Scottish Hospitals Inquiry

Witness Statement of

Angela Howat

PERSONAL DETAILS

1. My name is Angela Howat. I was previously the Senior Charge Nurse in ward 2B, paediatric haematology/oncology day care unit in the Royal Hospital for Children (RHC) in Glasgow, situated on the Queen Elizabeth University Hospital (QEUH) campus. Since September 2022 I have new role as a Neuro-Oncology Clinical Nurse Specialist for children with central nervous system tumours. I still work in the Schiehallion Unit, but am no longer based in ward 2B.

PROFESSIONAL BACKGROUND

2. I began my training as a nurse in May 1984 and qualified as a Registered General Nurse (RGN) July 1987 and worked in the care of the elderly ward in Mearnskirk Hospital in Glasgow.

3. In December 1989 I qualified as a Registered Sick Children's Nurse (RSCN) and began working in ward 7A, the paediatric haematology/oncology unit, in the Royal Hospital for Sick Children (RHSC) at Yorkhill. In 1996 the ward moved to a new unit on the first floor where the in-patient ward and day care were separate units, and the unit was called the Schiehallion Unit. At that time I moved to the day care unit.

4. From then I have held various roles in the day care unit. I became a Grade F Staff Nurse in 2002, the temporary ward manager in 2006, the permanent day care ward manager in 2008, and was the Senior Charge Nurse in ward 2B during the move to the new hospital in 2015.

5. Other qualifications that I have undertaken are: Online chemotherapy course from Robert Gordon University in 2006; Post Graduate Diploma in cancer nursing from Glasgow University in 2002; and I am a qualified Specialist Practitioner in Adult Cancer Nursing (which had some paediatric aspects as part of the training).

AWARENESS OF PATIENTS AND FAMILIES EVIDENCE

6. I have read some of the evidence from the patients and families involved and am aware of how stressful and worrying a time it was for them. The patients and parents were upset and critical of the hospital environment, but were complimentary to the consultants and staff that treated and supported them.

OVERVIEW

7. Ward 2B, the day care unit, treats children and young people with malignant and non-malignant haematology/oncology conditions. Ward 2A and ward 2B form the Schiehallion Unit. My witness statement relates to my role as the SCN in ward 2B from the move to the Royal Hospital for Children in June 2015 to September 2022.

CURRENT ROLE AND AREA WORKED IN

8. My new role is as the Neuro-Oncology Clinical Nurse Specialist for children and young people with tumours of the Central Nervous System. This is a new post to set up and deliver quality care, give support, advice and information to improve outcomes to patients with brain tumours and to continue to be their key worker into their aftercare. I support the patient and family from the start of their admission in the neuro-surgical ward and to the next stage in their treatment, radiotherapy and or Systemic Anti-Cancer Therapy (SACT).

ROLE AS WARD 2B SCN

9. My role and duties as the ward 2B SCN is set out below. This is split into Management and Clinical duties.

10. Management duties included: check and update the weekly roster in relation to staff sickness/absence, bank shifts, excess hours etc.; complete and check incident (Datix) reports; carry out weekly cleaning assurance checks and escalate to Estates (via FM First) or Infection Preventions and Control (IPC) if there are any issues; check that Health and Safety risk assessments are up to date; attend Multi-Disciplinary Team clinical meetings for haematology and oncology patients; attend monthly Unit meetings and 2 monthly Clinical Governance meetings, and monthly Infection Prevention and Control meetings. On a weekly basis I plan the treatments for incoming patients in relation to co-ordinating chemotherapy, blood products, arrange and book investigations. In terms of audits, there are a number of monthly audits that are carried out. These audits are carried out by a link nurse and I would check these and display the data on the board in the ward. These audits include central venous catherter (CVC), peripheral venous catheter (PVC), hand hygiene (HH), and Paediatric Early Warning Scoring System, (PEWS). The audits are uploaded onto the Care Assurance Improvement Resource, CAIR system so that the results can be viewed by our Lead Nurse, IPC Nurse and management. There is also a six monthly Standard Infection Control Precautions audit which is carried out by the linked IPC Nurse. I also provide support and information to staff on treatment protocols.

11. Clinical duties included the following. A daily briefing to the nursing staff on the patients attending that day using the Situation, Background, Assessment and Recommendations (SBAR) format. This involves organising staff and patient placement to manage flow of patients through the unit to ensure separation for haemopoietic stem cell transplant (HSCT) patients and patients requiring source isolation, managing the workload for the day. I also lead the Safety Brief, where staff are updated on any new information from IPC, any medication updates, and updates from the Lead Nurse on patient safety, and any miscellaneous matters. I co-ordinate emergency admissions via the Triage phone and organise / liaise with the ward the patient will be transferred

to. I co-ordinate elective admissions for administration of SACT, new diagnosis and investigations, and insertion of CVCs. I co-ordinate the day stay patient admissions for blood transfusions, intravenous immunoglobulin, administration of SACT via bolus or infusion, post HSCT patients attending for anti-viral infusions. I also assist with procedures such as lumbar punctures, administration of radioactive isotope (DTPA, Tc99M) for measuring glomerular filtration rate (GFR), and caring for patient pre- and post- diagnostic Meta- Iodo-Benzyl-Guanidine (MIBG) which is a radioactive iodine for diagnosis or for treatment therapy for patients with a malignant tumour called neuroblastoma. I also take blood samples and carry out CVC care, venepuncture and insertion of peripheral venous catheters. I also give advice to parents on specifics and general side effects of chemotherapy.

12. In summary, as the Senior Charge Nurse of the unit I am responsible for management of staff, staff recruitment, health and safety, duties as stated above, and to educate and provide support and information for all patients and their families attending ward 2B. I speak with parents about their child's treatment and protocol, answering any queries or complaints that they have.

13. Ward 2B is situated on the second floor of the RHC, adjacent to Ward 2A. 2B is a Monday-Friday ward and opening hours are 08:30-19:00. Any patients remaining after these hours may be transferred to ward 2A to complete their treatment.

14. Ward 2B is a smaller unit compared to ward 2A. It consisted of: reception area; 1 SCN office; 1 hot desk office for all staff; 1 office for the non-malignant haematology team; a total of 11-13 patient spaces consisting of 5 consulting rooms, 2 bays with en-suite toilets one of which can accommodate 4 reclining chairs for patients pre- and post-HSCT or 2 beds, and a larger 4 bed bay area; a clean utility room for preparing patients medication; a dirty utility room; two waiting rooms (one specifically for HSCT); an interview room; a baby changing toilet, and a staff toilet.

15. Ward 2A is the in-patient ward of the Schiehallion Unit. During the day, nursing staff in ward 2B carry out the admission process for elective and emergency admissions and commence the SACT as per protocol. Patients can be transferred to ward 2A from 2B for: in-patient admission for administration of SACT, and SACT for HSCT; if they are unwell or require intravenous antibiotics to treat febrile/neutropenia; if they are a new diagnosis; or for palliative care.

16. We have our own medical staff and Advance Nurse Practitioner in ward 2B and a small nursing team. Ward 2A have their own staff, but provide nursing cover during staff sickness or high acuity to ward 2B.

PROTOCOLS ON WARD 2B – DAY CARE

17. The Schiehallion Unit has Standard Operating Procedures (SOPs) which are relevant to haematology/oncology patients that can be accessed by all Schiehallion staff via a system called Q-pulse, by controlled hard copies kept in the ward, and certain SOPs can be accessed by all hospital staff on the Clinical Guidelines Platform. In addition to Schiehallion Unit SOPs there are specific SOPs for HSCT and SACT. Policies include: the management of neutropenia and fever - antibiotic policy, and the anti-fungal policy. The IPC team have an IPC manual and SOPs which can be accessed via the NHS GGC desk top. There are 10 Standard Infection Control Precautions (SICPs) which are followed to prevent the spread of infection and cross transmission. This includes, for example: patient placement, as patients are assessed for known or suspected infections and placed in an appropriate place; safe management of the care environment and equipment; Personal Protective Equipment (PPE) to prevent spread of infection and to protect staff; and hand hygiene. In addition there are transmission based precautions (TBPs) to be used if a patient is nursed in source isolation. The SICPs did not change when we moved to ward 6A. Some of the SOPs were amended to reflect the change in location for example, in terms of where HSCT patients being nursed (in ward 4B) and where SACT was being administered (in ward 6A).

