

SCOTTISH HOSPITALS INQUIRY

Bundle of documents following oral hearings in relation to the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow

Bundle 52 – Volume 14 Miscellaneous Material Arising Post Close of Hearings

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Scottish Hospitals Inquiry
Witness Statement of
Dr Michael Bradnam

Introduction

- 1 My name is Dr Michael Bradnam. I hold an Honours degree in Engineering from the University of Cambridge and a PhD in Medical Physics from the University of Glasgow. I am a Consultant Clinical Scientist and a Medical Physics Expert (MPE) in Nuclear Medicine. I am also an Honorary Associate Professor at the University of Glasgow. In terms of professional qualifications, I am a Chartered Scientist (CSci) and Fellow of the Institute of Physics and Engineering in Medicine (FIPEM). I am also a Chartered Electrical Engineer (CEng) and Fellow of the Institution of Engineering and Technology (FIET). I have worked as a Medical Physicist within Greater Glasgow Health Board and its predecessor organisations for approximately 42 years and have been directly involved in the new hospital project for around 20 years.
- 2 Prior to the QEUH project, I gained extensive experience in medical imaging infrastructure through my management of nine major imaging projects at the former Royal Hospital for Sick Children. Between 1995 and 2023, my substantive post was Clinical Physics Lead at the Royal Hospital for Children and its predecessor, the Royal Hospital for Sick Children, specialising in Nuclear Medicine. From 2013 to 2023, I also served as Physics Service Manager for Imaging, with responsibility for Nuclear Medicine and MRI across NHS Greater Glasgow and Clyde. I was one of three Physics Service Managers appointed by the General Manager to deputise for the Scientific Director of the Department of Clinical Physics and Bioengineering between spring 2019 and autumn 2020, providing scientific leadership to the department during that period. These roles gave me responsibility for providing specialist scientific advice on the planning,

procurement, installation and commissioning of imaging facilities, including those within the Queen Elizabeth University Hospital and Royal Hospital for Children project.

- 3 Since my retirement in autumn 2023, I have worked part-time on the NHS GGC staff bank as a Consultant Clinical Scientist in Nuclear Medicine at the Royal Hospital for Children.

Nuclear Medicine

- 4 Nuclear medicine provides both diagnostic and therapeutic services. Diagnostic nuclear medicine primarily involves imaging together with laboratory investigations. Common adult applications include bone scans and the diagnosis, staging and management of conditions such as prostate and breast cancer. My own work has been predominantly in paediatric nuclear medicine, specialising in renal disease and childhood cancers.
- 5 We also provide molecular radiotherapy treatments. In adults, the principal application is the treatment of hyperthyroidism (thyrotoxicosis) using radioactive iodine. In paediatric practice, we deliver highly specialised treatments for conditions including neuroblastoma and thyroid cancer. These paediatric services are provided within the dedicated Scottish Paediatric Molecular Radiotherapy (SMaRT) Suite on Schiehallion Ward (Ward 2A) at the Royal Hospital for Children, which is one of only a small number of specialist paediatric molecular radiotherapy facilities in the United Kingdom.
- 6 Our diagnostic and therapeutic procedures use radioactively labelled pharmaceuticals. Each radiopharmaceutical is designed to target specific tissues or tumours. For therapeutic applications, this enables radiation to be delivered selectively to the disease site while minimising exposure to surrounding healthy tissues. This differs from external beam radiotherapy,

in which high-energy X-rays are directed at the tumour from outside the body.

Late approach to Scottish Hospitals Inquiry

- 7 I have been asked to explain why I only recently contacted the Inquiry, despite having been aware of its existence for several years. There were both personal and professional reasons for this. Over the preceding two to three years, I experienced my own health difficulties, other members of my family also experienced significant health issues, and I suffered a family bereavement. As a consequence, I did not feel that I had the emotional capacity to engage with the Inquiry while managing these personal circumstances. More recently, on 3 June 2026, Occupational Health carried out an assessment which helped me to better understand my response to these circumstances.
- 8 Professionally, I have always sought to follow established organisational processes and reporting structures. Accordingly, I raised my concerns through the appropriate management and governance channels within NHS Greater Glasgow and Clyde and gave the organisation repeated opportunities to consider and address them. When those concerns remained unresolved, I sought advice from Solicitors at the Central Legal Office. In April 2026, Central Legal Office advised me that I could contact the Inquiry directly as an individual witness, and I did so.
- 9 In 2020, I had identified that the ventilation air change rates serving the Nuclear Medicine Department were lower than those required. I escalated those concerns through the Directorate's clinical governance arrangements. I was asked to prepare an SBAR (Situation, Background, Assessment and Recommendation), which is the NHS's standard structured format for presenting significant issues and making recommendations to senior management. **(A56439450)**

- 10 In June 2023, I became aware that several of my colleagues from the Schiehallion Ward, including Dr Dermot Murphy, Dr Milind Ronghe, Dr Jairam Sastry, Emma Somerville and Angela Howat, had given evidence to the Scottish Hospitals Inquiry. As I had been a member of the Schiehallion User Group and managed the SMaRT Suite within the ward, I assumed that the Inquiry was aware of my involvement and would contact me if it required my evidence. I subsequently noted that both Frances Wrath and Fiona McCluskey referred to my attendance at User Group meetings in their witness statements, which reinforced that understanding.
- 11 Around this time, I also considered that I had information which might be relevant to the Scottish Hospitals Inquiry. I discussed this with Antoinette Parr, my General Manager, and Professor Andrew Reilly, my Professional Lead and Scientific Director. It was agreed that I should contact Hazel McIntyre in Capital Planning, who was assisting in sourcing information for the Inquiry. During 2023, I was absent from work for various periods while undergoing several surgical procedures. Following my return to work, I arranged a meeting with Ms McIntyre on 11 July 2023. I explained the difficulties the Directorate had experienced obtaining the Room Data Sheets and that we had not been given the opportunity to review them during the design, construction and commissioning of the hospital. I also raised the issue of the pigeon infestation, which I describe later in this statement. Following the meeting, I emailed Ms McIntyre to confirm the matters we had discussed. My recollection is that, after discussing the matter with her managers, she advised me that they did not consider that my evidence would add to the Inquiry. I believe that advice was given to me verbally.
- 12 Following that discussion, I believed that I had taken all reasonable steps to ensure that the information I held had been brought to the attention of those responsible for assisting the Inquiry. At the same time, I was undergoing treatment for a serious medical condition and did not pursue the matter further.

13 I was due to retire in the autumn of 2023. Earlier that spring, my General Manager and I agreed that, following my retirement, I would return on a part-time, bank-hours basis, at a lower grade, to provide clinical cover within Nuclear Medicine, including during periods of maternity leave. I initially worked approximately 0.3 whole-time equivalent (WTE), providing professional oversight of the paediatric nuclear medicine service until the substantive post was filled. The unpaid management responsibilities that I had undertaken as Physics Service Manager for Imaging, which were an addendum to my substantive post, remained vacant following my retirement. I continued in this role until October 2025, when my successor took up post, and I remain employed on the NHS Greater Glasgow and Clyde Staff Bank as a Consultant Clinical Scientist to provide cover.

14 In 2024, together with an external consultant and Estates colleagues, I identified issues relating to patient electrical safety in two Group 2 medical locations, as defined in Section 710 of *BS 7671:2018+A2:2022 (Requirements for Electrical Installations – IET Wiring Regulations, Eighteenth Edition)*. This led me to prepare another SBAR in order to formally escalate my concerns. **(A56344078)**

15 In 2025, I identified a further issue relating to environmental humidity control. As part of my investigation, I engaged with both Estates and Capital Planning. At the request of Capital Planning, I prepared a further SBAR setting out my concerns regarding humidity control. **(A56439478)**

16 By that stage, a considerable period of time had passed and I had continued to follow the evidence being heard by the Scottish Hospitals Inquiry. I noted that the Inquiry was examining the availability of the Room Data Sheets and questioning members of the health board's project team about the extent of their engagement with the User Groups. It became increasingly apparent to me that the information I held was directly relevant to those issues.

17 In the summer of 2025, I met with my new General Manager, Janice Tannock, for a one-to-one meeting. During that meeting, I explained the

background to the concerns I had raised over a number of years, including the steps I had taken to escalate them through the appropriate governance processes. I also explained that I remained concerned that the issues I had identified had not been satisfactorily resolved. As a registered Clinical Scientist, I considered that I had a continuing professional responsibility, consistent with the standards of the Health and Care Professions Council (HCPC), to raise and escalate concerns where patient safety might be affected.

18 I was subsequently advised to contact the Public Inquiries contact at at NHS Greater Glasgow and Clyde. It was explained to me that I could approach the Inquiry directly or contact the Central Legal Office (CLO), which would provide support throughout the process. At that time, however, there were further significant health issues within my family and I did not pursue the matter.

19 I continued to follow the progress of the Inquiry. When the Health Board accepted that, on the balance of probabilities, there was a causal link between the hospital environment and patient deaths, I regarded this as a significant development. I was also aware of the establishment of the *Safety and Public Confidence Oversight Group* (the '*Oversight Group*'), announced by the Scottish Government on 3 February 2026 and co-chaired by Professor Sir Lewis Ritchie and Professor Jann Gardner. These developments gave me further confidence that my evidence would now be considered. At that stage, I contacted the Central Legal Office (CLO). I was advised that it was too late for the Health Board to submit my information as a Core Participant. I was advised to contact Elaine Vanhegan, Director of Corporate Services and Clinical Governance, NHS Greater Glasgow and Clyde.

20 As I have explained, I sought to follow established organisational reporting lines before escalating the matter further. My intention was therefore to brief the Director of Diagnostics, Ann Traquair-Smith and consider how we could feed in to the *Oversight Group*. However, by that stage she had been

seconded to the role of Interim Director of the South Sector and was unavailable. Instead, I met on 12 March 2026 with Mary McKee, Interim Director of Diagnostics, together with Janice Tannock, my General Manager, and Professor Andrew Reilly, my Professional Lead and Scientific Director.

21 Up until the meeting on 12 March 2026, I understood that the matters I had raised were being progressed through the Directorate's governance processes. During that meeting, I was advised that matters relating to the Scottish Hospitals Inquiry and the proposed oversight arrangements were not for the Directorate to determine. Mary McKee advised me to follow the advice I had previously received from the Central Legal Office and to contact Elaine Vanhegan, Director of Corporate Services and Clinical Governance. She was not available and so I contacted Professor Jann Gardner, Chief Executive. In subsequent correspondence with the Central Legal Office, I was also advised that I could place the information I held before the Scottish Hospitals Inquiry as an individual witness.

22 During my meeting with Mr Craig Connal KC, Counsel to the Scottish Hospitals Inquiry, on 2 June 2026, I was advised that some of the matters I had raised, including patient electrical safety in Group 2 medical locations, fall outside the Inquiry's remit. Accordingly, I have confined this statement to four principal issues:

- the involvement of the technical users during the design stage, including the lack of access to the Room Data Sheets and the consequent inability to review the detailed engineering design;
- the governance arrangements between the Health Board project team and the Diagnostics User Groups during the design, construction and commissioning phases;
- concerns relating to the design and operation of the ventilation system;
- the steps I took to raise and escalate those concerns through the Health Board's management and governance arrangements.

Technical input into the design process – Room Data Sheets

- 23 Between 1994 and 2015, I was closely involved in the delivery of at least nine major imaging infrastructure projects at the Royal Hospital for Sick Children, Glasgow. Working closely with Capital Planning and Estates, I acted as the client representative for the Diagnostics Directorate and Project Manager for the relevant Diagnostics User Groups. My role was a practical, hands-on one, encompassing the specification and selection of imaging equipment, the development and review of the technical design, oversight of the clinical aspects of installation and commissioning, and the verification and acceptance of the facilities before they entered clinical service.
- 24 These project teams typically comprised representatives from Capital Planning, Estates, the principal contractor and the relevant engineering disciplines, including mechanical and electrical engineering, together with representatives of the clinical end users. As part of the design process, we reviewed the project drawings and Room Data Sheets.
- 25 Room Data Sheets are key design documents that define the functional and technical requirements for each room, including its intended use, environmental conditions, furniture, fixtures and fittings, electrical supplies, ventilation, medical gases (where applicable) and other engineering services. They were made available to us for review before construction so that we could verify that the proposed design met the agreed clinical, technical and operational requirements of the Diagnostics Directorate and was suitable for the equipment and services to be installed.
- 26 In my experience, Capital Planning managed this process effectively. The design was developed iteratively, allowing technical and operational issues to be identified and resolved before it was finalised. Once the Directorate was satisfied that the agreed requirements had been accurately reflected, the Room Data Sheets and design drawings were signed by both Capital Planning and the client Directorate. This provided formal confirmation that

the agreed design had been reviewed and accepted before construction commenced.

- 27 I also understood that any proposed changes to an approved design, whether during the design phase or subsequently, were subject to formal change control. Such changes required further consultation with Capital Planning and the client Directorate, followed by review, verification and formal approval before they could be implemented.
- 28 At the commencement of the new hospitals project, I was responsible for the Nuclear Medicine workstream. Following my appointment, by job addendum, as Physics Imaging Service Manager for NHS Greater Glasgow and Clyde, my responsibilities expanded to include both the adult and paediatric Nuclear Medicine and MRI workstreams across the project. By 2013, I therefore had overall responsibility for the imaging facilities supporting diagnostic nuclear medicine, molecular radiotherapy, specialist laboratories, and four MRI scanners across the new hospitals: two at the Queen Elizabeth University Hospital and two at the Royal Hospital for Children.
- 29 In carrying out these roles, I had statutory and professional responsibilities relating to the planning, design, procurement, commissioning and acceptance of new nuclear medicine facilities and equipment. These responsibilities arose under *Regulation 9 of the Ionising Radiation (Medical Exposure) Regulations 2000 ("IR(ME)R")*, together with the *Medical and Dental Guidance Notes (IPEM, 2002)*. They also formed part of the NHS Scotland capital project governance framework established through the *Scottish Health Planning Notes ("SHPNs")*, *Scottish Health Technical Memoranda ("SHTMs")* and the *NHS Scotland Activity DataBase ("ADB")* process. Under that framework, clinical users and technical specialists were expected to participate in the design, review, verification and validation of healthcare facilities before they entered clinical service.

- 30 I have provided the Inquiry with a document prepared in 2009 by Mr Andy Brennan, Head of Health Physics. The document sets out the technical input that the Radiation Protection Advisers ("RPAs") were expected to provide under the *Ionising Radiations Regulations (IRR) 1999* during the design of the new hospital imaging facilities. This also demonstrates the breadth of specialist radiation protection, engineering and operational advice that was anticipated during the design process. **(A56344071)**
- 31 Although MRI does not involve ionising radiation and was therefore not regulated under IR(ME)R 2000 or IRR 1999, the design and commissioning of MRI facilities follow similar governance principles and are subject to the *Health and Safety at Work etc. Act 1974* and the Medicines and Healthcare products Regulatory Agency (MHRA) *Safety Guidelines for Magnetic Resonance Imaging Equipment in Clinical Use* (2014), which were current at the time. In this case, the expert specialist technical advice was provided by the Board's MR Safety Experts (MRSEs), formerly termed MR Safety Advisers.
- 32 During the design and construction of the new hospitals, I was a member of five Diagnostics User Groups: The Molecular Radiotherapy Suite (Ward 2A, Royal Hospital for Children); Nuclear Medicine (Royal Hospital for Children and Queen Elizabeth University Hospital); MRI (Royal Hospital for Children and Queen Elizabeth University Hospital); Bioengineering (Royal Hospital for Children); and Paediatric Imaging (Royal Hospital for Children). These facilities included imaging and treatment areas used by vulnerable and immunocompromised patients. Accordingly, we had professional responsibility for ensuring that the clinical and technical requirements of these services were submitted for the design.
- 33 Following the appointment of Brookfield Construction as preferred bidder at the end of 2009, the project entered the detailed design phase, during which the outline proposals were developed into room layouts and engineering specifications. At that time, I was the Lead Physicist for the Royal Hospital for Sick Children and, for the purposes of the project, reported

professionally to the Health Board's Head of Imaging Physics as part of the developing pan-Board management structure. During this phase, we were provided with successive iterations of the architectural drawings, initially at a scale of 1:200 and later 1:50, and we provided the Health Board's project team with the clinical, technical and operational requirements for the services within our remit. I understood that construction of the new hospitals commenced in March 2011 while elements of the detailed design continued to be refined.

34 On 10 August 2010, Professor Barrie Condon, Interim Director of the Department of Clinical Physics and Bioengineering, sent an email to Frances Wrath, which he subsequently copied to Aileen MacLennan, Director of Diagnostics, on 13 August 2010 (**A56357844**). In that email, Professor Condon recorded concerns expressed by the Medical Physics Experts (MPEs) and the MR Safety Experts (MRSEs) regarding the level of technical input into the project. He also advised Ms MacLennan that there appeared to be no mechanical and electrical engineers involved in the design process and warned that this could have significant cost implications for the new hospitals. He invited Ms MacLennan to consider escalating these concerns within the Health Board.

35 During the detailed design phase in 2010, Frances Wrath asked the Medical Physics Experts (MPEs) and MR Safety Experts (MRSEs) to complete a spreadsheet setting out the engineering requirements for their respective departments. From my experience of previous capital projects, this information would normally have been prepared by the project's mechanical and electrical engineers and architects, with the clinical users reviewing the resulting documentation to verify that it accurately reflected the agreed clinical and technical requirements. In my view, Professor Condon's email demonstrates that this departure from the usual design process had already been recognised and raised with senior management at that stage.

36 I obtained the planning guides for both the nuclear medicine equipment to be transferred from the existing hospital and the equipment to be newly

procured, and forwarded them to Frances Wrath, Capital Planning Manager on 6 September 2010. At that time, there were three principal manufacturers of this equipment, each with slightly different installation requirements. I therefore provided planning guides for all of the major manufacturers so that the project team could design to the most demanding specification, ensuring that the facilities would accommodate whichever manufacturer's equipment was ultimately selected. **(A56361619)**

37 A planning guide is a technical document produced by the equipment manufacturer to enable architects and engineers to design a building that can safely and effectively accommodate the equipment. It specifies the installation requirements, including room dimensions, structural loading, ventilation and cooling and other building services, together with the equipment's utility requirements, such as the type of electrical supply, voltage, current and power consumption.

38 The equipment is also extremely heavy, requiring the structural engineers to confirm that the building could safely support the imposed loads. Advances in imaging technology generally result in larger and heavier equipment and, in some existing hospitals, additional structural steelwork has been required to accommodate the increased loading. I therefore advised Frances Wrath that the manufacturers' planning guides should be provided to the project's structural and mechanical and electrical (M&E) engineers, and I offered to assist with any technical queries arising from the equipment specifications. I did not receive a response. **(A56361619)**

39 Having provided the manufacturers' planning guides and the engineering requirements, I understood that the project team had the information necessary to develop the detailed design. I have no recollection of any engineering representatives from the Brookfield project team attending the User Group meetings. The only members of the Brookfield team whom I recall attending were architects from Nightingale Associates, who were present at perhaps three meetings during the early stages of the design process.

- 40 The detailed engineering and operational requirements of a nuclear medicine department can only be properly specified and reviewed by individuals with appropriate specialist expertise.
- 41 My experience of the Queen Elizabeth University Hospital project was markedly different from previous projects. Despite repeated requests, the User Groups were not given access to the Room Data Sheets and were therefore unable to verify that the agreed clinical and technical requirements had been incorporated into the final design or to review subsequent amendments before construction and commissioning proceeded. Consequently, we were unable to satisfy ourselves that the design complied with the manufacturers' planning guides and relevant Scottish Health Technical Memoranda (SHTMs). I understood that responsibility for that assurance therefore rested with the Board's project team, and I made my managers aware of that opinion. At no stage was that understanding challenged.
- 42 When I eventually obtained the Room Data Sheets in 2025, of which the circumstances are discussed later, I understand that they were the versions issued to the Health Board project team in 2015. On reviewing them, I was unable to identify a number of the equipment-specific installation requirements contained within the manufacturers' planning guides that I had provided to Frances Wrath in 2010 and which I would have expected to be reflected in the building design.
- 43 By way of example, I specified that the imaging rooms should be provided with dedicated refrigerated air conditioning because gamma cameras are highly sensitive to temperature fluctuations, which can affect their performance and reliability. I also needed to verify the proposed ventilation design, including the air change rates and the arrangements for air handling. In particular, I needed to confirm that air extracted from the nuclear medicine department would not be recirculated elsewhere within the

hospital, as it could contain radioactive gases arising from certain clinical procedures.

- 44 The only design documentation made available during the User Group meetings consisted of architectural drawings. We were invited to comment on those drawings and, at the conclusion of each meeting, to sign them to record our approval of that iteration of the design. However, the drawings related only to the architectural layout of the rooms and did not include the engineering services, which would ordinarily have been specified in the Room Data Sheets.
- 45 We were not provided with copies of the marked-up drawings or any other design documentation for use at subsequent meetings. As a result, we were unable to compare successive iterations of the design or verify whether the amendments requested by the User Groups had been incorporated into the developing design documentation, including the Room Data Sheets.
- 46 As a result, I began keeping my own record of the developing design. Before returning the signed drawings at the end of each meeting, I photographed them so that I could compare them with the revised drawings presented at subsequent meetings, which were often held several months later. This enabled me to identify changes between successive iterations of the design before I was asked to approve the revised drawings. I recall that Frances Wrath expressed frustration at the time this took and commented that it was delaying the meeting. I also recall on one occasion that she led me away from the drawings before I had finished photographing them, with the result that I did not obtain all the photographs I had intended to take in order to preserve the information they contained.
- 47 By the beginning of 2014, I had been requesting access to the Room Data Sheets for approximately two years without success. I therefore raised the matter with the Director of Diagnostics, Aileen MacLennan, who asked me to prepare a draft email (**A56361962**). On 12 February 2014, Ms

MacLennan emailed the Project Director, David Loudon, requesting that the Room Data Sheets be made available (**A56500928**). Despite that further escalation, the Room Data Sheets remained unavailable to the User Groups. I also suggested, on 13 February 2014, that Ms MacLennan write to the Chief Executive, Robert Calderwood, to raise the matter further. I do not know whether that letter was ever sent.

48 The 12 February 2014 email also explained that the Diagnostics Directorate was being pressured to install high-value imaging equipment before the building was complete. In my experience, this carried a number of technical and operational risks, including deterioration of equipment that remained installed but unused for an extended period, the risk of an MRI scanner quench, and an increased risk of damage while construction activities were still ongoing. The equipment concerned had a value of approximately £10 million, for which the Diagnostics Directorate would ultimately bear financial responsibility. Accordingly, I considered this to be a matter of significant technical and financial concern.

49 As I understood it from Mairi MacLeod, this situation arose because of the way the capital funding had been structured. My recollection is that she explained there was a requirement to spend the remaining capital allocation before the end of the financial year and that, as a consequence, the equipment required by my department had to be purchased and installed before the hospital was complete. This concerned me because the equipment was being procured under turnkey contracts, under which the supplier would normally be responsible for installing the equipment and undertaking any structural, mechanical and electrical works necessary to accommodate it. In my view, installing the equipment before the building and its engineering services were complete created a risk of compromising that process.

50 Siemens, the supplier of the nuclear medicine and MRI equipment for the project, was subsequently consulted on this issue. Their advice was consistent with the earlier advice provided by the Medical Physics Experts

(MPEs) and the MR Safety Experts (MRSEs). Following that advice, installation of the equipment did not proceed until 2015. Based on the information available to me, I do not know why the Health Board project team did not act upon the earlier technical advice.

51 On 1 April 2014, I raised, through Lynn Ross, General Manager for Imaging, the risks arising from the continued unavailability of design information including the Room Data Sheets **(A56361716)**. By that stage, the hospital was expected to open within approximately one year, yet we still had no opportunity to verify that the agreed clinical and technical requirements had been incorporated into the design. In the same email, I requested that the matter be included on the Directorate's risk register.

52 In assessing the risk, I used the Health Board's 5 × 5 risk matrix and assigned it the maximum inherent risk score of 25 (5 × 5). This reflected my assessment that the potential consequences were Severe/Catastrophic (5) and that the likelihood of the risk materialising was Almost Certain (5), representing the highest level of inherent risk on the matrix.

53 Following this, on 13 May 2014, Aileen MacLennan, Director of Diagnostics, again wrote to David Loudon, Project Director, requesting the relevant design documentation, including the Room Data Sheets. **(A56361725)** In his reply of the same date, Mr Loudon acknowledged that some design drawings had not been shared with the User Groups and stated that a complete set of the documentation had been provided to the office of the Director of Diagnostics. That does not accord with my recollection. Had the full documentation been received by the Directorate, I would have expected it to have been circulated to the relevant managers and User Groups for review. To the best of my knowledge, that did not occur. **(A56361721)**

54 In his response, Mr Loudon referred to John McGarrity, formerly Technical Manager at the Victoria Infirmary, who had been seconded to the project and identified him as the person who would liaise with us. However, I had already approached Mr McGarrity, who advised me that, although he had

access to the Room Data Sheets, he was not permitted to share them with the User Groups. Following receipt of Mr Loudon's reply, I discussed the matter with Winnie Miller, Planning Manager for Diagnostics, and we again requested access to the Room Data Sheets, as we understood that the Health Board project team held them.

55 I have also provided the Inquiry with three emails exchanged with Mairi MacLeod, Project Manager, concerning access to the Room Data Sheets. In those emails, Ms MacLeod advised that the Health Board project team would not provide the existing Room Data Sheets to the User Groups because Brookfield was preparing a revised set, which was expected to be completed in June 2014 and then shared with us. **(A56361725)** We followed this up in June 2014. **(A56361821)** However, we were advised that the revised Room Data Sheets were still being prepared and were therefore still unavailable to the User Groups. **(A56361838)**

56 Given the complexity of the imaging installations, David Loudon and Aileen MacLennan established regular meetings with the Diagnostics Directorate at approximately six-week intervals throughout the installation programme. I have provided the Inquiry with copies of the resulting *"Diagnostics/Project Team Meeting – Meeting Notes"*. These provide a contemporaneous record of the installation process, the matters raised by the User Groups, and our continuing requests for access to the Room Data Sheets up to the opening of the hospital. **(A56361943, A56361900, A56361955, A56361842, A56361944)**

Governance- Interactions with Project Team

57 The User Group meetings that I attended were generally chaired by Mairi MacLeod, with Frances Wrath also in attendance. I recall that Ms Wrath was introduced as the Technical Lead, or Technical Adviser, for the project.

In that role, she received the technical requirements, comments and queries raised by the User Groups for communication to the wider project team.

58 I recall explaining to Frances Wrath that I had encountered difficulties in maintaining appropriate environmental conditions within nuclear medicine imaging rooms on previous hospital projects and was keen for the new hospital to benefit from that learning. At the Royal Hospital for Sick Children at Yorkhill, we had developed what I considered to be the best temperature-controlled imaging environment in Glasgow, and I desired that standard of good practice to be replicated in the new hospital facilities. I therefore offered Ms Wrath a site visit to the Yorkhill department so that she could see the installation in operation and discuss the lessons we had learned. To my recollection, she did not take up that offer.

59 I also became aware that Mairi MacLeod and Frances Wrath were meeting with prospective equipment suppliers without involving the relevant clinical and technical specialists or seeking our input. On one occasion, I was invited to attend a meeting at which the tender process for the imaging systems was introduced to prospective suppliers. During that meeting, it became apparent that the briefing information prepared by the Health Board's project team contained inaccuracies, which had been carried forward into the presentation and tender documentation. I subsequently arranged for those errors to be corrected through the Health Board's project team.

60 Overall, I had other concerns about aspects of the project's governance arrangements. My previous experience had been on smaller capital projects, where communication between clinical users, Capital Planning and other departments was more direct and regular meetings were formally recorded. By contrast, the QEUH project was substantially larger and operated through defined reporting structures. Members of the Diagnostics User Groups were instructed not to communicate directly with the Health Board's project team. Instead, any issues arising outwith User Group meetings were to be raised through our designated managers, in my case

Lynn Ross and Winnie Miller, who would communicate with the project team through Mairi MacLeod or Heather Griffin. I understood that this arrangement was intended to provide a clear and consistent reporting structure. In practice, however, I found it less direct and responsive than on previous projects. Furthermore, unlike my previous experience, no minutes or Meeting Notes were produced for the User Group meetings.

61 I have provided the Inquiry with an email from Winnie Miller to Mairi MacLeod dated 26 June 2014, in which Ms Miller again requested copies of the Room Data Sheets. Ms MacLeod replied the same day that the Room Data Sheets had not been updated since 2012 and were therefore out of date. She explained that, because they were “*completely inaccurate*”, they would not be shared with the User Groups. **(A56361824)**

62 In her email of 26 June 2014, Winnie Miller made it clear that we were willing to review these draft Room Data Sheets, recognising that they remained under development. Our objective was to assist by identifying and resolving any issues before construction, and subsequently commissioning, were completed. That proposal was not accepted by the Board's project team.

63 Following the opening of the hospital, I no longer had contact with the Health Board's project team and understood that it had been stood down. As a result, any subsequent concerns relating to the hospital infrastructure had to be pursued through Estates.

64 In 2019, I read media reports describing a possible association between patient deaths and *Cryptococcus* infection. This immediately reminded me of the pigeon infestation that had developed within the Estates plant area serving the imaging department. As I considered that this information might be relevant, I brought it to the attention of the Consultant Microbiologist, Dr Teresa Inkster **(A56435940)**.

65 Since the hospitals opened, I have submitted three SBARs through my management and the Health Board's clinical governance arrangements concerning matters that I considered affected the safe operation of the new hospital facilities: ventilation and temperature control in 2020, patient electrical safety in Group 2 medical locations in 2024, and environmental humidity control in 2025. To date, I have received no formal response to those SBARs, nor any confirmation that my recommendations have been implemented or that the assurance gaps they identified have been addressed. I also do not know how far the SBARs were escalated within the Health Board's governance processes or whether they were recorded on any corporate or departmental risk registers.

Ventilation - Air Change Rates and Anaesthesia

66 The ventilation system was one aspect of the design that I expected the User Groups to review before the design was finalised and approved for construction. In my email to Aileen MacLennan dated 11 February 2014, I explained that the User Groups were still awaiting essential design information including Room Data Sheets. **(A56500930)** The Room Data Sheets would also have enabled us to verify that the proposed ventilation specifications, including the ventilation air change rates, had been correctly incorporated into the design before it was signed off.

67 The Meeting Note for 9 April 2014 **(A56439318)** records no concerns regarding the ventilation system. However, by that stage the User Groups had still not been provided with the Room Data Sheets and therefore had no opportunity to verify the detailed ventilation specification, including the proposed ventilation air change rates, before the design was finalised.

68 In 2016, Winnie Miller invited me to directly contact Peter Moir, Deputy Director of the Health Board's Project Team, to request copies of the Room Data Sheets, as they had still not been made available to the Directorate. I

was subsequently referred to Estates. By that stage, Estates were dealing with a wide range of issues associated with the new hospital. My impression was that the volume of work and limited resources made it difficult for them to pursue matters such as the Room Data Sheets.

- 69 At the time the hospital was being designed, constructed and commissioned, the applicable Scottish guidance for the design and validation of healthcare ventilation systems was *Scottish Health Technical Memorandum (SHTM) 03-01 Part A: Design and Validation (Version 2, February 2014)*. This guidance set out the recommended ventilation requirements for different types of healthcare accommodation, including the ventilation air change rates and other environmental design parameters that should be incorporated into the design and verified before the facilities were brought into clinical use.
- 70 Consistent with my understanding of the applicable guidance at the time, I understood that imaging rooms in which anaesthetic gases were administered should be designed to provide 15 air changes per hour in order to minimise staff exposure to waste anaesthetic gases. I have provided the Inquiry with an email from Jim Guthrie in Estates which also refers to this requirement (**A56438465**).
- 71 When we moved into the new hospital, I requested that the ventilation systems serving the Nuclear Medicine Department be checked. From my experience of previous capital projects, I was aware that ventilation systems can require adjustment or balancing following installation. As part of my routine observations, I carried out simple checks of the supply and extract vents by assessing the airflow at the grilles. Based on those observations, I was not satisfied that the ventilation system was operating as intended, and I therefore submitted requests to Estates for the ventilation performance to be investigated. I also observed that one of the low-level extract vents appeared not to be functioning.

- 72 I believe that I raised requests for the ventilation system to be checked primarily through the FM First electronic request system, although I may also have discussed them directly with Estates personnel. I cannot now recall every individual request, but, to my knowledge, they did not result in the ventilation system being checked.
- 73 Another issue I identified after we moved into the new hospital related to environmental control. During the planning stage, we had requested a refrigerated system capable of maintaining the specified temperature and humidity conditions within the Nuclear Medicine Department. However, the installed system relied on chilled-water fan coil units. On one occasion, a fan coil unit leaked, shorting the electrical supply and causing the environmental control system serving both the adult and paediatric Nuclear Medicine Departments to fail for approximately two days. At the time, I regarded this as an operational resilience issue. It was only several years later that I came to appreciate the wider implications for humidity control.
- 74 We subsequently experienced several leaks from the fan coil units. In response, I recommended that each fan coil unit serving the scan rooms be connected to an individual electrical circuit and sought funding for its implementation. The change ensured that a leak affecting one unit would not interrupt the environmental control systems serving the remainder of the department. As part of the daily quality assurance programme across both the children's and adult Nuclear Medicine departments, staff now routinely check the neon indicators associated with these circuits alongside other quality assurance checks, providing early warning of any failure of the temperature control system.
- 75 In 2020, the COVID-19 pandemic highlighted the critical importance of ventilation within healthcare facilities. It became even more necessary to understand the actual ventilation performance of clinical areas in order to determine appropriate dwell times, namely the period required between patients using a room to allow adequate air clearance. This was particularly important for scan rooms, where patients were examined, and for control

rooms, where staff worked in close proximity while operating several scanners.

76 I asked Darryl Conner in Estates to arrange for the ventilation systems serving the Nuclear Medicine Department to be assessed. Jim Guthrie, Estates Manager, subsequently arranged a ventilation survey, during which we reviewed the three scan rooms and the associated control room. The measurements obtained during that survey are entitled "*SHTM 03-01 Critical Ventilation Verification and Inspection*". **(A56439289)**

77 Jim Guthrie used an external specialist ventilation contractor, Correctair Solutions (Scotland) Ltd. Although ventilation verification is normally managed by Estates, my understanding was that they relied on external contractors to undertake this work because they did not have sufficient in-house resources.

78 When the contractor attended site, they had access to the design air change rates for each room, enabling them to determine that the scan rooms had been designed to provide six air changes per hour and the control room three air changes per hour. However, their measurements showed that the ventilation systems were not achieving those design specifications.
(A56439289)

79 In my view, this demonstrated two separate issues. First, the design ventilation rates for the rooms were lower than I believed were required. Secondly, the ventilation systems were not achieving even those design ventilation rates. In my opinion, this indicated both a deficiency in the design specification and a failure to commission the ventilation systems in accordance with that specification.

80 It is possible for ventilation performance to change over time if, for example, dampers are inadvertently left in the wrong position following maintenance. However, I do not believe that this explains the situation in our department. The adult and paediatric nuclear medicine departments are by necessity

radiation-controlled areas, and access by Estates or contractors is controlled and closely coordinated with departmental staff. I do not recall any maintenance work being carried out on the ventilation ductwork or dampers in our area and, had such work taken place, I believe I would have been aware of it.

81 Following the ventilation assessment, I escalated our findings to my General Manager, Antoinette Parr. Dr Rachel Green, Chief of Medicine, Diagnostics Directorate, subsequently asked me to prepare an SBAR, which she shared with Professor Alastair Leanord, Consultant Microbiologist, and Arwel Williams, Director of Diagnostics. I also discussed my findings with Dr Ruth Allen, Lead Consultant Paediatric Radiologist and Clinical Lead for Paediatric Imaging, and with Dr Graham Bell, Consultant Paediatric Anaesthetist, who had served on the Theatres User Group. **(A56439450)**

82 Arwel Williams convened a meeting attended by Professor Alastair Leanord, Gerry Cox, who was Assistant Director of Estates, and me. We discussed how best to address the issues that had been identified. It was recognised that the discrepancy between the design ventilation rates and those I believed were required represented a longstanding design issue that could not readily be resolved. However, the immediate priority was to ensure that the ventilation systems installed by Brookfield were operating in accordance with Brookfield's design specifications. It was agreed that the Brookfield design issue itself would be added to the list of outstanding matters to be pursued under the Design and Build contract.

83 I was asked to leave the matter with them. Having escalated the matter to Director level through the appropriate management and clinical governance processes, I believed it was appropriate to allow those responsible to take the matter forward.

84 In 2024/25, the children's Nuclear Medicine SPECT-CT scanner was replaced after approximately 17 to 18 years in service. The replacement was funded by National Services Division (part of NHS National Services

Scotland). As part of the funding process, confirmation was sought on the ventilation rates serving the scanner room. We advised that the room had been designed to provide six air changes per hour, which we knew was below the requirements of SHTM 03-01.

85 At the time, I was working with Gerry Mather from Capital Planning on the scanner replacement project. As part of that work, Correctair Solutions (Scotland) Ltd were commissioned to undertake a further ventilation survey of the children's scan room. Their measurements confirmed that the ventilation system was still not achieving its design ventilation rate. They identified a second ventilation damper that had been left closed. Once it was reopened, the ventilation rate increased to its design value of six air changes per hour, but no higher. Based on my understanding, achieving substantially higher ventilation rates would require major modifications to the building services infrastructure.

