SCOTTISH HOSPITALS INQUIRY

Bundle of Documents for the Oral Hearing Commencing 12 June 2023 in relation to the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow

Bundle 2 – Problem Assessment Group Meeting Minutes (PAG Minutes)

SCOTTISH HOSPITALS INQUIRY

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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:	Sandra McNamee
Date:	23/05/2016
Subject/ situation:	Increase number in Abscessus cases within adult Cystic Fibrosis patients.
Background:	3 abscessus cases within a 3 month period (February – April) but with no obvious link between cases on initial timeline. 6 new cases of *M abscessus* in the CF adult population since the move to QEUH. In total over the past 10 years there have been 26 abscessus with 8 in 2014. [redacted] Some of the cases have been transferred from Paediatrics care into adult care. More detailed investigation including attendances at hospital and further typing of isolates.
Discussed with/Communications:	ICD, Lead IPCN, Clinical Team, CF Consultants, Lead Physio for CF, Service Director, Clinical Service Manager, CF Clinical Nurse Specialists.
Hospital Infection Incident Assessment Tool (HIIAT)	No - further information required.
Recommendation /options:	IMT – Yes – awaiting results from the genome sequencing (6-8 weeks) More detailed investigation including attendances at hospital and further typing of isolates – time line of 26 cases from June 2015 – present & Genome sequencing of 26 cases. Review of PPE for abscessus patients i.e. water repellent gowns Single patient use stethoscopes to be introduced. Review of Infection Control guidance within wards and out patient clinics. Screening strategy to include sample at annual review after 2 weeks off macrolide. 7 patients identified as not having been screened to be contacted for sampling.
ICT Members	Lynn Pritchard, Dr Christine Peters

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:	Anne Harkness Dr Teresa Inkster Sandra MacNamee
Date:	16/06/16
Subject/ situation:	Increased number of Aspergillus cases associated in time and place with area of water leakage in ITU2
Background:	There was an incident of a large amount of water ingress at Christmas into ITU2 which was found at the time to be due to an incorrectly positioned vent on the outside wall. Remediation work was carried out at the time to the external wall, however there was no inspection of the inner wall space and ceiling to ascertain if any water/ damaged material remained. ICT noted on ICNET alert system that there were increased numbers of Aspergillus isolates on Critical Care unit since January , 2 of which were in a bed space close to the damage. Inspection confirmed that the window in bedspace 34 was damaged , with non intact paintwork and a slightly bulging ceiling tile above the window exactly in the area of the water ingress at Christmas. Bed space was blocked and window taped on 10th June , when it seemed that there were 4 cases.
Discussed with/Communications:	ICD, Ian Powrie, David Batty (estates) Dr Sandy Binning (Clinical Director) Julie Kennedy (Charge Nurse) , Ian Thomson (Lead Nurse Critical Care), Jerry Sullivan (Brookfield) Katrina Black (ICN)
Hospital Infection Incident Assessment Tool (HIIAT)	Agreed to have IMT on Monday when HIATT will be completed
Recommendation /options:	Actions 1. Timeline to be completed – ICNs 2. Case ascertainment through laboratory system – Christine 3. ICNET alert system to be investigated re missed cases – Christine 4. Work required: • Window replacement – initially thought to take 6 weeks to order a bespoke replacement, however an alternative can be sourced within a week • Examination of plaster board in the surrounding space within the wall cavity _ requires removal of tiles and wall will generate dust and potential for discovery of damp and mouldy material – all such material would need to be removed and replaced • Estimated time of works 3 days – depending on what is found on inspection 5. Jerry to look at screening and negative pressure options 6. Ian and Julie to look at routes into unit 7. Risk mitigation pending work – clinicians informed of risks and need for immune compromised and neutropenic to be in isolation rooms if possible IMT to be called and HAISCRIBE need to be agreed with all relevant parties to

	include discussions around decant/ other options.
ICT Members	Lynn Pritchard, Dr Christine Peters

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:	Sandra McNamee
Date:	17/6/16
Subject/ situation:	Contamination of aseptic pharmacy unit at RHC water supply with Cupriavidus pauculus. One patient bacteremia as a result
Background:	Routine water sampling of the aseptic unit has revealed persistent colonisation with Cupriavidus pauculus ,a Gram negative environmental organism One patient developed [redacted] with same organism. This has been confirmed as the same strain as the water on typing by reference lab Walkround and action plan developed by local ICT in relation to practice in the unit. Estates colleagues to dose water supply with Sanosil early next week Ongoing surveillance for further bacteremias in the lab
Discussed with/Communications:	ICT Joanne Gallagher, aseptic unit Ian Powrie, estates
Hospital Infection Incident Assessment Tool (HIIAT)	Yes: Green No:
Recommendation /options:	IMT – Yes IMT early next week No OCT - Yes No
ICT Members	Dr Teresa Inkster Pamela Joannidis

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:	Sandra Mcnamee
Date:	04/8/16
Subject / Situation:	2 HAI Aspergillus cases in paediatric haematology patients [redacted]
Background:	2 suspected HAI Aspergillus cases attributable to ward 2A were reported by Dr Gibson. These numbers are higher than expected in this patient group. [redacted] Recent problem detected in the unit with ventilation ductwork which was torn , problems with condensation for chilled beams and a reported minor water leak – all may be contributing factors. Also construction /demolition work on the hospital site. Actions agreed at PAG – air sampling, clinical review of patients, urgent update on ventilation from estates, inspection of unit for water damage, antifungal prophylaxis for all patients with haematological malignancy.
Discussed with / Communications:	Dr Brenda Gibson Jamie Redfern Jean Kirkwood Melanie Hutton
Recommendation / Options:	**IMT**: Yes – IMT will be held 05/08/2016 **OCT:** No
ICT Members:	Dr Teresa Inkster Angela Johnson, senior ICN RHC

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 (Dr Inkster and Pamela Joannidis)
To:	Sandra McNamee
Date:	23/09/16
Subject/ situation:	Patient with long term colonisation with *Pseudomonas aeruginosa* [redacted] was +ve for this organism on blood culture taken on 12/09/16. Not considered an HAI.
Background:	[redacted] First noted to be positive for *Pseudomonas aeruginosa* on 15/03/16 [redacted]
Discussed with/Communications:	
Hospital Infection Incident Assessment Tool (HIIAT)	Yes: Green No:
Recommendation /options:	IMT - Yes No OCT - Yes No
ICT Members	

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 (Dr Inkster ,Pamela Joannidis)
To:	Sandra McNamee
Date:	24/09/16
Subject/ situation:	Serratia positive patients in PICU, RHC
Background:	4 patients positive for Serratia in PICU from 13/3/16- 24/9/16 . 2 infections and 2 colonisations. All 4 remain in the unit and are clinically stable. One current bacteraemia (21/9) – responding to antibiotics ?line related infection 3 HAI , 1 possible HAI [redacted] Planned Actions – increased cleaning (twice daily) in the affected bed bays in place - water testing Tuesday - Typing of isolates - Baseline screening to take place after weekend – will enable cohort to be established - Hand hygiene and cleaning of equipment emphasised to staff - Environmental screening early next week
Discussed with/Communications:	Julie Hanratty , SCN Warren Rodriguez, Consultant PICU Louise Hartley, ST4 , PICU
Hospital Infection Incident Assessment Tool (HIIAT)	Yes: Green No:
Recommendation /options:	IMT – Yes - ? Tuesday 27/9/16 No OCT - Yes No

ICT Members	T Inkster P Joannidis

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:	Sandra McNamee, ADNIPC
Date:	06/02/17
Subject / Situation:	Possible transmission of *Serratia marcescens* [redacted]
Background:	See timeline Review of : Equipment cleaning, in particular avoiding use of hand hygiene sinks for nebuliser equipment. GR will follow up with estates on removing trough sinks from trolley bays Environmental cleaning: PJ will follow up with facilities on cleaning, in particular pendants and patient locker. Hand hygiene; GR has asked for HH education in the clinical area by Stefan Morton again. Review of antibiotic prescribing: no issues of note. Isolates from all 3 patients sent for typing
Discussed with / Communications:	Gael Rolls (SCN), Edgar Brincat (PICU Consultant), Teresa Inkster (ICD), Padme Polubothu (Microbiologist), Pamela Joannidis(LIPCN), Angela Johnson (SIPCN), Katy Anderson (IPCN),
Recommendation / Options:	**IMT**: No **OCT:** No
HIIAT	**Green**
IPCT Members:	Dr Inkster, Pamela Joannidis, Angela Johnson, Katy Anderson

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:	Sandra McNamee (Associate Nurse Director for Infection Prevention & Control)
Date:	03/03/2017
Subject/ situation:	Three positive blood cultures of *Elizabethkingia miricola* from September 2016 – February 2017. *Elizabethkingia miricola* is an environmental gram negative organism associated with water and moist environments. All 3 patients have been inpatients in Ward 2A and Ward 2B. [redacted]
Background:	Jean Kirkwood informed the group that 2 rooms within Ward 2A had leaked condensation water from the wall panels. Estates had been informed and David Brattey had attended to fix the problem. Jean also reported that the humidity/heat within the ward builds up every now and again and the working temperature in the ward is very uncomfortable for both staff and patients. Jean also raised concerns around vent cleaning on the ward – this does not seem to be taking place frequently. **IPCT Control Measures** IPCT will sample the water supply on the floor. IPCT will request estates provide the current vent cleaning/maintenance programme for ward 2B and ward 2A. IPCT will sample the vents if possible
Discussed with/Communications:	Dr Teresa Inkster – Lead Infection Control Doctor (Chair) Brenda Gibson – Consultant Haematologist Susie Dodd – Lead Paediatric Infection Prevention & Control Nurse Padmaja Polubothu – Microbiologist

	Jean Kirkwood – Senior Charge Nurse Angela Howitt – Senior Charge Nurse Emma Somerville – Charge Nurse Kathleen Harvey Wood – Principle Clinical Scientist Calum MacLeod – Infection prevention & Control Administrator (minutes)
Recommendation /options:	IMT – Not required. OCT – Not required.
HIIAT	Patient – Minor Services – Minor Risk of Public Transmission – Moderate Public Anxiety – Minor **HIIAT Score: Green** Report to HPS. No intervention from HPS or escalation. IPCT will feed up to senior management team. No press statement required.
ICT Members	As per communications above

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:	Sandra McNamee (Associate Nurse Director For Infection prevention & Control).
Date:	03/03/2017
Subject/ situation:	Clinicians reported a perceived increase in fungal infections amongst paediatric haematology patients within the Royal Hospital for Children (NB; this was raised at the end of a PAG relating to another matter).
Background:	Discussion around perceived increase in fungal infections took place specifically around candida sp. Dr Brenda Gibson queried how further cases can be prevented and the suitability of the unit for these patients. The possibility of re-introducing prophylaxis for high risk patients was discussed although definitions around who is deemed high risk are yet to be established. There were discussions around moving these high risk patients to BMT rooms and the specification of the current ventilation system was also discussed. It was noted however that the IPCT would need time to gather data in order to confirm any increase in fungal pathogens within the unit.
Discussed with/Communications:	Dr Teresa Inkster – Lead Infection Control Doctor (Chair) Brenda Gibson – Consultant Haematologist Susie Dodds – Lead Paediatric Infection Prevention & Control Nurse Padmaja Polubothu – Microbiologist Jean Kirkwood – Senior Charge Nurse Angela Howitt – Senior Charge Nurse Emma Somerville – Charge Nurse Kathleen Harvey Wood – Principal Clinical Scientist Calum MacLeod – Infection prevention & Control Administrator (minutes)
Recommendation /options:	IMT: No OCT: No PAG **:** Yes – 2nd PAG to be arranged for 7/3/17 @ 1pm. A second PAG is to be arranged once data has been gathered from lab systems relating specifically to fungal pathogens. Invite to be extended

	to the CSM, GM, Chief Nurse and Chief of Medicine.
HIIAT	HIIAT not completed due to lack of available data at time of PAG. HIIAT will be re-visited at next PAG meeting.
ICT Members	As per communications above

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:	Sandra McNamee (Associate Nurse Director For Infection prevention & Control).
Date:	03/03/2017
Subject/ situation:	An increase in positive blood cultures in Paediatric Haematology patients within the Royal Hospital for Children. General upward trend of positive blood cultures since 2014 in acute wards. 13 positive cases in January 2017 and 11 cases in February 2017.
Background:	Most lines are inserted by the surgeons. Line care is carried out by nursing staff or phlebotomists. Parents do not carry out line care for their children but may perform dressing changes at home. No protocol for line removal, it is a clinical judgment made by medics on a case by case basis Perceived increase in lines being removed and replaced due to suspected/confirmed line infections. There has been a change in the type of lines used. Dr Inkster asked if there was any output from the short life working group which was developed to look at vascular access devices but staff were unaware of any such meetings taking place. SCN, Jean Kirkwood, stated that the general cleanliness of the ward had been satisfactory. There was an issue with cleaning a few weeks ago due to domestics being off but this has since been rectified after being escalated to Sheenagh Leighton. Infection Control actions; IPCT will speak to estates about vent cleaning regimes. IPCT will look at line devices in use and find out why and when this was changed over from the smart site. Procurement will be contacted to find out specific dates. IPCT to enquire about the short life working group for vascular access.
Discussed with/Communications:	Dr Teresa Inkster – Lead Infection Control Doctor (Chair) Brenda Gibson – Consultant Haematologist Susie Dodds – Lead Paediatric Infection Prevention & Control Nurse Padmaja Polubothu – Microbiologist Jean Kirkwood – Senior Charge Nurse Angela Howitt – Senior Charge Nurse Emma Somerville – Charge Nurse Kathleen Harvey Wood – Principal Clinical Scientist Calum MacLeod – Infection prevention & Control Administrator (minutes)

Recommendation /options:	IMT: Not required. OCT: Not required.
HIIAT	Patient – Moderate Services – Minor Risk of Public Transmission – Minor Public Anxiety – Minor **HIIAT Score: Green** Report to HPS. No intervention from HPS or escalation. IPCT will feed up to senior management team. No press statement required.
ICT Members	As per communications above

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:	Sandra McNamee (Associate Director for Nursing, Infection Prevention & Control)
Date:	03/03/2017
Subject/ situation:	*Serratia marcesans* in NICU, RHC – 1 case of systemic infection
Background:	3 patients currently positive for *Serratia marcesans* in a four bedded bay – 1 infected, 2 colonised. Of the 2 patient's colonised, [redacted]. There is a fourth patient in the same bay [redacted] but is currently not positive with *Serratia marcesans.* Morag Liddell gave a brief update on the patients [redacted] Twice daily cleans of single side rooms and twice daily Actichlor Plus cleans of sink areas are still being carried out on a daily basis within the ward. Morag Liddell raised concerns that domestics covering for regular staff who are on phased retirement are not providing a clean to the same spec as regular staff. Sheenagh Leighton will aim for experienced staff to cover any Domestics within NICU and ensure they are familiar with the spec required. The pendants within NICU are not being cleaned properly as the current tool used to clean the pendant cannot get in to clean a groove in the middle of the pendant. Sheenagh Leighton will get the pendants cleaned over the weekend. Dr Inkster asked if a private company could come in and clean the walls/pendants etc. It was suggested that this be a monthly occurrence due to the high risk patients within the wards. TI to discuss with senior management. No vent cleaning has been carried out within the unit for some time. IPCT to discuss with estates.

	Water testing has been done by estates – results are awaited. Hand hygiene – no concerns from audit data
Discussed with/Communications:	Dr Teresa Inkster – Lead Infection Control Doctor (Chair) Susie Dodd – Lead Paediatric Infection Prevention & Control Nurse Patricia Friel – Lead Nurse Neonatal Morag Liddell – Senior Charge Nurse Dr Anne Marie Heuchan – Neonatal Doctor Padmaja Polubothu – Microbiologist Kathleen Harvey Wood – Principle Clinical Scientist Calum MacLeod – Infection prevention & Control Administrator (minutes)
Recommendation /options:	IMT: Not required OCT: Not required
HIIAT	Patient – Minor Services – Minor Risk of Public Transmission – Moderate Public Anxiety – Minor **HIIAT Score: Green** Report to HPS. No intervention from HPS or escalation. IPCT will feed up to senior management team. No press statement required.
ICT Members	As per communications above

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:	Sandra McNamee
Date:	10/03/2017
Subject/ situation:	2 cases of systemic infection due to *Serratia marcescen* – PICU, RHC.
Background:	Trigger for PAG set as 1 case of *Serratia marcescens* bacteraemias. Notified of 2 new HAIs to PICU – 1 bacteraemia and 1 colonisation. In addition, there was 1 colonised case already on the unit. During PAG, medical staff reported that the [redacted]. Discussions took place around the cleaning on the unit in particular pendants. • Nursing staff have no way of knowing which pendants could not be accessed on previous shifts and therefore still require access to clean. • There were not enough mops available and domestic staff have been seen cleaning floors with paper towels. SCN also pointed out that the turnover of patients in the unit recently has been higher than normal. It was also noted that trough sinks which are situated in the main corridor have yet to be removed and relocated to positive pressure rooms. NB; water has already been tested on the unit and is clear. Actions; • SCN has emailed estates manager to request removal of sinks again. • Deputy Site facilities manager to create paper exception sheets to keep at ward level specifically for pendant cleaning to allow closer monitoring of the cleaning regime by ward staff. • IPCT to meet with facilities general manager next week to discuss ongoing cleaning issues. NB: following the meeting, SD, TI and LK found the incubator lamps/lights to be dusty. These sit immediately over the top of the patient. Concerns raised with SCN.
Discussed with/Communications:	Dr Teresa Inkster – Lead Infection Control Doctor (Chair)

	Susie Dodd – Lead Paediatric Infection Prevention & Control Nurse Lynne Kennea – Infection Prevention and Control Nurse Gael Rolls – SCN PICU Dr Mark Davidson – Paediatric Intensivist Dr Warren Rodriguez – Paediatric Intensivist Shennagh Leighton – Deputy Site Facilities manager
Recommendation /options:	IMT – Not required. OCT – Not required.
HIIAT	Patient – Moderate Services – Minor Risk of Public Transmission – Moderate Public Anxiety – Minor **HIIAT Score: Amber** HOIRT completed and sent to HPS. Holding press statement prepared. Surveillance continues.
ICT Members	As per communications above

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:	Sandra McNamee
Date:	12/04/2017
Subject/ situation:	PAG 2A RHC
Background:	**Summary** • 4 patients with rotavirus, of which 2 HAI – all symptomatic • 4 patients with VRE, 1 now asymptomatic • Of these, 3 have both with both being HAI in one. • Additionally – 1 parent symptomatic, and 1 staff member symptomatic **Background info** • VRE is a coloniser and won't cause infection – but can spread from people with loose stool and has IPC implications, we have found out about rotavirus due to VRE. Rotavirus has a relatively short incubation period. • In the lab – VRE sent for typing. • To note – also possible increase in bacteraemia rates and can be interlinked with antimicrobial stewardship. • VRE linked with glycopeptide and cephalosporin use and marker of other issues • Rotavirus – some strains less susceptible to hand gel particularly as it is not enveloped, can survive in environment for weeks **List of actions** • Resumption of actichlor based cleaning • Full terminal clean of entire ward • BD cleaning from now until after the long weekend when this will be reviewed • Reinforce SIPCs and TBPs • Handwashing for all parents/visitors/staff with soap and water • Door signage • Reinforcement that all staff/visitors should stay away if symptomatic • Restrict HCW movements and ideally dedicated nursing • Visiting restrictions– 1 hour afternoon, 1 hour evening with no more than 1 extra person in addition to two parents at any one time, and no child visitors • No unnecessary staff and extraneous visitors • PPE: Ideally glove and apron due to short incubation periods. Surgical facemask if risk of splashing/spraying of body fluids. • Inform IPCT of any new cases

	• Send stool samples of any new cases for routine bacteriology, VRE screening and virology to include rotavirus – details on form need to specify there is a rotavirus issue • Please use Bristol stool chart • Shut and deep clean kitchen and communal play areas • Nursing staff to serve food including food and condiments off the trolley • Deep clean rooms in day care • Written information for parents and 5 moments of hand hygiene leaflets for staff • Try to stick to dedicated nursing teams • Approppriate waste disposal and closure of sluice to parents • Further nursing resource list to be made by clinical team and escalated through their management
Discussed with/Communications:	Jean Kirkwood – Senior charge nurse Elaine Johnstone – Lead nurse Brenda Gibson – Lead clinician Ash Deshpande –Infection control doctor Heather Dawes – clinical services manager Julie Boyd – nurse in charge Angela Johnson – Infection control nurse Kathleen Harvey-Wood – Clinical scientist Emily Goldstein - trainee clinical scientist
Hospital Infection Incident Assessment Tool (HIIAT)	Yes: Amber Patient – moderate Services – moderate Public health – minor Public anxiety – minor Reported to Health Protection Scotland Lorraine Dick in press office informed and request for holding statement made
Recommendation /options:	Further meeting to be held tomorrow but as yet not classified as IMT IMT - No OCT - No

ICT Members	As per communications above

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:	Sandra McNamee
Date:	28/4/17
Subject/ situation:	Increased incidence of VRE isolates amongst heamato-oncology population on ward 2A, RHC.
Background:	9 new cases of VRE isolated since 9/3/17, 7 of which are HAI. No clinical infections at present. Previously 6 new cases between September 2016 and March 2017, only 1 of which was HAI. Recent outbreak of astro/rota virus (April 2017) generated an increase in samples being sent for lab testing. Recognised that increase in VRE colonisation in stools is driven by the increased bacteraemia rate amongst this patient group and subsequent increase in the use of vancomycin. Discussion took place around line care and the concerns raised by IPCT during recent review of practice. SD felt there were 3 factors associated with this, the environment for preparing IV meds, the poor practice around aseptic technique and the changes in line from smart site to VAD. Antimicrobial prescribing protocols were also discussed. An action plan will be developed inclusive of the following; • Ongoing review of aseptic technique and purchase of suitable trolleys/dressing packs. • Review of ward and suitable areas for reconstitution of IV meds. • Review of antimicrobial prescribing. • Use of Bristol Stool Chart for all patients in 2A • Additional hand hygiene training. • Review of line components (VAD and smart site) – change dates and associations with blood cultures rates. • Review of biopatch use • Discussion with Royal Marsden regarding line infection prevention. It was noted that those at the PAG were also attending the first meeting of the Quality Improvement Vascular Access meeting next week

	however the group felt that a specific action plan for 2A was necessary given the concerns around bacteraemias rates and associated VRE colonisation.
Discussed with/Communications:	Lead ICD, Dr Teresa Inkster Lead IPCN, Susie Dodd SCN ward 2A, Jean Kirkwood SCN ward 2B, Angela Howat Lead Nurse for 2A, Melanie Hutton Clinical Scientist, Kathleen Harvey-Wood Practice Development Nurse, Gillian Paton
Recommendation /options:	No IMT/OCT required however further meeting to be held (date TBC) to discuss the above action plan.
HIIAT	Not required.
ICT Members	

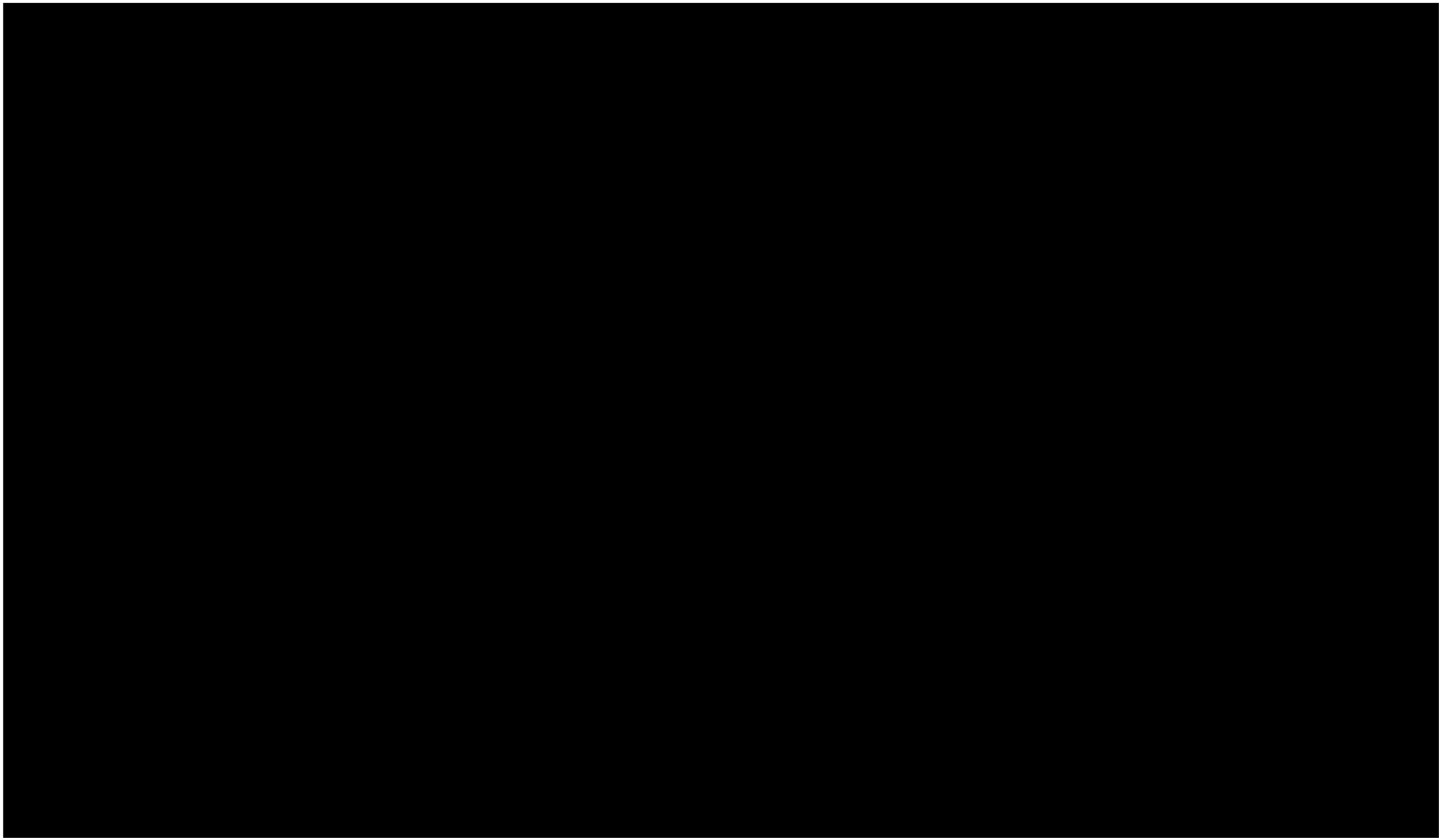
NHS Greater Glasgow and Clyde	**NHS Greater Glasgow & Clyde** **Infection Prevention and Control Team**
Purpose:	Problem Assessment Group (PAG)
From:	Infection Prevention and Control Team
To:	IPC SMT and Clinical SMT
Date:	31/5/17
Subject/ situation:	X3 cases of Norovirus, ward 2A, RHC
Background:	3 cases of Norovirus on ward 2A, RHC. Initial case first isolated Norovirus on 26/4/17 which was a non HAI and patient remains symptomatic. 2 further cases have since been identified on the ward the most recent testing positive from a sample sent 26/5/17. [redacted] All are isolated in side rooms with Transmission Based Precautions (TBPs)in place. Daily Actichlor cleaning of the ward continues and twice daily cleans of all isolated patients are in place. Since the previous outbreak of Astrovirus and Rotavirus in April 2017 the following audits have been undertaken; • Hand Hygiene audit – Combined compliance score 70% - All failures related to medical staff. • IPCAT audit 20/4/17 – Overall score 87% with a low score of 33% for the environmental aspects. These issues were explored and rectified as part of the IMT during the April 2017 outbreak. • SIPCPs audit 04/05/17 – 96%. During the audit, issues were identified with levels of high dusting, reported to domestic manager and rectified. • Regular domestic audits (both local and peer audits) have taken place and all scored above 90%. Hand hygiene training has been underway since 16/5/17 with 4 sessions completed and a further 2 scheduled. 2 were cancelled as staffing levels were too low to allow staff to attend.

