Scottish Hospitals Inquiry
Witness Statement of
Jacqueline Barmanroy

This statement was produced by the process of sending the witness a questionnaire with an introduction followed by a series of questions and spaces for answers. The introduction, questions and answers are produced within the statement.

Personal Details and Professional Background

1. Name, qualifications, chronological professional history, specialism etc – please provide an up-to-date CV to assist with answering this question. Please include professional background and role within NHS GGC, including dates occupied, responsibilities and persons worked with/ reporting lines.

A. As per attached CV (Appendix B)

Design and Specifications

2. When did you first become involved in the design of QEUH/RHC. Please describe your role and responsibilities.

A. I joined the new build project team in April 2010 on a 2-year secondment. My role was to advise on the general aspects of infection prevention and control. When I joined the team the architects and construction company had been decided upon. In addition, the layout of the hospitals had also been decided. At the point I joined it was at the 1:200 stage. This means the footprint of wards and departments had been decided and it was a matter of working with the clinical teams to decide the placement of the rooms within the wards and departments.

a) Please refer to **Bundle 27, Volume 8, Document 3 at page 41** please confirm whether you in fact arrived by April 2010 and left the team after July 2014? If this is not the case please explain.

A. I can confirm that I was in the project team from April 2010 to April 2012 when I left the project team. I then returned to the IPCT. Please see below the explanations for what was in the bundle –
Domestic Services Teaching – as an ICN with the South team I was still involved in teaching domestic services just not in the capacity of the project team after April 2012.

The construction interface weekly meetings – I only attended as an ICN of the South team if I was available and it was only to get a catch up on general progress of the build and not to answer and specific issues.

Zone checks and snagging – Clare Mitchell as the lead nurse was asked to review the cleanliness of a ward before opening the hospital and Clare asked me to help. Any issues raised with the cleanliness of the ward we checked was fed back by Clare to domestic services. Clare and I were not asked to do formal snagging checks.

The endoscopy decontamination unit was commented on and mainly guided by Alan Stewart who managed the decontamination unit at the time. I do not remember being involved in February 2014. Alan was the main source of expertise in this specialty.

Plastic bedpan units – by this do you mean holders for the disposable bedpan boxes in the dirty utility rooms?

Sanitary waste bins vs clinical bins – this is not a unique issue for the QEUH or RHC. When this was highlighted by facilities management, it was because all other hospitals in Scotland were looking at a safe and more cost efficient way of dealing with sanitary waste. IPC service made the decision not myself alone and was not project team directed.

Waiting room chairs – again this is not me in the project team role but Clare and I were asked our opinion as part of the clinical IPCT for the South, to comment on the chairs procurement wished to buy.

3. The Inquiry understands that you were Consultant Infection Control Nurse for the QEUH/ RHC Project Team from around 2010 to 2012. Describe in detail this role. Including your role, if any, in the User Groups.

A. My role was generic. Once the clinical teams were satisfied with how the flow of the rooms worked at the 1:200 stage, the next stage was the 1:50 stage. The 1:50 stage was more detailed and involved members of the project team and relevant clinical staff. During this process any necessary pieces of equipment and patient furniture was positioned to ensure the correct functionality of the room. This included positioning of clinical wash hand basins and patient beds. Can I also clarify that although the term consultant nurse is used in the sense, I am providing advice and not in the sense of my status. I was consulting on the project and not a qualified consultant nurse.

a) What was your role, specifically from an infection control perspective, in respect of a) the 1:200 stage and b) the 1:50 stage?

A. My role was to advise on positioning of wash hand basins, patient furniture that could withstand a high level clean with hypochlorite if contaminated with blood or body fluids. Discuss and agree the flow of the rooms with the clinical teams in the wards and departments. It was also to discuss the suggested room layouts included in the relevant guidance documents at the time (SHTMs and SHBNs). So generic and not technical.

b) Confirm who attended the user groups meetings from IPC, Estates, Clinical and the GGC Project Team for the following areas: Ward 4B – QEUH; Ward 4C – QEUH; Level 5 – QEUH; Critical Care – QEUH; Ward 2A & 2B – RHC; PICU RHC – RHC; All Isolation rooms

A. User groups included the project manager for either adults or children, lead nurse, architects, technical experts from the project team where required, specialty medics, nurses, and myself. Sometimes the senior charge nurses

were invited by the lead nurse attending. Water and ventilation meetings were separate groups and not discussed in the user group meetings.

c) Were you involved in water and ventilation meetings? In what way did the membership/attendance for water and ventilation meetings differ from the user group meetings?

A. I was not involved or invited to attend the above meetings. This would be for Professor Williams to attend. I cannot comment on the project team water and ventilation meetings and how they differed from the user group meetings.

d) How often were user group meetings scheduled to review design proposals and agree the design with the user groups

A. This could be around 2 to 3 times and could vary depending on what was required, the groups met until the clinical teams were satisfied with the design.

e) Describe your involvement in the design of the Schiehallion unit, PPVL and BMT rooms. Who signed off these areas from Infection Control?

A. I was involved early in the design with the basic room designs and did not sign off any specialist ventilation requirements or indeed any ventilation specifications.

f) If you did not sign off any specialist ventilation requirements or ventilation specifications, are you aware who did sign them off? Was there infection control input into these decisions?

