection Control

Hi Tom

Anna Cruishank felt that I should contact you to make you aware of the concerns that I have in relation to infection control.

My professional responsibilities for the care and safety of patients require me to bring my concerns and views to senior infection control management team within GG+C.
I have not been and ICD for some years, but was responsible for infection control for nearly 25 years. I feel that my experience enables me to raise my concerns as I see them.

Teresa Inkster is the only experienced ICD within GG+C. The workload she carries is enormous. She has an inexperienced team of ICDs supporting her, which means she carries most of the pressure. Unfortunately she is now off sick and the team that is left do not have the skills and knowledge to fill the gap in the service she provided.
I am aware they have raised their concerns with you and their need for more training and experience.

I was aware of Teresa's concerns before she had to go on leave and she has mentioned them to me when I have met her a couple of times recently. Although I have not discussed things with her in detail, as that I feel that would not be appropriate, she assured me that GG+C were aware of her views.

I believe that Teresa,Christine Peters and John Hood have put on record their concerns with regard to ventilation.
These individual's views cannot be ignored. As well as Teresa, John Hood and Christine Peters have a huge amount of experience and knowledge in relation to ventilation . I have a huge amount of professional respect for all of them.
I understand that even the inexperienced ICDs are beginning to understand the reason for their colleagues concerns with regard to the ventilation errors in the new QE. As you are aware it is a complex science and it takes years of experience to fully grasp the concepts. The views of the people with the knowledge and expertise must be taken advantage of when decisions are made. I feel GG+C must take their concerns and views very seriously and respect the knowledge that they have.

I am aware that the details of other concerns have also been raised with the senior infection control management team and discussions are still ongoing. This is not just about the ventilation.

I know the risk assessements that must be made are not easy and everyone has to work together to ensure that patient safety is the priority.

Regards

Penelope

46

49. RE ICD cover QEUH

Julie Rothney

From: [redacted]

Sent: 06 September 2017 12:03
To: Peters, Christine; Jones, Brian
Cc: Balfour, Alison
Subject: RE: ICD cover QEUH

Hi all,

This is not an official response to the letter but from my point of view, just to capture some of the ongoing workload and meetings in terms of my experience over the past 3 months:

1. Careplans – currently we are working on an MDRGNO careplan for spinal injuries, this is almost complete. As part of working collaboratively for more complex things I've already forwarded on to Alison for any additional comments or thoughts, this is something that needs moved forward as a matter of urgency – Alison let me know when you've had a chance to look through this as it is really important, Pepi and I spoke with this patient's wife and there is a huge amount of tension surrounding this
2. SSI meetings - Alison we will have to divide these up
a. Orthopaedic SSIs – Teresa and/or I were attending regular meetings with the orthopaedic surgeons looking at SSI rates. The next step was consideration of decolonisation regimes to reduce the bioburden on MSSA carriers - the next meeting is on Friday morning
b. Neurosurgical SSIs – next meeting is on 19th September – this is a Tuesday
3. Meetings – adult clinical governance, paediatric clinical governance, local adult and paediatric team meetings, and partnership meetings, as well as ICD meetings, AICC, IC SMT
4. Site-specific SOPs – I am currently working on a MERS and VHF SOP for QEUH, this is very much a work in progress and likely to take a long time due to staffing and time shortages, however it is important to progress this due to the nature of this site and likelihood of seeing these types of patients here
5. VRE rates – nothing formal as yet but need to be kept tabs on
a. Renal (adult)
b. 2A
6. Environmental organisms in NICU, SCBU, PICU & 2A – as above
7. Chill beam/vent cleaning – still awaiting word from estates about pieces of machinery to help with this, and NICU requires some co-ordination to help make this part of their PPM
8. Water testing – still lack of clarity around the process and I worry about this a lot - is it the IPCM who should be co-ordinating? I find myself stuck trying to tie things up between estates and GRI lab, not getting responses from estates, not getting forwarded results and it is extremely time consuming
9. Bacteraemia rates in paediatrics (especially line associated) – port protectors trialled in 2A, but NICU and SCBU as well as renal patients might also benefit, I gather though that bacteraemia rates are going up despite introduction of these which is worrying; there are also some separate pieces of work ongoing around this which I haven't had a chance to be involved with personally due to lack of time
10. PAGs and IMTs – as and when they come but typing results and actions need followed through - we've gone through a phase of having many of these
11. Arranging FFP3 fit testing sessions for paediatric hospital – currently it is me doing it all
12. Environmental sampling results for ward 2A (air sampling) and also for aseptic pharmacy (water testing) - I've already spoken to Stobhill QA lab and didn't get a definitive response on how to interpret some of these. I've spoken to Dr Hood about 2A and he wasn't really able to comment either, suggestion was to find out how and when Teresa intervened, but unfortunately neither the ward nor the ICNs know - I think Brian this is something that might also need to go to HFS for a bit of a steer until Teresa comes back as I worry about whether I am doing the right thing or not
13. HAISCRIBES as and when they come
14. Keeping on top of surveillance issues highlighted by Ann - for example increases in surgical infection incidence rates in areas, attributed to certain personnel or specific theatres etc - currently a couple of pieces of work ongoing around this

This is by no means an exhaustive list – Alison please feel free to add anything.

I don't think the current system is great but we need something workable that doesn't all just fall on 1 person, which was effectively what has been happening. At the same time it is important that ongoing, less urgent work is followed through as best as can be done in the current situation.

Best wishes,

[redacted]

From: Peters, Christine [redacted]
Sent: 06 September 2017 10:58
To: brian.jones[redacted]
Cc: [redacted]; alison.balfou[redacted]
Subject: ICD cover QEUH

HI Brian,

I have met with Alison and [redacted] this morning in order to agree an interim ICD arrangement .

We have identified that after the meeting last week there are 10 sessions for ICD cover for RCH, Maternity, QEUH, Regional (Renal, HAem-onc, Neursurgery) and partnerships (includes prisons) .

We agreed that

- [redacted] will cover Monday, Tuesday, Wednesday, (6 sessions) and Alison will cover Thursday and Friday (4 sessions).

- They will draw up a list of local meetings and workload and work together to cover this as well as answering queries to the generic inbox which I will ask Elaine to set up.

- this is not an ideal solution as Alison will no longer have clinical sessions, and takes further time out of the clinical rota, which is already very stretched.

- [redacted] is seeking a job plan review to relinquish IC altogether

- Pepi likewise does not want to do infection control , is currently on sick leave, and has minimal experience and training in IC and will require a lot of support to continue in the role

- This will be an interim measure under review as part of an overall review of Microbiology input into infection control

- both will help out with rota work as and when they can

- if either are off for leave , the IC queries will be answered by one of the duty consultants.

I would like to put on record my appreciation for both Alison and [redacted] who find themselves in a difficult situation and are working with great professionalism to ensure continuity of service and assure them of my continued support.

Regards,

From: Peters, Christine
To: McCamley, Pamela
Cc: Redding, Penelope; [redacted]
Subject: SBAR RE Infection Control and Patient Saftey at QEUH
Attachments: SBAR RE Infection Control and Patient Saftey at QEUH.docx
Importance: High

Dear Pamela,

Please find attached an SBAR relating to Dr Redding's concerns regarding patient safety and infection control for discussion at the meeting at 8am tomorrow.

It is not entirely comprehensive but given the time frame is as accurate as possible and all points are made in good faith based on our understanding of the facts.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Head of Department Clinical Microbiology
Queen Elizabeth University Hospital,
GGC
Ex [redacted]
Mobile: [redacted]

SBAR RE Infection Control and Patient Safety at QEUH

Dr P Redding, Dr C Peters, [redacted] 03/10/17

Situation

Dr Redding has written to Dr Jennifer Armstrong, Medical Director regarding her serious concerns in relation to the risks to patients arising from infection control issues at the QEUH.

Background

Dr Redding was an ICD (Infection Control Doctor) for nearly 25 years and was involved with the initial stages of the planning for the QEUH.

Assessment

Current issues were identified by discussions with clinical staff, local ICDs and Consultant Microbiology colleagues as well as weekly updates from the IPCT discussed at Consultant meetings. These concerns touch on a number of key facets for a robust and safe infection control service within an acute health care setting.

1. **Patient Placement**
   A fundamental aspect of infection control is the appropriate placement of patients in accommodation that is best suited to prevent hospital acquisition of infection. In a brand new building this should meet SHTM standards and policies for appropriate placement with exact locations for isolation should be available.

Date issue Raised	Type of accommodation	Current Situation	Patient /Staff Risk identified
June 2015, through IC SMT And numerous times in the intervening years including AICC . Letter from Infectious Diseases Consultants raising concerns. **06/05/2016**	**Source Isolation** of Infected patients to prevent transmission of infections to staff and other patients Specialist ventilation required for airborne infections	PPVL (Positive Ventilated Lobbied rooms) exist in both QEUH and RCH. These were not built to SHTM standard. It is unclear what remedial work has been carried out on any/all isolation rooms to date. ID and Microbiology Consultants are concerned that they do not provide appropriate airborne protection. There is a lack of provision of isolation in A+E/Acute	Patients with airborne infections including MDRTB, MERS, Measles, Chickenpox are being transferred to GRI/ Monklands. This was an interim measure put in place in December 2016 and was not meant to be a long term solution. Risk of inadequate airborne isolation pending microbiological diagnosis eg AAFB positive continues. Risk of exposure of large numbers of patients and

June 2015		Receiving	staff to infection eg norovirus/ MERS/Pandemic Flu.
June 2015	**Protective isolation** To prevent infections in patients vulnerable to infections Specialist ventilation required for airborne infections	PPVL rooms exist in the QEUH, Critical Care 4C PICU 2A Throughout the RHC Currently HEPA filters are not fitted in PICU isolation rooms where BMT patients are regularly accommodated Work is due to be carried out to alter 4 rooms to positive pressure in 2A – HAISCRIBE issues raised Safe placement of patients who are immune compromised is not documented or risk assessed for either QEUH or RHC. No HEPAS are in place in the Prep rooms on 2A IV s prepared in treatment room on 2A, not prep room High rates of line related infections are being experienced in the 2A immune compromised population.	Current ongoing risk of airborne infections to neutropenic patients There was a public statement by GGC regarding Air quality when the adult BMT patients moved back to Beatson 08/07/15 which said that : The Bone Marrow transplant services at the Royal Hospital for Children Glasgow are "separate and unaffected" At the time fungal growth was demonstrated in the Paediatric unit and issues with the design were identified. Air quality has remained an issue on 2A since opening. There has been an Aspergillus outbreak on the unit and particle counts continue to be raised. This risk continues .
May 2016	Single side room accommodation	Air changes per hour (ACH) for all clinical accommodation in QEUH and RCH are half the standard – ie 3 ACH instead of 6 Grills collect dust as air is entrained over cooler beams - again not recommended for healthcare setting.	Increased risk of airborne and dust borne infections, especially to immune compromised and CF patients currently housed in these rooms. Potential for organisms such as Acinetobacter, MRSA and MSSA to collect in the ducting. Risk that other

			organisations build hospitals with this ventilation system without knowledge of issues encountered in GGC. This pertains to all the building issues encountered.

