Scottish Hospital Inquiry

Glasgow 4 Part 2
Questionnaire for 'Consequential Witnesses'
Annette Rankin

The Inquiry has decided to hear the evidence of Professor Hawkey, Dr Agrawal and Dr Drumwright in respect of their report on the evidence of risk of infection from the water and ventilation systems at the QEUH/RHC ("the HAD Report") [Bundle 44, Volume 1, Document 1, Pages 5 to 223]. As a consequence, the Inquiry is seeking further evidence from certain witnesses who previously gave evidence in Glasgow 2 or Glasgow 3.

You have been identified as someone likely to have direct knowledge of key issues arising from that report. To assist in gathering this information effectively, we have provided you with a short questionnaire. This includes questions tailored to your prior involvement, along with access to relevant documents in the Objective Connect space, including Bundle 44, Volume 1 (the report by Professor Hawkey, Dr Agrawal, and Dr Drumwright), and Bundles 6 and 7. We ask that you respond to each question as fully as possible, to help ensure the Inquiry's understanding is accurate and complete.

To answer the questions please type your answer in the answer area marked [Type your answer here] below the question, you will note that your type comes up in a different font from that of the question – this is to allow your answer to be read with ease.

Please do not insert pictures or documents into your written answers. All our hearing bundles are on our website https://www.hospitalsinquiry.scot/. If you would like to refer to a document within our bundles which captures your answer to the question, then please refer to the relevant document in the format (Bundle X, Document Y, Page Z).

If you wish to refer to your own document, then describe the document in your statement, list all such documents at the end of the statement and provide us with a copy of that document in order that we can process the document in accordance with Inquiry protocols.

1. Your professional practice at Yorkhill

Whilst you have already provided a detailed CV in your earlier statement. Please could you summarise your connection to, involvement with or association with the paediatric haemato-oncology service in the Schiehallion Unit at Yorkhill from 2005 to 2015 and the extent of your experience/knowledge/understanding of environmentally relevant bacteraemia at Yorkhill?

Q1 response

Please note that my response to the nine questions set out in this consequential witness questionnaire is based on memory rather than having available documentation from this period to review.

As noted in my CV which I provided to the Inquiry in my earlier witness statement (**Annette Rankin – Witness Statement - A49764255**), in 2005 I was the Lead Infection Control Nurse for the Victoria Infirmary, NHS Greater Glasgow and Clyde (NHSGGC) and had no involvement in any aspects of infection prevention and control (IPC) at Yorkhill/ Schiehallion Unit.

In 2006 I became the Head of Nursing for Infection Control (acute sector) at NHSGGC. Yorkhill was one of the areas within the remit of this role. This role was predominantly a strategic role with no direct operational IPC responsibilities. As each sector had its own Lead IPC Nurse (IPCN)/ Team (IPCT), I had no day-to-day operational involvement with any of hospital sites, including the Yorkhill/ Schiehallion Unit. As I had overall responsibility for the IPC Nursing service and IPC oversight for the acute service, I met with the Lead IPCNs at a Lead Nurse meeting on a weekly basis and I was updated by the Lead IPCNs of any significant issues or any outbreaks/ Incident Management Teams (IMTs) within their area and often provided IPC support and advice. I would only attend an IMT if requested by the local team, or if I felt the local team required additional support.

Around 2006/2007 I, along with the lead Infection Control Doctor (ICD) and the General Manager for Diagnostics (the department where the IPC service resided), reviewed the IPC cover/ teams at the Yorkhill site and reconfigured the structure to align with the wider directorate structure within NHSGGC. This widened the remit of the Lead IPCNs to include IPC overview of the acute service directorate. The Lead IPC Nurse at Yorkhill became the Lead IPC Nurse within the Women and Children's Directorate, of which Yorkhill was part.

I subsequently established directorate reports as part of the overall directorate IPC reporting protocol. I cannot provide a specific date when these were first produced, however, from memory, this was not long after the IPC structure review around 2007. These were produced monthly for each directorate within the NHSGGC Acute Sector and issued to the relevant directorate team, which included the Director and Head of Nursing for each directorate. Each month the directorate IPC Lead provided me with the relevant data to populate these reports. I, along with administrative support, produced the reports based on the information provided by the local teams. Directorate reports covered all directorate activity from the previous month including audits, cleanliness champion training, and surveillance details, which included surgical site infection, Staph aureus bacteraemia, and alert

organisms. This process provided me, the IPCT and the directorate with a level of IPC oversight of each directorate.