A. I do not know who signed the specifications off or if there was infection control input into these decisions.

g) In respect of PPVL rooms, Dr Peters raised concerns with you in late 2014. What is your recollection of these concerns? Do you agree with Dr Peters oral evidence that the PPVL rooms didn't look like they were negative pressure? What action, if any, did you take following Dr Peters concerns? Who signed off the PPVL rooms?

A. I cannot remember specifics of Dr Peters concerns. I do not know who signed off the PPVL rooms. I had been away from the project team for over 2 years

by late 2014 so would not have been able to help personally and probably suggested that Dr Peters contacted Professor Williams.

h) When did you first see the PPVL rooms which Dr Peters described in her evidence? Did you agree that they did not look like negative pressure rooms? Did you have any concerns about the PPVL rooms at any point, either when you were working with the project team or afterwards?

A. From my memory I first saw these rooms after the hospital opened and by that time I was informed that Professor Williams was dealing with the issues. This was purely to highlight the concerns raised.

i) How were designs approved for construction and who signed off on the agreed design?

A. I cannot comment on this because the architects, building firm and the number, location of specially ventilated rooms had also been decided prior to me joining the team.

j) Please clarify when you were in the role of Consultant Infection Control Nurse for QEUH/ RHC Project Team.

A. April 2010 to April 2012

k) Please confirm who attended the User Group Meetings from:
IPC
The Schiehallion Unit
Adult BMT
Adult Haematology
Infectious Diseases

A. The user group meetings held during my time in the project team (2010 to 2012) would have been me for IPC.

Adult BMT, in my opinion it would have been the general manager, lead nurse and senior charge nurse and lead clinician, apologies I cannot remember names. From memory there was not much in the way of user group meetings

because it was not certain when I was in the project team if BMT, adult haematology was moving over from the Beatson.

The same people would have been invited for the Schiehallion Unit. Pamela Joannidis did a lot with these meetings as Pamela was previously the lead nurse for Yorkhill hospital and paediatric trained.

l) Was there at time (and if so when and in what circumstances) when you were told or saw documentation that set out the Air Change Rate, Pressure Differentials or presence or absence of HEPA filtration for any part of the hospital?

A. I was not shown these. These should have been checked by the technical specialists and Professor Williams.

m) Was there at time (and if so when and in what circumstances) when you were told or saw documentation that described the specification of the proposed isolation rooms within the hospital or used the expression Positive Pressure Ventilated Lobby or 'PPVL' to describe any of those rooms?

A. My answer is as above as I am not qualified to comment.

4. Explain the purpose of the guidance relied upon by the design team and why this was important.

A. The guidance for all members of the project team and builders would have been the Scottish Health Technical Memorandums and Scottish Health Building Notes that were available at the time. These documents are updated as necessary and are there to provide guidance in order that the environment is a safe as possible for patients, public and staff.

a) Have you ever read any part of SHTM 03-01 (Part A), HBN 4 Supplement 1 or SHTM 04-01 (Part A)? Which part and in what circumstances?

A. As an ICN these guidance documents are used as reference documents as it is expected that the technical experts are there to guide us, but ICNs do dip into these documents for their own reference.

5. Explain how the output for the design of the Wards was confirmed and signed off. In doing so describe the purpose of the clinical output specification, and your involvement.

A. When I joined the infection control team in April 2012 the footprint of the wards was already established and the patient bedrooms were all to be on the outer aspect of the wards to ensure patients had a view out of the window. All the support rooms, clean utility, dirty utility ward pantry were placed in the centre of the wards with walk ways to allow easy access and prevent staff from having to walk all the way around the ward to access these rooms. It was planned that all the wards should be laid out the same for governance and health and safety. An example of this is a nurse helping in a different ward would know where equipment and consumables were kept without having to keep asking, which is helpful especially in emergency situations.

6. Describe the role and involvement of Infection Control in the design process, in particular, describe your role as Consultant Infection Control Nurse in the design process. Who from infection control signed off the design?

A. As mentioned previously I only helped with placement of patient furniture and equipment after listening to the clinical teams who were going to have to work in the ward. That is all I would have signed off in conjunction with the clinical team.

a) If you were not involved, then who, from Infection Control, was involved in the design process?

A. I cannot comment if my predecessor signed off the design of the hospitals or not. Annette Rankin was my predecessor.

7. Describe the intended use and purpose of the following wards in QEUH/RHC: Ward 4B – QEUH; Ward 4C – QEUH; Level 5 – QEUH; Critical Care – QEUH; Ward 2A & 2B – RHC; PICU RHC – RHC; all Isolation rooms. What guidance was considered in the design of these wards, what processes were in place to ensure guidance compliance? Were there any changes to the design during the design and build, if so, please describe any such changes, describe the impact, if any, on guidance compliance, and described the sign off process for

any such changes, your involvement and how any changes were communicated to the Board. Was external advance ever sought in respect of design changes?