86 At the time I undertook this review in 2022, the applicable Scottish guidance was *SHTM 03-01 Part A Version 3.0 (February 2022)*. We discussed the implications of the measured ventilation air change rates with the Anaesthetics Department. I believe we liaised with Dr Ross Fairgrieve, Consultant Paediatric Anaesthetist who was the Directorate's link anaesthetist. Although anaesthesia was provided in the Paediatric Nuclear Medicine Department on one dedicated all-day list each week, individual patients were typically anaesthetised for three to four hours. It was therefore important to understand whether the measured ventilation air change rates were appropriate for a clinical area in which anaesthetic gases were administered.

87 The Anaesthetics Department advised that the scan rooms could continue to be used. My understanding was that the clinical risk was assessed as low because of the way modern anaesthetic techniques were delivered. Nevertheless, I still understood that the Health Board intended to improve the ventilation performance and increase the ventilation air change rates to those considered appropriate for the department.

88 During the meeting with Mary McKee, Janice Tannock and Professor Andrew Reilly on 12 March 2026, there was some discussion regarding the recommended air change rates set out in SHTM 03-01. Professor Reilly expressed the view that this represented guidance and referred to the use of derogations and wider discussions regarding the evidence base underpinning the standards.

Humidity control failures

89 In 2025, I identified recurring humidity control failures affecting imaging rooms at the QEUH and RHC. Elevated humidity levels were recorded within clinical imaging environments, giving rise to concerns about the potential impact on high-value medical imaging equipment and the possibility of condensation forming within ventilation systems and associated plant. In my view, these findings warranted further investigation because of the potential risks to equipment reliability and the possibility of microbial growth.

90 Estates officers advised that there was no humidity control within adult and paediatric nuclear medicine departments. I was surprised because this was contrary to the environmental requirements specified in the relevant equipment planning guides which I had personally supplied to France Wrath on the Board's project team in 2010. Those planning guides clearly relate to the operational requirements of the imaging equipment rather than to patient care. However, this led me to question whether there might also be implications for patients, whose environmental requirements may, in some circumstances, be even more stringent.

91 Whilst investigating recurring problems with the paediatric nuclear medicine scanner, I subsequently learned that an MRI scanner had experienced a similar problem at around the same time. In both cases, the underlying cause was found to be elevated humidity levels, which prevented the

equipment from operating normally until the humidity had returned to within the manufacturers' specified operating limits.

- 92 As is standard practice, faults affecting imaging equipment are reported to the manufacturer's service desk. When I encountered this problem, I initially believed that the fault lay with the scanner itself and therefore contacted Siemens. They advised that this type of occurrence was highly unusual. Using the scanner's remote diagnostic capability, Siemens reviewed the equipment error logs and environmental alarms and concluded that the problem did not lie with the scanner, but with the environmental conditions within the hospital.
- 93 It appears that modern scanners are equipped with integrated environmental monitoring systems. Historically, the required environmental conditions, including humidity, were specified by the manufacturer and had to be monitored locally. Modern scanners continuously record environmental parameters such as temperature and humidity. This information can be accessed remotely by the manufacturer, enabling it to assess both the environmental conditions at the time of a fault and the performance of the equipment during any subsequent investigation.
- 94 The scanners indicated that the environmental conditions exceeded the manufacturers' specified operating limits. Warning messages were displayed on screen, including a recommendation that the air conditioning system should be checked. During periods of warm, humid weather, the scanners generated numerous environmental error logs, sometimes over several consecutive days. In my view, prolonged periods of hot and humid weather therefore had the potential to disrupt scanning services if those conditions persisted. Not only can operation outside the manufacturer's specified environmental limits increase the risk of equipment faults but it can also reduce reliability and service life, with consequences for patient care and equipment replacement programmes.

- 95 I investigated why these issues had arisen, despite the manufacturers' planning guides having been provided to the Health Board project team at the outset of the project. At this stage, I finally obtained access, through Capital Planning, to the Room Data Sheets for all three Nuclear Medicine scan rooms, enabling me to compare the design documentation with the environmental requirements specified by the equipment manufacturers. I was unable to identify the humidity requirements within the Room Data Sheets.
- 96 Because the User Groups were not given access to the Room Data Sheets during the project, we were unable to verify that those requirements had been incorporated into the detailed design and carried through construction and commissioning.
- 97 I also obtained humidity trend graphs from Estates from the Building Management System (BMS). These indicated that the relative humidity of the air leaving the plant room serving the MRI Department had reached 100% (**A56344562**). At that level, condensation can occur within ventilation systems and on building surfaces if the air subsequently cools. There were no BMS sensors in the paediatric nuclear medicine scan room to compare. A portable humidity monitor within the paediatric nuclear medicine scan room recorded relative humidity levels in excess of 85%, despite the manufacturers' recommended maximum operating limit being 75%.
- 98 As the MRI and Nuclear Medicine scan rooms were served by separate air handling units located in different plant rooms, the identification of elevated humidity levels in both departments led me to consider whether similar environmental control issues might also exist elsewhere in the hospital.
- 99 When I identified elevated humidity levels affecting the Paediatric Nuclear Medicine scan room, I also worked with James Huddleston and Thomas Mills from Capital Planning. As part of that work, we reviewed the 2023/2024 scanner replacement project with Procurement to understand why the humidity problem had arisen despite my having again specified, in

accordance with the relevant manufacturer's planning guide, a refrigerated environmental control system capable of actively controlling both temperature and humidity.

100 My understanding is that, after the purchase order had been placed, the upgrade to refrigerated environmental controls was not progressed. The specification was changed during the turnkey delivery of the project following discussions between Capital Planning and the equipment supplier, and this change was accepted by Capital Planning. I neither proposed nor agreed to that design change. As a consequence, larger fan coil units were installed which could control temperature due to the larger thermal load of the new scanner but were incapable of actively controlling humidity.

101 My Directorate held regular meetings with Capital Planning through the Capital Planning Board. Having raised these concerns with Capital Planning, I was asked to prepare an SBAR for consideration by the Capital Planning Board, which I have provided to the Inquiry. **(A56439478)**

Recent developments and contact with the Board

102 By 2026, I had been raising concerns for at least fifteen years. Although some had been partially addressed, I had not seen evidence of a documented, system-wide gap analysis or of a documented process for demonstrating that the identified assurance gaps, particularly those relating to legacy issues, had been resolved and formally closed across the imaging facilities.

103 Following the meeting of 12 March 2026, and in accordance with advice from the NHS Central Legal Office, which had also been endorsed by Mary McKee, I escalated my concerns to Elaine Vanhegan, Head of Corporate Services and Governance, NHS Greater Glasgow and Clyde. I did so in fulfilment of my professional responsibilities as an HCPC-

registered Clinical Scientist to raise concerns relating to patient safety and clinical governance through the appropriate channels. As I received no response, I sent two further emails, later learning that Ms Vanhegan had been on an extended period of leave. In my third email, I copied the Chief Executive, Professor Jann Gardner, and the Chair, Professor Leslie Thompson. This was not something I would ordinarily have done, but I considered it necessary to ensure that the concerns I had raised were brought to the Board's attention. I subsequently sought further advice from the NHS Central Legal Office and was advised that I could approach the Scottish Hospitals Inquiry in a personal capacity and, if I wished, contact NHS Assure.

104 On Thursday 9 April 2026, I wrote directly to Professor Jann Gardner, Chief Executive, rather than merely copying her into my correspondence with Elaine Vanhegan, to ensure that she was personally aware of the concerns I had raised. Within an hour, I received a reply from her secretary inviting me to attend a meeting the following day to discuss those concerns. **(A56439483)**.

105 The meeting on Friday 10 April 2026 was attended by William Edwards, Deputy Chief Executive/Chief Operating Officer, and Russell Coulthard, Deputy Chief Operating Officer. We discussed the concerns I had raised regarding the imaging facilities, namely ventilation, humidity and patient electrical safety in Group 2 medical locations.

106 During the meeting, I raised the possibility that elevated humidity levels in the supply air could be contributing to mould growth within the ventilation system.

107 On Monday 13 April 2026, I provided Professor Gardner with the notes I had prepared in advance of the meeting **(A56439491)**. On 15 April 2026, Professor Gardner confirmed that she was commissioning a review of the imaging facilities, with Russell Coulthard taking responsibility for leading that work following William Edwards' appointment to NHS Fife. **(A56439495)**

108 On 1 June 2026, I was invited to a follow-up meeting with Professor Tom Steele, Director of Strategic Infrastructure Planning and Delivery, together with Mark Riddell and Colin McKechnie from Estates. Mr McKechnie chairs the Board's Electrical Safety Committee, and is also the site's operational Estates Manager at the QEUH.

109 Professor Steele requested background information and my views on the current position, including where I considered there to be gaps. We discussed these matters in detail and he expressed a wish to involve me in the review because of my extensive direct knowledge of the project. Following the meeting, Professor Steele confirmed that he intended to undertake a gap analysis of the hospital design. He also intended to assemble a project team and adopt a structured project management approach.

110 My understanding of our discussion was that active humidity control was provided only within the hospital operating theatres and that the humidity control systems serving other air handling units had been disabled because of concerns about the risk of *Legionella* associated with the dehumidification systems.

111 The infrastructure review has now been formally established as the “QEUH/RHC Diagnostic Infrastructure Review Short Life Working Group (SLWG)”. The Group held its inaugural meeting on 18 June 2026.

112 The Terms of Reference provide for the SLWG to oversee two principal workstreams:

- a review of electrical safety and ventilation infrastructure within Group 2 medical locations at the QEUH and Royal Hospital for Children; and
- a design, commissioning and assurance review of diagnostic imaging facilities at both hospitals.

The review is intended to identify assurance gaps, determine the actions required to achieve evidence-based assurance and compliance, and prepare any necessary business cases for remedial works. The Short Life Working Group reports through the Deputy Chief Executive/Chief Operating Officer and will also report to the *Safety and Public Confidence Oversight Group*, co-chaired by Professor Jann Gardner and Professor Sir Lewis Ritchie.

113 Professor Tom Steele has invited me to become one of the six Core Members of the SLWG. In that capacity, I have been invited to assist with a range of evidence-gathering activities, working alongside Estates, clinical staff and equipment suppliers and drawing on my extensive knowledge of the project.

114 As at the date of this witness statement, arrangements are being put in place to enable me to commence the work allocated to me as a Core Member of the SLWG.

115 I have prepared this witness statement to assist the Inquiry by setting out my recollection of the matters described above and by identifying the contemporaneous documents that support that evidence.

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.

Dr Michael Bradnam

Appendix A- documents referred to

A56439478 - SBAR Paediatric Nuclear Medicine Humidity Equipment Issues

A56344071 - Radiation Protection Advisers' Input into NSGH/NCH Projects

A56357844 - Email from Dr M Bradnam to B Condon and others - Re Potential Risk with NSGH/NCH - 16 August 2010

A56361619 - Email from Dr M Bradnam to F Wrath - Re Preinstallation Manuals for SPECT and SPECT-CT - 3c of 3a/3b/3c – 06 September 2010

A56500928 - Email chain from A MacLennan to Dr Bradnam forwarding email from A MacLennan to D Loudon, G Archibald and P Gallagher - Re Group 5 Equipment - 12 February 2014

A56361721 - Email from W Miller to M Macleod - FW: Electronic Plans - All radiology/ imaging - 14 May 2014

A56361715 - Email W Miller to Dr M Bradnam - Re 6-weekly Meeting with Project Team - 03 April 2014

A56361824 - Email from Mairi Macleod to W Miller - Re: Diagnostic Room Data Sheets - 26 June 2014

A56435940 - Email from Teresa Inkster to Dr M Bradnam and others - RHC-QEUA - Imaging Courtyard Pigeons - 24 January 2019

A56439318 - Diagnostics/Project Team Meeting Note - 9 April 2014

A56438465 - Email from Dr M Bradnam to J Guthrie - Urgent To Action: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUA and RHC - 18 June 2020

A56439289 - Correctair - SHTM 03-01 Critical Ventilation Survey - Verification & Inspection - Nuclear Medicine - 29 May 2020

A56439450 - SBAR - non-conformances in ventilation and temperature control - Nuclear Medicine Departments - 17 July 2020

A56344562 - 2025-08-15 - MRI Humidity details - Kerr Clarkson

A56439483 - Email from Dr M Bradnam to Professor Jann Gardner - Re Formal notification of safety, governance and assurances matters - Royal Hospital for Children - 09 April 2026

A56439491 2026-04-13 - Bradnam notes- Royal Hospital for Children

A56439495 - Email from Dr M Bradnam to Professor Jann Gardner - Re Diagnostic Image Review - Safety, Design, Commissioning and Assurance (QEUH/RHC) - 23 April 2026

A56344078 - 2024-04-10 - SBAR - Earth bonding checks in Medical Locations

A56361962 - Email from Dr M Bradnam to A MacLennan - Re: Private and Strictly Confidential - 12 February 2014

A56361716 - Email from Dr M Bradnam to L Ross and W Miller - Re Absence of 1:50s Risk Assessment - 01 April 2014

A56361725 - Email from Dr M Bradnam to L Ross and W Miller - Re Electronic plans - All Radiology/ imaging - 14 May 2014

A56361821 - Email from Dr M Bradnam to L Ross and W Miller - Re: Electronic plans - All radiology/ imaging - 16 May 2014

A56361838 - Email from Dr M Bradnam to W Miller - Re: Electronic plans - All radiology/ imaging - 19 June 2014

A56361943 - Diagnostics/ Project Team Meeting - Meeting Note - 23 July 2014

A56361900 - Diagnostics/ Project Team Meeting - Meeting Note - 13 August 2014

A56361955 - Diagnostics/ Project Team Meeting - Meeting Note - 24 September 2014

A56361842 - Diagnostics/ Project Team Meeting - Meeting Note - 07 November 2014

A56361944 - Diagnostics/ Project Team Meeting - Meeting Note - 09 January 2015

A56500930 - David Loudon requested by Aileen MacLennan - 11 February 2014

SBAR Report for Asset Investment Prioritisation

<i>Strategic fit</i>	<i>Service and business need</i>	<i>Impact on Assets</i>	<i>Risk Reduction</i>	<i>Overall score %</i>
				%

Section 1 – General Information & Governance	
Date of Request	14/8/2025
Project Title	Lack of Humidity Control in Paediatric Nuclear Medicine
Author and Designation	Dr Michael Bradnam, Consultant Clinical Scientist
Service Lead and Designation	Mary McKee, General Manager
Service Level Sponsor	Mary McKee, General Manager
Name of Governance Board which ratified this request	Diagnostics Capital Program Board
Chairperson of Governance Board	Anne Traquair-Smith, Director of Diagnostics
Date of Governance Board Meeting	
Known Costs, Availability and source of Funding	

Section 2 – SBAR Report (Situation, Background, Assessment, Recommendations)
Situation <i>(A concise statement of the activity or challenge)</i>
The environmental control of the paediatric SPECT-CT scan room is non-compliant with the SPECT-CT system environmental requirements. There is no control of the humidity within the paediatric SPECT-CT scan room nor within the Air Handling Unit which supplies the room. Accordingly, the room humidity is unregulated and sometimes outwith the SPECT-CT system design parameters. This lack of environmental control is causing multiple warning messages and error messages on the user console on hot humid days. This in turn delays quality assurance tests and clinical imaging. Siemens have advised that we need to obtain a new air conditioning system for the room, as the high humidity can damage the scanner and reduce its operational life (i.e. accelerate ageing of the system). There have also been quality assurance issues with the system which may be linked.

Background *(Pertinent and brief information related to the situation)*

The planning guide for the SPECT-CT scanner supplied to the Board clearly states that the room humidity should be restricted to the range 20% to 75% relative humidity (RH) (*Appendix 1*). However, there are no humidity controls within Plant Room 31, Air Handling Unit (AHU42), which supplies the scan room (RNM-033) nor within the scan room itself. When the external environment of the hospital is hot and humid, the room humidity sometimes exceeds the 75% safe operating limit. The room relative humidity has exceeded the 75% upper limit on at least four occasions in the last year, sometimes exceeding 85% (*Appendix 2*).

In 2015, the room was originally fitted with a water cooled fan-coil unit by Brookfield Multiplex to control room temperature. However, no controls were included to control humidity. The scanner was replaced in 2024 under a turn-key contract with Siemens. Siemens fitted a new like-for-like fan-coil unit in 2024, capable of cooling a larger thermal load. (NB The new scanner has a larger thermal output compared to the previous scanner.) This fan-coil unit is also incapable of managing humidity. Capital Planning accepted Siemens design solution and advise that the fan-coil units are now beyond the liability defects period.

The new scanner includes an environmental monitor within the system gantry. The old scanner did not have this feature. The environmental monitor warns the user if the environmental humidity is too high. The scanner produces repeated warnings and error messages on the operator's console whilst the humidity remains too high. Each warning has to be manually cleared. Once the humidity exceeds 85% there are multiple error messages. These temperature exceedances have been reported to Siemens for investigation.

On one occasion the system also failed its' Quality Assurance tests (system sensitivity) and could not be used until the room humidity was reduced.

The exceedance of room humidity has been confirmed, at Siemens recommendation, through independent monitoring of the scan room by means of a 24/7 data logger. Estates have been unable to provide humidity data as there is no humidity sensor provided in RNM-033 or in AHU42.

Coincidentally, the relative humidity within the MR scan rooms in the hospital has simultaneously been exceeded over the past week, on occasion resulting in automatic protective system shut-downs 'locking out' users from scanning (*Appendix 3*).

Assessment *(Analysis and consideration of options)*

The upper relative humidity limit is usually exceeded in the morning during periods of hot humid weather.

Investigation of the room data sheets, shows that no humidity limits were specified for the room, despite this information being provided to the New Hospital Project Team by the Board's Medical Physics Experts (MPEs) and Magnetic Resonance Safety Experts (MRSEs). Email evidence is available to confirm this. Furthermore, Capital Planning and Estates both confirm that there are no humidity controls on the air intake to the scan room.

Any scanner breakdown due to an uncontrolled environment is not covered by the system service contract and would be potentially chargeable, especially if we don't follow Siemens advice to upgrade the air conditioning system to control humidity as well as temperature in line with the system planning guide.

The simultaneous failure of the MR scanners, due to relative humidity limits being exceeded, possibly points to a wider problem with the design of the building's ventilation and environmental controls. The MR scan rooms

are fed from AHU23 and AHU32, in Plant Room 21, which is relatively close to Plant Room 31. These AHUs have humidity monitoring although any humidity controls present appear not to be working to specification.

The lack of scanner capacity delays patients and could adversely impact on patient waiting times. If a patient is anaesthetised at the time the scanner becomes faulty then there is the potential for a clinical incident.

Climate change is increasing the frequency of heatwaves in Glasgow, together with periods of increased humidity. We can postulate that the frequency of relative humidity limit exceedance is likely to increase if scan room humidity control is not addressed. The risk is highest in the summer months.

Recommendation *(Action requested or recommended)*

We recommend that a more detailed investigation of the humidity issues within the paediatric SPECT-CT scan room (RNM-033) is undertaken with a view to introducing humidity controls to meet the equipment Planning Guide, as advised by Siemens. This investigation would involve reviewing the equipment specifications, room data sheets and existing environmental controls and environmental monitoring. Then make recommendations for control of humidity. Given the issue with the lack of environmental control of the MR scanners in the QEUE and the RHC, the project could potentially be usefully expanded to check the environmental control of all the imaging rooms within the hospital as similar humidity control limitations may be found throughout the imaging estate.

Expected Benefits *(Proposed Outcomes)*

- Increased system reliability.
- Increased system lifespan.
- Improved system uptime.
- Reduction in patient scan delays.
- Reduced risk of clinical incidents.
- Reduced revenue exposure due to unplanned maintenance and repairs, as a result of environmental damage to the system.
- Reduced capital exposure, due to maximising the lifespan of equipment.
- Improved resilience to climate change.
- Reduction in reputational risk due to scanners failing due to a lack of environmental humidity controls.

Section 3 – Which Strategic Aim(s) Does This Request Deliver? *Please provide supporting evidence below*

1	☐	Strategic Fit – Does the proposal align with or support with the Board's Corporate Objectives ->  Corporate Statements 21-22.pc
2	☐	Will the proposed investment deliver an identified business/service need?

		Improved service resilience.
3	☐	How does the proposed investment impact on the condition and/or compliance of the existing asset(s)/estate?
		The proposal would ensure compliance with the operating environment of the asset and ensure that the estate environment is fit for purpose for future imaging systems.
4	☐	How does the proposal reduce risks to the Board – e.g. Reputational/Operational/Financial
		Reduce reputational/operational/financial risks due to improved asset management.
5	☐	How does the proposal impact on the Board delivering its objectives around Net Zero Carbon?
		Not applicable
6	☐	What is the capital and revenue position arising from the proposals and how does this relate to the Board's Financial Improvement Plan?
		Cost control. Reduce revenue exposure to unplanned maintenance and repairs due to environmental damage to the system. Reduce capital risk, due to maximising the lifespan of equipment.

Section 4 – Supporting and Additional Information <i>Please provide supporting evidence below</i>		
	☐	Does the proposal have any additional relevant supporting information or documents eg feasibility study; HEI reports; health & safety audit et al. <i>Please provide supporting evidence below</i>
		Appendix 1 – Siemens Pro.specta Planning Guide Appendix 2 – Siemens Pro.specta x3 SPECT-CT Scanner - Humidity Report. Appendix 3 – Information from Estates on Air Handling Units supplying MR (AHU23 and AHU32) and SPECT-CT (AHU42). <i>[Estates postulate that the humidity monitoring data from AHU23 and AHU32 is indicative of the humidity in AHU42 which supplies RHC SPECT-CT.]</i>

Guidance

Field	The required information
Project Title	The title should give a clear indication of the project purpose
Author	The name of the person who wrote the report including designation
Service Lead	Named lead within the service who is responsible for proposal
Service Level Sponsor	All requests are required to be signed off by a Director /Chief Officer from within your service and considered/ endorsed through the appropriate governance groups (see below)
Governance Board	All requests should be discussed and ratified by an appropriate formal governance group within your area, prior to submission to AIPF. The name of the group, chairperson and date of the meeting is required.
Costs and funding availability	Please indicate any one-off or recurring costs (by year) which you are aware of in relation to this request. Please state what funding is available for these or other costs which may arise, including the funding source.
Situation	A concise statement of the activity or challenge you want to solve
Background	Describe the background to this request. Include pertinent and brief information related to the situation. This should include details of any potential risks or legislative requirements for consideration
Assessment	Describe what analysis has been undertaken. What are the available options to deliver the solution? Include the reasons why this request should proceed and what will happen if it does not.
Recommendation	Summarise what exactly is being requested. Which option from the assessment is the preferred solution, and why?
What benefits will be delivered?	What are the expected benefits the project will deliver and how will these be measured? Project outcomes are the changes, learning or other effects of the project. Project Outputs are the tangible things the project intends to produce. Include the expected timescales for these benefits to be realised, i.e. immediately, two years' time.
Strategic Aims	Please consider how this request is aligned to the AIPF Criteria, noted at Section 3.
Supporting Information	Summarise any supporting documentation or evidence which is not captured in the previous sections

Radiation Protection Advisers' Input into NSGH/NCH Projects

Health Physics will perform the following functions, on behalf of NHS Greater Glasgow & Clyde:

1. Radiological Protection Design

Certificated RPAs will calculate and specify the Radiological Protection design for those areas using ionising and non-ionising radiations.

Mr A G Brennan, Deputy Head of Health Physics will lead, with Mr R Corrigan as his deputy for these projects. Ms H Amatiello will input for non-ionising radiation (Lasers, UV).

Other RPAs (Dr C J Martin, Head of Health Physics, Dr J Robertson, & Dr D Gentle) will input as required for continuity, training supervision and occasional advice.

2. Prior Examination of Plans & Installations

The above RPAs will advise on, check and sign off the proposed Radiological Protection design and plans, following consultation with nominated NHS professional colleagues & Design Team members.

At a later date, the above RPAs will advise on, check and sign off the proposed Radiological Installations, following consultation with professional colleagues & company representatives.

3. Critical Examination

Health Physics staff will perform the critical examination of the installations and testing of physical control measures under the leadership of Mr A G Brennan and will generate reports accordingly. Health Physics will perform re-checks as required.

4. Commissioning and Acceptance

Commissioning and Acceptance Testing of all radiological installations and radiation equipment will be performed by Health Physics in conjunction with other Physics and NHS staff. Health Physics will generate reports accordingly and will perform re-checks as required.

5. Communication

Mr A G Brennan and Mr R Corrigan will attend meetings as required with the Design Team and representatives of the Contractor. All communication will be directed via the designated Project Manager in the first instance. All professional advice will be documented in reports. To facilitate communication, coordination of resources, training supervision and requirements, and continuity, other RPAs involved in the project will deputise when both Mr Brennan and Mr R Corrigan are unavailable.

6. Timescales

Timescales and deadlines will be agreed with the Project Team for the completion of this work, as resources will have to be reallocated and other work & commitments rescheduled.

7. Radiation Equipment Specifications

Health Physics will generate and agree radiation equipment specifications for new or replacement radiation equipment, and will participate in the tender evaluation and selection process.

8. MEIGaN (Medical Electrical Installation Guidance Notes)

Mr A G Brennan & Mr G Phanco will advise the Design Team on the requirements of MEIGaN in those areas where continuity of supply & equipotential bonding are critical for patient & staff electrical safety.

9. MEIGaN Compliance

Health Physics will confirm the above for all radiological installations.

A G Brennan

23rd July 2009

From: Bradnam, Michael [REDACTED]
Sent: Monday, August 16, 2010 08:49
To: 'Barrie Condon' [REDACTED]
Cc: Foster, John (NHSmail) [REDACTED] Brennan, Andy
[REDACTED]; Miller, Winnie [REDACTED]
Subject: Potential Risk with NSGH/NCH

Dear Barrie,

Thank you very much. I hope this has the desired effect.

We will also need input from a Structural Engineering (e.g. Scott Wilson).

In the mean time I have collected information on the latest SPECT-CT scanners to provide to the M&E and Structural engineers; which is ready to hand over.

Best wishes,
Michael.

From: Barrie Condon [REDACTED]
Sent: 13 August 2010 16:41
To: MacLennan, Aileen; MacLennan, Aileen
Cc: Wrath, Frances; Brennan, Andy; Brennan, Andy; John_Edward_Foster ; E-mail;; Bradnam, Michael; Bradnam, Michael; Miller, Winnie; Parr, Antoinette; Parr, Antoinette
Subject: Potential Risk with NSGH/SK

Hi Aileen,

I want to alert you to an issue which could have significant cost ramifications as regards the new hospital. Staff in Clinical Physics have been asked to fill in an extensive spreadsheet (attached) which is related to Mechanical and Electrical (M&E) issues which will be used to plan the building. I have pointed out that this is not something my staff are qualified to do (see my email to Frances Wrath below which explains the reasons). However what worries me is who will eventually do this work as it will impact directly on the building design and if done incorrectly could involve major rebuilding costs to make good.

In all the previous installations and new builds we have dealt with it has been the case that the architects who have been hired (usually by the builders themselves) subcontract a firm or firms of Mechanical and Electrical Engineers to do this work. This involves extracting M&E data from installation information provided by potential equipment suppliers and using it to construct building plans and specifications. My concern is that no M&E engineers seem to be involved in this process. I am told that Nightingales, the architects hired by Brookfields, are indicating they have not been funded to hire such engineers and that is why they are passing this responsibility (ie liability) back to us.

I think what needs to be established is who has responsibility for supplying M&E expertise? If, uniquely in our experience, the responsibility lies with GG&C, then we should bring such expertise in quickly as I believe this all needs to be resolved by early September.

As all other Directorates will be installing equipment in the new hospital, this problem will presumably not be restricted to Diagnostics.

I would therefore be grateful if you would consider escalating this issue,

A57087549

Best wishes,

Barrie

Professor Barrie Condon,
Interim Director of DCPB,
Institute of Neurological Sciences,
Govan Road,
Glasgow G51 4TF

[REDACTED]

[REDACTED]

From: Barrie Condon
Sent: 10 August 2010 15:15
To: Wrath, Frances
Subject: NSGH technical spreadsheet

Hi Frances,

I am writing to you because my staff have been become concerned about the attached spreadsheet they are being asked to fill in. I wanted to point out:

- 1) Though we have been involved in many installations and new building designs, we have never been required to fill in such a spreadsheet.
- 2) We are certainly not qualified to fill in much of this spreadsheet, for example vibration checks, structural loads, wall fixings, gases, services etc.
- 3) I don't see why we should take on the liability of filling in this spreadsheet as we have no responsibility for the design.
- 4) As regards the MR installations I sent the pre-installation specs, from which qualified staff like architects and M&E Engineers could extract the required information, for the 3 main MR manufacturers to Hugh McDermont on 16/6/09 and again on 26/1/10.

As the staff are not qualified to fill the form in, and because it is not their responsibility, I am afraid I cannot ask them to comply,

Best wishes,

Barrie

Professor Barrie Condon,
Head of Imaging Physics for GG&C Health Board,
MRI Unit,
Institute of Neurological Sciences,
Govan Road,
Glasgow G51 4TF

[REDACTED]

[REDACTED]

From: Bradnam, Michael
Sent: 06 September 2010 16:19
To: Wrath, Frances [REDACTED]
Cc: Miller, Winnie [REDACTED]
Subject: Preinstallation Manuals for SPECT and SPECT-CT - 3c OF 3a/3b/3c

Frances,

As requested, please find installation manuals for GE SPECT and SPECT-CT scanners attached.

The Infinia is their current SPECT scanner and the Infinia Hawkeye and the DiscoveryNMCT670 are their current SPECT-CT scanner. The DiscoveryNMCT670 in this email is most likely to be the 'worst case' of the GE SPECT product range but your Structural Engineer and M&E Consultants will clearly need to check all of the parameters to ensure that this is the case. If they have any user technical questions then I will be happy to assist them.

Best wishes,
Michael.

Dr Michael Bradnam
Consultant Medical Physicist & Honorary Research Fellow
Head of Clinical Physics
Royal Hospital for Sick Children & The Queen Mother's Hospital
Dalnair Street, Yorkhill, Glasgow G3 8SJ

[REDACTED]
[REDACTED]
[REDACTED]

From: MacLennan, Aileen
Sent: 12 February 2014 09:45
To: Bradnam, Michael [REDACTED]
Subject: FW: Group 5 Equipment

Many Thanks
Aileen

From: MacLennan, Aileen
Sent: 12 February 2014 09:36
To: Loudon, David; Archibald, Grant; Gallagher, Peter
Subject: Group 5 Equipment
Importance: High

Dear Colleagues,

We clearly have inherited a difficult situation with regard to the imaging equipment being installed in the new hospitals before the hospitals are completed. I will continue to provide you with the best advice and support that Diagnostics can proffer.

David, you will recall that you and your Project Team first broached the subject of installing imaging equipment in the new hospital before it is completed, at the start of 2013. Up to this point it had always been understood that the imaging equipment would be delivered and installed in the spring of 2015. The physicists gave clear advice to the Project Team that early installation carried significant technical and financial risk to the organisation. They advised against early installation of equipment before the hospital construction was completed and handed over. They explained the risks to the various equipment. The Project Team advised that there was a contractual obligation with Brookfield to complete the imaging rooms in 2013. So the Board at least needed to know what equipment would be installed in the imaging rooms so that the design of the rooms could be completed.

By March 2013 the Board had decided that they would start the procurement process so that it could be determined what equipment would be purchased. Against the earlier advice of Diagnostics and Physics experts it was further decided that the equipment would be installed within the last quarter of the 2013/2014 financial year, with CT and MR following on shortly thereafter. As an aside, the Imaging modality teams and the Board's RPAs are still waiting and looking forward to receiving the full set of 1:50 drawings and elevations and room data sheets, in order to complete the imaging room designs and layouts, together with the suppliers and the Project Team. Most offers of advice and help from the experts in my Directorate have been ignored and the Project Team has continued mostly on its' own or by using separate advice.

On Friday 24 January 2014 we met to discuss the way forward. Again I offered the assistance of scientific experts and the modality teams to expedite the design work and mitigate the risks. You again advised that our assistance was not necessary.

On 31 January 2014 Siemens met with the Project Team for the pre-meet for the MR and SPECT-CT pre-installation and delivery. Four of the scientific experts were also in attendance. At this meeting Siemens raised all the issues that the experts had already raised with your Project Team, including the issue of potential dampness on the RF cages and the care of the SPECT-CT detectors and X-ray CT tubes.

It is frustrating for all of us that we are in the current situation, especially given that GGC experts gave their advice a year ago not to purchase these systems in advance of hospital completion. As far as I can see, there are three potential ways that the Board could mitigate the risk of damage to the SPECT-CT systems before the building is completed:

- 1.) Find a mechanism, compatible with the Board's Standing Financial Instructions, by which the detectors and tubes can be physically delivered and received on our premises and then stored safely off-site by Siemens on our behalf. Peter has already outlined the difficulties with this.
- 2.) Store the detectors and tubes in an existing clinical area within Diagnostics within a monitored and proven stable environmental control. We have seriously explored this possibility. The equipment will compromise the clinical area and be at risk of accidental physical damage, which may or may not be covered by your insurance policy. However, what would prevent this option is that we have determined that storage of equipment in clinical areas, especially for a prolonged period, would not be compatible with the requirements of HEI. As such, this option is not achievable.
- 3.) Store the detectors in an environmentally controlled environment elsewhere on the Health Board estate, within a well established stable environment, not subject to cement dust, dampness or flooding, that can be monitored by the BMS and accessed 24 hours per day/7 days per week. I appreciate that the Brookfield site is not the best location for the Board to achieve these conditions. However hopefully there maybe a non-clinical space elsewhere on the Board's estate that can be made available and made suitable.

Regards

Aileen

From: Miller, Winnie [REDACTED]
[REDACTED]
Sent: Wednesday, May 14, 2014 19:30
To: Macleod, Mairi [REDACTED]
Cc: Ross, Lynn [REDACTED] Bradnam, Michael
[REDACTED]
Subject: FW: Electronic plans - All radiology/imaging

Hi Mairi

Please see Michael's request below, I attach a copy of a previous Room Data sheet as an example of what is required.

With thanks

Winnie

Planning Manager - Diagnostics
AGILE WORKER

[REDACTED]
[REDACTED]
PA support: Mrs Christina Fulton
[REDACTED]

From: Bradnam, Michael
Sent: 14 May 2014 18:58
To: Ross, Lynn; Miller, Winnie
Cc: Brennan, Andy
Subject: Electronic plans - All radiology/imaging

Dear Lynn and Winnie,

Would you please request the Room Data sheets from Mairi Macleod for Nuclear Medicine and MRI so that I can circulate them to my team. We urgently need this information to check the plans made available to us. Many thanks.

Best wishes,
Michael.

From: MacLennan, Aileen
Sent: 14 May 2014 17:06
To: Miller, Winnie; Brennan, Andy; Ross, Lynn; Muir, Cathy; Bradnam, Michael; Peebles, Lorraine; Loudon, David
Cc: Smillie, Dawn; Dobson, Lorraine
Subject: FW: Electronic plans - All radiology/imaging

David,

A57087549

Thank you for your telephone calls and e mails in relation to the above. I have copied my team into your mail to ensure we understand the points of contact. This is helpful and I agree the 6 weekly meeting are an important interface for us and our staff.

Kind Regards

Aileen

From: Loudon, David
Sent: 13 May 2014 12:05
To: MacLennan, Aileen
Cc: Macleod, Mairi; Griffin, Heather; Wrath, Frances; Moir, Peter; McGarrity, John
Subject: RE: Electronic plans - All radiology/imaging

Aileen,

Thank you for your message. I have reviewed the content of your message with the project team and as a result have found that your team does have all current floor plans and 1:50's. However, I have also found that your team did not receive a formal copy of the elevations that were prepared for diagnostics rooms. This is a genuine oversight for which I apologise.

A full set of the data was delivered to your PA last week for distribution to your team members.

The project team has also reviewed our quality control procedures related to document control and I would ask you to advise your team members to note that Mairi McLeod will be the single point of contact for any queries regarding the equipping of your department with the exception of Group 5 which will remain with Frances Wrath. In Mairi's absence, Heather Griffin should be contacted. John McGarrity will continue to interface with your department as before.

I am aware of the good progress being made on the interfaces between your team and the project team especially since the introduction of the 6 weekly review meetings and site visits. I look forward to this positive relationship continuing as we head towards the installation and commissioning of the diagnostic related services.

Regards

David

David W. Loudon, MCIOB, CBIFM, MBA
Project Director - South Glasgow Hospitals Development / Director of Facilities and Capital Planning - Designate
NHS Greater Glasgow & Clyde
New South Glasgow Hospital Site Offices
Top Floor, NHS Offices
Hardgate Road
Glasgow
G51 4SX

[REDACTED]
[REDACTED]
[REDACTED]

A57087549

From: MacLennan, Aileen
Sent: 05 May 2014 10:58
To: Loudon, David
Subject: FW: Electronic plans - All radiology/imaging

David,

I wanted to bring to your attention the concerns I have about the very difficult situation the Diagnostic Directorate Service Transfer Owners are in. In our high level meetings with the Project team we have repeatedly asked for 'Room Data Sheets' and have been assured with you present in the room that we have all the information that the Project team have. The information shared with us to date has been a CD rom with 1:50 plans with equipment codes on them but no descriptor of content, subsequent to receiving these we eventually were given a code breaker.