18. The Schiehallion unit is accredited by the Joint Accreditation Committee ISCT-EBMT (JACIE). JACIE is a European body that assesses and accredits centres that carry out HSCT.

19. If ward 2A is full, patients except post-HSCT patients and patients receiving SACT, can be nursed in other wards, usually the 3rd floor in the RHC. All our 'outlier' patients are examined by the same team of medical staff they would have if they were an in-patient in ward 2A, and the same policies or SOPs are followed. New staff nurses would receive this information as part of their induction programme. Patient placement in other wards should not cause any difficulties.

20. In relation to the patient pathway for emergency admissions, a parent will call if their child is unwell or has fever. There is now a dedicated Triage phone, which is operated 24 hours a day. During the day patients are admitted directly to ward 2B (08:30-18:00) or ward 2A (until 21:00). Overnight patients would initially be admitted to the Clinical Decisions Unit (CDU) and then transferred to the ward. This changed during COVID-19 outbreak, when all pyrexial patients or patients with coryzal symptoms would be advised to attend CDU for initial assessment before being transferred to the appropriate ward regardless of time of day.

21. Patients would be placed in either source isolation, if they may be infective, or in a positive pressure ventilated lobby (PPVL) room, in another ward in RHC if they were neutropenic or in ward 2A. Ward 2B did not have any PPVL rooms as it is a day care ward, and patients do not stay there overnight.

22. TBPs would be followed for a patient in source isolation, where SICPs may be insufficient to prevent cross contamination. In relation to cleaning, rooms and near patient equipment are cleaned per the SOP, which will include twice daily cleans with Actichlor plus solution. This is the policy for all wards in the hospital, so would not change if the patient is elsewhere.

23. The parents' feedback is that they prefer to be in ward 2A as they are familiar with the surroundings and staff. Ward 2A had a parent's suite, teenage cancer trust (TCT) patient rooms and social space for teenagers. Other wards in the RHC may not have had parent facilities.

24. In relation to ward-level risk assessments, these are contained in the ward's Health and Safety Management Manual. Ward 2A and ward 2B share their manual as we have similar patient group and risk assessments. Emma Somerville, the ward 2A SCN, and I update the manual, complete the risk assessments (including and Control of Substances Hazardous to Health (COSHH) risk assessments), and input into the departmental risk register. The risk register is emailed to Dr Sastry, and is discussed at our 2 monthly clinical governance meeting that is attended by consultants and senior staff.

25. A patient may present to the ward pyrexial, or they may become pyrexial after having their line flushed. The process for haematology/oncology patients or non-malignant haematology patients with a CVAD who have a fever is to follow the neutropenia and fever policy. They will be reviewed by medical staff or an Advanced Nurse Practitioner (ANP) as soon as possible. Blood samples from their CVAD, including blood cultures and a C-Reactive Protein (CRP) test, which is an inflammatory marker that can be raised if you have an infection. First line antibiotics will be given as per the policy and paracetamol to reduce their fever, and any emergency care that is needed, and they will be admitted to ward 2A or an appropriate ward. The blood culture results are communicated by phone to the medical staff in ward 2A by the microbiology team as soon as results are known. The microbiologist also attends a regular meeting on a Friday at lunchtime and discusses the results with the medical staff and consultants.

THE OLD YORKHILL HOSPITAL

26. The old haematology/oncology ward was situated in ward 7A in the RHSC, Yorkhill. In 1996 the ward moved to the first floor of the hospital and was renamed the Schiehallion Unit. The Schiehallion unit in the RHSC had separate in-patient and day care wards separated by double doors with an air

lock. The office space in the day care unit was bigger than ward 2B in RHC, but the clinical spaces, consulting rooms and bed bays, were of a similar size. The consultant offices, social work office and outreach nurses office were part of day care at Yorkhill, but these were moved to the office block in the QEUH campus. There was an extra playroom in day care in Yorkhill. There was no special ventilation in day care in Yorkhill, as the patients did not need a controlled environment as they were in their own home environment, and were not in-patients.

27. In 2015 when I moved from Yorkhill to the new RHC, I had the same patient group. One difference from Yorkhill to RHC was that at first a longer wait for blood samples to be processed and for blood products to be matched. The laboritories in RHC have a large in-patient and out-patient population of blood samples to process which resulted in longer waiting times for patients in day care. The vast majority of patients attending day care need a full blood count to determine whether they need any blood product support or can receive their SACT. This was resolved after meeting with the manager of the haematology lab, and a change in process. A blood analyser has since been purchased by charity money, and is managed by the haematology lab in the out-patient department. The blood result can be processed through the analyser in 10-15 minutes or less.

28. The age range for children attending the Emergency Department (ED) at RHSC was up to age 13. This was increased to 16 years old for the new ED at RHC. With the closure of the local ED departments, this meant that the new RHC ED has a bigger population and workload.

CHRONOLOGY OF EVENTS

PRE 2015 – PLANNING STAGE

29. The SCNs, senior staff and consultants of each ward attended the planning meeting with the planning team for their own ward specification. I cannot remember the details of what was discussed at all of the meetings.

30. The new day care unit in RHC was to be the same size as RHSC in relation to the clinical areas. The planning, measuring each room and area and the layout and design of the day care unit were already carried out prior to our planning meetings by the Project team. There was not any scope for improving the size of the any of the rooms as I was told this was 'like for like', although we did not quite get 'like for like' as for example, we previously had a kitchen in the day care unit which we did not have in RHC. We did not have input into the building specification or total available space, but did have input into the allocation of space.

31. There were meetings chaired by the Clinical Service Manager, Lynne Robertson, where matters such as equipment, procurement, IT, heath and safety, staff inductions were discussed. All patient and staff equipment was ordered for each area and was in place for the hospital opening e.g., new medical devices, resuscitation equipment, IT etc.

32. On my first visit to see ward 2A and ward 2B in the new children's hospital the building was still under construction. The SCN from ward 2A at the time, Professor Gibson and I visited the site first. We arranged the walk round tours for wards 2A and 2B and the site of the new hospital for other staff. I arranged the induction, and hospital passes for staff and equipment in my area. All staff had an induction for health and safety, lifts, how to check in the out-patient department, receipt of blood products, and 'all access' hospital passes for door entry systems. I visited the new children's hospital site on a few occasions to get my bearings and for staff inductions.

General views on the opening of RHC, QEUH and Schiehallion Unit

33. The new children's hospital was a bright, modern, child friendly environment, with interactive toys for the children to play with, a fun new playroom and teenage cancer trust social space, and an area in the ward for parents to meet and have a coffee. In the atrium there were shops and a variety of food places to choose from. There were child friendly décor with beautiful murals of

Scottish scenery, hands free phones, and clean uncluttered cubicles and clinical spaces with brand new easy to clean equipment, beds, reclining chairs, and examination trollies. It had TVs at all patient's beds, improved patient Wi-Fi, paper light case notes, a clean and improved environment for our vulnerable group of immunocompromised patients. A new 'home from home' for our families to stay in near the hospital, funded by charity Clic Sargent (now Young Lives Vs Cancer), and a sanctuary area for quiet reflection. Ward 2B is situated near to ward 2A, and continued to treat our patient group in the new environment.

