Scottish Hospitals Inquiry

Closing Statement by National Services Scotland

Hearing Diet: 12 June 2023 to 23 June 2023

1. In this Closing Statement, National Services Scotland ("NSS") will respond to the Closing Statement by Counsel to the Inquiry dated 21 July 2023 ("the Closing Statement"). It will also respond to the draft Closing Statements by other Core Participants which were circulated on 4 August 2023.

2. NSS will be happy to provide further input and clarification as required.

Closing Statement by Counsel to the Inquiry

CHAPTER 3: Infections and mitigation of infection risk

3. The reporting of particular incidents to NSS is set out in the Chronology provided in NSS's response to PPP5. The Chronology lists incidents and outbreaks reported to ARHAI Scotland by GGC between 2015 and 2021. NSS has also provided timelines for particular incidents, and responses to Section 21 requests in relation to water and ventilation.

4. Paragraph 110 notes that the precise difference between the classification "Hospital Acquired Infection" and "Healthcare Associated Infection" "was not always stated with precision". NSS refers to chapter 3 of the National Infection Prevention and Control Manual (NIPCM) for a list of case definitions to be applied to incidents and/or outbreaks. The Incident Management Team (IMT) must consider the pathogen, patient journey and timescale under investigation when establishing a 'specified time period' applicable to each of the case definitions. An example of a case definition commonly used is as follows; "two or more linked cases with the same infectious agent associated with the same healthcare setting over a specified time period". Further case definitions can be found in chapter 3 section 3.1 of the NIPCM: National Infection Prevention and Control Manual: Chapter 3 - Healthcare Infection Incidents, Outbreaks and Data Exceedance (scot.nhs.uk)

5. Paragraph 121 refers to the need for a PAG. The need for a PAG is determined by the case definitions described in chapter 3 of the NIPCM and above in paragraph 4. Where a case definition is met, a PAG should be convened. Local boards may choose to convene a PAG at an earlier stage if there are early indications to be concerned prior to a case definition being met. Where the PAG determines the need for an IMT to be established, the IMT will then refine the case definition for that particular incident going forward taking account of the patient/staff involved, the pathogen or symptoms, the place and the time limit.

6. Paragraphs 122 to 125 refer to Incident Management Teams. Chapter 3 of the NIPCM provides more information on the incident management process within care settings.

7. Paragraph 125 notes Professor Gibson's note of caution regarding IMT minutes not always capturing discussions exactly as they happened. NSS further notes that on occasion HPS had to ask that IMT minutes be changed to accurately reflect discussions [see the email from Annette Rankin dated 4 October 2019, and the email from Laura Imrie dated 11 November 2019]. HPS also requested that IMT meetings be recorded to ensure the accuracy of minutes [see the email from Annette Rankin dated 4 October 2019]. To the best of NSS's knowledge, IMT meetings continued to be unrecorded.

8. Paragraph 140 notes "Clinicians were, however, consistent in their understanding that BMT patients should be cared for in rooms which provided specialist ventilation in at least two respects: (i) High Efficiency Particulate Air (HEPA) filtration; and (ii) positive pressure. HEPA filtration provides a high degree of filtration to air entering the filtered area. A positive pressure cascade is intended to allow air to exit a patient room but not to enter it." The last sentence is not strictly accurate, as make up air will still be required within the patient room. NSS respectfully suggests that it may be useful to refer to the formulation used by Professor Humphreys in his report dated 1 April 2022 at para. 4.2.2:

   "In contrast, positive pressure ventilation is used for protecting very vulnerable patients (protective isolation) such as those on cancer chemotherapy or a patient following organ transplantation where air from their room moves to other areas as the pressure there is higher than in surrounding clinical areas."

CHAPTER 4: The history of concern

9. In paragraph 152 a number of questions are posed to core participants. NSS's answers are set out below:-

1. Is it accepted that the narrative set out below provides a materially accurate summary of the evidence provided to the Inquiry – whether that evidence be in witness or in documentary form – about the history of concern?

Yes.

2. Does the narrative provide, for the period it covers, a materially accurate account of contemporaneous expressions or examples of concern about the hospital environment and about infection link or risk?

The narrative is accurate but it is non-exhaustive. NSS has previously provided a list of the infection-related incidents reported to HPS/ARHAI, and some are not included in the narrative.