A. I was not heavily involved in these wards. For the last 6 to 8 months of my secondment I spent it teaching facilities staff infection control principles. Whilst I was in the project team I knew the following – Ward 4B – there was discussion about Bone Marrow Transplant moving over from the Beatson but this was not confirmed when I left in April 2012. Ward 4C, I was aware half the ward was listed for renal but no speciality had been assigned the other half of the ward by the time I had left. I cannot comment on level 5 as the decision to move infectious diseases happened after I left the team. Critical Care comprised of intensive care beds, high dependency beds and coronary care. It was designed to allow flow between the units depending on the acuity of the beds required. The guidance available at the time should have been adhered to but as I was not part of the technical groups and the foundations were only going in at the time I left the project group, I cannot comment. Pamela Joannidis helped with some of the paediatric wards as I am not paediatric trained. However, ventilation and water would have had to be signed off by a microbiologist.

a) When you taught Facilities infection control principles to what extend did you describe or teach the HAI Scribe system and its application to new or refurbished hospitals?

A. The teaching I was involved with was for domestic services on standard infection control standards and not HAI Scribes.

8. The Inquiry has heard evidence from Pamela Joannidis that you confirmed that SHTMs were being followed in respect of all ventilation systems in the hospital. When did you confirm this? What information, if any, had you seen that allowed you to confirm this?

A. Absolutely, all the relevant guidance should have ben adhered to and when I spoke with Pamela Joannidis I had been assured by Frances Wrath that the guidance was being followed. I was not part of any technical group as I am not qualified to comment on such issues. When the technical groups were being

set up, I was asked who would attend and I gave Professor William's name as instructed by Sandra McNamee (now Devine).

a) When did you first become aware that guidance had not been followed? What was your reaction?

A. I first became aware when maintenance issues were being highlighted to the infection control team by the local estates' teams.
My reaction was one of disbelief. I could not understand why a brand-new building was having so many issues. I am not qualified to comment on validation, verification, and commissioning results/reports but personally I would expect any concerns or issues would have been picked up at this stage.

b) When and in what circumstances were you *assured by Frances Wrath that the guidance was being followed"*? What evidence, if any, did you see that assured you of this? Please confirm exactly how Frances Wrath assured you of this.

A. This was a verbal reassurance but Frances Wrath said she would send an email to the senior management team for infection control.

c) Please identify the technical groups that were being set up for which you gave Professor Williams's name.

A. The technical group being set up was the ventilation group. At this time, I also mentioned that he should be the person to contact when the water group was formed.

d) Please confirm a date of when you first became aware that guidance had not been followed.

A. This would have been after the hospitals opened in 2015, apologies I cannot give you an exact date and I found out about this via my lead nurse.

9. Describe your involvement and understanding, if any, in the removal of the maximum temperature variant? Why was the decision taken and by whom?

What risk assessments, if any, were taken prior to making this decision? What was the impact, if any, in removing the maximum temperature variant?

A. I cannot comment as this is not infection control and I was not involved.

10. Please describe and name the people who were involved, the sign off process involving RDD, and your knowledge and understanding of the purpose of the scale drawings and designs, how the technical requirements for the rooms were managed, including your role and involvement.

A. As I described previously my sign off input is limited, however I would expect the technical groups would have signed off RDD in a similar manner and Franes Wrath perhaps would have overseen this for the project team.

11. Describe the IPC involvement in the design of Wards 2A and 2B, who was involved and who signed off the final design and when.

A. Apart from the early basic room contents I was not part of any further review., so cannot comment.

a) What would you have expected IPC involvement in the design of Wards 2A and 2B to have been?

A. From the perspective of an infection control nurse, then I would expect what I have previously described to be the level of involvement. From the technical side of the design, I would expect the microbiologist (Professor Willimas or his deputy) to ensure the ventilation and water systems were safe. Also to involve experts in the field if necessary and liaise with the clinicians.

b) Who was the deputy of Professor Williams for the new hospital?

A. I was never told officially but heard it was Dr Teresa Inkster.

12. What concerns, if any, did you have regarding the final design specification of Wards 2A and 2B, and what action, if any, did you take in respect of these concerns?

A. I cannot comment as I left in 2012 before the building was complete, therefore was unaware of issues.

a) With hindsight, what concerns would you have had in respect of the final design specification of Wards 2A and 2B?

A. I am not qualified to comment on this and the guidance has changed since the hospital was built. Personally, the minimum I would expect is that the isolation rooms met specifications of the guidance at the time.

b) You state that you *"left in 2012"* and at Q2 you states that *"joined the new build project team in April 2012"*. Please can you confirm the position. If you did join the team in 2012 please can confirm what concerns you had, if any, regarding the final design specification of Wards 2A and 2B, and what action, if any, did you take in respect of these concerns?

A. I was part of the project team April 2010 to April 2012. I was never aware of any concerns in regard to 2A and 2B.

13. Describe the purpose of the ABD sheets and the relevance of ADB in respect of the intended patient cohorts. Who was responsible for sign-off of the ABD sheets? From the point of signing off the ADB sheets when did it become apparent that the ventilation specification of Wards 2A and 2B did not meet the requirements of SHTM/ HTM? What action, if any, did you take in respect of this?

A. I cannot comment as I was not involved or qualified and this would have been the responsibility of the microbiologist.

14. What concerns, if any, did you have regarding isolation rooms and compliance with SHTM/HTM? What action, if any, did you take in respect of any such concerns?

A. Ventilation was not my remit. I had left the project team and unaware of issues. Therefore, cannot comment.

a) The Inquiry has reviewed the RDS in excel format and note there is an entry under 'Design Notes' relating to Ward 2A isolation rooms; the entry states: *WARNING NOTICE: This room is based on a theoretical design model; which has not been validated (see paragraph 1.8 of HBN 4 Supplement 1).*

Specialist advice should be sought on its design. The lamp repeat call from the bedroom is situated over the door outside the room.