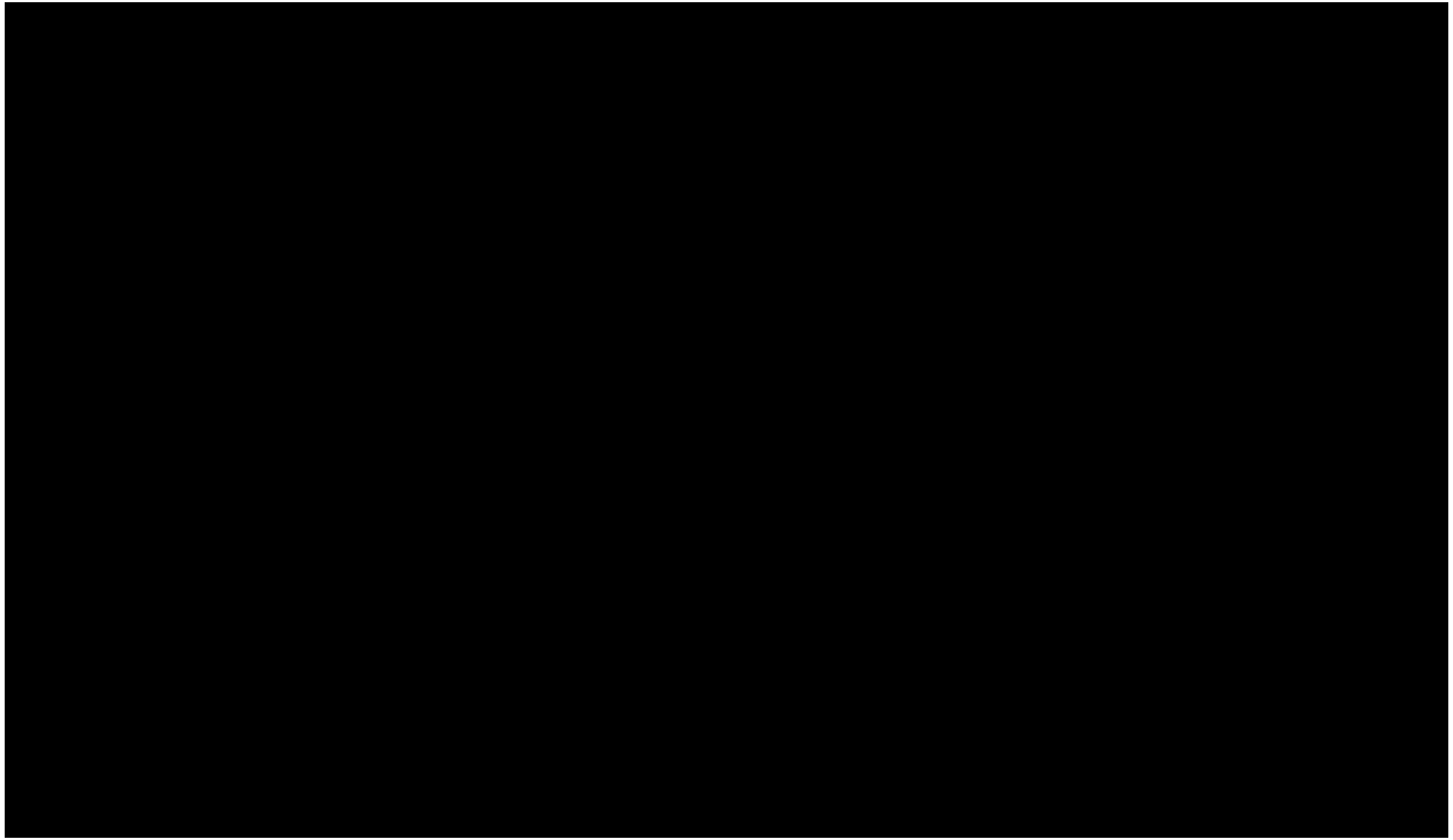
	A meeting was also held with domestic manager, SCN for 2A, CSM and Lead IPCN on 18/5/17 to discuss cleaning on the ward. Actions to be taken forward by the domestic services team were as follows; • Any rooms which could not be accessed were to be highlighted to nurse in charge at time of attempted clean. • Review of 'flow' of cleaning to take place having recognised the difficulties having to clean a high volume of source isolation, protective isolation and standard room cleaning as well as ensuring that adequate time was left between twice daily cleans. • Increase in domestic hours for ward 2A to be arranged. Staffing on ward 2A has recently been reduced back to levels maintained prior to the April 2017 outbreak.
Discussed with/Communications:	Jean Kirkwood – SCN 2A (phased retirement) Emma Sommerville – SCN (newly appointed) Heather Dawes – Clinical services manager David MacDOnald – Facilities Manager Charlie McNab – Duty Facilities Manager
Hospital Infection Incident Assessment Tool (HIIAT)	Yes – HIIAT Green; Severity of illness – Minor Service Impact – Minor Risk of Transmission – Moderate Public Anxiety - Minor
Recommendation /options:	• Hand Hygiene Audit to be repeated. • Twice daily cleaning with Actichlor plus in all areas of the ward. • IPCAT audit to be repeated. • Communal areas restricted to only those parents with asymptomatic children. • Staff ratio to be increased to allow for cohort nursing. • Medical staff to be emailed by Lead ICD and Lead IPCN to reiterate importance of hand hygiene and attendance at hand hygiene training session. [redacted] A further meeting has not been arranged at this time, the situation will be monitored closely on a daily basis and the meeting reconvened if there is evidence of ongoing transmission.

ICT Members	Susie Dodd – Lead IPCN Dr Teresa Inkster – Lead ICD

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:	22.06.17
Subject / Situation:	Increase in Enterobacter infections in 3 patients within Neurological Institute.
Background:	[redacted] [redacted] [redacted] [redacted] had insertion of an EVD in the same theatre (Theatre 3) on different days. Procedures carried out by different surgeons and different circulating theatre staff. Discussed with SCN Pam Philp and there are no documented issues regarding theatre environment or theatre packs recorded. [redacted] were in Ward 64 at the same time for a total of 15 days [redacted] and both nursed in Bed Bay from [redacted]. Ward 64 visited by IPCT on 15.06.17 to determine if there were any infection control issues. There were no concerns with the environment or clinical practice. The most recent IPCAT scored 86%.

	See page 3 for timeline and page 4 for Surveillance report.
Discussed with / Communications:	Sandra McNamee (ADNIPCT) Ann Kerr (Lead Nurse Surveillance) Lynn Pritchard (Lead IPCT)
Recommendation / Options:	
HIIAT	**Green**
IPCT Members:	Dr Inkster (ICD) Ann Kerr (Lead Nurse Surveillance) Lynn Pritchard (Lead IPCT)





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 (IPCT)
To:	IPCT SMT and clinical SMT
Date:	26/07/17
Subject / Situation:	2 Stenotrophomonas bacteraemias acquired in 2A within a 8 day period.
Background:	[redacted]
Discussed with / Communications:	Ashutosh Deshpande – ICD Susie Dodd – Lead IPCN Katie Anderson – IPCN Brenda Gibson – Consultant haematologist Kirsteen Quinn – Nurse in Charge, 2A
Recommendation / Options:	The following actions are already in place following previous enhanced IPC input on the unit; • Actichlor plus clean of ward on a daily basis • 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.
HIIAT	**RED;** **Severity of illness – Major** **Service Impact – Minor** **Risk of Transmission – Minor** **Public anxiety - Minor**
IPCT Members:	Katie Anderson – IPCN Brenda Gibson – Consultant haematologist Kirsteen Quinn – Nurse in Charge, 2A

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:	Clinical and IPC SMT
Date:	02/08/2017
Subject/ situation:	Increased incidence of Pseudomonas aeruginosa on PICU, RHC X1 bacteraemia HAI, X1 colonisation HAI
Background:	PICU is a 22 bedded unit comprising 4 main bays (each with 4 beds) and 8 single side rooms. *P.aeruginosa* is an alert organism with all positive isolates reported to the IPCT. On receipt of the 1st positive blood culture, a water checklist was completed as per NHSGGC algorithm for *P.aeruginosa* positive blood cultures in NICU/PICU. On receipt of a 2nd positive isolate, this time from a BAL, the IPCT reviewed both cases and included review of a non HAI *P.aeruginosa* on the unit. A timeline of beds showed an association of time/place between 2 cases - 2 patients occupied the same bed space, one immediately after the other. On this basis a PAG was convened. The patient situation report is as follows; • [redacted] • [redacted] Agree moderate severity as per HIIAT. • [redacted] • [redacted] The following actions were agreed; • Samples sent for typing • Terminal clean of unit by domestic services • IPCAT audit to be carried out by IPCT • SCN & consultant to reiterate SICPs to all staff

Discussed with/Communications:	Gael Rolls -SCN Sheenagh Leighton- Domestic manager Lorraine Kearney – Unit domestic Andrew McIntyre - Consultant Paediatrician Kathleen Harvey wood – Clinical Scientist
Recommendation /options:	No further meetings unless there are any new cases.
HIIAT	Green; Severity of illness – Moderate Service Impact – Minor Risk of transmission – Minor Public anxiety - Minor
ICT Members	Lead IPCN Susie Dodd ICD Ashutosh Deshpande

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:	Clinical and IPC Senior Management Teams
Date:	03/08/17
Subject/ situation:	Four patients with *Staphylococcus capitis* in blood culture within a 22 day period. Three patient colonised with *Stenotrophomonas maltophilia* within a 2 week period.
Background:	**Summary** ***S.capitis*** PAG held in mid July to discuss 2 cases of Staph capitis blood culture positive. [redacted] Two new cases: [redacted] Also, breach of a trigger for 3 colonisations with ***Stenotrophomonas maltophilia:*** [redacted] **<u>Review</u>** 1. Some of the S.capitis isolates from the same patient (Patient 2), have different antibiograms. 2. Two patients in the Staph capitis group and two patients in the S.maltophilia group have been nursed in adjacent bed spaces. Different medical teams mostly see patients in specific rooms; however, this may not always be the case. Also, nursing staff may move from room to room to provide assistance to colleagues. The Hand Hygiene co-ordinator, Stefan Morton, provided hand hygiene education yesterday at induction for new medical staff on the unit. 3. IPCAT on 14/07/17 scored 86% (green). *4.* Ward based twice yearly SICP's audit scores were not available for the meeting.

	5. SL confirmed that cleanliness in the unit is reported as good from audits and the SOP for pendant cleaning is working. KT confirmed that the standard of cleanliness in the unit is currently very good. 6. The frequency of deep cleans, including wall washing, is unclear. SL confirmed that wall washing is a service that cannot be carried out by the on-site domestic services. AJ informed the group that wall washing should be a request initiated on the advice of the IPCT. The question of a regular routine terminal clean of the ward, with wall washing, is outside of the scope of this PAG and will be taken forward by the IPCT. 7. It is unclear if vents in the unit are being cleaned as part of a rolling programme of maintenance. This has not been observed by staff. Susie Dodd, Lead IPCN, has raised the rolling programme of maintenance at the South Sector Facilities Infection Control Group meeting on 31st July. 8. Skin health of staff in unit – no issues. 9. Monthly Ward hand hygiene scores were not available for the meeting. Outside of the meeting Stefan Morton (LBHHC) provided hand hygiene audit scores from the last audit carried out on 13/07/17: 90% combined score, and 100% for opportunities taken. *10.* KT confirmed that the PVC bundle and care plan is in place. *11.* PPE advice poster, agreed by the Neonatal QI group, is no longer displayed in the unit 12. HUG Team meetings include an Infection Control component for parents. Stefan Morton involved with parent education in NICU. **List of Actions** 1. Typing results of all S.capitis isolates are expected next week, and the S.maltophilia isolates will also be sent for typing. 2. AJ to contact Morag Liddell to confirm twice yearly Ward based SICP's audits are being carried out. 3. Agreement on a regular routine terminal clean of the ward, with wall washing, to be taken forward by the IPCT 4. IPCT to follow-up request to Facilities for a rolling programme of maintenance for vent cleaning. 5. AJ to contact Carly Inskip for Monthly Ward hand hygiene scores. 6. AJ to provide KT and SCN Morag Liddell with PPE advice poster to be displayed in the clinical area 7. IPCT to consider rollout of education for all parents in the RHC 8. Commence a daily Actichlor clean of NICU, including equipment, until further notice 9. Implement a once only Actichlor clean of SCBU, including equipment 10. AD to contact Estates for numbers/volumes of water sampled for NICU 11. AD to liaise with GRI lab regarding water testing for *S.maltophilia*
Discussed with/ Communications:	Karen Taylor (KT) Charge Nurse NICU; Dr Jennifer Mitchell (MC), Clinical Neonatologist; Dr Neil Patel (NP), Clinical Neonatologist; Sheenagh Leighton (SL), Deputy Site Facilites Manager; Ashutosh Deshpande (AD), Infection Control Doctor; Angela Johnson (AJ), Senior IPCN; Lynne Kennea (LK), IPCN.

Hospital Infection Incident Assessment Tool (HIIAT)	***S.capitis*** HIIAT: **GREEN** Severity of illness: Minor Impact on service : Minor Risk of transmission : Minor Public anxiety: Minor ***S.maltophilia*** HIIAT: **GREEN** Severity of illness: Minor Impact on service : Minor Risk of transmission : Minor Public anxiety: Minor No further communications. The group were informed that the HIIAT score will be reported to Health Protection Scotland.
Recommendation/ options:	IMT – Not unless there is another case. OCT - No.
ICT Members	Angela Johnson (AJ), SIPCN, Lynne Kennea (LK)IPCN, Ashutosh Deshpande (AD), ICD.

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:	20/09/2017
Subject / Situation:	Week commencing 18/09/17 2 patients in Ward 61 (Neurosurgical ITU) had a new *Acinetobacter baumannii* complex isolated [redacted]. These were both identified by Microbiology as having the same antibiogram and have been sent for further typing.
Background:	[redacted] Ward 61 visited by IPCT on 18/09/17 to determine if there were any infection prevention and control issues. There were no environmental or clinical concerns highlighted. The most recent IPCAT scored 90% Terminal clean carried out in the bed spaces.
Discussed with / Communications:	Lynn Pritchard (LIPCN) Sofie Singh (SIPCN) Ash Deshpande (ICD)
Recommendation / Options:	Patients will be observed and ward visits will continue.

HIIAT	**Green**
IPCT Members:	Lynn Pritchard (Lead Nurse South Glasgow Adults ICPT) Sofie Singh (Senior IPCN)

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:	Clinical and IPC SMT
Date:	06/10/17
Subject/ situation:	X1 HAI Serratia on PICU during a period of increased burden of Serratia cases (3 other patients on the unit colonised with Serratia)
Background:	PICU is a 22 bedded unit comprising 4 main bays (each with 4 beds) and 8 single side rooms. *Serratia marcescens* is an alert organism with all positive isolates in high risk areas being reported to the IPCT. IPCT notified of a new case of Serratia marcescens on Wed 4th October which is an HAI attributable to PICU. It was noted at this point that there were 3 other cases of Serratia marcescens on the unit at the same time and a concern that the HAI may have been a result of increased burden on the unit. • By late morning on 4/10/17, 2 of the 4 patients had been transferred out of PICU meaning that the burden no longer existed. • A timeline of patient movement found that the HAI case was nursed in a bed space adjacent to another positive patient however it was noted that this was only after they had tested positive. • During an IPCN visit to PICU whilst the cases were being reviewed, a staff member raised concerns about poor hand hygiene practice on the unit by nursing and medical staff. • During the same visit it was also highlighted that domestic cleaning was being carried out with water only in isolation rooms rather than Actichlor plus as per 'Twice daily clean of isolation room SOP'. As a result of the above concerns, the IPCT held a PAG to discuss these issues today. • Hand hygiene training has been arranged for the unit. • The cleaning deficit has been rectified and Actichlor plus is now in use for all isolation rooms twice daily. • A terminal clean of the bed bay which housed 2 of the Serratia patients has taken place. • Discussed with charge nurse and requested SICPs be reinforced amongst all staff groups.

Discussed with/Communications:	Dr Alison Balfour – ICD Dr Ash Deshpande – ICD Susie Dodd – Lead IPCN
Recommendation /options:	No further meetings unless there are any new cases.
HIIAT	Not assessed.

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:	Clinical and IPC SMT
Date:	11/10/17
Subject/ situation:	2 HAI *Acinetobacter baumannii* isolates attributed to NICU, RHC within 28 days (UCL 2.5)
Background:	[redacted] [redacted] [redacted] Review 1. Same antibiogram at this time. AB will send isolates for typing. 2. NICU observations by IPCN's on 06/10/17 highlighted issues with practice in the unit including Room 5. Fed back to the NICU PAG group convened for the increased incidence of Gent Resistant E.coli. 3. Both cases nursed in the same bed bay between 28/09/17 and 10/10/17 (diagonally opposite) 4. One case (patient 1) now in SCBU 5. Patient [redacted] remains in NICU, room 5 Agreed Actions: 1. Terminal clean of bed bay 5 with Actichlor requested (Domestic Supervisor, Linda Malone and Charge Nurse Kate Anderson made aware) 2. Transmission based precautions to be implemented around bed space for patient [redacted]. To be isolated in a single room if there is another case. 3. Continue monitoring for further new cases. 4. Isolates from [redacted] sent for typing.

Discussed with/ Communications:	Charge Nurse Kate Anderson, NICU, aware to inform Nurse in Charge Sharron McMonagle. PAG e-mailed to IPCT, SMT IPC, SCN, LN and ICD.
Hospital Infection Incident Assessment Tool (HIIAT)	N/A
Recommendation/ options:	IMT – Not unless there is another case OCT - No
ICT Members	Angela Johnson (AJ), SIPCN, Alison Balfour (AB), ICD.

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:	Clinical SMT IPC SMT
Date:	13/10/17
Subject/ situation:	New case of hospital acquired Acinetobacter to ward 3A, RHC. 2 other cases of Acinetobacter on the ward at the time indicating a possible cross transmission.
Background:	Cases of Acinetobacter below;

			Typing
[redacted]	[redacted]	[redacted]	Unique
[redacted]	[redacted]	[redacted]	Match
[redacted]	[redacted]	[redacted]	Match
[redacted]	[redacted]	[redacted]	Match

Review of all cases and patient placement. The patients have not at any point been nursed in the same room. Isolation not necessary at this time as 3A is considered a low risk area.

Isolates sent for typing – update post PAG (25/10/17); Typing revealed 2 cases are a match [redacted].
Further update post PAG (10/11/17); Previously colonised case [redacted] readmitted to ward 3A had Acinetobacter sent for typing and it has been reported to be the same type of the 2 which already match [redacted]. [redacted] has not been nursed on the same ward as [redacted] since July. Since July, [redacted] have had multiple negative ETA/BAL samples obtained. This would suggest that the link in this case is not direct cross infection between [redacted] and [redacted] but indirect via the environment.

Continue to monitor for new cases.

No further action unless new cases identified.

Discussed with/Communications:	Discussed with Nurse in charge, Mary O'Neill

Recommendation /options:	No further meetings required unless new cases.
HIIAT	Green
ICT Members	Susie Dodd – Lead IPCN Christine Peters – Consultant microbiologist

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:	Clinical and IPC SMT
Date:	25/10/17
Subject/ situation:	Increased incidence of Pseudomonas aeruginosa on PICU. 2 cases in month of October [redacted].
Background:	PICU is a 22 bedded unit comprising 4 main bays (each with 4 beds) and 8 single side rooms. *P.aeruginosa* is an alert organism with all positive isolates reported to the IPCT. On receipt of the 1st positive blood culture [redacted], a water checklist was completed as per NHSGGC algorithm for *P.aeruginosa* positive blood cultures in NICU/PICU. The milk fridge was found to be dirty and thyis was reported at the time of finding and by email in SBAR format. On receipt of a 2nd positive isolate [redacted], the IPCT repeated the water checklist including a review of the milk fridge. There were no issues identified. A timeline of beds showed no association of time/place between the 2 cases. At no point were the 2 cases on the unit at the same time. Cases are clinically well in relation to pseudomonas – [redacted]. Discussion between LIPCN Susie Dodd and ICD Alison Balfour – no further action to be taken at this time.
Discussed with/Communications:	Lead IPCN Susie Dodd ICD Dr Alison Balfour
Recommendation /options:	No further meetings unless there are any new cases.
HIIAT	No HIIAT

ICT Members	Lead IPCN Susie Dodd ICD Alison Balfour.

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:	Clinical and IPC Senior Management Teams
Date:	27/10/17
Subject/ situation:	1 patient with probable invasive fungal infection due to Aspergillus. [redacted] [redacted] [redacted].
Background:	**Summary** **Review** [redacted] HAI. A.fumigatus from BAL on 23/10/17. Discussed with HPS on 27/10 17 re HIIAT assessment. [redacted] **List of Actions** Twice weekly IPCN visits to Ward to monitor environment, cleaning and practice. Ongoing cleaning of ward with chlorine based detergent. IMT to be held if another case is identified.
Discussed with/ Communications:	Annette Rankin, Nurse Consultant IPC, Health Protection Scotland Emma Sommerville, Interim SCN, Ward 2a Melanie Hutton, Lead Nurse, Ward 2a
Hospital Infection Incident Assessment Tool (HIIAT)	HIIAT Green
Recommendation/ options:	IMT if patient's condition deteriorates or another case is identified. [redacted] Clinical Team are risk assessing all 2A patients on a case by case basis before prescribing anti-fungal prophylaxis. No new cases to date. Twice weekly IPCN visits to Ward to monitor environment, cleaning and practice. Ongoing cleaning of ward with chlorine based detergent. IMT not required unless a new case is identified.

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:	Infection Prevention & Control SMT Dr Ash Deshpande
Date:	27.10.2017
Subject / Situation:	2 patients with Pseudomonas in Ward 10D, QEUH.
Background:	[redacted] **Pseudomonas aeruginosa +ve on 22.09.17** [redacted]. [redacted] **Pseudomonas aeruginosa +ve on 21.09.17** [redacted]. This will be an HAI to Ward 10D.
Discussed with / Communications:	Dr Ash Deshpande Charge Nurse Pauline Walsh
Recommendation / Options:	• Pseudomonas water checklist undertaken in ward and no issues identified. • MDRGNO Care Plan to be adapted by IPCT and issued to the ward. • Ward patient care is managed by 2 nursing teams and the ward / patient rooms are shared equally between the 2 teams. Both patient rooms are within the same team. • Specimens sent for typing – results waited. • Charge Nurse highlighted that she may have up to 10 discharges per day and these vacated rooms all require a discharge clean. CN is concerned that when this number of rooms requires discharge clean the burden on the ward domestic is high. • Ensure that Actichlor cleaning has commenced. • Retrospect discussion between Mr Kelly (Orthopaedic Consultant) and Dr Ash Deshpande and [redacted] will have rehab within his room at present.