34. Staff were worried about: toilet availability, car parking, limited office space, consultant office based in the office block 10 minutes away, a longer distance to the canteen, limited changing facilities and lockers. Some of these issues were resolved or staff accepted the new changes. Staff were encouraged to use public transport and reduce their carbon footprint. The public transport links to the hospital were improved and stopped outside both the RHC and QEUH. Staff were informed of the bus routes and the frequency of the public transport for several weeks prior to the new children's hospital opening, and encouraged to use them. Car parking spaces were limited at first but an extension was made to the adult multi-storey car park and designated spaces and permits for staff were given. The parents, and outreach nurses struggled to find parking spaces prior to the changes mentioned above, and this remains an issue for parents at times, although much improved.

35. Patients liked the new entrance to the hospital although there is quite a long walk from the car park, the TVs at all beds, bright new cubicles with new décor and equipment.

36. The RHC covers the same population as the RHSC at Yorkhill covered, which is the West of Scotland. The staff were attached to RHSC, Yorkhill hospital and were sad to leave it. There were many memories of patients previously treated in Yorkhill, some good, and lots of fun and some very sad.

37. I think you could say the RHC was a state-of-the-art facility.

Common Issues (Exterior of building)

38. There were issues with both cladding and a glazing panel had fallen out in the QEUH. I did not witness this but the access to the main atrium in the QEUH was restricted until remedial work was carried out.

39. The cladding was replaced on the outside of the QEUH and the RHC. Dr Inkster, Consultant microbiologist, advised the clinicians that during the work on the cladding that our immunocompromised patient group should enter and exit the hospital via the QEUH discharge lounge, and the higher risk patients (decided by consultants) were to receive anti-fungal prophylaxis to reduce the risk of Aspergillus, a fungal infection. In terms of how this was communicated to the patients and families, I handed out the written statement given to me by the Lead Nurse, Chief Nurse or General Manager to parents attending day care regarding the upgrade of the cladding. If the patient was unable to receive oral anti-fungal prophylaxis, they would be given this intravenously but this would require them to attend three times a week for it to be administered. Some patients had allergic reactions to the anti-fungal prophylaxis.

40. The impact on the haematology/oncology, and post-HSCT patients during the upgrade of the cladding was that: The families were asked not use the RHC entrance during the removal of the cladding at the side of the QEUH and to use the discharge lounge entrance at the side. Although the whole campus is designated as a non-smoking area, adult patients congregated to smoke at this side entrance as it is covered. Parents were very upset that their children were exposed to second hand smoke. Facilities, Estates, the Infection Control team, and the General Manager Jamie Redfern tried to address the problem. There were notices asking people not to smoke and from wardens asking people to move away from the side entrance. This was not successful.

41. The smell of the sewage works was more noticeable at different times of the day. I do not remember if the smell of the sewage works was discussed at the planning and design stage of the new Children's Hospital. Parents and staff

expressed concerns about this, but my understanding is that this does not pose a risk and I note that the old Southern General Hospital was on this site.

42. The subject of the cladding was in a Core Brief issued to staff in July 2017 and August 2017. The information in the Core Brief outlined that the cladding was of a similar type to the cladding used in the Grenfell flats, but not the same, and as a precautionary measure the panels would be removed and upgraded.

Communication about external issues

43. Staff had access to the Core Brief with information about the ongoing cladding works that commenced in September 2018. Letters and a map about where to park and where to enter and exit the hospital were given to parents attending ward 2B. The content of the letter explained that haematology/oncology patients were to enter and exit the RHC via the side entrance of the QEUH, where to park, and how the building material could pose a risk of infection and the consultants would advise on which patients were at risk and should be commenced on medication as a precaution.

44. I do not remember if there was information for me to give to families about the smell of the sewage works.

Common Issues (Interior of building)

45. I am aware of issues that arose early on in ward 2A. The in-patient televisions did not always work, the integrated blinds needed replaced, and ward 2A was very hot and humid particularly in the middle area of the ward. In 2B we also had the issues with the televisions, but as our patients were there for a short time this did not have the same impact. On ward 2B, we did not have the integrated blinds or have an issue with the temperature / humidity.

46. After a few years in 2B, we noticed that the chilled beams and vents had dust evident on them, and some cupboard doors nearly fell off and needed their hinges replaced.

47. Ward 2B did not have a door entry system or nurse call alarms in the consulting rooms. We had emergency buzzers so help could be summoned in an emergency. Processes were changed so that children were not left unattended in a room. This was added to the departmental risk register. The nurse call alarms and a doorbell were installed during our decant to ward 6A. Prior to this we kept the entrance door to ward 2B open during the day.

WATER SUPPLY
ISSUES IN WARD 2A/2B: MARCH 2018 TO SEPTEMBER 2018

48. At this IMT **(A36690457 – Incident Management Meeting, dated 12 March 2018, relating to Water Contamination on Ward 2A – Bundle 1 – Page 63),** the microbiology results came back showing Cupriavidus and Stenotrophomonas. I cannot remember the meeting, but carried out the actions set out by the IMT. Most of the actions related to 2A rather than 2B. Whilst I am aware of how this impacted 2A from attending these meetings, it did not have the same impact on 2B. Staff in ward 2B could continue to use the tap water to carry out hand hygiene but as a safety measure alcohol hand gel was to be used as final handwashing step. Patients in ward 2B should not drink the tap water, or drink from the water fountain. This meant that patients attending ward 2B were to drink bottled water or sterile water for HSCT patients, but not tap water, and were to use wipes during nappy changing. There were no showers on ward 2B.

49. Parents were concerned for their child's safety, they were scared because they could not drink the water during this time. Staff were worried and concerned for their patients and the safety of the environment. Communication was provided for staff from a Core Brief and parents were given a written statement with information on environmental bacteria found in the water, although I do not know exactly when this information was given to me.The information outlined the actions and control measures that the hospital was taking during this time.

50. The impact that this had on staff was that they were worried, anxious, and stressed. Hand hygine audits were carried out and there was extra presence from the IPC nurses for education. Staff were upset for their patients and parents, and worried about patient safety. Communication for parents and staff came from the General Manager, Jamie Redfern, Chief Nurse, Jennifer Rodgers, and or the Director, Kevin Hill in the format of a written statement via email or hard copy, and from the Core Brief. The Lead IPC nurse Susie Dodds and Lead nurse supported and advised me during this time.

51. Emma Somerville the SCN from ward 2A and I waited for the communication from the Chief Nurse and General Manager before updating staff and parents. Once the communication, a written statement explaining the need for the control measures was available, we would share with staff and parents. This would usually happen at the end of the day or on a Friday. If this was on a Friday, staff and patients in day care would not receive the communication until the Monday morning and had sometimes found out already from social media**.** Control measures would be shared with staff at the following morning's Safety Brief. I do not remember when the written updates for parents and staff were first available.

52. I have been provided with a copy of the minutes **(A36690477 – Incident Management Meeting dates, 16 March 2018, relating to water Contamination in Ward 2A – Bundle 1 – Page 66)**. The IMT minutes state "Dr Inkster has requested support from Health Facilities Scotland and Health Protection Scotland as the original Hypothesis of the incident is different due to positive water results in other ward areas and not the transmission of the organisms from sink to showers by staff only on 2A. The outlets appear to be the problem Dr Inkster has also requested that HPS & HPS contact Public Health in England to see if they have experienced anything similar to this situation." Health Protection Scotland liaised with the Scottish Government, as at the meetings they would ask questions they were given by Scottish Government and would feedback to Scottish Government following the meetings. HPS carried out audits and gave their knowledge on the types of

bacteria to the IMTs. Health Facilties Scotland's (HFS) offered epidemiological advice and support for the ICD.

53. As noted above Ward 2B staff and patients did not have the same control measures as ward 2A. Oral prophylaxis, Ciprofloxacin, were given to patients as part of the control measures. The consultants advised which patients should receive prophylaxis. Water samples were taken from the taps in ward 2B as well as other areas in the hospital. The oral antibiotic prophylaxis was stopped when control measures were put in place and there were no new cases as defined by the IMT, and then restarted when cases started to rise. General communication was given to parents and staff as outlined above, via Core Brief or written statement. Medical staff would also have communicated to their patients about changes to medication.