However, we have now been made aware by John McGarrity that there is actually a Room data sheet for each of our rooms that shows the code and descriptor. He has access to this information but for a reason unknown to me he has not been allowed to share it. All our STOs have to spend a considerable amount of time closely scrutinising plans for codes and then cross referencing to the code breaker in order to complete the equipment workbooks to help to identify any gaps. These individuals as you'll be aware are already fully employed clinically and I find it hard to understand why, when the organisation is in possession of a mechanism to expedite this process for clinical staff they will not share it? The frustration and additional work this important task is adding to the clinical team due to the lack of pertinent documentation is again in danger of fracturing collaborative working, and, the potential for serious errors being made due to the current cross referencing of documents in the absence of the Room Data Sheets.

Cathy Muir is required to complete the migration workbook and requires access to this information as a matter of urgency.

I am sure we can resolve this matter easily with your assistance,

Thank you in anticipation

Kind Regards

Aileen

From: Miller, Winnie [REDACTED]
[REDACTED]
Sent: Thursday, April 03, 2014 12:06
To: Bradnam, Michael [REDACTED]
Subject: RE: 6-weekly Meeting with Project Team

Hi Michael, have agreement from Aileen that we should meet, Christina will be in touch to organise-thanks

Planning Manager
Acute Planning - Diagnostics
AGILE WORKER

[REDACTED]
[REDACTED]
PA support - Christina Fulton
[REDACTED]

From: Bradnam, Michael
Sent: 03 April 2014 11:19
To: Ross, Lynn; Miller, Winnie
Cc: Parr, Antoinette
Subject: RE: 6-weekly Meeting with Project Team

Hi Lynn and Winnie,

Thank you for the update. This is clearly going to be an important strategic meeting.

Please advise me of any pre-meeting briefing that you wish me to attend so that I know how Aileen and Lynn wish to handle the meeting, so that I am prepared to discuss the priority issues and conversely know what is not considered a priority.

Please note that I will need to leave the meeting at 3pm.

Best wishes,
Michael.

From: Ross, Lynn
Sent: 02 April 2014 17:50
To: Bradnam, Michael; Miller, Winnie
Cc: Parr, Antoinette
Subject: RE: 6-weekly Meeting with Project Team

Hi Michael

Aileen has asked Winnie to pull together an agenda for the meeting I have therefore included her in my response to you so she can collate

Regards

Lynn

A57087549

From: Macleod, Mairi
Sent: 26 June 2014 16:43
To: Miller, Winnie
Cc: Bradnam, Michael
Subject: RE: Diagnostic Room Data sheets

Winnie

I am sorry to disappoint but we will not be issuing these - there are not just potential inaccuracies in the Room Data Sheets they are completely inaccurate as I have already said these have not been updated since 2012 and are therefore not reflective of the final design.

regards

Mairi

From: Miller, Winnie [REDACTED]
Sent: 26 June 2014 12:30
To: Macleod, Mairi
Cc: Bradnam, Michael
Subject: Diagnostic Room Data sheets
Importance: High

Hi Mairi,

I know that you're waiting for updated room data sheets, however following our Steering group meeting yesterday the team feel that despite potential inaccuracies in the current data sheets it would be very helpful to have access to them.

Would it be possible to have them?

Many thanks

Winnie

Planning Manager - Diagnostics
AGILE
WORKER

[REDACTED]

[REDACTED]

PA support: Mrs Christina Fulton

[REDACTED]

From: Inkster, Teresa [REDACTED]
[REDACTED]
Sent: Thursday, January 24, 2019 17:35
To: Bradnam, Michael [REDACTED] Purdon, Colin
[REDACTED]
Cc: Peters, Christine [REDACTED] Marek, Aleksandra (NHSmail)
[REDACTED]
Subject: RE: RHC-QEUEH - Imaging Courtyard Pigeons

Thanks Michael , we will need to get these checked

Thanks for bringing the courtyard area to our attention . We have identified two issues that we are exploring further. As you say the heat exchanger will be effectively disseminating spores and there was pigeon droppings and feathers visible on top. We note an inlet higher up the building . Also we noted bird faeces on the ground beside the door and smoke testing revealed ingress at the bottom of the door. I have requested that estates colleagues address these issues and clean up , sounds like that is happening .

Kind regards
Teresa

From: Bradnam, Michael
Sent: 24 January 2019 11:51
To: Purdon, Colin
Cc: Inkster, Teresa
Subject: RHC-QEUEH - Imaging Courtyard Pigeons

Dear Colin,

I note that contractors in PPE are working in the imaging courtyard today to clean up the pigeon droppings (and pigeon carcasses) on the outside of the electrical cabinets and fans. I met Mr Forrest your sub-contractor and he advised me that he is working with you.

My observation is that the pigeons may have also roosted inside some of the electrical cabinets, which will require to be opened and checked in due course. I advised Mr Forrest that I would inform you of my observation.

I hope that this helps.

Kind regards,
Michael.

Dr Michael Bradnam
Head of Service for Imaging & Honorary Clinical Senior Lecturer
Dept of Clinical Physics and Bioengineering, Greater Glasgow Health Board & University of Glasgow
Head of Paediatric Clinical Physics, c/o Diagnostic Imaging, Royal Hospital for Children
1345 Govan Road, Glasgow G51 4TF
[REDACTED]
[REDACTED]

**DIAGNOSTICS/PROJECT TEAM MEETING
MEETING NOTE**

9th April 2014 at 1pm in the Boardroom, Project Offices, Southern General

Present: Ms Aileen MacLennan (AMaCL), Director Diagnostic Services (Chair)
Mrs Winnie Miller (WM), Planning Manager, Diagnostics Directorate
Mrs Lynn Ross (LR), General Manager Imaging
Ms Cathy Muir (CM), Sector Superintendent, South Sector, Imaging
Mr Andy Brennan (AGB), RPA, Health Physics
Mr Robert Stewart (RS), Head of Procurement
Mr David Loudon (DL), Project Director
Ms Frances Wrath (FW), ASR Programme – Capital Planning Manager
Ms Mairi Macleod (MMAcl), Project Manager, Project Team
Dr Michael Bradnam (MB), Head of Imaging Physics

Apologies: Mr David Hall (DH), Consultant – Currie & Brown

In Attendance: Allyson Hirst (AH), (Note taker)

	ACTION
1. Welcome and Apologies No apologies were received	
2. Notes of last meeting Were noted as an accurate record of discussions but DL clarified that changes could be made within limitations	
3. Matters Arising/Actions 1:50 Drawings/Elevations All available drawings had been forwarded to Diagnostic colleagues including the codes. Equipment Delivery Group 5 equipment had now been delivered and was being stored on site. Installation will take place around August/September when the environmental on site are suitable and FW has agreed to provide a programme of works. Transfer Equipment RS reported that progress on the equipment new versus transfer had been hampered due to clarifications on the adult bed model. He reported however, that progress was now being made a plan was expected to be agreed by July 2014. It was noted that the imaging equipment transferring from the WIG would require further consideration due to the Outpatient service not moving to Gartnavel until later. Mobile CT Gantry – this was a change and will require to be put out to market for costs.	FW programme of works

Drawings to Suppliers

It was noted that a full set of the drawings forwarded to the companies was sent on to diagnostics colleagues. AB agreed to check and RS will contact suppliers if there are any missing drawings noted.

AB to check drawings

Site Visit

CMcF asked if there was opportunity to review general rooms – Diagnostic colleagues are reviewing 1:50 drawings and this would be helpful to possibly answer questions. Project team indicated that the rooms were not ready to be seen at this time. FW agreed to check with construction manager on timescale for the imaging depats to be completed. MM advised that staff tours were being arranged as areas became available and the project team are working with colleagues to progress these. Tours will be on Friday afternoons.

FW to check timescales for room review

RPA

AB noted that he had a schedule of dates. He reported that the Spot checks undertaken had gone well and he was very impressed with standard, supervision and finish of rooms. He advised that there would be further inspections on site. AB was asked if report format he had submitted was satisfactory – FW advised that Brookfield had fed back that they were happy with the format.

4.

OPT Placement

FW reported that as the Dexa could not fit into the Bone Densitometry room – as per the original plan- It was agreed that it could move to into one of the general diagnostics rooms. FW indicated that this could be picked up at the design stage with suppliers. It was noted that this is a new purchased and not transfer so footprint not fully known.

Medical Gases MR Prep Room on Ground Floor

The Diagnostics Team raised the issue that there were no gases to anaesthetise patients in the ground floor MR prep room. MM advised that Jane Peutrell had carried out a piece of work on patient flows and the anaesthetists had not wanted to anaesthetise in the room as: it was too narrow; they had concerns about the patient pathway from the prep room to the MR room; they wanted to anaesthetise as near to the machine as possible; and they were concerned about having more gas outlets to maintain. Diagnostic colleagues indicated that that they had not been consulted on this and the model would not work for them as 90% of paediatric MRIs were conducted under GA. It was noted that 1:50s were signed off and not gas in the room – however, if this was best practice then a review needed to be undertaken. AMacL suggested that a meeting was set up top look at this issue. It was agreed that MM would arrange and invite MB, AWatt and LRoss from Diagnostics.

MM Meeting with Anaesthetic colleagues

Intercom

AMacL expressed her concern that due to the size of the department and the usual ways or working within imaging the currently proposed push to talk system will not work. It was agreed that a paper should be

submitted to state reasons why push to talk will not work for imaging and thereafter forwarded to KC to discuss with Telecoms colleagues. DL agreed to check status

Pendants

Starkstrom pendants were discussed and agreed at workshops to ascertain the positions and this was agreed via 1:50 drawings – FW agreed to forward images from suppliers brochures. AB noted that the legend used is different and thereby causing concern that the wrong items have been selected. FW advised that the 1:50 drawings had not been updated to include the workshop discussions, and agreed to provide information on the pendant types selected for Imaging rooms. She further advised that suppliers had been informed that if pendants had to be moved to fit their equipment this would be at their cost.

Waste Holding

FW noted that pipe work and an area within the basement has been allocated which was large enough for a holding tank to contain waste from the MBiG room in the NCH if SEPA required this installation.

Migration

It was agreed that tasks noted within the project plan, which had been previously circulated, should be reviewed by attendees and feedback to the next meeting of this group.

Feedback to
next meeting

5.

Blood Fridges

MM advised that this issue had been raised by laboratory staff to rationalise the number of blood fridges in the new hospital. AMacL reported that following consideration of the proposal by staff to locate the fridge in theatres, she was not supportive of this as it would mean a lot of staff entering this area. Instead the status quo would remain. FW commented that the size of fridges had changed and she agreed to look at any implication this might have

FW to look
at new fridge
requirements

6.

ACOB

LP asked if version 9 was still the current version of the migration paper – DL advised that this was correct.

7.

AMacL commented that the meeting had been very helpful in moving issues forward and that feedback from staff on areas visited within the building were positive and a credit to the project team – DL agreed.

RS asked if there were any requirements from Capital Programme that Diagnostic colleagues considered for the new buildings – AMacL commented not at this time but there would be a requirement for the VIC ACH to purchase an MRI to be installed in the “shell space”.

CMcF expressed her concern that there will be only 1 mobile x ray within the stack – AMacL commented that it was the view of the medical advisor that patients requiring x-ray should be seen within the Imaging

department. She suggested that this assumption might require review once the hospital was operational.

New date to
be circulated

Date and Time of Next Meeting

The next meeting date was early May and was too soon, it was therefore agreed that AH would contact CFulton to get a date later in May.

8.

From: Bradnam, Michael
Sent: 18 June 2020 12:35
To: Guthrie, James
Subject: URGENT: TO ACTION: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUH and RHC

Hi Jim,
Yes that is my concern. Do you know how this is going to be addressed? Who should we contact to take this forward?
Kind regards,
Michael.

From: Guthrie, James
Sent: 18 June 2020 12:29
To: Bradnam, Michael [REDACTED]
Subject: Re: URGENT: TO ACTION: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUH and RHC

Hi Michael, individual room as as supposed to be 6 ACH bit as you have seen the hospital was only designed to give 2-3 which is part of the public enquiry into the QEUH. Any room with anaesthetic gases should have 15 ACH to protect the staff.

Thanks jim
Sent from my BlackBerry 10 smartphone on the EE network.

From: Bradnam, Michael
Sent: Thursday, 18 June 2020 08:51
To: Guthrie, James
Cc: Morris, Shona; Wallace, Hugh
Subject: URGENT: TO ACTION: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUH and RHC

Dear Jim,

Many thanks for the report. This is very helpful, although disappointing for all. I am not surprised by the results as the ventilation has not felt right.

I note that the measured number of air changes is lower than recommended for an individual patient room.

Can you advise what number of air changes are required/recommended in rooms where anaesthetic gases are being used, as in these scan rooms?

What remedial action is required to rectify the faults identified, how will we action these through Facilities, what is the mechanism, and how do we monitor the outcome?

I am available on my mobile phone [REDACTED] to discuss.

Thank you for all your assistance.

Kind regards,
Michael.

From: Guthrie, James
Sent: 17 June 2020 21:38
To: Bradnam, Michael [REDACTED]
Cc: Morris, Shona [REDACTED]; Wallace, Hugh [REDACTED]
Subject: RE: URGENT: TO ACTION: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUEH and RHC

Hi Michael, here is the report for the areas you asked to be checked.

Thanks Jim

From: Bradnam, Michael
Sent: 17 June 2020 15:07
To: Guthrie, James
Cc: Morris, Shona; Wallace, Hugh
Subject: URGENT: TO ACTION: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUEH and RHC

Hi Jim,
Is it possible to receive a copy of the report and the measured number of air changes?
Many thanks.
Kind regards,
Michael.

From: Guthrie, James
Sent: 29 May 2020 14:55
To: Nicol, Alice [REDACTED]; Pirie, Mary [REDACTED] Bradnam, Michael
[REDACTED]
Cc: Wallace, Hugh [REDACTED] Morris, Shona [REDACTED]
Subject: RE: URGENT: TO ACTION: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUEH and RHC

Hi the rooms have been done this morning.

Thanks Jim

From: Nicol, Alice
Sent: 29 May 2020 13:59
To: Pirie, Mary; Guthrie, James; Bradnam, Michael
Cc: Wallace, Hugh; Morris, Shona
Subject: RE: URGENT: TO ACTION: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUEH and RHC

I've been told that access to childrens scanning room was arranged
Alice

From: Pirie, Mary
Sent: 29 May 2020 13:04
To: Guthrie, James; Bradnam, Michael
Cc: Nicol, Alice; Wallace, Hugh; Morris, Shona
Subject: RE: URGENT: TO ACTION: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUEH and RHC

Hi James,

Did you manage to get access to the Childrens Department today? I am aware that Shona left work at lunch time today and advised me that no-one had been in the Department.

Thanks
mary

From: Guthrie, James
Sent: 29 May 2020 12:57
To: Bradnam, Michael
Cc: Nicol, Alice; Pirie, Mary; Greenwood, Nicola; Purdon, Colin; 'Ian McKenzie'; Wallace, Hugh; Dennis, Jen; Reilly, Caitlin; Morris, Shona; Williamson, Ross
Subject: RE: URGENT: TO ACTION: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUH and RHC

Hi Michael, Stephan has already been up and scanned the rooms for you. Once his report is done and checked we will get it over to you.

Thanks Jim

From: Bradnam, Michael
Sent: 29 May 2020 12:55
To: Williamson, Ross; Morris, Shona
Cc: Nicol, Alice; Pirie, Mary; Greenwood, Nicola; Purdon, Colin; Guthrie, James; 'Ian McKenzie'; Wallace, Hugh; Dennis, Jen; Reilly, Caitlin
Subject: URGENT: TO ACTION: checking ventilation in gamma camera scan rooms - Nuclear Medicine QEUH and RHC

Hi Ross and Shona,
 Estates contactor is coming to check the ventilation flow rate in the gamma camera scan rooms today. I am off today. Could you show them around and get them to check the ceiling grills and the suction on the wall grills in all three scan rooms please.
 Many thanks.
 Kind regards,
 Michael.

From: Ian McKenzie
Sent: 28 May 2020 17:37
To: Bradnam, Michael; Guthrie, James; Conner, Darryl James
Cc: Purdon, Colin; Nicol, Alice; Williamson, Ross
Subject: [ExternaltoGGC]Re: TO ACTION: Critical Cooling Units - Nuclear Medicine QEUH and RHC

Hi Jim, I have informed our team for support on this tomorrow.

Steven will take lead on this, as I have a two theatre validation at the RAH tomorrow morning, I will be back on site mid morning tomorrow to oversee review.

Thanks, Ian.

Best regards,

Ian McKenzie
Director
Correctair Solutions (Scotland) Limited.

From: Bradnam, Michael [REDACTED]
Sent: Thursday, May 28, 2020 4:18:28 PM
To: Guthrie, James [REDACTED]; Conner, Darryl James
[REDACTED] Ian McKenzie [REDACTED]
Cc: Purdon, Colin [REDACTED] Nicol, Alice [REDACTED]; Williamson, Ross
[REDACTED]
Subject: RE: TO ACTION: Critical Cooling Units - Nuclear Medicine QEUEH and RHC

Hi Jim,
Many thanks.
Kind regards,
Michael.

From: Guthrie, James
Sent: 28 May 2020 15:47
To: Conner, Darryl James [REDACTED]; Bradnam, Michael
[REDACTED]; 'Ian McKenzie' [REDACTED]
Cc: Purdon, Colin [REDACTED]; Nicol, Alice [REDACTED]; Williamson, Ross
[REDACTED]
Subject: RE: TO ACTION: Critical Cooling Units - Nuclear Medicine QEUEH and RHC

Hi Daryl, I will contact Correctair and Michael to arrange for the survey and produce a report for the area.

Ian can you provide your staff to carry out this survey with me please.

Thanks Jim

From: Conner, Darryl James
Sent: 28 May 2020 15:38
To: Bradnam, Michael; Guthrie, James
Cc: Purdon, Colin; Nicol, Alice; Williamson, Ross
Subject: Re: TO ACTION: Critical Cooling Units - Nuclear Medicine QEUEH and RHC

Hi Jim

Can you touch base with Michael and arrange for ACH rate assessment please.
Michael, who approved your electrical additions?
I haven't seen that proposal, Can you send me it please in order to assess if it would come under capital or estates.

Thanks

Darryl
Sent from my BlackBerry 10 smartphone on the EE network.

From: Bradnam, Michael
Sent: Thursday, May 28, 2020 1:29 PM

To: Conner, Darryl James

Cc: Purdon, Colin; Nicol, Alice; Williamson, Ross

Subject: TO ACTION: Critical Cooling Units - Nuclear Medicine QEUH and RHC

Dear Darryl,

As you may remember we have some remaining Brookfield legacy issues in Nuclear Medicine in QEUH and RHC in relation to air handling and critical cooling units. Can you advise me how I should progress and expedite these matters please?

Some of the vents do not appear to be drawing air. I have tried via FMFirst to have the number of air changes per hour confirmed by Estates on a number of occasions but I have not received this information yet.

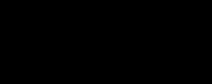
In addition, we had approved some electrical works to put each of the air conditioning units in the three scanner rooms and two control rooms onto individual circuits. At present if one of the critical cooling units faults, it trips the electrical supply to all the other units in the department. I have submitted a bid for a Small Capital Grant to fund this aspect of the work, otherwise we were going to fund from our revenue budget.

I would be pleased to discuss. I am available on my mobile [REDACTED]

Kind regards,
Michael.

SHTM 03-01 CRITICAL VENTILATION SURVEY VERIFICATION & INSPECTION
QEUH – NUCLEAR MEDICINE IMAGE ROOMS
SURVEY



Client:	NHS Greater Glasgow & Clyde	Client Contact:	James Guthrie
Hospital:	Queen Elizabeth University Hospital	Site Address:	1345 Govan Road, Glasgow G51 4TF
Area:	QEUH – Nuclear Medicine		
Report No:	A-1358	AHU	31AHU42 S&E
Date of Test:	29 th May 2020	Date of Last Test:	Unknown
Test Engineer & Report Preparation:	Steven McFadyen	Signature:	
CSSL. Reviewed By:	Ian McKenzie	Signature:	
Client Reviewed By:	James Guthrie	Clients Signature:	

Correctair Solutions (Scotland) Limited
Unit RO7 Trident House
175 Renfrew Road,
Paisley. PA3 4EF.



Scottish Society for
Contamination Control

A57087549



Table of Contents

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2. DEFINITION OF TERMS
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4. VENTILATION VERIFICATION CHECKLIST
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6. ROOM PRESSURE DIFFERENTIALS, TEMPERATURE, HUMIDITY & NOISE LEVELS
7. SCHEMATIC LAYOUT OF NUCLEAR MEDICINE DEPARTMENT IMAGE ROOMS
8. TEST EQUIPMENT USED
9. CALIBRATION CERTIFICATES

Section 1 – Scope of Works

This report is for a survey of Nuclear Medicine department image rooms Located in the Queen Elizabeth University Hospital first floor level, served from 31AHU42.

Section 2 – Definition of Terms

Assessment of compliance with Health Building Note 26 and Health Technical Memorandum 03-01 (all questions relevant to the type of theatre)

Poor

Air volumes and hence air-change rate is less than 75% of the design; room pressure differentials do not ensure a flow from clean to less clean areas; supply or extract air diffusers are not clean; pressure stabilisers not clean and/or not operating correctly; significant faults or failures of indicators on surgeon's panel; visible faults in the fabric of the suite; doors unable to close completely; general air of neglect.

Action: Urgent management action required.

Average

Air volumes and room pressure differentials approximate to the original design values; supply air diffusers clean but extracts visibly fouled; most pressure stabilisers clean and operating correctly; some of the indicators on the surgeons panel not working; minor faults in the fabric and décor of the suite.

Action: Maintenance action required.

Good

Better than average.

Action: None.

Maintenance quality (all questions relevant to the type of theatre)

Poor

More than three answers are negative.

Action: Management action required by estates/facilities department.

Average

No more than three answers are negative

Action: Maintenance action required.

Good

No answers are negative.

Action: None.

Section 3 – Executive Summary

Adults (RNM-036) and Shared (RNM-037) image room both appear to have a faulty FCU unit (FCU 2).

LL-EG2 for all three rooms were originally designed to be ceiling grilles according to commissioning documents from 2014 and have now been modified to become low level egg crate serving extract grilles.

This has changed the overall balance as these have less resistance than a standard 4-four throw diffuser and therefore Adults and Shared image rooms have an increased volume. This explains why EG1 has decreased in both rooms.

Children's image room (RNM-033) LL-EG2 has no airflow and further investigation shows the balancing Volume Control Damper (VCD) has been fully shut, therefore further disrupting the original balance of 31AHU42.

Commissioning reports from 2014 states 31AHU42 was set at 64Hz (Supply) with an external static of 197Pa. Time of recording 31AHU42 was running at 58.7Hz and an external static of 169Pa.

Giving the modifications to ductwork and VCD's (volume control dampers) since commissioning, the original figures can not be used as accurate relationship but only for recording purposes.

31AHU42				
Supply Fan Hz	Extract Fan Hz	Supply Pre-Filter DP	Supply Secondary Filter DP	Extract Filter DP
58.7	54.5	40Pa	85Pa	40Pa
Supply Fan Inlet Pressure		Supply Fan Discharge Pressure		
-95Pa		+169Pa		
Extract Fan Inlet Pressure		Extract Fan Discharge Pressure		
-207Pa		+146Pa		

Supply Grille Reading & Air Change Rates

Nuclear Medicine – Adult image room – RNM-036							
Grille Reference	Recorded Air Volume l/s	Design Volume l/s	Design %	Total Air Volume m³/s	Room Volume m³	Recorded AC/HR	SHTM 03-01 AC/HR
SG1	+159	+196	81	0.159	127.8	4.48	N/A
Comments:							

Extract Grille Reading & Air Change Rates

Nuclear Medicine – Adult image room – RNM-036							
Grille Reference	Recorded Air Volume l/s	Design Volume l/s	Design %	Total Air Volume m³/s	Room Volume m³	Recorded AC/HR	SHTM 03-01 AC/HR
EG1	-63	-82	77	0.226	127.8	N/A	N/A
LL-EG2	-163	-82	199				
Comments:							

Supply Grille Reading & Air Change Rates

Nuclear Medicine – Shared image room – RNM-037							
Grille Reference	Recorded Air Volume l/s	Design Volume l/s	Design %	Total Air Volume m³/s	Room Volume m³	Recorded AC/HR	SHTM 03-01 AC/HR
SG1	+189	+248	76	0.189	175.0	3.85	N/A
Comments:							

Extract Grille Reading & Air Change Rates

Nuclear Medicine – Shared image room – RNM-037							
Grille Reference	Recorded Air Volume l/s	Design Volume l/s	Design %	Total Air Volume m³/s	Room Volume m³	Recorded AC/HR	SHTM 03-01 AC/HR
EG1	-79	-103	77	0.272	175.0	N/A	N/A
LL-EG2	-193	-103	187				
Comments:							

Supply Grille Reading & Air Change Rates

Nuclear Medicine – Children’s image room – RNM-033							
Grille Reference	Recorded Air Volume l/s	Design Volume l/s	Design %	Total Air Volume m³/s	Room Volume m³	Recorded AC/HR	SHTM 03-01 AC/HR
SG1	+181	+205	88	0.207	142.35	5.2	N/A
SG2	+26	+30	87				
Comments:							

Extract Grille Reading & Air Change Rates

Nuclear Medicine – Children’s image room – RNM-033							
Grille Reference	Recorded Air Volume l/s	Design Volume l/s	Design %	Total Air Volume m³/s	Room Volume m³	Recorded AC/HR	SHTM 03-01 AC/HR
EG1	-78	-100	78	0.078	142.35	N/A	N/A
LL-EG2	-0	-100	0				
Comments:							

Supply Grille Reading & Air Change Rates

Nuclear Medicine – Shared control room – RNM-034							
Grille Reference	Recorded Air Volume l/s	Design Volume l/s	Design %	Total Air Volume m³/s	Room Volume m³	Recorded AC/HR	SHTM 03-01 AC/HR
SG1	+32	+35	91	0.032	55.07	2.1	N/A
Comments:							

Extract Grille Reading & Air Change Rates

Nuclear Medicine – Shared control room – RNM-034							
Grille Reference	Recorded Air Volume l/s	Design Volume l/s	Design %	Total Air Volume m³/s	Room Volume m³	Recorded AC/HR	SHTM 03-01 AC/HR
EG1	-26	-30	87	0.026	55.07	N/A	N/A
Comments:							

Section 6 – Room Pressure Differentials, Temperature & Noise Levels

Room Pressure Differentials

Room Reference	Target Room Pressure (Pa)	Recorded Room Pressures (Pa)	Recorded Temp	Recorded %RH	Recorded Noise dB(A)
RNM-036 Adults image room	+ve	+1.0	21.8	50.4	63.9

Comments:

Room Reference	Target Room Pressure (Pa)	Recorded Room Pressures (Pa)	Recorded Temp	Recorded %RH	Recorded Noise dB(A)
RNM-037 Shared image room	+ve	-0.4	24.6	48.9	58.4

Comments:

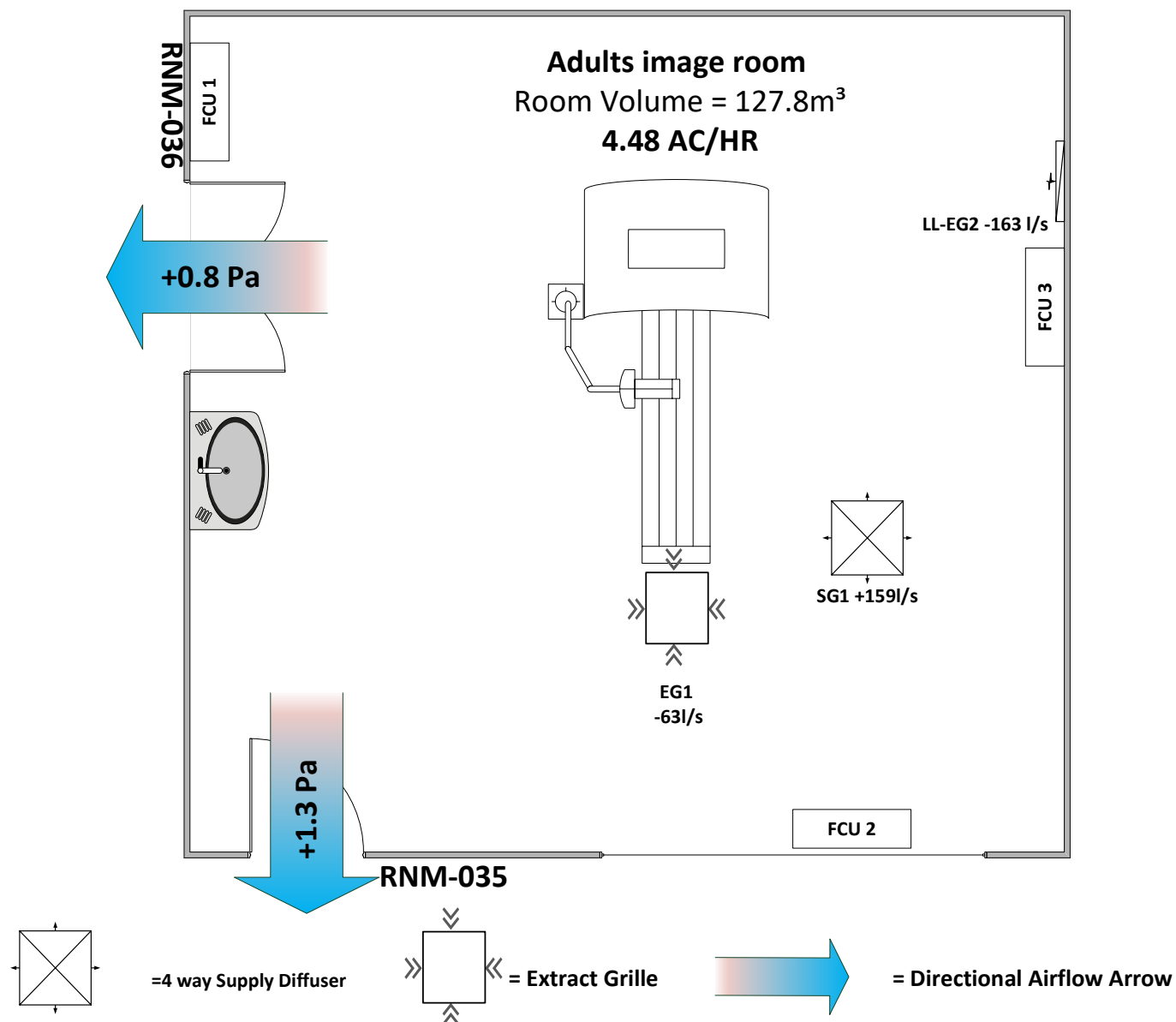
Room Reference	Target Room Pressure (Pa)	Recorded Room Pressures (Pa)	Recorded Temp	Recorded %RH	Recorded Noise dB(A)
RNM-033 Children's image room	+ve	+1.0	23.6	47.1	54.5

Comments:

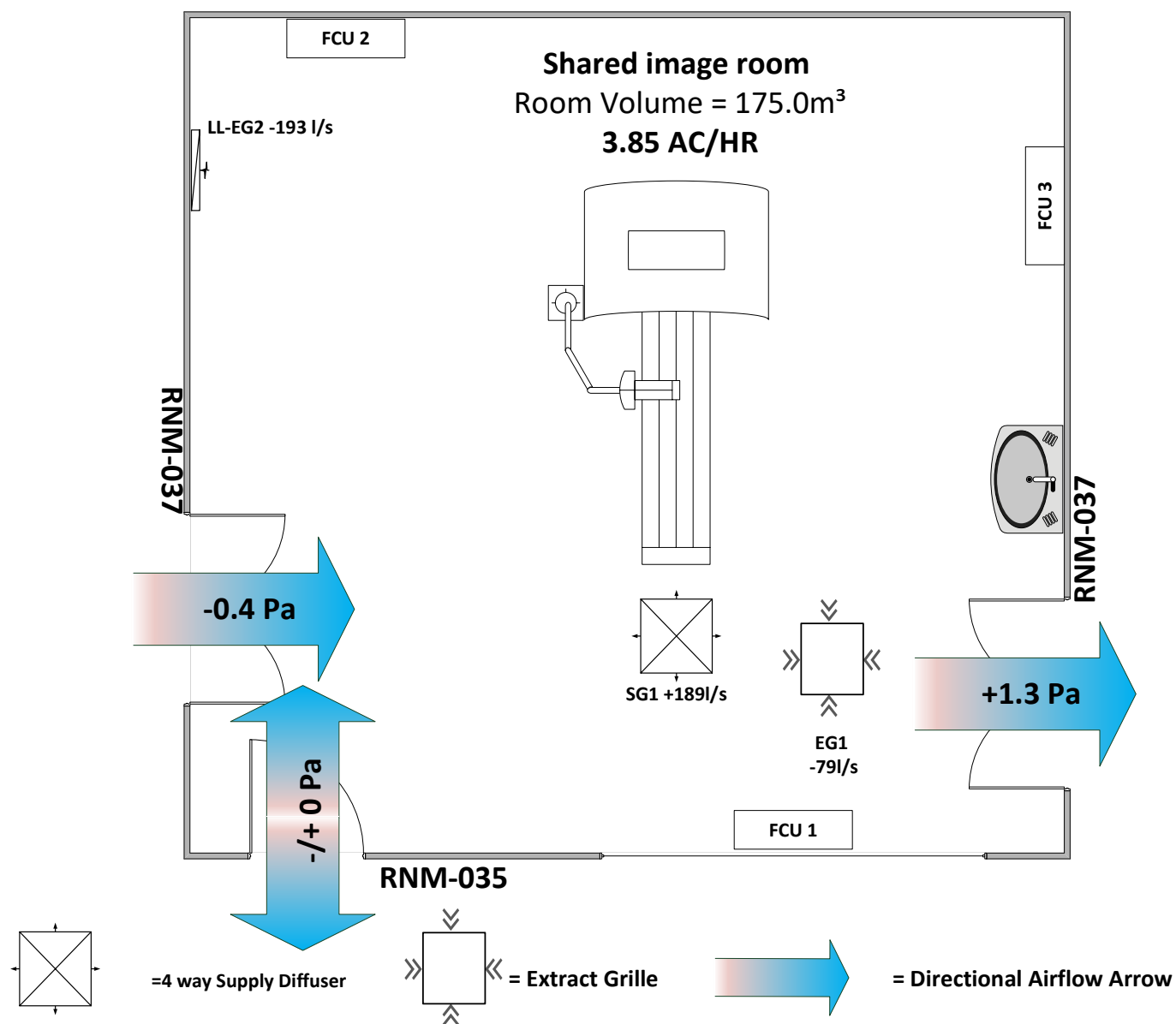
Room Reference	Target Room Pressure (Pa)	Recorded Room Pressures (Pa)	Recorded Temp	Recorded %RH	Recorded Noise dB(A)
RNM-035 Shared control room	N/A	+0.7	25.3	45.1	56.1

Comments:

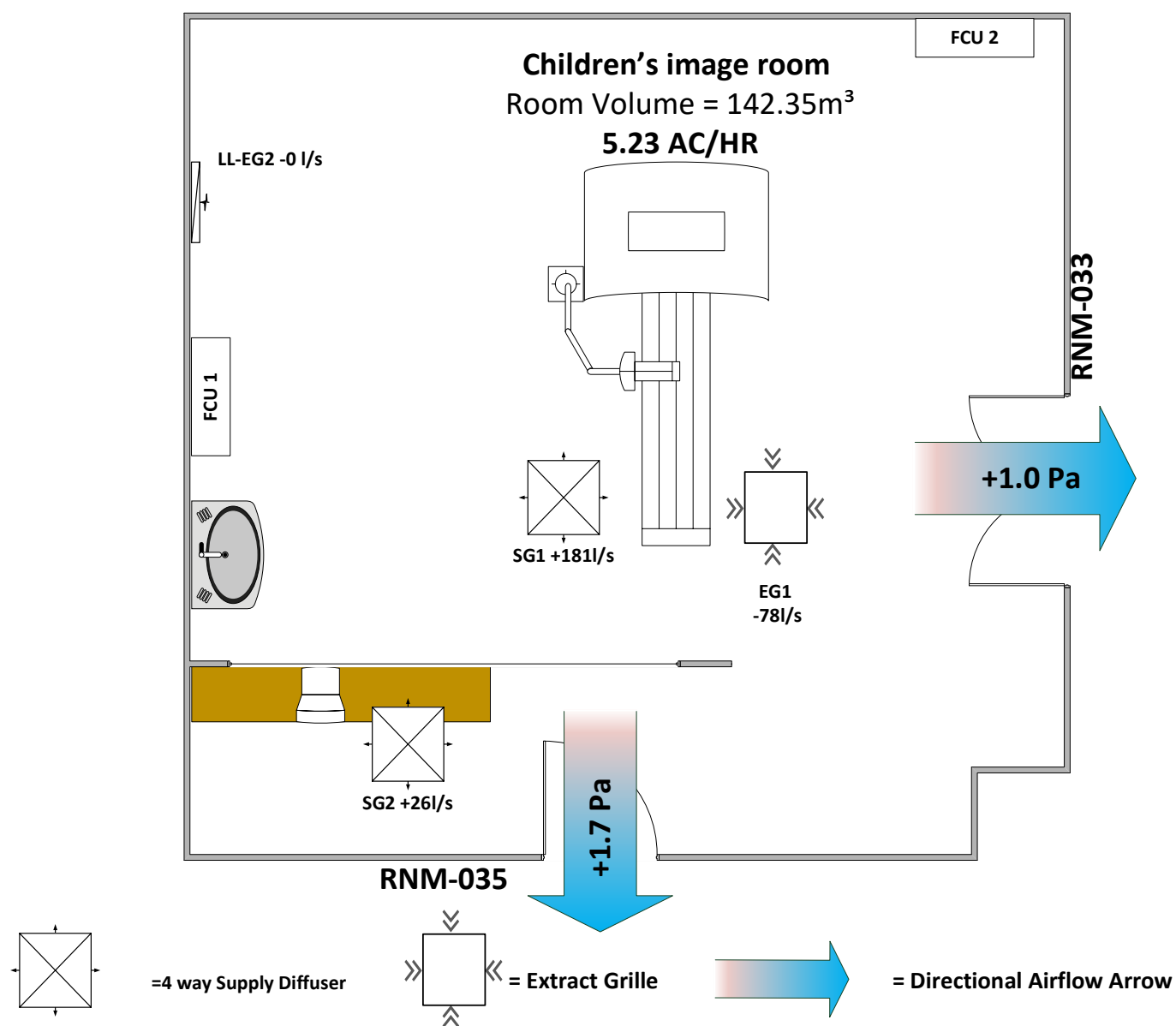
Section 7 - Schematic Layout Adult image room RNM-036