	• Reiteration of SIPCs and TBPs to all members of the MDT including phlebotomy team.
HIIAT	**GREEN**
IPCT Members:	LIPCN Lynn Pritchard IPCN Fiona Gallagher Nurse Consultant Pamela Joannidis

NHS Greater Glasgow and Clyde	**NHS Greater Glasgow & Clyde** **Infection Prevention and Control Team**
Purpose:	Problem Assessment Group (PAG) – updated 30.10.17 (updates in blue)
From:	Infection Prevention and Control Team
To:	Infection Prevention & Control SMT Dr Ash Deshpande
Date:	27.10.2017
Subject / Situation:	2 patients with Pseudomonas in Ward 10D, QEUH and PAG held on 27.10.17. Notified by email by Dr Pauline Wright (Cons Microbiologist) of further +ve specimen for Pseudomonas aeruginosa from a further patient.
Background:	[redacted] **Pseudomonas aeruginosa +ve on 22.09.17** [redacted]. [redacted] **Pseudomonas aeruginosa +ve on 21.10.17** [redacted]. This will be an HAI to Ward 10D. [redacted] **Pseudomonas aeruginosa +ve on 27.10.17.**
Discussed with / Communications:	Dr Ash Deshpande Charge Nurse Pauline Walsh

Recommendation / Options:	• Pseudomonas water checklist undertaken in ward and no issues identified. • MDRGNO Care Plan to be adapted by IPCT and issued to the ward. • Ward patient care is managed by 2 nursing teams and the ward / patient rooms are shared equally between the 2 teams. Both patient rooms are within the same team. • Specimens sent for typing – results waited. • Charge Nurse highlighted that she may have up to 10 discharges per day and these vacated rooms all require a discharge clean. CN is concerned that when this number of rooms requires discharge clean the burden on the ward domestic is high. • Ensure that Actichlor cleaning has commenced. • Retrospect discussion between Mr Kelly (Orthopaedic Consultant) and Dr Ash Deshpande and patient GA will have rehab within his room at present. • Reiteration of SIPCs and TBPs to all members of the MDT including phlebotomy team. • IPCT will undertake a Hand Hygiene audit within the ward • IPCT will undertake the SICPs section of the IPCAT audit within the ward. • Email communication with Mr Michael Kelly (clinical director) and Ms Morag Busby (Lead Nurse) • Discuss with Lead Nurse for Surveillance in IPCT re collation of Theatre visits by the patients and the names of the theatre teams • Review of the orthopaedic theatre practice has been and continues to be undertaken by IPCT. 2 sessions agreed. • IPCT will review practice within the ward. • Updated timeline (SEE BELOW)
HIIAT	**GREEN**
IPCT Members:	LIPCN Lynn Pritchard IPCN Fiona Gallagher Nurse Consultant Pamela Joannidis

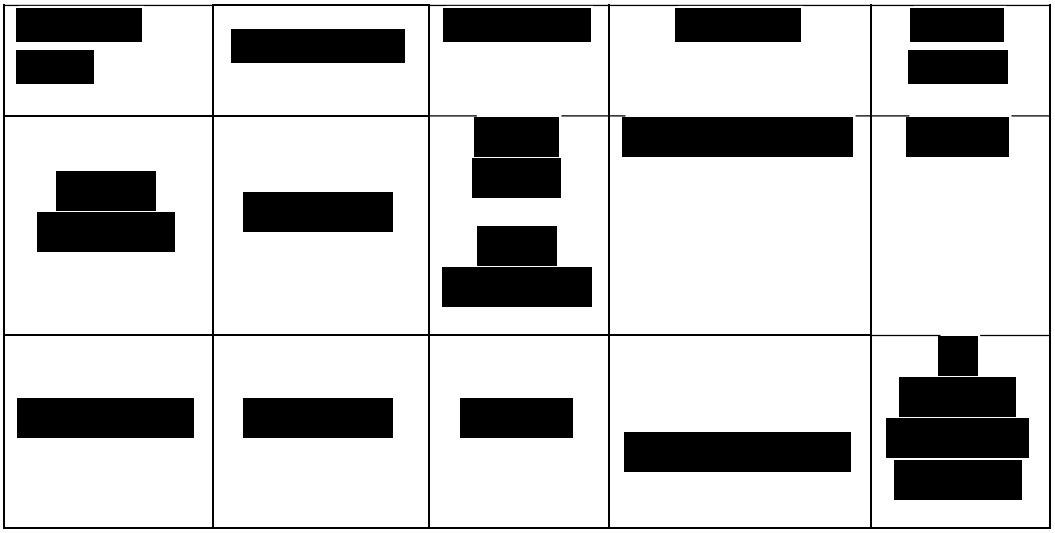
[redacted]

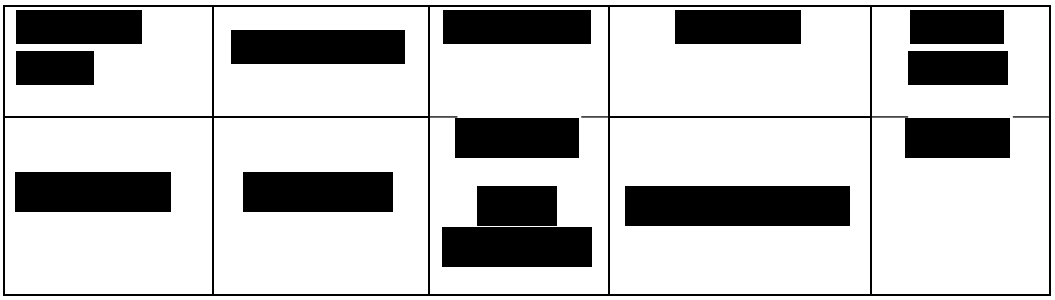
NHS Greater Glasgow and Clyde	**NHS Greater Glasgow & Clyde** **Infection Prevention and Control Team**
Purpose:	Problem Assessment Group (PAG)
From:	Infection Prevention and Control Team
To:	Clinical and IPC Senior Management Teams
Date:	13/11/17
Subject / Situation:	2 new cases [redacted] of *Acinetobacter baumannii* currently on PICU and both nursed in same bed bay [redacted]. Of the 2 new cases, 1 is an HAI to PICU and the other is an HAI to 1E therefore **no control line has been breached**. 2 new cases below; [redacted] There is a 3rd case (AB) on the unit currently known to the IPCT who was previously nursed in the same bed bay in late Sept – October. [redacted] Following an association with the same bed bay, retrospective cases from Sept and Oct 2017 were reviewed to ascertain any link with the bed bay in question. A 4th case [redacted] who is now discharged from hospital was also nursed in this bay during 2 short admissions to PICU during October. A 5th [redacted] case known to PICU but currently on ward [redacted] was considered but has not been [redacted].

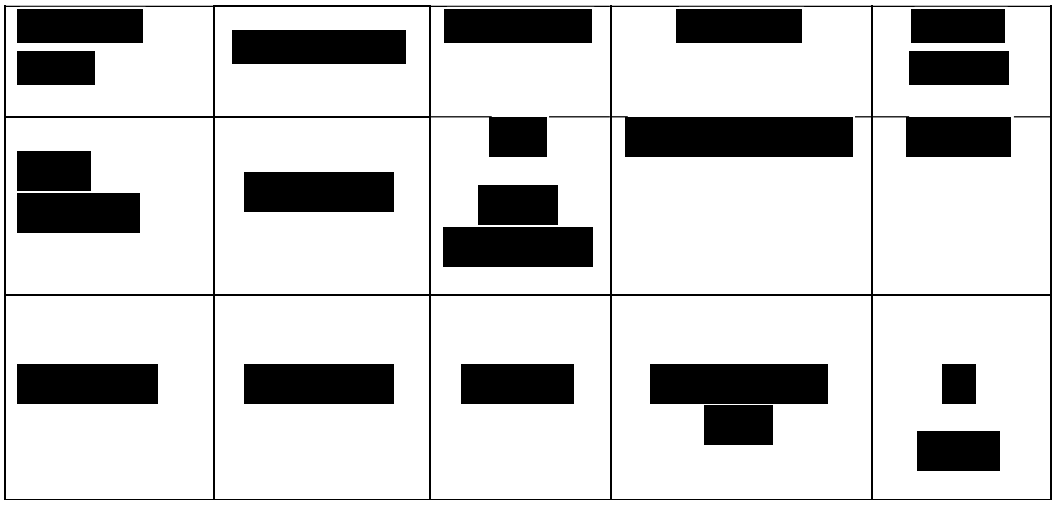
	[redacted]
Background:	3 patient s remain on PICU currently colonised with *Acinetobacter baumannii*. 1 patient may be started on antibiotic therapy today (13/11/17) [redacted]. Unit visited by Lead IPCN Susie Dodd, IPCN Katie Anderson, Lead Microbiologist Dr Christine Peters and Microbiologist Raje Dhillon. Link to bed bay [redacted] established. Same bay inspected for standard of cleanliness. No concerns noted in relation to domestic cleaning or equipment cleaning. Noted parent pouring dirty basin water down the trough sink in the patient bay. Dyson Bladeless fans in use at 2 patient bedsides. Agreed to keep [redacted] and [redacted] in current bed bay and treat as a cohort. Note one additional patient [redacted]. Agreed that exposure has taken place so patient should remain in the bay until results available from a blind BAL obtained this morning. 4th bed space unoccupied and to remain empty whilst this bay is considered a cohort. [redacted]
Discussed with / Communications:	Lead microbiologist Christine Peters Lead IPCN Susie Dodd IPCN Katie Anderson Microbiologist Raje Dhillon SCN Eileen Milligan SCN Gael Rolls
Recommendation / Options:	• Create cohort in bed bay [redacted]. Ensure TBPs in place for each patient and twice daily cleaning by domestics and nursing staff using Actichlor plus – EM & GR • Remove fans from use in cohort. Not recommended for use in high risk areas – EM & GR • Request hand hygiene audit - SD • Request details of vent cleaning regime - SD • Request removal of trough sinks not in use on the unit (outstanding action for many months) - SD will chase; multiple requests made by GR in previous months. • Ensure all basin water is taken to the sluice area for disposal. Clinical staff should remind all parents that basin water should not be poured down sinks –

	EM & GR. • Typing of 2 new isolates to be requested – CP • Environmental sampling to be carried out in bed bay 19-22 – KA & RD • Request details of most recent domestic audit scores – SD (Email sent 13/11/17) • Continue to monitor for any further cases – SD & KA.
HIIAT	**Green**
IPCT Members:	Lead microbiologist Christine Peters Lead IPCN Susie Dodd IPCN Katie Anderson Microbiologist Raje Dhillon

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:	Clinical and IPC Senior Management Teams
Date:	30/11/17
Subject / Situation:	1 new HAI colonisation to 1D, [redacted]. Additionally the same typing has been returned on 2 previous 1D HAI colonisations from October and November, [redacted], and one other previous case [redacted] 1st positive July 2017. One other case, [redacted], from November, was nursed in the same bed bay in 1D as [redacted]. During the PAG of 13/11/17 it was also identified that [redacted] was previously nursed in the same bed bay in late Sept – October. [redacted]





	
Background:	Unit visited by Senior IPCN Angela Johnson. Spoken to Nurse in Charge to reinforce precautions and awareness of cases. [redacted] transmission based precautions (TBP's) not in place at time of IPCN visit. Advised Charge Nurse to ensure that TBP's are implemented around the bed space while a single room is unavailable. [redacted]
Discussed with / Communications:	Lead microbiologist - Christine Peters Senior IPCN - Angela Johnson IPCN - Lynne Kennea CN – Lianne McPherson (regarding TBP's) CN- Cardiac Theatre 8 – Fiona Bell CN – Theatres – Teresa Jerome
Recommendation / Options:	• Patient [redacted] to have transmission based precautions around the bed space until a single room is available. • Request for most recent hand hygiene audit from Stefan Morton- AJ • IPCN to visit Cardiac theatre 8 – AJ (completed 01/12/17) • Typing of new isolate from [redacted] – CP • Consider water testing – CP • Arrange IMT – AJ • Continue to monitor for any further cases - IPCT
HIIAT	**Green**
IPCT Members:	Lead microbiologist - Christine Peters Senior IPCN - Angela Johnson IPCN- Lynne Kennea

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:	Clinical and IPC Senior Management Teams
Date:	22/01/18
Subject / Situation:	1 new Pseudomonas aeruginosa infection [redacted] reported on Friday 19th January 2017. First isolate was a positive mediastinum swab. Later that day, a positive blood culture was reported for the same patient. On review of the case, IPCT noted that patient had been nursed in the same bed bay as another patient on the unit with pseudomonas aeruginosa [redacted]. This patient has only ever been colonised with pseudomonas. In addition, the antibiograms of both cases are the same. Details of both cases below.

[redacted]

In addition to those cases noted above, there are also 2 other cases on the unit who have been known to the IPCT for a period of time.

[redacted]

	[redacted]
Background:	PICU was visited by IPCN on Friday 19th January to review patient placement, update patient condition and review the immediate patient environment of the patient cases. No concerns were noted with the environment. NB: IPCAT audit completed on 16/01/18 scoring 91% Gold. A meeting was requested with the consultant looking after the patient [redacted], clinicians were unable to meet with the IPCT. A PAG was arranged for Monday 22/1/18. The following was discussed with SCN and Lead Intensivist for PICU; **Environment & water testing** – The IPCAT audit was discussed and an improvement from the previous audit in August 2017 which scored 78%. It was noted that some minor issues had been found with domestic cleaning. These were reported and rectified immediately. SCN states that cleaning is being carried out as per specification although she has always felt the cleaning is not to the same standard as it was on the old Yorkhill site. The cleaning of the sink drains was queried. In the absence of domestic services at the meeting, Susie Dodd agreed to find out how the drains were cleaned. It was agreed that environmental sampling would be carried out in addition to water testing. Dr Deshpande and Susie Dodd suggested that it may be worth while having the unit cleaned by an external cleaning company pending results of environmental sampling and water testing. At present, enhanced cleaning with Actichlor plus is in place around the bed spaces of the pseudomonas cases. Susie Dodd and Dr Deshpande agreed to carry out an inspection of the environment including water sources. **Staff practice/Knowledge** – It was again noted that staff knowledge scored in the IPCAT was good. There was a general feeling that staff know the principles of SICPs and TBPs. Staffing levels were discussed and the potential for the current staff shortages to affect good practice. It was agreed that Dr Deshpande would provide a teaching session for medics specific to IPC. Susie Dodd agreed to increase the IPCN visits to the unit from once to twice weekly using these visits as an opportunity to observe staff practice and educate staff when necessary. Susie Dodd will also request that the hand hygiene coordinator provide further awareness sessions on the unit. It was noted that concerns around the lack of staff had been raised by Susie Dodd and Neil Spenceley with CN Jennifer Rodgers who in turn provided details of current vacancies, maternity leave and recruitment processes in place. **Typing** – The isolates above [redacted] will be sent for typing analysis. [redacted] This will help ascertain if cross transmission has taken place. **HIIAT** – The condition of the patients was discussed in detail alongside the other 3 components of the HIIAT which was scored as per below. [redacted] With evidence of cross transmission in the bed bay and on a background of increased incidence of other environmental organisms (Acinetobacter baumannii being investigated separately) it was agreed by the group that the risk of transmission should be rated as moderate. Impact on services and public anxiety were both minimal and rated minor.
Discussed with / Communications:	Lead IPCN Susie Dodd Infection Control Doctor Ashutosh Deshpande SCN Gael Rolls Paediatric Intensivist Neil Spenceley

Recommendation / Options:	• Seek clarification on drain cleaning - SD. • Environmental sampling to be carried out in addition to water testing – SD & AD. • Consideration to deep clean the unit by an external cleaning company pending results of environmental sampling and water testing - ALL. • Enhanced cleaning with Actichlor plus is in place around the bed spaces of the pseudomonas cases – GR. • Inspection of the environment including water sources – SD & AD • Teaching session for medics specific to IPC - AD • Increase the IPCN visits to the unit from once to twice weekly using these visits as an opportunity to observe staff practice and educate staff when necessary - SD. • Hand hygiene coordinator to provide further awareness sessions on the unit - SD • Isolates above [redacted] will be sent for typing analysis and compared to [redacted].
HIIAT	Severity of illness – Moderate [redacted] Impact on services – Minor Risk of transmission – Moderate (evidence of possible cross transmission) Public Anxiety – Minor HIIAT – Amber HIIORT sent to HPS 22/1/18 *UPDATE SINCE PAG – HIIAT reassessed on Wednesday 24/1/18.* [redacted] *As a result, the severity of illness is now considered minor which downgrades the HIIAT to a Green. HIIORT sent to HPS 24/1/18.*
IPCT Members:	Lead IPCN – Susie Dodd Infection Control Doctor – Ashutosh Deshpande

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:	Clinical SMT and IPC SMT
Date:	05/02/18
Subject / Situation:	Cupriavadis isolated from blood culture of a patient receiving IV therapy made up in the aseptic unit.
Background:	Back in Feb 2016, a patient tested positive for Cupriavadis in a blood culture and subsequent investigations found [redacted] which was reconstituted in the Aseptic pharmacy. Samples taken from water outlets in the aseptic pharmacy also isolated Cupriavadis and typing of both isolates were found to be the same. A 2nd patient case was identified in September 2017 and at that time, no links were made to the previous case or the aseptic pharmacy. More recent investigations found that this patient did in fact have [redacted] which came from the aseptic pharmacy. Most recently, a 3rd case was identified who also has had [redacted] reconstituted in the aseptic pharmacy. This meeting was convened to discuss the potential for contamination in the Aseptic pharmacy and any other potential sources which should be investigated. JG noted that she was not aware of any positive water isolates from the aseptic pharmacy and any subsequent typing match with the 1st patient case. This was the information available to the IPCT at the time of the meeting but CP and SD agreed to clarify this after the meeting. Clarity around this was provided by Dr Teresa Inkster after the meeting. JG confirmed that all 3 cases received treatments from the Aseptic pharmacy around the time of their positive isolates. JG updated the group on the environmental sampling which is routinely carried out in the aseptic pharmacy inclusive of water testing and sessional plates. JG states that plates are sent to Stobhill labs for analysis. CP will speak to Lynn Morrison in the Stobhill labs to discuss what testing is carried out. JG also stated that she has SOPs pertaining to water control in the aseptic unit and will forward these on.

	JG also confirmed that the clinical hand wash basin which was a concern resulting from the September 2016 PAG has been re-treated by estates this morning. In addition the sink is cleaned daily with bleach and once weekly with porceine. KHW and CP updated on available typing results from case 1 and 2 – both unique. Typing from 3rd case is also unique however was not compared directly with previous isolates requested and awaited. SD fed back on ward associations for each of the 3 patients. [redacted] was mainly an inpatient on 3B. [redacted] been an inpatient on 3C but the positive blood culture was obtained the day of transfer to 3C. Some days prior, this patient had been on ward 2A. Similarly, the 3rd patient case was on 3C at time of positive culture but had spent time on 2Ain the days prior. As a result, it was accepted that 2A may be a potential source for the Cupriavadis. SD agreed to complete a timeline for [redacted]. SD agreed to visit the aseptic unit to ensure there were no areas of concern. SD and CP also agreed to have water outlets sampled in the aseptic unit and ward 2A.
Discussed with / Communications:	Dr Christine Peters (CP) – Infection Control Doctor Kathleen Harvey-wood (KHW) – Clinical Scientist Susie Dodd (SD) – Lead Infection Prevention and Control Nurse Joanne Gallagher (JG) – Aseptic Accountable Phamacist
Recommendation / Options:	Clarity around positive water isolates in 2016 and subsequent linked typing analysis with case 1 – SD/CP. Speak to Lynn Morrison in the Stobhill labs to discuss what testing is carried out - CP. Forward on water control SOPs to Christine Peters – JG Compile a timeline for case 2 and 3 - SD Visit the aseptic unit - SD Water sampling in Aseptic pharmacy and 2A – CP/SD
HIIAT	Severity of Illness – Moderate (case 2 and 3 required antimicrobials) Impact on services – Minor Risk of Transmission - Minor (no evidence of cross transmission at this stage) Public anxiety – Minor Over all HIIAT – GREEN.
IPCT Members:	LIPCN – Susie Dodd ICD on call – Dr Christine Peters

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:	Infection Prevention & Control SMT Dr Teresa Inkster
Date:	06/02/2018
Subject / Situation:	13 HAI VRE attributed to the Renal Wards within the QEUH during the month of January 2018. 9 of the HAIs were attributed to Ward 4A and the other 4 were attributed to Ward 4D.
Background:	Of the 13 HAI VRE cases 12 of them are colonisations and 1 is an infection [redacted] [redacted] None of the patients are giving the medical staff any cause for concern. SCN Anne Marie Burns and Susan Cunning brought up issues regarding the cleaning of the outer areas of their wards not being carried out on a daily basis. A deep clean was carried out in the first weekend of February to Wards 4A and Ward 4D.
Discussed with / Communications:	Dr. Teresa Inkster Lynn Pritchard Gus McKillop (Renal Lead Nurse) Donna McConnell Anne Marie Burns (Senior Charge Nurse Ward 4D) Susan Cunning (Senior Charge Nurse Ward 4A)
Recommendation / Options:	• Dr Inkster has requested all 13 VRE specimens to be typed. • Dr Inkster is going to contact Pharmacy regarding antibiotic use • IPCT will carry out Hand Hygiene audits in Ward 4A & 4D for the months of February and March. • IPCT will carry out an Environmental audit of Ward 4A • IPCT will follow up with Facilities surrounding the twice daily clean of SSRs, Corridors and outer areas of the wards. • Stefan Morton will carry out hand hygiene audit of Ward 4A and Ward 4D. • Environmental screening will be carried out by the Microbiology Team. • Action update issued to PAG members by the IPCT at the end of February.
HIIAT	**Green**
IPCT Members:	Dr. Teresa Inkster ICD Lynn Pritchard Lead IPCN Donna McConnell Senior IPCN

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:	Infection Prevention & Control SMT Dr Teresa Inkster
Date:	06/02/2018
Subject / Situation:	13 HAI VRE attributed to the Renal Wards within the QEUH during the month of January 2018. 9 of the HAIs were attributed to Ward 4A and the other 4 were attributed to Ward 4D.
Background:	Of the 13 HAI VRE cases 12 of them are colonisations and 1 is an infection [redacted] [redacted] None of the patients are giving the medical staff any cause for concern. SCN Anne Marie Burns and Susan Cunning brought up issues regarding the cleaning of the outer areas of their wards not being carried out on a daily basis. A deep clean was carried out in the first weekend of February to Wards 4A and Ward 4D.
Discussed with / Communications:	Dr. Teresa Inkster Lynn Pritchard Gus McKillop (Renal Lead Nurse) Donna McConnell Anne Marie Burns (Senior Charge Nurse Ward 4D) Susan Cunning (Senior Charge Nurse Ward 4A)
Recommendation / Options:	• Dr Inkster has requested all 13 VRE specimens to be typed. • Dr Inkster is going to contact Pharmacy regarding antibiotic use • IPCT will carry out Hand Hygiene audits in Ward 4A & 4D for the months of February and March. • IPCT will carry out an Environmental audit of Ward 4A • IPCT will follow up with Facilities surrounding the twice daily clean of SSRs, Corridors and outer areas of the wards. • Stefan Morton will carry out hand hygiene audit of Ward 4A and Ward 4D. • Environmental screening will be carried out by the Microbiology Team. • Action update issued to PAG members by the IPCT at the end of February.
HIIAT	**Green**
IPCT Members:	Dr. Teresa Inkster ICD Lynn Pritchard Lead IPCN Donna McConnell Senior IPCN

Action outcomes / progress at 1 month post PAG

PAG ACTION AGREED	PERSON RESPONSIBLE	OUTCOME / PROGRESS
13 isolates to be sent for typing	Dr Inkster	Multiple strains but some evidence of cross transmission between patients
AMP audit of antibiotics (4A and 4D)	Dr Inkster	Cephalosporin use spiked in November, otherwise ok
Hand hygiene audits February and March (4A and 4D)	L. Pritchard / D. McConnell	February Ward 4A – 50% Opportunities Taken, 50% Combined Compliance February Ward 4D – 50% Opportunities Taken, 45% Combined Compliance Further audits to be undertaken in March by IPCT
Hand hygiene audits (4A and 4D)	S. Morton	February Ward 4A – 95% Opportunities Taken, 85% Combined Compliance February Ward 4D – 90% Opportunities Taken, 80% Combined Compliance March Ward 4A – 80% Opportunities Taken, 75% Combined Compliance March Ward 4D – 100% Opportunities Taken, 75% Combined Compliance Further audits to be undertaken in April by S. Morton
Ensuring twice daily chlorine cleans are in place throughout 4th floor	L. Pritchard / D. McConnell	Email confirmation from Pat Coyne received that all cleaning is in place
IPCAT Audit (4A)	L. Pritchard / D. McConnell	Completed 08/02/18 – 81%
Environmental sampling (4A and 4D)	Dr Inkster	No microbiology resource to do currently . Overall numbers have come down so this will left for now

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:	IPC and clinical SMT
Date:	9/4/18
Subject / Situation:	Outbreak of Astrovirus on ward 2A, RHC.
Background:	The IPCT have been monitoring cases of loose stools on ward 2A since 26/3/18 when 5 patients were initially reported with either diarrhoea and/or vomiting. 1 patient was positive for Astrovirus and all patients were isolated in side rooms, with twice daily cleans of room in place. Over the Easter weekend, 3 further patients were reported positive for Astrovirus and enhanced control measures were put in place on 3/4/18. Since this point there have been additional cases reported [redacted], 1 of which has also tested positive for Astrovirus. In total, 12 reported cases, 5 of which are positive for Astrovirus.
Discussed with / Communications:	Professor Brenda Gibson – Haemonc consultant Emma Somerville – SCN Ward 2A Angela Howat – SCN Ward 2B SD provided a full report on the situation. 12 patients reported symptomatic (5 of whom confirmed Astrovirus), 3 staff reported sick for work [redacted], 3 patients remained symptomatic on morning of 9/4/18 and the ward has 4 empty beds. No patients have given cause for concern as a result of D&V. [redacted] No parents have reported symptoms. Control measures were discussed at length and SCN confirmed that the following control measures are being adhered too; • All equipment cleaning taking place with Actichlor plus. • All patient s symptomatic of loose stools have TBPs in place. • TBPs reiterated to all staff. • Hand washing with soap and water instead of ABHR for patients with loose stools. • Visiting restricted to parents/guardians only. • Communal areas such as kitchens/play area closed (locked). • New admissions who can be diverted to other wards will be. If clinically they

	need to be admitted to ward 2A for chemo or they are a BMT patient, then they will go straight into SSR. • Restriction of non essential staff to ward. Cohort of staff to infected patients where possible. • Restriction on number of people entering patient's room during ward round/examinations. • Parent information leaflet issued explaining importance of hand hygiene and cleaning measures. • Non essential investigations or therapies have been curtailed. • Any staff or parents who report symptoms to be sent home immediately and not to return until 48 hours asymptomatic. • Charity staff, AHPs, support workers who can avoid visiting the ward will until control measures have been lifted. Twice daily domestic cleans with Actichlor plus were requested by the IPCT on 3/4/18. SCN reported that the domestic staffing on the ward seemed to be no greater than normal allocated hours and she felt that it is unlikely twice daily cleans are being achieved on this basis. POST MEETING – Susie Dodd contacted facilities GM and requested a review of the domestic hours and clarification that twice daily clean, was being carried out. Facilities GM reported that domestic hours were increased on ward 2A on 9/4/18. It was also noted that 1 patient attends the WoSCC for radiotherapy. Susie Dodd reported that the IPCT who cover the area have been made aware that the patient is coming from a ward with ongoing confirmed outbreak. SCN reported that staffing levels are adequate at this time. SCN also confirmed that when bedpans or sluice products need to be removed from rooms, parents are instructed to buzz nursing staff who then do this for them.
Recommendation / Options:	Additional measures following PAG; Gloves provided for parents when assisting children with personal hygiene, particularly nappy change. • To contact PHPU to request review of CLIC sergeant house where some of the parents are resident and to ensure there are no reports of D&V amongst parents. • TBPs in place for all 12 patients regardless of whether they meet 48 hours asymptomatic criteria. Astrovirus has a lengthy incubation period and some patients have become asymptomatic then developed loose stools and/or vomiting following the 48 hour period. Immunocompromised patients may shed virus for a long time and may have symptoms due to underlying disease. IMT reminded that astrovirus can shed via respiratory route so any patient with coryzal symptoms should have TBPs in place also. • Cleaning of public toilets with actichlor plus requested. • Staff will remind parents about cleaning of toys.