Any unusual organisms reported to the IPCT at Yorkhill/ Schiehallion Unit would have been included within these reports. During my time producing these reports/ having oversight of this area, I do not recall the IPCT at Yorkhill/ Schiehallion Unit escalating or reporting any unusual/ environmental organisms, specifically gram negative organisms (e.g. Pseudomonas), which fell within the alert organism list of the NHSGGC infection control manual. As I had not dealt with any reports of the more unusual/ uncommon organisms such as Cupriavidus, Achromobacter, Burkholderia prior to the 2018 incident at the QEUH/ RHC, I am therefore confident in my recollection that no blood stream infections with these types of organism were reported either as part of these reports, or at any of the other meetings (Area Infection Control Committee (AICC), Board Infection Control Committee (BICC) or Lead IPCN meetings).

In 2009 I left my role within NHSGGC to join Health Protection Scotland (HPS) (now ARHAI Scotland) and therefore have not been involved in any local NHSGGC reported incidents since leaving NHSGGC. From 2017 I became involved with the RHC through incidents reported to HPS.

2. Incidence of environmentally relevant bacteraemia cases at Yorkhill

Please review the list of 'microorganism species of environmental concern' from 2005 to 2022 listed in Tables 11A to 11F of the HAD Report (Bundle 44, Volume 1, Pages 97 to 106) and the conclusion of the authors expressed on page 109 of the bundle that refers to the "significantly higher number of cases observed historically when the haemato-oncology paediatrics service was located at Yorkhill compared with QEUH cases". On the basis of your expertise and experience, to what extent would you accept that there was a significantly higher number of environmentally relevant bacteraemia cases in the paediatric haemato-oncology patient population at Yorkhill from 2005 to 2015 compared to the QEUH/RHC from 2015 to 2022? Please explain the basis of your answer.

Q2 response

I am not an epidemiologist nor do I have a specific qualification in epidemiology, however, my experience as an IPCN and my infection control qualifications (including a master's degree in IPC) encompassed epidemiology in outbreak settings. My response to this question is provided within the context of my own knowledge and experience of epidemiology within IPC.

I accept that looking at this data as laid out in tables 11A to 11F, there are a number of positive samples that could have an environmental link in both Yorkhill and

QEUH/RHC. A Healthcare Associated Infection (HAI) bacteraemia would require to be reviewed to establish a potential source. Therefore, reviewing numbers without context from an IPC perspective does not allow conclusions to be made.

It is also worth noting that concern over environmentally linked cases was not reported via the management structure or to the relevant governance committees (AICC, BICC) or to HPS.

Furthermore, as demonstrated from the 2018/19 water incident at the QEUH/RHC, it is often not increased numbers of cases which may cause concern but the nature and type of organisms being identified. Therefore, the cases presented in this data and those identified from 2015 onwards in the QEUH/ RHC are not comparable as many of the cases identified since 2015 have been unusual organisms, not previously reported in this clinical cohort and many samples have been polyclonal, which would be suggestive of an environmental source. When considering HAIs and clinical samples, it is remiss to view and review these through a purely numerical lens; consideration of the organism type, nature of organism and potential source/ environment is crucial.

When reflecting on this data from the perspective of any clinical concerns, the senior paediatric Haemato-oncology clinical team remained the same at Yorkhill and the RHC. From 2017 the clinical team at the RHC started to note concerns that, whilst they had previously observed gram negative infections in their patients at Yorkhill, these infections were of a different type. The clinical team had not seen these types, number and variety of environmental gram negatives before. The clinical team verbalised concerns over 2017-2019 and as noted in the evidence of Dr Murphy (**Transcript – Dermot Murphy - 15 June 2023**) and Professor Gibson (**Transcript – Brenda Gibson - 12 June 2023**).

From an IPC perspective, the types of organisms and polyclonal episodes being reported from the RHC, particularly in 2018/19, were those that neither I nor my colleagues within HPS had seen or had reported before.

3. **Rate of change of incidence of environmentally relevant bacteraemia cases between Yorkhill and QEUH/RHC**

Please review Figure 22 of the HAD Report and the text discussing it (Bundle 44, Volume 1, Pages 116 to 119) and the conclusion of the authors in the second bullet point on page 119 that “Among paediatric haemato-oncology patients, we see an ~2 fold decrease in incidence and cases of bacteraemia attributed to environmentally relevant microorganisms following transfer of services from Yorkhill to QEUH; lower incidence at QEUH was statistically significant”. To what extent is this conclusion consistent with your experience at Yorkhill and subsequently at the QEUH/RHC? Please explain the basis of your answer.