(i) Was this note entered on the RDS? If so, why and by whom?

A. I do not know on both counts.

(ii) What specialist advice was sought relating to the design of these rooms?

A. I do not know.

(iii) What was the final agreed design for isolation rooms and who approved this?

A. I do not know who approved this.

(iv) Who would you have expected, from an infection control perspective, to have approved the final design for isolation rooms?

A. The infection control doctor for the project and the clinicians.

b) The Inquiry has reviewed the RDS in excel format and note there is an entry under 'Design Notes' in the RDS which refers to HBN 4 Supplement 1, paragraph 1.10, and states:

"EXCLUSIONS: This supplement does not describe the specialist facilities required in infectious disease units or on wards where severely immuno-compromised patients are nursed. Guidance for these facilities will follow in a further supplement to HBN 4."

Were you aware of the exclusion in para 1.10? If so, what action was taken? What was the impact, if any, of the exclusion?

A. No

c) Who would you have expected to have been aware of this exclusions on the RDS?

A. The Board, the project director, the project manager for the hospitals, the clinicians that would be working in these areas, the local estates department and the infection control manager.

d) What ceiling types were specified and approved for use in isolation rooms? Who from the GGC Project Team approved this? Describe your involvement,

if any? What was the impact, if any, of the choice of ceiling tiles? What concerns, if any did you have regarding the choice of ceiling tiles?

A. I did not have any involvement.

e) What are the practical implications of using suspended ceilings with ceiling tiles in single patient bedroom on infection control risk and practice?

A. Suspended ceiling tiles make it easier for maintenance access, however, in a special isolation room with controlled ventilation, then solid ceilings are preferred to stop any breaks in the ceiling interfering with air flow and air changes.

15. The Inquiry is aware that in respect of a derogation being agreed in respect of the ventilation system and the requirement to achieve ACH in compliance with SHTM. Where you aware of this at the project phase?

A. No, I was not.

a) If not, when did you become aware? In hindsight, should you not have been aware of this at the time?

A. My understanding is that derogations require to be signed off by the Board and clinical team.

b) What concerns, if any, at the project phase did you have in respect of the ventilation system?

A. Not involved so cannot comment.

c) What the basis of your understanding that derogations require to be signed off by the Board and clinical team?

A. I cannot say exactly what was required to be signed off regarding the QEUH or RHC. My understanding is that derogations require to be signed off if for any reason the guidance cannot be met and if the Board and clinical teams are happy to accept any risk involved.

d) From the perspective of an ICN what would be the practical implications on infection control risk and practice if a single patient bedroom housing an

immunocompromised patient did not have adequate ventilation to remove contaminants such as *Aspergillus spp* spores or to prevent such contaminants from entering the room?

A. It may possibly lead to an increased risk of the patient developing an infection

e) From the perspective of an ICN what would be the practical implications on infection control risk and practice if a single patient bedroom housing a patient with an infectious disease did not have adequate ventilation to prevent their infection from spreading out of the room?

A. Depending on the pathogen, the infection control practice of staff and visitors and the cleanliness of the area, this could lead to other patients being put at risk.

16. Describe your involvement, if any, in respect of the decision to use Horne taps.

A. I was asked by my immediate boss Fiona McCluskey to telephone around neighbouring health boards to see if any of them had installed the Horne tap. I spoke with Richard Fox from NHS Lanarkshire who advised they had used them without any issues.

a) What concerns, if any, did you have regarding the use of Horne taps?

A. I was reassured with Richard Fox's information and at the time there was a Horne tap in use in Yorkhill hospital, I cannot remember which ward.

b) What risk assessments were carried out in respect of the use of Horne taps?

A. I was advised that the technical team were speaking with Health Protection Scotland about using Horne taps.

c) Who was involved in, and who signed off the use of Horne taps?

A. I do not know.

d) Did you attend the meeting regarding the use of Horne taps in 2014? If so, why was the decision made to proceed with Horne taps?

A. No, I had left the project team 2 years previous and cannot comment on the meeting.

e) Were you aware of the requirement to implement a regular maintenance system following the decision to proceed to use Horne taps?

A. Any water system should be maintained regardless of the supplier. The only point to mention regarding the Horne tap is that Richard Fox in NHS Lanarkshire said they had adopted them as the TMV (thermal mixing valve) could be replaced without having to remove the panel at the back of the sink.

f) When did you speak with Richard Fox from NHS Lanarkshire?

A. I cannot remember exactly when I spoke with Richard Fox.

g) Please refer to **Bundle 27, Volume 8, Document 3 at page 41** this suggests that you approved an aspect of the project from an IPC perspective in July 2014 (described as “Sanitary Waste Bins vs Clinical Bins in en-suites”) and that you were on the project was around at the time of the meeting on 5 June 2014. Please confirm whether the Inquiry’s understanding is correct. If not, please explain why not.

A. As mentioned above, this was not my sole decision and I was not part of the project team at the time. Sanitary waste bins vs clinical bins – this was not a unique issue for the QEUH or RHC. When this was highlighted by facilities management, it was because all other hospitals in Scotland were looking at a safe and more cost-efficient way of dealing with the waste. IPCT made the decision not myself alone and was not project team directed.

h) Please confirm how you knew that NHS Lanarkshire had the same type of Horne TMV installed in the same way?