2. Cleaning

Cleaning has long been recognised as a key component of an infection prevention strategy for hospitals

Date issue Raised	Issue	Current Situation	Patient Risk identified
June 2015 at ICSMT Estates October 2015	Cleaning agents were not used on floors in clinical areas . Agreement at SMT June 2015 that this would be raised with HPS and ICDS suggested Actichlor should be used	Cleaning agents are still not used . Achtichlor has not been used this Winter to date. Office block is dirty, no /minimal cleaning in place	Build up of environmental organisms throughout the hospital and risk of outbreaks of viral and bacterial infections Most medical staff are located in this block . Risk of infections to staff and ongoing to patients.
September 2017	Dishwashers Not cleaned , installed or operated according to manufacturing instructions	An outbreak linked to this alerted IPCT to issue and remedial steps taken. Water jugs and cups were washed in these dishwashers including for haematology oncology, CF and HIV patients This was not picked up by any audit system but has relevance to infection control throughout the hospital.	Unknown if there are further gaps in the cleaning schedules and environmental audits

3. Estates

Date issue Raised	Issue	Current Situation	Patient Risk identified
June 2015 at ICSMT Estates October 2015	Water Quality	All taps are fitted with TVCs Cleaning and maintenance policy not reported and need to ensure is up to date. Water in 4B not tested to be up to high risk standard.	Risk of Legionella and Pseudomonas and Mycobacterial growth if the rolling programme of cleaning is not maintained.
2015 and ongoing	Water testing	In order to manage outbreaks water testing can be a key measure to investigate possible sources and need to be requested by the ICD Delays in testing and reporting occur	Prolongation of outbreak and source not controlled eg potentially relevant to recurrent issues with Serratia, Pseudomonas Stenotrophomonas, Cupriovadis
July 2015	Plumbing in Neuro surgical block	Sewage leakage repeatedly in theatre suite since before 2015 and ongoing. Not all incidents have been reported to ICDs by ICNs or estates ICDs and ? HIS told that plumbing would be replaced. This has not occurred. Delay in New ICE theatre opening, so Neuro theatres continue in use despite the risk assessment in 2015 stating that the theatre would not be in use beyond December 2016	Obvious risk of repeated incidents due to underlying poor infrastructure in neurosurgical block which increases the risk of post surgical infections .
2014	Decontamination Provision for respiratory clinics	The decontamination facilities in both Paediatric and adult respiratory clinics has been identified as inadequate on numerous occasions. Remedial actions have not been taken.	Risk of fomite transmission of pathogens through inadequately decontaminated respiratory equipment

4. Infection Control Structure

Roles within the infection control team are unclear and appear to have changed eg the lack of formal involvement of the IPCT including an ICD in the planning and commissioning of the QEUH. ICDs are not being informed of HAISCRIBE meetings and incidents in a timely manner.

There appears to be a lack of resources to investigate potential outbreaks /increase in infection rates eg neuro surgical rates of EVD infections, line related infections in 2A.

There is a gap in experience and knowledge of ICDs with Dr Inkster's absence eg . they are unable to sign off and commission complex building projects . This is aggravated by a lack of communication of important information despite requests for that information. There is therefore a professional risk of making decisions and giving advice based on incomplete information.

Recommendations

All the above issues are openly discussed and evidenced information collected . This will ensure that all the concerns are fully understood by everyone. Risk assessments should be carried out where appropriate. Recommendations can then be based on published guidelines with policies and procedures written and updated as required.

NB this document is not comprehensive but summarises the main areas of concern.

48

51. RE Line infections 2A

Julie Rothney

From: Peters, Christine
Sent: 03 October 2017 15:49
To: Dodd, Susie
Cc: [redacted]; Harvey-Wood, Kathleen; Balfour, Alison
Subject: RE: Line infections 2A

Categories: Red Category

Thanks Susie,

I will be interested in how the line related infection rates are being addressed as the clinical consequences for these patients is dire.

Roseomonas is an environmental organism, in the pseudomonas ball park of bugs. It is waterborne and numerous case reports of pathogenicity and catheter related bacteraemia.

Kr

Christine

From: Dodd, Susie
Sent: 03 October 2017 15:45
To: Peters, Christine
Cc: [redacted]; Harvey-Wood, Kathleen; Balfour, Alison
Subject: RE: Line infections 2A

Thanks Christine. Tim Bradnock's 2A QI group meets again tomorrow so it will be interesting to hear the latest updates on line associated bacteraemias and progress of the improvement works.

[redacted], Alison,
Roseomonas – This isn't on our alert list and is new to me. What is the significance of this in relation to IPC precautions?
Staph epi - CNS blood culture numbers are within control limits for Sep for 2A but will keep a record of this case.

KR
Susie

Susie Dodd
Lead Nurse
Infection Prevention and Control - Paediatric Services
RHC
[redacted]

From: Peters, Christine
Sent: 03 October 2017 13:25
To: Dodd, Susie
Cc: [redacted]; Harvey-Wood, Kathleen; Balfour, Alison
Subject: Line infections 2A

51.

54. email SBAR ICD 2017

Julie Rothney

From: Peters, Christine
Sent: 06 October 2017 10:54
To: Jones, Brian
Cc: Valyraki, Kalliopi; [redacted]; Wright, Pauline; Balfour, Alison; Leanord, Alistair; Khanna, Nitish; Redding, Penelope
Subject: SBAR ICD 2017
Attachments: SBAR ICD 2017.docx

Categories: Red Category

Dear Brian,

Please find attached an SBAR regarding the current ICD situation at QEUH. We had a meeting yesterday and discussions have explored the options we see available to us.

Thanks for coming over today to discuss,

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Head of Department Clinical Microbiology
Queen Elizabeth University Hospital,
GGC
Ex [redacted]
Mobile: [redacted]

53. minutes with comments RE Meeting of Infection Control Estates Issues - QEUH RHC

Julie Rothney

From: Peters, Christine
Sent: 28 October 2017 13:22
To: Lang, Ann; Armstrong, Jennifer; Loudon, David; Gardner, Morag; Jones, Brian; Harkness, Anne; Best, Jonathan; Walsh, Tom; McNamee, Sandra; Powrie, Ian; Jenkins, Gary; Redding, Penelope; [redacted]; Hill, Kevin; Green, Rachel (NHSmail)
Subject: RE: Meeting of Infection Control & Estates Issues - QEUH & RHC
Attachments: Exclusion criteria for general admissions to ward 3A.DOCX; Patient flow (infection) CTH Op Policy May 2014.docx

Dear Ann,

Further to the minutes I have recently received the document to which I was alluding in the meeting from Dr Keane ICD at Crosshouse. There is a clear stratification of risk group with advice on appropriate accommodation.

I hope this is helpful,

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Queen Elizabeth University Hospital,
GGC
Ex[redacted]
Mobile: [redacted]

From: Lang, Ann
Sent: 16 October 2017 16:01
To: Armstrong, Jennifer; Loudon, David; Gardner, Morag; Jones, Brian; Harkness, Anne; Best, Jonathan; Walsh, Tom; McNamee, Sandra; Powrie, Ian; Jenkins, Gary; Redding, Penelope; Peters, Christine; [redacted]; Hill, Kevin; Green, Rachel (NHSmail)
Subject: Meeting of Infection Control & Estates Issues - QEUH & RHC

Dear Colleagues

Please find attached a copy of the notes of the meeting held on 4th October 2017.

At the meeting we agreed a number of actions for progression within the appropriate managerial and governance structure. We also agreed that the notes of the meeting would be discussed at the Acute Infection Control and Governance Committees.

The actions are summarised below and I would be grateful if the relevant updates/information could be submitted for distribution to all in attendance.

- Ian Powrie to provide documents supporting work on PPVL rooms.
- David Loudon to liaise with colleagues re GGC experience with chilled beams.

- In relation to safe patient placement and availability of isolation rooms, this is to be raised via the Regional Clinical Governance Committee.

- Dr Peters to issue the group a copy of the document listing isolation rooms from Crosshouse Hospital. ***(Documents attached)***

- Dr Armstrong to relay issues pertaining to Ward 2A to Women & Children directorate.

- Dr Armstrong to confirm chemotherapy preparation in Aseptic Unit. ***(Confirmed with Chief Pharmacist)***

- Consideration to be given to a further meeting with a smaller group to discuss the issues contained in the Infection Control Structure section of the SBAR. ***(Dr Green progressing)***

- Dr Armstrong to check with the Comms team regarding the wording in the public statement regarding BMT services.

Regards

Ann

Ann Lang
PA/Data Manager to Infection Control Manager
West Glasgow Ambulatory Care
Dalnair Street
Glasgow
G3 8SJ

Tel: [redacted]
Email: [redacted]

52

Louise Mackinnon

From: Peters, Christine
Sent: 27 September 2019 13:18
To: 'christinepeters[redacted]
Subject: FW: ward 2A fungal counts

From: Balfour, Alison
Sent: 19 October 2017 15:36
To: Somerville, Emma; Dodd, Susie
Cc: Ic Doctor, South; Hutton, Melanie
Subject: RE: ward 2A fungal counts

Retest not required as it will be monitored in monthly air sampling

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From: Somerville, Emma
Sent: 19 October 2017 15:30
To: Dodd, Susie; Balfour, Alison
Cc: Ic Doctor, South; Hutton, Melanie
Subject: RE: ward 2A fungal counts

Hi Susie,

The patient will be going home later today, SSN Boyd will then have the room deep cleaned.

Does it have to be retested? Or will it be safe to use tomorrow after the deep clean.

Emma

From: Dodd, Susie
Sent: 19 October 2017 15:22
To: Balfour, Alison; Somerville, Emma
Cc: Ic Doctor, South
Subject: RE: ward 2A fungal counts

Thanks Alison.
Emma, can this be facilitated as soon as possible?
Thanks,
Susie

Susie Dodd
Lead Nurse
Infection Prevention and Control - Paediatric Services
RHC
[redacted]

From: Balfour, Alison
Sent: 19 October 2017 14:57
To: Dodd, Susie
Cc: Ic Doctor, South
Subject: RE: ward 2A fungal counts

Thanks Susie; we don't have particle counts to consider in relation to TCT room 3 and no baseline criteria to interpret the fungal counts. However, as patient is non neutropenic and this is a non HEPA filtered room, could we as minimum have deep clean of room? [redacted] and I assessed previous air sampling results from TCT and fungi have been cultured previously but no obvious record of actions taken.

Call me if we need to discuss further.

Kind regards

Alison

From: Dodd, Susie
Sent: 19 October 2017 14:06
To: Balfour, Alison
Subject: FW: ward 2A fungal counts

Susie Dodd
Lead Nurse
Infection Prevention and Control - Paediatric Services
RHC
[redacted]

From: Dodd, Susie
Sent: 19 October 2017 13:03
To: Ic Doctor, South
Subject: ward 2A fungal counts

Hi Alison,

Both myself and Pamela have spent the last hour walking round ward 2A and I have reviewed the rooms with the concerning fungal counts;

- Treatment room – no water leaks identified. Dust noted on high level cupboard, top of clock and on resus trolley; reported to SCN and domestic at time of visit and will be emailed to clinical SMT and domestic manager later today.
- Room 19 – no issues identified suggestive of water leaks or cleaning issues.
- TCT room 3 – No water leaks identified. Dust noted on underside of bedframe and oroscope. Reported to SCN at time of visit and will be emailed to clinical SMT and domestic manager later today.

In addition I have requested that (Discussed with SCN Sommerville);

- Room 10 can now be re-opened and returned to use.
- Room 19 must remain closed – this is one of the rooms which will be upgraded first as part of the BMT upgrade works.

Let me know if you require any further actions to be taken.

Kind regards,
Susie

Susie Dodd
Lead Nurse
Infection Prevention and Control - Paediatric Services
RHC
[redacted]

54b. SBAR ICDs to HOS

SBAR: Infection Control Doctor Cover QEUH

Dr Christine Peters

05/10/17

Situation

There is an acute gap in ICD cover for Paediatrics, Maternity Regional Services and for work streams carried out by Lead ICD who is on extended sick leave from QEUH.

Background

Medical staffing in Infection Control has been under pressure due to the extended sick leave of the Lead ICD Dr Teresa Inkster since June 14th 2017, without locum cover being provided. Dr Inkster was working with 7 sessions of Infection Control in her job plan and was involved in water, ventilations and HAISCRIBE work for critical services such as BMT and Neuro surgery.

As an interim measure [redacted] agreed to cover Teresa's infection control remit from June and was taken off the duty rota. Other Microbiologists took on his other duties. His Job Plan is for 4 IC sessions to cover Adult Services only at QEUH, however he worked full time on IC for 3 months. Prof Jones took on the Lead ICD remit.