	• Additional stethoscopes to be purchased to allow 1 per isolated patients. Dr Gibson queried whether a transplant due in on Monday 16th April should go ahead. Dr Marek confirmed that this should go ahead as planned at present and if the situation worsens or fails to resolve later in the week this will be reviewed.
HIIAT	• Severity of illness – Minor • Impact on services – Moderate (It was felt that re-directing some patients to other wards had a impact on the service. In addition, 1 other ward in the hospital is closed due to Norovirus creating a pressure on beds). • Risk of transmission – Moderate (Evidence of cross transmission). • Public anxiety – Minor HIIAT – Amber. HOIRT completed and sent to HPS on 10/4/18.
IPCT Members:	Infection Control Doctor – Dr Aleks Marek Lead IPCN – Susie Dodd Consultant Microbiologist – Ashutosh Deshpande

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:	Clinical and Infection control Senior Management Team
Date:	03/05/18
Subject / Situation:	Vancomycin Resistant Enerococci (VRE), ward 2A, RHC Hospital acquired (HAI) cases of VRE are monitored monthly in ward 2A. Baseline rates are 1-2 cases per month. For the month of April 2018, 10 VRE cases were recorded for ward 2A, 6 of which are HAI. All cases were stool colonisations. No clinical isolates of invasive VRE have been recorded. Ward 2A experienced an outbreak of Astrovirus early in April 2018 with the outbreak spanning 2 weeks. In total, 14 patients were reported to the IPCT [redacted]. It is the opinion of the IPCT that the increased incidence of VRE is a consequence of increased testing stool samples during the period of the outbreak.
Background:	A similar spike in HAI VRE was recorded in April 2017 during a diarrhoeal outbreak of Astrovirus. HAI VRE dropped to within normal monthly limits the following month. <u>Investigations</u> Ward 2A receives enhanced IPCN visits twice weekly accompanied by the lead nurse for the ward at least once. The provision of domestic hours on the ward was increased during the outbreak and this extra provision has continued since then. Cleaning has notably improved since then. Any concerns relating to cleanliness of equipment is raised at the point of the twice weekly inspections and auctioned immediately. In general, equipment cleaning has been good. No concerns have been raised in the last month relating to staff practice associated with Standard infection control precautions (SICPs) or Transmission based precautions (TBPs).
Discussed with / Communications:	SCN Emma Somerville LN Melanie Hutton ICD Teresa Inkster LN IPC Susie Dodd
Recommendation / Options:	Continue to monitor for further cases. Ensure that transmission based precautions (TBPs) are in place for the patient cases who remain on ward 2A with [redacted]. IPCNs to continue to monitor equipment and environmental cleaning on the unit during twice weekly visits and report any concerning findings immediately.

HIIAT	**GREEN** • Severity of illness- Minor (all colonisations) • Impact on services- Minor • Risk of transmission- Minor (Astrovirus outbreak now closed). Public anxiety-Minor
I **PCT Members:**	ICD Teresa Inkster LN IPC Susie Dodd

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:	Clinical and Infection Control Senior Management Team
Date:	03/05/18
Subject / Situation:	Surveillance is carried out for various organisms in PICU including a range of environmental organisms. 3 Acinetobacter colonisations all hospital acquired to PICU, RHC in April 2018 have been triggered. In addition there is a 4th positive patient who has [redacted] and acquired an HAI Acinetobacter in Feb 2018. Investigations A timeline (incl the Feb case) has shown no link between bed spaces or bed bays. An inspection of cleaning standards on the unit has found cleanliness of the environment and equipment to be satisfactory. Nursing staff report no concerns with cleaning standards.
Background:	A perceived increase in Acinetobacter baumannii colonisations/infections was investigated in October and November 2017. No source was identified. Environmental screening carried out in March 2018 identified Acinetobacter species on the baby bath. Nursing staff report that the patients included in the attached timeline have not used the baby bath. An inspection of the bath on 3/5/18 found it to be clean, dry and inverted.
Discussed with / Communications:	SCN Gael Rolls SCN Linda Brown ICD Teresa Inkster LN IPC Susie Dodd
Recommendation / Options:	Continue to monitor for further cases. Ensure that transmission based precautions (TBPs) are in place for the patient cases who remain on PICU. IPCNs to monitor equipment and environmental cleaning on the unit during twice weekly visits.
HIIAT	**GREEN** • Severity of illness- Minor (all colonisations) • Impact on services- Minor • Risk of transmission- Minor (no link between bed bays, rooms) • Public anxiety-Minor
IPCT Members:	ICD Teresa Inkster LN IPC Susie Dodd

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 (IPCT)
To:	Clinical and Infection Control Senior Management Team
Date:	11/05/18
Subject / Situation:	Surveillance is carried out for various organisms in PICU including a range of environmental organisms. 3 Acinetobacter colonisations all hospital acquired (HAI) to Ward 1D (PICU), RHC in April 2018 were triggered on 3/5/18. A further new hospital acquired case was reported to the IPCT on Friday 11/5/18. In addition there is a 5th positive patient who has been on the unit [redacted] and acquired an HAI Acinetobacter in Feb 2018. Investigations A timeline (incl the Feb case) completed on 3/5/18 had shown no link between bed spaces or bed bays. However, the new HAI case reported on 11/5/18 is in the adjoining bed space to one of the previous cases suggestive of cross transmission. An inspection of cleaning standards on the unit on the 3/5/18 found cleanliness of the environment and equipment to be satisfactory. Nursing staff reported no concerns with cleaning standards. However, a domestic audit carried out on 25/04/18 was later sent to the IPCT and reports and overall score of 86.27, falling within the amber range. A further review of the unit cleaning standards was carried out on 11/5/18 by the IPCT. A discussion was had with the nursing team around equipment which may be shared between patients. No shared equipment was identified although it was noted that 2 of the patients have used the baby bath albeight one of those patients had not used it in more than 5 weeks. HIIAT discussed with SCN and Dr Anne McGettrick. Remains green as per classification below.
Background:	A perceived increase in Acinetobacter baumannii colonisations/infections was investigated in October and November 2017. No source was identified. Environmental screening carried out in March 2018 identified Acinetobacter species on the baby bath. Nursing staff report that the patients included in the attached timeline have not used the baby bath. An inspection of the bath on 3/5/18 and 11/5/18 found it to be clean, dry and inverted.
Discussed with / Communications:	SCN Gael Rolls SCN Kirsty McCool DR Anne McGettrick ICD Teresa Inkster LN IPC Susie Dodd

Recommendation / Options:	• Continue to monitor for further cases. • Ensure that transmission based precautions (TBPs) are in place for the patient cases who remain on PICU (around bed space if side room not available). • IPCNs to monitor equipment and environmental cleaning on the unit during twice weekly visits. • A meeting is to be held on 14/5/18 comprising PICU SCN, Domestic manager and IPCT to discuss cleaning standards on PICU. • All isolates will be sent for typing. • Review hand hygiene on unit.
HIIAT	**GREEN** • Severity of illness- Minor (all colonisations) • Impact on services- Minor • Risk of transmission- Minor (potential link between 2 cases – typing awaited. No bed space/nursing team link between these cases and the other 3) • Public anxiety-Minor
IPCT Members:	ICD Teresa Inkster LN IPC Susie Dodd

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:	Clinical and Infection Prevention Control Team Senior Management Team.
Date:	18/05/18
Subject / Situation:	Increased incidence of Stenotrophomonas maltophilia in blood cultures amongst patients on ward 2A/2B. Stenotrophomonas maltophilia is an environmental gram negative bacteria. **Patient update** 3 case's of Stenotrophomonas maltophilia in patients associated with ward 2A and/or 2B between 4th May and 16th May 2018. Of the 3, only 1 is an HAI as per the 48 hour rule. It was noted however that the 2 Non HAIs have had outpatient day care in ward 2B in the days prior to their positive blood culture. Dr Teresa Inkster shared a run chart with the group listing all positive blood culture isolates for Stenotrophomonas maltophilia in RHC which evidenced an increase in cases. [redacted] Dr Inkster queried whether any of the 3 patients were on Meropenom. BG and ES were unsure but this was to be reviewed post meeting. **ACTION** – SD to review patient drug kardex for evidence of Meropenom use. **ACTION** – TI will request an Antimicrobial prescribing review of ward 2A and 2B be carried out. **Water** TI reported that the view of the IPCT was that the Stenotrophomonas was unlikely to be associated with the water contamination incident. PAL filters are in place throughout ward 2A and ward 2B. Advice has been sought from water experts external to GGC and it is their opinion that organism such as those found in the contaminated water system (including Stenotrophomonas) would not breach the PAL filters. TI also reported that Stentrophomonas is an environmental bacteria and can therefore be found within the healthcare environment, on equipment, on hands etc. She reported that it was important not to focus completely on the water as a potential source and forget other possible sources. As part of routine testing following increased incidence of gram negative organisms in blood cultures, the water has been sampled on ward 2A and ward 2B again and results are awaited. **ACTION** – TI to follow up results of water sampling.

Epidemiology

All patients have been on ward 2A and or 2B. There is no bed space link. TI queried whether they had all had a similar procedure carried out that could be a source of acquisition. BG and ES could not think of any at the time of the meeting but SD agreed to review cases in more depth.

ACTION – SD to review the 3 cases to look for any procedure, equipment or solutions linking the cases. Previous patient cases from the period of the water incident will be included in investigations to look for all possible environmental sources.

Weekly visits findings by IPCNs

Susie Dodd reported that IPCNs continued to find issues with the domestic cleaning provisions on ward 2A. These include high and low dust (inc underside of patient beds), dusty parent beds (long standing issue with accessing the plinth under the parent bed which carries high levels of dust). It was noted that the domestic hours on the ward have been increased since the Astrovirus outbreak on ward 2A in April. SCN reports that the additional hours continue, although the regular domestic is absent from work and has been replaced by another domestic not familiar with the ward. Recent meeting held with domestic managers to discuss domestic staffing provisions, access to clean and the cleaning of underside of beds. It was noted that cleaning of the underside of parent beds was a two person duty and that the housekeeper may be assisting with this however ES not clear on whether this is happening or not.

ACTION – SD will follow up on progress of cleaning tool for underside of parent beds.

ACTION – SD will increase IPCN ward visits to daily (currently 3-4 times weekly).

ACTION – JR will explore whether appropriate for housekeeper to assist in the cleaning of underside of parent beds.

ACTION – TI will report domestic concerns to Interim director for facilities Mary Ann Kane on a background of multiple concerns raised around domestic cleaning.

IPCNs have found some items of equipment which are not visibly clean. It remains a common theme to find items of equipment/parent belongings at the clinical hand wash basins in the patients' rooms. Clutter is still a problem in some rooms creating access to clean issues. It was noted that there is no other surfaces in the patient rooms for parents to leave their belongings. Items are parent/patient belongings are often left lying on top of waste bins.

ACTION – SD will chase progress of IPC information leaflet specifically designed for parents.

ACTION – BG and ES will continue to request that parents keep rooms clutter free and assist with access to clean. This will be rolled out to staff to enforce the message.

Hand Hygiene

SD provided feedback on the last hand hygiene audit carried out on the ward on 12th April. Compliance score was 95% for opportunities taken. One failure to take the opportunity, Medical staff member after taking patient bloods went straight to case notes. The Combined Compliance Score was 85% - this score is based on staff taking the opportunity *and* utilising the Correct Technique Criteria. Two failures recorded with technique used, Nurse with long sleeves and Pharmacist with wristwatch. Concerns fed back to staff on the ward at the time of audit. ES and AH report no concerns with their own hand hygiene monitoring.

	ACTION – SD to arrange further hand hygiene education for ward 2A and 2B staff. **Typing** TI stated that isolates have been sent for typing and results are awaited. Findings will be compared with the isolates found in the water also. **ACTION** – TI to follow up typing results. **Activity on Ward 2A** It has been noted by the IPCT on a regular basis that the volume of people on ward 2A is high creating a high level of activity on the unit which appears to be a consistent problem. Discussion took place around the number of visitors and the number of doctors taking part in grand ward rounds. ES reported that although visitors are advised only 2 at a time, there are often more (although not amongst the patient cases reported in this PAG). **ACTION** - ES will task a staff member with auditing the number of people coming onto ward 2A and their purpose for being on the ward. **ACTION** – ES to encourage staff to challenge non compliance with hand hygiene, SICPs. IPCNs to do this during visits to the ward. **ACTION** – SD will arrange further parent education. **Hydrogen Peroxide Vapour (HPV) Cleaning** TI explained that there is documented improvement's in the cleanliness with healthcare settings associated with HPV. There is an HPV machine on site used for CF patients. TI will look at obtaining use of this for ward 2A and proposes that it is used to clean each patient room on discharge on a rolling programme until all rooms have been done. The group agreed that this should be facilitated. **ACTION** – TI to contact relevant parties regarding use of HPV. **ACTION** – (Post meeting) TI to request review of chilled beams by estates and sampling of water within chilled beams. **Line Care** JR reported on the discussions at the last Quality Improvement group which focuses on Central Line Associated Blood Stream Infections (CLABSIs). A sharp rise in CLABSIs was recorded in March 2018 but April showed cases of CLABSI had dropped down to the lowest since the CLABSI QI group began. JR reported that clinicians are using a clinical review tool to investigate each CLABSI individually and findings from these were reported at the meeting. BG noted that patient lines are often trailing on the floor. ES and AH explained that the lines have extensions on them to allow more freedom of movement for the patients. **ACTION** – ES and AH to review lines and possible solutions to trailing on floor. **External Visit** TI suggested to the group that members of the IPCT and clinical team visit another BMT to observe their practices and ward setting/environment. The group agreed this would be a worthwhile trip. Some discussion took place about the most appropriate place to visit and Alder Hey was favoured. TI and BG will give some further thought to this and approach clinicians in selected hospital.

	ACTION – BG & TI to explore possibility of visiting Alder Hey.
Background:	See above.
Discussed with / Communications:	Susie Dodd – Lead IPCN (SD) Teresa Inkster – Lead Infection Control Doctor (TI) Brenda Gibson – Consultant Haematologist (BG) Emma Somerville – SCN ward 2A (ES) Angela Howatt – SCN ward 2B (AH) Jen Rodgers – Chief Nurse Paediatrics and Neonates (JR) Kalliopi Valyraki – Consultant microbiologist (KV)
Recommendation / Options:	**ACTION** – SD will follow up on progress of cleaning tool for underside of parent beds. **ACTION** – SD to review patient drug kardex for evidence of Meropenom use. **ACTION** – TI will request an Antimicrobial prescribing review of ward 2A and 2B be carried out. **ACTION** – SD will increase IPCN ward visits to daily. **ACTION** - SD to review the 3 cases to look for any procedure, equipment or solutions linking the cases. Previous patient cases from the period of the water incident will be included in investigations to look for all possible environmental sources. **ACTION** – JR will explore whether appropriate for housekeeper to assist in the cleaning of underside of parent beds. **ACTION** – TI will report domestic concerns to Interim director for facilities Mary Ann Kane on a background of multiple concerns raised around domestic cleaning. **ACTION** – SD will chase progress of IPC information leaflet specifically designed for parents. **ACTION** – BG and ES will continue to request that parents keep rooms clutter free and assist with access to clean. This will be rolled out to staff to enforce the message. **ACTION** – SD to arrange further hand hygiene education for 2A and 2B staff. **ACTION** - ES will task a staff member with auditing the number of people coming onto ward 2A and their purpose for being on the ward. **ACTION** – TI to contact relevant parties regarding use of HPV. **ACTION** – ES and AH to review lines and possible solutions to trailing on floor. **ACTION** – (Post meeting) TI to request review of chilled beams by estates and sampling of water within chilled beams. **ACTION** – BG & TI to explore possibility of visiting Alder Hey.
HIIAT	**Severity of Illness – Moderate** **Impact on Services – Minor** **Risk of Transmission – Moderate** **Public Anxiety – Minor** **Rating - AMBER**
IPCT Members:	Susie Dodd – Lead IPCN (SD) Teresa Inkster – Lead Infection Control Doctor (TI) Kalliopi Valyraki – Consultant microbiologist (KV)

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:	Clinical and Infection Prevention Control Team Senior Management Team.
Date:	18/05/18
Subject / Situation:	Increased incidence of Enterobacter cloacae in blood cultures amongst patients on ward 2A/2B. E.cloacae is an enteric coliform not as common as E.coli or Klebsiella. **Patient update** 4 new cases of E.cloacae in patients associated with ward 2A and/or 2B between 28th April and 14th May 2018. Of the 4, only 2 are HAIs as per the 48 hour rule. It was noted however that the 2 Non HAIs have had outpatient day care in 2B in the days prior to their positive blood culture. Dr Teresa Inkster shared a run chart with the group listing all positive blood culture isolates for E.cloacae in RHC. This evidenced a spike in cases following the 4 identified above. [redacted] All patients have lines. Nil giving cause for concern **Weekly Visits Findings by IPCNs** Susie Dodd reported that IPCNs continued to find issues with the domestic cleaning provisions on ward 2A. These include high and low dust (inc underside of patient beds), dusty parent beds (long standing issue with accessing the plinth under the parent bed which carries high levels of dust). It was noted that the domestic hours on the ward have been increased since the Astrovirus outbreak on ward 2A in April. SCN reports that the additional hours continue although the regular domestic is absent from work and has been replaced by another domestic not familiar with the ward. Recent meeting held with domestic managers to discuss domestic staffing provisions, access to clean and the cleaning of underside of beds. It was noted that cleaning of the underside of parent beds was a two person duty and that the housekeeper may be assisting with this however ES not clear on whether this is happening or not. **ACTION** – SD will follow up on progress of cleaning tool for underside of parent beds. **ACTION** – SD will increase IPCN ward visits to daily. **ACTION** – JR will explore whether appropriate for housekeeper to assist in the cleaning of underside of parent beds. **ACTION** – TI will report domestic concerns to Interim director for facilities Mary Ann Kane on a background of multiple concerns raised around domestic cleaning. IPCNs have found some items of equipment which are not visibly clean.

	It remains a common theme to find items of equipment/parent belongings at the clinical hand wash basins in the patients' rooms. Clutter is still a problem in some rooms creating access to clean issues. It was noted that there is no other surfaces in the patient rooms for parents to leave their belongings. Items are parent/patient belongings are often left lying on top of waste bins. **ACTION** – SD will chase progress of IPC information leaflet specifically designed for parents. **ACTION** – BG and ES will continue to request that parents keep rooms clutter free and assist with access to clean. This will be rolled out to staff to enforce the message. **Hand Hygiene** SD provided feedback on the last hand hygiene audit carried out on the ward on 12th April 2018. Compliance score was 95% for opportunities taken. One failure to take the opportunity, Medical staff member after taking patient bloods went straight to case notes. The Combined Compliance Score was 85% - this score is based on staff taking the opportunity *and* utilising the Correct Technique Criteria. Two failures recorded with technique used, Nurse with long sleeves and Pharmacist with wristwatch. Concerns fed back to staff on the ward at the time of audit. ES and AH report no concerns with their own hand hygiene monitoring. TI emphasized importance of HH in relation to type of organism **Typing** TI stated that isolates have been sent for typing and results are awaited. **Activity on Ward 2A** It has been noted by the IPCT on a regular basis that the volume of people on ward 2A is high creating a high level of activity on the unit which appears to be a consistent problem. Discussion took place around the number of visitors and the number of doctors taking part in grand ward rounds. ES reported that although visitors are advised only 2 at a time, there are often more (although not amongst the patient cases reported in this PAG). TI suggested if doctors on grand grounds are waiting in the corridor they should wait outside the ward instead. **ACTION** - ES will task a staff member with auditing the number of people coming onto ward 2A and their purpose for being on the ward. **Hydrogen Peroxide Vapour (HPV) Cleaning** TI explained that there is documented improvements in the cleanliness with healthcare settings associated with HPV. There is an HPV machine on site used for CF patients. TI will look at obtaining use of this for ward 2A and proposes that it is used to clean each patient room on discharge on a rolling programme until all rooms have been done. The group agreed that this should be facilitated. **ACTION** – TI to contact relevant parties regarding use of HPV.
Background:	See above.
Discussed with / Communications:	Susie Dodd – Lead IPCN (SD) Teresa Inkster – Lead Infection Control Doctor (TI) Brenda Gibson – Consultant Haematologist (BG) Emma Somerville – SCN Ward 2A (ES)

	Angela Howatt – SCN Ward 2B (AH) Jen Rodgers – Chief Nurse Paediatrics and Neonates (JR) Kalliopi Valyraki – Consultant microbiologist (KV)
Recommendation / Options:	**ACTION** – SD will follow up on progress of cleaning tool for underside of parent beds. **ACTION** – SD will increase IPCN ward visits to daily **ACTION** – JR will explore whether appropriate for housekeeper to assist in the cleaning of underside of parent beds. **ACTION** – TI will report domestic concerns to Interim director for facilities Mary Ann Kane on a background of multiple concerns raised around domestic cleaning. **ACTION** – SD will chase progress of IPC information leaflet specifically designed for parents. **ACTION** – BG and ES will continue to request that parents keep rooms clutter free and assist with access to clean. This will be rolled out to staff to enforce the message. **ACTION** - ES will task a staff member with auditing the number of people coming onto ward 2A and their purpose for being on the ward. **ACTION** – TI to contact relevant parties regarding use of HPV.
HIIAT	**Severity of illness – Moderate** **Impact on Services – Minor** **Risk of Transmission – Minor** **Public Anxiety - Minor**
IPCT Members:	Susie Dodd – Lead IPCN (SD) Teresa Inkster – Lead Infection Control Doctor (TI) Kalliopi Valyraki – Consultant microbiologist (KV)

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:	Clinical and Infection Prevention Control Team Senior Management Team.
Date:	20/07/18
Subject / Situation:	Notification of 1 isolate of Aspergillus fumigatus from a sample of [redacted] obtained from a haem-onc patient on ward 2A [redacted]. Further review of the case found a clinical presentation in keeping with probable –infection associated with Aspergillus fumigatus. (as per EORTC trial definitions). The patient is also positive in a respiratory sample for Exophiala which tends to colonise lungs , infection v rare.
Background:	A single case of Aspergillus fumigatus with associated clinical presentation of the same requires further investigation by the IPCT. Following notification of a lab isolate on Friday 20th July, members of the IPCT met with the SCN, Emma Somerville, and lead consultant, Professor Gibson, on ward 2A to discuss the case. [redacted] Radiology results are inconclusive for fungal infection and there is a wide differential diagnosis at this stage including GVHD . [redacted] They have also been exercising in the corridor with physio. (Note corridor is not HEPA filtered). On treatment with two antifungal agents The room occupied by the patient [redacted] was inspected for signs of leakage or fungal growth – none identified. Drains looked clean. SCN stated that there was a slight leak behind the IPS panel in room 16 earlier in the week. Already repaired by estates. Patient has not been in this room at any point. SCN confirmed that there have been no other leaks reported on ward 2A.
Discussed with / Communications:	Susie Dodd – Lead IPCN (SD) Teresa Inkster – Lead Infection Control Doctor (TI) Brenda Gibson – Consultant Haematologist (BG) Emma Somerville – SCN Ward 2A (ES)
Recommendation / Options:	IPCT will continue to monitor for further cases. Clinicians should continue to report any clinical suspicion of Aspergillus in patients. Ward staff should continue to observe for any signs of water leaks/fungal growth on the ward. The patient is allowed to leave his room on the basis of neutrophil recovery. However for complex patients with other risk factors such as GVHD , steroid use and prolonged neutropenia staff should risk assess. Wearing a mask might be appropriate for patients leaving rooms into a non hepa

	environment .
HIIAT	**Severity of illness – Moderate** **Impact on Services – Minor** **Risk of Transmission – Minor** **Public Anxiety - Minor**
IPCT Members:	Susie Dodd – Lead IPCN (SD) Teresa Inkster – Lead Infection Control Doctor (TI)

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:	15/08/18
Subject / Situation:	Increased incidence of *Serratia marcescens* in NICU, RHC since 8th July 2018.
Background:	Routine monitoring of specimens identified four *HAI Serratia marcescens* attributable to NICU between 8th July and 13th August, breaching a trigger for 3 colonisations with environmental Gram negative organisms occurring within a 2 week period. It was noted that the increase is of concern as there have been no cases for several months prior to July.
Discussed with / Communications:	**Discussed with:** Consultant Neonatologist – Duncan Boyd Charge Nurse NICU – Gillian Sloane Charge Nurse SCBU - Mairi Scott Deputy Site Facilities Manager - Sharon Johnstone Clinical Scientist – Kathleen Harvey-Wood **<u>Patients</u>** Timeline identifies Room 6 as a link between [redacted]. Typing results confirm [redacted] as unique strains, therefore currently no evidence of cross transmission. Typing awaited for the last 2 cases in order to assess relatedness of all 4 cases. [redacted] [redacted] **<u>Environment</u>** No concerns with Domestic monitoring scores. All scores are green. Unknown if any exceptions have been recorded relating to cleaning in NICU. IPCAT score 92% on 31/07/18. Temporary closure mechanisms on sharps boxes not in place. Blood spots on gas analyser. Dust on lower surfaces of breast milk pumps. Cleaning instructions for breast pumps not visible. Some procedure trolleys (oral

	supplies and IV) have dust on the outer frames, runners and paper fibres in drawers. Room 1 is being used to store newly delivered privacy screens, creating access to clean issues reflected in the dust levels in the room. IPCT have raised this at the recent Facilities meeting and requested that work is progressed to install the screens. IPCT have given advice to SCN regarding management of tubes of yellow soft paraffin in communal procedure trolleys. Food items placed on surfaces where medicines are checked and prepared. Noted practice of storing cleaned equipment in occupied bed space although not in use for a specific patient. **Pressures in the unit** Generally busy. Room 6 has been the quietest recently. **Antimicrobials** No change. **Practice and Equipment** No changes to oral care practice. Change in ET tube fixation device in the last week from Neo bar to Neo fit. Most recently colonised patient had a Neo bar which is a product that has been in use for at least 6 months throughout NICU. Confirmed after PAG meeting that the Neo-fit is individually packaged (1 fixation kit per tube). **Hand Hygiene Audit Scores** Local Ward based scores: June 85% overall score (combined compliance and technique) - 3 incorrect technique. July 85% overall score (combined compliance and technique) - 1 missed opportunity; 2 incorrect technique. **Local Hand Hygiene Co-ordinator Scores** 13/09/17 – Opportunities taken 90%. Combined compliance 85%. Noted that recent change of medical staff have received a hand hygiene teaching session.
Recommendation / Options:	**Actions** 1. Check new Neo fit and packaging – **AJ** actioned on 15/08/18. 2. Chase Hand Hygiene Co-ordinator scores – **AJ** actioned on 15/08/18. 3. Arrange audit by Hand Hygiene Co-ordinator ASAP - **AJ** actioned on 15/08/18. 4. Walkround and review of NICU environment, equipment and practice – **AJ** actioned on 15/08/18. 5. Establish if there have been exceptions to achieving domestic cleaning – **SJ** to action. 6. Ensure Mothers of positive babies have a dedicated breast pump if required – **GS** to action. 7. Ensure hand hygiene sinks in occupied isolation rooms 9 and 10 are cleaned

	with Titan before and after cleaning of dedicated breast pump equipment - **GS** and **SJ** to action. 8. Remove unused equipment and unnecessary clutter from clinical rooms - **GS** to action. 9. Ensure all procedure trolleys, including case note trolleys are cleaned - **GS** to action. IPCT to continue routine monitoring for further HAI cases associated with NICU. **Communications** Patients/relatives – reinforce good hand hygiene Staff – Inform of increased incidence and impending independent hand hygiene audit Press Office – no requirement to inform **Date and Time of Next Meeting** No further meeting planned unless concerns are generated from further typing results and PAG actions, or a further HAI case is identified.
HIIAT	Green – 15/08/18 • Severity of illness: Minor • Impact on Services: Minor • Risk of Transmission: Minor • Public Anxiety: Minor
IPCT Members:	SIPCN – Angela Johnson ICD on call – Alison Balfour