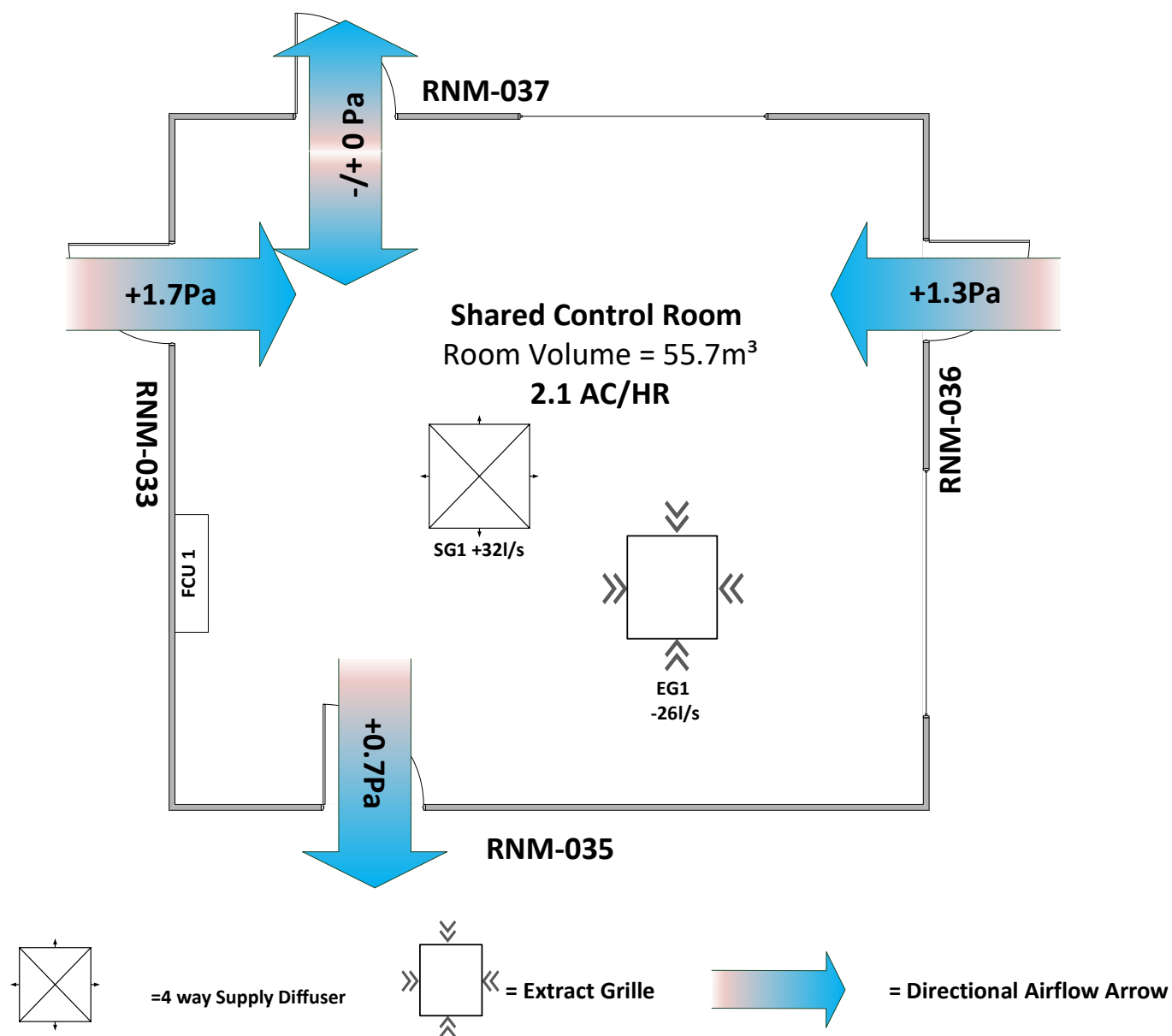
Section 7 - Schematic Layout shared image room RNM-037



Section 7 - Schematic Layout shared Children's image room RNM-033



Section 7 - Schematic Layout of shared Control room RNM-035



Section 8 - Test Equipment Used

Type of Equipment	Serial No	Cal Due Date
Micro-manometer	8666	July 2020
Sound Meter	N850802	July 2020
Humidity & Temperature Meter	42670651	July 2020
Balometer	PH7311809008	June 2020

Section 9 - Calibration Certificates

Associated Instruments Repairs

**CALIBRATION CERTIFICATE****CUSTOMER DETAILS:**

Customer: Correctair Solutions Ltd
Customer Serial Number: N/A

INSTRUMENT DETAILS:

Model: TT570 SV
Serial Number: 8666

CONDITION ON RECEIPT New

1 Required repair:
 2 In spec: after repair
 3 If yes to 2 adjustment:
 4 If no to 2 adjustment:

CALIBRATION DETAILS:

Date Of Calibration 09/07/19
Due Date: 09/07/20
Certificate Number 45675

TEST ROOM CONDITIONS:

Temperature: 25°C ± 2°C

Manufacturers Specification Readings less than 100 counts ± 2 counts
 Readings greater than 100 counts ± 1% of reading ± 1 count

Manufacturer: DP Measurement

TEST RESULTS:

							kPa	kPa	kPa
Calibration Points Pa:	0	40.0	80.0	160	400	800	1.60	3.00	6.00
Indicated Readings:	0	39.9	79.9	160	400	800	1.60	3.00	6.00
Percentage Error:	0	-0.25%	-0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

							kPa	kPa	kPa
Calibration Points Pa:	0	-40.0	-80.0	-160	-400	-800	-1.60	-3.00	-6.00
Indicated Readings:	0	-40.1	-80.1	-161	-400	-800	-1.60	-3.00	-6.00
Percentage Error:	0	0.25%	0.12%	0.63%	0.00%	0.00%	0.00%	0.00%	0.00%

Calibration Points m/sec:	0	5.00	8.16	11.5	15.0	16.3	25.8	36.5	50.0
Indicated Readings:	0	5.00	8.14	11.5	15.0	16.3	25.8	36.5	50.0
Percentage Error:	0	0.00%	-0.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Notes:**Equipment:**

The instrument detailed above has been calibrated against equipment serial number 0047368 which in turn has been calibrated against instruments and equipment that are traceable to National Standards. (UKAS Calibration Laboratory N° 0157). The above results are obtained on the date of calibration. The percentage error quoted refers to the measured values only, with no account being taken of the instruments ability to maintain its calibration.

Velocity Range:

Is calibrated for the ellipsoidal nose (NPL Type) Pitot Static Tubes used at air density 1.20kg/m³. Air stream temperature set at 16°C and barometric pressure set at 1000 mbar on the instrument.

Calibrated by Hussein Khimji:

Page 1 of 1 ©

Version 1
01.09.2005

Unit 11, Top Angel, Buckingham Industrial Park, Buckingham. MK18 1TH
 Telephone/Fax: 01280 823823 e-mail: air@ttseries.com www.a-i-r.co.uk



CERTIFICATE OF CALIBRATION

Issued by: RS Components Ltd

Date Issued: 11 Jul 2019

Certificate No.

1588163



Calibration and Repair Service

DPN 175, Lammas Rd,
Weldon Industrial Est
Corby, Northants, NN17 9RS

Tel: 01536 405545
Fax: 01536 401590

Page 1 of 3 Pages



Pamela Alvarez

Client CORRECTAIR SOLUTIONS LIMITED
NEILSTON
G78 3JA

Instrument SAUTER SU 130 Sound Meter

Serial No. N850802

Client Reference N/A

Procedure ID. 789.8902 Rev. P3

Date of Calibration 11 Jul 2019

Equipment Used to Carry Out Calibration

Bruel & Kjaer Acoustic Calibrator Type 4226

Equipment ID.

Cal 1045

The measurements reported in this certificate were carried out using equipment whose values are traceable to national standards.

All procedures employed and results reported are in compliance with the requirements of the International Standard ISO/IEC 17025:2005.

The management controls of the RS Calibration Laboratory are registered under the British Standard BS EN ISO 9001 : 2015 No. RS 00362.

Uncertainties

The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor $k = 2$, providing a level of confidence of approximately 95%.

Compliance to Specification

The manufacturer of this instrument doesn't state compliance with any sound level meter standard, therefore these are Reported Values Only.

This calibration is of a new instrument.



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CERTIFICATE OF CALIBRATION

Issued by: RS Components Ltd

Date Issued: 10 Jul 2019

Certificate No.

1587874



Calibration and Repair Service

DPN 175, Lammas Rd,
Weldon Industrial Est
Corby, Northants, NN17 9RS

Tel: 01536 405545

Fax: 01536 401590

Page 1 of 2 Pages



Antony Cavanagh

Client	CORRECTAIR SOLUTIONS LIMITED PAISLEY RENFREWSHIRE PA1 3RA
Instrument	FLUKE 971 Humidity & Temperature meter.
Serial No.	42670651
Client Reference	N/A
Procedure ID.	724.4193_DPM_(HYGRO95%) Rev. 1
Date of Calibration	10 Jul 2019

Equipment Used to Carry Out Calibration**Equipment ID.**

Rotronic Hygrogen 2 Humidity Generator
MBW 473 Dew Point Mirror
MBW Dew Point Reference Probe

CAL 1077
CAL 1078
CAL 1079

The measurements reported in this certificate were carried out using equipment whose values are traceable to national standards.

All procedures employed and results reported are in compliance with the requirements of the International Standard ISO/IEC 17025:2005.

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CERTIFICATE OF CALIBRATION

TSI Instruments Ltd., Stirling Road, Cressex Business Park,
High Wycombe, Bucks HP12 3RT England
Tel: (Int +44)(UK 0) 1494 459200 Fax: (Int +44)(UK 0) 1494 459700
<http://www.tsiinc.co.uk>

ENVIRONMENT CONDITION		
TEMPERATURE	67.3	° F
RELATIVE HUMIDITY	50.3	% RH
BAROMETRIC PRESSURE	29.3	inHg

MODEL	PROHOOD™ PH731
SERIAL NO.	PH7311809008

CALIBRATION STANDARDS USED
Capture Hood Calibration System UK1

☒ AS LEFT	☒ IN TOLERANCE
☐ AS FOUND	☐ OUT OF TOLERANCE

CALIBRATION DATA						
Tolerance: $\pm (3\% \text{ of reading} + 7.0 \text{ cfm})$						
TESTING POINTS	SUPPLY DATA MEASURED IN ft ³ /min			RETURN DATA MEASURED IN ft ³ /min		
	CALIBRATION STANDARD	INSTRUMENT OUTPUT	ALLOWABLE RANGE	CALIBRATION STANDARD	INSTRUMENT OUTPUT	ALLOWABLE RANGE
1	1896	1937	1835 - 1961	1900	1850	1836 - 1964
2	1501	1519	1449 - 1553	1502	1458	1450 - 1554
3	1167	1208	1155 - 1239	1205	1170	1182 - 1248
4	900	904	866 - 934	901	882	867 - 935
5	601	604	576 - 626	601	594	576 - 626
6	302	300	285 - 318	297	294	282 - 312
7	99	102	90 - 108	100	101	90 - 110

* Indicates out of tolerance condition

TSI does hereby certify that the above described instrument conforms to the original manufacturer's specification (not applicable to As Found data) and has been calibrated using standards whose accuracies are traceable to members of the European co-operation for Accreditation (EA) for example: UKAS, SWEDAC, DaKKS) or has been verified with respect to instrumentation whose accuracy is traceable to some member of EA, or is derived from accepted values of physical constants. TSI's calibration system meets ISO-9001:2008 and meets the requirements of ISO 10612:2003.

Measurement Variable	System ID Number	Date Last Calibrated	Calibration Due Date
DC Voltage	E006072	04-25-19	04-25-20
Thermometer	E006103	04-25-19	04-25-20
Pressure	E006155	04-24-19	04-24-20
Pressure	E006095	04-24-19	04-24-20
Flow	E004015	08-14-15	08-14-19
Flow	E004017	08-12-15	08-12-19
Barometric Pressure	E006061	04-24-19	04-24-20

Calibration procedure used: 9011156

Calibrated By

Jun. 12, 2019

Calibration Date

1060905A

**SBAR – Non-conformances in ventilation and temperature control:
Queen Elizabeth University Hospital and Royal Hospital for Children
Nuclear Medicine Departments**

1. Situation

Significant non-conformances have been found in the ventilation and temperature control of the Nuclear Medicine departments in both the Queen Elizabeth University Hospital (QEUH) and the Royal Hospital for Children (RHC).

2. Background

2.1 Introduction

There is a requirement to precisely control the number of air changes within the Nuclear Medicine scan rooms for the purposes of infection control and in order to protect staff from the build-up of anaesthetic gases.

There is a requirement to precisely and finely control the air temperature within the scan rooms in order to:

- (i) prevent the system performance from drifting during the working day, and
- (ii) protect the fragile scanner crystals from thermal damage.

All these parameters should be specified and detailed in the design room data sheets for the building (*see below*).

2.2 Air changes

The number of air changes within the scan rooms is required to be sufficient to meet infection control requirements to best protect patients in preventative isolation (e.g. immune compromised oncology patients) and also to protect staff from patients with infectious diseases, with reasonable dwell times between patients. The number of air changes in the scan control areas needs to be adequate to ensure that staff members remain healthy and minimise the cross-infection of staff. It is understood that the current recommendation is that rooms with anaesthetic gases require 15 air changes per hour.

2.3 Temperature control

The crystals within the SPECT-CT/SPECT scanners are very sensitive to thermal damage. At the design stage, the scan rooms were specified to be air conditioned, to achieve a maximum temperature change of +/- 1 degree C per hour. The design of the air temperature control system in the Nuclear Medicine Department at the Royal Hospital for Sick Children, Yorkhill, was presented to the Project Team as an exemplar to copy. This system had been designed by environmental control specialists, and achieved the necessary design specification, following failure of a previous design. The Project Team did not follow up on several invitations to visit and learn from this successful design.

2.4 Room data sheets

The room data sheets for the department were not shared with the Directorate by the New Hospital Project Team. This was despite formal requests from the Directorate senior management team for them to be shared and discussed. No opportunity was given during the design or the build phase. The Project Team advised the senior management of the Directorate that the data sheets could not be made available until after project handover due to 'contractual' reasons. The Project Team was disbanded at project handover and they did not make the room data sheets available.

3. Assessment

3.1 Air changes

The number of air changes within the department has always seemed poor. A test of the ventilation system by Estates has been requested on a number of occasions since the opening of the building in 2015. A test was recently undertaken by an external contractor on 29 May 2020. The tests confirm that the ventilation system is inadequate. During the tests, the ventilation dampers within the scan room in the RHC were found to be closed, and had to be opened to achieve a supply of fresh air. At this stage it is not known to the author whether the dampers are manual or automatic, and also for how long they had been closed. Once the dampers were opened the performance tests were repeated.

The ventilation report states that the ventilation in scan rooms RNM-033, RNM-036 and RNM-037 was specified to achieve 6 air changes per hour (not the required 15 air changes per hour). However, the report found that the built ventilation system failed to even achieve this inferior design specification. The room ventilation within the three scan rooms was measured at 5.2, 4.48 and 3.85 air changes per hour respectively, instead of the necessary 15. The number of air changes in the shared control room was just 2.1 air changes per hour and the room temperature was unacceptably high at 25.3 degrees C.

3.2 Temperature control

The scan room temperatures are not 'controlled' by air conditioning and do not meet the users' specification. The scan rooms have instead been supplied with comfort cooling by means of fan-coil units. These fan-coil units cannot reliably achieve the required temperature controls. The room temperature sometimes drifts out of tolerance. It is understood by the author that fan-coil units are not suitable for providing precise temperature control and they would definitely not be suitable for controlling room temperature at rates of 15 air changes per hour (*personal communication*). The organisation appears to have failed to learn the lessons of previous design failures and created a greater failure. A further problem has been identified in that all the fan-coil units are on the same electrical circuit. As a result, if one fan-coil unit trips the electrical supply circuit, then all fan-coil units in all three scan rooms are taken out of use, causing the three scanners to drift out of specification and risking thermal damage to their crystals. Users also have no access to reset the circuit.

3.3 Conclusion

The mechanical and electrical works within the Nuclear Medicine departments do not meet the requirements of the user specification and do not appear to meet acceptable minimum hospital standards for infection control, staff protection from anaesthetic gases, and manufacturer's requirements for temperature control of the equipment.

4. Recommendations

The Directorate management is asked to note the failures in the mechanical and electrical design. The following recommendations are made:

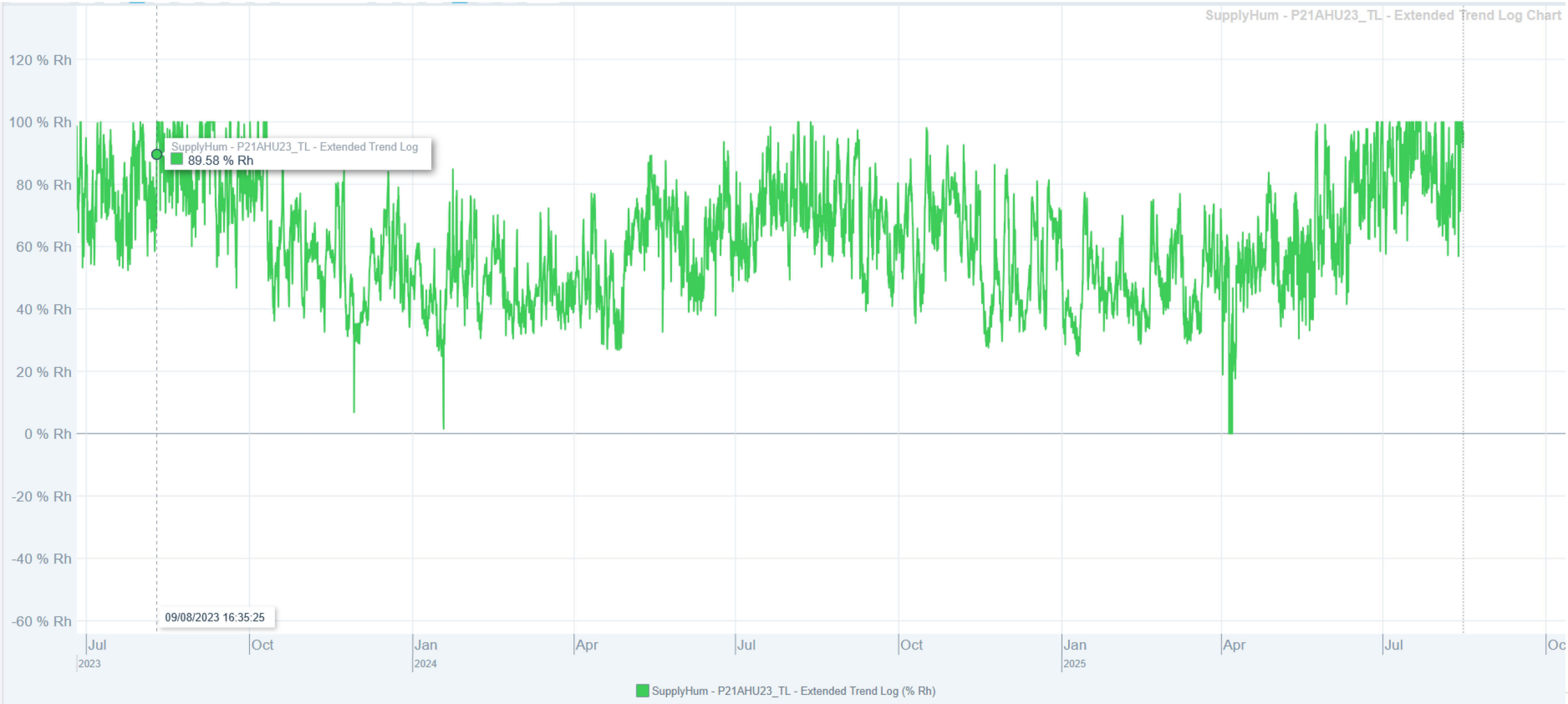
1. The Directorate should inform the Health Board's team investigating the failures with the hospital (design, construction and maintenance) of these new objective findings.
2. The consequences of the failure in the mechanical and electrical design should be investigated and reviewed in collaboration with the lead Infection Control Doctor and with the Board's Build Environment Group.
3. The review should consider what remedial works will be necessary.
4. In the short term, a risk assessment and infection control advice will be required to determine the implications for the necessary PPE for staff and patients, and also the implications on dwell times, especially given the COVID-19 pandemic.

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AHU23

Room No.	Room Name	Temperature	Setpoints		Heating	Cooling
(21AHU23) NCH First Floor MRI						
RCF024	MRI	21.7 °C	-2 °C	1.0 °C	0 %	
RCF023	MRI Control	23.9 °C	-6 °C	24.0 °C		5 %
RCF014	Anaesthetic	19.2 °C	-2 °C	19.0 °C	2 %	
RCF015	Radio logist Office	23.9 °C	-2 °C	24.5 °C	0 %	0 %
RCF041	Supervisor 2P	22.9 °C	-2 °C	23.0 °C	0 %	2 %
RCF020	CT Control	22.2 °C	-2 °C	22.0 °C		20 %
RCF017	CT	21.8 °C	-3 °C	22.0 °C	0 %	29 %
(22AHU01) Neuro Surgery Theatre (with ultra clean units)						
(22AHU02) Cardiac Operating Theatre (with ultra clean units)						
(22AHU03) NCH Theatre Support & Recovery						
(22AHU04) First Floor Changing Area						
THE076	Staff Rest Workstation	23.7 °C	-2 °C	23.0 °C	0 %	0 %
(22AHU09) Cardiac Catheter Theatre						
(31AHU36) First Floor Adult Radiology						
RAF112	Seminar	20.3 °C	0 °C	22.0 °C	100 %	
RAF123	Family Interview	19.5 °C	0 °C	23.0 °C	100 %	
RCF001	Reception	22.1 °C	-2 °C	23.0 °C	0 %	0 %
RCF037	IT Hub	19.1 °C	0 °C	19.0 °C		100 %
RAF109	Training	20.4 °C	0 °C	22.0 °C	0 %	0 %





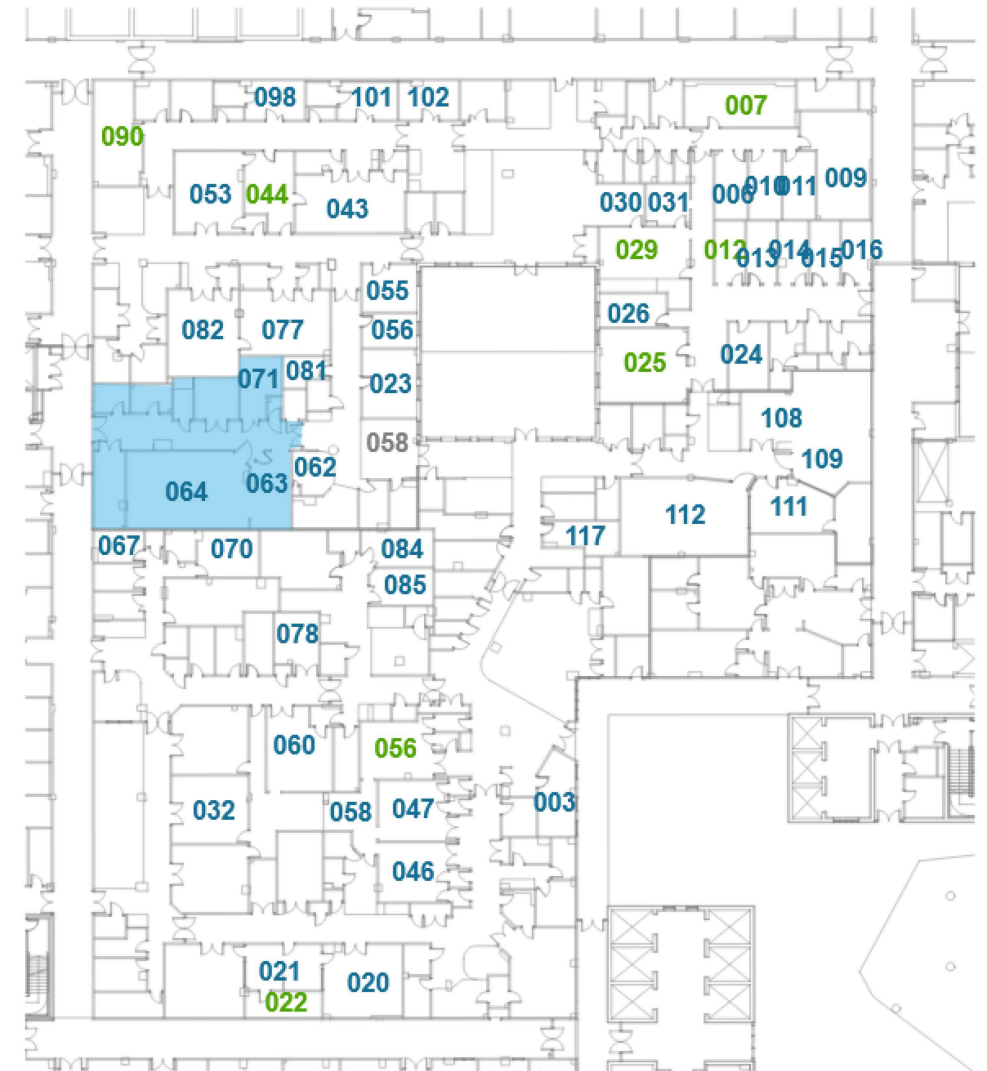




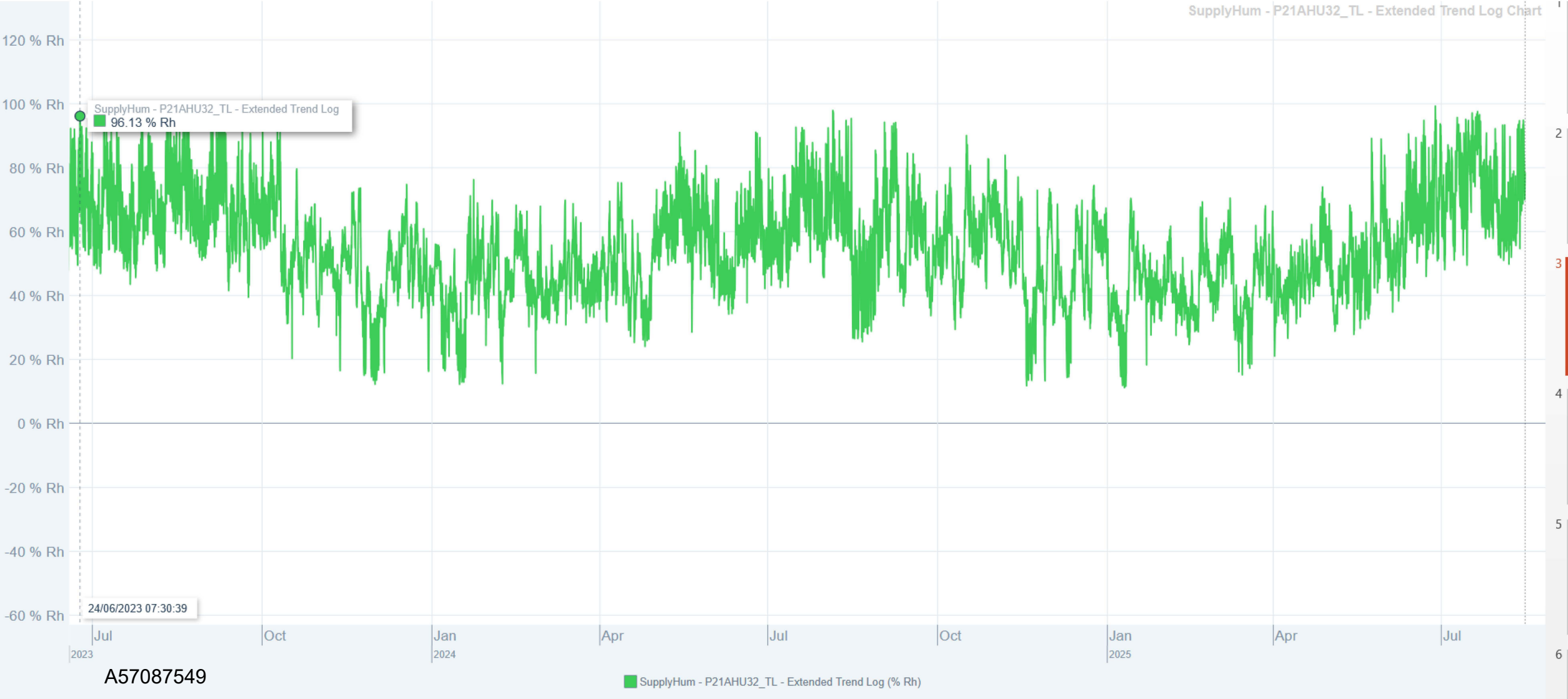
AHU32

Room No.	Room Name	Temperature	Setpoints		Heating	Cooling
(21AHU32) NCH Ground Floor MRI						
RCG063	Control Room	23.0 °C	-2 °C	23.0 °C	0 %	0 %
RCG064	MRI Scan	20.7 °C	0 °C	2.0 °C	0 %	
RCG071	Patient Prep	22.7 °C	-2 °C	2.0 °C	0 %	
(21AHU33) NCH Ground Floor Adult Radiology						
RCG023	Img Analysis	20.8 °C	2 °C	19.0 °C	0 %	0 %
RCG043	Fluoroscopy	23.0 °C	0 °C	23.0 °C	0 %	6 %
RCG044	Store View Area	23.3 °C	0 °C	23.0 °C	0 %	60 %
RCG053	Gen Xray	23.8 °C	0 °C	23.0 °C	0 %	100 %
RCG055	Bone Densi	23.3 °C	2 °C	23.0 °C	49 %	0 %
RCG056	Head Paed	21.4 °C	2 °C	20.5 °C	0 %	0 %
RCG077	GenXray	22.6 °C	0 °C	23.0 °C	0 %	10 %
RCG062	Reception	22.7 °C	2 °C	23.0 °C	0 %	0 %
RCG081	Img Review	23.0 °C	0 °C	23.0 °C	0 %	2 %
RCG082	Gen Xray	23.7 °C	0 °C	25.5 °C	0 %	0 %
RCG090	Hot Report	24.8 °C	0 °C	25.5 °C	0 %	3 %
RCG098	Ultrasound	22.6 °C	0 °C	23.0 °C	0 %	5 %
RCG101	UltraSound	22.1 °C	0 °C	23.0 °C	0 %	0 %
RCG102	UltraSound	22.9 °C	0 °C	23.0 °C	0 %	6 %
(22AHU20) Ground Floor NCH Radiology						
RCG007	Seminar	22.1 °C	0 °C	19.0 °C	0 %	
RCG030	Reception	22.8 °C	0 °C	22.0 °C	24 %	0 %
RCG031	Manager CD	22.6 °C	0 °C	21.0 °C	0 %	100 %

023

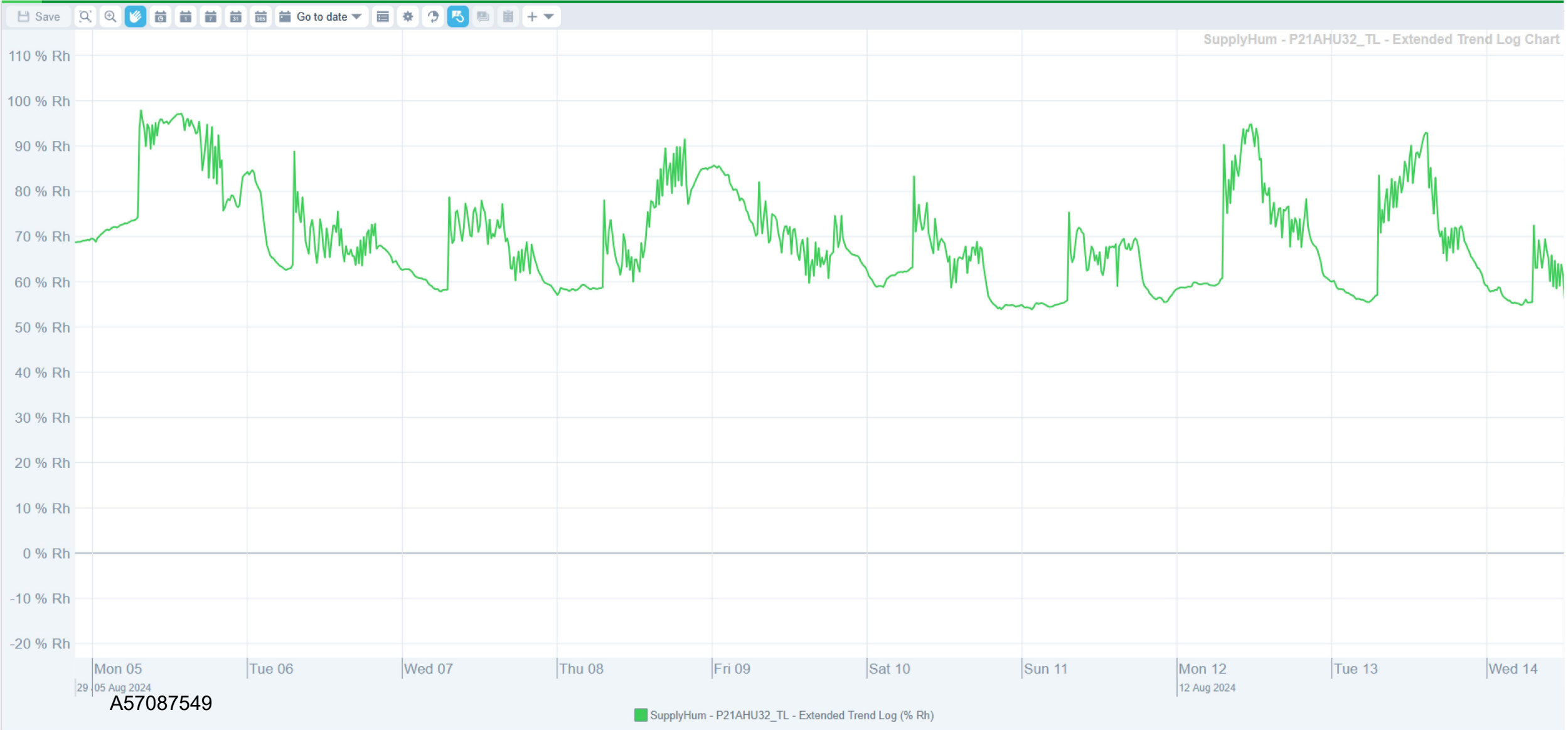


SupplyHum - P21AHU32_TL - Extended Trend Log Chart



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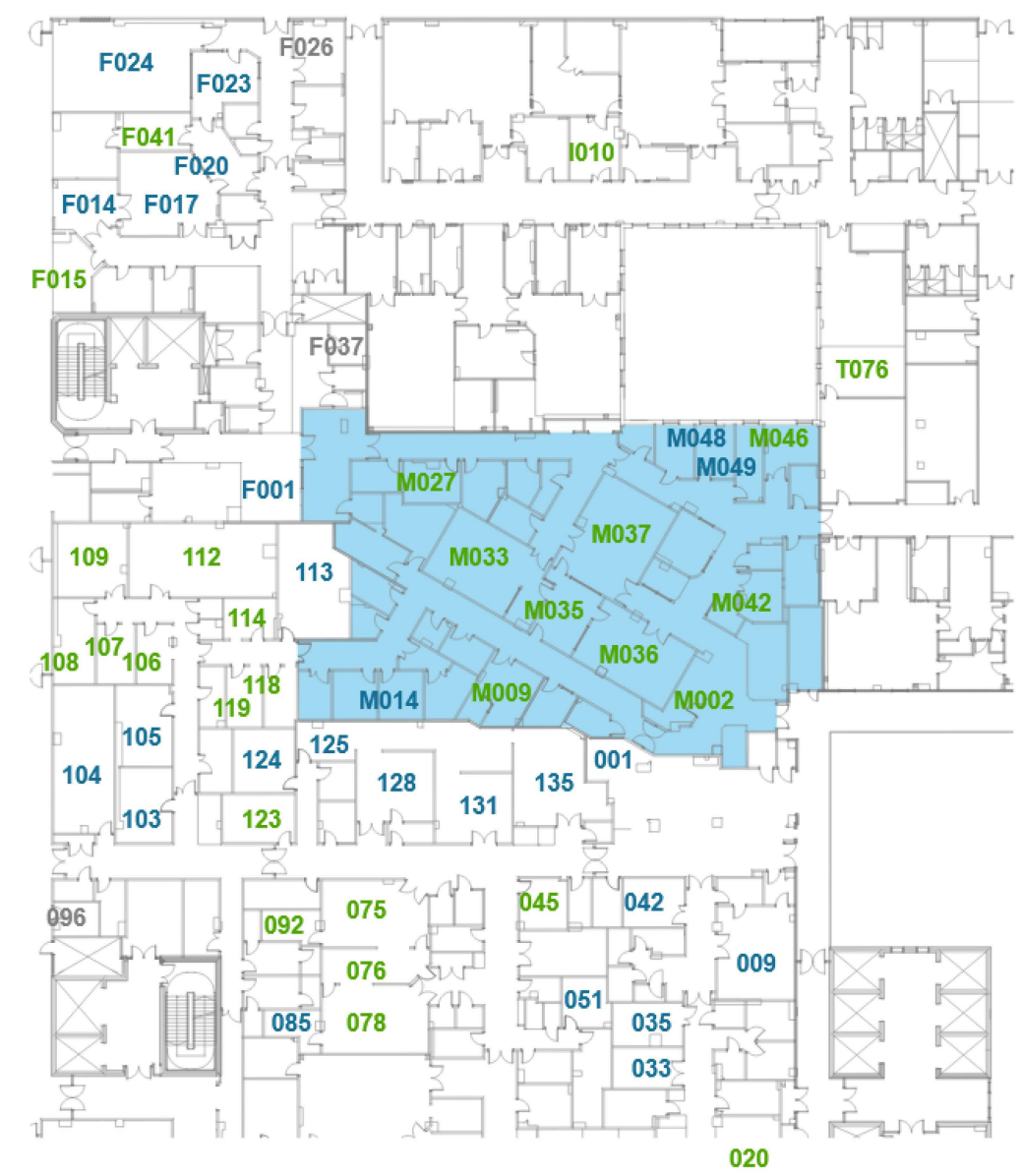
SupplyHum - P21AHU32_TL - Extended Trend Log (% Rh)





AHU42

Room No.	Room Name	Temperature	Setpoints		Heating	Cooling
RAF042	Ultrasound	22.4 °C	-2 °C	23.0 °C	0 %	25 %
RAF045	Report	22.4 °C	-2 °C	23.0 °C	100 %	0 %
RAF051	Super Office	23.0 °C	0 °C	23.0 °C	0 %	2 %
RAF020	Nurse Office	22.7 °C	-2 °C	23.0 °C	22 %	0 %
RAF033	Mammog	23.0 °C	0 °C	23.0 °C	0 %	90 %
RAF035	Ultrasound	22.3 °C	-2 °C	23.0 °C	0 %	0 %
(31AHU42) Adult Radiology - Nuclear Medicine						
RNM046	Cardiac Room	24.2 °C	0 °C	19.0 °C	0 %	
RNM002	Reception	23.5 °C	-2 °C	26.0 °C	0 %	
RNM009	DXA Scanner	23.0 °C	-2 °C	23.0 °C	0 %	32 %
RNM027	Nuclear Admin	22.4 °C	0 °C	23.0 °C	0 %	0 %
RNM033	Children Image Room	20.5 °C	-1 °C	20.0 °C	0 %	0 %
RNM035	Shared Control	23.5 °C	0 °C	23.5 °C	0 %	7 %
RNM036	Adult Room	24.7 °C	-2 °C	25.0 °C	0 %	0 %
RNM037	Shared Image Room	22.8 °C	-2 °C	23.0 °C	0 %	5 %
RNM042	Radio Nuclear Admin	22.7 °C	-2 °C	23.0 °C	0 %	0 %
RNM048	Consultant Office	20.3 °C	2 °C	23.0 °C	100 %	0 %
RNM049	Office 3P	22.2 °C	2 °C	24.0 °C	0 %	0 %
(22AHU10) Adult Interventional Operating Theatre						
RNM010	Report	...	...	...	...	...