Q3 response

I do not agree with the statement presented that "among paediatric haemato-oncology patients, we see an ~2 fold decrease in incidence and cases of bacteraemia attributed to environmentally relevant microorganisms following transfer of services from Yorkhill to QEUH; lower incidence at QEUH was statistically significant". In addition, this statement does not align with my experience working within NHSGGC and in HPS (from 2009).

Whilst I accept that on transfer to the QEUH/ RHC the numbers of blood stream infections from 2015 through 2016 declined, this was not sustained beyond 2016. From 2017 blood stream infections with unusual environmental organisms were being identified. This was considered, at IMTs held in 2018/2019, to be related to the water system and potentially linked to the level of biofilm being identified in the system. The hospital opened in 2015 and as biofilm develops over time, whilst it may have been present, it is unlikely to have been significant and present considerable risk when the hospital opened in 2015. This does however change over time if conditions for biofilm are optimal and could be the reason that the numbers of infections were lower in 2015/16, rising from 2017. This view was supported by Dr James Walker in evidence which he gave to the Inquiry on 6 November 2024 (**Transcript – Dr James Walker – 6 November 2024**).

4. **Comparison between the susceptibility of adult haemato-oncology patients and paediatric haemato-oncology patients to bacteraemia attributed to environmentally relevant microorganisms**

From your own professional expertise are you able to assist the Inquiry as to the extent to which it is appropriate to consider that adult haemato-oncology patients as a class and paediatric haemato-oncology patients as a class have a similar susceptibility to bacteraemia attributed to environmentally relevant microorganisms?

Q4 response

I am not a haemato-oncologist nor do I have any knowledge of, or experience, in this specialism. My response to this question is provided within the context of my own knowledge and experience of IPC.

Each clinical case, whether concerning an adult or child, will have an individual disease management response, which will impact a patient's degree of suppression and, therefore, vulnerability. Whilst age may be a factor, and younger children may be developing their immune system, an older adult may experience a gradual decline in their immunity.

With regards to my experience of adults and children in haemato-oncology at the QEUH/ RHC, I do believe that the prophylaxis regime differed at the time for adults and children. Anti-fungal prophylaxis was given more regularly/ routinely to adults than children. Adults were also more commonly given ciprofloxacin prophylactically. In addition, severely immunocompromised adult haemato-oncology patients were treated at the Beatson West of Scotland Cancer Centre (a more compliant environment) prior to the refurbishment of Ward 4b, whereas the children were cared for within Wards 2a/b at the RHC and subsequently Ward 6a at the QEUH. Therefore, with these differences in mind, it is difficult to consider any similarity between adult and paediatric patients within the QEUH/ RHC during the period of 2015-2022.

5. IPC practice in the Schiehallion Unit at Yorkhill from 2005 to 2015

Accepting that much time has passed can you assist the Inquiry by giving an assessment of the extent to which at the Schiehallion Unit at Yorkhill from 2005 to 2015 the investigation of bacteraemia cases from potentially environmentally relevant microorganisms such as those listed in Tables 11A to 11F of the HAD Report (Bundle 44, Volume 1, Pages 97 to 106) (a) formed a part of IPC practice, (b) were the subject of investigation by the IPC team and/or (c) were reported to HPS?

Q5 response

As I have never been operationally involved in the Schiehallion Unit at Yorkhill I am unable to comment on whether these organisms listed formed part of the IPC practice as requested in Part a) above. This would have been the remit of the Lead IPCN and the ICD at Yorkhill at that time. I do not know whether they were subject to investigation by the IPCT at that time. It would however have been normal practice for any gram negative blood stream infection, deemed to be hospital acquired within this unit, to be investigated by the IPCNs if referred to them by the laboratory or clinical team. Reporting to HPS has changed over the years. Prior to 2017 these infections would have required to be reported to HPS if assessed (Watt matrix/ HIIAT assessed) as amber or red. Having reviewed the incidents reported to HPS, no HAI gram negative bacteraemia within the Schiehallion Unit was reported to HPS within the timeframe of 2005-2015.

6. Your last day working for NHS GGC in 2009

The issue of precisely when you worked your last day for NHS GGC in 2009 before transferring to HPS has now become of some importance. What was your last day working for NHS GGC in 2009 and how can you be sure?