3. Insofar as any aspect of the narrative is said not to have been part of the history of concern at the time what is the basis for that challenge?

Not applicable.

4. What if any additional expressions or examples of concerns ought to be included in the narrative and considered for further investigation?

Reference is made to answer 2. NSS takes no view on whether any of the infection-related incidents not presently included in the narrative should be.

5. Does the narrative and the timeline set out a reasonably comprehensive history of the response by GGC and other organisations to concerns that the built hospital environment gave rise to a risk of infection on the part of vulnerable patients?

Reference is made to answer 2. NSS takes no view on whether any of the infection-related incidents and responses not presently included in the narrative should be.

6. Should consideration be given to other measures; and if so which ones?

NSS is not clear what the reference to "other measures" means.

7. At any point since patients arrived in the QEUH/RHC, has the water system given rise to an increased avoidable risk of patients being exposed to infections?

Based on the reports and IMT discussions in which NSS's HPS took part, it took the view that avoidable risks had been identified with regards to the water and ventilation systems. Controls were implemented to address these risks. NSS has not received any alternative hypothesis submitted as part of an IMT explaining the patient infections identified.

7a. Is it accepted that the 2015 DMA Report identified deficiencies in the water system that without remediation had the potential to give rise to such a risk?

Yes.

7b. Were these deficiencies addressed prior to the report being "discovered" around June/July 2018?

No comment

7c. Did the events of March/April 2018 identify widespread contamination of the water supply throughout the RHC and QEUH per the evidence of Professor Gibson and the Full IMT Report of 13 April 2018?

That is NSS's understanding from reports received and IMT investigations and actions. In particular, reference is made to paras. 62 to 72 of NSS's response to the section 21 request in relation to water.

7d. Did that contamination have the potential to be harmful to vulnerable patients coming into contact with untreated or unfiltered water?

Yes.

8. At any point since patients arrived in the QEUH/RHC, has the ventilation system given rise to an increased avoidable risk of patients being exposed to infections?

Yes, based on the IMT findings, discussions, and the reports that NSS has had sight of. In particular, reference is made to NSS's response to the section 21 request in relation to ventilation.

8a. Does the Innovated Designs Report of 24 October 2018 identify any features of the ventilation system on Ward 2A that could have increased the risk of infection to patients?

No comment.

8b. Did the features of the ventilation system discussed in the SBAR of 12 November 2018 present an increased risk of infection to patients?

Yes. The SBAR background section states that there is a "risk of cross contamination into the patient environment".

9. Finally, for GGC, NSS and the Scottish Government specifically: which if any of the infections identified in the history of concern, are accepted as having been caused by an aspect of the built hospital environment; which aspect of the environment?

It is often not possible to be absolute in determining the cause of an outbreak and the means by which transmission took place. However, the risks identified with both the water and ventilation systems, alongside the unusual types of pathogens identified within a single patient cohort, would indicate a valid and justified position of assuming an association between the environment (water and ventilation systems) and some of the clinical patient cases.

9a. To what extent does the answer to this question depend upon the availability and use of genomic investigation?

NSS do not have any knowledge of the methods used, results from, or findings from, the genomic investigations undertaken by GGC.

9b. Insofar as it is being relied upon, is genomic investigation being used as a means for excluding or for confirming causal links to the environment?

By way of context, NSS notes that genomic sequencing is only a small part of outbreak investigations, and is a field still very much in development. Due to the evolving nature of pathogens and the passage of time, genomic sequencing cannot usually be used to rule out a causal link. However, a sequencing match between a clinical patient sample and an environmental sample can offer assurance with a high degree of certainty that there is a direct link between the two.

9c. Does the utility of genomic investigation depend upon the availability of suitable environmental testing?

Yes.

9d. In what way and over what period did water testing within the QEUH and RHC evolve (as regards regularity, location and nature of pathogens considered)?

NSS are unable to accurately provide details of sampling undertaken and methods used by GGC. However, requests were made for sampling to be undertaken at various points throughout the history of concern. Reference is made to NSS's response to the section 21 request regarding water at paras. 14, 15, 17, 18, 47 and 52.

9e. Who sat on the Cryptococcus sub-group and did it come to an agreed view on each of the hypotheses under consideration?