On 5th September [redacted] and Dr Valyraki indicated that they wished to work to job plan and requested to have IC removed entirely from their job plans A letter delineating all the concerns regarding infection control and the ICD role was sent to ICSMT by Dr Balfour , Dr Valyraki and [redacted]. After discussions a further interim arrangement was made: [redacted] worked 6 sessions Monday , Tuesday and Wednesday , and Dr Balfour 4 sessions on Thursday and Friday. This is the third week of this arrangement.

On 04/10/2017 Following a meeting with the Medical Director and other Senior management staff which was called to discuss patient safety issues raised by DR Redding, [redacted] sent a further email stating that he would work to job plan from Monday 09/10/17 and repeated a request for an urgent job plan review in order to have IC removed. He gave a number of reasons for this.

Assessment

All Consultant Microbiologists at QEUH have been approached and asked if they would be able to take on IC commitment for Paediatrics, Maternity , and Regional Services (excluding Beatson which is now covered by North).

A Consultant meeting was held on 05/10 to discuss the situation. All Consultants present stated support for [redacted] and Dr Balfour and recognised the significant strain and workload that all consultants are under at this time in terms of covering a full time consultant on extended sick leave. Concerns were expressed regarding the lack of information flow, lack of experience in some of the work being requested of Dr Balfour and [redacted], and lack of senior IC support. There was unanimity in recognising that this is an increasingly problematic environment for any Microbiologist

to undertake an ICD role. It was recognised that concerns have been raised to the highest levels within the organisation and that Prof Jones as Lead ICD was undertaking a review of Microbiology input into Infection Control and this was welcomed.

Options and notes:

1. Third Microbiologist, to cover 6 sessions of Regional /Paeds/Maternity IC;
    a. No Microbiologist in a position to take this on

2. Rota Consultant takes routine IC calls through generic inbox and any PAGS /further work gets escalated to Lead Clinician to arrange work load distribution. All Consultants take part in this rota.
    a. Risks of communication failure – Microbiologists not members of IC SMT will not be up to date with SMT issues
    b. Lack of efficiency with numerous Consultants involved in the same issues
    c. Need for extensive handovers on a daily basis
    d. PAGs, IMTS and longer term issues will need to be dealt with according to capacity of team and other pressures on Microbiology team. Recognised that there is a large workload currently pending.
    e. Lack of consistency for ICN team
    f. Risk of overburdening of duty consultant in event of significant IC incidents and knock onto clinical Microbiology service
    g. Consultant body concerned that interim arrangement does not tackle the issues raised by ICDs
    h. Increased risk during periods of annual leave – notably October week
    i. Seasonal increase in work load over winter will put extra pressure on the system

Recommendation

1.Option 2 is put in place from Monday 9/10/2017

2. A locum Consultant continues to be sought

2. Senior management recognise the risks associated with this option particularly the repercussions on the clinical microbiology service

3. [redacted] and Dr Balfour collate a list of all ongoing IC workload to be distributed to all consultants

4. Dr Peters re-writes rotas to include the new arrangement

5. The situation is reassessed on Monday 23/10/17 with Lead ICD.

6. A long term sustainable solution to Micro input into Infection control is sought , with the involvement of all Microbiologists North and South as soon as possible

From: Bustillo, Sandra
Sent: 23 October 2017 11:02
To: Armstrong, Jennifer
Subject: BMT press release - 8.8.15

Jennifer

To the recollection of colleagues involved, the Communications team were not briefed at the time of the release about the adult BMT move of any testing underway at the Royal Hospital for Children.

The final line of the press release of 8th July 2015 "Bone Marrow Transplant Service Temporary Relocation" was written to make clear to media that the move of the adult service did not include the paediatric service at the Royal Hospital for Children and that the latter was not moving.

Best wishes

Sandra

57+58. email RE 2A

Julie Rothney

From: Jones, Brian
Sent: 24 October 2017 11:34
To: Peters, Christine; Leanord, Alistair; [redacted]; Balfour, Alison; Wright, Pauline; Khanna, Nitish; Harvey-Wood, Kathleen
Subject: RE: 2A

Watch this space.

From: Peters, Christine
Sent: 24 October 2017 11:32
To: Jones, Brian; Leanord, Alistair; [redacted]; Balfour, Alison; Wright, Pauline; Khanna, Nitish; Harvey-Wood, Kathleen
Subject: RE: 2A

Yes, it's a point Teresa and I have been making for 2 years.

From: Jones, Brian
Sent: 24 October 2017 11:31
To: Peters, Christine; Leanord, Alistair; [redacted]; Balfour, Alison; Wright, Pauline; Khanna, Nitish; Harvey-Wood, Kathleen
Subject: RE: 2A

How long is a piece of string...
High dose steroids are probably more of a risk than neutropaenia and will continue for variable periods in different patients depending on clinical need - so hard to be prescriptive.
However, if off chemo (vincristine) then azoles may come back into play.

Having HEPA filtered rooms under positive pressure would help and I've made that point.

BJ

From: Peters, Christine
Sent: 24 October 2017 09:21
To: Jones, Brian; Leanord, Alistair; [redacted]; Balfour, Alison; Wright, Pauline; Khanna, Nitish; Harvey-Wood, Kathleen
Subject: RE: 2A

Thanks Brian, that is really helpful .

Would I be right in anticipating that the length of prophylaxis would be around 5 weeks for duration of induction ? The impact on renal function of ambisome may well affect our empirical choices for antibiotics if this goes ahead.

Kr
Christine

From: Jones, Brian
Sent: 23 October 2017 18:32
To: Peters, Christine; Leanord, Alistair; [redacted]; Balfour, Alison; Wright, Pauline; Khanna, Nitish; Harvey-Wood, Kathleen
Subject: RE: 2A

Hi

I visited the ward this morning to discuss building works.

Brenda raised the issue of prophylaxis for the ALL patients who are being nursed in non-HEPA filtered rooms. There is little data on prophylaxis in this group and, according to Brenda, no guidelines. Intuitively, AmBisome would seem to be the most reasonable option as azoles are contraindicated - I have contacted Gilead Medical Affairs for their view. Caspofungin may also be an option but, again, there is probably no data - I'll have a look.

As they are iv drugs both options are resource intensive and logistically problematic and Brenda is going to discuss with medical/nursing/pharmacy colleagues. Ultimately it is a clinical decision but I would strongly recommend the use of prophylaxis given the current situation.

We did not discuss the use of biomarkers. I have concerns that routine twice weekly screening will lead to significant over-treatment/investigations given the low pre test probability and consequent low PPV. However, I'll discuss with Brenda.

There was also some discussion around future isolation requirements for the unit.

Hope that helps.

BJ

From: Peters, Christine
Sent: 23 October 2017 16:31
To: Jones, Brian; Leanord, Alistair; [redacted]; Balfour, Alison; Wright, Pauline; Khanna, Nitish; Harvey-Wood, Kathleen
Subject: 2A

Hi Brian,

I was doing the 2A ward round today and was informed that you had been over there having discussions with Prof Gibson this morning re prophylaxis for fungal infections on the unit.

I would be interested to know if there were any conclusons and if fungal biomarkers weekly were also discussed?

regards,

Christine

55

Julie Rothney

From: Peters, Christine
Sent: 30 October 2017 09:44
To: Jones, Brian
Cc: [redacted]; Valyraki, Kalliopi; Khanna, Nitish; Wright, Pauline; Redding, Penelope; Balfour, Alison; Leanord, Alistair; Ic Doctor, South
Subject: SBAR 2a october2017
Attachments: SBAR 2a october2017.doc

Categories: Red Category

Dear Brian,

Please find attached an SBAR with as accurate a summary as we can pull together regarding air quality on 2A. We would greatly appreciate your input on the recommendations as this is causing daily issues for the duty ICD.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist
Queen Elizabeth University Hospital,
GGC
Ex[redacted]
Mobile:[redacted]

SBAR: 2A Patient Accommodation and Risk of Invasive Fungal Disease

QEUH ICDs
30/10/17

Situation

Ward 2A at the RHC houses the Haematology- oncology Paediatric services including the Scottish Paediatric Bone Marrow Transplant Unit. Since the unit opened in 2015 ICDs have expressed concern regarding the ventilation and building spec of the unit with regard to effective airborne protection of high risk patients on a number of occasions. A recent probable case of invasive fungal infection has occurred in the context of raised particle counts and fungal growth on the unit, once again raising concern regarding the ongoing issues on the unit. Of note this patient was not housed in a HEPA filtered room, but was at high risk of fungal infection.

Background

Prevention and early recognition and treatment of IFD are crucial to prevent associated mortality, increased length of stay and delay of critical treatment for underlying malignancies.

Patients at risk of Invasive Fungal disease

Current standards and guidelines support the use of isolation facilities that protect profoundly immune compromised patients from fungal spores particularly in the setting of building works occurring on site. This includes:

- Allogenic Bone Marrow transplant patients during neutropenic period or with graft versus host disease
- Autologous BMT during neutropenic period
- Children with SCIDS
- Prolonged neutropenia for greater than 14 days following chemotherapy of immunosuppressive therapy.

Other groups at high risk, but to a lesser level are:

- Acute lymphoblastic Leukaemia patients on high dose steroid therapy
- Neutropenia for less than 14 days following chemotherapy
- Solid organ transplant patients

Building requirements for Neutropenic/BMT patients

Based on recommendations , SHTMs as well as HPS advice on 4B (adult BMT) BMT and other high risk patients should be housed in rooms that meet the following requirements:

- 10ACH
- Positively pressured at 10 pa to corridor
- All air entering room should be HEPA filtered
- Room must be sealed
- Continuous pressure monitoring system in place with alarms for failure.

Jacie Standard B2.1 recommends HEPA filtration and positive pressure is used for high risk patients and that if non-HEPA filtered rooms are used for lower risk patients that SOP's on infection control should indicate how allocation is prioritised. Furthermore audit of airborne infections in those patients is recommended.

Current Provision

The ward has 8 positive pressure ventilated lobbied rooms (PPVL) with supply that is HEPA filtered coming into the lobby.These are rooms 17,18,19,20,22,23,24,25.

All other rooms on the unit, including those on the Teenage Cancer Corridor are :

- Single rooms with ensuite
- Have 3 ACH
- Neutral pressure
- Not HEPA filtered
- Have entrainment of air on to cooler beams resulting in collection of dust on grills

The corridor is not HEPA filtered and is not positively pressure to the rest of the hospital.

Air sampling

A regime of air sampling as a quality assurance tool was in place in Yorkhill , and is in place at the Beatson. Samples are being taken in 2A on a monthly basis and the document circulated by the QA team for 2A states a particle count of <1000 and <1 CFUcm3 is acceptable for HEPA filtered rooms. There is no standard for the rest of the ward.

Particle counts have been raised and fungal growth has occurred on a number of occasions in both HEPA and non-HEPA filtered rooms.

These results have drawn attention to the ventilation of the rooms and have been instrumental in highlighting to the ICDs the underlying defects with the estate.

Incidents

Faults that have been discovered since the opening of the unit and have been managed to date include:

- PPVL Rooms originally had no HEPAs – now in place, but not in ITU
- Rooms not sealed – not seen final sign off re the leak testing on all the rooms
- Incorrect light fittings - fixed
- Ducting ripped - fixed
- Water Leaks with subsequent mouldy ceiling tiles – now replaced
- Leaks occurred 2 weeks ago – no information regarding what work was carried out and what the HAISCRIBE was to do this work.

An IMT was held in August 2016 due to cases of aspergillosis and again in April 2016.

Assessment

1. High risk patients are treated regularly on the ward, currently ALL patients on induction chemo are not housed in HEPA filtered rooms and there are not enough HEPA-filtered rooms for the numbers of BMT patients on the ward on occasion and are being housed in the non-HEPA filtered rooms.
2. The current configuration of ventilation has extensively been discussed by Dr Inkster and Estates and the Board have agreed to upgrade the PPVL rooms into positive pressure rooms that will meet the specifications for high risk patient protection

3. The work for this upgrade is pending in November - there is an increased risk of IFA during this work and measures to protect the vulnerable population have been discussed between Prof Jones and Prof Gibson including the use of prophylaxis.