54. Point of use filters were installed in ward 2A and ward 2B as a control measure, and initially all areas and wards that our patient group may have been nursed in. The Chair of the IMT said that the point of use filters should be changed weekly in the rooms used for HSCT patients and monthly for all other patients. The filters were fitted in ward 2B out of hours. I do not recall the exact communication to parents and staff regarding the installation of the point of use filters, but communication was circulated to staff and parents. The point of use filters are still in use.

55. I attended an IMT held on 19 March 2018, **(A36690507 – Incident Management Meeting, dated 19 March 2018, relating to Water Contamination in ward 2A – Bundle 1 – Page 70)**. I have been asked if the minutes are an accurate reflection of the meeting. As the meeting was several years ago I am not able to recall in that detail.

56. The minutes state, "A positive stenotrophomonas in PICU, but this case is not linked to ward 2A", "a couple of patients with increased pyrexia in 2A and some patients in Ward 3C with possible fungal growth." I cannot comment on these as they were not in my ward.

57. The minutes also state, “Staff in Ward 3C have some confusion as not all patients are immunocompromised so unsure as to why some patients can have showers and some cannot.” Not all patients that get admitted will be immunocompromised. Our non-malignant haematology patients may not have been immunocompromised, so they could use the showers.

58. I have been provided with minutes from an IMT, **(A36690544 – Incidence Management Meeting, dated 23 March 2018, relating to Water Contamination in Ward 2A – Bundle 1 – Page 81).** The minutes state “Lot of questions from adult Renal and adult ITU. Lots of anxiety out there from staff trying to attribute a lot of Gram-negative pathogen results to the water.” As far as I can recall from the IMTs, in the adult patient population there were not the same issues with Gram-negative infections in the wards. Samples from the water were taken over a wide variety of areas, different wards in the RHC and in adult wards in the QEUH. The microbiology staff contact the medical staff to inform them of the blood culture results.

59. I have been provided with minutes from a Problem Assessment Group that was held in May 2018 **(A36706505 – Problem Assessment Group (PAG) Meeting, dated 18 May 2018 relating to Stenotrophomas Gram Negative Bacteria in Ward 2A – Bundle 2 – Page 97).** Hand hygiene monitoring, and audits were ongoing. A section of the minutes states, “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.” This was regarding cleaning in ward 2A. The SCN or nurse in charge carry out the weekly cleaning assurance checklist and the daily cleaning of near patient equipment checklist and escalate any concerns to the Infection Prevention Control Team (“IPCT”), Estates, or Facilities.

60. Emma Somerville, Susie Dodds (the Lead IPC Nurse) and I had an action to review central lines and possible solutions to them trailing on the floor. Haematology/oncology patients receiving SACT have a CVAD which is a silicon catheter that is inserted into a large vein. Blood sampling, medication, intravenous fluids, blood products and SACT, and any medication that requires to be administered in an emergency are administered through the CVAD. There are three types of lines they can have, which can either be single or double lumen: a CVC or Hickman line; a Port-a-cath, which is an implanted tunnelled line that is situated just under the skin and is accessed by a non-coring needle called a Gripper needle which is removed prior to the patient's discharge; or a peripherally inserted central catheter (PICC), which is is usually inserted into a vein on the patient's arm. The patient has to go to theatre and have a general anaesthetic for the insertion and removal of a CVAD. Medication etc are administered through the line via a giving set. The giving set was a certain length and in order to ensure that the giving set did not 'pull' and to give the patient more freedom an extension line was attached which increased the length of the line. The extension line could fall onto the floor. Emma Somerville and I looked at all practices related to CVAD care, and we implemented the change to remove the extension sets, and patients, parents and staff became used to the change.

61. I have been shown a copy of the IMT minutes on 4 June 2018. **(A36690448 – Incident Management Meeting, dated 4 June 2018, relating to Water Contamination in Ward 2A – Bundle 1 – Page 94).** I found some black grime in the drains of the handwashing sinks. I escalated this to Estates and the Lead IPC Nurse, Susie Dodds, who investigated this. It was discussed at this IMT meeting that "black grime had been noted in the drains some weeks ago". I had seen it in the hand washing sink in the HSCT bed bay in ward 2B. I do not remember how many drains in the hand washing sinks it had been found in. Facilities, Estates and IPCT worked together to remove the black grime from the drains. Hysan, a chlorine dioxide solution, was poured down the drains to try to remove the black grime and this became a weekly action carried out by the domestics. The black grime was not removed by the weekly Hysan and there was an action to remove it manually. This action could not be

carried out with patients in the rooms. Ward 2B could get the manual clean of the drains when we were closed at the weekend. Swabs were taken for culture and it was discussed at an IMT that they grew, Stenotrophomonas and Cupriavidus. The cultures were sent to Collindale for typing. The action for staff as a result of the finding of black grime in the handwashing sink was that we were instructed by Dr Teresa Inkster to ensure that nothing was emptied into the handwashing sink drains. It was thought that Chemotherapy was put down the drains but this was disposed of in the appropriate sharps box. Staff thought they were being 'blamed' for the black grime. Both staff and parents received education from the IPC Nurses on this. A poster was put up at every hand washing sink as a reminder.

62. Other control measures included: staff hand hygiene audits carried out by IPCT, hand hygiene co-ordinator.

63. These control measures were continued after our decant to ward 6A.

64. I do not remember if there was a greater use of source isolation rooms.

65. I have been provided minutes from an IMT meeting held in June 2018, **(A36690461 – Incident Management Meeting, dated 6 June 2018, relating to Water Contamination in Ward 2A – Bundle 1 – Page 99).** The clincians from Shciehallion Unit met to discuss the safety of the unit for new admissions and felt it was not safe to continue to admit new patients to ward 2A as environmental Gram-negative bacteraemias had started to increase, and this may be due to bio film build up found in the drains.

66. Some patients' treatment was delayed due to the closure of ward 2A to new admissions. I was advised from the IMT that, until the drains were cleaned, patients should not receive chemotherapy in ward 2B. Once the hydrogen peroxide vapour (HPV) decontamination and the drains were cleaned, over a weekend, ward 2B could continue to administer chemotherapy. HPS were going to carry out an audit on the environment**.**

67. The details of the chemotherapy delays and the patients sent to other centres to receive their chemotherapy was captured and escalated to the General Manager and Chief Nurse on a weekly basis. Some patients were sent to the Beatson TCT unit for their chemotherapy, but the TCT unit only treats patients aged 16 to 25. It was agreed by the relevant haematology/oncology consultant which patient could have their chemotherapy deferred and which patients could go to another centre for administration of SACT. Edinburgh was the nearest children's haematology/oncology ward and providing that they had capacity, patients were sent there. This involved added travel for parents to go to Edinburgh and some parents did not want to stay there. This was extremely stressful for parents to take their children to another centre to receive their chemotherapy, and added to consultants', data managers' and my workload to organise.

68. I have been provided with the IMT minutes for 5 September 2018 **(A36629284 – Incident Management Meeting, dated 5 September 2018, relating to X3 Gram Negative Bacteria in ward 2A – Bundle 1 – Page 149).** During weekly cleaning assurance checklist I noticed that the walls, the chilled beams and the vents in the consulting rooms appeared to have some dust on them. The chilled beam dripped water from a straw located on underside of the beam. I think this was the first time that had happened in ward 2B. I escalated this to Lead Nurse Kathleen Thomson. I do not know what the Estates' maintenance schedule was for the cleaning of chilled beams at that time. The IPC Lead Nurse and Estates manager arranged a 6 weekly rolling maintenance cleaning schedule for the chilled beams.