HVAC

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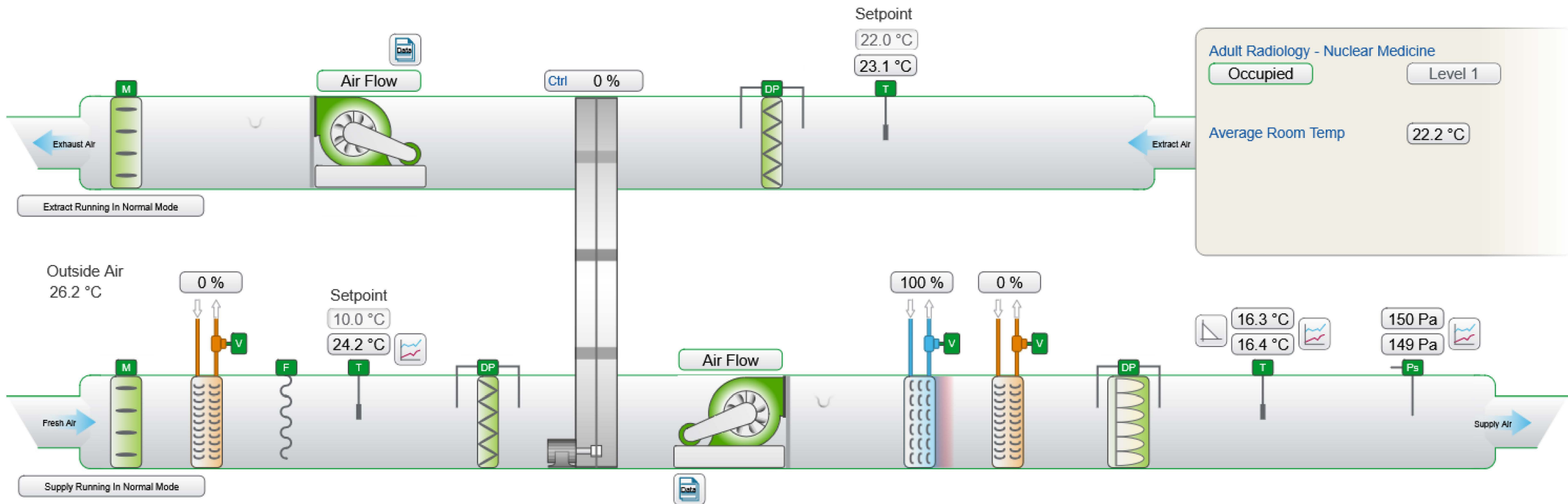
LINE 1

LINE 2

LINE 3

LINE 4

LINE 5



From: Michael Bradnam (NHS Greater Glasgow and Clyde) [REDACTED]
Sent: Thursday, April 09, 2026 14:59
To: Jann Gardner (NHS Greater Glasgow and Clyde) [REDACTED]
Cc: Nicola Munro (NHS Greater Glasgow and Clyde) [REDACTED] Leanne Law (NHS Greater Glasgow and Clyde) [REDACTED]
Subject: Formal notification of safety, governance and assurance matters – Royal Hospital for Children

Dear Professor Gardner,

I am writing to formally notify you of a number of matters relating to the design, commissioning, verification and ongoing assurance of ventilation, environmental control (including humidity), and electrical safety systems within specialist imaging environments at the Royal Hospital for Children, used by vulnerable and immuno-supressed patients.

I am making direct contact with you in your capacity as Chief Executive in light of previous correspondence sent to Elaine Vanhegan, Director of Corporate Services and Governance, for which I have not received a response. I have recently been made aware by [REDACTED] (CLO), that [REDACTED] [REDACTED]. My General Manager, Janice Tannock, had originally directed me to [REDACTED]. [REDACTED] directed me to [REDACTED], who in turn advised me to contact Elaine Vanhegan. Mary McKee, Interim Director of Diagnostics, subsequently advised me to follow [REDACTED] advice.

By way of background, I have worked within the Royal Hospital for Children and predecessor NHS organisations within NHS Greater Glasgow and Clyde for approximately 42 years and have been directly involved in the new hospital project for around 20 years. From 2013 to 2023, I held the role of Physics Service Manager for Nuclear Medicine and MRI.

For context, I was also an active member of five User Groups during the design and build phase of the new hospitals:

- Molecular Radiotherapy ('mIBG') Suite (Ward 2A, RHC)
- Nuclear Medicine (QEUH & RHC)
- MRI (QEUH & RHC)
- Paediatric Imaging (RHC)

- Bioengineering (QEUH & RHC)

These roles involved direct engagement with design specification, environmental requirements and verification processes across multiple clinical areas.

The matters I am raising are not solely historical. They relate to whether appropriate assurance can be demonstrated that key safety-critical systems were correctly designed, commissioned and verified, and whether any legacy risks have been fully identified and addressed.

In summary, my concerns relate to:

- the absence of stable and validated design information (including Room Data Sheets) during design and commissioning;
- the inability of user representatives to verify safety-critical environmental requirements prior to construction and handover;
- uncertainty regarding the basis on which commissioning and acceptance processes were undertaken;
- subsequent identification of ongoing ventilation and environmental control issues in operational clinical settings, including as recently as 2025;
- potential gaps in electrical safety assurance arrangements; and
- the absence of clear, system-wide evidence demonstrating that these matters have been fully resolved.

These issues were raised contemporaneously through appropriate governance routes, as recently as this past year, including escalation to senior management and submission of SBAR documentation. However, I have not seen evidence that they have been comprehensively addressed at a system level. I was advised within the Directorate, including by the Interim Director of Diagnostics, that these legacy issues are understood to fall within the remit of the Scottish Hospitals Inquiry and the Safety and Public Confidence Oversight Group, rather than being addressed directly through current operational governance.

Given the nature of these matters, I consider them to be relevant to:

- the Board's duty of care in relation to patient safety;
- the effectiveness of governance and assurance processes;
- the evidential context of the Scottish Hospitals Inquiry;

- the Safety and Public Confidence Oversight Group, which I understand that you co-chair; and
- any related external investigations.

I have prepared a structured summary of evidence, including a detailed chronology, key findings and supporting documentation, and would be happy to provide this for your consideration should that assist.

I am raising these matters in good faith and in the interests of ensuring that any remaining risks are fully understood, appropriately managed and transparently addressed.

I would be grateful if you could:

1. confirm receipt of this correspondence; and
2. advise how you wish these matters to be considered and taken forward.

Yours sincerely,

Dr Michael Bradnam MA PhD CEng FIET CSci FIPEM

Consultant Clinical Scientist (Bank)

Former Physics Service Manager (Nuclear Medicine and MRI)

Department of Clinical Physics and Bioengineering, NHS Greater Glasgow and Clyde

Honorary Associate Professor, University of Glasgow

Timeline

2010: Risks raised regarding lack of appropriate Mechanical and Electrical Engineering input to the hospital design and build.

2012-2015: Member of five User groups: Molecular radiotherapy suite (Ward 2A, RHC), Nuclear Medicine (RHC & QEUH), MR (RHC & QEUH), Bioengineering (RHC), Paediatric Imaging (RHC). Reviewable Room Data Sheets (RDSs) were not provided despite repeated requests, therefore lack of verification prior to design and build.

2015: Commissioning of hospitals undertaken without clear baseline due to lack of accurate Room Data Sheets.

2020: Ventilation performance issues identified in imaging rooms.

2023: Further ventilation performance issues identified prior to SPECT-CT installation in RHC Imaging.

2024: Electrical safety (earth bonding) issues identified in RHC imaging rooms.

2025: Humidity control failures observed in QEUH and RHC imaging rooms.

2026: Governance escalation.

Observations

1. No stable design baseline (no reviewable RDSs; gross errors and omissions in final 2015 RDSs).
2. Commissioning not reliably verified (in the absence of validated RDSs).
3. Ventilation underperformance identified (both in terms of design and commissioning).
4. Humidity control failures observed (both in terms of design and commissioning).
5. Environmental conditions were capable of contributing to water ingress and conditions conducive to mould growth.
6. Electrical safety assurance gaps in Group 2 Medical Locations. *(Group 2 locations include: operating theatres; anaesthetic rooms; theatre recovery; ICU; and specialised imaging rooms (e.g. interventional laboratories and those scan rooms where anaesthesia is used)).*
7. Governance processes have not yet ensured resolution.

Evidence

Risks regarding lack of M&E input - Emails from Interim Director of DCPB (2010) to Director of Governance and the Project Team's Technical Adviser.

Lack of verification of Room Data Sheets - Emails with Director of Diagnostics, Project Director, General Managers, Planning Manager/minutes of meetings (2014-2015). Request to raise absence of reviewable data to 'very high risk' (2014).

Ventilation findings - Emails with Chief of Medicine, escalation to Director of Diagnostics, Consultant Microbiologist and Assistant Director of Capital Planning and Estates (2020). Ventilation report (demonstrated errors in the design and commissioning) and SBAR (2020).

Ventilation report - Email to Director of Diagnostics and ventilation report (2023). Commissioning errors still present.

Offered in 2023 to submit evidence to the Scottish Hospitals Inquiry, including lack of reviewable Room Data Sheets (2010-2015). My offer was declined by the Health Board team working on the Inquiry.

Electrical safety findings - Test certificate failure (2024) and SBAR (2024). Test failures identified in two of three rooms tested by Ian Chell (who conceived and wrote BS 7671 Medical Locations) when he came to provide training to Estates and DCPB staff. (Training organized in March 2024 by Dr Michael Bradnam (Consultant Clinical Scientist, MPE & Chartered Electrical Engineer), together with Operational Head of Estates and Electrical Compliance Manager.)

Humidity control failures - Report and SBAR (2025)

Design data review (2025) - Errors and omissions found in major equipment spreadsheet (2013) and Room Data Sheets (2015). *(I was provided with the spreadsheet and the Room Data Sheets following the humidity control failures in 2025 above. The required humidity control was missing from the RDSs for all rooms, although correctly specified in a (2010) spreadsheet.)*

Governance escalation (2026) - Emails. Following reports of a change in organisational culture, I offered in writing to help address the legacy issues that I had already identified (above). I have identified some quick wins. My offers were declined. The assumption of the Interim Director of Diagnostics was that the legacy issues that I have identified are for the Scottish Hospitals Inquiry and the new Safety and Public Confidence Oversight Group to address, not for operational governance (2026). I was also advised by the Interim Director, General Manager and Scientific Director (professional lead) that because my successor is now in post and because I am bank staff that the Directorate consider it inappropriate for me to continue to be involved in resolving the legacy health and safety issues that I have identified. CLO have sign-posted me to where I could formally escalate my on-going concerns, including to the Board. I wrote to the Chief Executive and was offered a meeting with the Deputy Chief Executive the following morning.

Key Proposed Solutions

Ventilation non-compliances

- Assess design gap within imaging rooms and anaesthetic rooms within imaging departments - Medical Physics Expert to forensically review RDSs (2015) with SHTM requirements together with Estates.
- Assess the commissioning gap - Estates organise SHTM verification of air changes within scan rooms, including anaesthetic rooms within imaging departments, against the RDSs (2015). *(NB take safety advice from MR Safety Expert for MR controlled areas including MR scan rooms due to projectile hazard.)* Medical Physics Expert to forensically review results together with Estates.
- Introduce annual SHTM verification of air changes in all specialised imaging rooms and anaesthetic rooms within imaging departments. Medical Physics Expert to help identify the necessary rooms. *(NB take safety advice from MR Safety Expert for MR controlled areas including MR scan rooms due to projectile hazard.)*

Humidity non-compliances

- Assess design gap within imaging departments - including scan rooms, anaesthetic rooms and equipment rooms (e.g. MRI, CT and Interventional Laboratories). Medical Physics Expert forensically review RDSs (2015) with vendor's planning guides for relative humidity.
- Assess the commissioning gap.
 - Medical Physics Expert and Estates forensically review Building Management System (BMS) data with RDSs (2015).
 - Estates to determine why humidity controls are not working reliably (e.g. MRI scan rooms).
 - Estates to introduce BMS humidity monitoring in key rooms where this is currently unavailable. Use portable monitors in the meantime where this is safe to do so. *(NB take safety advice from MR Safety Expert for MR controlled areas including MR scan rooms due to projectile hazard.)*

Electrical Safety (IET Wiring Regulations - BS 7671) - Group 2 Medical Location non-compliances

- Do not rely on self-certification by contractors due to high risk (>50%) of non-compliances. Undertake and demonstrate 'Duty of Care' through independent testing.
- Resource Estates to introduce independent verification testing of Medical Locations. *(Testing was previously undertaken in imaging rooms by the Department of Clinical Physics and Bioengineering prior to 2020. However, this was phased out and a change of position taken. NB take safety advice from MR Safety Expert for MR controlled areas including MR scan rooms due to projectile hazard.)*

- Medical Physics Expert, with specialised electrical engineering knowledge to identify all Group 2 locations within imaging departments and notify Estates.
- Identify all Group 2 locations within the hospitals with the assistance of a suitably qualified Medical Physicist, with electrical engineering knowledge.
- Medical Physics Expert, with specialised electrical engineering knowledge, to work with Estates to assess competence of outside compliance test company within three imaging rooms in RHC with known electrical earth-bonding faults.
- Resource Estates to introduce annual verification testing of all Group 2 rooms plus all other electrical safety verification requirements in other medical locations, all as per BS 7671. *(NB take safety advice from MR Safety Expert for MR controlled areas including MR scan rooms due to projectile hazard.)*

From: Michael Bradnam (NHS Greater Glasgow and Clyde) [REDACTED]
Sent on: Thursday, April 23, 2026 2:04:35 PM
To: Jann Gardner (NHS Greater Glasgow and Clyde) [REDACTED]
CC: William Edwards (NHS Greater Glasgow and Clyde) [REDACTED]; Russell Coulthard (NHS Greater Glasgow and Clyde) [REDACTED]; Leanne Law (NHS Greater Glasgow and Clyde) [REDACTED] O'Connell, James [REDACTED]
Subject: Diagnostic Imaging Review – Safety, Design, Commissioning and Assurance (QEUH/RHC)

Dear Professor Gardner,

Further to your email of 15 April 2026, I would be grateful if we could arrange the scoping meeting at a time when my union representative, James O'Connell, is able to accompany me.

Many thanks.

Yours sincerely,

Dr Michael Bradnam MA PhD CEng FIET CSci FIPEM
Consultant Clinical Scientist (NHS GGC Bank staff)
Former Physics Service Manager (Nuclear Medicine and MRI)
Department of Clinical Physics and Bioengineering, NHS Greater Glasgow and Clyde
Honorary Associate Professor, University of Glasgow

From: Michael Bradnam (NHS Greater Glasgow and Clyde) [REDACTED]
Sent: Wednesday, April 15, 2026 11:20
To: Jann Gardner (NHS Greater Glasgow and Clyde) [REDACTED]
Cc: William Edwards (NHS Greater Glasgow and Clyde) [REDACTED]; Russell Coulthard (NHS Greater Glasgow and Clyde) [REDACTED] Leanne Law (NHS Greater Glasgow and Clyde) [REDACTED]
Subject: Diagnostic Imaging Review – Safety, Design, Commissioning and Assurance (QEUH/RHC)

Dear Professor Gardner,

Thank you for your response and for confirming that a programme of work will be initiated to review the specification and assurance of diagnostic imaging environments across QEUH and RHC.

I welcome this approach and the involvement of Estates, Public Health and Corporate Planning, together with the Electrical Safety Committee and

Diagnostics Directorate. Given the nature of the issues raised, a structured and evidence-based review will be important in providing clear assurance.

I am grateful for the opportunity to contribute and would be pleased to support the development of the scope of work. In particular, I believe it will be important that the review is able to demonstrate, with appropriate evidence, how compliance with design standards and safety requirements has been achieved and verified, including where retrospective assessment may be required.

While I understand that an initial meeting will be arranged, given the importance of continuity and technical context, I would welcome the opportunity to remain involved, as appropriate, as the programme develops, in light of my prior involvement in the design phase, subsequent identification of issues in operational settings, and familiarity with the relevant technical standards.

I would also be happy to provide any further supporting information, including detailed evidence and documentation, to assist in informing the scope and progression of this work and any related considerations.

I look forward to hearing from Mr Coulthard regarding next steps.

Yours sincerely,

Dr Michael Bradnam MA PhD CEng FIET CSci FIPEM

Consultant Clinical Scientist (NHS GGC Bank staff)

Former Physics Service Manager (Nuclear Medicine and MRI)

Department of Clinical Physics and Bioengineering, NHS Greater Glasgow and Clyde

Honorary Associate Professor, University of Glasgow

From: Leanne Law (NHS Greater Glasgow and Clyde) [REDACTED] on behalf of Jann Gardner (NHS Greater Glasgow and Clyde) [REDACTED]

Sent: 15 April 2026 10:18

To: Michael Bradnam (NHS Greater Glasgow and Clyde) [REDACTED]

Cc: William Edwards (NHS Greater Glasgow and Clyde) [REDACTED] Russell Coulthard (NHS Greater Glasgow and Clyde) [REDACTED]

Subject: RE: Notes accompanying Formal notification of safety, governance and assurance matters – Royal Hospital for Children

Dear Mr Bradnam

Thank you for your own summary of the note of the meeting with Mr William Edwards, Deputy Chief Executive and COO and Mr Russel Coulthard Deputy COO on Friday 10th April 2026. While the note covers a level of detail, Mr Edwards and Mr Coulthard are aware that a dedicated review is required around imaging rooms across QEUH and RHC as you outlined to provide necessary assurance on specification.

Mr Edwards and Mr Coulthard agreed to have a further discussion with Professor Tom Steele , Director of Estates and Facilities as well as Dr John O'Dowd , Interim Director of Public Health to ensure that there is awareness of your concerns. Following this we have agreed to initiate a programme of work that will assure us around the specification of our Diagnostic rooms in relation to ventilation and electrical safety.

Mr Coulthard will further update you on next steps as we develop a scope of work. This will be supported by Corporate Planning to ensure we have a structured programme of activities and will also lean on the expertise of the Electrical Safety Committee and the Diagnostics Directorate.

We also recognise your own desire to have visibility and be involved and thank you for this commitment. An initial meeting will be initiated as we develop the required scope, and your input would be welcome at this session.

Kind Regards

[Redacted Signature]

Professor Jann Gardner
Chief Executive
NHS Greater Glasgow and Clyde

Jann Gardner | Chief Executive, NHS Greater Glasgow and Clyde | JB Russell House | Gartnavel Royal Infirmary | 1055 Great Western Road | Glasgow | G12 0XH | [Redacted Contact Information]

SBAR – Earth Bonding Checks in Medical Locations

Situation

NHS GGC is not exercising its 'Duty of Care' to carry out the necessary electrical safety checks in 'medical locations' (*i.e.* clinical areas where medical devices with applied parts are used).

Background

NHS GGC has a 'Duty of Care' as described in BS EN 7671 (2018) and SHTM 06-01, to ensure that checks of wiring and earth bonding are undertaken in Medical Locations. These checks should be undertaken as part of the commissioning of new, or refurbished, clinical areas where medical devices with applied parts are used. These checks should then be repeated on an annual basis. This is especially important for locations containing radiological equipment and other high-risk areas such as theatres. Despite this 'Duty of Care' requirement, no department within NHS GGC is currently undertaking these checks and no staff are undertaking continuing practice development (CPD) in how to undertake the tests. The Health Physics section, within the Department of Clinical Physics and Bioengineering, used to undertake some limited independent checks for new radiological installations. However, they ceased undertaking these tests about four years ago and no department has been resourced to undertake the full tests necessary.

Assessment

If these electrical bonding tests are not undertaken, then there is a safety risk to patients and a business risk to the organisation.

By way of example, we recently had to employ an external consultant to undertake the acceptance testing of the new SPECT-CT installation at the Royal Hospital for Children. Eight non-compliances were found within the earth wiring, including a supplementary equipotential bonding connection point, which was found to be open-circuit. Some of these non-compliances date to the original construction of the Royal Hospital for Children, whilst others stem from the recent radiological equipment installation. In each case, the installation electrician had signed-off their own work.

Two further rooms within the Royal Hospital for Children were checked as a training exercise. In Fluoroscopy Room 4, the equipotential bonding of all the blue medical sockets were found to be non-compliant. The impedances were all out of tolerance. This non-compliance dates to the original construction of the hospital. In the cardiac catheterisation laboratory a medical device within the patient environment was found to be plugged into the wrong type of electrical socket; not the blue medical socket. This would have increased clinical risk to the patient due to an increased likelihood of electrical disconnection. This issue was presumably due to a lack of awareness by a member of clinical staff.

Recommendations

- NHS GGC needs to implement independent electrical safety testing of medical locations, especially after the installation of new or refurbished radiological equipment, or in other high-risk areas, including theatres. These checks should be undertaken by a Competent Person (CP) and repeated on an annual basis.
- NHS GGC needs to fund the necessary staff resource and their ongoing CPD.
- The Board's Electrical Safety Group should oversee the governance of these safety checks, and determine, in conjunction with relevant departments, the Authorising Engineer (AE) and site Authorised Persons (APs), the scope of the proposed CP role and appointment process.
- Each clinical directorate should have responsibility for ensuring that their medical locations are checked on an annual basis by appointed CPs.
- Each clinical directorate should have responsibility for ensuring that their clinical staff are trained to understand, and use, the relevant patient electrical safety features within medical locations.
- To escalate to Directorate and Acute Clinical Governance Committee for consideration.

Michael Bradnam MA PhD CEng FIET CSci FIPeM
Consultant Clinical Scientist and Honorary Associate Professor
Department of Clinical Physics and BioEngineering
Greater Glasgow Health Board

10th April 2024

From: Bradnam, Michael [REDACTED]
Sent: Wednesday, February 12, 2014 11:11
To: MacLennan, Aileen [REDACTED]
Subject: Private & Strictly Confidential

Dear Aileen,

I suggest that I help prepare a draft summary/overview letter to Mr Calderwood in the first instance. I will do that shortly on the time scale that you requested.

A definitive, well referenced letter, will take us more time. We first need to collate copies of minutes for the:

- Over-arching Steering Group
- Executive Group
- Equipment Group

plus obtain copies of all correspondence between the Project Team and Directorate Management. We need to concentrate on documents from the first quarter of 2013.

The subject of delivering the imaging equipment early was informally broached with the physicists by the Project Team (Mairi Macleod) on 11 February 2013 in meeting room LA/0/10. Frances Wrath sent her apologies. This Equipment Group was organised by Lorraine Pebbles and fortunately she has kept minutes. That group stopped meeting after that date. Mairi advised that transferring equipment will be put in-situ after February 2015 and that new equipment can be installed before February 2015. The physicists explained the technical risks of early delivery to Mairi and advised how this would cause huge risk to the equipment and to the organisation. We advised against this course of action and that if they purchased equipment early not to bring the equipment on site but get the companies to store the equipment off site. We suggested that we work together on a risk matrix. We were then advised by John McGarrity that Alan Seabourne had £15M to spend and that a decision on the imaging equipment had already been made the week before. He advised that Lynn Ross would be able to report back to us. I don't know what agreement had been reached. To the best of my knowledge the RPAs and MPEs were not formally consulted. In fact we have rarely seen or met Mairi Macleod or Frances Wrath for several years now. In any case I knew that you had previously instructed us that early equipment delivery was not to happen (see below). At this time, you were on leave and Prof Barrie Condon was Head of the Physics Imaging Service. He sat on the Over-arching Steering Group along with Andy Brennan. I didn't sit on the Over-arching Group at that time. I don't know if Barrie was on the Executive Group or not. I don't know what consultations took place with Barrie if any.

Earlier, in the last quarter of 2012 you met with a number of us including Lynn Ross, Winnie Miller, myself and about four to six others to discuss the imaging equipment. From memory I recall that we met in a first floor meeting room in the Southern General Management Meeting. I don't remember if minutes were kept. I think that Lorraine Peebles was possibly present. You advised that you would not agree to early delivery of equipment into the new hospital (i.e. not until the building is completed in the spring of 2015 and handed over to the

Board). You cited the recent example of the Lab Building and how you had been asked to accept early installation of equipment. I believe as a result of that meeting you commissioned Lorraine to start the Equipment Group and we later started work with her on planning for deliveries in spring 2015. Those meetings ceased in about February 2013 for a reason unknown to myself. At the 2012 meeting you also stressed that you needed to control dialogue with the Project Team so that you had robust governance arrangements in place and so that all decisions went through the Directorate Management with a full audit trail. To that end, you instructed that all correspondence with the Project Team would be routed through Lynn Ross. Winnie Miller requested of you that all correspondence would be copied to her so that she could collate a full audit trail. That full audit trail collated by Winnie will now make the definitive letter easier to prepare. On occasions, Winnie has asked Physicists to write letters to the Project Team on behalf of the Directorate but we have (to the best of my knowledge) copied them to Lynn or Antoinette and Winnie.

As highlighted above, we have rarely seen or met Mairi Macleod or Frances Wrath for several years now. We have still not received the 1:50 drawings, elevations and room data sheets for most of the imaging rooms. We were last promised that we would receive them in the first half of 2013. They have on occasion cited contractual problems with Brookfield but that cannot be the whole story as how can the tradesmen have built the rooms? The Project Team has usually met with imaging companies without our presence, including discussions on moving equipment. They have not involved us in discussions on the tenders for the pre-installation works. They have finalised room and equipment layouts, radiation protection, uni-strut ceilings and their installation, ceiling layouts, floor trays, pendant specifications and position, room ventilation and decisions on medical gases without our final agreement or indeed showing us final drawings. For much of the time they appear to have gone their own way and done their own thing, finalising arrangements themselves; without meaningful partnership with the experts (RPAs, Medical Physics Experts and users), all at substantial risk to the organisation.

Best wishes,
Michael.

Dr Michael Bradnam
Head of Service for Imaging & Honorary Research Fellow
Department of Clinical Physics and Bioengineering
NHS Greater Glasgow and Clyde & University of Glasgow

[REDACTED]

[REDACTED]

From: Bradnam, Michael [REDACTED]

Sent: Tuesday, April 01, 2014 17:36

To: Ross, Lynn [REDACTED] Miller, Winnie [REDACTED]

Cc: Brennan, Andy [REDACTED]

Subject: Absence of 1:50s Risk assessment

Hi Lynn and Winnie,

Can we please update the Absence of 1:50s Risk Assessment as below please? I have checked the proposed changes with Andy Brennan and he is happy with them.

Best wishes,
Michael.

14	Equipment	In the absence of 1:50s with Equipment Schedules, we risk failing to identify that certain items of equipment are omitted & thereby not provided or procured. This can include anything from injector pumps, to patient connected medical devices to an OPT. Also the purchased equipment needs to be laid out correctly for clinical use and as previously reported this will require optimisation of some rooms.	5	5	25	1	Ongoing requests for all 1:50s with Equipment Schedules, Room Data Sheets, and indicative Equipment Layouts to edit.	Provision of latest 1:50s with Equipment Schedules for all Imaging Rooms, with appropriate Codebreaker, Room Data Sheets and indicative equipment layouts to be cross-checked with Procurement databases.	Diagnostics/ Project team/ Procurement
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From: Bradnam, Michael
Sent: 14 May 2014 18:58
To: Ross, Lynn [REDACTED]; Miller, Winnie [REDACTED]
Cc: Brennan, Andy [REDACTED]
Subject: Electronic plans - All radiology/imaging

Dear Lynn and Winnie,

Would you please request the Room Data sheets from Mairi Macleod for Nuclear Medicine and MRI so that I can circulate them to my team. We urgently need this information to check the plans made available to us. Many thanks.

Best wishes,
Michael.

From: MacLennan, Aileen
Sent: 14 May 2014 17:06
To: Miller, Winnie; Brennan, Andy; Ross, Lynn; Muir, Cathy; Bradnam, Michael; Peebles, Lorraine; Loudon, David
Cc: Smillie, Dawn; Dobson, Lorraine
Subject: FW: Electronic plans - All radiology/imaging

David,

Thank you for your telephone calls and e mails in relation to the above. I have copied my team into your mail to ensure we understand the points of contact. This is helpful and I agree the 6 weekly meeting are an important interface for us and our staff.

Kind Regards

Aileen

From: Loudon, David
Sent: 13 May 2014 12:05
To: MacLennan, Aileen
Cc: Macleod, Mairi; Griffin, Heather; Wrath, Frances; Moir, Peter; McGarrity, John
Subject: RE: Electronic plans - All radiology/imaging

Aileen,

Thank you for your message. I have reviewed the content of your message with the project team and as a result have found that your team does have all current floor plans and 1:50's. However, I have also found that your team did not receive a formal copy of the elevations that were prepared for diagnostics rooms. This is a genuine oversight for which I apologise.

A full set of the data was delivered to your PA last week for distribution to your team members.

The project team has also reviewed our quality control procedures related to document control and I would ask you to advise your team members to note that Mairi McLeod will be the single point of contact for any queries regarding the equipping of your department with the exception of Group 5 which will remain with Frances Wrath. In Mairi's absence, Heather Griffin should be contacted. John McGarrity will continue to interface with your department as before.

A57087549

I am aware of the good progress being made on the interfaces between your team and the project team especially since the introduction of the 6 weekly review meetings and site visits. I look forward to this positive relationship continuing as we head towards the installation and commissioning of the diagnostic related services.

Regards

David

David W. Loudon, MCIOB, CBIFM, MBA
 Project Director - South Glasgow Hospitals Development / Director of Facilities and Capital Planning - Designate
 NHS Greater Glasgow & Clyde
 New South Glasgow Hospital Site Offices
 Top Floor, NHS Offices
 Hardgate Road
 Glasgow
 G51 4SX

[REDACTED]
 [REDACTED]
 [REDACTED]

From: MacLennan, Aileen
Sent: 05 May 2014 10:58
To: Loudon, David
Subject: FW: Electronic plans - All radiology/imaging

David,

I wanted to bring to your attention the concerns I have about the very difficult situation the Diagnostic Directorate Service Transfer Owners are in. In our high level meetings with the Project team we have repeatedly asked for 'Room Data Sheets' and have been assured with you present in the room that we have all the information that the Project team have. The information shared with us to date has been a CD rom with 1:50 plans with equipment codes on them but no descriptor of content, subsequent to receiving these we eventually were given a code breaker.

However, we have now been made aware by John McGarrity that there is actually a Room data sheet for each of our rooms that shows the code and descriptor. He has access to this information but for a reason unknown to me he has not been allowed to share it. All our STOs have to spend a considerable amount of time closely scrutinising plans for codes and then cross referencing to the code breaker in order to complete the equipment workbooks to help to identify any gaps. These individuals as you'll be aware are already fully employed clinically and I find it hard to understand why, when the organisation is in possession of a mechanism to expedite this process for clinical staff they will not share it? The frustration and additional work this important task is adding to the clinical team due to the lack of pertinent documentation is again in danger of fracturing collaborative working, and, the potential for serious errors being made due to the current cross referencing of documents in the absence of the Room Data Sheets.

Cathy Muir is required to complete the migration workbook and requires access to this information as a matter of urgency.

A57087549

I am sure we can resolve this matter easily with your assistance,

Thank you in anticipation

Kind Regards

Aileen

From: Bradnam, Michael [REDACTED]
Sent: Friday, May 16, 2014 17:10
To: Ross, Lynn [REDACTED]; Miller, Winnie
[REDACTED]
Cc: Brennan, Andy [REDACTED]
Subject: Electronic plans - All radiology/imaging

Dear Lynn and Winnie,

Can we still have access to the 2012 room data sheets please.

Best wishes,
Michael.

From: Macleod, Mairi
Sent: 16 May 2014 13:18
To: Miller, Winnie
Cc: Ross, Lynn; Bradnam, Michael
Subject: RE: Electronic plans - All radiology/imaging

Winnie

We do not have any up to date Room data sheets the last ones issued to us were in 2012 and as you will appreciate these are now completely out of date with the design

We are expecting the "as built" room data sheets in June/July this year and we will issue these when we have them

Kind regards

Mairi

From: Miller, Winnie [REDACTED]
Sent: 14 May 2014 19:30
To: Macleod, Mairi
Cc: Ross, Lynn; Bradnam, Michael
Subject: FW: Electronic plans - All radiology/imaging

Hi Mairi

Please see Michael's request below, I attach a copy of a previous Room Data sheet as an example of what is required.