4. There are currently extensive demolition projects ongoing at the QEUH site which increases the risks of IFA in the immune compromised population.

5. Currently all patients who are neutropenic or on high dose steroids are being given antifungal prophylaxis – either ambisome or posaconazole, including the solid organ cancer patients at risk of fungal infection

6. Currently there are 3 HEPA filtered rooms that are out of use to our knowledge : room numbers: 19, 24, 25? However it would be useful to confirm this.

7. Air sampling baselines are not well established on the unit – as the spec is entirely different from the Beatson, 4B and old York hill ward, there is no established agreement on the cut off values for particle counts or CFU for the non HEPA filtered rooms. This is causing confusion and misunderstandings with regard to appropriate course of action on receiving these results.

Recommendations

1. Air sampling regime and interpretation is clarified by ICSMT and cumulative results presented for each room, with clarity on the reports whether the rooms are HEPA filtered or not.
2. A reduction in turn around time for ID of organisms is achieved by laboratory
3. Intensified air sampling should occur during periods of construction work both within the unit and on the QEUH site.
4. Clear guidance is produced regarding the risk assessment around the housing of ALL, and other high risk patients in the non-HEPA filtered rooms when these rooms are not available.
5. Further consideration is given to risk mitigation measures to be put in place pending the completion of the upgrade works including use of masks on moving around site and advice regarding routes into and out of hospital. Consideration may also be given to use of mobile HEPA filtration units

From: Peters, Christine
To: Inkster, Teresa (NHSmail)
Subject: FW: Infection Control Issues 041017
Attachments: Infection Control Issues 041017.docx

My comments on the minutes.
C

From: Peters, Christine
Sent: 10 November 2017 10:46
To: Lang, Ann
Cc: Redding, Penelope; [redacted]
Subject: FW: Infection Control Issues 041017

Hi Ann,
Sorry for delay in replying with comments on minutes however I was out of the country last week.
The comments are from Dr Peters, Dr Redding and [redacted].

Kr
[redacted]
Dr Christine Peters
Consultant Microbiologist
Queen Elizabeth University Hospital,
GGC
Ex [redacted]
Mobile: [redacted]

Minutes of Meeting
Meeting Room L02-001, Teaching & Learning Centre
Queen Elizabeth University Hospital

Wednesday 4th October 2017 at 8:00am

PRESENT

Dr Jennifer Armstrong (**Chair**)	JA	Medical Director
David Loudon	DL	Director of Property, Procurement & FM
Morag Gardner	MG	Chief Nurse
Sandra McNamee	SMcN	Associate Nurse Director IPC
Ian Powrie	IP	Depute General Manager, Estates
Professor Brian Jones	BJ	Head of Service, Microbiology
Tom Walsh	TW	Infection Control Manager
Anne Harkness	AH	Director, South Sector
Jonathan Best	JB	Acting Chief Operating Officer
Gary Jenkins	GJ	Acting Director, North Sector
Dr Penelope Redding	PR	Consultant Microbiologist
Dr Christine Peters	CP	Consultant Microbiology
[redacted]	[redacted]	[redacted]
Dr Rachel Green	RG	Chief of Medicine, Diagnostics

In Attendance

Ann Lang (Minutes) PA, Infection Prevention and Control

Item	Action

1. Welcome & Introductions

Dr Armstrong welcomed everyone to today's meeting to discuss Infection Control and estates issues at QEUH and RHC and round the table introductions were made. The group noted that colleagues from Women's and Children's Directorate were not in attendance but were aware of the issues raised and had helpfully submitted information via email which could inform the relevant areas of the discussion.

2. Purpose, Format and Conduct of Meeting

Dr Armstrong advised that a series of emails have been received from Dr Redding and Dr Peters regarding Infection Control and estates issues on the QEUH and RHC site. Dr Armstrong had requested a document setting out the issues of concern and thanked Drs Redding and Peters for providing the SBAR document which provided a helpful basis for the discussion. Dr Armstrong proposed that the meeting is focused on patient safety and a review and update on the current status of the issues identified.

She asked that if there are any comments during the meeting if these could be addressed through the chair and to adhere to the GMC and Board guidance regarding respect, professionalism and working as part of a team. The group agreed the importance of issues raised being discussed in the context of the appropriate roles, responsibilities and governance structures.

3. Review of SBAR / Concerns

It was agreed to go through the items detailed in the SBAR from Dr Redding and Dr Peters, to look at the points raised and address any outstanding issues.

Item	Action

- Patient Placement

Dr Redding outlined that there are challenges for the microbiologists regarding source isolation of infected patients.

She said the current situation is that the positive pressure ventilated lobby rooms were not built to SHTM standard and she and others were concerned that they do not provide appropriate protection when managing a small number of patients with significant respiratory pathogens of high consequence such as MERS and MDRTB.. Dr Peters advised that Microbiologists and ICDs and ID colleagues feel there is a lack of provision for isolation rooms in A&E. David Loudon replied that this specification was signed off by the board and clinical teams; he also confirmed that remedial work had been carried out due to issues raised at the snagging stage of the build. David also stated that although there were some modifications to the design the rooms did conform to SHTM 04-01 and that it was incorrect to state that this was not the case. Ian Powrie addressed specific points raised in respect of the ventilation specification and agreed to provide the detailed information to support this.

Sandra McNamee commented that the inclusion of the Infectious Diseases service was a late amendment to the QEUH project and therefore not commissioned as an ID unit at the outset. The group noted that the Brownlee Clinical Team put a strong clinical case to the board to be co-located on QEUH site with the Intensive Care Unit and other critical clinical services. The issues identified were discussed with HPS at the time and they agreed to advise the Board on what standard these rooms would need to be to accommodate these patients. When this information has been received, estates colleagues will review the advice to determine if these modifications were feasible. Dr Redding stated she would like to see the evidence relating to this. Sandra advised that a follow up meeting took place with HPS on Monday 2nd October and that the relevant information was expected in the next few weeks, however in the meantime a patient pathway has been in place which routes these patients to appropriate isolation rooms in other hospitals.

Dr Peters reported that these patients with significant airborne pathogens are being sent from A&E to the isolation rooms in ITU before being transferred to other hospitals as reported by ID colleagues . The group noted that this would be the case for other hospitals within NHSGGC and across NHS Scotland. Dr Peters however intimated that there is a risk of exposure to a large number of patients and staff and reiterated that, in her opinion, the ITU isolation rooms are not adequate for these types of patients. Furthermore other hospitals have not been recently built and are not a tertiary ID referral centre such as the QEUH.Dr Redding also recognised that work may be ongoing but the microbiologists are not aware of this.

Anne Harkness advised that as these issues were raised she met with Directors and ID Physicians and they agreed a pathway for these patients to be transferred to other sites. She also commented that based on the external advice, unless the existing rooms can be modified in some way the only alternative was to build a new Infectious Disease Unit which would require a significant resource. David Loudon confirmed that changing the specification to negative pressure would be reviewed to assess technical feasibility.

It was agreed to await the response from HPS and to deal with any further issues via the Acute and Board Infection Control Committees and the relevant Directorate Governance Committees.

Item	Action
• Protective Isolation Currently HEPA filters are not fitted in PICU isolation rooms and in the prep rooms in Ward 2A. Dr Redding also commented that IVs are prepared in the treatment room. She stated that there has been a perceived high rate of infections in immune compromised patients in Ward 2A and air quality has remained an issue in this ward since it opened. She also commented that there was an outbreak of Aspergillus in the unit and that there is still a risk to patients. Dr Peters said there was a public statement made by NHSGGC that BMT services at RHC are separate and unaffected and that both she and Dr Inkster had objected to the wording of the statement at the time and had asked to step down from ICD roles immediately after it was released. Dr Armstrong advised that she will check with the Comms team regarding the wording in the statement as this required some additional clarity around context. With regards to the cases of Aspergillus, Sandra McNamee updated that there were two cases in March and April associated with a leak in the ceiling space. This was investigated and the tiles were removed and replaced with no further cases of Aspergillus. Ian Powrie advised that the HEPA filters were installed in two of the rooms in adult ITU but there has been no request to add these to isolation rooms throughout the adult or children's hospital. Work in RHC, Ward 2A is scheduled to start this month and with the scribe being signed off he can now contact the contractors to start the work. Sandra McNamee confirmed that this was raised at a meeting she attended yesterday and that she was aware that there is a plan to put HEPA filters in two of the rooms in PICU as contingency. Ian Powrie said that the only reason this had not been done is that there was a requirement for the rooms to be unoccupied for 24 hours whilst this work was done and validation carried out and that up to this time it was not possible because the beds had been fully occupied and that there were ongoing discussions with the team in Ward 2A as to whether these patients could be accommodated in isolation rooms within other wards where HEPA Filters could be fitted to address the overspill contingency. Dr Peters commented that this was necessary in PICU, not just as an overspill for Ward 2A, but for these extremely vulnerable patients if they required intensive care treatment because of their illness. Dr Redding advised that the clinical team in Ward 2A have reported that in their experience there seemed to be an increase in the number of line related infections and Sandra advised that this was investigated by Infection Prevention Control and the clinical team when first raised and work had been ongoing for several months. She also reported that IPCT and the Clinical Team were working with Timothy Bradnock, Consultant Paediatric Surgeon to look at improvement work. Sandra noted that there was no effective benchmark available for this area. Dr Peters noted that rates of line infection were important to determine and that IPCT had stated there was no resource to do this. Jen Rodgers, Chief Nurse has an improvement group looking at PVC and CVC bundles and Sandra said that this should have an impact on the number of infections. Dr Armstrong added that there has been a focused piece of work carried out in Ward 2A and they were on a weekly reporting process to ensure compliance with infection control standards had improved. Dr Redding was concerned that this may not accurately pick up any concerns.	**JA**

Item	Action
In relation to the chemotherapy being prepared in the treatment rooms Gary Jenkins advised the group that chemo was prepared in a designated area and there was an audit process to confirm this. He also commented that this process had been reviewed recently and offered to provide Dr Redding the document that was produced. Dr Armstrong confirmed that chemo is not being made up in these rooms and is carried out in the Aseptic Dispensing unit. Dr Armstrong agreed to confirm this with Pharmacy.	**JA**
With regards to safe placement of immunocompromised patients, Dr Peters asked if there was a list of which rooms were of the standard that would be acceptable for this group of patients. She commented that when she worked in Crosshouse Hospital they had a list of where these particular patients could be placed. She said the microbiologists receive calls asking this question by clinical staff. The group debated the definition and severity of immunocompromised patients and agreed, with input from Sandra McNamee and Prof Jones that this was a decision best considered by the clinical team looking after the individual patients. Dr Armstrong advised that this should be discussed at AICC and Gary Jenkins commented that this has not been raised as an issue via his Regional Clinical Governance Committee. Dr Armstrong recommended that this be addressed through the Regional Clinical Governance Committee. She also said it would be helpful to have a copy of the document that Dr Peters used in Crosshouse. Dr Redding reiterated that Microbiologists need to know which rooms are the most suitable for different categories of patients.	**GJ** **CP**
Dr Redding commented that she feels the infection rates are not being monitored and Dr Armstrong replied that the Board and Acute Directors receive a weekly report of all outbreaks and infection control incidents. Dr Armstrong agreed to ask the Women & Children directorate to take forward the points raised above.	
• Single Side Room Accommodation Dr Redding outlined that air changes per hour for all clinical accommodation in QEUH and RHC are 3 instead of 6 as per guidleines with the inclusion of chilled beam technology. The grills also collect dust as air is entrained over chilled beams which she suggested is not recommended in a healthcare setting. Dr Peters advised this initially came to light when investigating issues regarding CF patients.	
David Loudon advised that Dumfries and Galloway have chilled beam technology and Dr Peters stated that Monklands Hospital is at the commissioning stage of a new build and suggested that we share our learning with them. It was agreed that it was important to share the GGC knowledge around chilled beam technology with colleagues in other Boards and David Loudon agreed to take this forward. Ian Powrie informed the group that all chilled beams on site are being cleaned and maintained and Dr Redding asked if the air changes can be changed from 3 to 6 in some rooms but not in all areas and David Loudon advised this was not realistically possible. Ian Powrie confirmed that cleaning and monitoring is being carried out to determine how quickly dust has built up and once this has been established a cleaning schedule will be organised and this can be shared with other hospitals. Dr Redding suggested involving Microbiologists regarding cleaning to look at the microbiological counts. Dr Jones suggested that rates of infection may also be a useful indicator. In this context Sandra McNamee reported that during the point prevalence survey QEUH was under the national average for infections and that all alert organism/conditions were monitored by the IPCT and that there were no indications that this site had a higher than average infection rates. It was noted that infections occurring post discharge wouild not be picked up by the point prevelance survey.	**DL**

- Cleaning
  In relation to cleaning Dr Redding stated that cleaning agents were not being used on floors in clinical areas.