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:	Clinical and IPC Senior Management Teams
Date:	03/10/18
Subject / Situation:	Increase incidence of Stenotrophomonas maltophilia in NICU, RHC
Background:	Surveillance is in place to monitor for gram negative organisms in high risk units including NICU. The IPCT detected 3 cases of *S.maltophilia* within a 2 week period [redacted]. A meeting was held to review the 3 cases and discuss control measures. SD provided a patient report. [redacted] SD explained that all 3 cases are considered to be HAIs having been on the unit for more than 48 hours when the samples were obtained [redacted] SD noted that there were 3 cases of Staphylococcus epidermis in the same bed bay last week which the IPCT also reviewed. [redacted] SD provided feedback relating to review of the clinical environment and staff practice by IPCNs. It was noted last week that the room was very busy with staff and parents and some clutter was noted on the worktop areas. The clutter was removed by nurse in charge at the time of finding. Some light dust was found on the base of a trolley. All other equipment was found to be clean. During a further inspection of the room today the environment and equipment remained clean. Point of use filters, were noted to be visibly dirty. Drains were inspected in the 2 trough sinks in room 7 – 1 was clean, 1 had a light white biofilm build up. PPE practice and hand hygiene were also observed by IPCNs and performed well. The last IPCAT audit carried out on the unit was on 31st July 2018 and scored 92%. The last hand hygiene audit was on 23rd August 2018 and scored 95% for opportunities taken. GS noted that some of the parents in the room were friendly and often crossed between bed spaces however they only had direct contact with their own babies. AMH queried if the number of staff entering the bed bay should be restricted as visiting teams often contained large numbers of staff. SD advised that access to the area should be restricted to essential staff only. DMc and SJ reported that there had been no concerns noted with the unit domestic audits. GS reported that she was happy that the cleaning provision by domestic staff was satisfactory. KV advised that the drains and water should be sampled in room 7. SD added that the 3

	cases were all associated with one bed bay and the most likely cause was a breakdown in SICPs however it was important that a water source is ruled out. AMH informed the group that the mother's of the 3 parent cases all use the bottle feeding room for decontaminating bottles and expression kit. TF added that there is no filter on the tap in this room. SD advised that this was considered a low risk area in relation to the water incident as there was no direct patient contact with the sink and outlet. AMH requested that the outlet be sampled. KV advised that this could be done. AMH requested that the IPCT provide a slide for the parent information screen. SD agreed to do this.
Discussed with / Communications:	Kalliopi Valyraki – Infection control doctor Susie Dodd – Lead IPCN David McDonald – Site facilities Manager Sharon Johnstone – Deputy site facilities manager Louise Leen – Neonatal consultant Patricia Friel – Lead nurse, NICU Gillian Sloane – SCN Anne Marie Heuchan – Lead Consultant Laura McGlone – Neonatal consultant
Recommendation / Options:	The following actions were agreed; • If staffing allows, the 2 colonised patients who remain in the bed bay will be cohorted in room 1, a 4 bed bay. • Twice daily Actichlor plus cleans will be carried out in room [redacted] whilst the colonised patients remain there and in room 1 if the cases can be moved to there. • 1 [redacted] • IPCT will sample the environment in room [redacted] including water and drains. • Water samples will be obtained from the breast feeding room. • KV will arrange for samples to be sent for typing. • SD will query with HPS SLWG if Neonatal Patient info leaflet is read for use. • SD will provide a slide for the parent information screen. • IPCT to provide education to new graduates on 19th October 2018.
HIIAT	Severity of illness – Minor Impact on services – Minor Risk of transmission – Moderate Public anxiety – Minor **Overall HIIAT - GREEN**
IPCT Members:	Kalliopi Valyraki – Infection Control Doctor Susie Dodd – Lead IPCN

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:	Clinical and IPC Senior Management Teams
Date:	10/10/18
Subject / Situation:	Increase incidence of Pseudomonas aeruginosa in NICU, RHC
Background:	Surveillance has detected 4 cases of P.aeruginosa attributable to NICU, RHC within a 2 week period. Three are linked in time and place to room [redacted], and one patient is in room [redacted]. A Problem Assessment Group meeting was held to review the 4 cases and discuss control measures. [redacted] AB highlighted to the group that the PAG today is the 4th increased incidence event in NICU in recent times. The others relate to Serratia marcescens colonisations, Stenotrophomonas maltophilia colonisations and Staph epidermidis blood culture positives. AB informed the group that these events may require an over- arching IMT. This will be discussed with Teresa Inkster (TI). The antibiogram from [redacted] isolates are the same suggesting possible cross transmission between the [redacted]. Typing results are awaited. All 4 isolates of Pseudomonas aeruginosa have been sent for typing. The last hand hygiene audit was August 2018 and scored well (95% for opportunities taken). Stefan Morton has been asked to carry out another hand hygiene audit in view of recent increased incidence. No concerns with Domestic cleaning. Water safety checklist 27th September following 1st patient positive case for *P.aeruginosa* – no issues identified. AB informed the group that results from water sampling taken last week are usually available 1-2 weeks after sampling, and drain swabs 1 week after sampling. Typing results will take 3- 4 weeks. AH has forwarded a parent information leaflet on isolation to Susie Dodd and SCN Morag Liddell for comment. The group suggested that parents are given the opportunity to

	comment to ensure clarity is achieved.
Discussed with / Communications:	Alison Balfour – Infection Control Doctor Morag Campbell – Neonatal Consultant Patricia Friel – Lead Nurse, NICU Anne Marie Heuchan – Neonatal Consultant Angela Johnson – Senior IPCN Louise Leven – Neonatal Consultant Lorna McSeveney – Charge Nurse Kathleen O'Reilly - Neonatal Consultant Joyce O'Shea – Neonatal Consultant Colin Peters – Neonatal Consultant Apologies received from Sharon Johnstone on behalf of Domestic Services.
Recommendation / Options:	The following actions were agreed; • Room [redacted] to be vacated and a deep clean arranged with Domestic services. • [redacted] • [redacted] • [redacted] • Hand hygiene audit to be carried out by Stefan Morton. • Water safety checklist repeated at time of PAG. • AJ to request latest Domestic monitoring scores. • AB and AJ to check room 6 general environment, check mouth care procedures and any other practices relevant to Pseudomonas transmission. • AB and AJ to visit and check the breast milk expression room. • Mothers of positive babies can continue to use the breast milk expression room and to clean and keep their equipment in the same place. • Staff are to reinforce hand hygiene with parents in NICU. • Twice daily Actichlor plus cleans will be carried throughout NICU until further notice. • From last PAG - Susie Dodd is to query with HPS SLWG if Neonatal Patient information leaflet is ready for use. • Susie Dodd and Morag Liddell to comment on parent information leaflet on isolation. Clinical team suggested also asking for comments from parents. • Isolates sent for typing. • AB to check with TI regarding following-up with an over-arching Incident Management Team meeting to review all recent NICU related PAG's. There will be no further meeting scheduled at present unless there are any further colonisations or infections attributable to NICU.

HIIAT	Severity of illness – Minor Impact on services – Minor Risk of transmission – Minor Public anxiety – Minor **Overall HIIAT – GREEN**
Communications	No requirement for press office communications or escalation to Health Protection Scotland. Neonatal Consultants agreed to communicate with parents verbally regarding cohort isolation precautions.
IPCT Members:	Alison Balfour – Infection Control Doctor Angela Johnson – Senior IPCN

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:	Clinical and Infection Prevention Control Team Senior Management Team.
Date:	25/10/18
Subject / Situation:	TI reported 3 isolates of *Pseudomonas aeruginosa* detected [redacted] in the same 24 hour period.
Background:	**Patient cases** TI explained that *P.aeruginosa* is an unusual organism to find in samples taken from the [redacted]. TI reported a retrospective look back of lab data found 2 other cases, 1 in July and 1 in August, [redacted]. It was noted that all the procedures were carried out in theatre 6. [redacted] **Investigations to date** AJ carried out a review of practice and the environment within theatre 6. The group were given feedback. In general, environmental and equipment cleaning in the theatre were very good. Some notes of concern; Narrow gaps between stacking of electronic equipment making this part inaccessible for cleaning – these cannot be taken apart by staff and are the same throughout theatre. Mobile saline warming cabinet had some rusting to the surfaces and the wheels and lower surface contained a white adherent substance which looked like salt from a bag of saline which has previously leaked – JW will review this and MH agreed a new one will be ordered if there is irreparable damage. Multi pack of baby wipes in use in theatre for cleaning patient post operatively – JW to contact procurement to try to obtain small single patient use packs of baby wipes. TI reported that samples of the water supply have been taken and results are awaited. To date, P.aeruginosa has never been isolated from the water supply on the RHC site. TI also reported that a number of items have been sampled including the laparoscope commonly used for appendisectomies, specimen pots, sucker irrigator, detergent wipes and baby wipes. Results of these are awaited. TI queried any issues with equipment coming from cowlairs. JW reported that there has not been and that the system in place is robust with any breaches in packaging being reported back to cowlairs at time of finding. It was also noted that the laparoscope which has been sampled is used for various laporoscopic procedures and not just appendisectomies.

	Hypothesis TI noted that if this increased incidence was linked to water or the ventilation within theatre we would expect to see positive isolates from samples throughout theatre and across different procedures. This indicates that the water and ventilation are not the source. The common denominators are the theatre location and the procedure. The same surgeon was involved in the 3 October cases. It was noted that this may just be a coincidental cluster but that it is important we exclude all potential sources. The isolates have been sent for typing and the results will help guide the hypothesis. **Comms** Parents – Not required at present. Should the typing of the 3 patients be the same they may need to be contacted as per Duty of Candour. Staff – The relevant staff have been kept up to date. Press – No press statement needs to be prepared.
Discussed with / Communications:	Susie Dodd – Lead IPCN (SD) Teresa Inkster – Lead Infection Control Doctor (TI) Angela Johnson – Snr IPCN (AJ) Jeanette Whiteside – SCN theatres (JW) Melanie Hutton – CSM (MH) Karen Connelly – GM facilities (KC)

Recommendation / Options:	No further control measures are required at present and the group will be contacted with results of environmental sampling when they are available. **ACTION** - JW will review the warming cabinet for suitability for use. **ACTION** - JW to contact procurement to try to obtain small single patient use packs of baby wipes. **ACTION** – TI to report sampling results when available.
HIIAT	**Severity of Illness** **Impact on Services –** **Risk of Transmission –** **Public Anxiety –** **Rating -**
IPCT Members:	Susie Dodd – Lead IPCN (SD) Teresa Inkster – Lead Infection Control Doctor (TI) Angela Johnson – Snr IPCN (AJ)

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:	Clinical and IPC Senior Management Teams
Date:	18/12/18
Subject / Situation:	2 clinical cases of Cryptococcus neoformans isolated from blood cultures obtained [redacted]
Background:	Cryptococcus neoformans, is an encapsulated yeast that can live in both humans and animals and is largely found in soil and pigeon excrement. The incidence of Cryptococcus neoformans is extremely low. 2 clinical isolates within 17 days on the same hospital site is of concern and was reported to the IPCT by consultant microbiologists. A review of the patient cases was undertaken by the IPCT. [redacted] **Patient location** – The QEUH building is the only common link between cases. **IV medications** – The aseptic pharmacy have been contacted to establish if they have provided any medications to either of the 2 cases and identify any commonality. **Environment** – [redacted] On retrospective inspection, there is no evidence of exposure to soil. Excessive volumes of pigeon droppings have been noted outside of PICU in enclosed external atriums. There is no window or door access to the external atrium for staff or patients. Pigeons have been reported to be nesting on the sills of the external atrium throughout the summer months and as a result nets were placed overhead and spikes applied to window sills. The extensive pigeon excrement is no longer visible although some pigeon droppings do remain on the external windows and sills. The same was also visualised on overhead canopies at entrance way to the Royal Hospital for Children.

	Duct work – Facilities colleagues have been contacted to query any possible concerns relating to pigeons accessing the duct work and therefore potentially exposing inpatients to contaminated duct work. Facilities are investigating the ventilation intakes for, ward 6A and PICU in relation to roofs and garden space.
Discussed with / Communications:	Lynn Pritchard Susie Dodd Dr Teresa Inkster Professor Brenda Gibson *Adult haem onc consultant* Tom Steele Ian Powrie
Recommendation / Options:	Review of aseptic pharmacy and any supply of IV medications to either of the 2 cases. Review of duct work facilities colleagues. Clean of pigeon excrement on external sills and canopies.
HIIAT	Not reviewed.
IPCT Members:	Lead IPCN – Susie Dodd Lead IPCN - Lynn Pritchard Infection Control Doctor – Dr Teresa Inkster

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:	31.1.19
Subject / Situation:	Increased incidence *Serratia marcescens* in SCBU
Background:	Routine monitoring of specimens identified 3 *HAI Serratia marcescens* attributable to SCBU between 14th Jan and 27th Jan, breaching a trigger for 3 colonisations with environmental Gram negative organisms occurring within a 2 week period. All recently nursed in Room 9.
Discussed with / Communications:	[redacted] [redacted] [redacted] **<u>Environment</u>** Ward and bed bay 9 reviewed by IPCNs oon 30/1/19; • generally clean but busy (Room 9) • arm of over bed light clean (Room 9) but some light dust in room 2 – highlighted to domestic and immediately rectified. • no pendants in this room (Room 9) • vents satisfactory (Room 9) • odd sticky stains found from medicines but cleaned at time of visit (Room 9) • Workstation slightly dusty but cleaned at time of visit (Room 9) • <u>very</u> minor dust noted on vent and pendant (not in use) in room 8

- dust balls behind the door (not in use) in room 4

IPCAT audit
Last IPCAT audit carried out on 20/6/18.
Standard Infection Control Precautions (SICPs) - 85%
Safe Patient Environment (SPE)- 77%
Transmission Based Precautions - 100%
Quality Assurance (QA) - 100%
Overall Score 87% Green rating.

SPE section failures

- Some dust in store rooms
- Some inappropriately placed items – communal baby washes kept in sluice.
- Handcreams and jewellery on clinical bench top.
- Dusty IV trolleys
- Resus trolley dusty
- Dusty suction points

SCN has been carrying out SICPs audits every 2 months. Scores are consistently above 90%. The audits are rotated amongst nursing staff to improve their SICPs knowledge and understanding of the purpose of the audit.

Hand hygiene audit
To date, hand hygiene audits include level 1 and 2 (NICU and SCBU). The hand hygiene coordinator will carry out an audit for SCBU as a stand alone unit.

The SCN has been carrying out monthly hand hygiene audits – Results consistently above 90%.

Visit to unit on 31/1/19 by Lead IPCN Susie Dodd, ICD Sara Jamdar and IPCN Lynne Kennea
Discussion took place with Nurse in Charge Sandra Lowis and SCN Karen Goodwin.

Placement - Babies tend to be split into 2 teams, surgical and medical. Surgical babies (normally in room 9) are screened every Sunday routinely. Medical babies (normally in room 2) do not undergo the same screening. This has been a historical practice. The current serratia isolates have been identified from screening samples.

Parents in room 9 are compliant with good IPC practice. Parents only have direct contact with their own baby, they do not handle or enter the bed space of other babies. It was noted however that parents do often wear wrist watches and jewellery and parents using mobile phones in the clinical area is also and common problem.

Staff - There are no new staff on the unit and although the unit have used a number of bank staff throughout January, these tend to be their own nurses. There are no new AHPs or phlebotomists. Staff note that they accompany visiting staff to see the patients and alert them to any additional control measures at the bed space.

Domestic cleaning - Nursing staff are largely happy with the domestic cleaning although note that the regular weekend domestic has been on leave/absent from

	work for a number of weeks and there have been different domestics covering the unit. There have been no access to clean issues. Domestic monitoring scores have been good.
Recommendation / Options:	• Ensure TBPs are adhered to by all staff at the bedspace of the 3 babies colonised with Serratia. Ensure good SICPs by all staff throughout the unit. • Local hand hygiene coordinator to carry out hand hygiene audit. • Staff to encourage parents to remove any jewellery/wrist watches and outerwear before entering the clinical area and performing hand hygiene. SCN has added this to the agenda for the next team meeting. • Ensure all equipment is cleaned as per cleaning of near patient equipment SOP. Ensure Actichlor plus is used for cleaning of equipment in the bed bays occupied by the colonised babies. • Serratia isolates sent for typing. • IPCT to continue regular visit to the unit to review environment and practice. • Following discussion with Dr Inkster (the ICD lead) it is recommended that for the time being weekly screening on all SCBU is carried out. Mouth swabs and NPA will be obtained from all babies on a Sunday. The need for continued screenings will be reviewed at a later date.
HIIAT	Severity of illness – minor Impact on services – minor Risk of transmission – moderate Public anxiety – minor HIIAT - **GREEN**
Discussed with:	Lead IPCN Susie Dodd, ICNs Lynne Kennea and Katie Anderson ICD Sara Jamdar SCN Janice Heggie Dr Louise Leven Nurse in charge Sandra Lowis SCN Karen Goodwin

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:	07/02/2019, 2pm
Subject / Situation:	Increased incidence of environmental organisms acquired by patients in Ward 1D
Background:	Routine surveillance monitoring of specimens identified 2 Pseudomonas positives (1 of which is a blood culture), 2 Acinetobacter baumannii and 1 Serratia marcescens attributable to Ward 1D, RHC, between 5th Jan and 3rd February, breaching the following triggers: 1 bacteraemia with an environmental Gram negative organism within a 1 week period 3 colonisations with environmental Gram negative organisms occurring within a 2 week period.
Discussed with / Communications:	[redacted] **<u>Audits and visits</u>** Lead IPCN, Susie Dodd visited 1D on 6th February: • Lab room: Blood syringes on worktop, blood on worktop and floor, used PPE left lying on worktop. • Vents in cylinder storage room - dusty • General environment seemed clean though and no issues identified with practice. Noted that the Lab room is also used by other departments. 17/01/19: Infection Control Team IPCAT score overall 82% (Green)

	Safe Patient Environment (SPE) • Score was 58% (red) reflecting findings relating to cleanliness of equipment. • Vents – dusty above patient bed spaces (cleaning of vents in bed bay spaces completed by the end of January). Unable to confirm completion of vent cleaning in single rooms. 19/01/19: Hand Hygiene Audit – Stefan Morton • Opportunities Taken score was 95%. • Combined Compliance score was 80% (Issues with technique) Feedback shared with staff at the safety brief. Week beginning 28th January 2019: Hand hygiene audit carried out by HEI visit Score of 27 from 29 opportunities. No other detail from feedback. **Cleaning** No issues identified. Recent Domestic Monitoring Scores not available at time of PAG. **Staffing** New Consultants hired and new intake of Registered Nurses – all have completed a programme of induction and are supervised/supported. Acknowledgement of 1D being particularly busy during the time period under discussion.
Recommendation / Options:	Actions: • Domestic Services to increase monitoring of cleaning and a change of auditors. • Recent Domestic Monitoring scores to be forwarded to Infection Control Team. • Repeat Safe Patient Environment (SPE) section of IPCAT • Continue with surveillance monitoring of HAI environmental Gram negative organisms attributable to Ward 1D • SCN to continue to share feedback of audit results with staff at safety brief • SCN to contact other users of the lab room to advise on cleaning after use • Gram negative organisms sent for typing No further meetings unless new cases are detected.
HIIAT	Not assessed.
Discussed with:	Dr K.Valyraki (Infection Control Doctor) A.Johnson (Senior IPCN) Dr Neil Spenceley (Paediatric Intensivist) Susan Miller (Charge Nurse) Karen Connolly (General Manager, Facilities) Patricia Coyne (Professional Lead Domestic)

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 and Clinical SMT
Date:	16/04/19
Subject/ situation:	Typing match for two HAI *Acinetobacter baumannii*, Ward 1D, RHC
Background:	Two HAI Acinetobacter baumannii attributable to Ward 1D, RHC. [redacted]

	[redacted] **Timeline** A timeline shows that there is no bed space connection between the 2 cases. The nearest the cases came to one another was from late [redacted] which is adjacent to the bed bay [redacted]. Confirmed that nursing staff would not have cared for both patients during the same shift, however other groups of staff may have done so. **AUDITS** **Hand Hygiene on 27/03/19** Opportunities Taken score was 90%, Combined Compliance score was 85%. Two failures to take the opportunity; after contact with patient surroundings, multiple contacts across three bed spaces; after patient contact, patient to eqpt and trolley. One failure with technique; took the opportunity to clean hands but timing was too short. **Infection Control Audit 17/01/19:** Overall Score 82% (Green) Safe Patient Environment (SPE) section - Score was 58% (red) - reflecting findings relating to cleanliness of equipment 15/03/19 – Infection Control Team repeated the SPE section of the audit and the score had improved to 90%. **Cleaning Services** No issues raised. **Other Issues** Keyboard covers are not commonly used at all bedside computers.
Hospital Infection Incident Assessment Tool (HIIAT)	HIIAT – Green • Severity of illness – minor • Impact on services-minor • Risk of transmission- moderate • Public anxiety- minor
Recommendation /options:	**Actions:** • Repeat of hand hygiene audit by local board co-ordinator • Keyboard covers to be used on all bedside keyboards

	• Continue with surveillance monitoring of hospital acquired environmental Gram negative organisms attributable to Ward 1D • SCN to share feedback of evidence of cross transmission with staff at safety brief and reinforce compliance with hand hygiene No further meetings planned unless new cases are detected. Ongoing monitoring by IPC team.
IPCT Members: **Discussed with:**	Dr P.Valyraki – Infection Control Doctor Dr Kamaljit Khalsa, Microbiology Registrar A.Johnson – Senior Infection Prevention Control Nurse K. Anderson - Infection Prevention Control Nurse **Other Attendees:** Dr Neil Spenceley (Consultant Paediatric Intensivist) Dr Edgar Brincat (Consultant Paediatric Intensivist) Dr Mark Davidson (Consultant Paediatric Intensivist) Lianne McPherson (Senior Charge Nurse. 1D) David MacDonald (Facilities Manager) Louise Bell (Acting Lead Nurse)

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:	27/05/19
Subject / Situation:	2 cases of *Stenotrophomonas maltophilia* isolated from blood cultures of patients receiving care on ward 6A, haemato-oncology
Background:	[redacted] [redacted] [redacted] [redacted] **<u>Water sampling</u>** Stenotrophomonas isolated from basement water storage tank. Further samples have been obtained from ward 6A to test for any growth at the point of use. **<u>Point Of Use Filters (POUF)</u>** POUFs continue to be changed every 30 days by DMA water services. On 17th May,

	room 16 (day care room) in 6A had a loss of water. The POUF was accidently removed by a parent. DMA attended and put on a new filter immediately. No water came out the tap when the filter was off. The room and wash hand basin were cleaned after the filter change. DMA reported to staff that it was the valve in the filter that stopped the water coming out. Clarification awaited on this. **Drain cleaning** Drains are dosed weekly with Hysan by domestic services. This has been ongoing since Schiehallion service transferred to 6A and has been very successful in preventing build up of any black grime in the drains. **Air sampling** **Hand Hygiene** Undertaken on 9th October 2018 Opportunities Taken score was 95%. One failure to take the opportunity, Medical staff after contact with patient surroundings, went straight to station and answered phone. Combined Compliance score was 80%. Three failures with technique. One Trained Nurse, before and after touching a patient, wearing a wristwatch. One Trained Nurse, before contact with isolation patient, less than 3 seconds duration. **Infection Control Audit** Last completed on 1st November 2018. Overall score of 95% SICPs 94% SPE 94% TBPs 97% QA 100% **Enhanced supervision** Discontinued on 23/04/19 on the basis that practice observed was of a consistently high standard. On a weekly basis, IPCNs continue to check a selection of equipment and findings are reported back to the nurse in charge. No major areas of concern identified.
Recommendation / Options:	**Actions:** • Patient Isolates sent for typing • Water samples obtained from ward 6A for testing • Time line of patient movement across the RHC site
HIIAT	
IPCT Members:	

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:	03/06/19
Subject / Situation:	4 cases of *Gram Negative Bacteraemia* isolated from blood cultures of patients receiving care on ward 6A, haemato-oncology
Background:	[redacted]

[redacted]

[redacted]

Water sampling

Water samples have been obtained from ward 6A to test for any growth at the point of use. Provisional results have found no gram negative organisms isolated from the water. Final results still awaited. It was agreed that the water should be sampled in interventional radiology and theatre 6, RHC.

Point Of Use Filters (POUF)

POUFs continue to be changed every 30 days by DMA water services. On 17th May, room 16 (day care room) in 6A had a loss of water whilst the POUF was insitu. The POUF was accidently removed by a parent who thought this was preventing the flow of water. DMA attended and put on a new filter immediately. No water came out the tap whilst the POUF was off. The room and wash hand basin were cleaned after the filter change. DMA reported to staff that it was the valve in the filter that stopped the water coming out. Clarification awaited on this. POUFs were checked on day of PAG and are within the expiry date.

Drain cleaning

Drains are dosed weekly with Hysan by domestic services. This has been ongoing since Schiehallion service transferred to 6A and has been very successful in preventing build up of any black grime in the drains. A selection of drains were checked on the day of the PAG by IPCT – all satisfactory with very minor build up of grime at the far back of some sinks. It was agreed that drains within theatre 6 and interventional radiology should be inspected and sampled if build up of grime is evident.

Hand Hygiene

Last hand hygiene audit undertaken by board hand hygiene coordinator on 9th October 2018
Opportunities Taken score was 95%.One failure to take the opportunity, Medical staff after contact with patient surroundings, went straight to station and answered phone.
Combined Compliance score was 80%.
Three failures with technique.
One Trained Nurse, before and after touching a patient, wearing a wristwatch.
One Trained Nurse, before contact with isolation patient, less than 3 seconds duration.