With thanks

Winnie

Planning Manager - Diagnostics
AGILE WORKER

A57087549

[REDACTED]
[REDACTED]
PA support: Mrs Christina Fulton
[REDACTED]

From: Bradnam, Michael
Sent: 14 May 2014 18:58
To: Ross, Lynn; Miller, Winnie
Cc: Brennan, Andy
Subject: Electronic plans - All radiology/imaging

Dear Lynn and Winnie,

Would you please request the Room Data sheets from Mairi Macleod for Nuclear Medicine and MRI so that I can circulate them to my team. We urgently need this information to check the plans made available to us. Many thanks.

Best wishes,
Michael.

From: MacLennan, Aileen
Sent: 14 May 2014 17:06
To: Miller, Winnie; Brennan, Andy; Ross, Lynn; Muir, Cathy; Bradnam, Michael; Peebles, Lorraine; Loudon, David
Cc: Smillie, Dawn; Dobson, Lorraine
Subject: FW: Electronic plans - All radiology/imaging

David,

Thank you for your telephone calls and e mails in relation to the above. I have copied my team into your mail to ensure we understand the points of contact. This is helpful and I agree the 6 weekly meeting are an important interface for us and our staff.

Kind Regards

Aileen

From: Loudon, David
Sent: 13 May 2014 12:05
To: MacLennan, Aileen
Cc: Macleod, Mairi; Griffin, Heather; Wrath, Frances; Moir, Peter; McGarrity, John
Subject: RE: Electronic plans - All radiology/imaging

Aileen,

Thank you for your message. I have reviewed the content of your message with the project team and as a result have found that your team does have all current floor plans and 1:50's. However, I have also found that your team did not receive a formal copy of the elevations that were prepared for diagnostics rooms. This is a genuine oversight for which I apologise.

A full set of the data was delivered to your PA last week for distribution to your team members.

A57087549

The project team has also reviewed our quality control procedures related to document control and I would ask you to advise your team members to note that Mairi McLeod will be the single point of contact for any queries regarding the equipping of your department with the exception of Group 5 which will remain with Frances Wrath. In Mairi's absence, Heather Griffin should be contacted. John McGarrity will continue to interface with your department as before.

I am aware of the good progress being made on the interfaces between your team and the project team especially since the introduction of the 6 weekly review meetings and site visits. I look forward to this positive relationship continuing as we head towards the installation and commissioning of the diagnostic related services.

Regards

David

David W. Loudon, MCIOB, CBIFM, MBA
Project Director - South Glasgow Hospitals Development / Director of Facilities and Capital Planning - Designate
NHS Greater Glasgow & Clyde
New South Glasgow Hospital Site Offices
Top Floor, NHS Offices
Hardgate Road
Glasgow
G51 4SX

[REDACTED]
[REDACTED]
[REDACTED]

From: MacLennan, Aileen
Sent: 05 May 2014 10:58
To: Loudon, David
Subject: FW: Electronic plans - All radiology/imaging

David,

I wanted to bring to your attention the concerns I have about the very difficult situation the Diagnostic Directorate Service Transfer Owners are in. In our high level meetings with the Project team we have repeatedly asked for 'Room Data Sheets' and have been assured with you present in the room that we have all the information that the Project team have. The information shared with us to date has been a CD rom with 1:50 plans with equipment codes on them but no descriptor of content, subsequent to receiving these we eventually were given a code breaker.

However, we have now been made aware by John McGarrity that there is actually a Room data sheet for each of our rooms that shows the code and descriptor. He has access to this information but for a reason unknown to me he has not been allowed to share it. All our STOs have to spend a considerable amount of time closely scrutinising plans for codes and then cross referencing to the code breaker in order to complete the equipment workbooks to help to identify any gaps. These individuals as you'll be aware are already fully employed clinically and I find it hard to understand why, when the organisation is in possession of a mechanism to expedite this process for clinical staff they will not share it? The frustration and additional work this important task is adding to the clinical

team due to the lack of pertinent documentation is again in danger of fracturing collaborative working, and, the potential for serious errors being made due to the current cross referencing of documents in the absence of the Room Data Sheets.

Cathy Muir is required to complete the migration workbook and requires access to this information as a matter of urgency.

I am sure we can resolve this matter easily with your assistance,

Thank you in anticipation

Kind Regards

Aileen

From: Bradnam, Michael [REDACTED]
Sent: Thursday, June 19, 2014 14:24
To: Miller, Winnie [REDACTED]
Cc: Parr, Antoinette [REDACTED]
Subject: RE: Electronic plans - All radiology/imaging

Hi Winnie,

No he has not. But he has confirmed that he has free access to the 'current' data sheets. But he is not allowed to show them to us. The room data sheets and the drawings go together.

Best wishes,
Michael.

From: Miller, Winnie
Sent: 19 June 2014 14:17
To: Bradnam, Michael
Subject: RE: Electronic plans - All radiology/imaging

Michael has John confirmed that he has Room data sheets that are newer than 2012?

Thanks

Planning Manager
Acute Planning - Diagnostics
AGILE WORKER

[REDACTED]
[REDACTED]

PA support - Christina Fulton

[REDACTED]

From: Bradnam, Michael
Sent: 19 June 2014 14:13
To: Miller, Winnie
Cc: Parr, Antoinette
Subject: Electronic plans - All radiology/imaging

Hi Winnie,

Thanks for asking. I think that we should continue to ask from time to time. It concerns me that the Project Team are continuing to withhold information which it holds.

In previous projects with which I have been involved the Medical Physics Experts and the Radiation Protection Advisers work with the Estates staff and the architect/main contractor to review and agree changes to the Data Sheets. It is a very strange arrangement that they are not sharing them with us, even if they are out of date, when we would normally have been consulted on them. This again raises concerns over the governance of the project.

What surprises me is that they have openly shared the room data sheets with John McGarrity from Bioengineering but will not share them with the team of statutory Medical Physics Experts and Radiation Protection Advisers who actually have the statutory legal responsibilities for the facilities.

Kind regards,
Michael.

From: Miller, Winnie
Sent: 19 June 2014 12:20
To: Bradnam, Michael
Subject: Fw: Electronic plans - All radiology/imaging

Hi please see below - have asked for the older ones, do you want me to pursue obtaining them?

Thanks

Winnie

Sent from a NHS GG&C BlackBerry device

From: Macleod, Mairi
Sent: Thursday, June 19, 2014 09:45 AM
To: Miller, Winnie
Subject: RE: Electronic plans - All radiology/imaging

Winnie

I'm really sorry but we still haven't got the room data sheets and Brookfield can't give me a definite date as more work is required to be done by Nightingales. I can only advise that once we have these we will forward them to you

Mairi

From: Miller, Winnie [REDACTED]
Sent: 17 June 2014 09:48
To: Macleod, Mairi
Subject: RE: Electronic plans - All radiology/imaging

Hi Mairi

Any sign of the updated Room Data sheets as yet?

Thanks

Winnie

Planning Manager
Acute Planning - Diagnostics
AGILE WORKER

[REDACTED]
[REDACTED]

A57087549

PA support - Christina Fulton
[REDACTED]

From: Macleod, Mairi
Sent: 16 May 2014 13:18
To: Miller, Winnie
Cc: Ross, Lynn; Bradnam, Michael
Subject: RE: Electronic plans - All radiology/imaging

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We are expecting the "as built" room data sheets in June/July this year and we will issue these when we have them

Kind regards

Mairi

From: Miller, Winnie [REDACTED]
Sent: 14 May 2014 19:30
To: Macleod, Mairi
Cc: Ross, Lynn; Bradnam, Michael
Subject: FW: Electronic plans - All radiology/imaging

Hi Mairi

Please see Michael's request below, I attach a copy of a previous Room Data sheet as an example of what is required.

With thanks

Winnie

Planning Manager - Diagnostics
AGILE WORKER
[REDACTED]
[REDACTED]

PA support: Mrs Christina Fulton
[REDACTED]

From: Bradnam, Michael
Sent: 14 May 2014 18:58
To: Ross, Lynn; Miller, Winnie
Cc: Brennan, Andy
Subject: Electronic plans - All radiology/imaging

A57087549

Dear Lynn and Winnie,

Would you please request the Room Data sheets from Mairi Macleod for Nuclear Medicine and MRI so that I can circulate them to my team. We urgently need this information to check the plans made available to us. Many thanks.

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From: MacLennan, Aileen
Sent: 14 May 2014 17:06
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Kind Regards

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Sent: 13 May 2014 12:05
To: MacLennan, Aileen
Cc: Macleod, Mairi; Griffin, Heather; Wrath, Frances; Moir, Peter; McGarrity, John
Subject: RE: Electronic plans - All radiology/imaging

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Regards

A57087549

David

David W. Loudon, MCIQB, CBIFM, MBA
Project Director - South Glasgow Hospitals Development / Director of Facilities and Capital Planning -
Designate
NHS Greater Glasgow & Clyde
New South Glasgow Hospital Site Offices
Top Floor, NHS Offices
Hardgate Road
Glasgow
G51 4SX

[REDACTED]
[REDACTED]
[REDACTED]

From: MacLennan, Aileen
Sent: 05 May 2014 10:58
To: Loudon, David
Subject: FW: Electronic plans - All radiology/imaging

David,

I wanted to bring to your attention the concerns I have about the very difficult situation the Diagnostic Directorate Service Transfer Owners are in. In our high level meetings with the Project team we have repeatedly asked for 'Room Data Sheets' and have been assured with you present in the room that we have all the information that the Project team have. The information shared with us to date has been a CD rom with 1:50 plans with equipment codes on them but no descriptor of content, subsequent to receiving these we eventually were given a code breaker.

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Cathy Muir is required to complete the migration workbook and requires access to this information as a matter of urgency.

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Thank you in anticipation

Kind Regards

A57087549

Aileen

A57087549

**DIAGNOSTICS/PROJECT TEAM MEETING
MEETING NOTE**

23 July 2014 at 9is in the Boardroom, Project Offices, Southern General

Present: Ms Aileen MacLennan (AMaCL), Director Diagnostic Services (Chair)
Mrs Winnie Miller (WM), Planning Manager, Diagnostics Directorate
Mrs Lynn Ross (LR), General Manager Imaging
Ms Cathy Muir (CM), Sector Superintendent, South Sector, Imaging
Mr Andy Brennan (AGB), RPA, Health Physics
Ms Frances Wrath (FW), ASR Programme – Capital Planning Manager
Mr David Hall (DH), Consultant – Currie & Brown
Mr Nick Cleary, Senior Buyer, Capital Equipment
Mr Peter Moir, Deputy Project Director
Ms Lorraine Peebles, Senior Project Manager

Apologies: Mr Robert Stewart (RS), Head of Procurement
Mr David Loudon (DL), Project Director
Ms Mairi Macleod (MMAcl), Project Manager, Project Team
Dr Michael Bradnam (MB), Head of Imaging Physics

In Attendance: Christina Fulton (CF), (Note taker)

1. Welcome and Apologies

AMaCL welcomed everyone to the meeting, acknowledging Peter Moir representing David Loudon who is on leave. Apologies noted above were accepted.

2. Notes of last meeting

The notes of the last meeting were approved with the following amendments:

Item 3 Drawings to Suppliers AB agreed to check the DR drawings for Diagnostic colleagues.

Item 7 AOCB CMcF should read CM (Cathy Muir) expressed concern.....

3. Matters Arising/Actions

Equipment Delivery

AMaCL asked FW for an update on this.

FW advised that presently the Project Team and Diagnostic Colleagues are meeting with Design Engineers from each of the suppliers of Imaging Equipment. Finalised drawings from Suppliers are expected shortly for agreement. The programme of works is currently being agreed with Brookfield. The meeting with the teams and Siemens regarding Spect CT will take place on the 01.08, a further meeting to agree IR/Hybrid theatres and MR installation meetings will take place on the 06.06 and 08.08 respectively. Revised drawings for DEXA have been circulated and final sign off of the Fluoroscopy and Endoscopy rooms remain outstanding. FW noted that the finer details would be discussed with Brookfield the first week in August and AMaCL asked that FW share definitive dates for installation work to be

ACTION

undertaken with LHP so that the Diagnostic Migration Project plan can be updated. This is required by the 04.08, so the detail can be shared with the acting COO.

FW

Proforma for sign off of Imaging Room design for equipment installation

AMacL enquired if the above proforma documents for all the DR Rooms in the new department had been completed for sign off? DH asked if this was how we wished to approach sign off of all areas? CM indicated that this is the way forward as although each room has generic equipment they are all individual designs FW agreed this format as each room proforma would then be given to Brookfield and the companies for any further works required by them to be completed FW indicated that MIS (DR rooms) have a new technical advisor on board – Steve Alton who is currently working on RAG029 for technical specification completion. This should be available by the end of the week with all other specifications should be completed by the end of next week. AB noted that MIS will be challenged to complete the installations within the agreed timeline.

FW advised that Method Statements had been asked for, from the suppliers in order to ensure all works are carried out in line with Brookfield's work schedule.

AMacL asked NC to write to MIS indicating that they had been awarded a tender of magnitude and we would like to meet with their installation team in order to be reassured that their installation project plan was robust.

NC

Medical Gases NCH MR Prep Room on Ground Floor

DH indicated that any issue on this was now resolved as the gases were now installed.

SEPA

AMacL enquired if this issue was resolved FW indicated that this is in relation to a Radiotherapy room in Schiehallion Ward and there is space available in the basement for a radioactive holding tank but as yet SEPA have not requested one as yet.

Mobile Imaging

AMacL indicated that further work was being carried out with regard to a possible additional mobile unit in the ward stack.

Blood Fridges

AMacL indicated that a new Blood Fridge would require to be funded and this needs to be discussed with David Loudon.

FW/DL

Notes & Actions

AMacL asked that in future if there could be an action list with the minute for the meeting.

CF/AH

1:50 Drawings, feedback mechanism

AMacL asked how the team would like this to proceed. WM indicated that guidance was required from the Project Team as how they would like Diagnostics to feedback any issues picked up on review of the recently circulated 1:50 plans. She acknowledged that most issues are being dealt with as designs are being altered for Group 5 equipment installation but with departments such as Nuclear Medicine there are other clinical rooms that require amendments that will not be picked up by this process. FW acknowledged there were items not fully completed when the team made their visit but if the list can be forwarded to the Project team these can be addressed. WM would ask Michael Bradnam to re send the list.

WM/MB

DH advised that Brookfield have a Project Supervisor who would pick up snagging issues, the Project Team have their own experts to complete snagging lists and finally the users can identify any further issues that may have been overlooked. PM reminded the Group that some smaller items have not been installed as yet due to security issues but this would be completed once the areas are finalised for lock down.

Site Visit

AMacL asked if there could be a site visit arranged for this Group to see the facilities. FW to arrange a suitable date.

FW

Room Data Sheets

WM enquired if these were available as yet. FW indicated that these should have originally been available in April 2014 but were not complete. As Diagnostics are Product Group 3 it is anticipated a delivery of these would be end of August beginning of September.

FW

AMacL advised that it would be good to have these sheets to review as early as possible due to the timescale involved along with the normal work carried out by the relevant staff.

RPA

AB advised there is one more day of testing to be carried out and the RPA has been perfect so far. There has been damage to lead glass identified, which FW advised that this appeared to be an act of vandalism and this is being reviewed by Infection Control, to see if it requires to be replaced.

AB raised concerns as there appeared to be glass panels in doors to some of the scanning rooms allowing views into patient areas. FW noted that opaque film had still to be applied to the glass in these areas.

AB highlighted concerns that the air cooling units have been installed, which do not appear in the 1:50 drawings, in some of the equipment rooms. These are floor mounted and he is concerned that there might be possible interruption to services for servicing. DH indicated that the units were installed as per requirements for the equipment that has been procured and the suppliers have seen the areas. The cooling element would be located in plant rooms. CM advised there would no issue with this as long as the locations did not interfere with the day to day operation of the room. One aspect CM would like to raise is the

maintenance of the air conditioning equipment, who would be responsible for it as currently it sits with Estates and they don't always respond quickly enough when AMacL asked that this be an agenda item for the next meeting when David Loudon is available to discuss.

CF/AH

4. **Feedback from 1:50 plan review , issues for discussion**

NCH OPT Placement

DH advised this has been resolved.

Paediatric DEXA Room

FW advised this has been resolved and new layout plans are out for agreement by the service users.

Medical Gases in the ground floor Paediatric MR Induction room

DH advised that this had been resolved with the Gases now in place.

Intercom

AMacL enquired if there was now agreement over the installation of an Intercom. WM indicated that following a demonstration by the supplier and telecoms input it was agreed that although the equipment was very useful it still did not meet the required use in the Imaging department. Karen McSweeny had acknowledged this. PM understood that the department would operate with the proposed 'push to talk' system initially and then if required install an intercom at a later stage. AMacL advised that she had discussed this issue with David Loudon, that we had no desire to disrupt the system being put in place for the hospital but it was clear a further system would be required to ensure we had procedures in place to protect the patients within the department in the event of an emergency, not necessarily cardiac arrest but pre cardiac arrest in our care.

PM indicated that we should discuss this further at the next meeting, AMacL agreed that we need to move forward. DH suggested utilising the wireless network for the intercom system.

CF/AH

Pendants

FW indicated that the specification for the pendants had been circulated to the relevant staff just prior to this meeting.

5. **Migration dependencies and risks**

LP reported that the Migration period paper identifies the dependencies to diagnostics both internally and external. The list circulated ahead of the meeting today indicates areas of work and the lead team to progress these. FW advised that she had shared this with Karen Connelly and Fiona McCluskey and would be discussed at the Project Team meeting to progress. AMacL acknowledged that some of the work sits within Diagnostics and this would be discussed at the Diagnostic Executive Group meeting on Friday. AMacL asked that PACS representatives be included in the meeting. AMacL

WM/CF

suggested that the Group review the plan and ensure all dependencies are captured. Any subsequent risks can then be identified and be incorporated into a discreet risk register as well as the overarching diagnostic risk register. LHP indicated that this document would be shared with other Directorates at the Event on 20 August in the Campanile hotel.

NC asked to be included in the Executive Group meeting with equipment details to be discussed.

CF

6.

AOCB

Mammography Room

FW enquired if a decision had been made on the fitting out of this room in the new hospital. WM & LR clarified that a decision had been made and agreed by the Diagnostic Executive group not to commission this room, as the patient pathway for Mammography will be through the ACADs.

CT

FW advised that guidance was awaited for one room to allow completion by Brookfield. AMacL indicated that final sign off is awaited from Mr Calderwood and will discuss with Mr Archibald to progress.

AMacL

Equipment Procurement

NC asked if now was the time to start the discussion on overhead gantry within the Rhesus department. AMacL agreed that NC should attend the Executive Group meeting.

WM/CF

Group 3 Equipment

CM enquired if there was any development on the Group 3 equipment gap analysis. FW indicated that John McGarrity is working on this. NC advised that following work completed by Andrew Barnes he hopes to produce information for the department later today for a further review.

Date and Time of Next Meeting

7.

The next meeting date is Wednesday 13 August 2014 at 1pm in the Board Room, Project Offices, Hardgate Road, Govan.

ALL

**DIAGNOSTICS/PROJECT TEAM MEETING
MEETING NOTE**

13th August 2014 at 1pm in the Boardroom, Project Offices, Southern General

Present: Ms Aileen MacLennan (AMaCL), Director Diagnostic Services (Chair)
Mrs Winnie Miller (WM), Planning Manager, Diagnostics Directorate
Mr Andy Brennan (AGB), RPA, Health Physics
Ms Frances Wrath (FW), ASR Programme – Capital Planning Manager
Mr Nick Cleary (NC), Senior Buyer, Capital Equipment
Mr Peter Moir (PM), Deputy Project Director
Ms Lorraine Peebles (LP), Senior Project Manager
Ms Mairi Macleod (MMAcl), Project Manager, Project Team

Apologies: Mr Robert Stewart (RS), Head of Procurement
Mr David Loudon (DL), Project Director
Dr Michael Bradnam (MB), Head of Imaging Physics
Mrs Lynn Ross (LR), General Manager Imaging
Ms Cathy Muir (CM), Sector Superintendent, South Sector, Imaging
Mr David Hall (DH), Consultant – Currie & Brown

In Attendance: Allyson Hirst (AH) – Notes

1. Welcome and Apologies

AMaCL welcomed everyone to the meeting. Apologies noted above were accepted.

2. Notes of last meeting

The notes of the last meeting were approved

3. Matters Arising/Actions

Room Data Sheets

No programme for these at this time and will continue to the next meeting

Blood Fridges

Fridge acquired through MSC route but power and data to be clarified – site visit will answer questions and this can progress

Maintenance Contracts for A/C

Requires further discussion and will remain on the agenda

CT Equipment purchase

It was noted that approval had been given for 2 x 128 scanners for the new adult hospital from COO. Paediatric colleagues are in the process of pulling together a Business case for a 320 scanner for the NCH – FW commented that she had reservations on ability to fit this into the area allocated. AMaCL advised that she had cautioned Paediatric colleagues that delays on the purchase of a CT could result in there being no scanner will be available at hospital opening

ACTION

OPT Machine/Mobile Units and 4rd Adult 128

It will be necessary to seek approval for the purchase via GArchibald

Update on Equipment

FW/WM agreed that this was progressing with final drawings for DR rooms passed to WM for distribution and FW advised she has just received Phillips drawings which would be forwarded when received. Final comments on Dexa and CT drawings have been passed to GE. FW commented that the Hybrid Theatre drawings were also awaited. FW reported that she was scheduled to meet with BMCL to review the installation programme and once further information on the proposed installation dates was available she would forward these to LP. AMaCl noted that it was imperative to have dates, timelines in order to ensure good progress.

RPA Testing

AB had forwarded his report in early August noting that Schiehallion still had to be tested as the doors were not in position.

4. **Pendant Specification**

The information has been circulated and feedback received – J Crawford was happy that the specification meets requirement but noted that clarity required on data points. FW reported that data points will be provided by Mercury in the spaces noted.

5. **Migration Dependencies and Risk**

A workshop is planned for 25th September to review

6. **AOCB**

WM asked for a site plan to share with SEPA to show the completed site – PM agreed to provide this with the boundary marked

PM to provide

Emergency Gantry - Tender process commencing– this would be progressed via the national contract framework

LR and AB to progress

Mobile DR – specification required before progressing with procurement – wireless connectivity required

7. **Date and time of next meeting**

The next meeting of the group will take place on 24th September 2014 and AMaCl asked that the meeting commence at 9.15

Agreed

**DIAGNOSTICS/PROJECT TEAM MEETING
MEETING NOTE**

24th September 2014 in the Boardroom, Project Offices, Southern General

Present: Mr Peter Moir (PM), Deputy Project Director (Chair)
 Ms Aileen MacLennan (AMacL), Director Diagnostic Services
 Mrs Winnie Miller (WM), Planning Manager, Diagnostics Directorate
 Ms Frances Wrath (FW), ASR Programme – Capital Planning Manager
 Mr Nick Cleary (NC), Senior Buyer, Capital Equipment
 Ms Lorraine Peebles (LP), Senior Project Manager
 Ms Mairi Macleod (MMacL), Project Manager, Project Team
 Dr Michael Bradnam (MB), Head of Imaging Physics
 Ms Cathy Muir (CM), Sector Superintendent, South Sector, Imaging
 Mr David Hall (DH), Consultant – Currie & Brown

Apologies: Mr David Loudon (DL), Project Director
 Mr Andy Brennan (AGB), RPA, Health Physics

In Attendance: Christina Fulton (CF) – Notes

1. Welcome and Apologies	ACTION
PM welcomed everyone to the meeting. Apologies noted above were accepted.	
2. Notes of last meeting	
The notes of the last meeting were approved	
3. Matters Arising/Actions	
Room Data Sheets FW noted that the Room Data sheets were not available and we do not have a confirmed date when they would be received. FW indicated that Brookfield were still updating the sheets with any equipment and environmental changes. PM advised that he would raise this at the Project Management meeting.	PM
Blood Fridges WM indicated that a date was now available for the Supplier to undertake a site visit to review the locations of the Blood fridges within the NSGH. Issues had been raised concerning the type of electrical spur units in place (switched or unswitched) for the blood fridges and ventilation circulation for some. A full report will be sent to the Project Team following the Supplier visit DH indicated any alterations to the electrical installations would require to be carried out by the contractors to maintain warranty cover.	
Maintenance Contracts for A/C AMacL indicated that she would discuss with David Loudon who would be responsible for the contracts once the two year warranty period has lapsed It was pointed out that On occasion there can be excessive machine down time when air conditioning units fail and are awaiting repair.	AMacL/DL

CT Equipment purchase

AMaCL advised that discussions were ongoing to confirm the CT equipment to be purchased for the NCH. It is anticipated that a 256 Machine would be the preferred equipment and this would enable the order to be placed with a proposed delivery by the middle of January 2015. FW indicated that enabling work in the room would be the same if the machine were a 128 or a 256.

OPT Machine / Mobile units

FW indicated that the OPT Machine was on the equipment list awaiting confirmation of funding. AMaCL pointed out that additional mobile units were essential given that BMT are relocating to this site. NC advised that this is currently out to tender.

Update on Equipment

FW advised the Group on equipment installation start dates

- MIS 06.10.14
- Toshiba 06.10.14
- GE 06.10.14
- Philips 13.10.14
- Siemens January 2015

FW indicated that each Contractor and their employees would have to go through an induction programme prior to being allowed on site.

FW pointed out that Endoscopy/Hybrid Theatres plans had still to be agreed and it is hoped this would take place on 3 October 2014 for the Hybrid theatres. FW is awaiting confirmation from Toshiba of their availability to attend with GGC colleagues. It was noted that Ram Kasthuri should be included in the meeting being scheduled for 3 October 2014 to enable Diagnostics to have an input.

AMaCL asked for an updated equipment installation project plan to present to MEG on behalf of Diagnostics. FW will provide an up to date schedule by the end of the day.

FW

RPA Testing

WM indicated that actions had been noted for Brookfield with FW advising that a further RPA site inspection visit would be arranged to confirm the works had been carried out. AMaCL asked that the date be suitable to all for attendance. DH indicated that week of the 13 October 2014 for testing in Schiehallion had been identified.

FW

4. **Pendant Specification**

MB indicated that the specification was suitable for Nuclear Medicine. John Crawford had indicated that they were suitable for Anaesthetics.

MB noted that in the Paediatric Cath Lab there had been non UPS/IPS sockets fitted on the pendant which might pose a risk. FW advised that this would be reviewed with Brookfield.

FW/DH

5. **Nuclear Medicine Department Door Security Strategy**

MB enquired if there was further information on the operation of security doors within the department. Would they be fitted with door locks or swipe card access. FW noted that this was an operational issue. MMacL advised that if it

was swipe access doors this would be programmed into the magnetic strip on the swipe card. DH indicated that some rooms are fitted with door locks but accesses into the nuclear medicine department are by swipe card. MB noted that the access would require to be restricted once radioactive material was stored in the department from January 2015. FW advised that interim measures would be in place from January 2015. DH indicated that all workers entering the area from January 2015 would require a "permit to work certificate". AMacL intimated that this is a mechanism that is required to be in place by the end of December to enable safe access to all staff within the area.

FW

6. **AOCB**

FW advised that she was working on a paper for Grant Archibald, Peter Moir and David Stewart to take to the Directors Group indicating a list of equipment that would be transferring and any equipment which would be scraped following the migration of all hospital sites. If staff is aware of any such equipment can they please advise FW. FW is working on this with Procurement. NC indicated that Lead Aprons need to be added to the list and confirmation of the amount suitable for transfer is required to identify the gap in equipment.

FW/ALL

NC/CM

CM enquired if there had been a schedule established for the transfer of large equipment items. FW advised that quotes are currently being agreed for the transfer costs of the large pieces of equipment and proposed transfer dates. FW will circulate relevant information once agreed. She anticipated that clinical engagement to review rooms would begin in the next 2-3 weeks

FW

7. **Date and time of next meeting**

The next meeting of the group will take place on Friday 7 November 2014 at 12.30pm in the Board Room, Project Offices, Hardgate Road, Govan.

Agreed

**DIAGNOSTICS/PROJECT TEAM MEETING
MEETING NOTE**

7th November 2014 at 12.30pm in the Boardroom, Project Offices, Southern General

Present: Ms Aileen MacLennan (AMaL), Director Diagnostic Services (Chair)
Mrs Winnie Miller (WM), Planning Manager, Diagnostics Directorate
Mr Andy Brennan (AGB), RPA, Health Physics
Ms Frances Wrath (FW), ASR Programme – Capital Planning Manager
Mr Nick Cleary (NC), Senior Buyer, Capital Equipment
Mr Peter Moir (PM), Deputy Project Director
Ms Lorraine Peebles (LP), Senior Project Manager
Dr Michael Bradnam (MB), Head of Imaging Physics
Mr David Hall (DH), Consultant – Currie & Brown

Apologies: Mr David Loudon (DL), Project Director
Mrs Lynn Ross (LR), General Manager Imaging
Ms Cathy Muir (CM), Sector Superintendent, South Sector, Imaging
Ms Mairi Macleod (MMAcl), Project Manager, Project Team

In Attendance: Allyson Hirst (AH) – Notes

ACTION

1. Welcome and Apologies

AMaL welcomed everyone to the meeting. Apologies noted above were accepted.

2. Notes of last meeting

The notes of the last meeting were approved

3. Matters Arising/Actions

Transferring Equipment

Now that installations of new equipment are underway the opportunity can now be taken to fully review the transfer and where this comes from and transfer too.

Meeting regarding transfer of Children's Cardiac Cath Laboratory to take place first week of December – decommissioning and installation dates require to be known so that NHS Lothian can be prepared to take on case load during the down time.

It is also anticipated that meeting to discuss transfer of Children's SPECT CT scanner will also take place in early December..

Further meetings will follow in the new year regarding transfer of Adult interventional Lab and CT scanners.

New Purchase

Progress made with procurement with Siemens for cath lab with the Spec CT and MR. JMcG is in contact with Philips to get availability for 17th and 24th November to complete discussions. Funding has now been found to replace the cath lab monitoring equipment and a plan is in place to run cables without disrupting the floor which is the preferred option. Drawings to be returned to progress conversation. Preparatory works to be undertaken to ensure equipment can be placed when it is ready.

Communication

Over communication is preferable to ensure that all participants are clear and fully understanding of the plans and programmes that are to be put in place. Understanding the migration plan is key to ensuring that the right facilities and people are ready to receive and work to understand who exactly is moving from each of the hospitals. This in turn allows the project team to plan to prepare the transfer of appropriate equipment

A discussion is required with NHS Lothian to ascertain the services that could potentially be covered during the migration and potentially in the weeks leading up to this in order to decommissioning and recommission transferring equipment such as Cath Lab.

The migration should

- Have no deterrent to any patient
- Cover from another hospital with no risk during transfer
- Ensure that staff have sufficient training in equipment and area
- If there is any gap within any of the above the migration cannot progress

4. New Equipment

Siemens MRs – pre install is underway and we are currently awaiting final drawing to accommodate the changes to the case – FW will chase up to conclude

FW to pursue

Spec CT – FW will forward information she has to MB

FW to forward info

Toshiba – interventional work has started for pre install

Hybrids – awaiting final drawings – core positions have been returned to DH to progress. Essentially ready on the layout once some small issues are resolved and installation is set for January

DH to progress

Philips have commenced pre installation works – fluoroscopy drawings are required and FW is chasing for this information. Endoscopy reps have met on site and DH has reviewed issues on layouts and solution to generator positions agreed – drawings are anticipated by mid week next week.

GE have commenced on the two adult scanner rooms – final drawings have yet to be forwarded – FW has agreed to pursue

FW to pursue

NCH CT – decision still awaited as to whether standard 128 slice CT or Cardiac CT (320 slice) is to be purchased.

MIS are currently working within various DR rooms on site although progress is very slow. Project team are currently chasing MIS to increase staff on site and maintain agreed programme.

5. Programme

The current equipment installation programme shows the majority of work will

be completed before the Christmas holidays with only a few rooms remaining to be completed – mostly final equipment installation. Awaiting the programme from MIS for final preparatory works and this will be completed over the weekend to allow a clear pathway to complete their works.

AMaCL agreed to hold off with further review to see the programme and to ensure that there are no major impacts to the project/transfer and migration

LP agreed to send her version of the installation and commissioning plan to sense check against final dates.

It was agreed that an installation and commissioning update to be forwarded to LP to keep updated on any impacts, delays etc. NC asked for a copy of this information as this will be of assistance to procurement to ascertain works by the installers and to ensure that they are able to take on the work. FW agreed that this information would not be entirely appropriate for procurement but was happy to provide a clearer picture for their purposes.

Forward
information to
NC – FW

A review of the contractors to be complete the fit out to be taken forward to ensure that best value for money and that they will be available to complete the works

Paediatric Dexa – no updated drawings are available – FW agreed to chase GE they are scheduled for December.

It is imperative to understand where the programme sits on the critical path and if it deviates how this can be recovered

6. **Blood Fridges**

WM circulated a paper which captures the issues raised from C&M site visit – clarifications on the conditions required, actual fridge heat output and noted that this is a sealed building but the clinical rooms are max temperature set of 26 degrees and requirements for more specific temps are provided with fan coil unit. The engineers have reviewed the areas and BMS will be able to cope with the additional heat output in order to double check this the heat output of the fridges is required and diagnostics have agreed to provide

7. **Hold Open Doors**

FW reported that she is progressing PMI and DH has a possible solution. This work will be completed post 26th January so as not to cause any delays to completion.

8. **RDD**

FW stated that we have yet to receive further final RDD sheets from BMCE apart from 1st work package receipt previously reported. BMCE management are being chased on this matter.

Following concern expressed by clinical team re packaged chillers within clinical rooms. DH noted chilling relating directly to MR incorporated into the MR packages and supplied as part of the equipment. Central system - single

contract – enhanced response time required to ensure no unplanned downtime. DH agreed to discuss with Ian Powrie who is currently reviewing plant maintenance contracts for the new hospitals. Initially for the first two years system will form part of BMCE warranty and will be their responsibility.

9. **RPA /Laser Testings**

Some areas remain to be checked including Schiehallion Radiotherapy Suite AB is awaiting details from BMCE of when areas will be available for testing to prepare information for staff – It was noted that a visit is scheduled for later this PM to orientate. AB noted that this was progressing to satisfaction and will complete in sufficient time for testing

10. **Pendants**

DH/PM were to complete a review of sockets and appropriate positioning. DH agreed to check and revert back by later today to MB

11. **AOCB**

Update on the task log to be completed and will be circulated with notes

AH

After Hours Working

AB asked about arrangements for working on site outwith normal hours. AB will raise with SF to ascertain details

AB to raise with SFrew

Storing of equipment on site

It was agreed that the likely equipment and possible location to be forwarded to FW who will review and ascertain if acceptable

FW

CSCS Training – costs to be picked up by project team

Modality Installations – some supplementary electrical checks and re certifications for when the work is completed – communication via Project Team

Installation Engineers – AB will liaise on this matter

AB

Communication – arrangements for additional items required and the discussion on the best mechanism to ensure that relevant people are informed

Maintenance Checks – FW noted that maintenance checks are required for the equipment whilst it sits within the department to ensure equipment is maintained – after handover and how the diagnostics team will maintain the equipment and if offered by company to maintain then clarification on what they are offering and any potential costs – WM and LP to pull together a list of equipment and nothing the requirements of each piece

LP/WM to pull together information

Quench Pipe and Helipad – MB raised the possible implications for the quench pipe impacting on the helipad landing and had forwarded a video link showing the scale of the release when quenching the magnets. FW noted that the helipad being so far from the pipes should negate any issues MB was

concerned about. DH added that regulations have been fully complied with and the location of the pipes to be helipad and to any other outlet within the building have been taken into consideration. DH noted that the pipes sit on the lee side of the building and are 40m below and discharging in a downward direction and away from the helipad and the prevailing wind will remove any discharge. In the event that the wind direction changes to north and due east this still remains outwith the exclusion zone. No discussions have been undertaken with SAS. AMacL asked that this be written up to include probability, likelihood, impact and possible consequences. DH noted in conclusions that the downdraft from the helipad would likely disperse any quench pipe output

Medical Illustration Studio Lights – work completed and lights to be transferred

STOs – meetings are now set up and progress being made

Commissioning of MRI – MB asked is these will remain on field after commissioning – it was noted that these will be taken off field and control maintained over the area

12. **Date of Next Meeting**

It was to be held on 19th December 2014

**DIAGNOSTICS/PROJECT TEAM MEETING
MEETING NOTE**

9 January 2015 at 2pm in the Boardroom, Project Offices, Southern General

Present: Ms Aileen MacLennan (AMaCL), Director Diagnostic Services (Chair)
Mrs Winnie Miller (WM), Planning Manager, Diagnostics Directorate
Mr Andy Brennan (AGB), RPA, Health Physics
Ms Frances Wrath (FW), ASR Programme – Capital Planning Manager
Mr Nick Cleary (NC), Senior Buyer, Capital Equipment
Ms Lorraine Peebles (LP), Senior Project Manager
Dr Michael Bradnam (MB), Head of Imaging Physics
Mr David Hall (DH), Consultant – Currie & Brown
Mr David Loudon (DL), Project Director
Ms Annette Turnpenny, Capital Equipment Buyer

Apologies: Mrs Lynn Ross (LR), General Manager Imaging
Ms Mairi Macleod (MMacL), Project Manager, Project Team
Mr Peter Moir, Deputy Project Director

In Attendance: Christina Fulton (CF) – Notes

ACTION

1. Welcome and Apologies

AMaCL welcomed everyone to the meeting. Apologies noted above were accepted.