Item	Action

Dr Redding also outlined that dishwashers had not been cleaned, installed or operated according to manufacturing instructions. This was brought to light with the investigation into CF patients with Exophiala. Sandra McNamee updated regarding the occurrence of Exophiala in CF patients and said this was referred to HPS as an amber HIIAT score but they downgraded this to a green HIIAT as this is considered to be a ubiquitous organism and the modes of spread, incubation period and occurrence in the population and environment was largely unknown. Dr Peters stated that she had already discussed the outbreak in her role as CF Microbiologist with mycology experts and given the striking epidemiology of increasing numbers , it is a reasonable hypothesis to assume a link to the dishwashers as a possible source. She had also discussed the HIATT rating with HPS and agreed with green rating as the intervention with dishwasher was rapidly and appropriately dealt with.

With reference to the cleaning agents Sandra McNamee responded that Actichlor cleans are used throughout the winter norovirus season which normally runs from November to April. She also stated that Actichlor was used in specific areas at the recommendation of IPCT, for example. Actichlor was used in GGH for a month in the summer due to an increase in CDI across the site. This has also been introduced for general cleaning into the wards with CF patients in QEUH and RHC, PICU, NICU and Ward 2A. At a recent meeting with HPS Sandra said HPS have found no evidence that using Actichlor is effective but further guidance was awaited.

With regards to dishwashers in the ward area there had been some debate in the ward regarding whose responsibility it was to clean these but Sandra said this has been addressed. The manufacturer has come in to check the dishwashers and Catering Services have confirmed they will commence a cleaning programme for the dishwashers. It was also noted that Environmental Health Officers prefer dishwashers to be used over hand washing in sinks/ basins.

Dr Peters commented that the audit system did not pick up this problem, and raised concerns about gaps in the environmental audit programmesand this was possibly the same with regards to ward refrigerators or other equipment. Sandra McNamee advised that nursing staff have a requirement to check the temperature in fridges and stated again that the catering department have agreed to take responsibility for the ward dishwashers. The group noted that dishwasher maintenance had been overlooked in the overall system but that this had now been rectified.

- Water Quality and Testing
  In the SBAR it stated that all taps are fitted with TMVs and the cleaning and maintenance policy has not been reported and Dr Redding stated that we need to ensure this is up-to-date. She also commented that the water in Ward 4B has not been tested to a high standard.

  The group was assured that there was a Board Water Safety Policy in place that is approved by the appropriate governance committees. David Loudon reported that we have strict guidance on how to monitor water systems and processes are in place to comply with ECOPs. Ian Powrie also confirmed that water testing is carried out as per protocol and only exceptions are reported to the Infection Control Teams and this was previously agreed with Dr Inkster. He said testing is mainly carried out in high risk areas.

David Loudon stated that we are not required to test all taps but a sample and that this was in accordance with guidance. He also confirmed that if requested by an ICD additional sampling was undertaken. [redacted] said that Dr Inkster was managing the water testing and he perceived there was a problem with the environment. He said that he requested gram negative testing but did not receive the results from Estates. Ian Powrie replied that recent changes in staff in both estates and IPC could have been the reason why he did not receive the information. It was agreed that GGC are compliant with the water testing protocol. Dr Peters stated that the issue was not the overall testing protocols but the ICD role in requesting and receiving the results in a timely manner in exceptional circumstances where a water source of infection needed to be investigated.

Item	Action

In relation to TMVs Ian Powrie advised that these are maintained in all high risk areas and they are working towards carrying this out in all areas. He said the end piece of the taps cannot be removed and an SBAR is in place for this. Estates are finalising the installation of a heat sanitation system and once complete this will be sent to the Board Water Safety Committee for approval.

In terms of serratia Ian said they would test the water for this if requested by a clinician.

- Plumbing in Neuro Surgical Block
  Dr Redding stated that there has been sewage leaking in the theatre suite since before 2015 and is still ongoing and not all incidents have been reported to ICDs.

  Gary Jenkins advised that there is ongoing work in the neuro building that would, because of its complexity, take several years to complete. In the meantime the new operating theatres were due to open in January 2018. He stated that his directorate has a specific focus on IPC and that they had a dedicated group to look at surgical site infection. He said they funded 1.5 WTE surveillance nurses to carry out prospective surgical site surveillance in this area. Dr Armstrong updated that Dr Inkster carried out a detailed inspection of the area previously and she suggested that SSI surveillance was carried out here. Sandra McNamee advised for context that there are 3 surveillance nurses that cover all of GGC so the resource to actively do this in the INS was significant.

  She acknowledged that the ICDs were concerned about infections in EVD and stated that the clinical teams were currently developing an EVD bundle. Ian Powrie reported that remedial work was carried out in this building over the past year but that there had been an incident with sewage last week.

  There has been a delay in the opening of the ICE theatres as GGC were not satisfied with the standard but a programme of work has been agreed with the clinicians. Dr Peters said she requested to know the number of instances from when the theatres closed two years ago due to problems with the pipe work to date and she stated that she was told at the time of the initial problems that the plumbing was to be replaced. Gary Jenkins responded that that the pipes run through multiple floors and a process is in place with IPC and Capital Planning to take this forward in stages. Anne Harkness commented that increases in SSI should be discussed at the Regional Clinical IPC Group which [redacted] is a representative of. Ian Powrie advised that he has arranged to meet with [redacted] and Dr Balfour to discuss the INS theatre issue.

- Decontamination Provision for Respiratory Clinics
  The SBAR also stated that the decontamination facilities in both Paediatric and adult

respiratory clinics have been identified as inadequate on a number of occasions. Sandra McNamee informed that remedial actions have been put in place and a list of items has been sent to HPS for advice on how to decontaminate them. Dr Peters stated that QEUH ICD had not been informed of timeline for revision works to decontamination area to take place.

- Infection Control Structure
  Dr Redding advised that the ICDs in the South Sector had stated that the roles within the Infection Control team are unclear and appear to have changed. Dr Armstrong proposed that consideration is given to having a further separate meeting to discuss the issues referred to in this section. Jonathan Best offered to support this discussion.

Item		Action
4.	**Agreement of Further Actions / Next Steps** - Ian Powrie to provide documents supporting work on PPVL rooms - David Loudon to liaise with colleagues re GGC experience with chilled beams - In relation to safe patient placement and availability of isolation rooms, this is to be raised via the Regional Clinical Governance Committee. - Dr Peters to issue the group a copy of the document listing isolation rooms from Crosshouse Hospital. - Dr Armstrong to relay issues pertaining to Ward 2A to Women & Children directorate. - Dr Armstrong to confirm chemotherapy preparation in Aseptic Unit. - Consideration to be given to a further meeting with a smaller group to discuss the issues contained in the Infection Control Structure section of the SBAR. - Dr Armstrong to check with the Comms team regarding the wording in the public statement regarding BMT services	
5.	**A.O.C.B.** Nil. Dr Armstrong thanked everyone for their attendance today.	

Infection Control SBAR for Dr Green

Dr C Peters 06/12/2017

Situation

The Infection Control Doctor service is being provided at the QEUH on a rota basis with all consultants providing cover 1 – 4 days at a time. This covers QEUH, RCH, Maternity, Renal and Neuro. All Consultants have expressed concerns regarding this set up and none are comfortable with taking on a full ICD role due to a number of governance, operational and structural concerns.

Background

Prior to June 2017 the QEUH ICD service was provided by dedicated sector ICDS:

- Dr Teresa Inkster : 7 sessions to cover RHC plus Maternity plus Regional including Beatson and Neuro and Renal, and Lead ICD role. She also covered Fridays at GRI on Barbara's days off, and had covered Clyde when Linda had days off . She covered all ICDs annual leave and also chaired outbreak meetings across all sites including HAISCRIBE work for Clyde.
- [redacted]: 4 sessions : QEUH
- Dr Balfour : 1 session partnerships
- Dr Valryraki : 1 session ? not job planned and responsibilities never agreed

Discussions were ongoing at the Microbiology Senior Medical Management Team regarding the ICD arrangements going forward with a suggestion to go to a daily duty based approach to IC. Dr Inkster was not in agreement with this approach and was strongly in favour of sector based ICDs.

Sadly Dr Inkster became ill and in order to cover her leave it was agreed that:

- Dr Jones would take on the Lead ICD role.
- [redacted] would be relieved of QEUH Clinical Microbiology rota duties and would take on RHC, Regional including Beatson, Maternity and continue with QEUH infection control.

RE ICD cover QEUH.msg

On 4th September [redacted], Dr Balfour and Dr Valyraki wrote a letter to ICSMT delineating reasons why they all felt that the infection control set up was untenable and they all wished to urgently review job plans to give up IC role unless substantive progress was made on their concerns.

In response to this and to avoid a complete disintegration of the ICD service it was agreed to put in place an *interim* measure of an ICD duty rota. Initially this was anticipated to last only a few weeks, pending actions from management regarding the concerns that were raised by the ICDs. The QEUH consultants pointed out the

shortcomings of this approach to IC, and offered a risk assessment and agreed to the situation only as an interim arrangement.

SBAR ICD 2017.docx

On 4th October there was a meeting chaired by the Medical Director to respond to a number of concerns raised by Dr Redding regarding patients safety issues and infection control . As part of this the ICD role and structure was raised as an area of concern. Dr Green was tasked with investigating the ICD concerns re operational and structural issues.

Assessment

Questionnaire to Consultants Microbiologists:

All Consultants were asked for views regarding the current arrangements, areas of concern and willingness to take on ICD role. Responses are summarised below:

Current arrangements:

- "Far from ideal. Is there a lead ICD? If there is, It doesn't feel like local ICD has lead ICD support. If not, the current IC structure doesn't regard local ICD as the decision maker, and decisions appear to be made with little input from ICD. However, if things go wrong, it feels as if the local ICD is the fall guy. "
- "No clear sight of roles and responsibilities. What influence does local ICD have? When issues are cascaded up the chain, is anything actioned – are issues discussed at SMT level? Thinking of 4B + 2A issues specifically. Who should be acting on the sampling results, especially after local ICD's have highlighted problems with rooms etc? "
- "The current set up is a mess, and having individual ICD's change after several days/week on week off is far from ideal as there is little continuity or ownership of problems. It is also difficult to know what issues have/have not been resolved depending on level of handover. In addition, stories fed to ICD's can change. However, cognisant that some cover is needed."
- "I am concerned that there has not been an opportunity to discuss the very serious concerns raised with senior management. Disappointed in the response."
- "I have had a positive experience as ICD at both GRI and GGH, especially with ICNs, but at QE I feel like there is a disorganisation after Teresa's absence."
- "The current arrangements for IC although it give us some flexibility and also time until Teresa is back, have the big disadvantage of the lack of continuity and sometimes there is a bit of confusion at handover"
- Difficult to understand how local work feeds into overarching decision that are not communicated to local ICDS (– verbal communication)
- Not good

- Not part of the same team as the ICNs, different management structure completely
- Meetings are not all protected and perpetually swapping on the clinical rota makes things difficult

- Different perception of things in North/Clyde, large and complex workload in the South campus with several specialist and even national units (both paediatric and adults) and many new build issues
- Constant conflict and opposition– almost no point in being an ICD when constantly questioned and run down by clinical team management and sometimes even ICNs, when ultimately the ICD is most likely to be held accountable
- Lack of trust in not only the system but people within the system
- Working hours never respected
- A stressful and high profile job with lots at stake and potentially big implications many months later that one might be accountable for, and no steps taken to make it easier or provide any incentive to do it
- ICSMT - ? what are the roles Have been at meetings where votes are taken and Consultant microbiologists views outvoted due to numbers of ICNs. This does not seem to be a rational approach to primarily medical issues.