69. The additional control measures impacted staff, in 2A much more that 2B, as there was a lot of extra work to do. I had my duties as SCN to carry out and attend IMT meetings and carry out the actions recommended at the IMT. We were worried and concerned about the possible contamination from the drains. Staff were under close scrutiny with the peer audits relating to the care of CVADs, hand hygiene, cleaning of the environment, and cleaning of near patient equipment, carrying out line care. Staff received reassurance from IPCN, and chief nurse that the audit scores were good, and so was staff

practice. For example, the score for the Infection Prevention and Control Audit Tools (IPCAT) audit carried out in 22nd August was 98%.

70. **(A36629302 – Incident Management Meeting, dated 14 September 2018, relating to Ward 2A, RHC – Bundle 1 – Page 164).** This meeting was prior to the decant to ward 6A. The minutes state that there were [redacted] patients in the current cluster, and discussed an external drain expert using a scope to survey the drains. Discussions at the IMT around phase 2 decant of ward 2A and ward 2B took place. My understanding was that the reason for the decant was to enable the examination of the drains using a scope as this would be easier to access if there were no patients in the wards, and with less continual disruption to in-patients. The IMT made recommendations of where the wards could decant to, and this was escalated to the executive management team. I would have followed the process of giving Core Brief statements to staff and written statements to parents as they attended ward 2B.

71. At this meeting, **(A36629315 – Incident Management Meeting, dated 17 September 2018, relating to Stenotrophomonas in Ward 2A, RHC – Bundle 1- Page 169)**, a statement was read out by Professor Brenda Gibson which acknowledges "that the IMT's recommendations from Friday were not approved at the meeting with Board members" and she expresses her worry on the situation and asks for assurance that advice taken on how to proceed will be taken from experts in their field. I do not remember how these comments from Professor Gibson were received by the group. My understanding was that there was discussion around the decant and the IMT still recommended that ward 2A and ward 2B should decant to carry out a detailed survey of the drains. The clinicians were worried about the environment. Staff anxiety was high as they were aware of the new cases of infections, and the possible link to the bacteria found in the drains. Parents anxiety was high as they knew from their social media about the cases in the ward and that the ward was closing to new admissions.

72. There was an IMT held, **(A36629310 – Incident Management Meeting, dated 18 September, relating to Drain Cleaning Regime in Ward 2A, 2B**

and 4B RHC – Bundle 1 – Page 175), where the decision to decant had been agreed. BMT patients would go to ward 4B, the adult transplant unit in the QEUH. For non BMT patients, the location they were to be decanted and when was still to be determined. Clinicians, parents and staff were anxious about patients being treated in ward 2A and ward 2B, and were relieved to be moving to allow the work to be done. The move was very stressful for both clincians and all members of staff, and everyone worked extremely hard to allow the decant to ward 6A and 4B to take place. There was increased media attention, and a media statement from the hospital.

73. I have been provided with minutes from an IMT held just before we decanted, **(A36629316 – Incident Management Meeting, dated 19 September 2018, relating to Ward 2A, RHC – Bundle 1- Page 180)**. The in-patient families would have been told about the current situation, and then it was already on the news. I do not remember the exact scenario of what came first, but as soon as one parent was given the information, other parents would find out. Anybody that was an out-patient or came into day care may not have found out that quickly. They were very upset and annoyed that they had not been communicated to. All families were sent letters in Septermber 2018, but obviously you cannot get a letter quicker than you can see it on Facebook and as soon as parents found out about something they may have put it on social media. Later a closed Facebook group for patients was set up by NHSGGC.

74. The process would be that I would speak to all of the patients and families on ward 2B and provide them with written statements to inform them that they would be attending ward 6A, instead of 2B**.** However, due to the nature of attendance on the ward, they would often have already found out from the media. It was initially thought that we would be in ward 6A for 3-4 weeks.

75. There were designated cubicles with certain criteria in wards in RHC that our patients could be admitted to. They must have a point of use filter on the new tap, drains cleaned with Hysan, shower heads replaced, enhanced cleaning. The MRI, CT, and X-ray department also had point of use filters fitted and drains cleaned with Hysan.

76. Once the point of use filters were fitted on all the taps in ward 2A and 2B, a process to fit point of use filters on all taps in the other wards in the RHC commenced. The Estates team worked extremely hard to achieve this.

77. Once the actions for the water issues were completed, the number of children with Gram-negative blood cultures attributed to the water did come down. So the actions that were carried out from IMT were working. The IMT closed as there were no new cases.

CLOSURE OF WARD 2A AND 2B AND THE MOVE TO WARD 6A AND 4B: 26 SEPTEMBER 2018

78. I was not involved in making the decision to move. I was involved in the options process in deciding where and how to move.

79. I attended a meeting with Kevin Hill, Jamie Redfern, Emma Somerville, and clinicians from the Schiehallion Unit, to discuss options of where we could decant to. Some of the options were a field type hospital in the grounds of RHC, a ward in QEUH, ward 4B for HSCT patients, and a ward in RHC but this may not have been suitable if the issues with the drains were similar to our wards. It was decided that ward 2A and ward 2B should move to the same ward together, as this would be easier logistically for patients receiving their chemotherapy.

80. The risk assessment was part of the options and considered for the move, in terms of where would be safest for the patients. There was a Health and Safety audit of our management manual not long after we moved to ward 6A.

81. The reason for moving was to survey the drains and to replace the sinks without disrupting the in-patients in ward 2A. The IMT reported patients with Gram-negative organisms that were a possible link to the bacteria found in the

drains. Decontamination of ward 2A and ward 2B had been carried out using HPV in June and was going to be carried out again.

82. The parents were anxious about the ward being closed to admissions, and having to go to Edinbrgh for in-patient chemotherapy. Some parents had spoken to their MSP.

83. Grant Archibald, Operations Manager, had identified what ward could be used. Dr Inkster had said the BMT patients had to go to ward 4B as this was the adult transplant ward and had the correct specification for a transplant patient in relation to ventilation. There was the option of having a mobile pop-up hospital outside but that was not going to be ready quickly enough. It was thought that we could not use other wards in the RHC because the same sinks are across the RHC so will have the same issue with the drain. The QEUH did not have the same issues. Ward 6A was identified as a ward that could be decanted to.

84. The move was co-ordinated by Lynne Robertson, Clinical Service Manager, in the absence of Melanie Hutton. Ward 6A needed some remedial work carried out, e.g. replace sealant in the skirting in the en-suite bathrooms, repair flooring, painting, repair blinds, fit point of use filters to the taps, change shower heads, cleaning etc. Facilities, Estates and IPCN, all worked extremely hard to carry out all the remedial work in a short amount of time to have ward 6A ready and safe for our patients. As 2A and 2B would now be in the one ward, I was concerned if there be enough space for day patients and in-patients. Also we would have to go back and forth from the RHC to collect chemotherapy and paediatric radiology services were still in the RHC. There were child protection concerns with having paediatric patients in an adult hospital, but these were addressed by having the doors secured with an entry system. There were concerns about the time it would take for the resuscitation team to attend in a clinical emergency, but these were addressed by having equipment and medication on site in the ward. The pharmacy staff were provide with office space near to 6A. Administration staff and data managers stayed in RHC. The lifts to the wards on the QEUH site were very busy, so we

had a lift pass for patients to use the core lift. The non-malignant haematology staff and clinics were moved to RHC out-patient department, but if the patients were unwell they would come to 6A.

85. There was a media statement created regarding the remedial works, **(A38662124 – Press Statement from NHS GGC on decision to move patients dated 17 September 2018 – Bundle 5 – Page 148)**. Emma Somerville and I waited for the written statement and gave the information to the parents and patients in ward 2A. A written statement was provided to parents attending ward 2B with their child on the next day. There was a media statement on the BBC news.

86. The decision to move was quick and there was a lot of work involved in moving in a short space of time. Estates did a great job in trying to get 6A ready over the weekend.