A. I can only confirm that Richard Fox confirmed NHS Lanarkshire had the Horne Taps and reported no issues. I cannot comment on how they were installed.

Bone Marrow Transplant Unit and Ward 4C

17. The Inquiry understands that the BMT service was to transfer from the Beatson following a change order request, issued by Jonathan Best in July 2013.

a) Following the Change order request, what actions did the GGC Project Team take to confirm the technical and environment requirements (in particular air change rates, pressure regimes and HEPA and air permeability requirements) for the BMT Unit?

A. Again I cannot comment as I left the Project Team in April 2012.

b) What design review meetings were held to confirm with the user groups to confirm the requirements for the BMT Unit.

A. I was not involved.

c) Was the design for the BMT Unit subject to the RDD process

A. I cannot comment, was not involved.

d) If so, who was involved in the RDD process for the BMT Unit

A. I cannot comment, was not involved.

e) What feedback regarding Air Change Rates and pressure differentials was received from Multiplex regarding the Change Order?

A. I cannot comment, was not involved.

f) Prior to handover did the BMT unit at QEUH/ RHC meet the requirements and specifications of the intended patient cohort and comply with SHTM guidance? If not, why not, and if not, how was this area of the hospital accepted at handover? Who from infection control was responsible for singing off on handover?

A. I cannot comment as I was not involved in any handover.

g) In his oral evidence during the hearings commencing 20 August 2024 Professor Craig Williams told the Inquiry that you were the infection control nurse leading on the projects and that you were saying that the hospital had been built and was compliant with the appropriate legislation. Do you agree with this statement? If so, how did you satisfy yourself that compliance had been achieved? With the benefit of hindsight do you now agree this this to be the case?

A. I disagree with Professor William's statement. I had a limited input very early on with the project team as described earlier in the 1:50 stage and certainly no technical involvement. My involvement although limited was compliant with the guidance available at the time, but that was only for what I have described earlier.

h) What is your understanding of who was responsible from infection control in respect of ensuring technical compliance with the guidance?

A. The infection control doctor for the project team or his deputy. Also perhaps Frances Wrath who was the technical lead for the project team.

i) Please refer to **Bundle 27, Volume 8, Document 3 at page 41**. You have suggested that you were in post in some form until July 2014. What was your involvement in each year from 2010 to 2014?

A. No April 2010 to April 2012. I have explained the anomalies in the clarification requested in question 2A above.

j) You describe your role as being limited to whether the hospital was *"compliant with the guidance available at the time"*. Could you have carried out this role if you did not understand or had not read HTM 03-01 (Part A), SHTM 04-01 (Part A)?

A. Much of what I did was from experience and general good infection control principles. As I mentioned before many of these guidance documents have suggested layouts for hospital rooms.

k) What the process was when a technical issue arose that required you to seek the advice or involvement of *"the infection control doctor for the project team or his deputy"* and also how you would know when a technical issue that you needed to seek advice from Professor Williams had arisen?

A. During my time with the project team, I did not have any technical issues highlighted to me as the hospitals were in the process of being built in 2012. In general, a technical issue is usually highlighted by maintenance technicians or technicians that have responded to a break down.

18. In respect of the BMT unit describe your involvement, in the decision to return the BMT unit to the Beatson in July 2015? Please include details of the escalation process and whether any external advice and support was sought and why the decision was taken.

A. This was not myself but perhaps my lead nurse at the time Clare Mitchell, although I'm unsure what if any involvement Clare had.

19. The Inquiry is aware that the change order not only confirmed that the Bone Marrow Transplant (BMT) service would transfer to Ward 4B in the QEUH but also that the haematology patients that were originally planned to accommodate Ward 4B would move to Ward 4C.

a) Describe how this change was communicated to the project team and Multiplex and how this change was captured in the design and specification documentation.

A. I do not know.

b) Prior to handover did the BMT unit at QEUH/ RHC meet the requirements and specifications of the intended patient cohort and comply with SHTM guidance? If not, why not, and if not, how was this area of the hospital accepted at handover? Who from infection control was responsible for singing off on handover?

A. I do not know as I was not involved.

Handover

20. Commissioning and validation:

a) Describe what commissioning of the water and ventilation system took place prior to handover, and your involvement, if any.

A. I do not know and was not involved.

b) Who was responsible for ensuring that commissioning of the water and ventilation system was carried out, and who signed off that it had been carried out? What concerns, if any, did you have regarding commissioning and validation being carried out prior to handover?

A. I do not know and was not involved.

c) The Inquiry understands that NHS GCC decided to forgo the requirement to have an independent commissioning engineer. Who made this decision? What was the impact, if any, of this decision? In hindsight, do you think that it was the correct decision?

A. I do not know. I am not qualified to comment on this question.

d) The Inquiry understand that no validation was carried out in respect of the ventilation system. When did you become aware of this? How did handover come to be accepted without the ventilation system being validated? Who was responsible for this and who signed off on this?

A. I do not know how this happened or who was responsible and only became aware when the inquiry started.

21. Who oversaw contractual compliance? Who was responsible for ensuring that the paperwork was produced to confirm contractual compliance? What action, if any, did you take to ensure that paperwork was in place to ensure contractual compliance? Was validation of the ventilation system a contractual requirement? If so, who signed off on contractual compliance given the lack of validation?