Future willingness to take on role

- "Personally, not comfortable with taking on an ICD role in any capacity, be it temporary or fixed. The job has changed so much over the years (and the QEUH building has raised more issues than we ever thought it would) but I don't think the ICT has changed to mirror this. All the more depressing as there are some very good CM's who want to do IC and are very good at it."
- "Not keen unless all the issues around roles and responsibilities are sorted out with our input into discussions"
- "considering the fact that I don't have a lot of experience as ICD, I am very sceptical regarding my future role at IC"
- "From the experience of working in IC at QEUH I have no confidence that the role has any meaning or worth and only results in the health of ICD being compromised and a deterioration of quality of working life"
- Would not be happy to give up duty role altogether and not enough DCCs to do both (verbal response)
- "The term "IPCT" seems to exclude Doctors. Post Vale of Leven that is very worrying and means I do not wish to take this on."
- "No"

Examples of problems encountered:

- Management of ?Pseudomonas outbreak on ortho. A lot of additional BMS and medical time spent on organising and doing sampling – was it all required? Not seen any IMT debrief – highlights flaws within the communication strategy at IC level.
- Called on a Saturday morning to give advice regarding closed ward. Provided advice, only to find that an ICN was phoning in to discuss with ward staff. Again this highlights lack of communication between ICNs and CM on call.
- Clin scientist being told not to send emails regarding alert organisms to ICT. This highlights that ICT would rather not know about the problems in the hospital, rather than front up, acknowledge there are issues and look at engaging with all stakeholders to ensure an action plan is developed in response to issues
- Local ICD for day having to attend IMTs and other regularly scheduled meetings with no foresight of issues from previous meetings that require input. I don't think having

different people representing local ICD attending different meetings is an efficient process but understand need for current set-up.

- ICNs not informing of incidents eg involving sewage
- Meetings arranged without ICD being informed or invited
- Direct requests for information ignored
- ICD recommendations sent to Associate Nurse Director without ICD copied in and being over ruled without discussion
- Meeting support with held eg minute taking, and appropriate agendas etc
- Expected to sign off 4B without being informed of 2 years of backstory, with undue pressure, and without enough knowledge to make the right decisions, despite key players involved or copied into discussions over past 2 years knowing the issues and not wanting to sign off themselves
- 2A SCRIBE – various questions asked after the pre-start meeting but no reply for several weeks
- Lack of response to emails from estates as well as IC management on some occasions (e.g. water testing, asking for advice on ventilation/new builds etc)
- Behaviour or attitude as though the ICD is not part of the IPCT on some occasions from ICNs (e.g. neuro sewage works)
- Lack of resources cited as a reason for data team not being able to support data-related activities required to make correct microbiological and IC assessments of situations, such as retrospective microbiology lookback for neuro EVD infections
- ICD expected to handle a large amount of lab results from microbiology colleagues without sifting and vetting by ICNs – again can be very time consuming if not sessioned properly to do this
- Asking for deep cleans/professional cleans in areas such as neuro theatres and NICU but opposition to do this
- ICD doesn't really have the final say in policy related decisions e.g. CF
- No ICD meetings since August
- Role of ICManager is unclear – usual response to queries is that this is not their area of knowledge, or no response at all
-

Examples of Good Experience

- Good handover arrangements and team working under Teresa
- Good rapport with lead ICD when she was here, with clear escalation and no deflection of responsibility, and with openness
- Overall good rapport/working relationship with individual ICNs and individual members of management

Nursing Feedback

Feedback has been received from Nursing staff and ICNS that they find the current arrangement difficult to work with as mentioned in email to lead ICD. Main concerns being inconsistency and having to repeat information.

Relevant Aspects of Vale of Leven Report:

- Table was presented to inquiry of all microbiologists who authorised C diff reports. Those reporting HAIS have a duty of care to ensure possible outbreaks are followed up
- Point 15.1 Constitution of ICT:

The Infection Control Doctor as leader of the team

The Watt Group Report of 2002[11] also highlighted the importance of the role of the Infection Control Team in the management of healthcare associated infection (HAI), and recommended that the ICD should be the leader of the Infection Control Team.[12] The recommendation on this issue also provided that the ICDs would have "designated sessions" and a clearly defined job description for this component of their work.[13] The CSBS Standards provided that the "contracted sessions per week"[14] for the ICD were to be defined and agreed.

- Recommendation 51: Health Boards should ensure that any Infection Control Team functions as a team, with clear lines of communication and regular meetings

- Recommendation 56: Health Boards should ensure that infection prevention and control groups meet at regular intervals and that there is appropriate reporting upwards through the management structure.

- Recommendation 59**:** Health Boards should ensure that attendance by members of committees in the infection prevention and control structure is treated as a priority. Non-attendance should only be justified by illness or leave or if there is a risk of compromise to other clinical duties in which event deputies should attend where practicable

Recommendations

1. A meeting is organised with Dr Green and Prof Jones with QEUH Consultants to discuss the concerns raised in relation to infection control in person

2. Agreement is reached regarding roles and responsibilities of local ICD – to include autonomy of decision making and clear leadership role of ICD in IPCT as recommended in WATT report and ratified in Vale of Leven report

3. Pending Dr Inksters return to work and her future role becoming clear, there is an immediate reassessment of the IC structure with clarity around the Lead/co-ordinating ICD role.

Re: Infection control

MACLEOD, Mairi (NHS GREATER GLASGOW & CLYDE)

Mon 26/11/2018 08:44

To: Peters Christine (NHS GREATER GLASGOW & CLYDE) [redacted]; brian.jones [redacted]; INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Thanks Christine,

Agree with much of your email, particularly around ICD cover - particular challenge in the north. Be useful to discuss further,

Mairi

Dr Mairi Macleod
Consultant Microbiologist
Clinical Lead Microbiology (North & Clyde Sectors)
Glasgow Royal Infirmary
Greater Glasgow & Clyde

From: Peters, Christine [redacted]
Sent: 23 November 2018 10:37
To: brian.jones [redacted]; MACLEOD, Mairi (NHS GREATER GLASGOW & CLYDE); INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: Infection control

Hi All,

In the light of all our recent discussion re infection control and the comments by Jane Grant re non –availability of other ICDs/ deputy I thought it may be useful to jot down the challenges that we have identified for discussion week after next:

1, Current arrangements :
South – 11 sessions Alison 2, Pepi 3, Teresa 4 plus 2 for lead. Since commencement of the system every session in the week has a named ICD – Teresa fills this in and I only write the micro service rota once ICD slots are in place to ensure no double hatting of ICDs with rota. This has failed when there is no ICD available due to leave/sickness/days off . At that point we revert to the duty consultant covering emergency calls. This leaves both IC and the service vulnerable if an outbreak meeting is required . There is usually very little scope for stepping into the duty rota as others are fully occupied also, especially when no/1 trainee only.
North runs a sector based approach Aleks -2 , Barbara 2, Linda -3 , which works well in some ways I . understand , but also faces the duty challenge in case of outbreak and also days when no ICDs are present.

Weakness in present system – complex arrangements for leave cover and passing on of work to others (usually Teresa) as only on for short time in a week . Does having more people give a robust system or would fewer people with more sessions and a commitment to developing expertise be more robust?

2. Role of lead ICD

It is clear that an organisation this size with all the critical incidents going on the lead ICD role is a full time job. Teresa is the default pick up for all the infection situations across the city and covers everyone else's leave/days off for infection control. This seems entirely unsustainable , and we are faced with an un-fillable gap when she needs to have time off both in terms of expertise and time and volume of work.

3. Role of deputy – this needs to be defined – if this requires Aleks to step in and take over at a minute's notice, this is an impossibility on 2 sessions a week and without full involvement at every step of decision making. How can we up this role when we don't have sessions to cover the rotas adequately when trainees are in short supply?

4. Role of local ICDS – needs defined in terms of meetings and responsibilities in order to take some work away from Teresa. Training issues have been identified, are these being met?

5. Decontamination role not filled and a gap in expertise in GGC.

This week has exposed the weakness of the system and service sessions have been taken up with IC work (john Hood especially), at the same time as Teresa having to work 4 weekends in a row as well as evenings. I have grave concerns about this in the light of occupational health advice, never mind basic job boundaries. I am working with Teresa to identify time when she can take time back in lieu as a matter of urgency , however this will have a knock on effect to the rota (especially if Pepi continues to suffer ill health) and unless we have deputy in place, her time off will continue to be filled with urgent calls.

We really need to be in a situation where the system can robustly and consistently allow Teresa to have her time off while ensuring no other ICDs suddenly find themselves out of their depth in a serious and risk fraught environment, and we need to capture the impact on Microbiology in adding extra sessions into infection control .

Kr

[redacted]
Dr Christine Peters
Consultant Microbiologist
Queen Elizabeth University Hospital,
GGC
Ex [redacted]
Mobile: [redacted]

Inkster, Teresa

From: Peters, Christine
Sent: 15 January 2019 13:34
To: CARGILL, James (NHS GREATER GLASGOW & CLYDE); Harvey-Wood, Kathleen; Balfour, Alison; [redacted]; Inkster, Teresa; INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE); Khanna, Nitish; Peters, Christine; Valyraki, Kalliopi; Wright, Pauline
Subject: FW: SAFETY OF MICROBIOLOGY SERVICE
Attachments: QEUH Staffing and Safety Concerns January 2019.docx

FYI

From: Peters, Christine
Sent: 15 January 2019 13:33
To: Jones, Brian
Cc: Macleod, Mairi (NHSmail)
Subject: SAFETY OF MICROBIOLOGY SERVICE

Dear Brian,

Thank you for your email regarding the safety of the microbiology service and for taking this very serious matter forward with senior management.
I attach a summary of the current situation at the QEUH.

We are very concerned that there has been a significant reduction in Clinical staff dealing with the workload of the department over the past 5 years coupled with a substantial increase in workload over the same time period. Despite many of us working extra hours (coming in on days off, coming in early and leaving late) in order to try to mitigate the risks of an understaffed Microbiology service, we feel that the workload is such that we can anticipate a high possibility of future errors/oversights in the laboratory, loss of follow up of cases and sadly burn out of colleagues. This will also impact on the ability to carry out effective training for the few trainees we still have left.

Unfortunately we can point to recent SCIs and Datix's where we feel adequate staffing would have helped to prevent the situations arising, although this cannot of course be proven retrospectively, they give us cause for great anxiety regarding future errors and the potential consequences of these. A strategy of waiting for a serious incident before action is taken is not one that anyone can condone, and therefore we have made every effort to raise our concerns over the past few years as well as striven to optimise working practices as far as possible. Yet we find ourselves stretched on a daily basis.

Finally I would like to pay tribute to the incredible hard work and dedication of this team of Clinical Microbiologists who constantly go above and beyond their job plans to delivery as safe a service as possible within the resources available. We are very fortunate to have such an experienced, patient centred and professionally exemplary team. This team is expressing signs of exhaustion, frustration regarding an ever worsening staffing situation with fears of consequential potential patient impact. This cannot be ignored.

We value an opportunity to discuss these matters further in a constructive setting.

Regards,

[redacted]
Dr Christine Peters
Consultant Microbiologist

Queen Elizabeth University Hospital,
GGC
Ex [redacted]
Mobile: [redacted]

From: Jones, Brian
Sent: 10 January 2019 18:29
To: Macleod, Mairi (NHSmail); Peters, Christine
Subject: SAFETY OF MICROBIOLOGY SERVICE

Dear Mairi and Christine,

Following the consultants' meeting yesterday the BMA have written to Rachel Green in her role as NHS GGC Chief of Medicine for Diagnostics.