87. The management team, the General Manager, Jamie Redfern, and Chief Nurse, Jennifer Rodgers, arranged a meeting in ward 2A to answer any questions from staff regarding the purpose of the decant and to reassure staff. Staff were able to voice their opinions and ask questions regarding the decant and the environmental issues. Some staff were angry that this had happened and it was hard to understand. Staff were worried about what to tell families, and about patient safety. Jamie Redfern and Jen Rodgers had a meeting with staff most weeks when we moved to ward 6A to update, answer their questions and reassure them. Jamie Redfern and Jen Rodgers were available and would go round with Emma Somerville to meet with parents and patients every time there was a written statement. This was often later in the day, and if any day care patients were there they would have spoken to them.

WARD 6A QEUH: AUTUMN 2018

88. I have been asked about the concerns I raised at the IMT meeting on 5 October 2018 **(A36629290 – Incident Management Meeting, dated 05 October 2018, relating to Ward 2A, RHC – Bundle 1 – Page 199)**. Whilst

we were decanted to ward 6A I was asked about any remedial work that needed to be carried out in 2B. I asked for the nurse call buttons to be installed, door bell entry, ward to be made brighter with LED lighting as they were no outside windows, as well as painting, fixing any tears in the floors or general repairs required.

89. The number of cubicles that I had for day care patients in ward 6A was less than in 2B and to keep to our appointment times the cubicles required to be cleaned promptly in between patients. This was discussed with Karen Connolly from Facilities, and domestic cover was organised to carry this out in ward 6A.

90. I have been asked about a statement in the IMT minutes of 19 October 2018 **(A36629317 – Incident Management Meeting, dated 19 October 2018, relating to Ward 2A, RHC – Bundle 1 – Page 208)**. Under the heading control measures it refers to "a review of all water sources and routes of transmission with an opportunity for intervention before patients move back into ward 2A/2B." This related to the bathroom in ward 2A. The bath was not in regular use and Emma Somerville wanted to change the use of the bathroom to a treatment room for patients attending the ward out of hours. We were to review the literature regarding the removal of the trough sinks in the ante rooms to remove a potential source of water contamination. The sink would be replaced with a work top and hand hygiene was to be carried out prior to entering the room and again on entering the ante-room.

91. I have been provided with another set of minutes from IMT meetings **(A36629326 – Incident Management Meeting, dated 30 November 2018, relating to Ward 2A, RHC – Bundle 1 – Page 241)**. The minute records a discussion, and a difference of opinion between Prof Gibson and Dr Inkster relating to the removal of trough sinks. Dr Inkster had literature to support this. I did not have much involvement in that discussion.

92. Audits were carried out in ward 6A for hand hygiene, peer audits for central venous line care, insertion of peripheral access catheters and enhanced

supervision. IPCN, Facilities, Estates, Lead Nurse, and SCN would carry out an enhanced supervision audit to assess the cleanliness of the environment, near patient equipment, beds, lockers, light fittings, matresses, and SICPs. Any remedial work would be carried out as soon as possible. Independent auditors assessed hand hygiene and carried out an inspection in the patient cubicles.

93. The departmental SOPs were the same as in 2A/2B. Addendums were added to change the name of the ward and if any of the process was changed. The HSCT patients protocols were amended as the patients were now being nursed in ward 4B. The pathway for patients with a fever or were unwell who lived in GGC was to attend 6A day care during the day, and to be admitted to 6A providing there were available beds. If they lived outside GGC, patients were to attend their local District General Hospital. This was because the ward 6A capacity was reduced compared to 2A/2B. Overall, a similar number of patients still attended day care, with some patients now attending non-malignant haematology clinic in out-patients.

COMMUNICATION ABOUT THE WATER ISSUES AND INFECTIONS

94. I have already described the communications process above. In summary, the communication came from the hospital management team including the General Manager, Jamie Redfern and Director, Kevin Hill, and the Chief Executive, Jane Grant. The Communications team attended the IMTs and provided the Core Brief statements or media statements to be given and read to parents. The IMTs were confidential and the process was that I waited for the written statements from the management team and I would distribute them to staff, patients and their families attending day care that day. This was time consuming as there could be 20 patients each day.

95. The Consultant Microbiologist, usually Dr Inkster and the patient's consultant informed the parents if their child had a Gram-negative bacteraemia which may have been linked to environment. I was present at some of the meetings but cannot remember which patients.

96. Not all patients attended ward 2B every week so they may not have received the most recent written communication. It could be challenging to ensure that all day care, out-patients received the written communication until the closed Facebook page was started.

97. As part of the IMT and communication process, information was shared with staff in the Core Brief. The management team, Jamie Redfern, Jen Rodgers, Kevin Hill and the Lead Nurses did their best to manage the communications for parents and staff. They had meetings with parents and Jen Rodgers came round the ward.

VENTILATION: EXPERIENCE IN THE NEW HOSPITAL

98. My understanding is that ventilation is important for patients undergoing a HSCT. Ward 2B did not need to have HEPA filters and positive pressure ventilation.

99. A Healthcare Associated Infection Systems for Controlling Risk in the Built Environment (HAI-SCRIBE) is a risk assessment that Infection Control and Estates develop before carrying out work that involves creation of dust, or disruption of water. For example, drilling a hole in the wall to put up a hook, taking an IPS panel off behind the toilet, removing roof tiles, fixing a burst pipe in the ceiling or en-suite. The HAI-SCRIBE has different levels relating to the risk to the patient, and the type of work to be carried out, and how to mitigate the risk from the work to be carried out to the patient. Estates, the IPC Lead Nurse and occasionally a SCN would sign off the HAI-SCRIBE.

100. In general terms, the process for Estates to carry out any repairs or jobs required in ward 2A and 2B was: the nurse would enter a brief description of the job needing carried out via the FM First system. A member of the Estates team would come to the ward and speak to the nurse in charge or SCN, and discuss the repair or what needed to be fixed and what would be involved in carrying that out. If required Estates and/or the nurse would discuss with the

IPC Team, and if required an HAI-SCRIBE would be used to reduce the risk of any contamination to patients.

101. The first I heard of any concern related to ventilation prior to the move to the new hospital. I was not the SCN of ward 2A, but I was told there were no HEPA filters in the transplant rooms, and they had to be sourced and were fitted prior to ward 2A opening. My ward, 2B did not need to have HEPA filters or positive pressure ventilation.

102. My understanding of positive pressure ventilation is when the air pressure is higher in the patient's room than in the adjacent room or corridor and this helps to prevents airborne bacteria from entering the room.

103. The patients undergoing a HSCT would be nursed in a transplant cubicle in ward 2A. I would not need to know the specification for the ventilation for this group of patients.

104. As part of the accreditation for JACIE staff would undertake training.

CRYPTOCOCCUS – DECEMBER 2019 TO JANUARY 2019

105. There was an IMT held in December 2018, where Cryptococcus had been mentioned. I have been provided with the minutes for this meeting, **(A36605180 – Incident Management Meeting, dated 27 December 2018, relating to Cryptococcus in Ward 2A, RHC – Bundle 1 – Page 250)**. This meeting started off saying that [redacted] HAI cases of Cryptococcus neoformans had been identified, [redacted] There was a discussion of pigeons, and pigeon droppings in the plant room. There were pigeons on the hospital roof. I did not have experience of Cryptococcus before this IMT.

106. I have been provided with minutes from an IMT held in January 2019. **(A36690595 – Incident Management Meeting, dated 18 January 2019, relating to Cryptococcus in Ward 2A, RHC – BUNDLE 1 – Page 274)**. The minute refers to a Core Brief to be sent out to all staff outlining the press

statement. Staff from Ward 6A had requested some more information about Cryptococcus to allow them to answer any queries patients or parents have and also relieve staff anxiety as to whether this would cause a skin rash.