A. I believe it was Capita? I cannot say for certain. Sorry I cannot help with any of these questions.

22. **Please see Bundle 12, page 936 and 937.** This is an email from Frances Wrath to you dated 5 May 2015. Frances Wrath states *'All areas have been commissioned in line with contract ER's and all legislative requirements.'*

a) What documentation, if any, did you have sight of in order to accept this statement at the time?

A. No, I did not have sight of any documentation. I was asked by the Infection Control Committee which included Tom Walsh and Sandra McNamee, now Devine to get assurance on the commissioning and received the email in the bundle from Frances Wrath. I am not qualified to review commissioning documents.

b) At the time, how were you satisfied that all areas had been commissioned in line with contact ER's?

A. I cannot comment as I was not involved.

c) Please explain how 'all areas had been commissioned in line with the contract ER's and legislative requirements' give the agreed ventilation derogation which provided for achieving air changes below the required level as provided for in SHTM 03-01 guidance at the time?

A. I cannot comment as I was not involved

d) With the benefit of hindsight do you consider that 'all areas had been commissioned in line with the contract ER's and legislative requirements'? If so, why, and if not, why not?

A. I cannot comment as I was not involved

e) Describe your role in the lead up to accepting handover. What action, if any, did you take to ensure that the wards within QEUH/RHC met the guidance requirements of SHTM.

A. I left the project team in April 2012 and was not involved in the handover.

f) How were you assured that the wards met the requirements of the specific patient cohorts?

A. I cannot comment as I was not involved

g) In her evidence Dr Peters tells us that you have her a tour of the QEUH/RHC campus in around late 2014. Dr Peters told the Inquiry that she noticed that the sinks had a greenish puddle where the drain was, and that she asked about this, and you assured her that the sinks were compliant. How were you assured that the sinks were compliant? What action, if any, did you take follow Dr Peters comments? In hindsight, what action, if any, should you have taken?

A. I was on a tour with other infection control colleagues and have a vague memory of this. My action would have been to highlight what was noticed by Dr Peters during the tour to the project team. I informed Dr Peters that the group responsible for the sinks would have had access to SHTM 64 and been guided by Professor Williams. Therefore if this was followed then the sinks were compliant.

h) The Inquiry is aware that the ventilation system in respect of Wards 2A and 2B did not meet the requirements of SHTM – knowledge and awareness/ involvement in derogation. Did you have any concerns at the time? If so, please describe. The Inquiry is aware that Ward 2A was handed over without HEPA terminals being in place in wards, how did sign off come to take place without these being in place? Who signed off the RHC as ready for handover, without HEPA being in place?

A. I was not involved in ventilation design or sign off.

i) What concerns did you have when you became aware that Wards 2A had been handed over without any HEPA terminals being in place? Who would have been responsible for signing off the ward?

A. When I became aware of this my concerns were for the patients. I also could not understand how this would not have been picked up at the time of validation/verification and commissioning. I would expect the technical experts responsible for the build would have done a hand over and sign off with the Board/s technical experts.

j) The Inquiry understands that there was no validation of the ventilation system prior to handover. Who was responsible for ensuring that this was in place?

Why was validation not carried out? When did you become aware that it had not been carried out and what action did you take in respect of validation having not been carried out? What was the consequence of validation not having been carried out? Should the hospital have opened without the ventilation system having been validated?

A. I cannot answer any of these questions. I was not made aware of any issues.

k) Describe your knowledge and involvement, if any, in the PMI allowing Multiplex's role as Independent Commissioning Engineer. What was the impact of this?

A. I was not involved and not qualified to comment.

l) At handover, had a preoccupation L8 risk assessment been carried out? Who was responsible for ensuring that this was in place prior to patient migration? were you aware of a preoccupation L8 assessment having been carried out? Who instructed it? When did you become aware? Why did you not raise it as a concern that you had no seen this prior to patient migration, was this not within your role as Project Manager of RHC?

A. I cannot answer this and I was not project manager for RHC it was Mhairi McLeod.

m) Who was responsible for providing asset tagging. Why was there no asset tagging who decided to proceed without it?

A. I do not know and this is not infection control's remit.

n) What, if any, testing and maintenance protocols and regimes were in place at handover? Who was responsible for putting these in place? If they were not in place, why not, and what action was taken and by whom to address this?

A. Again, I cannot help. I had no involvement with anything to do with the handover.

o) Please can you clarify in light of your response to clarifications at Q2 and Q17(a).

A. I have explained the anomalies above regarding the dates.

p) Please confirm what job you were doing when you were on the tour with other infection control colleagues in late 2014.

A. I was a band 7 ICN working as part of the adult infection prevention and control, south sector.

23. Have you ever been to the old Schiehallion Unit at Yorkhill?

A. Yes, before the QEUH was built the paediatric team and adult team amalgamated at what was the old southern hospital. All the ICNs would take it in turn to respond to patient referrals at Yorkhill

a) Have you ever been to the Adult BMT ward at the Beatson?

A. Yes. The ICNs in the south sector took it in turns to cover patient referrals at the Beatson.

b) Are you aware of whether either, both or neither of these wards had a two door 'airlock' style lobby at the entrance to the ward like the refitted Ward 2A RHC now does.