2. Notes of last meeting

The notes of the last meeting were approved

3. Matters Arising/Actions

Hybrid Theatres

It was noted that the Hybrid core was being installed week commencing 12 January 2015. WM reported that John Crawford had raised concerns over the position of the Imaging monitor when not in use. DH advised that there would be a choice of 4 types of arms which are being delivered via European manufacturers.

DH/JC

NCH Scanner

The Project Team advised that the Scanner for the NCH had now been procured and delivery was anticipated by the end of February 2015.

Pendants

DH indicated that he had still to review the sockets on the pendants and would carry this out and update at the next meeting.

DH

SPECT CT

FW advised that there had been a meeting prior to Christmas and the

comments from this had been forwarded to Siemens.

Transferring Equipment

FW indicated that she would liaise with WM to arrange the meetings with suppliers of the transferring equipment for Diagnostic staff.

FW/WM

Equipment Installation - update

The Group discussed the Project Plan circulated by FW for this meeting indicating the stages for all equipment installations in the departments. A copy of which is added to the minute.

Blood Fridges

DH advised that all rooms have sufficient ventilation with only two rooms requiring minor alterations. The sockets used as a power source had now been changed to non-switched spurs and information requiring safe isolation for maintenance work would be available for relevant staff.

Change order for hold open doors

General X-Ray Rooms RAG-029/031/032

DH indicated that the cost for altering these doors has been quoted at £25K. The weight of the doors was a concern and the Project Team are exploring different mechanisms to hold the doors open at a lesser cost.

DH

Pendant Move – SPECT

It was agreed to further discuss any alterations once the final drawings for the room had been received. AMacL agreed that this would be discussed outside of this meeting.

AB advised that there may be other rooms which may require to be reviewed once we receive handover. The Group agreed to review as and when necessary.

Room Data Sheets

FW advised that these had still not been received by the Project Team. DH indicated the scheduled date for the receipt of these is week commencing 19 January 2015, ahead of the handover of the buildings.

FW/DH

AC Maintenance Contracts

DL advised that this would be covered by the estates department. DL indicated that the required fast turnaround to avoid excessive machine downtime would be covered by a SLA. DH reported that the MRI would be an exception to this.

RPA/Laser Testing

AB advised that the laser testing had been completed and a summary report is being compiled for the Project Team. FW noted there had been concerns over the film not on some of the windows, in the theatre areas. DH raised concerns still to be addressed with the internal blinds as there may be a small pin hole where the laser may shine through. AMacL indicated that it is hoped we can address any issues and progress the resolution of issues.

AB advised that the Pendant (sockets) had still to be RPA tested.

AB indicated that most of the shielding is of the correct specifications but the shielding in the Schiehallion Unit is not the correct thickness and this is being pursued with Brookfield.

4. AOCB

AMacL enquired as to the content of the Bill of Quantities, noting that the DR Mobile Unit would not be included as yet as Grant Archibald had still to sign it off. The equipment is required due to the Organisational change of having the Bone Marrow Transplant Unit on the new hospital site. DL indicated that AT would be meeting with Grant Archibald and David Stewart to discuss a number of items next week and a decision on additional equipment procurement would be made following that. AMacL noted that the shortfall in PACS workstations had been identified as 15 in number and this should be included in the Bill of Quantities for the Directorate.

AB asked how suppliers and contractors would gain access to the buildings following handover. FW indicated that a procedure document is currently being prepared. DL advised that control of the building would fall to Facilities Management and would be controlled by them.

AT acknowledged the work carried out by LHP across the workstreams and thanked her for the valuable input given.

5. Date of Next Meeting

Friday 30 January 2015 at 9.30am in the Board Room, Project Offices, Hardgate Road, Govan.

From: Bradnam, Michael
Sent: 11 February 2014 21:06
To: MacLennan, Aileen [REDACTED]
Subject: DRAFT EMAIL TO DAVID LOUDON - AS REQUESTED

Dear Aileen,

I hope that this is suitable or near suitable.

Dear David,

We clearly have inherited a difficult situation with regard to the imaging equipment being installed in the new hospitals before the hospitals are completed. We will continue to offer you the best advice and support that we can.

Your Project Team first broached the subject of installing imaging equipment in the new hospital before it is completed, at the start of 2013. Up to this point it had always been understood that the imaging equipment would be delivered and installed in the spring of 2015. My physicists gave clear advice to the Project Team that early installation carried significant technical and financial risk to the organisation. They advised against early installation of equipment before the hospital construction was completed and handed over. They explained the risks to the various equipment. The Project Team advised that there was a contractual obligation with Brookfield to complete the imaging rooms in 2013. So the Board at least needed to know what equipment would be installed in the imaging rooms so that the design of the rooms could be completed.

By March 2013 the Board had decided that they would start the procurement process so that it could be determined what equipment would be purchased. Against the earlier advice of my experts it was further decided that the equipment would be installed within the last quarter of the 2013/2014 financial year, with CT and MR following on shortly thereafter. As an aside, my modality teams and the Board's RPAs are still waiting and looking forward to receiving the full set of 1:50 drawings and elevations and room data sheets, in order to complete the imaging room designs and layouts, together with the suppliers and the Project Team. Most offers of advice and help from the experts in my Directorate have been ignored and the Project Team has continued mostly on its' own or by using separate advice.

On Friday 24 January 2014 we met to discuss the way forward. Again I offered the assistance of my scientific experts and my modality teams to expedite the design work and mitigate the risks. You advised that our assistance was not necessary.

On 31 January 2014 Siemens met with the Project Team for the pre-meet for the MR and SPECT-CT pre-installation and delivery. Four of my scientific experts were also in attendance. At this meeting Siemens raised all the issues that my experts had already raised with your Project Team, including the issue of potential dampness on the RF cages and the care of the SPECT-CT detectors and X-ray CT tubes.

It is frustrating for all of us that we are in the current situation, especially given that my experts gave their advice a year ago not to purchase these systems in advance of hospital completion. As far as I

can see, there are three potential ways that the Board could mitigate the risk of damage to the SPECT-CT systems before the building is completed:

- 1.) Find a mechanism , compatible with the Board's Standing Financial Instructions, by which the detectors and tubes can be physically delivered and received on our premises and then stored safely off-site by Siemens on our behalf. Peter has already outlined the difficulties with this.
- 2.) Store the detectors and tubes in an existing clinical area within Diagnostics within a monitored and proven stable environmental control. We have seriously explored this possibility. The equipment will compromise the clinical area and be at risk of accidental physical damage, which may or may not be covered by your insurance policy. However, what would prevent this option is that we have determined that storage of equipment in clinical areas, especially for a prolonged period, would not be compatible with the requirements of HEI. As such, this option is not achievable.
- 3.) Store the detectors in an environmentally controlled environment elsewhere on the Health Board estate, within a well established stable environment, not subject to cement dust, dampness or flooding, that can be monitored by the BMS and accessed 24 hours per day/7 days per week. I appreciate that the Brookfield site is not the best location for the Board to achieve these conditions. However, there must be non-clinical space elsewhere on the Board's estate that can be made available and made suitable.

Best wishes,
Michael.

Dr Michael Bradnam
Head of Service for Imaging & Honorary Research Fellow
Department of Clinical Physics and Bioengineering
NHS Greater Glasgow and Clyde & University of Glasgow

**Scottish Hospitals Inquiry
Supplementary Questionnaire for
Professor Tom Steele**

The Inquiry already has your evidence from Glasgow 3 in the form of a Witness Statement ([Witness statement - Prof Tom Steele - 04.10.2024 | Hospitals Inquiry](#)) and transcript ([Transcript - Professor Thomas Steele - 04.10.2024 | Hospitals Inquiry](#)). We also obtained a supplementary statement from you concerning your attendance at a meeting 2019. [Bundle of documents for Oral hearings commencing 20 January 2026 in relation to the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow Bundle 52 – Volume 13 Miscellaneous Documents | Hospitals Inquiry](#)

The Inquiry has now received a witness statement from Dr Michael Bradnam. This refers to the design and build stage of QEUH/ RHC and Dr Bradnam's interactions with the Project Team both pre- and post-handover in January 2015. It also narrates his recent interactions with the Board and the setting up of the Diagnostic Imaging Review – Safety, Design, Commissioning and Assurance (QEUH/RHC)

Please note that the issue of electrical safety is outwith the Inquiry's TOR so there is no need to deal with this aspect.

Please refer to **A56563242 05-06-2026 - Email Chain M Bradnam J Gardner and T Steele**

Q1. Please confirm how and when you first became involved with the matters raised in the witness statement.

A. In March 2026 I was advised by my colleague William Edwards that information had been received from Dr Bradnam via Professor Gardner. I was asked to review the issues raised. I offered to meet with Dr Bradnam and other technical colleagues to gain further information.

Q2 Were you aware of any of the issues prior to your involvement ? If so, which ones?

A. No, I was not aware of any issues.

Q3 Please describe the measures planned to rectify the issues? We understand from Dr Bradnum that you will carry out a gap analysis, but we would appreciate a fuller explanation.

A. In order to explore the issues raised by Dr Bradnum, the QEUH/RHC Diagnostic Infrastructure Review Short Life working Group was set up. Below are the terms of reference(ToR) which includes the objective and remit of the review group.

The terms of reference of the group have been agreed as:

TERMS OF REFERENCE

QEUH/RHC Diagnostic Infrastructure Review SLWG

1. Objective

To oversee:

1. *the successful planning and delivery of a review of Electrical Safety and Ventilation Infrastructure in Group 2 Medical Locations within the QEUH and RHC.*
2. *a Design, Commissioning and Assurance Review of Diagnostic Imaging locations within the QEUH and RHC.*

2. Remit

Includes but is not limited to:

1. *Identification of all locations within the definition of "Medical Locations"*
2. *Identification of all locations within the definition of "Diagnostic Imaging" locations and associated anaesthetic/interventional rooms.*
3. *Establishing an agreed register of rooms for assessment.*
4. *Testing current electrical status of each location.*
5. *Obtaining current ventilation status of each location.*
6. *Identifying required actions to achieve evidence based assurance of compliance with required annual verification process.*
7. *Developing and maintaining a project plan, meeting schedule and benefits realisation plan.*
8. *Providing alignment with other key programmes across QEUH / RHC and the wider GGC Estate.*
9. *Preparing a risk based business case for any works.*
10. *Approving the submission of any Project Papers, New Project Requests and Business Cases to the (Acute) Strategic Management Group and capital governance groups.*
11. *Inviting topic specialists as required by the scope and specialism of project and seeking external expertise if required.*

3. **Membership**

Co-Chairs

Claire Brown

Corporate Programme Manager

Hazel McIntyre

*Assistant Director - QEUH/RHC Hospitals
Special Project*

Core Members *as above plus*

Tom Steele

*Director of Strategic Infrastructure
Planning and Delivery*

Michael Bradnam

Consultant Clinical Scientist

Mark Riddell

Head of Operational Estates

Colin McKechnie

Site Manager (QEUH) Operational Estates

John Foster

Medical Physics

James O'Connell

Staff side Representative

In Attendance

Comms Team Representatives as required

Planning Team Representatives as required

Capital Planning Project Managers as required

Other subject matter experts as required

4. **Quorum**

The meeting will be considered quorate with a co-chair plus the attendance of 3 core members.

5. **Meeting Schedule and Minutes**

The Project Group will meet for 1 hour at a frequency to match the actions. The Group is intended to be Short-Life until the review is completed. Minutes of meetings will be prepared by co-chairs.

6. **Reporting Arrangements**

The Project Group will report to Depute Chief Executive / COO.

7. **Review**

The Terms of Reference of the Project Group will be reviewed on request of any Core Member.

Q4 What is the final objective of these measures?

A. See remit of the group within ToR.

Q5 What progress has been made so far, and when do you anticipate completing the Review?

A. Initial scoping meetings have taken place, ToR agreed and a multistakeholder working group established. The outcome of the reviews will be assessed and consequently direct any remedial actions as required, address any safety issues and instigate any ongoing planned maintenance or assurance processes.

Q6 Is there anything further you wish to add which might be of assistance to the Inquiry?

A. No, nothing further.

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.

Scottish Hospitals Inquiry
Supplementary Questionnaire for
Professor Jann Gardner

The Inquiry already has your evidence from Glasgow 4, Part 1 in the form of a Witness Statement ([Witness Statement - Professor Jann Gardner - 09.10.2025 | Hospitals Inquiry](#)) and transcript ([Transcript - Professor Jann Gardner - 09.10.2025 | Hospitals Inquiry](#))

The Inquiry has now received a witness statement from Dr Michael Bradnam. This refers to the design and build stage of QEUH/ RHC and Dr Bradnam's interactions with the Project Team both pre- and post-handover in January 2015. It also narrates his recent interactions with the Board and the setting up of the Review Group.

Please refer to :

A56337960 09-04-2026 Email M Bradnam to J Gardner

A56337961 05-05-2026 Email Chain M Bradnam T Steele J Gardner R Coulthard

A56563242 05-06-2026 - Email Chain M Bradnam J Gardner and T Steele

Q1. Please confirm when you first heard from Dr Bradnam in respect of the matters raised in his witness statement.

A. I first heard from Dr Bradnam by email dated 9 April 2026 addressed to me.

Q2 Were you aware of any of the issues prior to this? If so, which ones?

A. I first became aware of the matters set out in Dr Bradnam's email to Ms Vanhegan on 31 March 2026, when I was copied into that email.

Q3 Please describe the actions you took in response.

A. Following receipt of the email of 31 March, I asked my Senior Business Manager to raise the matter with William Edwards, former Chief Operations Officer and Deputy Chief Executive, requesting that he investigate and follow

up promptly with Dr Bradnam. William Edwards progressed these investigations, while I retained overall oversight.

After receiving Dr Bradnam's letter of 9 April, I responded immediately, confirming that the issues would be investigated and inviting him to meet with William Edwards and Russell Coulthard, Deputy Chief Operating Officer, the following day.

Further correspondence followed. By email dated 15 April, I confirmed to Dr Bradnam that a review of the imaging rooms across QEUH and RHC was required, and that I had approved a programme of work relating to diagnostic facilities.

Thereafter, the QEUH/RHC Diagnostic Infrastructure Review Short Life Working Group was established, chaired by the Corporate Programme Manager and Assistant Director for QEUH/RHC Hospitals Special Project, with membership including Dr Bradnam, a staff-side representative, and representatives from Estates and Facilities and Medical Physics.

The Group will report to Russell Coulthard, and I have requested that a formal, routine update on the progress of the work of the Group be provided to me by Mr Coulthard.

Q4 Why did you take these actions? What is the objective?

A. It was my view, and that of the team progressing these investigations, that this approach was the most effective way of ensuring that the issues raised by Dr Bradnam were assessed directly by appropriate subject experts. The objective in establishing the Short Life Working Group was to examine the concerns he identified, determine any assurance gaps and ensure that any appropriate remedial actions are taken.

Q5 Dr Bradnam describes escalating various issues over a number of years through his line managers without these issues ever being addressed.

a) Why do you think this situation arose?

A. As I was not in post throughout this period, I cannot give a definitive explanation.

b) What do you intend to do to ensure this situation does not arise in the future?

A. I consider that the following will ensure that this situation does not arise in future:

- Strengthening escalation pathways so that safety-critical concerns reach senior leadership promptly;
- Reinforcing expectations around timely response and resolution of clinical concerns;
- Ensuring that diagnostic and imaging infrastructure has a clear governance route, with defined accountability;
- Embedding regular assurance reviews involving Estates, Facilities, Medical Physics and clinical leadership; and
- Continuing to promote a culture in which staff feel supported and empowered to raise concerns, and confident that these will be considered appropriately and addressed where required.

Many of these measures are currently being advanced through initiatives such as: Transforming Together - The GGC Way Forward improvement programme; Board assurance and governance in relation to the Integrated Performance and Quality Report; and the work of the Safety and Public Confidence Oversight Group. Together, these initiatives support NHSGGC's continued development by strengthening assurance processes, fostering staff engagement and a positive working culture, and ensuring accessible and proportionate pathways for escalation.

Q 6 Is there anything you wish to add which may be of assistance to the Inquiry?

A. NHSGGC is committed to ensuring robust governance and assurance arrangements around diagnostic infrastructure, and to addressing any gaps identified through the Short Life Working Group. We are also committed to supporting staff who raise concerns and ensuring that issues of this nature are assessed appropriately, escalated where necessary and resolved in a timely and transparent manner.

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.

Scottish Hospitals Inquiry
Second Supplementary Questionnaire for
Mairi MacLeod

The Inquiry already has your evidence from Glasgow 4, Part 1 in the form of a Witness Statement [Witness Statement - Mairi Macleod - 14.05.2025 | Hospitals Inquiry](#) and transcript ([Transcript - Mairi Macleod - 14.05.2025 | Hospitals Inquiry](#)). You have also given a Supplementary Witness Statement following the oral evidence of Gary Jenkins in Glasgow 4 Part 3 ([Witness Bundle - Volume 6 | Hospitals Inquiry](#)). The Inquiry has now received a witness statement from Dr Michael Bradnam. This refers to the design and build stage of QEUH/ RHC and Dr Bradnam's interactions with the Project Team both pre- and post-handover in January 20215.

S1. In his statement Dr Bradnam states:

- 48 The 12 February 2014 email also explained that the Diagnostics Directorate was being pressured to install high-value imaging equipment before the building was complete. In my experience, this carried a number of technical and operational risks, including deterioration of equipment that remained installed but unused for an extended period, the risk of an MRI scanner quench, and an increased risk of damage while construction activities were still ongoing. The equipment concerned had a value of approximately £10 million, for which the Diagnostics Directorate would ultimately bear financial responsibility. Accordingly, I considered this to be a matter of significant technical and financial concern.
- 49 As I understood it from Mairi MacLeod, this situation arose because of the way the capital funding had been structured. My recollection is that she explained there was a requirement to spend the remaining capital allocation before the end of the financial year and that, as a consequence, the equipment required by my department had to be purchased and installed before the hospital was complete. This concerned me because the equipment was being procured under turnkey contracts, under which the

supplier would normally be responsible for installing the equipment and undertaking any structural, mechanical and electrical works necessary to accommodate it. In my view, installing the equipment before the building and its engineering services were complete created a risk of compromising that process.

a) Please confirm your understanding of why the equipment had to be purchased by the end of the financial year?

A. Due to the passage of time, I can't recall this – the Procurement of Imaging equipment would be undertaken by the GGC Procurement Department headed by Gordon Beattie. Issues relating to the phasing of this funding to equip the hospital would best be answered by the Capital Finance Team.

b) Dr Bradnam stated he was concerned about the consequences of early installation of the equipment. What action, if any, did you take in response to these concerns?

A. I do not remember this issue. It was normal practice for such issues to be taken to the weekly project team meeting.

c) If you did not take any action, please explain why.

A. I do not recall this issue.

S2. Please refer to **A56361725 - 2014-05-14 - Email from Michael Bradnam seeking reviewable RDSs; A56361838 - 2014-06-19 - Email chain about no access to reviewable RDSs**. These are email chains, which you are part of.

a) At paragraph 55 of his statement Dr Bradnam states “Ms MacLeod advised that the Health Board project team would not provide the existing Room Data Sheets to the User Groups because Brookfield was preparing a revised set, which was expected to be completed in June

2014 and then shared with us. We followed this up in June 2014. However, we were advised that the revised Room Data Sheets were still being prepared and were therefore still unavailable to the User Groups.”

When, if at all, did you provide the Rooms Data Sheets to Dr Bradnam and or his colleagues?

A. Again, due to the passage of time I do not recall the detail you have requested.

b) How could the User Group be expected to ensure that the design was appropriate and meet the needs of the group without seeing regularly updated Room Data Sheets?

A. From the Project Team responses Brookfield and Nightingales were updating the Room data sheets as required to reflect the design as discussed at user group meetings. I do not recall when these were issued.

c) Why was there a delay in providing the room data sheets to the User Group?

A. This question is best answered by the Architect and Brookfields, they were the parties who provided the Room Data Sheets.

d) What was the problem, if any, with providing the 2012 Rooms Data Sheets to the User Group?

A. I can't recall this detail.

S3. Please refer to **A56361824 - Email from Mairi Macleod to W Miller - Re: Diagnostic Room Data Sheets - 26 June 2014**. In this email you state that you would not be issuing the Rooms Data Sheets from 2012, owing to them being completely inaccurate and not reflective of the final design.

Why did you not issue the 2012 Rooms Data Sheets, Winne Miller had stated that they would be useful notwithstanding the inaccuracies?

A. I can't recall why I could not issue the 2012 Room Data sheets.

S4. At paragraph 57 of his statement Dr Bradnam states:

57. The User Group meetings that I attended were generally chaired by Mairi MacLeod, with Frances Wrath also in attendance. I recall that Ms Wrath was introduced as the Technical Lead, or Technical Adviser, for the project. In that role, she received the technical requirements, comments and queries raised by the User Groups for communication to the wider project team.

Was this your understanding of Frances Wrath's role?

A. Frances did provide technical support to the User Groups due to her experience in building projects undertaken across GGC but I cannot comment on specific details of her role.

S5. At paragraph 59 of his statement Dr Bradnam explains that you and Frances Wrath were meeting with prospective equipment suppliers without seeking the relevant technical and clinical input from himself and his colleagues.

a) Why did you not seek the relevant technical and clinical input?

A. I did not meet with prospective equipment Suppliers – this role was undertaken by the Board's Procurement department. I cannot comment on Frances's role, if any, in the process.

b) Dr Bradnam goes on to explain that there were inaccuracies in the presentation and tender documentation provided to potential suppliers, and this it had to be corrected through the Project Team. Please confirm your position regarding this matter.

A. I was not involved in the tender documentation for the suppliers. This would be the responsibility of the Procurement department.

- S6. At paragraph 60 of his statement Dr Bradnam describes the communication between the User Groups and the Project Team as being less direct and responsive than other projects that he had worked on. Do you agree that communication was indirect and unresponsive?
- A. I do not agree with this statement we consulted with colleagues at all stages of design and regularly gave presentations on progress to department Teams and staff groups.

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.

**Scottish Hospitals Inquiry
Second Supplementary Questionnaire
Frances Wrath**

The Inquiry already has your evidence from Glasgow 4, Part 1 in the form of a Witness Statement ([Witness Statement - Francis Wrath - 14.05.2025 | Hospitals Inquiry](#)) and transcript ([Transcript - Francis Wrath - 14.05.2025 | Hospitals Inquiry](#)). The Inquiry has now received a witness statement from Dr Michael Bradnam. This refers to the design and build stage of QEUH/ RHC and Dr Bradnam's interactions with the Project Team both pre- and post-handover in January 2025.

S1. Please refer to A56357844 - 2010-08-16 - Email to Barrie Condon re lack of engineering input.

At paragraphs 34 & 35 of his statement Dr Bradnam states:

34 On 10 August 2010, Professor Barrie Condon, Interim Director of the Department of Clinical Physics and Bioengineering, sent an email to Frances Wrath, which he subsequently copied to Aileen MacLennan, Director of Diagnostics, on 13 August 2010 (A56357844). In that email, Professor Condon recorded concerns expressed by the Medical Physics Experts (MPEs) and the MR Safety Experts (MRSEs) regarding the level of technical input into the project. He also advised Ms MacLennan that there appeared to be no mechanical and electrical engineers involved in the design process and warned that this could have significant cost implications for the new hospitals. He invited Ms MacLennan to consider escalating these concerns within the Health Board.

35 During the detailed design phase in 2010, Frances Wrath asked the Medical Physics Experts (MPEs) and MR Safety Experts (MRSEs) to complete a spreadsheet setting out the engineering requirements for their respective departments. From my experience of previous capital projects, this information would normally have been prepared by the project's mechanical and electrical engineers and architects, with the clinical users reviewing the resulting documentation to verify that it accurately reflected the agreed clinical and technical requirements. In my view, Professor Condon's email

demonstrates that this departure from the usual design process had already been recognised and raised with senior management at that stage.

a) What action, if any, did you take following these concerns being raised to you direct in the email **A56357844 - 2010-08-16 - Email to Barrie Condon re lack of engineering input?**

A. As it was more than 10years ago, I do not recall this specific email from Barrie Condon. However, I am sure that I reiterated the process we were following; highlighted the columns which the diagnostic team were asked to complete and I confirmed yet again that there was a technical team headed by Project Advisors Currie & Brown from the Boards side together with full mechanical, electrical and structural engineers from the Contractor/ designer involved.

The process which had been agreed between the Project Director, CEO and Aileen McLennan (diagnostics director) was as follows:

- Given that it was a new build with multiple imaging and diagnostic installations it was decided the building should be able to take the largest, the heaviest, the one with the highest power load and the one requiring the greater ventilation/air conditioning requirements.
- Details of each machine type available were requested from equipment suppliers by Procurement and Imaging/Clinical physics staff. Imaging department reviewed and selected from appropriate information criteria available the best parameters to ensure we would be able to install most advanced and appropriate equipment for building opening.

b) Why did you ask “Medical Physics Experts (MPEs) and MR Safety Experts (MRSEs) to complete a spreadsheet setting out the engineering requirements for their respective departments”?

A. As detailed in my response to question S1 (a), Imaging and Medical Physics experts were asked to complete a spreadsheet detailing from equipment available what parameters we should include for size, weight,

power, water, ventilation and of course lead lining of rooms for protection. The medical physics team as always were kept involved every step of the way because at the end of the day the Safety experts have to sign off the rooms - particularly for shielding before installations can be signed off.

c) Dr Bradnam advises that this information was usually prepared by the project's mechanical and electrical engineers and architects and subsequently reviewed by the clinical users. Please confirm your position?

A. Dr Bradnam is correct on previous jobs of smaller new build installation e.g. one MRI suite with a traditional builds contract i.e. clients team design and Contractors team build that design. The client's technical team would sit down with the diagnostic users group and the equipment selected for installation and pull together all necessary information to ensure building and equipment installed appropriately.

However, the QEUH and RCH was a very complex build with the structure and main service installations being designed approx. 5 years prior to equipment tendering exercise. Therefore, the building had to be designed to take into account whatever equipment was selected down the line. The whole point of designing in this way was to avoid expensive and time consuming major development to departments required to take account of the equipment chosen. Imaging directorate including clinical physics agreed that this was the best way forward. The only other alternative would be to buy equipment 5/6 years prior to opening – this would have resulted in imaging department opening with almost obsolete equipment; which they agreed would be unthinkable.

d) Why did you not ask the project's mechanical and electrical engineers and architects to complete the spreadsheet?

A. The Projects technical team together with the contractor's technical team did complete the spreadsheet. All that Imaging and Clinical physics were asked to do was (together with installation manual from the equipment manufacturers they were in discussion with) with their specialist knowledge of which equipment was likely to be available to us, which equipment suited each room's specific clinical requirements were the

parameters in respect of heat, power, ventilation, weight and shielding requirements for each room. Shielding in particular is very specific to the size of the room and orientation of equipment.

e) What action, if any, was taken by you on receipt of this email?

A. Sorry as email seems to have been 16 years ago and I have no access to paperwork from that time I cannot say for certain. I have instead laid out the process in the answers above.

S2. Please refer to **A56361619- 2010-09-06 - Planning manuals for SPECT & SPECT-CT for engineers - 3c of 3a 3b 3c** and paragraph 38 of Dr Bradnam's statement.

a) What assistance if any did you seek from Dr Bradnam regarding this matter?

A. As discussed in answers above Planning manuals were obtained for all equipment types. These, after expert perusal by imaging staff and clinical physics, were forwarded to the technical team through David Hall (Currie and Brown) and used with spreadsheet details etc. as basis for design. This email was Dr Bradnam passing on details of Spect CT equipment and his opinion that the new Discovery was the model technical team would employ as the "worst case" i.e. install to these parameters – after checking naturally.

b) If you did not seek any assistance, please explain why?

A. I cannot access Dr Bradnam's statement and would refer to my answer above. I'm not completely sure what specifically this question is asking. As usual for diagnostic and imaging installations; imaging staff and Clinical physics are the experts and they are involved in every step of the process. I would never presume to leave them out or include their advice. However, what I was unable to do was change the process to suit individual user's expectations. Diagnostics and imaging staff (including clinical physics) referred numerous concerns and requests for clarification through their director Aileen McLellan, who discussed these with the Project Director and GGC

Board. I was merely informed of outcomes – which generally were to continue as before.

S3. Please refer to paragraph 42 of Dr Bradnam's statement. He states that on review of the 2015 Room Data Sheets he was unable to identify a number of equipment specific installation requirements that were contained within the manufacturers planning guide that he had provided to you in 2010.

a) Please confirm your position.

A. I cannot recall such a discussion after 16 years. The room data sheets provide details of equipment group that require installation by contractors or others and also those identifying space requirements. The only equipment which is usually missing is - equipment of a small portable nature.

b) Did you refer to and use the manufacturers planning guides to prepare the Rooms Data Sheets?

A. Original source of RDS were used at the numerous meetings with each specific user group; as RDS's were drafted prior to equipment being tendered. Once equipment was selected any amendments required to the RDS's due to specific equipment requirements would be included.

c) If not, why?

A. As answered above once equipment was selected any changes in equipment orientation, socket outlets etc., which has services or space requirements are included. I do not know what "missing" equipment Dr Bradnam could be referring to. Prior to my leaving my post in May/June 2015, I did meet with all my specialist areas to check for any concerns or snagging which I would then pass on to Peter Moir, Assistant Project Director. I was not made aware of any outstanding concern at that time.

- S4. At paragraph 46 Dr Bradnam says you expressed frustration at how long it took him to sign off drawings, because he checked back to his previous records to consider any changes made to the design.

Please confirm your position.

- A. I am concerned that Dr Bradnam felt I was frustrated with him. As I had worked with him on numerous areas of the children's hospital over a 3 or 4 year spell by that time I was well aware of how he worked keeping his own notes of each meeting and was happy to accommodate that where possible This is generally the best type of user to have rather than one who forgets what was previously agreed and decides to design from scratch again. It can be quite exhausting to keep them on course. Copies of all agreed and signed room layouts (at each stage of the design) were sent to each User group by the project managers (adult or children's).

- S5. At paragraph 57 of his statement Dr Bradnam states:

57 The User Group meetings that I attended were generally chaired by Mairi MacLeod, with Frances Wrath also in attendance. I recall that Ms Wrath was introduced as the Technical Lead, or Technical Adviser, for the project. In that role, she received the technical requirements, comments and queries raised by the User Groups for communication to the wider project team.

In your oral evidence to the Inquiry, you acknowledge that while you had more technical knowledge than other members of the Project Team, none of the members of the Project Team, yourself included, had M&E knowledge. You also confirmed you were not qualified to assess environment pages of the Room Data Sheets. Further that you assumed that there was a technical team for NHS GGC.

a) Do you agree with Dr Bradnam's comments that you received the *technical requirements, comments and queries raised by the User Groups for communication to the wider project team*;

A. As detailed in my previous statement we also had technical representation at each of these meetings – the Contractors design team including M&E and any specialists required and David Hall (Currie & Brown) from Boards team. Dr Bradnam discussed queries directly with our specialists and I brought up queries and concern to Peter Moir and Alan Seabourne/David Loudon

b) What, if any, technical requirements, comments and queries did you communicate to the Project Team, and to whom specifically did you speak to?

A. Due to the passage of time, I cannot remember any specific queries or concerns I took forward. As per my response to previous question these would be communicated to Peter Moir and Alan Seabourne/David Loudon

c) Describe what action, if any, you took in respect of technical requirements, comments and queries raised?

A. See above – due to the passage of time I am unable to comment

S6. Please refer to paragraph 58 of Dr Bradnam's statement. He explains that he offered to provide his assistance in respect of achieving 'the best temperature-controlled imaging environment' and offered you a site visit to Yorkhill. He recalls that you did not take him up on the offer.

a) Please confirm your position.

A. I cannot recall this conversation. However, Dr Bradnam was involved in every aspect of Nuclear Medicine department including temperature control. Engineers from both Boards initial design team (pre-tender) and contractors design team respected Dr Bradnam for the very knowledgeable

professional that he is and sought his input at every step of the process. I also visited Nuclear Medicine department at Yorkhill on a number of occasions to view what worked and what didn't work for the department.

b) If you did not take Dr Bradnam up on his offer for assistance, please explain why not?

A. See above.

S7. At paragraph 59 of his statement Dr Bradnam explains that you and Mairi MacLeod were meeting with prospective equipment suppliers without seeking the relevant technical and clinical input from himself and his colleagues.

a) Why did you not seek the relevant technical and clinical input?

A. At no time did we meet with any prospective equipment suppliers without the relevant specialist (Imaging, TSSU, Pharmacy etc.). These meetings were generally arranged through Procurement as is normal in tendering situations to ensure non collusion etc.

b) Dr Bradnam goes on to explain that there were inaccuracies in the presentation and tender documentation provided to potential suppliers, and this it had to be corrected through the Project Team. Please confirm your position regarding this matter.

A. I cannot recall this instance. However, it is not unusual for information to develop during tendering process and amendments to technical specifications or clarifications of clauses/specifications to be issued to all parties during tendering. As long as the same information is provided in the same manner at the same time to all tenderers this is acceptable part of tendering process. The process was overseen by Procurement team, for imaging that was Nick Cleary.

- S8. At paragraph 60 of his statement Dr Bradnam describes the communication between the User Groups and the Project Team as being less direct and responsive than other projects that he had worked on. Do you agree that communication was indirect and unresponsive?
- A. As Dr Bradnam says in his statement this was unlike any other development; in size and scale; that he had been involved in previously. I also address this in my answer to question 1C. In a small development - a single installation – the design period is a short duration with all parties meeting on a few occasions and concluding design. Management of the installation would generally be delegated to a Project manager (construction and design) and a project manager from the diagnostic and imaging management, usually someone like Winnie Millar. However, on larger projects and extremely large projects such as QEUH and RCH the overall project management and change control is run by a Project Board overseeing all aspects of the project including cost. This is populated by Project Director and other Board Directors. Therefore, although I would not agree that the communication was indirect and unresponsive – we kept all 50 plus user groups involved and informed throughout all phases of the project and were always available to discuss and update clinical users as requested. I imagine for someone who had only been involved in smaller installations where decisions were agreed and binding at a lower level you can feel more involved and have more of an impact on design. In reality your involvement is almost identical but it is just that the decisions are taken over a longer period and some changes suggested are referred to an overall Project Board for approval as impact on other departments have to be considered.

S9. Please refer to paragraph 90 of Dr Bradnam's statement and to **A56361619 - 2010-09-06 email MB to F Wrath re planning guides**

In his statement Dr Bradnam states:

90 *Estates officers advised that there was no humidity control within adult and paediatric nuclear medicine departments. I was surprised because this was contrary to the environmental requirements specified in the relevant equipment planning guides which I had personally supplied to France Wrath on the Board's project team in 2010. Those planning guides clearly relate to the operational requirements of the imaging equipment rather than to patient care.*

a) What action, if any, did you take when you received the relevant equipment planning guides supplied by Dr Bradnam?

A. As previously stated, all equipment planning guides from successful equipment manufacturers were passed to the Contractors Design manager and M&E Manager for inclusion in design as agreed by project director and Brookfield Directors.

b) How did it come to be that there were no humidity controls within the adult and paediatric nuclear medicine departments?

A. I'm sorry I cannot answer that. It is too long ago for me to respond as I cannot remember the detail of humidity controls and it is not a subject I have much knowledge of.

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.

**Scottish Hospitals Inquiry
Supplementary Questionnaire for
Peter Gallagher**

The Inquiry already has your evidence from Glasgow 4, Part 1 in the form of a Witness Statement ([Witness Statement - Peter Gallagher - 18.09.2025 | Hospitals Inquiry](#)) and transcript ([Transcript - Peter Gallagher - 18.09.2025 | Hospitals Inquiry](#)).

The Inquiry has now received a witness statement from Dr Michael Bradnam. This refers to the design and build stage of QEUH/ RHC and Dr Bradnam's interactions with the Project Team both pre- and post-handover in January 2015.

S1. Please refer to **A56500928 - 2014-02-12 - Email from Aileen MacLennan to David Loudon;**

- a) You were a recipient of this email. Please confirm what action, if any, you took on receipt of this email?
- A.** In answer to this question, I think there is a need to understand the reporting structure in February 2014 when this email was sent. There is a clear frustration in Aileen MacLennan's email that the Project Director (David Loudon) has not resolved the Group 5 Equipment issue first raised with the Project Team at the start of 2013, over one year previously.

Ms. McLennan notes that early installation carried significant technical and financial risk to the organisation in the view of physicists. Mr. Archibald, at that point, was the Chief Operating Officer. David Loudon was the Project Director, Aileen MacLennan was the Diagnostic Director and I was the Acute Finance Director and we all reported directly to Mr. Archibald (COO).

The correspondence is Ms. MacLennan writing to her boss, Mr. Archibald (COO) and Mr. Loudon (Project Director) trying to push forward a solution to this problem. As there is a mention of financial risk, I was included in the distribution list as Acute Finance Director.

Turning to what action I took on receipt of this email. I personally spoke to Mr. Archibald asking if he would pull all parties together for a meeting. Mr. Archibald confirmed that he had already set up a meeting with Mr. Loudon and Ms. MacLennan. He felt there was no financial risk at this point if a solution could be found to the equipment timing issue and as such I was not required to attend the meeting.