107. Dr Inkster noted the fungal counts were found to be higher than expected in ward 6A with the portable HEPA filters in place. During my weekly assurance checklist I noticed there were gaps evident in the sealant of the skirting in some of the ensuite bathrooms and I submitted an FM first request to Estates to look at the issue and raised this with the IPC Nurse when they did their weekly walk round. On inspection by estates mould was found and as a result of this we temporarily decanted from 6A to CDU/1A to allow repairs to the ensuite bathroom walls and floors. The decant to ward 1A was challenging as the day care area was small and when we moved at first there was no office space for medical staff to discuss confidential information. This was addressed by Melanie Hutton and space was found.

108. In addition to the portable HEPA filters, fixed HEPA filters were later installed in the bathroom ceilings in ward 6A.

GRAM NEGATIVE BACTERAEMIA – SUMMER 2019

109. I have been provided with minutes from IMTs that were held when we were on Ward 6A. **(A36591622 – Incident Management Meeting, dated 3 July 2019, relating to Gram Negative Bacteraemia in Ward 2A, RHC – Bundle 1 – Page 325)**. The minutes refer to ward 2A undergoing a major refit with respect to ventilation, and no chilled beams in the ward. My understanding was that they were going to upgrade the ventilation system.

110. The minutes also refer to communications in relation to a Facebook page. I do not remember this.

111. There was another IMT on 14 August, **(A36591626 - Incident Management Meeting, dated 14 August 2019, Relating to Gram Negative Bacteraemia in Ward 2A, RHC- Bundle 1 – Page 343)**. The minutes refer to an issue

regarding a staff member not using the appropriate mopping system which was addressed. This would be a Facilities issue. I do not remember this.

112. I have been provided with minutes from an IMT held in October 2019, **(A36591643 – Incident Management Meeting, dated 8 October 2019, relating to Gram Negative Bacteraemia in Ward 2A, RHC – Bundle 1 – Page 373)**. The minutes state "Angela Howat informed the group that one of their domestics had left and not been replaced. Angela Howat also informed the group that their domestic was having trouble in obtaining a T3 floor cleaning machine." We would have been asked if there were any issues, and so I have highlighted this and it was addressed by the Facilities Manager.

HOSPITAL ACQUIRED INFECTIONS AND A HEALTHCARE ASSOCIATED INFECTIONS

113. Haematology patients can be more at risk of infections, if they are immunocompromised which means they have a weaker immune system.

114. Haematology/Oncology patients tend to have lines and this will also mean they are at a higher risk of infection. One of the risks with line infections, Gram-negative bacteraemias in immunocompromised children is if it is not treated promptly it can be life threatening.

115. In some cases, the infection may not be able to be cleared from the line and the best practice would be to remove the device. The Consultant Microbiologist would advise the medical staff of the type of bacteria and if the line was not salvageable and should be removed.

116. Infection could impact chemotherapy treatment. If any child had a temperature and was unwell, treatment could be delayed until the child's blood cultures were negative and they remained apyrexial for a specified period of time. If the central line was removed, the patient would go to theatre for a new central line once the required amount of days of antibiotic cover had been given.

117. The IPC team monitor infections in the hospital, and will investigate, report and take action as required. I do not know how often they meet, but they meet to discuss types of infections.

118. The Central Line Associated Blood Stream Infection (CLABSI) Quality Improvement group was set up by surgeon, Mr Tim Bradnock, and Chief Nurse Jen Rodgers, and involved consultants, nursing staff and nurse educators from the Schiehallion Unit in May 2017 in response to increased line infections. The group met to discuss how to reduce the line infections. Actions were: standardise practise for the insertion of CVADs with the same surgeons doing this and a dedicated line list for our patient group; in August 2017, aseptic non-touch technique (ANTT) was introduced; in September 2017 the Curos cap, a cap that is impregnated with 70% alcohol to keep the end of the line clean, was introduced; and in February 2019, introduction of Taurolok, an anti-microbial lock.

119. When the hospital first opened in 2015, I did not have any concerns about infection risk within the hospital. When the patients got ill around March 2018, that was the first time I was aware of concerns. I became aware of this as I attended the IMTs .

Infection Control

120. As a SCN, my responsibility in relation to infection control in my area, is to follow the SICPs and any TBPs in place, and to report any issues per my duties described above. I have given examples above in relation to the audits we carry out that relate to this.

121. Health Improvement Scotland (HIS), a separate body, carry out audits of all the hospitals in Scotland. Their audit reports are publically available.

122. I am responsible for the equipment and any furnishings in my area. With our group of patients, if there is a tear or anything, I would remove the item to get it repaired. Regarding the cleaning of our actual ward area, this is done by

the domestics team. If there are any issues in relation to cleaning then I would phone the Domestic Supervisor and they would remedy this.

123. My involvement with investigations or infection risk, was only in attending the IMT meetings, and adhering to SICPs.

124. I have been asked what my awareness of whether the infections were linked to the built hospital environment in 2018 was. From the IMTs, the hypothesis was that there was a possible link to the environment because of the water samples. I do not know if this was proven to be the case. I am aware that the samples from the water were sent for typing to see if they were the same bacteraemia. I cannot comment on that as it is not my area.

125. I feel the communication given to us from management about the infections or infection risk was good on the whole, but parents found out about infections from other families so thought that the communication was not good enough. It is possibly because I was attending the IMTs that I had a better understanding.

126. I have been aware of a few cases where patients have suffered an infection where the patient or myself understands there to be a possible link between the pathogen and the hospital environment. If that was the case, the Consultant and Infection Control Doctor would speak to the parents and explain it to them. The Infection Control Nurse and Lead Nurse may also have come to discuss it with the parents as well.

127. There is also a meeting on the ward every day, which is sometimes attended by the Microbiologist, where all the in-patients are discussed, what is wrong with them and any positive blood cultures. So there were numerous ways staff would be made aware of the infection and situation. For day care, we were made aware of infections either by medical staff on the ward or from the IPC team.

Prophylactic Medication

128. I do not prescribe medication and am not involved in decision making on prophylaxis. But I make sure that any patient in day care who needs prophylaxis receives it. I would have given any written communication regarding the prophylaxis to the parents, and medical staff would have discussed any changes in medication with the parents/patients.

INCIDENT MANAGEMENT TEAM MEETINGS

129. My role and involvement in the IMTs was to provide an update on the patient's condition, give an update on parents and staff anxiety, and carry out any relevant actions and hand out any communications when they were ready after the IMT.

130. I do not remember the reason that I did not attend an IMT prior to, 9 March 2018. I do not know the protocol around who attends an IMT.

131. In my experience all staff attending the IMTs were given an opportunity to speak and voice their concerns and opinions. Although there were disagreements and differences of opinions, I felt that everybody felt able to share their professional opinions or points of view.

132. In general, the relationships between team members in the IMT process were good with everybody. Maybe more senior people did not always agree on everything that was said.

133. The Healthcare Infection Incident Assessment Tool (HIIAT) scoring, at the end of the IMT, was led by experts that were round the table.

134. I do not recall whether the IMTs between 2018 and 2019 became more difficult or not. There was a new chair, Dr Emilia Crighton and ICD, Professor Al Leonard from August/September 2019.

COMMUNICATION

135. I think communication was probably as good as it could have been at the time, as in it was an evolving situation. Even at the IMTs they did not always have the answers to give to the parents and staff but the parents felt we were not fast enough. Hopefully with the introduction of the closed Facebook page the parents now feel that they are listened to and receive information promptly.

136. There is a duty to communicate when something goes wrong during care or treatment. I am sure not all the families were satisfied with the communication. We are all bound by a duty of candour so once you knew something, you are going to tell the family what has happened. But maybe the families felt it did not happen fast enough. It was evolving, it was something I am sure none of us had ever experienced before.