A. Yes both units did have an airlock entrance.

Declaration

24. 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.

The witness was provided the following Scottish Hospital Inquiry documents for reference when they completed their questionnaire statement.

Appendix A

A47069198 – Bundle 12 – Estates Communications

A50039563 – Bundle 27 – Miscellaneous Documents - Volume 8

The witness provided the following documents to the Scottish Hospital Inquiry for reference when they completed their questionnaire statement.

Appendix B

A51785688 – Jackie Barmanroy - CV

Curriculum Vitae

Jacqueline Margaret Barmanroy

Address:

[redacted]

Telephone:

Home: [redacted]

Mobile: [redacted]

E-mail: [redacted]

D.O.B. [redacted]

Age: [redacted]

Marital Status: [redacted]

General education.

Woodmill High School, Dunfermline. [redacted]

GRADE	SUBJECT	YEAR	RESULT
'O' Level	English	1980	A
	History		A
	Biology		A
	Chemistry		A
	German		A
	Mathematics		B

	Arithmetic		B
	Physics		C
Higher	English	1981	B
	History		B
	Biology		B
	Chemistry		C
	German		B

I left school at 18yrs after serving as Head Girl for a year.

Professional Training

1982-1985 Attained RGN qualification at Edinburgh Royal Infirmary.

Further Professional Qualifications

1991	The Institute of Counselling	Certificate in Nurse Counselling Skills
1991-1993	South bank University London.	Diploma in Professional Studies in Nursing.
1995	Caithness and Sutherland NHS Trust.	Appraisal and PDP Skills.
1995	Centre for Medical Education Medical School, Dundee.	Audit Module.
1995-1998	South bank University London.	BSc(Hons)Nursing.(Included Module in Management).
1998	Scottish Qualifications Authority.	Computer Application Packages.
1999	University of Stirling.	Nursing Students Supervisors Course.
2008	University of Highlands and Islands.	MSc Infection Control.

2009	Institute of Leadership & Management	Level 3 Introductory Certificate, First Line Management.

Employment History

December 1985 – October 1986

I worked as a staff nurse in the renal dialysis unit of the renal unit in Edinburgh Royal Infirmary. The work was over 3 areas; outpatient renal dialysis, high dependency and an investigations unit, which also taught patients CAPD.

October 1986 – January 2000

I worked in a twin theatre suite in Caithness General Hospital. I progressed from staff nurse to sister, rotating between anaesthetics, scrubbing and recovery. As a sister I was responsible for a team of 14 nursing staff of various grades. I particularly enjoyed the gynaecological surgery. It was in theatre that my interest in infection control developed. This was recognised by the Director of Nursing who in conjunction with the Infection Control Team at Raigmore hospital created the dual post of theatre sister and infection control nurse. My salary was split and I was paid 'F' Grade for theatres and 'G' grade for infection control.

Achievements during this employment:

- Helped to develop infertility services at Caithness General and set up a counselling service for patients.
- Became an infection control nurse for Caithness and Sutherland covering primary and acute care settings, which covered a population of 40,000.
- Taught as an open learning tutor for the pre-nursing course at Thurso College.
- I was awarded 3 discretionary points in 2000 for my part in developing infection control and infertility services in Caithness and Sutherland.

- Presented with an academic achievement award by Caithness and Sutherland Trust in 1999.
- Undertook training in endoscopic surgery.
- Completed the infection control link nurse training.

January 2000 – July 2001

Applied to work full time in infection control from Caithness and Sutherland and was successful in obtaining an 'H' grade post at Raigmore Hospital. Working in Highland Acute Trust meant providing a service for 9,000 staff. A third of the 9,000 staff were working in Raigmore. During this time I worked as an acting 'I' grade to allow my colleague time off to develop the MSc in infection control at the university of Highlands and Islands.

Achievements during this employment

- Worked on committees at Health Board and Trust level particularly in regard to SHTM 2010 and SHTM 2030.
- Wrote and implemented a new hand hygiene policy for the Trust.
- Reviewed and updated the infection control manual.
- Developed and taught the link nurse programme.

July 2001 – April 2002

At Fife Acute NHS Trust I worked as a senior ICN.

Achievements during this employment

- Successfully obtained a place on the MSc programme.
- Participated in the national decontamination audit.
- I was invited to sit on the national steering group for HAI surveillance at SCIEH.
- Undertook training in general risk assessment in occupational health and safety.

April 2002 – April 2010.

I have been working as a senior infection control nurse at Stobhill hospital. In July 2006 I was asked to take up position as interim 'I' Grade ICN based for Glasgow West hospitals, based at Gartnaval General Hospital. This involved strategic clinical leadership. During this time, I also helped provide infection control cover for the dental hospital.
I am currently working as band 7 senior nurse in infection control based at Glasgow Royal Infirmary. I am also responsible for marking cleanliness champions' folders for both nurses and dental students at Glasgow dental hospital. When requested I provide lectures at Glasgow and Caledonian University for student nurses. I regularly work with the capital planning project team giving infection control advice during refurbishment work.

Achievements during this employment

- Worked with the project team on the new Stobhill ACH. I was involved from the user group stage to sign off.
- Worked on research with laboratory staff on the association of antibiotics and *C. difficile*.
- Mentored the first complete team of domestic assistants (oral health directorate) to complete the Cleanliness Champions programme.