Infection Control Audit

Last completed on 1st November 2018. Overall score of 95%
SICPs 94%
SPE 94%
TBPs 97%
QA 100%

	Enhanced supervision Discontinued on 23/04/19 on the basis that practice observed was of a consistently high standard. On a weekly basis, IPCNs continue to check a selection of equipment and findings are reported back to the nurse in charge. No major areas of concern identified. Unit reviewed by IPCN on day of PAG. Equipment noted to be clean and stored appropriately. No practice issues noted. **Status of ward** TI advised that the ward is safe to be open to admissions and transfers including [redacted]. Some discussion around suitability of ward 4B BMT for babies. GR and JR agreed to review. **Air Sampling** TI noted that there had been some occasional high fungal counts on ward 6A. Investigations have found no water or moisture sources to explain high counts. Request has been made by IPCT for portable filters to be checked for expiry. Water fountain still in place on ward 6A meeting room – DMc will arrange for it's removal.
Recommendation / Options:	**Actions:** • Patient Isolates sent for typing - TI • Water samples – final results awaited - TI • Water samples to be obtained from theatre 6 and interventional radiology - TI • Drains to be inspected in theatre 6 and interventional radiology +/- swabbing - SD • Review of ward 4A for admission of babies – GR and JR • Removal of water fountain from 6A meeting room – DMc
HIIAT	**HIIAT** Severity of illness – Moderate Service Impact – Minor Risk of Transmission – Minor Public anxiety – Minor No further meetings arranged unless new cases or sampling results are of concern.
Members Present:	Professor Brenda Gibson Jen Rodgers Gael Rolls Angela Howat Emma Somerville Teresa Inkster (Chair) Susie Dodd Dr Jairam Sastry David MacDonald

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:	21/08/2019
Subject / Situation:	4 VRE in Ward 4C with 12 days. 3 in blood cultures and 1 in wound swab.
Background:	IPCT were notified on 5th August 2019, via ICNet of a confirmed VRE from a blood culture taken on 31st July 2019. Following this, there were 3 further patients identified VRE positive from samples taken on 9th August 2019 (blood culture), 13th August 2019 (wound swab) and 16th August 2019 (blood culture). [redacted] During this period the ward was extremely busy.
Discussed with / Communications:	Dr Valyraki (ICD) SCN Wendy McClintock Pamela Joannidis (ANDIPCT) IPCT
Recommendation / Options:	Observation of practice / enhanced supervision will be undertaken looking at all staff groups with a focus on clinical care. Hand hygiene audit will be undertaken.

	Typing of the samples. Review TVN input with the patients that had wounds Review of input from “friends of the Beatson” Observe for any further isolates of VRE within the ward area.
HIIAT	GREEN
IPCT Members:	Dr Kalliopi Valyraki ALYRAKI (ICD) Lynn Pritchard (Lead IPCN) Allana Kelly (IPCN) Wendy McClintock (SCN)

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:	Pamela Joannidis
Date:	12.11.19
Subject/Situation:	*P.aeruginosa*
Background:	2 patients isolated *P.aeruginosa* Ward 1D PICU. [redacted]

	[redacted] Rebalancing of the ventilation system carried out: Room 13-16 - 28.10.19 -11.11.19. [redacted] No work carried out in room 19-22 [redacted]
Discussed with/ Communications:	Dr A McGettrick – Consultant Intensive Care LN E Johnstone SCN N Spence G Wylie – ECLS Coordinator P Coyne – Domestic Services
Hospital Infection Incident Assessment Tool (HIIAT)	Severity of illness –Moderate (due to Pseudomonas 1 HAI case) Impact on services –Minor Risk of transmission –Minor Public anxiety – Minor HIIAT – **Green**

	This is an interim HIIAT assessment until the typing of the isolates is returned. [redacted]
Recommendation /options:	Ward had IPCAT carried out 05.11.19 – overall RAG score was Green however SPE section scored RED. This will be repeated with SCN in 3 weeks time. Hand Hygiene audit also carried out last week – Score 80%. LN and SCN agreed to carry out peer hand hygiene audits. No domestic issues highlighted. Water safety checklist carried out 11.11.19 – no issues identified. Typing of patient 2 specimen is awaited. Decision made to re convene if typing matches. **IMT** - No
ICT Members	Dr K Valyraki LIPCN G Bowskill

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:	Pamela Joannidis
Date:	21.11.19
Subject/Situation:	*P.aeruginosa*
Background:	[redacted]

	[redacted]
Discussed with/ Communications:	Dr J Scarth – Consultant Intensive Care LN E Johnstone SCN N Spence SCN L McPherson
Hospital Infection Incident Assessment Tool (HIIAT)	Severity of illness –Minor Impact on services –Minor Risk of transmission –Minor Public anxiety – Minor HIIAT – **Green**
Recommendation /options:	Ward had IPCAT carried out 05.11.19 – overall RAG score was Green however SPE section scored RED. This will be repeated with SCN beginning of December. Hand Hygiene audit carried out 08.11.19 – Score 80%. Hand hygiene audit repeated 20.11.19 – Score 90%. Hand hygiene coordinator has liaised with staff regarding training. LN and SCN agreed to carry out peer hand hygiene audits. No domestic issues highlighted. Water safety checklist carried out 11.11.19 – no issues identified. Water safety checklist carried out 20.11.19 – no issues identified. SOP for BBAL supplied by PICU. IPCT will observe process for obtaining BBAL. Water samples taken on 14.11.19 were negative. Typing of patient 2 specimen is awaited. Decision made to re convene if typing matches. **IMT** - No
ICT Members	Dr A Balfour P Joannidis G Bowskill

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 and Clinical SMT
Date:	05/11/19
Subject/ situation:	Increased incidence of HAI *Acinetobacter baumannii*, Ward 1D, RHC
Background:	Routine surveillance has identified three Acinetobacter baumannii positive patients within a 12 day period. All are hospital acquired and attributable to Ward 1D, RHC. The trigger for investigation is 3 cases within a 2 week period. Two of the three patients [redacted] have identical typing. Case [redacted] is unique. A fourth patient case was identified from August with typing that is identical to cases [redacted]. The fourth case is not being investigated as part of the October cluster as the positive specimen occurred 6 - 7 weeks prior to the October cases, and the patient was transferred out of 1D [redacted]. [redacted]

	[redacted] [redacted] [redacted] **Timeline** The timeline identifies a time and space link between case [redacted] and case [redacted] who were in bed spaces in the same bed bay. The transfer of case [redacted] out of 1D on 10th October took place 7 days before patient [redacted] became positive on 17th October. It was noted that prior to this positive the last Blind BAL for case [redacted] occurred on 11th September. It is difficult to identify exactly when case [redacted] acquired A.baumannii as this could have occurred at any time between 12th September and 17th October. The identical typing results from [redacted] suggest that cross transmission is likely to have occurred in 1D. **Last Hand Hygiene Audit - 24/04/19** Opportunities taken score was 95%, Combined Compliance score was 90%: • One failure to take the opportunity; after contact with patient surroundings, observed multiple contacts across three bed spaces; • One failure with technique; took the opportunity to clean hands but used a dry soap rub. **Infection Control Audit 17/01/19:** Overall Score 82% (Green) Safe Patient Environment (SPE) section - Score was 58% (red) - reflecting findings relating to cleanliness of equipment 15/03/19 – Infection Control Team repeated the SPE section of the audit and the score had improved to 90%. **Cleaning Services** No issues identified. **Other Issues** Alternatives to keyboard covers are being explored to assist staff with regular cleaning. No other issues identified.
Hospital Infection Incident Assessment	HIIAT – Green

Tool (HIIAT)	• Severity of illness – Minor • Impact on services- Minor • Risk of transmission- Moderate • Public anxiety- Minor
Recommendation /options:	**Actions:** • Repeat hand hygiene audit - by local board co-ordinator • Repeat IPCAT audit – Local Infection Prevention Control Team • SCN /LN to explore alternatives to keyboard covers • Infection Control Team to continue with surveillance monitoring of hospital acquired environmental Gram negative organisms attributable to Ward 1D • SCN to ensure shared patient equipment is clean through use of the routine weekly cleaning assurance checklist • SCN and Consultant to share feedback of evidence of cross transmission with staff at safety brief and reinforce compliance with hand hygiene No further meetings planned unless new cases are detected.
IPCT Members: **Discussed with:**	Dr P.Valyraki – Infection Control Doctor A.Johnson – Senior Infection Prevention Control Nurse Dr Richard Levin (Consultant Paediatric Intensivist) Lianne McPherson (Senior Charge Nurse) Mandy Meechan – Lead Nurse Patricia Coyne (Deputy Site Facilities Manager)

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:	P Joannidis/S Devine
Date:	20.12.19
Subject / Situation:	2 HAI Serratia marcescens cases attributed to NICU RHC taken 4 days apart (colonisation).
Background:	[redacted]

Discussed with / Communications:	Dr Colin Peters (neonatologist) Patricia Friel LN Karen Taylor SCN Joanne Cattan SSN
Recommendation / Options:	Both isolates are being sent for typing. Hand Hygiene audit will be carried out. SPE audit will be carried out. Decision made to await typing results. All taps in NICU have been replaced following previous Serratia incident and have POUF attached. Decision made not to carry out environmental sampling at this time. If typing matches or there are any new cases an IMT will be convened.
HIIAT	HIIAT - Green Severity of illness –minor Impact on Services -minor Risk of Transmission –minor Public Anxiety - minor
IPCT Members:	Dr A Balfour/LIPCN G Bowskill

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 and Clinical SMT
Date:	24.03.20
Subject/ situation:	Vancomycin Resistant Enterococcus (VRE) Ward 6a RHC.
Background:	Hospital Acquired (HAI) cases of VRE is monitored monthly in Ward 6a. The warning line sits at 2 cases in the month. For the month of March we have so far had 2 cases of VRE colonisation attributable to Ward 6a. The previous 2 months, 1 HAI case for each month with identical typing. The last spike with 2 HAI cases in a month was November 2018. The 2 cases identified in March were from non diarrhoeal stools. Discussion around the practice of sending formed stools to the lab. These are currently sent as part of a neutropenic screen which Dr Sastry agreed to review. Hypothesis is that VRE colonisation is being identified in asymptomatic patients through current screening policy in unit.
Hospital Infection Incident Assessment Tool (HIIAT)	HIIAT - Green • Severity of illness – minor • Impact on services- minor • Risk of transmission- minor • Public anxiety- minor
Recommendation /options:	**Actions:** The ward has had weekly enhanced supervision and hand hygiene audits carried out since August. These were discontinued 2 weeks ago. Compliance with SICPs, TBPs, Hand hygiene and environmental cleanliness were not an issue. The PAG agreed that at this time due to the hypothesis further audits were not necessary at this time. Dr Sastry will review the current neutropenic sepsis screening policy. No further meetings planned.
IPCT Members: **Discussed with:**	Professor A Leanord LIPCN G Bowskill Dr J Sastry Chief Nurse J Rodgers SCN E Somerville

NHS Greater Glasgow and Clyde	**NHS Greater Glasgow & Clyde** **Infection Prevention and Control Team**
Purpose:	Problem Assessment Group (PAG)
From:	South Glasgow Infection Prevention and Control Team
To:	Dr Alison Balfour, Infection Control Doctor Dr Kalliopi Valyraki, Infection Control Doctor Sandra Devine, Infection Control Manager Pamela Joannidis, Acting Associate Nurse Director Infection Prevention & Control Kate Hamilton, nurse Consultant IPC Lynn Pritchard, Lead Infection Prevention & Control Nurse
Date:	17/04/20
Subject / Situation:	2 HAI *Enterobacter aerogenes*, Critical Care Unit 6 (ITU Covid hub)
Background:	IPCT notified of 3 patients within Critical Care Unit 6 (ITU Covid hub) who isolated *Enterobacter species*. On review 2 patients had *Enterobacter aerogenes* isolated from blood cultures. Both patients had been nursed in Critical Care Unit 6 and crossed over for a period of 5 days. Details of the patients below [redacted] [redacted]

	[redacted]
Discussed with / Communications:	Discussed with Dr Alison Balfour regarding situation on 17/04/20. Both isolates will be sent for PFGE typing when Colindale resumes service; in the meantime to explore possibility of performing whole genome sequencing at GRI. Unfortunately unable to discuss with the clinical team directly due to the COVID outbreak and the ward affected being a COVID cohort unit. [redacted]
Recommendation / Options:	Unable to carry out hand hygiene audit/IPCAT due to current ward use. Review any previous audits/practice issues in relation to unit. Await typing results when available. Continue surveillance for further cases.
HIIAT	**Amber** Severity of illness – moderate Impact on services – minor Risk of transmission – moderate Public anxiety - minor
ICT Members:	Lead IPCN Lynn Pritchard IPCN Fiona Gallagher ICD Dr Alison Balfour

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 (IPCT)
To:	IPCT Senior Management
Date:	10/06/20
Subject / Situation:	Burkholderia stabilis
Background:	2 adult patients with Burkholderia stabilis in blood cultures. [redacted]

	The PAG members discussed possible environmental and equipment sources. Both of these were identified in previous outbreaks in other European countries. Prof Leanord has agreed that 5 samples of each item will be sufficient for screening. It was agreed that sampling of would be undertaken and a further meeting will be held depending on these results.
Discussed with / Communications:	Lynn Pritchard (Lead Nurse IPCT) Sandra Devine (ICM) Dr Valyraki (ICD) Prof Leanord (Lead ICD) Lorna Loudon (Associated Chief Nurse) Pamela Joannidis (Associate Director IPC) Jackie Barmanroy (Senior IPCN)
Recommendation / Options:	Actions: • Items that would be tested were agreed and include gloves, alcohol gel and bottles and Chlorhexidine solution and bottles. • Dr Valyraki will discuss with Dr Christine Peters the scope of the QEUH Microbiology Lab to undertake this sampling. • A method statement will be written by Dr Valyraki for the process of testing. • Once agreed, the IPCT will obtain the items and deliver to the Microbiology Lab where the sampling is to be undertaken.
HIIAT	Severity of illness – Minor Impact on services – Minor Risk of transmission – Moderate Public Anxiety – Minor **GREEN**
IPCT Members:	Lynn Pritchard (Lead IPC Nurse, QEUH) Dr Kalliopi Valyraki (Consultant Microbiologist) Jackie Barmanroy (Senior Nurse IPC QEUH)

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/Clinical Team
Date:	16.06.20
Subject / Situation:	Increased Environmental Gram Negative Organisms in NICU/SCBU
Background:	There have been 3 colonisations of an environmental organism in NICU within a 2 week period. This is a trigger event as per the NHS GGC Environmental Organisms in a High Risk Clinical Area SOP. There has also been an increased incidence of environmental organisms in SCBU over the same period. [redacted]
Recommendation / Options:	Discussed with Dr Valyraki. Typing request has been made, however due to COVID 19 Colindale has suspended routine typing. Isolates will be stored.

	Last SICPs audit 22.04.20 - 98%. Ward currently has enhanced twice daily cleaning in place at the moment.
HIIAT	HIIAT – Green • Severity of illness – minor • Impact on service - minor • Risk of transmission- moderate • Public anxiety- minor
IPCT Members:	Dr P Valyraki – Infection Control Doctor G Bowskill – LIPCN
Discussed with:	PAG and Timeline shared with Dr Heuchan and SCN Liddell.

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/Clinical Team
Date:	09.07.20
Subject / Situation:	Environmental organism bacteraemia
Background:	[redacted] has isolated *Acinetobacter ursingii* from a blood culture (HAI NICU). This is a trigger event as per the NHS GGC Environmental Organisms in a High Risk Clinical Area SOP. [redacted]
Recommendation / Options:	Discussed with Dr Valyraki. Due to COVID 19 Colindale has suspended routine typing. Isolates will be stored. Last SICPs audit 22.04.20 - 98%. Ward currently has enhanced twice daily cleaning in place. [redacted] IPCT will continue to observe.
HIIAT	HIIAT – Green • Severity of illness – Minor • Impact on service - Minor • Risk of transmission- Moderate • Public anxiety- Minor
IPCT Members: **Discussed with:**	Dr P Valyraki – Infection Control Doctor G Bowskill – LIPCN PAG shared with Clinical Team and IPCT SMT.

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/Clinical Team
Date:	14.07.20
Subject / Situation:	Environmental organism colonization
Background:	3 babies on transfer to RAH SCBU from RHC SCBU have isolated *Enterobacter cloacae* colonisations (HAI RHC SCBU) within a 2 day period. [redacted]
Recommendation / Options:	Discussed with Dr Valyraki. Due to COVID 19 Colindale has suspended routine typing. Isolates will be stored. Last SICPs audit 22.04.20 - 98%.

	Ward currently has enhanced twice daily enhanced cleaning in place. RAH IPCT and Ward Staff have been advised of results. RHC SCBU Staff made aware of isolates. IPCT will continue to observe.
HIIAT	HIIAT – Green • Severity of illness – Minor • Impact on Service - Minor • Risk of Transmission- Moderate • Public Anxiety- Minor
IPCT Members: **Discussed with:**	Dr P Valyraki – Infection Control Doctor G Bowskill – LIPCN PAG shared with Clinical Team and IPCT SMT.

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:	27.07.20
Subject / Situation:	Gram negative bacteraemia
Background:	1 baby in NICU has isolated *Klebsiella oxytoca* from a blood culture (HAI NICU). [redacted]
Recommendation / Options:	Discussed with Dr Bagrade. [redacted] Isolate will be stored. Last SICPs audit 22.04.20 - 98%. Ward currently has enhanced twice daily cleaning in place. [redacted] IPCT will continue to observe.
HIIAT	HIIAT – Green • Severity of illness – Minor • Impact on service - Minor • Risk of transmission- Minor • Public anxiety- Minor

IPCT Members:	Dr L Bagrade – Infection Control Doctor G Bowskill – LIPCN
Discussed with:	PAG shared with IPCT SMT.

NHS Greater Glasgow and Clyde	**NHS Greater Glasgow & Clyde** **Infection Prevention and Control Team**
Purpose:	Problem Assessment Group (PAG)
From:	Infection Prevention & Control Team (IPCT)
To:	IPCT Senior Management
Date:	29/07/20
Subject / Situation:	2 VRE Blood Cultures in 4B-BMT
Background:	[redacted] Both patients are in rooms next to each other but have separate nursing teams providing care. Recent IPCAT score was GOLD – 94% (June 2020). No issues with staff practice/PPE/environment noted.

Discussed with / Communications:	Dr Alison Balfour, ICD SIPCN Jackie Barmanroy IPC Nurse Consultant Kate Hamilton IPCN Fiona Gallagher
Recommendation / Options:	Actions • Both VRE blood cultures will be sent for typing • Hand hygiene audit will be completed • Timeline completed for current case • If any further cases reported, IMT will be arranged
HIIAT	Severity of illness – Moderate Impact on services – Minor Risk of transmission – Minor Public Anxiety – Minor **GREEN**
ICT Members:	Dr Alison Balfour, ICD IPCN Fiona Gallagher

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/Clinical Team
Date:	31.08.20
Subject/ situation:	Gram negative bacteraemia
Background:	1 baby in NICU has isolated *Serratia marcescens* from a blood culture (HAI NICU). [redacted]
Discussed with/Communications:	Discussed with Dr Valyraki. [redacted] Isolate will be stored. PAG will be distributed to clinical team. Medical staff will discuss isolate with parents.
Hospital Infection Incident Assessment Tool (HIIAT)	HIIAT – Green • Severity of illness – Moderate • Impact on service - Minor • Risk of transmission- Minor • Public anxiety- Minor

Recommendation /options:	Last Full IPCAT – 04.08.20 – 88% SICPs score 92%. Hand Hygiene audit – 03.08.20 – 100%. Ward currently has enhanced twice daily cleaning in place. Ward due to have HPV carried out this week. [redacted] IPCT will continue to observe.
IPCT Members	Dr P Valyraki G Bowskill

DATE	WHAT (Action)	WHO (Owner)	DATE COMPLETED	RESULT: (Conclusion)
30.07.20	**Hand Hygiene audit**	**S Morton**	**03.08.20**	**Combined score 100%**
30.07.20	**IPCAT**	**IPCT**	**04.08.20**	**Overall score 88%, SICPs score 92%**
06.08.20	**Electrostatic HPV due to be carried out 03.09.20**	**RHC SMT**		**Completed**

DATE	WHAT (Action)	WHO (Owner)	DATE COMPLETED	RESULT: (Conclusion)

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 (IPCT)
To:	IPCT Senior Management
Date:	07.09.20
Subject / Situation:	Burkholderia stabilis
Background:	1 patient with Burkholderia stabilis isolated from blood cultures. This follows 2 patients reported in May & June with matched typing. This is the rare environmental microorganism. [redacted]

	[redacted] No crossover identified with 2 other patients previously reported. The PAG members discussed possible environmental and equipment sources as per previous PAG. Both of these were identified in previous outbreaks in other European countries. This will be discussed further.
Discussed with / Communications:	Lynn Pritchard (Lead Nurse IPCT) Dr Valyraki (ICD) Prof Leanord (Lead ICD) Sandra Devine (ICM) Kate Hamilton (IPC Nurse Consultant)
Recommendation / Options:	Actions: • Isolate will be sent for typing. • Environmental sampling may be undertaken if this typing result matches the typing from the previous cases • Hand hygiene audit will be carried out by the HH coordinator in Wds 10B, 11B & 11D • Water sampling will be undertaken in Wds 10B, 11B & 11D by DMA via GGC Estates.
HIIAT	Severity of illness – Minor Impact on services – Minor Risk of transmission – Moderate Public Anxiety – Minor **GREEN**
IPCT Members:	Lynn Pritchard (Lead IPC Nurse, QEUH) Dr Kalliopi Valyraki (Consultant Microbiologist) Prof Leanord (Lead ICD)

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:	10/09/20
Subject / Situation:	GNB PICU RHC
Background:	A trigger of 2 GNB isolates in [redacted] in a 2 week period has been reached for Ward 1D PICU RHC. [redacted]
Recommendation / Options:	Hypothesis: [redacted]

	Duty of Candour: 1 set of parents has been informed of GNB isolate. The other set of parents will be informed by the clinical team. Current and New Actions: • The unit currently has an enhanced supervision audit carried out 2 weekly, this will continue. • Hand hygiene audit is currently carried out 2 weekly, this will continue. • A Route Cause Analysis is carried out with a clinician following every GNB isolated in a BBAL or Blood Culture, this will continue. • Routine water sampling on a rolling 4 week programme will continue. • All taps in the unit are fitted with POUF. • VAP data will continue to be monitored by the clinical team– no VAPs for 7 data points. • GNB SPC charts will continue. • Local Infection Prevention & Control champions continue. • HPV of the unit has been discussed and will be carried out.
HIIAT	HIIAT – Green • Severity of illness – Moderate • Impact on Service - Minor • Risk of Transmission- Minor • Public Anxiety- Minor
IPCT Members: **Discussed with:**	Dr P Valyraki, G Bowskill LIPCN Dr A Turner Chief Nurse J Rodgers

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 Senior Management
Date:	11/09/20
Subject/ situation:	VRE blood cultures in 4B-BMT, QEUH
Background:	2 HAI VRE blood cultures previously reported in July 2020. Both typed and were found to be different. 2 further HAI VRE blood cultures reported, one each for August and September. [redacted] Patients currently cared for by separate, designated nursing teams. IPCAT completed in June was gold (94%). Hand hygiene audit carried out on 31/07/20 – 100%. No concerns with line care and current environmental cleaning satisfactory. Rooms and ward receiving frequent actichlor cleans (affected rooms have been twice daily). Previous 2 cases from July were not linked. If typing returns the same for the two new cases or related to any previous cases an IMT should be held.
Discussed with/Communications:	Dr Alison Balfour, ICD

Hospital Infection Incident Assessment Tool (HIIAT)	Yes: Severity of Illness – Minor Impact on Service – Minor Risk of Transmission – Minor Public anxiety – Minor **Green** No:
Recommendation /options:	IMT – Yes No ✓ OCT - Yes No ✓
IPCT Members	Dr Alison Balfour, ICD IPCN Fiona Gallagher

Date	What	Who	Date Completed	Result (Conclusion)
11/09/20	isolates to be sent for typing (x1 August bacteraemia, x1 September bacteraemia)	Dr Alison Balfour	11/09/20	Completed
11/09/20	Discuss with antimicrobial pharmacists if abx review would be helpful	Lynn Pritchard/Fiona Gallagher	22.09.20 Pharmacist advised that they don't do individual reviews	Completed

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 Senior Management
Date:	08/10/20
Subject/ situation:	2 HAI *Stenotrophomoas maltophilia* blood cultures attributed to Ward 4C - Haematology
Background:	2 patients identified with *Stenotrophomoas maltophilia* blood cultures. Both inpatients within Ward 4C haematology for duration of 8 days crossover. [redacted] Patient treated with multiple antibiotics throughout admission: Linezolid, meropenam, ambisome, gentamicin, levofloxacin, cirprofloxacin, tazocin

Discussed with/Communications:	Prof. Alistair Leanord, Lead ICD
Hospital Infection Incident Assessment Tool (HIIAT)	Yes: Severity of Illness – Minor Impact on Service – Minor Risk of Transmission – Minor Public anxiety – Minor **Green** No:
Recommendation /options:	IMT – Yes No ✓ OCT - Yes No ✓
IPCT Members	Prof. Alistair Leanord, Lead ICD IPCN Fiona Gallagher SIPCN Jackie Barmanroy

Date	What	Who	Date Completed	Result (Conclusion)
08/10/20	Isolates to be sent for typing	Prof. Alistair Leanord	08/10/20	[redacted]
08/10/20	Water testing to be carried out in occupied rooms within 4C haem and commonly used outlets i.e. clean utility	Estates	Ongoing	Water testing carried out and **all results negative.** DMA missed the Clean utility/Dirty utility from the original list, and we will know the results next week.
08/10/20	Review of line practice within 4C haem	IPCN Fiona Gallagher	19/10/20	DW SCN and no changes to line care over the past few months. No issues highlighted with practice. QA of line care carried out 01/10/20 and scored 100%
08/10/20	Hand hygiene audit to be requested for 4C haem	IPCT	15.10.20	Opportunities Taken score 100%.

				Combined Compliance score 100%.