137. At the beginning every time we put control measures and it got better, we thought that we had resolved the issue. Then it felt like maybe something else happened. There was a huge amount of work and very stressful for our families. Some of them lost confidence in us; they had already been to the new unit and knew the facilities that they were missing out on when in 6A. Parents did not have their parents' kitchen to make a cup of tea and to chat so that was then made for them where the bathroom had been. I think that was a great idea. Also the loss of the Teenage Care Trust (TCT) unit which has a big social space. Ward 6A logistically did not have enough space to give them that area. The teenagers were given a small room that we called the playroom. The ward did not have a staff kitchen, but this was put in. We moved in September 2018 and it took a few months to get some of these things put in place for parents and teenagers. Ward 6A was very cramped for everybody, it was challenging in there, but we did all manage it. Then when COVID happened, everything changed a bit, and nobody could move out of rooms.

Whistleblowing

138. If I had any concerns about wrongdoing, failure or inadequacy within the hospital, there are procedures to facilitate disclosure of that either within GGC or to individuals external to GGC. I would speak to my Lead Nurse. I would

refer to the whistleblowing policy, which would outline what to do if you felt that you were concerned about something. I would hope that my staff could come to me before they felt the need to be a whistle-blower, but I tried to be as open and honest as I could with my staff and to listen to them, but there is a procedure if you were concerned.

139. I do not think anyone fully appreciated whistleblowing until during or after the events of the IMTs. If I had concerns, I could certainly go to my Lead Nurse. I have never had to do that. The policies were sent to us and you can easily get them on our internal HR website. I am aware of the policy**.** All members of staff have access to the Core Brief and details of the whistleblowing policy were highlighted there.

140. Staff could also go to the Lead Nurse (or other nursing line managers), or to their Trade Union if they did not want to speak to me. I think my staff certainly knew that they could do that and in chats with them since then they have felt that they were supported and that they could talk to somebody.

141. Psychology sessions were also arranged to support staff.

142. It was helpful when Jen Rogers and Jamie Redfern came and talked to staff. As soon as staff had concerns, you highlighted it to them, and they would come up and speak to them.

143. I was not part of communication between the hospital management and external bodies. However, in the IMT, Health Facilities Scotland (HFS) and Health Protection Scotland (HPS) came to the meetings. They would feed back to the Scottish Government.

OTHER PROCESSES: CASE NOTE REVIEW/OVERSIGHT BOARD/INDEPENDENT REVIEW/PUBLIC INQUIRY

144. I have not had any involvement in the Case Note Review or the Oversight Board.

145. Currently, if a patient has a Gram-negative bacteraemia then there will be immediate in-depth root cause analysis carried out. For example, did they have their line flushed, where have they been, and did they have any gut colonisation as some organisms can originate from the patient as well as the environment.

146. I have not attended any IMTs recently. I have attended some PAGs, but only if it impacted a patient that had come through Ward 2B, otherwise it have been the Senior Charge Nurses in Ward 2A that would have attended.

147. Staff are encouraged to speak out if they have any concerns. Awareness has been increased as it is brought up periodically in the Core Brief.

148. I am aware that the there were some changes to IPC procedures following recommendations by the Oversight Board and Case Note Review. I am not able to comment on these in any detail. From a nursing perspective we have continued with enhanced supervision (in 2A) and increased frequency of audits.

149. I do not know if the process within Estates has changed. The process for reporting an issue via the FM First system remains the same. If you raise an issue with Estates have always dealt with it quickly.

150. I have been informed that witnesses at the previous evidential hearing have said: “Nurses asked patients and families to report issues to the media for fear of risking their jobs if they spoke out”; that “they were not being told anything official by the hospital, they were only being told by myself” in respect of the decant to ward 6A; and “It was poor Angela in day care who was on the front line of all of this because she was the one that was threatening to take the flak from all of us, and they got to the point where the parents were saying it wasn’t fair to send her”.

151. In relation to the first part I have never heard of this before. Staff were worried and concerned when they could not drink the water or wash the children with the water. Staff raised their concerns at meetings with management team - Jamie Redfern, Jen Rodgers and the Lead Nurses.

152. It was part of my role as SCN to communicate to families about this. It was stressful at times because the information about the IMT hypothesis that there was a possible link to the water, and the drains was evolving and complicated. I give advice and information on a daily basis to families on what to do if their child has a fever or is unwell. I explain their child's treatment plan, side effects of their chemotherapy, importance of central line care, and the communication of the information from the IMTs would need to be part of that overall advice to families. The consultants were also communicating to the families, as they also attended the IMTs. This was extremely stressful for the consultants and for all staff.

153. Communication was updated regularly. Jamie Redfern and Jen Rodgers offered me support and offered support to staff and to parents. There was support from clerical staff occasionally to answer calls from concerned and worried parents when we were in ward 6A. This was very helpful, particularly when there was media reporting which was not always accurate which contributed to a lot of the stress and uncertainty for staff, and parents.

154. At certain points formal letters were sent out by the Chief Executive Jane Grant to the patients' home address. I would hand out the written statements following the IMTs to the families attending day care. Jamie Redfern, Jen Rodgers, my Lead Nurses Kathleen Thomson and Gael Rolls, and the consultants were available if I wanted to contact them. By the next day the parents would already know the content of the written statement from other families on social media or on the news. As parents' confidence was low, Professor Craig White was appointed by the Cabinet Secretary to meet with the parents to offer support and to feedback their concerns.

155. I did communicate to families both in day care and by phone to families that were due to come in over the next week that we would be moving. I do not feel like I was ever sent out to be in the front line. I never felt like that. I wanted to make sure that the patients in ward 2B received the communication as it was given to me. The communication for the decant to ward 6A was on the news at about the same time that I received it, and unfortunately the parents

of children who were not currently in-patients at that time heard about it on the news and not from the hospital. In relation to day care patients, due to the opening hours of the day care unit it may be that I communicated with them the day after. The Chair of the IMT, Dr Inkster came to talk with many families, as did all the consultants, and the Chief Nurse Jen Rodgers, and the General Manager Jamie Redfern.

RETURN TO THE SCHIEHALLION UNIT: MOVE BACK TO WARDS 2A AND 2B IN 2022

156. I was pleased to return to ward 2B with more space for the patients attending day care. Most of the patients had never been in ward 2B before. Communication was given to the parents regarding the 2 bed bays, as patients would need to share. The patients had become used to the single ensuite rooms, but are now used to the environment. A video was made to show patients ward 2A and the facilities. Through 'how are we doing' questionnaires we know that patients and families are happy with the unit and regularly praise the staff.

157. The staff were very pleased to have moved back and to have more space. We had a new staff room and office spaces were reconfigured.

158. Ward 2B did not need the same amount of work as Ward 2A. HEPA filters were fitted to upgrade ward 2B's ventilation system, new clinical hand wash sinks were installed, new taps fitted, the lighting was improved with LED lights and the whole unit was painted. Point of use filters remained, as does the weekly drain cleaning with Hysan, and chlorine dioxide dosing of the water sytem. Toilet seat lids were fitted to decrease the effect of the plume, as was done in 6A. The nurse call alarms and the a bell for the door entry system were installed. From fundraising by two former patients, new reclining chairs for the patients as well as comfortable chairs and a coffee machine for the staff were purchased.

159. Communication has improved for families due to the closed Facebook page. Families can join the closed Facebook page and receive information at the same time, even if their child is at home and is well.

160. There is a Core Brief for staff, which is on the NHSGGC website and families can receive the Core Brief too. The Chief Executive Jane Grant has always issued a regular brief with information for staff, positive stories about staff with new initiatives and praise for staff that have been thanked by patients. This can help to boost staff morale.

CONCLUDING COMMENTS

161. The experience was very stressful. The IMTs and the actions for the control measures took up a huge amount of time, and there was still my role as the SCN for ward 2B to be carried out. The IMTs and actions carried out were so that we could ensure the safety of our patients. I relied on my team to help and I thank them for their hard work, and patience.

162. I believe that the facts stated in this witness statement are true. I understand that this statement may form part of the evidence before the Inquiry and be published on the Inquiry's website.