April 2010 – Present.

- Take the lead and provide the Project Team with expert professional advice in relation to refurbishment of clinical environments and design of new build accommodation with regards to HAI.
- Provide a research environment.
- Provide professional leadership and vision to the HAI initiatives to ensure compliance with national policy.

Character profile.

- I am a hardworking, conscientious team player.

- I enjoy a challenge and as a team leader encourage colleagues to fulfil their potentials.
- Having previously been an interim lead nurse I am used to meeting deadlines and can work under pressure. This was useful during work on the Stobhill ACH.
- I have good interpersonal skills, patience and a good sense of humour.
- I have a lot of experience in working with various disciplines and have been told that I immediately put people at their ease and am easy to talk to.
- I especially enjoy teaching and facilitating ward staff to work through infection control issues, which not only prevents the spoon–feeding syndrome but provides them with necessary experience and competencies.
- My counselling skills have augmented my listening ability and assertiveness.
- During my time in Caithness I worked as a Special Constable with the Northern Constabulary. This was a great life experience pursuit, which certainly taught me a lot about people.

Leadership

- As a team leader I enjoy developing colleagues to fulfil their potential.
- With good interpersonal skills, patience and a sense of humour I find it easy to develop productive working relationships with other disciplines. My leadership skills started early as I left school after serving my last year as head girl.
- I have served on many committees locally and nationally. One example was the national steering group for HAI surveillance with SCIEH, now HPS. Networking with colleagues from other health boards empowered me to lead team colleagues and convey to multi-disciplinary teams the goals of these committees, all of which aim to improve patient care.
- I attended a short leadership course organised by the Infection Prevention Society. While I was an interim lead nurse I also studied with the Institute of Leadership and Management at level 3. My goal was to improve my skills in order to lead the team in a motivating manner.
- I regularly take part in corporate inspections in Glasgow & Clyde to provide leadership in order to prepare wards and departments for HEI inspections.

- Completed ‘Ready To Lead’ and the ILM level 3 certificate in leadership and management.

Clinical Practice

- I am a member of the infection prevention and control person centred care group. Since the group began there have been 2 posters created and I am a named author on both posters – one on the feelings of the patient in isolation. This was done to see how care could be improved for this group of patients. The second poster is concerned with how the ward staff view the infection control service and how relations can be improved. The group were keen to be more supportive to staff.
- Contributed to SAB surveillance, changes in policy and helped to develop the Clinical Review Tool that is sent to the medical team of patients who have a healthcare acquired bacteraemia.
- Commenced PVC and CVC ward sweeps that are undertaken as soon as possible after a bacteraemia has been investigated and the source is deemed to be a PVC or CVC. The information gathered from these sweeps is given to the ward senior charge nurse and lead nurse to help improve practice.
- Monitoring the levels of C.diff whilst an interim lead nurse encouraged me to instigate project work to help reduce the levels of C.diff. This started with working with staff at ward level and progressed to a group being convened that included a consultant microbiologist, pharmacist and consultant infectious diseases physician.
- As part of service development I developed an infertility service in Caithness and Sutherland. Developed a template for the medical notes in relation to paediatric patients with RSV. This helped with a more lean methodology.

Facilitation of Learning

- Provide training for the facilities directorate – this was board wide. I analysed their training needs by liaising with the different site managers. From this I devised a training programme which I delivered and evaluated for future programmes.

- Taught as an open learning tutor for the pre-nursing course at Thurso College.
- I was awarded 3 discretionary points in 2000 for my part in developing infection control and infertility services in Caithness and Sutherland.
- I was presented with an academic achievement award by Caithness and Sutherland Trust in 1999.
- I have in the past lectured nurse students for both Glasgow University and Caledonian University.

Research and Service Development

- Throughout my 17 years in infection prevention and control I have been involved in policy development and audit. This includes reviewing audit tools, the audit process and audit platform.

- Became the first infection control nurse for Caithness and Sutherland covering both primary and acute settings, which encompassed a population of 40,000.

- Helped to develop infertility services at Caithness General and set up a counselling service for patients.
- Used my master's degree project to reduce bacteraemia rates in care of the elderly wards.
- Worked with the project team on the new Stobhill ambulatory care hospital.
- Worked as a nurse consultant providing infection control input for the new south Glasgow hospitals, adults and children. This included using national polices health facilities guidance and HAI standards. This was a strategic post communicating with the health board, directorate heads, heads of nursing and the board infection control service.
- Worked on a research project with laboratory staff on the association of antibiotics and C. difficile. This work was written up and presented in a paper and poster at ECCMID in Barcelona in 2008 -
  "An investigation into antibiotic susceptibility and ribotype profiles among community acquired and hospital acquired Clostridium difficile strains isolated in a university teaching hospital laboratory"

General Points

- A lot of infection prevention and control is diplomacy. This was certainly tested when I served for 2 years as a special constable in the Northern Constabulary.

Publications

- Transmission of Salmonella enteritidis following endoscopic retrograde cholangiopancreatography due to inadequate endoscope decontamination accepted for publication in the American Journal of Microbiology.
- An investigation into antibiotic susceptibility and ribotype profiles among community acquired and hospital acquired Clostridium difficile strains isolated in a university teaching hospital laboratory.

Hobbies

I enjoy good food and drink, going to the cinema and spending time with my family.