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/Clinical Team
Date:	09/10/20
Subject/Situation:	Increased incidence of Serratia marcescens
Background:	RHC NICU - 3 HAI serratia marcescens isolates in a 27 day period from 07/09/20 – 04/10/20. An earlier positive patient from 24/08/20 is included in the investigation as an in-patient currently contributing to the burden of Serratia marcescens in NICU. [redacted] **Timeline:** There is NICU association for cases, but no crossover in rooms on the unit. [redacted] **Typing**: Patient [redacted] and patient [redacted] have isolates that are unique. Patient [redacted] and [redacted] have slightly

	[redacted], and were sent for typing on 08/10/20.
Discussed with/Communications:	Dr Lesley Jackson, Morag Liddell, P Friel, J Rodgers Hypothesis : To be determined following typing results. Duty of Candour : The medical staff have discussed isolates with the parents.
Hospital Infection Incident Assessment Tool (HIIAT)	HIIAT – Green • Severity of illness - Minor • Impact on Service - Minor • Risk of Transmission- Minor • Public Anxiety- Minor
Recommendation /options:	IMT - No – await typing of isolates from patients' [redacted] and [redacted]. Triggers set for progression to IMT: Any further colonisation or bacteraemia with a Serratia marcescens within a 2 week period. Continue transmission based precautions for 2 remaining colonised patients. Previous Actions: • IPCAT carried out 04/08/20 – overall score 88%, SICPs 92%. • Hand hygiene audit carried out 30/09/20 – 100%. • HPV of unit completed 15/09/20. New Actions: • Isolates from patients' [redacted] & [redacted] sent for typing • Ongoing typing of future isolates Actions already in place from IMT for increased incidence of Gentamicin resistant MSSA, 5th October 2020: • HPV treatment of NICU completed on 15/09/20 • Ongoing enhanced cleaning of NICU • Line observational audit to be repeated due to hand hygiene concerns • Routine weekly screening of babies will continue • Neonatal service is reviewing the literature around skin cleansing prior to Kangaroo care. • RHC SMT review of the staffing levels in the unit in relation to acuity, and found no concerns • Annual skin surveillance has identified 6 staff as new referrals to OHD • Neonatal service continue to review parent/visitor hand hygiene.
IPCT Members	Dr A Balfour – Infection Control Doctor Angela Johnson – Senior Infection Prevention and Control Nurse

DATE	WHAT (Action)	WHO (Owner)	DATE COMPLETED	RESULT: (Conclusion)
05/10/20	Line audit	P Friel/J Rodgers	**02/10/20 (presented at Gent R MSSA IMT on 05/10/20)**	**Issues with hand hygiene. Will be repeated in 1 week.** **Joint review of line care practice with practice development and IPCT scheduled 20.10.20.**
05/10/20	Neonatal service will review the literature around skin cleansing prior to Kangaroo care.	Dr AM Heuchan	**05/10/20 (presented at Gent R MSSA IMT)**	**Dr Heuchan reviewed the literature and there is little evidence to support skin cleansing prior to Kangaroo care. Dr Heuchan has contacted Chris Lilley, Neonatal Consultant at PRM, for information and is awaiting a response.**
05/10/20	RHC SMT will review the staffing levels in the unit dependant on acuity	J Rodgers/P Friel	**05/10/20 (presented at Gent R MSSA IMT)**	**Presented figures from BAPM for the period 02/08/20 – 30/09/20. The average number of nurses required on shift during this period, according to BAPM, was 21.03, the number of nurses on duty was 23.25. The caveat is that there are very complex patients in ICU that require 1 to 1 care. Huddles are carried out every day to review safety levels.**
05/10/20	Neonatal service will assess staff for any new skin conditions	Dr AM Heuchan	**05/10/20 (presented (at Gent R MSSA IMT)**	**The unit also undertake annual skin surveillance and have identified 6 staff as new referrals to Occupational Health.**
05/10/20	Neonatal service will review parent/visitor hand hygiene	Dr AM Heuchan/P Friel	**05/10/20 (presented (at Gent R MSSA IMT)**	**Hand hygiene for parents is included in the Safety Brief and the Weekly Parent Brief.**
09/10/20	Isolates from patients' 3 & 4 sent for typing Ongoing typing of future isolates	Dr Balfour	**09/10/20**	

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/Clinical Team
Date:	16.10.20
Subject/ situation:	Two Pseudomonas fluorescens positive results in NICU on the same day
Background:	2 babies in NICU have isolated Pseudomonas fluorescens (HAIs to NICU). Both are colonisations. [redacted] **Timeline:** There is a crossover association with the two patients nursed in room 4 in NICU. [redacted]

Discussed with/Communications:	Discussed with Dr Alison Balfour. PAG will be distributed to the clinical team - Dr Jennifer Mitchell, Dr Morag Campbell, SCN Morag Liddell, Lead Nurse Patricia Friel, Chief Nurse Jennifer Rodgers. Typing has been requested on 15.10.20 <u>Hypotheses :</u> 1.Coincidence of colonisation with the same organism at the same time (organisms noted to have different sensitivity patterns). 2.Possible cross transmission from the environment or potential breach of hand hygiene (note that equipment is dedicated to each baby and both nursed in incubators, and there has been recent deep clean and HPV of NICU) 3.Possible mix-up of specimens (Same nurse obtained both specimens). [redacted]
Hospital Infection Incident Assessment Tool (HIIAT)	HIIAT – Green • Severity of illness –minor • Impact on service - minor • Risk of transmission - moderate • Public anxiety- minor
Recommendation /options:	Last Full IPCAT – 04.08.20 – 88% SICPs score 92%. Hand Hygiene audit – 30.09.20 – 100%. Water checklist last completed on 07.10.20 - no issues. <u>Actions already in place from IMT for increased incidence of Gentamicin resistant MSSA, 5th October 2020:</u> • HPV treatment of NICU completed on 15.09.20 • Ongoing enhanced twice daily cleaning of NICU • Line observational audit to be repeated due to hand hygiene concerns • Routine weekly screening of babies will continue • Neonatal service is reviewing the literature around skin cleansing prior to Kangaroo care. • RHC SMT review of the staffing levels in the unit in relation to acuity, and found no concerns • Annual skin surveillance has identified 6 staff as new referrals to OHD Neonatal service continue to review parent/visitor hand hygiene. **Currently:** Patient [redacted] is nursed with transmission based precautions in place around the bed space. IPCT will continue routine surveillance monitoring and await typing results.

IPCT Members	Dr A Balfour – Infection Control Doctor A.Johnson – Senior Infection Prevention and Control Nurse

DATE	**WHAT** (Action)	**WHO** (Owner)	**DATE COMPLETED**	**RESULT:** (Conclusion)
16.10.20	Isolates from patient 1 and 2 sent for typing	Dr Balfour	**12/11/2020**	**Both isolates are unique**
16.10.20	Repeat line audit due on 20.10.20 (from IMT for Gent Resistant MSSA 05.10.20)	A.Johnson	**20/10/2020**	**Completed.**

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:	09/11/2020
Subject / Situation:	GNB PICU RHC
Background:	A trigger of 2 GNB isolates in BBAL in a 14 day period has been reached for Ward 1D PICU RHC. [redacted] RCA for both cases completed. Water safety checklist carried out 21.10.20 – no issues identified.

Recommendation / Options:	Hypothesis: [redacted] Routine water testing of this unit the last isolated Pseudomonas aeruginosa from water samples in January 2020. These organisms have not been isolated in any water samples taken for this unit since then. Duty of Candour: Medical staff have informed parents. Actions: • The unit currently has an enhanced supervision audit carried out 2 weekly, this will continue. • Hand hygiene audit is currently carried out 2 weekly, this will continue. • A Route Cause Analysis is carried out with a clinician following every GNB isolated in a BBAL or Blood Culture, this will continue. • Routine water sampling on a rolling 4 week programme will continue. • All taps in the unit are fitted with POUF. • VAP data will continue to be monitored by the clinical team. • GNB SPC charts will continue. • Local Infection Prevention & Control champions continue.
HIIAT	Green Risk of transmission –Minor Public Anxiety –Minor Severity of illness – Moderate Impact on services -Minor
IPCT Members:	Prof A Leanord
Discussed with:	PAG sent to A Turner, P Friel & J Redfern.

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/Clinical Team
Date:	20.11.20
Subject/ situation:	*Serratia marcescens*; *Klebsiella pneumoniae*
Background:	A trigger of 2 HAI GNB (*Serratia marcescens*; *Klebsiella pneumoniae*) isolates in blood cultures in a 30 day period has been reached for Ward 6a RHC/QEUH. [redacted]

	[redacted] [redacted] [redacted] [redacted] Note: Last trigger 17/09/2020 – PAG held regarding two HCAI Pseudomonas aeruginosa in a two week period assessed as HIIAT Green. Hypothesis : The IPCT has considered environmental sources and the hypothesis remains under investigation, noting the complexity and vulnerability of the patients.
Discussed with/ Communications:	Dr N.Heaney, Gillian Bowskill, Patricia Friel, Jamie Redfern, Kerr Clarkson, Mel McMillan. Duty of Candour : Nurse in Charge Amy Sadler has confirmed that both parents have been informed of their [redacted] blood culture positive isolate. The parent of patient [redacted] will be updated by the Haematology Registrar today with the identity of the isolate.
Hospital Infection Incident Assessment Tool (HIIAT)	HIIAT – Green • Severity of illness – Moderate • Impact on Service - Minor • Risk of Transmission- Minor • Public Anxiety- Minor
Recommendation /options:	IMT - No Triggers agreed at PAG for proceeding to IMT are: • A PAG will be held to re-appraise any new GNB blood culture positive occurring within a 30 day period from the last positive. Current Actions: • The unit currently has an enhanced supervision audit carried out 4 weekly, this will continue. • Hand hygiene audit is currently carried out 4 weekly, this will continue. • Routine scheduled IPCAT carried out 17.11.20 – no environmental issues. • A Route Cause Analysis is carried out with a clinician following every GNB isolated in a Blood Culture, this will continue. • Routine water sampling on a rolling 4 week programme will continue. • All taps on the haem onc pathway are fitted with POUF. • GNB SPC charts will continue.

DATE	WHAT (Action)	WHO (Owner)	DATE COMPLETED	RESULT: (Conclusion)
20.11.20	Duty of Candour – confirm parents of 2 patients have been informed of blood culture isolate.	Dr N.Heaney/ Haematology Medical Team	20.11.20	Haematology Medical Team have advised both sets of parents of their child's blood culture positive results.
20.11.20	Serratia isolate sent for typing.	Dr A.Balfour	20.11.20	Serratia isolate typing is unique. Klebsiella isolate stored.

	• No change to line care at RHC. • No recent change to prophylaxis. <u>New Actions:</u> • Medical staff will ensure parents of C.E are updated with isolate identity. • Serratia typed as unique • Klebsiella pneumoniae has been stored.
IPCT Members	Dr Alison Balfour - ICD Angela Johnson - SIPCN

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:	25/11/20
Subject / Situation:	GNB PICU RHC
Background:	A trigger of 2 Klebsiella pneumoniae isolates in BBAL in a 30 day period has been reached for Ward 1D PICU RHC.

Recommendation / Options:	Hypothesis: The PAG has considered environmental sources and the hypothesis remains under investigation, noting the complexity and vulnerability of the patients. Duty of Candour: Medical staff will ensure that parents have been informed. Current and New Actions: • The unit currently has an enhanced supervision audit carried out 2 weekly, this will continue. • Hand hygiene audit is currently carried out 2 weekly, this will continue. • A Route Cause Analysis is carried out with a clinician following every GNB isolated in a BBAL or Blood Culture, this will continue. • Routine water sampling on a rolling 4 week programme will continue. • All taps in the unit are fitted with POUF. • VAP data will continue to be monitored by the clinical team. • GNB SPC charts will continue. • Local Infection Prevention & Control champions continue. • IPCAT carried out 25.11.20 – Score 93%
HIIAT	HIIAT – Green Severity of illness – Minor Impact of services – Minor Risk of Transmission – Moderate Public Anxiety -Minor
IPCT Members:	Dr P Valyraki & LIPCN G Bowskill
Discussed with:	PAG sent to Dr A Turner, J Redfern, P Friel & M Meechan

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:	14/12/20
Subject / Situation:	GNB, PICU, RHC
Background:	A trigger of 2 Gram negative isolates in BBAL in a 30 day period has been reached for Ward 1D PICU, RHC. Patient 1 isolated a *Klebsiella pneumonia* and was the subject of an earlier PAG held on 25/11/20. Patient 2 has isolated an *Enterobacter cloacae*. [redacted]

	[redacted] [redacted] [redacted] Last HAI Gram negative in Ward 1D (PICU), prior to the two cases above, occurred on 30.10.20 and was part of a PAG held on 09/11/20 for a 30 day GNB trigger.
Recommendation / Options:	Hypothesis: The PAG has considered environmental sources and the hypothesis remains under investigation, noting the complexity and vulnerability of the patients. Duty of Candour: Medical staff will ensure that parents have been informed. Current and New Actions: • The unit currently has an enhanced supervision audit carried out 2 weekly, and this will continue. • Hand hygiene audit is currently carried out 2 weekly, and this will continue. • A Route Cause Analysis is carried out with a clinician following every GNB isolated in a BBAL or Blood Culture, and this will continue. • Routine water sampling on a rolling 4 week programme will continue. • All taps in the unit are fitted with POUF. • VAP data will continue to be monitored by the clinical team. • GNB SPC charts will continue. • Local Infection Prevention & Control champions continue. • IPCAT carried out 25.11.20 – Score 93% • HPV decontamination of the unit and equipment completed on 14.12.20
HIIAT	HIIAT – Green Severity of illness – Minor Impact of services – Minor Risk of Transmission – Moderate Public Anxiety - Minor
IPCT Members:	Dr K.Valyraki & SIPCN A.Johnson
Discussed/ Sent to:	PAG sent to Dr A Turner, J Redfern, P Friel & M Meechan, L.McPherson

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:	15.01.21
Subject / Situation:	Gram negative bacteraemia
Background:	1 baby in NICU has isolated *Klebsiella oxytoca* from a blood culture (HAI NICU). [redacted]
Recommendation / Options:	Discussed with Dr Alison Balfour. Likely endogenous source – lactose fermenting colonies isolated from screening swab 11/01/21 and [redacted] for potential to develop Gram-negative bacteraemia. Isolate will be stored. Parents have been informed of isolate. Last SICPs audit 22.04.20 - 98%. Ward currently has enhanced twice daily cleaning in place. Baby will be nursed with TBPs in place. IPCT will continue to observe.
HIIAT	HIIAT – Green • Severity of illness – Moderate • Impact on service - Minor • Risk of transmission- Minor • Public anxiety- Minor
IPCT Members: **Discussed with:**	Dr Alison Balfour – Infection Control Doctor Mhairi Brown IPCN PAG shared with IPCT SMT.

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/RHC Clinical Team
Date:	21/01/2021
Subject/situation:	X2 HAI *Serratia marcescens* in NICU, RHC from mouth swabs taken on 18/01/21
Background:	[redacted] Clinical staff do not report any concerns in relation to this organism with the cases.
Discussed with/ Communications:	Dr AM Heuchan Dr C Peters SCN M Liddell
Hospital Infection Incident Assessment Tool (HIIAT)	HIIATT not assessed– await typing results and progress to further meeting if matching.
Recommendation /options:	Continue with enhanced twice daily cleaning both facilities and nursing staff. TBPs should be in place. IPCT will continue to monitor the situation. Specimens from the most recent 2 cases have been sent for typing. If typing matches reconvene PAG. Unit previously had HPV in September. The unit has plans to continue with this 6

	monthly, next due approx. March. Update 03/02/21: Typing on both isolates returned as different from one another.
IPCT Members	Dr P Valyraki LN G Bowskill ADNIPC P Joannidis

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:	22.01.21
Subject/ situation:	2 x gram negative organisms in a 2 week period attributable to 1D PICU, RHC
Background:	[redacted]
Hypothesis:	The IMT has considered environmental sources and the hypothesis remains under investigation, noting the complexity and vulnerability of the patients.
Duty of candour:	Medical staff will ensure that parents have been informed.

Discussed with/Communications:	Dr Alison Balfour, Infection Control Doctor. Dr Alistair Turner, Consultant PICU.

Hospital Infection Incident Assessment Tool (HIIAT)	HIIAT – Amber • Severity of illness – Moderate • Impact on service - Minor • Risk of transmission- Minor • Public anxiety- Moderate
Recommendation /options:	Last Full IPCAT – 04.08.20 – 88% SICPs score 92%. Findings of the previous 2 enhanced supervision visits: **Hand Hygiene Audit 06/01/21** **Combined Compliance Score was 85%** • Staff member failed to perform hand hygiene after contact with patient environment. • Staff member failed to perform hand hygiene following contact with patient. • Staff member failed to perform hand hygiene before donning PPE. All staff involved were reminded about practice at the time of the audit and feedback was given to Nurse in Charge. **Hand Hygiene Audit 21/01/21** **Combined Compliance Score was 90 %** • 2 visiting staff members did not perform hand hygiene before applying PPE. All staff involved were reminded about practice at the time of the audit and feedback was given to Nurse in Charge. The last out of spec water sample for PICU was from the sample on the 16th December (results 23rd December) for a count of 1 colony of Enhydrobacter Aerosaccus. DMA changed the filter on the 24th. Due to this being filtered water this is most likely retrograde contamination on the filter. No changes in BBAL practice/change of staff or equipment issues reported by clinical team.

	Ward currently has enhanced twice daily cleaning in place. HPV cleaning carried out 14.12.21. Environmental swabbing carried out on 17.12.21 – no gram negative organisms isolated. [redacted] IPCT will continue to observe and surveillance is ongoing. Routine water sampling continues from all water outlets. POUF in place at all water outlets with planned maintenance and change programme in place. RCA continue to be carried out for each GNB isolated in BBAL or blood culture.
IPCT Members	Dr Alison Balfour, Infection Control Doctor Mhairi Brown, IPCN G Bowskill LIPCN

NHS GGC IPC Incident Summary

Date reporting / Update no.	23.04.21
Sector / Hospital	Paediatrics/RHC
RHC Ward / departments	NICU
Incident statement	3 *Enterobacter cloacae* colonisations in a 2 week period.
Patient Cases	

[redacted]

Isolates picked up on routine screening. Current condition of babies unaffected by these isolates.

[redacted]

Control Measures
Continue with enhanced twice daily cleaning both facilities and nursing staff. TBPs in place around the bed spaces of each Enterobacter cloacae positive baby. IPCT will continue to monitor the situation. HPV cleaning of NICU is ongoing this week. SICPs audit 07.04.21 – 91% - 1 piece of equipment not visibly clean (milk warmer) Hand Hygiene audit 07.04.21 – 90% -1 trained nurse did not take the opportunity to decontaminate hands following contact with patient environment. 1 student nurse time for application of hand gel was less than 10 seconds and did not cover all surfaces of hands. SCN will ensure that staff are reminded of compliance with hand hygiene and cleaning of equipment on the daily safety brief. Unit previously had HPV in September. This will now take place 6 monthly. **Update 06.05.21 –** Continue with enhanced twice daily cleaning both facilities and nursing staff. TBPs in place around the bed spaces of each Enterobacter cloacae positive baby. HPV cleaning of NICU completed today (05.05.21). Agreed 6 monthly frequency. IPCT will continue to observe and surveillance is ongoing.
Investigations
Specimens have been sent for typing. Given the size and acuity of RHC NICU, a review of the GNB triggers for the unit is underway with the Neonatal Working Group to inform a review if the NHS GGC Environmental Organisms in High Risk Clinical Areas SOP. **Update 06.05.21 –** Last isolate of *Enterobacter cloacae* was Case 3 on 19.04.21 from endotracheal aspirate. Isolates have been sent for typing.

Hypothesis
The PAG has considered environmental sources and possible cross transmission via staff's hands or equipment. The hypothesis remains under investigation, noting the complexity and vulnerability of the patients.
HIIAT Score
HIIAT – Green Patient – minor (all colonisation, picked up on routine screening. Condition unaffected by isolate) Services – minor (unit open and service running as normal) Transmission – moderate (possible patient to patient transmission via hands or equipment)

Public Anxiety – minor (Discussion between clinical team and IPCT. There is no anticipated anxiety due to colonisation on routine screening and no impact on babies condition)
Isolates will be discussed with parents. RHC SMT informed of trigger event. IPCT SMT informed of trigger event. PAG Members : ICD Linda Bagrade IPCN Mhairi Brown Dr Anne Marie Heuchan/Dr Louise Leven

NHS GGC IPC Incident Summary

NB: PAG below not required or reported as blood culture trigger is a single case with a gut source

Date reporting / Update no.	12.05.21 1st update
Sector / Hospital	Paediatrics/RHC
RHC Ward / departments	NICU
Incident statement	Single HAI *Klebsiella oxytoca* bacteraemia.
Patient Cases	
[redacted]	
Control Measures	
Continue with enhanced twice daily cleaning both facilities and nursing staff. TBPs in place around the bed space IPCT will continue to monitor the situation. Patient screening for the unit is being reviewed. SICPs audit 07/04/21 – 91% - 1 piece of equipment not visibly clean (milk warmer). Hand Hygiene audit 07/04/21 – 90%. 05/05/21 - HPV cleaning completed in NICU. High patient acuity in NICU resulted in delays to completion of HPV decontamination. 12/05/21 - Repeat Hand Hygiene audit 12/05/21 – 85%. Non-compliances were attributable to visiting staff performed. Lead Clinician, NICU, to contact all visiting teams to reinforce compliance with hand hygiene. Glow box for hand hygiene practice and awareness will be provided for staff in the unit.	

SCN will use the daily safety brief to remind staff about compliance with hand hygiene practice. Routine water sampling continues. No issues identified. POUF on all taps in clinical areas. Weekly drain cleaning in place.
Investigations
All isolates have been sent for typing. Environmental sampling will be carried out on 19/05/21. Antimicrobial review will be carried out for the months of January to April 2021.

Hypothesis
The PAG has considered environmental sources and possible cross transmission. The hypothesis remains under investigation, noting the complexity and vulnerability of the patients.
HIIAT Score
HIIAT score – Amber Severity of illness – moderate (clinical interventional support required as a consequence of this incident) Impact on Services – minor (unit open and service running as normal) Risk of Transmission – moderate (possible patient to patient transmission via hands or equipment) Public Anxiety – moderate (public anxiety anticipated to be moderate should there be a press statement released although the baby is stable)
The clinical team have discussed the result with the baby's parents. The NICU are in the process of developing a parent information leaflet on GNB. RHC SMT informed of trigger event. IPCT SMT informed of trigger event. PAG Members : ICD K.Valyraki NICU Consultant: SCN Morag Liddell / Dr Morag Campbell; IPCN Mhairi Brown Senior IPCN Angela Johnson

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/RHC SMT
Date:	28.10.21
Subject/ situation:	2 cases of Serratia Marcescens (BBAL & Blood Culture)
Background:	2 cases of Serratia Marcescens (BBAL & Blood Culture) with links in time and place. [redacted]

Hypothesis

Cases possibly not connected. Possible transmission patient to patient via staff hands or equipment. Possible environmental source.

Control Measures & investigations:

Terminal clean of bed bay [redacted] requested 26.10.21.

Hand Hygiene audit 27.10.21 – Opportunities taken 100% - Combined compliance 80%
Four non-compliance with hand hygiene technique:

- Radiographer - soap washed off immediately after application
- Staff Nurse - soap washed off immediately after application
- ANP - insufficient coverage of hands. Omitted finger interlacing with hand gel rub
- Consultant - insufficient coverage of hands. Omitted finger interlacing with hand gel rub

Other observations:

- Used laundry, bagged, and placed on top of clinical waste bin, causing staff to dispose of used PPE in the domestic waste bin.
- Bed space 4 - hand hygiene sink is draining very slowly
- Hand hygiene technique posters not displayed at all sinks
- Staff Nurse contaminated gloves by touching front of FRSM and adjusting glasses

Most recent SICPs audit carried out by clinical staff – 100%

Routine water sampling continues in 1D– each outlet is sampled every 4 weeks. No out of spec water results.

Planned maintenance of AHU and verification of space within date, building management system also reviewed with no abnormalities found.

Routine water sampling continues in Th8. No out of spec water results.

Most recent air sampling carried out Th8 26.10.21 – negative.

POUF in situ.

No changes in BBAL practice/change of staff or equipment issues reported by clinical team.

Ward currently has enhanced twice daily cleaning in place.

TBPs in place.

RCA continue to be carried out for each GNB isolated in blood culture.

IPCT will continue to observe and surveillance is ongoing.

Sink Bed space 4 not draining – reported 27.10.21

Planned HPV arranged for December. Now twice per year.

Hand hygiene and PPE education delivered.

Environmental sampling will be carried out in bay 13-16 on 01.11.2021.

	Repeat hand hygiene audit will be carried out. Clinical staff raised the issue of staffing in the unit (nursing) at the moment. Unit is under extreme pressures at the moment.
Discussed with/Communications:	Dr A Turner, Dr M Davidson, Chief Nurse P Friel, LN M Meechan & SCN L McPherson. Duty of candour has carried out for case 1 and Dr Turner will ensure that parents of case 2 will be informed. Staff to be reminded of adherence to SICPs including hand hygiene at huddles. Clinical staff will ensure that new staff are made aware of up to date BBAL SOP.
Hospital Infection Incident Assessment Tool (HIIAT)	HIAT not required at this time.
Recommendation /options:	Decision made at PAG not to progress to IMT at the moment. Await environmental sampling results and isolate typing. Progress to IMT if there are issues with results. **Update 08.11.21 –** • **Typing from both patient isolates does not match.** [redacted] • **Environmental sampling carried out 01.11.21 did not isolate *Serratia marcescens* form the environment.** Progression to IMT not required as further investigations have not illustrated transmission within the unit.
IPCT Members	Dr L Bagrade IPCM S Devine LIPCN G Bowskill

DATE	WHAT (Action)	WHO (Owner)	DATE COMPLETED	RESULT: (Conclusion)
28.10.21	Environmental sampling will be carried out in Bay 13-16	G Bowskill	01.11.21	Results available 08.11.21 – *No Serratia marcescens* isolated from the environment.
28.10.21	Hand hygiene audit	S Morton	08.11.21	Improvement noted – 95%

NHS GGC IPC Incident Summary

Date reporting / Update no.	12.11.21
Sector / Hospital	Paediatrics/RHC
RHC Ward / departments	NICU
Incident statement	*Burkholderia contaminans* blood culture linked to *B. Contaminans* cluster associated with Clinell wipes.

Patient Cases

05.11.21 - Advised by PHE that NHS GGC had a likely case of *Burkholderia contaminans* from a blood culture taken on 13/09/21. This would need to be confirmed through PFGE testing but highly likely that this is part of the outbreak strain associated with certain batches of contaminated Clinell wipes in England and Wales (please see the Field Safety Notice - Medicines and Healthcare products Regulatory Agency - download (filecamp.com) for further details).

12.11.21 – PHE confirmed this isolate as part of the *B. contaminans* cluster associated with contaminated batches of Clinell wipes by PFGE.

Control Measures

05.11.21 – Advised by PHE to check batch numbers of wipes in NICU and remove any wipes with batch numbers listed on the safety action notice. No wipes in the unit matched these numbers.

Investigations

As requested by PHE, samples of Universal Clinell wipes were sent to Porton for further testing.

Following further investigation into patient pathway wipes sent to Porton from the QEUH labour suite theatre.

Clinell wipes form the lab (if in use) will be sent to PHE lab for testing to exclude contamination of

the specimen while processing in the lab.

Retrospective lookback at all Burkholderia isolates in GGC from beginning of PHE investigation. These isolates will be sent for typing.

Request made to PHE to put us in touch with any other neonatal unit who has dealt with this so we can discuss any further actions.

Request made to PHE re the alert received 12.11.21 relating to U/S gel to determine if this is related to the incident. PHE have confirmed this is not related.

Environmental sampling will be carried out in NICU of surfaces where Clinell wipes are used.