Q6 response

I can confirm that my last day of employment at NHSGGC was 30 November 2009. I commenced my employment with HPS on 1 December 2009.

I am less specific on my last working day with NHSGGC as I recall taking leave prior to starting my new post on 1 December, however this would be unlikely to have been more than 2 weeks.

7. Stage 1 HAI Scribe

Did you complete a Stage 1 HAI-Scribe for the new South Glasgow Hospital ("new SGH") as recorded on the face of the Stage 2 HAI-Scribe (Bundle 43, Vol 3, Documents 18-19, Page 1114) and if so what steps do your recollect taking to collect the information you needed to complete it?

Q7 response

I did not, nor was I asked to complete a Stage 1 HAI-Scribe for the QEUH. I have never completed nor participated in a Stage 1 HAI-Scribe for any project or as part of any role I held in NHSGGC.

A Stage 1 HAI-Scribe (2007 version) should be undertaken at the initial planning stage, when the appropriateness of the proposed site for the new build is being considered. In terms of the QEUH/RHC project, a Stage 1 HAI-Scribe would have required to be undertaken prior to the competitive tendering stage. e.g. Point 2.3 in a Stage 1 HAI-Scribe addresses any considerations relating to the proximity of the local sewage plant.

As recorded on the face of the Stage 2 HAI-Scribe (Bundle 43, Vol 3, Documents 18-19, Page 1114) and as Ms Barmanroy stated in evidence (**Transcript – Jackie Barmanroy – 15 May 2025**), she was unsure who had signed to confirm the completion of the Stage 1 HAI-Scribe, and she said that she did not see the signatures other than my signature. Based on this, Ms Barmanroy then completed a document putting my name in a signatory box for having completed the Stage 1 HAI-Scribe. This is a misrepresentation as I had not, nor was I ever asked to participate in or complete the Stage 1 HAI-Scribe. Furthermore, I was never contacted or approached by Ms Barmanroy, or the project team, to clarify if I had undertaken a Stage 1 HAI-Scribe.

8. Scope of the HPS Situational Assessment RHC Wards 2a 2b

Please refer to paragraph 122 of your statement which addresses a proposed piece of work by you that became Appendix 4 to the HPS Situational Assessment RHC Wards 2a 2b Draft - 5 June 2019 (Bundle 7, Document 5, Page 205). Was there any discussion at this meeting or any other point in 2018 of the need to extend

any analysis of historical infection rates back to 2005 in order to capture the incidence and cases of bacteraemia attributed to environmentally relevant microorganisms at Yorkhill back to that date? If there was please describe who was involved and produce any records you have of such discussions or meetings?

Q8 response

I vaguely recall having a conversation with Dr Inkster and Professor Gibson to discuss infections and infection rates at Yorkhill, primarily that the volume and type of organisms being seen in the QEUH (in 2018) had not been seen before. I did not have any formal conversations or discussions on including historic Yorkhill data. Furthermore we were dealing with a current incident that met national outbreak definitions and the focus was on control and prevention of further cases. There was no suggestion at that time from the IMT or others that we consider historic data.

9. Additional information to assist the Inquiry

The Inquiry is attempting to understand the extent to which it can be said that the adequacy of ventilation, water contamination and other issues have or have not adversely impacted patient safety and care at the QEUH/RHC. Do you have any further information that you have not yet given the Inquiry that you consider would assist the Inquiry in understanding that issue?

Q9 response

I believe that I have provided the Inquiry with all relevant information that I have. It is perhaps worth noting that since the refurbishment of Wards 2a/b and the repatriation of patients to the wards, there has been a significant reduction in the number of gram negative organism associated incidents reported to ARHAI Scotland. Presuming that NHSGGC reporting is in line with Chapter 3 of the NIPCM, this is supportive of the positive impact that the refurbished environment has had on patient safety.

Declaration

I believe that the facts stated in this witness statement are true. I understand that proceedings for contempt of court may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.

Signed: [redacted] Print name: Annette Rankin

APPENDIX A

The witness referred to the following documents when giving her statement

A44119340 -Transcript of Dr Dermot Murphy- Hearing Commencing 12 June 2023- Day 4

A4496847- Transcript of Professor Brenda Gibson- Hearing Commencing 12 June 2024- Day 1

A50934819-Transcript of Dr James Walker-Hearing Commencing 19 August 2024- Day 42

A52931190- Transcript of Jackie Barmanroy-Hearing Commencing 13 May 2025- Day 3