Annette Rankin, Susie Dodd and Ian Storrar from NSS sat on the sub-group. The members of the sub-group were unable to agree on a final report. ARHAI/HFS did not support the findings by GGC. Instead, GGC issued the report as a GGC report rather than a report by the whole sub-group.

10. Paragraph 183 describes concerns arising in 2015 regarding ward 4B. NSS first became involved in relation to ward 4B when the Infection Control Doctor sought to confirm that the environment was appropriate for adult bone-marrow transplant patients on 31July 2015. NSS's response to the section 21 request in relation to ventilation paragraph 9 contains details of this.

11. Regarding paragraph 188, NSS notes that an IMT held on 5 August 2016 in relation to paediatric BMT (ward 2A) raised concerns regarding the environment. There are multiple concerns noted in the minute including a tear in the ventilation duct work, dust in the environment, and condensation dripping from the chilled beams.

12. Paragraph 205 refers to HPS's report of August 2018 reporting that HPS "understood no contemporaneous environmental or water sampling to have been done relative to the September 2017 case." The August 2018 report was an update on the original May 2018

report, which was appended to it. The reference to the lack of environmental or water testing is within the May 2018 report.

13. Paragraph 219 refers to Dr Inkster stating that concerns discussed on 6 March 2018 had been "reported to the highest level in GGC and HPS over 2 years ago". Paragraph 220 states that Professor Gibson and Dr Murphy "each confirmed in their evidence that they had been dissatisfied with the apparent lack of response from senior management within GGC and those external to GGC to whom the concerns had been reported." For the avoidance of any doubt, HPS responded to concerns raised by Dr Inkster to HPS via email in 2016.

14. Paragraph 273 states that "One thing that could be usefully clarified at this point is the question of who sat on the sub-group and whether the sub-group was able to reach an agreed conclusion: see the timeline." NSS's members of the sub-group were Annette Rankin, Ian Storrar, and Susie Dodd. Laura Imrie later became involved by reviewing the final report and communicating with GGC about the report. Reference is made to NSS's response to PPP 5 at 6.5.2: "HPS and HFS belonged to this Sub-Group, but the members of the Sub-Group were unable to agree on a final report. ARHAI/HFS did not support the findings by GGC. Instead, NHS GGC issued a report as a GGC report and not as a Sub-Group report."

15. Paragraph 314 refers to the requirement for "real time root cause analysis," and NSS notes that this was requested by the Chief Nursing Officer.

CHAPTER 6: Communication

16. Paragraph 426 refers to the duty of candour. NSS notes that since January 2022 this duty has been expressly referred to within chapter 3 of the NIPCM:

> *"The IMT must ensure affected patients, and where appropriate their next of kin, have been informed of any actual or potential harm as a result of the HAI. Duty of Candour must be considered at each IMT."*

17. In paragraph 456, questions are put to core participants. The only question that NSS can, in part, answer is (1): "Which organisations had responsibility for directing or had input into communications during the periods covered in the above narrative?" NSS was responsible for communicating with the Scottish Government, and between the

Scottish Government and NHS Boards. Beyond this, NSS does not have "an involvement or interest" in the matters discussed in Chapter 6 and so it cannot meaningfully answer the questions posed.

Draft Closing Statements by other Core Participants

18. The Closing Statements of the Core Participants deal with matters wider than the evidence heard at the June 2023 hearing and Counsel to the Inquiry's Closing Statement. NSS means no criticism by that. However, many of the new matters raised will require further exploration at future hearings. What follows is not a comprehensive response to these new matters, but rather observations on two particular points.

19. In GGC's Closing Statement at Appendix 4 paragraph 63, and at Appendix 5 paragraph 59, it states that "The Board took advice from the Lead Infection Control Doctor, and external organisations, predominantly ARHAI, at all times in responding to all hypotheses which were put forward in relation to infection prevention and control and has conducted more extensive surveillance than any other NHS Board as a result." NSS respectfully suggests that the extent and nature of ARHAI's involvement, and the information that was made available to it, merit further consideration at future hearings.

20. In GGC's Closing Statement at Appendix 4, Appendix 1 is a "Summary of Patient Safety Indicators by Sandra Devine". This summary refers to reports and data. NSS notes that these reports and data are capable of a number of different interpretations. NSS respectfully suggests that this is another area that merits further consideration at future hearings.

National Services Scotland

18 August 2023