Hypothesis
1 case of Burkholderia contaminans in NICU linked to PHE investigations in England and Wales associated with Clinell Universal Wipes.
HIIAT Score
Green Patient - Minor Services - Minor Transmission - Minor Public Anxiety - Moderate
Communications
Clinicians have discussed incident with parents of affected child. RHC SMT informed. ARHAI informed. Holding press Statement – **NHSGGC Holding line Burkholderia contaminans** Recent lab testing has revealed a case(s) of Burkholderia contaminans infection(s) which occurred in our Neonatal Intensive Care Unit in Glasgow in September. Impacted family (ies) were informed as soon as the case(s) was/ were identified and we are providing ongoing support to them during this time. No other cases have been identified, and given the passage of time there we do not believe there are any other cases or any risk of further transmission. However, investigations are underway to determine the source of the infection. This particular organism is closely linked to that found in a specific batch of anti-bacterial wipes recalled in May and while we can confirm none of the impacted batch was ever delivered to NHSGGC, we are conducting additional tests on a number of wipes within NICU to confirm this poses no risk. **ENDS**

Date: 22.11.21	Update: No further cases since 13.09.21. Clinell wipes sent to Porton from NICU did not isolate Burkholderia. Environmental sampling carried out in NICU (40 swabs) did not isolate Burkholderia. Results on wipes sent from Labour Suite theatres are outstanding.
Date: 02.12.21	Update: No further cases since last update. Last case 13.09.21. Confirmation from Porton that wipes sent from labour suite theatre and the lab did not isolate Burkholderia. GGC Burkholderia isolates from beginning of PHE investigation identified on retrospective lookback have been sent to PHE for typing – no results back as yet.
Date 07.12.21	Update: No further cases since last update. Last case 13.09.21. GGC Burkholderia isolates from beginning of PHE investigation identified on retrospective lookback sent to PHE for typing – none of the samples match the PHE cluster. All actions now complete for NHS GGC. Incident closed.

Date	What (action)	Who (owner)	Date Completed	Result (conclusion)
08.11.21	Sample wipes to be sent to Porton form NICU	G Bowskill	08.11.12	Burkholderia not isolated form any wipes sent form NICU.
12.11.21	Sample wipes to be sent from Labour suite theatre.	G Bowskill	12.11.21	Burkholderia not isolated form any wipes sent from labour suite or lab
12.11.21	Parents of affected child to be advised of incident	Colin Peters	12.11.21	Complete
12.11.21	Environmental sampling to be carried out in NICU	!PCT	16.11.21	Burkholderia not isolated on any of the 40 environmental swabs taken from NICU

12.11.21	Holding press statement to be prepared.	Neil McSeveney	12.11.21	Complete
12.11.21	Retrospective lookback at all Burkholderia isolates in GGC from beginning of PHE investigation. These isolates will be sent for typing.	Microbiology	07.12.21	Complete – none of the typing matched the PHE cluster.
12.11.21	To confirm with NDC that no alternative batches of Clinell Wipes were provided to NHSGGC and also with NHS GGC procurement that all Clinell wipes were provided via NDC	PJ	15.11.21	Complete

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NHS GGC IPC Incident summary

Date reporting / Update no.	12.01.22
Sector / Hospital	RHC/QEUH
Ward / departments	Ward 6a
Incident statement	1 case of Chryseobacterium species from blood culture Ward 6a Haem Onc.
Patient cases	

[redacted]

Routine water samples taken in Ward 6a isolated *Chryseobacterium Gleum* from point of use filter (POUF) outlet in Room 11 en-suite hand wash sink 30.11.21.

Chryseobacterium spp. is non-spore forming, aerobic GNB primarily found in soil, water and is chlorine resistant.
It can colonise upper airways via contaminated medical devices and colonise implanted devices (iv catheters). This can cause invasive infections as well as community acquired respiratory infections and SSTI. It is an opportunistic pathogen, infecting mainly new-borns and immunosuppressed patients. *C.indologenes* occasionally have been isolated from human gut.

BC audit in 0-16 age groups in all GGC hospitals shows there is on average 1-2 cases of *Chryseobacterium sp*. bacteraemia/year.

QE campus water system is not designed to provide sterile water, however it is made as clean as

possible. Water is filtered on entry to QE water supply system, chlorinated and most of the areas are using POUF. Note – *Chryseobacterium spp.* is chlorine resistant.

Chryseobacterium indologenes has been sporadically isolated from water samples in GGC hospitals but these occasions are very rare. In 5 years of water testing of QE campus hospitals (2015-dec2020) there were almost 12 000 water samples done and *C.indologenes* has been isolated only 12 times. Only isolate of C.gleum was sample taken on 30.11.21.

Control measures

Following positive water sample taken on 30.11.21, routine practice of change of filter, reviewing flushing and POUF cleaning regime carried out. Staff requested to remind patients and staff not to use the CHWB for anything other than hand washing. Patient seen in other departments on the Schielhallion pathway, all have POUF in situ.

The following control measures are currently being undertaken

- Enhanced supervision audit carried out every 4 weeks. Last audit 12.01.22 – no cleanliness issues.
- Hand hygiene audit carried out every 4 weeks by LHHC with the most recent audit 12.01.22.

➢ Opportunities Taken score was 85%. Three areas for improvement with opportunity; One Phlebotomist, after contact with patient surroundings, PPE use only, room to prep area and clean equipment. One Phlebotomist, after body fluid exposure risk, PPE use only, room to prep area. One Trained Nurse, after contact with patient surroundings, PPE use only, room to clean eqpt and prep area. Combined Compliance score was 80%. One area for improvement with technique; One Anaesthetist, after contact with patient surroundings, not BBE, long sleeves, wristwatch.

➢ Actions taken - Actions taken – All non-compliant staff observed were spoken to at the time by hand hygiene coordinator, Toolbox talks have been provided to SCN for distribution to all staff, non-compliance issues raised with phlebotomy staff will be raised by nurse in charge of this service and hand hygiene coordinator will deliver education sessions in the ward.

- Clinical review is carried out with a clinician for every GNB isolated in a blood culture.
- Water is tested every 4 weeks. Last year 1350 samples were tested from ward 6A and only 50 samples had out of spec results either because of TVCs/ml or GNB isolates. There is only one isolate of *Chryseobacterium sp (C.gleum)* this year on 30.11.21 from room 11 en suite tap. Sample was taken from POUF therefore it is not clear if this is retrograde contamination of POUF or it represents microorganisms in water. There were very low TVC counts for this sample (1 TVC/ml).
- All taps on the haematology/oncology patient pathway are fitted with point of use filters.
- Routine weekly Hysan drain decontamination continues. However, it is possible that drains become colonised, especially if nutrient-rich fluids are discarded in sink. No such occasion has been reported or observed but cannot be excluded. Note – the sink is in en-suite therefore mostly will be used by parents and patients. Posters advising parents and patients not to discard food/drink etc in CWHB are displayed above every CWHB.
- Continued surveillance of GNB with the use of SPC charts.
- Unit continues to have enhanced cleaning.

Investigations
• Audit of line care documentation 12.01.22 – issues noted with CVC documentation, this will be addressed by service. • Peer audit of line care practice carried out 12.01.22 – no issues identified. • Repeat water samples taken from all water outlets in 6a 12.01.22 (potable, TVC & GNB). • Environmental sampling will be carried out when patient is discharged and before terminal clean. Estimated discharge date 14.01.22 • Filter will be sent to PAL for integrity testing. • Samples will not be sent for typing as WGS is unhelpful as too few isolates to draw conclusions. At least 20 isolates would be required to assess the degree of similarity.
Hypothesis
Patient has a bloodstream infection caused by *Chryseobacterium spp.* most likely acquired from an environmental source (predominantly water source). The nature of the source is unclear and under investigation. Chryseobacterium sp. has been isolated in the ward environment but exposure to other water sources cannot be excluded.
HIIAT Score
Amber Patient - moderate Services - minor Transmission - moderate Public Anxiety – moderate
Communications / next steps
Parents have been informed of GNB blood culture and investigation. Parents spoken to by Clinician and ICD. Incident will be raised at weekly Haem Onc clinical governance meeting (ICD will attend). Incident will be raised at daily safety briefs. Next meeting will be held when results of repeat water and environmental samples are available. Incident will be reported to ARHAI electronically.
Press statement

IF ASKED – Ward 6A, QEUH

As part of the routine bloodstream infection investigations we are reviewing a case of infection and looking into the source, including whether or not there is any link to the hospital environment.
The finding was made as part of our routine processes for managing infections and while undertaking all necessary infection prevention and control precautions, the team took swift action to carry out a review of the situation.
Sadly, infections can occur among our vulnerable patients, and we recognise the anxiety this can cause to them and their loved ones. This is why our teams work exceptionally hard to minimise the risk of this happening at our hospital sites and work closely with patients and their families to provide guidance about mitigating potential risks outside the hospital environment.
Throughout this process we have been working with relatives directly and will continue to do so to ensure they are fully informed of any developments with the review, and ultimately any findings.
We will continue to admit people and administer treatment as normal.
ENDS

Date	Incident update
20.01.22	No further cases of *Chryseobacterium* since last update. Last case 01.01.22. Environmental sampling carried out 13.01.22 – No *Chryseobacterium* identified in patient environment. Repeat water sampling carried out from all water outlets in 6a 12.01.22 (potable, TVC & GNB). – No results available as yet. PAL filter has been sent for integrity testing. Next meeting will be arranged when water sample results are available.
25.01.22	No further cases of *Chryseobacterium* since last update. Last case 01.01.22. Water and PAL filter integrity results outstanding. Next meeting when results are available.
01.02.22	No further cases of *Chryseobacterium* since last update. Last case 01.01.22. Repeat water samples carried out 12.01.22 did not isolate Chryseobacterium. No result available as yet from PAL POUF integrity testing. Next meeting when POUF integrity testing result is available.
09.02.22	IMT 09.02.22 ARHAI in attendance.

	HIIAT Updated 09.02.22 Green Patient - minor Services - minor Transmission - minor Public Anxiety – minor **Update -** No further cases of *Chryseobacterium* since last update. Last case 01.01.22. **Investigations -** PAL filter been sent for integrity testing has passed – no filter fail identified. Patient sample from 01.01.22 has now been identified by 16 s rDNA PCR as *Chryseobacterium culicis*. 16S rDNA testing of isolate from original water sample 30.11.21 identified as *Chryseobacterium sp*. (99% sequence homology to *C.binzhouense* and *C.taihuense*). Reference Lab have confirmed that patient's isolate and that from the water sample are different species. **Updated Hypothesis –** Source of infection remains unclear, currently we do not have any evidence to suggest that this has been acquired from the hospital environment. However this cannot be completely excluded either. **Controls –** Continue with routine water sampling. Continue with enhanced supervision/hand hygiene and line care audits. Continue with GNB surveillance. GNB isolates will continue to be discussed at Clinical Governance meeting and at the Case Review Group. **Updated Communications –** ICD and clinician will inform parents of investigation findings on their

	return to RHC. Parent information leaflets will be checked by nursing staff to ensure that line care at home is optimal. No further meetings arranged unless situation changes. Incident is now closed.
	Lessons learned – As the isolates from both patient and water sample were identified as different species on 16 s rDNA PCR from original identification, perhaps the naming of isolates should be following reference lab identification. In this type of unusual incident we should consider waiting for confirmation of results before formulating a hypothesis. Control can still be applied while all relevant information is gathered.

DATE	WHAT (Action)	WHO (Owner)	DATE COMPLETED	RESULT: (Conclusion)
12.01.22	Audit of line care practice	M Meechan	12.02.22	Complete
12.01.22	Audit of line care documentation	IPCT	12.01.22	Complete
12.01.22	Hand Hygiene Audit	LHHC	12.01.22	Complete
12.01.22	Repeat water samples from all outlets Ward 6a	Estates/DMA	13.01.22	Complete – no Chryseobacterium isolated. No GNB identified form any outlet post filter.
12.01.22	Environmental sampling to be carried on room after discharge of patient	IPCT	13.01.22	Complete– no Chryseobacterium isolated.
12.01.22	PAL filter to be sent for integrity testing removed following positive water sample 30.11.21	Estates/DMA	03.02.22	Complete – no filter fail identified.
12.01.22	Parents to be advised of investigation	Dr Rhonge/Dr Bagrade	12.01.22	Complete
09.02.22	SCN to check that parent information regarding line care at home advises on prevention of exposure to water sources and contamination from nappy.	SCN McDaid	14.02.22	Complete
09.02.22	Facilities to provide report on POUF decontamination	R Brown		

NHS Greater Glasgow and Clyde

Problem Assessment Group meeting
Review of *Burkholderia contaminans* cases in neonates RHC
Thursday 05/05/2022 at 10:00

Present	**Designation**
Dr Linda Bagrade	Lead ICD, Consultant Medical Microbiologist,
Gillian Bowskill	Lead Nurse Infection Prevention & Control
Mandy Meechan	Interim Chief Nurse, HPN, Women & Children's Services
Lorna Mcsveney	Senior Charge Nurse, Neonatology
Karina Correia	Clinical Service Manager - HPN, Women & Children's Services
Colin Peters	Clinical Director, Consultant Neonatologist, Neonatology
Janice Heggie	Acting Lead Nurse Neonatal Services GGC
Sandra Devine	Director Infection Prevention and Control
In Attendance	
Ruth Okeke	Admin Assistant IPCT

Apologies	
Anne Marie Heuchan	Consultant Neonatologist, Neonatal medicine
HIIATT Score	**GREEN**

1.	**Introduction**	**ACTION**
	Dr Linda Bagrade welcomed everyone to the meeting. Dr Bagrade advised that the purpose of the meeting was to agree on further investigation and action plans. She also reminded the group of the need for confidentiality. Meeting was recorded to enable admin to type up minutes with the recording being deleted when minutes are accepted.	
2.	**Incident update – General situation update**	
	Dr Bagrade gave the following general situation updates: • There have been 3 RHC NICU patients identified with *B.contaminans* in either clinical or screening samples in the last 9 months. All isolates are identical to the strain that caused an outbreak in England and was associated with Clinell cleaning wipes on PFGE typing. • The *B.contaminans* belong to the *B.cepacia* complex Group K and there are at least 17 species in this complex. Burkholderia are *ubiquitous opportunistic* pathogens mainly found in soil, water and plants or in food. *Burkholderia* is highly transmittable via direct or non-direct contact and have the ability to survive for months in moist environments. • *B.contaminans* are considered to be of low virulence in the general population but can cause serious illness in critically ill or immunocompromised patients. There are not specific symptoms and they mainly affect the respiratory and urinary tract of a patient, they can also present as bacteraemia or post-op wound infection • HAI outbreaks are associated mainly with contaminated medical equipment or products (disinfectants, US gels, pharmaceuticals, and personal hygiene products (mouth wash, body moisturisers) inhalation solutions), instruments	

	(bronchoscopes), respiratory devices (humidifiers, O2 delivery devices, anaesthetic equipment) and/or hospital environment, especially water related surfaces. • Risk factors for *Burkholderia* colonisation/infection include prolonged stay in ICU, mechanical ventilation, CVC, abdominal surgery, renal failure and haemodialysis, use of broad spectrum antibiotics, especially beta-lactams (cephalosporins), macrolides, VA.	
2a.	[redacted]	
[redacted]	[redacted]	
[redacted]	[redacted]	

	[redacted]	
2d.	**Microbiology report**	
	• All 3 isolates have been sent to Colindale reference lab as per agreed protocol and have been identified as representatives of *B.contaminans* cluster found in multiple hospitals in England between 2020-21 and associated with contaminated hospital wipes. The identification as carried out by Pulse Field Gel Electrophoresis (PFGE). Further WGS testing is in progress and the results are expected next week. WGS will give more information on relatedness of isolates and possible epidemiological links. There is however, a significant aspect of reporting bias that needs to be considered in interpreting results, especially if drawing conclusions on a national level. The test requested for PT3 was CRO screening and according to the Lab SOP this result should be reported as CRO present or not, without any additional information on what other bacteria are isolated in this sample. However, it is accepted that significant isolates would be brought to attention of microbiologists but this is not standardised practice and might not be performed in all labs. Also the extensive screening programme in RHC NICU need to be considered as testing bias as this is the only neonatal unit in Scotland with such patient screening programme in place.	
4.	**Hypothesis**	
	• The timeline and epidemiological information supports association in time and place only partially and more information from Whole genome sequencing (WGS) might be helpful to confirm or dismiss this association. • There is a common unidentified source in NICU or associated clinical areas which has led to acquisition of *B.contaminans* in all 3 cases. Timeline and epi information does not support this statement fully and additional information from the clinical review and WGS data should help to confirm or dismiss this statement. • There are multiple independent sources and acquisition of *B.contaminans* are separate events in all 3 cases. • The particular clone of *B.contaminans* has established itself in the environment and should be treated as any other *Burkholderia sp.* isolate without association with outbreak related to cleaning wipes.	
3.	**Risk Management/Control Measures**	
	• Hand hygiene audit was carried out on 23/03/22 and scored 95%. • Environmental audit was carried out on 27/03/22 and scored 97%. • There are currently no babies with *Burkholderia* in the NICU, but monitoring of results will continue and if new patients are identified, they will be treated accordingly.	

	• All water outlets in the NICU are fitted with POU filters so no regular testing from all outlets. But regular water system testing is carried out in NICU on outlets without POU filters. • There have been no significant practice issues observed or reported. • National epidemiology data have been requested from ARHAI to look at the *Burkholderia* sp. isolates reported in Scotland, including reports from Neonatal units in other health boards. • Additional information in relation to the outbreak in England in 2020-21 have been requested from ARHAI as well as information regarding the 4th case identified elsewhere in UK which was not associated with the use of cleaning wipes. • Packets of wipes from NICU and related clinical areas were sent to the reference Lab for testing during investigation of the patient 1 case and no issues were identified. • It has been confirmed that no batches of contaminated cleaning wipes were distributed in Scotland, so wipes as a source of the infection would be unlikely. • Staff to be made aware of investigation and control measures during daily briefings. • Routine IPC control will remain in place in the NICU.	
5.	**Further investigation**	
	• Await WGS results and review hypothesis and action plan accordingly • Complete the clinical review of all 3 cases to identify possible common risk factors for acquisition of *B.contaminans* and explore them In detail • To review aspects of surgical infections in each patient case with clinicians as risk factor acquisition of *B.contaminans* • Discuss with colleagues in FV if they would consider investigation possible acquisition of *B.contaminans* for PT3 during delivery and stay in the hospital • Continue monitoring programme of IPC practise in NICU • Linda will keep working with quality improvement team in labs to try and address the reporting bias	
6.	**Agree HIIAT Classification**	
	The Healthcare Infection Incident Assessment (HIIAT) tool assesses the impact Of a healthcare infection incident/outbreak on patients, services and public health. The PAG reviewed and agreed the following: • Impact on patients - Minor • Impact on services - Minor • Risk of transmission - Moderate • Public anxiety - Minor **The incident scores GREEN on the HIIAT.** Please note these HIIAT scores can be re-scored on a daily basis if the situation Changes.	

6.	**Communication**	
	• Public: There will be no communication to the public due to HIIAT score being Green • Duty of candour: this might be considered if epidemiological investigations supports the link or a common source is identified. • Advice to professionals/staff: staff will be provided with general information. They will be reminded of the need to adhere to infection control precautions, hand hygiene and appropriate patient placement. • Media: Nothing to report to media as HIIAT score is green • ARHAI / SG HAI Policy Unit (HIIORT): Will be updated via the usual outbreak reporting tool.	**Clinical team** **IPCT**
8.	**Date and time of next meeting**	
	To be determined	

Action List - *Burkholderia contaminans* cases NICU RHC				
DATE	**WHAT: (Action)**	**WHEN: (Commit)**	**WHO: (Who)**	**RESULT: (Conclusion)**
05/05/22	To determine if any of the 3 babies shared incubators	05.05.22	**L. Mcsveney**	No crossover identifed
05/05/22	Clinical review of the time line of all cases to determine if there were any procedures or interventions carried out that was unique to each baby or common to all babies in this cluster. To review aspects of surgical interventions in each patient case with clinicians as risk factor in the acquisition of *B.contaminans*		**C.Peters and AM.Heuchan**	
05/05/22	[redacted]		**L.Bagrade**	Microbiologist in Forth Valley have been made aware
05/05/22	Lab SOP process to be reviewed by Quality management team		**L.Bagrade/D Jordan**	
05.05.22	Comms to be provided to clinical/nursing staff regarding control measures required.	Dr C Peters	05.05.22	Comms sent to clinicians and SCN.

NHS Greater Glasgow and Clyde

Follow-up Problem Assessment Group meeting
Review of *Burkholderia contaminans* cases in neonates RHC
Thursday 19/05/2022 at 13:00pm

Present	**Designation**
Dr Linda Bagrade (chair)	Lead ICD, Consultant Medical Microbiologist,
Gillian Bowskill	Lead Nurse Infection Prevention & Control
Mandy Meechan	Interim Chief Nurse, HPN, Women & Children's Services
Karina Correia	Clinical Service Manager - HPN, Women & Children's Services
Colin Peters	Clinical Director, Consultant Neonatologist, Neonatology
Janice Heggie	Acting Lead Nurse Neonatal Services GGC
Sandra Devine	Director Infection Prevention and Control
Anne-Marie Heuchan	Consultant Neonatologist, Neonatal medicine
In Attendance	
Ruth Okeke	Admin Assistant IPCT

Apologies	
None	
HIIATT Score	**GREEN**

1.	**Introduction**	**ACTION**
	Dr Linda Bagrade welcomed everyone to the meeting. She advised that the purpose of the meeting was to review the actions from previous meeting and review information gathered dus far. She also reminded the group of the need for confidentiality. Meeting was recorded to enable admin to type up minutes with the recording being deleted when minutes are accepted as accurate.	
2.	**Minutes from previous meeting**	
	Minutes accepted as accurate	
3.	**Incident update – General situation update**	
	Dr Bagrade gave the following general situation updates: • There are no new cases of *Burkholderia* • Information from whole genome sequencing is yet to be provided **Patient report** • There is no update on any of the patients relevant to the meeting **Microbiology report** • No more cases reported • Whole genome sequencing is still in progress.	
4.	**Hypothesis**	
	• The timeline and epidemiological information supports association in time and place only partially and more information from Whole genome sequencing (WGS) might be helpful to confirm or dismiss this association.	

	• **There is a common unidentified source in NICU or associated clinical areas which has led to acquisition of *B.contaminans* in all 3 cases. Timeline and epi information does not support this statement fully and additional information from the clinical review and WGS data should help to confirm or dismiss this statement. – (After further investigation this hypothesis seems unlikely, there is no one source in the unit that is infecting or colonising the patients)** • There are multiple independent sources and acquisition of *B.contaminans* and they are separate events in all 3 cases. • The particular clone of *B.contaminans* has established itself in the environment and should be treated as any other *Burkholderia sp.* isolate without association with outbreak related to cleaning wipes. • [redacted]	
5.	**Risk Management/Control Measures**	
	• The unit will continue with their practise of good hand hygiene and cleaning • The team will keep an eye on the situation and reconvene if the need arises or there are more cases.	
6.	**Further investigation**	
	• Await WGS results • Continued monitoring of the situation in the NICU • Dr. Bagrade will continue working with quality improvement teams in the labs	
7.	**Agree HIIAT Classification**	
	The Healthcare Infection Incident Assessment (HIIAT) tool assesses the impact Of a healthcare infection incident/outbreak on patients, services and public health. The PAG reviewed and agreed the following: • Impact on patients - Minor • Impact on services - Minor • Risk of transmission - Minor • Public anxiety - Minor **The incident scores GREEN on the HIIAT.** Please note these HIIAT scores can be re-scored on a daily basis if the situation Changes.	
8.	**Communication**	
	• Public: There will be no communication to the public due to HIIAT score being Green • Duty of candour: Not applicable in this situation. • Advice to professionals/staff: staff will be encouraged to continue with their practice of hand hygiene and cleaning.	**Clinical team**

	• Media: Nothing to report to media as HIIAT score is green • ARHAI / SG HAI Policy Unit (HIIORT): Will be updated via the usual reporting tool.	**IPCT**

Rolling Action List - *Burkholderia contaminans* cases NICU RHC from 05/05/22				
DATE	**WHAT: (Action)**	**WHEN: (Commit)**	**WHO: (Who)**	**RESULT: (Conclusion)**
05/05/22	To determine if any of the 3 babies shared incubators	05.05.22	**L. Mcsveney**	**No crossover identified**
05/05/22	Clinical review of the time line of all cases to determine if there were any procedures or interventions carried out that was unique to each baby or common to all babies in this cluster. To review aspects of surgical interventions in each patient case with clinicians as risk factor in the acquisition of *B.contaminans*		**C.Peters and AM.Heuchan**	**Completed**
05/05/22	[redacted]		**L.Bagrade**	**Microbiologist in Forth Valley have been made aware**
05/05/22	Lab SOP process to be reviewed by Quality management team		**L.Bagrade/D Jordan**	**Ongoing**
05.05.22	Comms to be provided to clinical/nursing staff regarding control measures required.	05/05/22	**Dr C Peters**	**Comms sent to clinicians and SCN.**
19/05/22	Dr Bagrade to share data received from ARHAII on general testing and reporting of *Burkholderia* in Scotland with the group		**L.Bagrade**	**Complete**

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:	03/11/2022
Subject/ situation:	2 Hospital Acquired Infections of VRE one from a blood culture and one from a line tip taken on 10th October 2022. Both isolates are similar type so acquisition/transmission of VRE has been within Edenhall. [redacted] Hand hygiene audit has been undertaken on 20th October where an overall score of 90% was achieved. Issues identified were fed back at the time of the audit. [redacted] A terminal clean of Edenhall should be undertaken. Hydrogen Peroxide Vapour (HPV) clean should be considered. A look back exercise highlighted a total of 5 HAI VRE cases attributed to Edenhall since January 2022 including the 2 being discussed. No further VRE cases reported since the 10th of October 2022. Whole genome sequencing of the VRE specimens will be undertaken. Eilidh and Marie advised that if they were informed earlier of our suspicion of cross transmission and that isolates had been sent for typing, they could have provided support to the staff. Dr Bal replied that until the typing was back he could not confirm this was a definite trigger. He agreed that in the future the SMT will be informed and those present understood that depending on results there may or may not be further action required.
Discussed with/Communications:	
Hospital Infection Incident Assessment Tool (HIIAT)	No
Recommendation /options:	IMT - No OCT - No

IPCT Members	Dr Abhijit Bal, Jackie Barmanroy, Lesley Hemmingsley, Eilidh Gallagher, Marie Austin Calum MacLeod

DATE	WHAT (Action)	WHO (Owner)	DATE COMPLETED	RESULT: (Conclusion)
03/11/22	Marie Austin will check when second patient has their line inserted.	Marie Austin	04/11/22	Line was inserted I neuro critical care.
03/11/22	Terminal clean of Edenhall ward is to be undertaken	Marie Austin		
03/11/22	HPV clean of Edenhall is to be considered	Marie Austin		

SCOTTISH HOSPITALS INQUIRY

Bundle of Documents for the Oral Hearing
Commencing 12 June 2023
in relation to the Queen Elizabeth University Hospital
and the Royal Hospital for Children, Glasgow
Bundle 2 – Problem Assessment Group Meeting Minutes (PAG Minutes)