In his letter Martyn Ramsay states "The overriding concern however in the medium to long term is the general safety with respect to the staffing levels and how this impacts on being able to do the job that they are job planned to do"

I have now been asked to provide more specific detail about safety concerns as these relate to the GGC Microbiology service. It would be useful to have specific examples of where patient safety has been compromised.

I'd be grateful if you could provide responses asap.

Many thanks.

BJ

Professor Brian L. Jones
Consultant Medical Microbiologist, NHS GGC

QEUH Staffing and Safety Concerns January 2019

1. The extent of the erosion of the staffing levels since 2014 :
    - Loss of 3 Clinical scientists,
    - Loss of 4.5 trainees
    - **Reduction** in consultant sessions from 88 pre reconfiguration to 83 today
2. Increase in workload since 2014
    - Massive increase in clinical areas and acute bed days covered on south site with the opening of the QEUH in 2015
    - Increase in positive results, particularly Blood cultures and sterile sites
    - Increase in calls
    - Increase in GP practices covered (influx of ALL Clyde primary care work during lab reconfiguration)
    - Acquisition of specialised and expanded services requiring Clinical Microbiology input including CF, NICU , adult ITU , renal service and BMT adult, orthopaedics , OPAT, paediatric renal
    - Increase in infection control workload due to multiple issues with the new build as well as massively increased size of hospital
3. Increase in on call commitment from 1 in 11 to 1 in 7
4. Increase in requests for Microbiology time that have had to be rejected (eg paediatric OPAT, paediatric renal, neurosurgical MDT, restarting of renal adult rounds)
5. Increase in Sickness Leave which has required extra cross cover
6. Difficulty in getting annual leave and parental leave , the feeling is that taking leave puts others into untenable position in terms of workload and so reticent to take it.
7. Annual leave is effectively covered by others SPA in order to cover the rota
8. Cancelations of rounds and MDTS , with Clinical teams reported negative impact
9. Increased number of occasions when two slots on rota need to be covered by one person – eg infection control plus duty,
10. Multiple efforts to rationale work load
    - Merging of paediatric and adult service
    - Dropping MDTs and ward rounds
    - Requests to have CMT and above only calls
    - Ortho liason service developed as heavy users of call system
    - GP email service
11. Concerns re staffing levels raised and documented including but not limited to:
    - RIE event in 2016
    - Emails to HOS, GM, CD
    - Meeting with CoM and GM in 2018
    - SMT , MMT
    - UKAS inspector raised staffing as a quality issue
    - Staffing is on risk register of Directorate

12. Untoward incidents that we feel have been impacted by the staffing levels :
    - SCI re CF patient result not being acted on – primarily due to IT issue, but secondarily could have been prevented had the CF MDTS been attended
    - DATIX re E coli 0157 and group A strep not being reported to Public Health
    - DATIX re paratyphoid being incorrectly reported
    - Mycobacterium in blood culture delay in pick up in laboratory , delay in therapy

RE: deputy ICD

Best, Jonathan [redacted]

Fri 25/01/2019 12:15

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Armstrong Jennifer (NHS GREATER GLASGOW & CLYDE) [redacted];

Teresa,
My understanding was that John would help for an initial 10 days then review.

I will check,

Jonathan.

-----Original Message-----
From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]]
Sent: 25 January 2019 09:41
To: Armstrong, Jennifer; Best, Jonathan
Subject: [ExternaltoGGC]Fw: deputy ICD

Hi, John Hood arrived yesterday afternoon having been told he was here for 2 days , half of one he had missed already. Brian Jones has been calling me to discuss why he is required.I require someone at a senior level to sort out the deputy issue with diagnostics. I need John to pick up the ventilation work and will today be sending him to the water technical group on my behalf. He also needs to be able to chair IMTs if I am off. I need this much longer term than just 2 days.

Thanks
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology Dept of Microbiology Queen Elizabeth University Hospital
Glasgow Direct dial : [redacted]
From: MACLEOD, Mairi (NHS GREATER GLASGOW & CLYDE)
Sent: 24 January 2019 11:29
To: brian.jones[redacted]
Cc: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject:

Hi both,

Following request to have John Hood made available I have arranged cover for his duty sessions today and tomorrow so he is free from now. Can I have an indication of how long this will be ongoing?
Mairi

RE: STAFFING RED FLAG

Jones, Brian [redacted]

Mon 28/01/2019 11:22

To: Peters Christine (NHS GREATER GLASGOW & CLYDE) [redacted]; INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: Leanord Alistair (NHS GREATER GLASGOW & CLYDE) [redacted];

Nothing. We have to work with what we have. Simple really.

From: Peters, Christine
Sent: 28 January 2019 11:22
To: Jones, Brian; Inkster, Teresa (NHSmail)
Cc: Leanord, Alistair
Subject: RE: STAFFING RED FLAG

up to you to advise - what else can you suggest?

From: Jones, Brian
Sent: 28 January 2019 11:21
To: Peters, Christine; Inkster, Teresa (NHSmail)
Cc: Leanord, Alistair
Subject: RE: STAFFING RED FLAG

Like I said, up to you to decide how best to utilise your resource.
BJ

From: Peters, Christine
Sent: 28 January 2019 11:17
To: Jones, Brian; Inkster, Teresa (NHSmail)
Cc: Leanord, Alistair
Subject: RE: STAFFING RED FLAG

Yes, I am cancelling ITU rounds, as I have done previously. I am informing you so you are aware.

regards,
Christine

From: Jones, Brian
Sent: 28 January 2019 11:06
To: Peters, Christine; Inkster, Teresa (NHSmail)
Cc: Leanord, Alistair
Subject: FW: STAFFING RED FLAG

Thanks Christine.

I fully appreciate the pressures on the clinical and IPC services on both sites and you will be aware that I am working to improve staffing.

However, we can only work with what we have currently and will need to prioritise accordingly.

As clinical lead for the South, It is for you (and your colleagues) to decide where these priorities lie.

BJ

From: Peters, Christine
Sent: 26 January 2019 16:49
To: Inkster, Teresa (NHSmail); Jones, Brian
Subject: STAFFING RED FLAG

Hi All,
On the back of this Brian, I need to clarify the staffing position at the QEUH this week: there will be NO SPA, two (pauline and ALison) on AL (essential and non postponable) , one on parental leave (extended as some issues with child, and unexpectedly early) , sincerely hope [redacted] will be back from sick leave on Tuesday (he has been in bed for a week and narrowly missed a hospital admission) .

The entirity of the staff present will be on the rota:

Monday: , James (Paeds) Pepi (duty 1) plus Jenna, Christine (Duty2) ie 3 people to do all the BCs, calls, lab, icus, one of whom is a pre part 2 trainee. IE NO TIME FOR ADDITIONAL IC SUPPORT

Tuesday : James (Paeds) , Christine (Duty 1 plus deanery visit coordination plus Paeds CF IMT) with Jenna, [redacted] (Duty2) ,MAY NEED TO CANCEL ITU ROUNDS Pepi (infection Control)

Wednesday: James (paeds), Pepi (duty1) , no trainees in morning due to training, [redacted] (duty2), NEED TO CANCEL ITU ROUNDS Christine CF and then help duty NO TIME FOR IC

Thursday : James (paeds), Pepi plus Jenna plus Sarah (duty 1) , [redacted] (duty 2) , MAY NEED TO CANCEL ITU ROUNDS, NO ADDITIONAL TIME FOR IC SUPPORT

Friday : James (paeds) , Christine and Sarah (duty 1 +duty2) DEFINITELY WILL CANCEL ALL ROUNDS , NO IC SUPPORT

Perhaps I do not need to remind you that I have been repeatedly been raising the issue of the lack of resilience in the system . Teresa will not only be dealing with all the high level issues at present, but there will be no-one else rota'd for routine IC except for Tuesday and Thursday pm.

Please be assured that I am working to the utter extremes of my stamina to keep the service going, but I and my colleagues are not super human and the point at which this will actually become unbearable is not far off.

kind regards,

[redacted]

Dr Christine Peters

Consultant Microbiologist
Clinical Lead Microbiology QEUH
[redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 26 January 2019 15:53
To: Hood, John (NHSmail)
Cc: Jones, Brian; Peters, Christine
Subject: [ExternaltoGGC]Monday

Hi John

Rather than come to the IMTs with me in the morning I wondered if you could do other stuff as the work is mounting up

I will send you relevant emails but the following will need done

1) HAI scribe for an issue in room 23 ICU - this is the room we were in the other day

2) Exophiala in 7A and 7D - have a look at showers with ICNs

3) Outstanding actions from Christine and Aleks in relation to smoke tests as part of Crypto

Brian - Im like a broken record, but the IC workload continues to be significant. Christine has been doing IC stuff today whilst on call and Im dealing with stuff from home.

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

Re: Staffing

INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)

Mon 28/01/2019 13:20

To: Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted]; brian.jones [redacted]

As per previous email , he is not able to cope with the ventilation work and Im having to check everything.
T

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Walsh, Tom [redacted]
Sent: 28 January 2019 13:15
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE); brian.jones [redacted]
Subject: RE: Staffing

Appreciate it's not within my gift to arrange microbiology cover, and I wasn't party to the discussions last week, but I though John was being released to cover ventilation?

Tom

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 28 January 2019 12:44
To: Walsh, Tom; Jones, Brian
Subject: [ExternaltoGGC]Fw: Staffing
Importance: High

Confidential

See below.

Others are struggling to cope with workload and tasks. They are not able to work independently and at the pace we require . This is generating more work for me because they are having to ask me stuff all the time. Both Pepi and John have now asked me about this scribe. John has told me he is out of touch and that he likes to talk things through with people .

I am requesting that Christine Peters is freed up to assist me with tasks relating to HAI scribes and ventilation /water damage. Others can then fill the microbiology slots on the rota. This will be short term only .

KR
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Peters, Christine [redacted]
Sent: 28 January 2019 10:28
To: brian.jones[redacted]
Cc: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: RE: Staffing

An HAISCRIBE, John has never done one before

From: Jones, Brian
Sent: 28 January 2019 10:28
To: Peters, Christine
Cc: Inkster, Teresa (NHSmail)
Subject: RE: Staffing

What does this actually mean? Pepi has to go with John? To do what?

From: Peters, Christine
Sent: 28 January 2019 09:51
To: Jones, Brian
Cc: Inkster, Teresa (NHSmail)
Subject: Staffing

Hi Brian,

Update on staffing

It seems that John is not able to do the work today on his own and so Pepi has had to go with him .
This leaves just two consultants and a trainee (plus FY2) to cover all the QEUH workload .

kind regards,

[redacted]

Dr Christine Peters

Consultant Microbiologist
Clinical Lead Microbiology QEUH
[redacted]

RE: FOI

Armstrong, Jennifer [redacted]

Tue 05/02/2019 15:36

To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]; Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc: GREEN, Rachel (NHS NATIONAL SERVICES SCOTLAND) [redacted];

Teresa
I have spoken to Rachel Green this afternoon as we clearly need to put in place arrangements which will stabilise the ICD service; She will be in the lab block tomorrow lunchtime and can discuss with you how to address the shortfalls while maintaining a microbiology service
Tom: i want to discuss this with you now please so I will call you as I think it would be helpful for you to talk to Rachel in advance of AL to ensure that we put support in place
Kind regards
Jennifer

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 05 February 2019 15:23
To: Walsh, Tom; Armstrong, Jennifer
Subject: [ExternaltoGGC]Re: FOI

I will call Iain tomorrow

For noting;

Barbara has a family issue and will be off I expect now for a few days, she will kindly stay on today to sort RAH ICU out

Another ICD took unauthorised annual leave today , this has been discussed with Brian and she will be contacted and asked to come back to work tomorrow

Myself and John have high workloads, I know John has been in touch with you separately Tom regarding this

I have had to defer 3 HAI scribes today and will need to request a deferral on the sign off for RAH ICU , which I only found out about yesterday. We are unable to do SAB ward rounds at QEUH currently. Fridays ortho SSI meeting is cancelled

The organisation need to be aware that ICD cover is thin on the ground and that we are having to prioritise work. The micro shortages are impacting on IC also. Linda and [redacted] are on A/L, Christine is off sick and will be for some time, another colleague at QEUH has just handed in his notice.

Tom - can you contact estates and request that we have the previously agreed 2 weeks notice for HAI scribes, this is not happening and in some cases we are getting these the day before work is due. Can we ask capital planing colleagues for details of all work requiring ICD sign off so we can anticipate what is coming

I am giving small tasks to senior trainees to look at i.e. device related SABs at QEUH, vascular SSIs at QEUH

Kind regards

A49525252

Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

To: MAREK, Aleksandra (NHS GREATER GLASGOW & CLYDE); Weinhardt, Barbara; BAGRADE, Linda (NHS GREATER GLASGOW & CLYDE); alison.balfou[redacted]; Valyraki, Kalliopi
Subject: Fw: IPC workload

Hi all

See below. It is essential you are all involved with this. Can you please get back to me urgently with info. I am putting together all the meetings I attend, screenshots of my diary, numbers of emails etc.

HAI scribes,PAGs, IMTs barely scratch the surface...

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Jones, Brian [redacted]
Sent: 22 February 2019 11:59
To: Walsh Thomas (NHS GREATER GLASGOW & CLYDE); INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE); Devine, Sandra
Subject: RE: IPC workload

Thanks Tom.

Teresa, I've been asked to get this info fairly quickly so we can make a case for increased resource. Do you think you could provide a summary? I'm guessing we don't need to go into too fine detail.

Thanks

BJ

From: Walsh, Tom
Sent: 22 February 2019 11:43
To: Jones, Brian; Inkster, Teresa (NHSmail); Devine, Sandra
Subject: RE: IPC workload

Hi Brian

Scribes, PAGs and IMT are all relevant. I think we would need to also consider :

Time spent on incoming Ward/ Clinician inquiries
IPCT meetings, both SMT and within the local team set up.
ICC and expert groups such as Decon and Water Safety etc.
Input to a fairly hefty ward to board reporting schedule.

I'm sure Teresa and the ICDs will have more metrics which can inform the review.

Bw

Tom

From: Jones, Brian
Sent: 22 February 2019 11:20
To: Walsh, Tom; Inkster, Teresa (NHSmail); Devine, Sandra
Subject: IPC workload

Hi All,

I'd like to get a better understanding of medical IPC workload to inform a review of resource.

What would be the best way to do this? Scribes/PAGs/IMTs + other metrics?

Grateful for your views on how to go about this.

BJ

RE: ICD workload

Jones, Brian [redacted]

Mon 25/02/2019 16:40

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc:Walsh Thomas (NHS GREATER GLASGOW & CLYDE) [redacted];

Thanks Teresa. I appreciate how difficult it is to pull this sort of thing together.
I'll wait to see what the others say.
Could you give some indication of frequency of meetings and how long they take including prep and travel?
BJ

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 24 February 2019 17:24
To: Jones, Brian
Cc: Walsh, Tom
Subject: [ExternaltoGGC]ICD workload

HI Brian,

Its difficult to capture workload because the intensity of IC is variable. I have asked the other ICDs for info which I will forward.

~20 IMTs/PAGs chaired by me between Dec 20th and Feb 22nd. I have delegated recent HAI scribes so only 5 for me in that time.

I have attached committee meetings that I attend.The ones in yellow I haven't been to in over a year due to workload

Diary screen shots for a month attached also.These are fairly typical .

Add to that a huge volume of emails ,if you need that level of data I will need to ask my PA to tally up

As lead I have the responsibility with Tom and Sandra for all the board level reports. I also have updates from the surveillance team for all our surveillance programmes coming to me and needing actioned when appropriate. Exception reports for water come to me , significant nos in QEUH and Clyde currently. Also air sampling results for QEUH/RHC +validation reports for specialist areas all over the city

Also supervision of other ICDs, one in particular at the moment.The others are independent and it is minimal support only. Note RAH has had some complex issues requiring input from Linda,JH and myself recently.

Happy to discuss further

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology

Dr Teresa Inkster

Committee meetings NHSGGC

Board Infection control committee

Acute Infection control committee

Infection control Senior management team meeting

Board water safety group meeting

Sector water safety meeting

Sector facilities meeting

Board Clinical Governance meeting

Womens and Childrens clinical governance meeting

Water safety short life working group

Antimicrobial Utilisation Committee

Clinical Senate meeting

Neurosurgical SSI group

Orthopaedic SSI group

Infection control doctors meeting

Microbiology management team meeting

Medical director meetings

SAB group

Health Protection Scotland groups

National outbreak consensus group,Chair

Neonatal unit group,representative

Built environment group,deputy chair

Pseudomonas guidance – SLWG, representative

Infection Control Workload

Weinhardt, Barbara [redacted]

Thu 07/03/2019 16:44

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Cc:MACLEOD, Mairi (NHS GREATER GLASGOW & CLYDE) [redacted];

Dear Teresa,

Thought I should fire you a quick e-mail before I go off for just over a week.

We have been prompted by Mairi to compile some info on our Infection Control Workload.

I have tried to go back retrospectively for the last month through old e-mails and calls so I feel it is not very accurate at all.

My diary is availble if needed.

However in Summary it is very evident that probably 90% of the work is AD-HOC i.e firefighting.

It feels unsafe and very stressful when as it regurally happens for me on a Monday to be covering the whole of the North and being on the Duty rota at the same time.

Not being able to have any protected SPA time as never not availble to IC matters. I can't remember a supposed SPA session not being disturbed/distrubted by an IC phone call.

Travel time especially having responsibilty for an off site hospital is significant.

Happy to discuss futher when I get back.

All the best

Barbara

Re: IPC workload

MAREK, Aleksandra (NHS GREATER GLASGOW & CLYDE)

Thu 07/03/2019 16:40

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Hi Teresa,

We have tried to retrospectively put together as much as we can recall about our IC activity from diaries emails, mobile phone logs etc for a two week period. It is definitely not complete but it is available when you need it.

I think as a general summary when we are not in the duty room we are just dealing with acute infection control issues and we don't have time for any audit/development/training type activities.

The other issue is that when we are in the duty room we are less efficient than non IC colleagues as we are checking emails, answering IC calls etc. I rely very heavily on cover from colleagues which I know I cant always pay back. This can be a particular worry when we are on the duty rota on days where we are cross covering sites.

I know this is the case for most of us these days but SPA time doesn't exist. Additionally but probably more for Barbara and Linda than myself travelling between sites is a huge time drain.

Please let us know if you would like to discuss further.

Kind regards,

Aleks

Dr Aleksandra Marek
Medical Microbiology/Infection Control
Glasgow Royal Infirmary
[redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 24 February 2019 16:40

RE: Sarah and John

Stewart, David [redacted]

Wed 27/03/2019 09:48

To:INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted];

Hi Teresa

This links to the staffing issues in microbiology. I understand that John is in discussions with the senior Directorate team about this and there are proposals to stabilise the service. Hopefully that will allow us to get into a more sustainable situation for IC.

Regards

David

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 22 March 2019 11:53
To: Stewart, David [redacted]
Subject: [ExternaltoGGC]Fw: Sarah and John

Hi ,can i ask your advice re the email below from diagnostics, particulary regarding Sarah

As I mentioned yesterday 4 sessions of an experienced ICD in QEUH has transformed things . I had hoped this would be longer term.

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: MACLEOD, Mairi (NHS GREATER GLASGOW & CLYDE)
Sent: 22 March 2019 11:01
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: Sarah and John

Hi teresa,

I'm making up our rota for April and finding it increasingly difficult without John and Sarah. We can't offer Sarah past ECCMID 16th April.

A49525252

In addition is there any flexibility in the time John is spending doing IC? Could he give eg 3 sessions/week back to us.

Thanks,

Mairi

Dr Mairi Macleod
Consultant Microbiologist
Clinical Lead Microbiology (North & Clyde Sectors)
Glasgow Royal Infirmary
Greater Glasgow & Clyde

Fw: QEUH Consultants Meeting 17.04.19.pdf

INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)

Mon 12/08/2019 15:35

To:brian.jones[redacted]

FYI

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
National Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Sent: 23 April 2019 13:33
To: Leanord Alistair (NHS GREATER GLASGOW & CLYDE)
Subject: Re: QEUH Consultants Meeting 17.04.19.pdf

Yes I think that is the case

Sent from my BlackBerry 10 smartphone on the EE network.

From: Leanord, Alistair
Sent: Tuesday, 23 April 2019 1:27 PM
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE)
Subject: RE: QEUH Consultants Meeting 17.04.19.pdf

T

There is time in the JPs, (0.75Pas/wk) for NK and PW. CP has none.

I assume the issue is other pressures are now intruding on this time making it difficult to deliver?

Al

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 23 April 2019 13:18
To: Leanord, Alistair; Green, Rachel (NHSmail)
Subject: [ExternaltoGGC]Re: QEUH Consultants Meeting 17.04.19.pdf

Christine, Nitish and Pauline. Pauline in particular is a huge loss . She was the local training lead dealing with rotations, inductions etc and also one of only three of us who have done the doctors in difficulty training.
T

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital

Glasgow
Direct dial : [redacted]

From: Leanord, Alistair [redacted]
Sent: 23 April 2019 13:12
To: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE); GREEN, Rachel (NHS GREATER GLASGOW & CLYDE)
Subject: RE: QEUH Consultants Meeting 17.04.19.pdf

Teresa

Which 3 have decided to give up the role?

Cheers

Al

From: INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE) [redacted]
Sent: 23 April 2019 13:01
To: *Leanord, Alistair; Green, Rachel (NHSmail)*
Subject: [ExternaltoGGC]Re: QEUH Consultants Meeting 17.04.19.pdf

Alistair,

Thanks for meeting with us.

I think we also need to look at the situation with training in QEUH, specifically the trainers. Recently 3 experienced consultants have given up the Ed sup role ,citing a lack of time in job plans. This leaves just myself and [redacted] as Ed sups here. With Pauline being one of those resigning there is no local lead for training .

As a result I am currently; national TPD for med micro, interim TPD for virology until replacement appointed, local training lead and ed sup for 5 trainees. This is fairly excessive and I think we need to encourage people back into the Ed sup role.

Brian has emailed me recently re setting up a teaching programme in QEUH in response to the deanery visit . I think it will be a challenge to get colleagues here to participate.

I received an email today re the 2019 job planning review , perhaps there is an opportunity to look at this issue as a department?

Kind regards
Teresa

Dr Teresa Inkster
Lead Infection Control Doctor NHSGGC
Training Programme Director Medical Microbiology
Dept of Microbiology
Queen Elizabeth University Hospital
Glasgow
Direct dial : [redacted]

From: Tolland, Karen [redacted]
Sent: 18 April 2019 15:04
To: Leanord Alistair (NHS GREATER GLASGOW & CLYDE); 'MRamsay[redacted]'; GREEN, Rachel (NHS GREATER GLASGOW & CLYDE)
Cc: Wood, Kathleen (NHS GREATER GLASGOW & CLYDE); alison.balfou[redacted]; Cargill, James; [redacted],

[redacted] INKSTER, Teresa (NHS GREATER GLASGOW & CLYDE); Khanna Nitish (NHS GREATER GLASGOW & CLYDE); Peters Christine (NHS GREATER GLASGOW & CLYDE); Valyraki, Kalliopi; Wright Pauline (NHS GREATER GLASGOW & CLYDE)

Subject: QEUH Consultants Meeting 17.04.19.pdf

SCOTTISH HOSPITALS INQUIRY

Bundle of documents for Oral hearings commencing from 19 August 2024 in relation to the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow

Bundle 14 - Volume 1– Further Communications

A49525252