- b) Why was the advice of the GGC experts not followed regarding the early purchase of systems?
 - A.** In my role of Acute Finance Director, I had no input into the timing of purchase and installation of equipment. As such I can offer no comment on this question. This question would be better addressed to the Project Director who was responsible for equipment purchase and timing.
- c) What mitigating action, if any, are you aware of being taken following receipt of this email? When was the mitigating action, if any, taken and by whom?
 - A.** As noted above, there was not deemed to be a financial risk at that point so I was not involved in any mitigating action.

Mr. Archibald called other parties together in response to this e-mail so that would be the start of any mitigating action. I note in paragraph 50 of Dr Bradnam's statement that equipment installation did not proceed until 2015, so I assume that was the outcome of the mitigation action.

- d) Why were Room Data Sheets not made available?
 - A.** I was not involved in Room Data Sheets so I cannot comment on this question. This question would be better addressed to the Project Director.

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.

**Scottish Hospitals Inquiry
Supplementary Questionnaire for
Robert Calderwood**

The Inquiry already has your evidence from Glasgow 4, Part 1 in the form of a Witness Statement ([Witness Statement - Robert Calderwood - 30.09.2025 | Hospitals Inquiry](#)) and two transcripts ([Transcript - Robert Calderwood - 30.09.2025 | Hospitals Inquiry](#) and [Transcript - Robert Calderwood - 01.10.2025 | Hospitals Inquiry](#)).

The Inquiry has now received a witness statement from Dr Michael Bradnam. This refers to the design and build stage of QEUH/ RHC and Dr Bradnam's interactions with the Project Team both pre- and post-handover in January 2015.

S1. Please refer to **A56500928 - 2014-02-12 - Email from Aileen MacLennan to David Loudon; A56361962 - 2010-02-12 - Email - Private conversation with Director of Diagnostics highlighting lack of reviewable RDSs** and paragraph 47 of Dr Bradnam's statement.

a) Were you aware that there had been repeated requests for Room Data Sheets from Dr Bradnam and his colleagues?

A. I was not aware of any issues re RDS, indeed I do not believe I have ever heard of Dr M Bradman.

b) Did Director of Diagnostics, Aileen MacLennan ever contact you regarding the failure for Room Data Sheets to be provided to User Groups, at any time on or after 13 February 2014?

A. I have no recollection of ever speaking to Aileen MacLennan on the subject of RDS.

c) If so, what action, if any, did you take?

A. Not applicable.

d) Following any action taken by you did you have any further concerns regarding this matter?

A. Not applicable.

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.

Safety and Public Confidence Oversight Group
Update to the Scottish Hospitals Inquiry
Position as at 29th May 2026



1. Purpose

This paper provides an update to the Scottish Hospitals Inquiry in response to the letter of 31 March 2026 to Professor Sir Lewis Ritchie and Professor Jann Gardner, Co-Chairs of the Safety and Public Confidence Oversight Group.

The Inquiry requested an update setting out:

- what the SPCG has done in the period since its establishment
- what roles families and whistleblowers have played in its work; and
- what the Co-Chairs consider has been achieved in that period.

The Inquiry also requested the SPCG remit and Terms of Reference, which are provided alongside this paper.

2. Background and Remit of the Safety and Public Confidence Oversight Group

The Safety and Public Confidence Oversight Group (SPCG) was established to support work to improve public confidence in the safety of the Queen Elizabeth University Hospital (QEUH) and the Royal Hospital for Children (RHC). Its remit is focused on ventilation, water, infection control and communication with patients, families, the public and staff.

The work of the SPCG is being delivered through three portfolios:

- **Portfolio 1: Public Confidence and Engagement**
- **Portfolio 2: Environmental and Facilities Assurance**
- **Portfolio 3: Professional Relations, Leadership and Culture**

The SPCG Terms of Reference set out that the work will be undertaken through a phased approach. Phase 1 covers February until the end of August 2026. As Phase 1 is completed, the SPCG will review the evidence and learning gathered and consider proposed priorities for Phase 2.

This work has been enabled by the identification of a group of external independent experts – this is included within appendix A1 of this document.

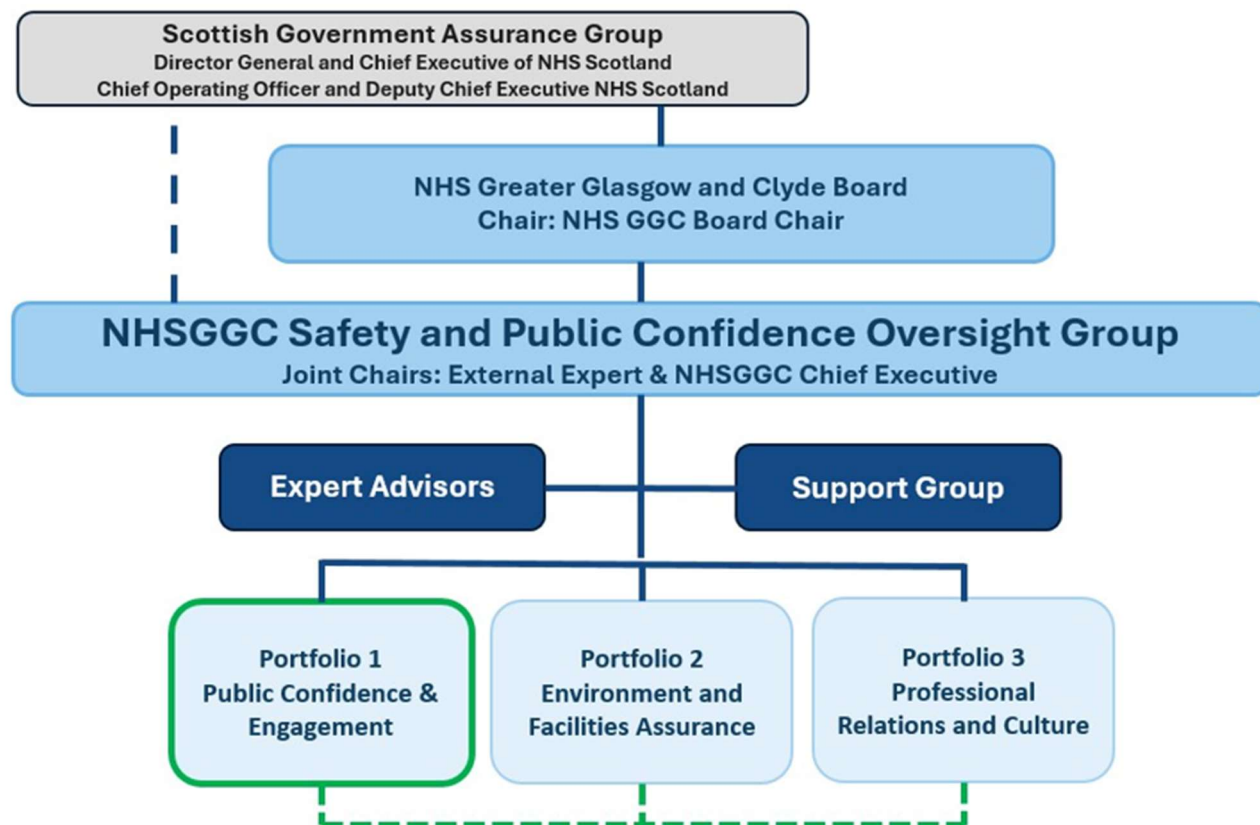
3. Governance and Reporting Arrangements

The SPCG is jointly chaired by Professor Sir Lewis Ritchie, Clinical Academic, University of Aberdeen and Professor Jann Gardner, Chief Executive of NHS Greater Glasgow and Clyde. Membership includes family representatives, a whistleblowing representative, independent/external expertise, Scottish Government representatives and public sector partners, NHSGGC executive and non-executive directors, and clinical and professional experts.

The SPCG reports formally to the NHSGGC Board. The Board provides onward reporting to the Scottish Government's NHSGGC Safety and Assurance Oversight Group, chaired by Christine McLaughlin, Chief Operating Officer/Deputy Chief Executive, NHS Scotland

This Group exists to manage the SG's assurance to matters relating to service safety at the Queen Elizabeth University Hospital, and to inform Ministers. It is not intended to consider matters requiring formal escalation, which are the domain of the National Planning and Performance Oversight Group (NPPOG) – these considerations would be out of scope given there is no formal escalation in this instance.

Following each SPCG meeting, key messages are drafted and shared with SPCG members for comment before publication on the SPCG webpage. This allows members to review and suggest amendments before the messages are made public. Once ratified, meeting minutes are published on the SPCG webpage, supporting transparency around the work of the group. The Terms of Reference are now ratified and will be published on the SPCG Website.



The SPCG does not replace NHSGGC's core governance mechanisms and does not hold operational decision-making authority. Its role is to provide oversight, advice, guidance and recommendations for consideration through the appropriate governance and approval routes. Operational issues remain managed through the relevant operational structures.

4. What the SPCG Has Done Since it was Established

Since its establishment, the SPCG has established a range of work outlined in this section.

4.1 Key Achievements

The following activities have been achieved to date:

4.1.1 Initial meetings with whistleblowers and family representatives

Initial meetings were held between the Co-Chairs and those current and former NHSGGC consultant microbiologists who raised concerns regarding the QEUH/RHC built environment (whistleblowers) and also with family representatives in March to help develop the aims of the SPCG. Family representatives and a whistleblowing representative are active members of the SPCG, regularly contributing to discussions, reviewing papers, and raising issues for the oversight group's consideration.

4.1.2 Agreed governance of SPCG Oversight Group and Portfolio work

The SPCG has been successfully established with an independent co-chair and broad membership, including families, a whistleblower, HIS, ARHAI, and external independent experts. Terms of

Reference have been developed, ratified and aligned with the Scottish Government Assurance Oversight Group Terms of Reference.

4.1.3 Launch of three portfolios with associated workstreams

Three portfolios of work have been established, each with appointed leads and identified external expert input (including independent experts where appropriate). Initial meetings with Portfolio Leads commenced in late April, and work is progressing to embed and support these workstreams.

4.1.4 Clarity of output required for phase 1

Phase 1 workplans have been developed for each portfolio, setting out clear outputs and timescales. The purpose and deliverables of the three portfolios were discussed at the April SPCG meeting, with reporting arrangements now being developed to track progress.

4.1.5 Communications

A fortnightly communications process was established in April, with regular updates circulated to SPCG members. A public-facing website has been launched, publishing meeting minutes and key messages to support transparency and public confidence.

4.2 Key Activities Overview

The Scottish Government announced the establishment of the SPCG on 3 February 2026, followed by correspondence from the First Minister to NHSGGC setting out families' concerns. Throughout March, foundational work progressed at pace:

- the inaugural meeting was held on 11 March
- the Programme Management Office and public-facing website were established
- draft Terms of Reference and workplans were developed through iterative consultation with members
- an options appraisal for the short-term location of the adult bone marrow transplant (BMT) unit was also undertaken during March and April, involving NHSGGC stakeholders, ARHAI, National Services Division, and external independent experts

The SPCG held its second meeting on 8 April, following the inaugural session, where members discussed governance arrangements, portfolio outputs, and correspondence from families. Portfolio Lead meetings commenced, and an update on the SPCG's establishment was presented to the NHSGGC Board. Work has continued through May to embed core arrangements, progress portfolio workstreams, and maintain regular communication with members. The third SPCG meeting took place on 21 May.

4.3 Progressing the Portfolios of Work

As described above the work of the SPCG is being taken forward through three portfolios, each with an identified lead, supporting lead and a Non-Executive Director link. The portfolios provide the structure through which the SPCG will progress its initial programme of work, gather evidence and learning, develop action plans and identify priorities for Phase 2.

The detailed scope, workstreams and outputs for each portfolio are set out in the accompanying Portfolio Terms of Reference. The table below provides an overview of the scope of work.

Portfolio 1: Public Confidence and Engagement: is focused on listening to and learning from families, current service users, staff and the public. Its work includes engagement with affected families and families currently accessing services, learning from staff, and wider public engagement and communication activity. This will inform the development of a Portfolio 1 Action Plan and a supporting Communications and Public Engagement Plan.

Portfolio 2: Environment and Facilities Assurance is focused on environmental, facilities and technical assurance. Its Phase 1 work includes assurance activity relating to water systems, Ward

2A and Ward 4B, development of an environmental compliance and assurance framework, consideration of a bottled water policy, and review of antimicrobial prophylaxis guidance. It also includes undertaking an option and risk assessment for the short-term location of the adult BMT service, pending the building of a new BMT unit. The work undertaken will inform a Portfolio 2 Action Plan with a supporting communication and public engagement plan.

Portfolio 3: Professional Relations, Leadership and Culture is focused on professional relationships, leadership, culture and routes for escalation and resolution. Its Phase 1 work includes engagement with relevant professional groups, consideration of future professional structures for microbiology and infection control, and development of a Professional Resolution Framework. This will inform a Portfolio 3 Action Plan to support collaboration, trust and strengthened working relationships.

4.4 Specific Portfolio Work Plan

The three portfolios of work provide a clear structure for taking forward the SPCG's work. A detailed plan for each portfolio is available in **Appendix 1**.

5. Role of Families and Whistleblowers

The following section outlines the roles of families and whistleblowers to date.

5.1 Initial meeting with whistleblowers offered

Initial meetings with whistleblowers took place prior to the first meeting of the SPCG. A whistleblowing representative has been included as a member of the SPCG, as set out in the Terms of Reference. Through their membership, they contribute to discussions, review papers, and raise issues for the oversight group's consideration.

5.2 Initial meeting with family representatives offered

Initial meetings with the three family representatives took place prior to and after the first meeting of the SPCG. The patient/family representatives are members of the SPCG and have been actively engaged since the group's establishment. Feedback from family representatives has directly informed papers and work, including changes to wording and points of clarification.

5.3 SPCG Meetings

The inaugural SPCG meeting was held on 11 March to establish the group's remit, membership, and ways of working. The second meeting followed on 8 April, where members discussed the draft Terms of Reference, portfolio outputs, reporting timescales, and correspondence from family representatives. The third meeting took place on 21 May. Families and whistleblowers have been involved in all of these meetings.

5.4 Communications and Updates

A fortnightly communications process was established in April, with updates circulated to SPCG members covering operational, governance, and programme activity. A public-facing website has been launched to publish meeting minutes and key messages. The website link is: [Safety and Public Confidence Oversight Group \(SPCG\) - NHSGGC](#)

Informal communication has also been encouraged via email with responses sent to all queries received to date.

6. Next Steps / Key Dates

The following provides an overview of key dates:

1. Phase 1 Discovery – work with stakeholders to inform phase 1 plans – Feb/March (complete)
2. Phase 1 Development – development of governance and workplan – March/April (complete)
3. Phase 1 Delivery – SPCG and portfolios delivery of agreed workplan – May-June (underway)

4. Phase 1 Reporting and Reflection – small working groups encompassing the SPCG membership to review the outcomes of the portfolios – July with the final reports for the SPCG produced by the end of August

As the work is completed action plans will be formulated to ensure all learning is captured, actioned and implemented in a sustainable manner.

Appendices

- Appendix 1: SPCG Terms of Reference (attached)
- Appendix 2: Portfolio Work plan (attached)
- Appendix 3: Portfolio 1 Terms of Reference (attached)
- Appendix 4: Portfolio 2 Terms of Reference (attached)
- Appendix 5: Portfolio 3 Terms of Reference (attached)
- Appendix 6: Example of a Fortnightly SPCG communication update issued to SPCG members (attached)
- Appendix 7: List of External Independent Expert Advisors

Name	Specialty	Site
Haematology		
Professor John Snowden	Consultant Haematologist/ Director of the Blood and Marrow Transplant (BMT) Programme.	Sheffield Teaching Hospitals NHS Foundation Trust
Dr Charles Crawley	Clinical Director for Haemato-Oncology at Addenbrooke's and Programme Director for the Cambridge Blood and Marrow Transplant Programme.	Cambridge University Hospitals NHS Foundation Trust.
Professor Antonio Pagliuca	Retired Professor of Stem Cell Transplantation at Kings College Hospital.	Retired – previously at Kings College Hospital NHS Foundation Trust, London
Infection Control		
Dr David Partridge	Consultant Microbiologist, Florey Institute of Infection.	Sheffield Teaching Hospitals NHS Foundation Trust
Dr Sarah Thompson	Director of Infection Prevention & Control	Sheffield Teaching Hospitals NHS Foundation Trust
Microbiology		
Dr Julie R Samuel	Consultant Microbiologist, Director of Infection Prevention & Control (DIPC).	Newcastle Upon Tyne NHS Foundation Trust
Dr Manjula Meda	Consultant in Clinical Microbiology and Infection Prevention Doctor	Frimley Health NHS Foundation Trust, Camberley
Medical Leadership		
Dr Tracey Gilles	Medical Director	NHS Lothian

- Appendix 8: NHSGGC Board paper/update of 30 April 2026

The paper can be viewed at: [NHSGGC-Board-Paper-26-32-Safety-and-Public-Confidence-Oversight-Group.pdf](#)

1. Background

The Queen Elizabeth University Hospital (QEUE) and the Royal Hospital for Children (RHC) both opened in 2015. Unfortunately, NHS Greater Glasgow and Clyde (NHSGGC) did not receive the building that it paid for. As a result, there were multiple issues with the quality of the building. NHSGGC currently has a range of ongoing legal proceedings against the builder as a result of these significant failures.

There has been a significant impact on patients, families, NHSGGC staff and the wider public.

The Scottish Government commissioned a public inquiry – the Scottish Hospitals Inquiry (SHI), which is due to report later this year.

There is a related investigation underway by the Crown Office and a number of legal proceedings from families against NHSGGC. Further, NHSGGC has a number of legal proceedings against the building contractor, Multiplex, and these proceedings will continue to advance.

The Safety and Public Confidence Oversight Group (SPCG) will undertake a range of work to improve public confidence in the safety of the QEUE and RHC by consideration of key issues and associated stakeholder and expert opinion.

2. Purpose of the SPCG

The Safety and Public Confidence Oversight Group through the work of its portfolios will **undertake a review of the safety of the QEUE and RHC hospitals**, with a focus on **ventilation, water, infection control, communication to families, public and staff**.

The work of the SPCG will be delivered through three portfolios as follows:

- **Portfolio 1: Public Confidence and Engagement**
- **Portfolio 2: Environment and Facilities Assurance**
- **Portfolio 3: Professional Relations Leadership & Culture**

These Terms of Reference set out the phase 1 work in the initial phase of work across each of the key workstreams within the three portfolios. This reflects the initial prioritised phase of delivery and does not limit the broader scope of work which will continue to evolve through subsequent phases.

The work of the SPCG will be undertaken in a phased approach through the SPCG and its external expert advisors, ensuring the work progresses in a tiered and proportionate way. As phase 1 is completed, the SPCG will review the evidence and learning gathered, and agree the proposed priorities for Phase 2. This phased approach will be shaped by the collective judgement of the SPCG and its external expert advisors.

SPCG Portfolios

Portfolio 1: Public Confidence and Engagement

Portfolio Lead: Gill Imery

Supporting Portfolio Lead: Tracy Myhill

Non-Executive Director: Ketki Miles

Objective: This portfolio of work exists to listen and support the families, staff and the public taking forward key actions to systematically address the root causes of concern through meaningful and transparent engagement.

A transparent engagement approach will be established, ensuring that patients, families and the public are meaningfully involved, and that their experiences directly inform the key priorities and actions delivered through portfolio 1. Engagement and communication approaches will be inclusive and accessible, recognising the needs of different population groups, including children and those with varying language requirements.

Phase 1: April to June 2026

The first phase of this work will be delivered during April and June and will include three key pieces of work as follows:

Portfolio 1: Public Confidence and Engagement - Phase 1 Work	
1.1	Workstream 1: Learning from Families The portfolio lead will meet with the families affected to understand and capture learning from their experiences and better understand their hopes for the future to inform the key improvements and actions that require to be taken forward. The portfolio lead will also meet with families currently accessing services to also understand their experience and again capture learning to inform key improvements and actions to be taken forward.
1.2	Workstream 2: Learning from Staff The portfolio lead will also meet staff from across the multi-disciplinary team to capture learning. This will focus on staff who support delivery of services within Ward 4B, adult and paediatric haematology/oncology services and Ward 2A within RHC and wide. Learning will be captured to inform future actions and improvement work. Outputs from the work undertaken within portfolio 3 professional relationships and culture will also be reflected into the above workstream.
1.3	Workstream 3: Public Engagement & Communication The portfolio lead will be supported by the patient experience and public involvement (PEPI) team to undertake an initial public engagement programme including a sentiment analysis. This will help gather a baseline position and further inform the portfolio 1 work plan. Portfolio 2 Environment and Facilities Assurance members will also be involved in the development of this work. Work will commence on this in April and will be launched during May (post-election period).
1.4 Development of an Action Plan and Supporting Communications Plan for Portfolio 1 – following the conclusion of the work described above a clear action plan and supporting communications plan will be developed, this will be approved by the SPCG and NHSGGC Board.	

Phase 2: June 2026 onwards

During phase 2, the action plan and key improvements within it will be implemented with oversight from the NHSGGC Board.

Portfolio 2: Environment and Facilities Assurance

Portfolio Lead: John O'Dowd, Interim Director of Public Health

Supporting Portfolio Lead: Tracy Myhill

Non-Executive Director: Margaret Kerr

Objective: The key objective of this portfolio of work is to design and deliver an agreed environmental compliance and assurance framework. In addition this portfolio will commission the development of a bottled water policy for NHS Scotland and undertake a review of development and approval of guidelines to support the use of all antimicrobial prophylaxis for children receiving treatment for malignancy in NHSGGC.

Phase 1: April to June 2026

The first phase of this work will be delivered during April and June and will include seven key pieces of work:

Portfolio 2: Environment and Facilities Assurance – Phase 1 Work	
2.1	Water Systems Assurance A further External Authorising Engineer audit of the QEUH /RHC water system will be undertaken during May 2026.
2.2	Paediatric Haematology Service - RHC Ward 2A A tabletop review will be undertaken of what has been put in place since the new unit was opened in 2022. In addition, a further external audit and risk assessment of the unit today will be undertaken.
2.3	Adult BMT and Cellular Therapy Services – QEUH Ward 4B Day to day controls will remain in place for the Adult BMT unit within ward 4B, this consists of a gold, silver and bronze command structure that meets daily, 7 days a week to ensure any emerging issues or concerns are immediately addressed. The meetings are structured to cover all issues as follows: clinical issues, microbiology issues, Infection control issues, environmental estates or facilities issues, patient or family concerns, staff concerns and any other issues for escalation. An options appraisal and risk assessment will be undertaken by the multi-disciplinary team the work will determine the short-term optimal location of the service with agreed risk mitigations and any additional Infection prevention and control (IPC) and estates / facilities measures documented. A project team is in the process of being established to develop a robust business case for the development of a new BMT Unit, this will be progressed at pace and follow a standard business case process in line with Scottish Government Capital Investment Manual Guidance.
2.4	Bottled Water Policy A commission for an NHS Scotland Wide bottled water policy will be developed.
2.5	Develop an Environmental Compliance and Assurance Framework Utilising the work of the workstreams above start to develop a clear robust environmental compliance and assurance framework
2.6	Prophylaxis Undertake an external review of development and approval of guidelines to support the use of all antimicrobial prophylaxis for children receiving treatment for malignancy in NHSGGC
2.7 Development of an Action Plan and Supporting Communications Plan for Portfolio 2 – following the conclusion of the work described above a clear action plan and supporting communications plan will be developed, this will be approved by the SPCG and NHSGGC Board.	

Phase 2: June 2026 onwards

Phase 2 work will involve ensuring robust oversight of the implementation of the portfolio 2 action plan. In parallel a project team is in the process of being established to develop a robust business case for the development of a new BMT Unit, this will be progressed at pace and follow a standard

business case (SBC) process in line with Scottish Government Capital Investment Manual Guidance. This will be overseen by the NHSGGC Board.

Portfolio 3: Professional Relations Leadership & Culture

Portfolio Lead: Tracey Gillies, Medical Director NHS Lothian

Supporting Portfolio Lead: Tracy Myhill

Non-Executive Director: Ketki Miles

Objective: to develop a future approach that will support a fully collaborative, respectful and psychologically safe professional culture with clear roles, strengthened relationships, and effective leadership within NHSGGC and between NHSGGC and key external advisors.

This work will recognise the complexity of professional concerns raised in the past, including those escalated through formal routes, and will learn from previous approaches to ensure that the future arrangements are appropriately informed and effective. This will include consideration of the environment in which staff feel able to raise concerns.

Phase 1: April to June 2026

The first phase of this work will be delivered during April and June and will include the following key work.

Portfolio 3: Professional Relations Leadership & Culture – Phase 1 Work	
3.1	Workstream 1: Development of a plan to further improve professional relationships The supporting portfolio lead has started the process of meeting with NHSGGC staff and ARHAI staff, to understand the themes from professional groups including microbiology, Infection Control and ARHAI. This piece of work will focus on gaining an understanding of current professional interactions, systems and relationships. The work will involve discussions and agreement with key stakeholders on their objectives and develop an understanding of what is required to improve trust and confidence to develop a plan to further improve relationships.
3.2	Workstream 2: Consider and Propose Options for NHSGGC professional structure for Microbiology and Infection Control The portfolio lead will undertake discussions with the MDT and subsequently develop options for the future professional model and structure within NHSGGC. The future options will consider and informed by: • The work underway by the supporting portfolio lead who is meeting with NHSGGC staff and ARHAI staff to develop a plan to further improve relationships. This will involve reviewing the themes from the commissioned interviews with staff across microbiology, Infection Control and ARHAI to gain an understanding of current professional interactions, systems and relationships. • Discussion and agreement with key stakeholders their objectives and develop an understanding of what is required to improve trust and confidence specifically: • Professional & Service Relationships – to strengthen collaboration trust and relationships. • Escalation, Governance and Resolution – assessing how concerns are raised and resolved. • Future Service Configuration Options – developing and accessing options for future professional structures and service working arrangements and recommending a preferred approach. This work will also inform portfolio 1 action plan.

3.3	Workstream 3: Develop and Implement a new Professional Resolution Framework (PRF) The development of a new Professional Resolution Framework (PRF) will provide clarification of escalation, governance and resolution routes for professional concerns. The aim of the framework is to support and strengthen professional and service relationships , particularly in high risk or complex areas.
3.4 Following this development of a clear action plan to support implementation of key actions to support collaboration, trust and strengthening of relationships	

Phase 2: June 2026 onwards

Phase 2 work will involve ensuring robust oversight of the implementation by the NHSGGC Board of the portfolio 3 action plan and implementation of the preferred option for a new professional structure for microbiology and infection control.

4. Scottish Hospitals Inquiry: Issues and Future Recommendations

It is envisaged that the SHI will report (at the earliest) in Autumn 2026. Once the report is published all recommendations from the SHI will be fully implemented within agreed timescales with ongoing actions to ensure learning and improvements are sustained. Any emerging issues from the SHI will be incorporated into the work of the three portfolios. NHSGGC will also fully respond when the SHI recommendations are published.

Once the report is received NHSGGC will:

1. Ensure all themes and findings from the SHI are well understood
2. Ensure learning is captured and embedded within the portfolio work plans
3. Develop an action plan to implement all SHI recommendations and ensure they are successfully delivered
4. Ensure that progress against the action plan is transparent and assurance of completion of actions is provided to the NHSGGC Board

A PMO approach will be taken to tracking and monitoring progress of the action plans delivery.

5. Out of Scope of the SPCG

Operational issues will be proactively handled through relevant Silver and Gold command structures as required. The SPCG are not responsible for:

- operational management of normal and escalated issues across QEUH and RHC
- core governance via normal NHSGGC routes
- the new BMT Unit Technical Design Group, though issues, learning and recommendations from SPCG will be fully considered.
- oversight, management or determination of legal proceedings, Crown investigation matters or Scottish Hospitals Inquiry processes

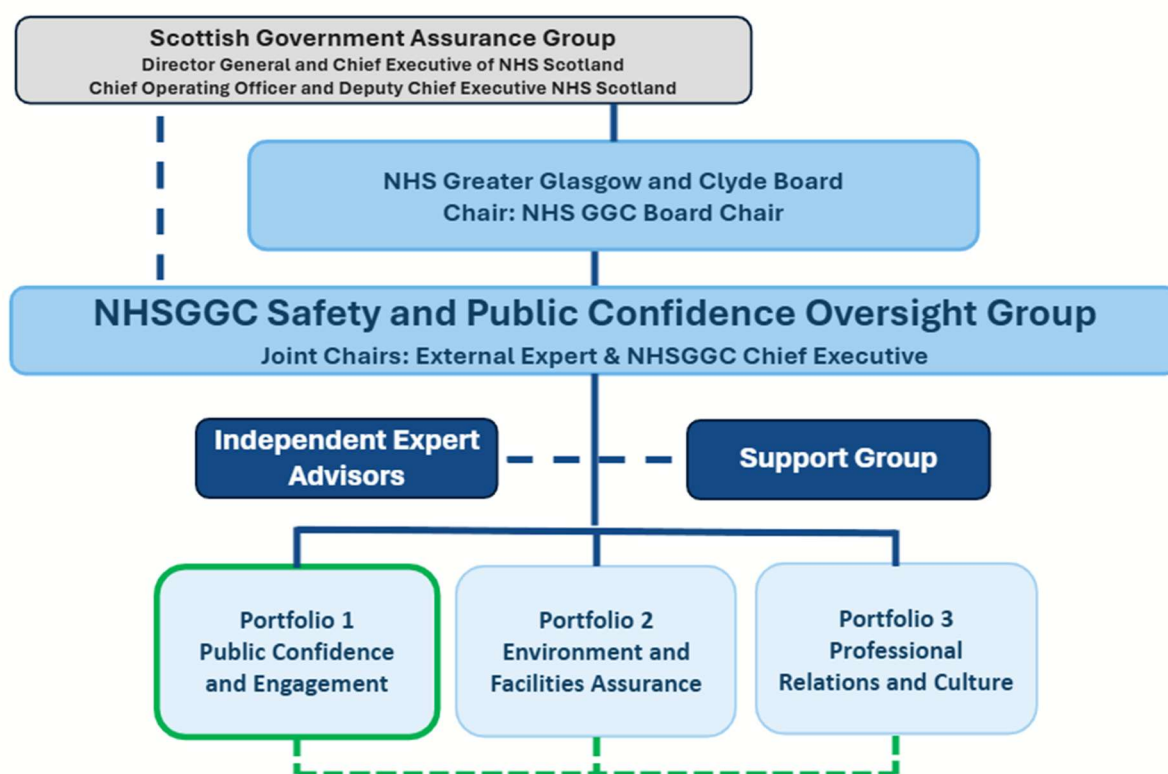
The SPCG does not replace the core governance mechanisms of the NHSGGC Board, nor does it have decision making powers. The SPCG will advise, guide and make recommendations for onward approval.

6. Governance and Reporting Structure

The governance and reporting structure is outlined below. The group will be jointly chaired by Professor Sir Lewis Ritchie and the NHSGGC Chief Executive, Professor Jann Gardner. The SPCG will formally report to the NHSGGC Board with onward reporting to the Scottish Government's COO NHS GGC Safety and Assurance Oversight Group, for both regular and urgent items. The group will complement but not duplicate the role of NHSGGC and other scrutiny bodies.

Portfolio Leads (as outlined in Portfolio 1–3 Terms of Reference) will attend SPCG by invitation as required to present findings, recommendations and progress.

A dedicated PMO will support the programme, tracking and monitoring progress of the portfolio action plans and overarching SPCG programme plan.



7. Membership

The membership of the group is set out below. The group will be made up of a range of stakeholders including independent experts, families' representatives, public sector partners, NHSGGC executive and non-executive directors, and experts from within NHSGGC. Further representation will be sought for the sub-groups. The list below outlines the membership

Member	Title
Professor Sir Lewis Ritchie	Co-Chair
Professor Jann Gardner	Co-Chair

Mrs Elspeth Banks	Patient and Public Involvement – Independent Public Partner
Ms Ann Cameron-Burns	Employee Director, NHSGGC
Professor John Cuddihy	Patient/Family Representative
Dr Scott Davidson	Executive Medical Director, NHSGGC
Professor Graham Ellis	Deputy Chief Medical Officer, Scottish Government
Ms Tracey Gillies	Scottish Association of Medical Directors (SAMD) Representative (Portfolio 3 Lead)
Ms Ann Gow OBE	Deputy Chief Executive, Healthcare Improvement Scotland
Ms Gill Imery QPM	Independent Member (Portfolio 1 Lead)
Ms Laura Imrie	Lead Consultant, Antimicrobial Resistance & Healthcare Associated Infection (ARHAI), Scotland
Ms Margaret Kerr	Non-Executive Member, NHSGGC
Ms Claire MacArthur	Director of Corporate Planning, NHSGGC
Ms Alison MacDonald	Executive Nurse Director, NHS Lothian and SEND Representative
Professor Jim McMenamin	Head of Infections Service, Public Health Scotland
Ms Ketki Miles	Non-Executive Member, NHSGGC
Dr John O'Dowd	Interim Director of Public Health, NHSGGC (Portfolio 2 Lead)
Ms Claire Pearce	Deputy Chief Nursing Officer, Scottish Government
Dr Christine Peters	Whistleblowing Representative, Consultant Clinical Microbiologist, NHSGGC
Mr Alfie Rawson	Patient/Family Representative
Mrs Louise Slorance	Patient/Family Representative
Professor Angela Wallace	Executive Nurse Director, NHSGGC and SEND Representative

Expert Advisory Input

Expert advisors may be commissioned to support the work of the SPCG or its portfolios. Expert advisors are not members of the SPCG and may participate on an individual basis or as part of dedicated advisory groups. The composition of advisory input may vary by portfolio or workstream, and advisors may have their own agreed ways of working. Their role is to provide independent expertise to inform SPCG discussion and assurance, rather than to act as SPCG decision-makers. External expert advice will be sought in a manner that supports independence, objectivity and appropriate separation from NHS Greater Glasgow and Clyde operational structure

8. Communications to SPCG Members between meetings

- The group will meet every 6-8 weeks
- A summary of progress will be shared with members on a fortnightly basis
- A website has been developed to support the SPCG work.
[Safety and Public Confidence Oversight Group \(SPCG\) - NHSGGC](#)
- A generic email address has been established and is available to all for non-clinical issues and a closed Facebook page will be established.
ggc.spcg@nhs.scot

9. Administration of Meetings

The Programme Management Office will provide administrative and business support for the Safety and Public Confidence Group. The Head of Corporate Programmes and the Portfolio Administration Manager will be in attendance to support the group.

The agenda will be issued at least 5 days in advance of meetings. Meeting papers will be issued as early as possible, recognising the dynamic nature of issues under consideration.

SPCG PORTFOLIO OVERVIEW 29 May 2026

PORTFOLIO 1: FAMILY, STAFF + PUBLIC ENGAGEMENT AND LEARNING				Discover Feb – March	Develop March - Apr	Deliver May -June
REF	ITEM	DESCRIPTION	OUTPUTS			
1.1 PATIENT AND FAMILY ENGAGEMENT + LEARNING						
1.1	Overview	This is a structured Patient and Family Engagement Programme which will be undertaken using a sensitive and proportionate approach. This will first involve identifying relevant family cohorts recognising there is no single route to families. The engagement approach will be consistent across all family groups, with adaptations made as appropriate for different cohorts. The engagement will include: - Engagement with families linked to historical and SHI-related cases - Use of tailored communication routes including email invitations and supported conversations - Opportunities for participation through questionnaires, virtual or face-to-face discussions - Videos of relevant areas of QEUH/RHC The engagement approach will be informed by PEPI to ensure it is accessible and appropriate.				
1.1a	Patient and Family Engagement (Historical /SHI Cases/Current)	Families with historical experience (inc. SHI related) and current/recent families of services (Ward 2A, Ward 4B), will be invited to engage through questionnaire and or interview as part of the Patient and Family Engagement Programme. This will include: • Invitation to participate through structured engagement routes • Ensuring all those who wish to engage have opportunity and access to do so • Ensuring engagement is supportive, proportionate and aligned to patient needs • Capturing experience relating to care delivery, communication and confidence	PFER Report Chapter: Insight captured learning from Families (Historical)			
1.1b	Patient and Family Engagement Report	Produce a Patient and Family Engagement Report (PFER) with the following sections: 1. Historical Cases/SHI 2. Recent/Current 3. Thematic Analysis and Key Learning 4. Emerging Priorities and Recommendations Identifying key themes and emerging priorities to inform SPCG actions and improve public confidence.	Patient and Family Engagement Report (PFER)			
1.2 STAFF ENGAGEMENT & LEARNING						
1.2a	Adult BMT Staff	This is a structured Staff Engagement Programme which will be undertaken across all relevant staff groups, designed to minimise burden and utilise existing routes where possible. This will include engagement with Adult BMT (Ward 4B) multidisciplinary staff. The engagement will: - Use a combination of bookable sessions, drop-ins and virtual engagement - Be delivered across QEUH / RHC locations and online - Capture staff experience, operational challenges and improvement opportunities	Staff insight captured and incorporated into Staff Learning Summary			
1.2b	Paed Haem Staff	This is engagement with Paediatric Haematology (Ward 2A) staff and wider MDT as part of the same approach. This will include: - Engagement sessions with clinical and non-clinical staff - Use of accessible formats to maximise participation - Consideration of pressures and service delivery challenges Learning will be captured alongside wider staff engagement activity.	Staff insight captured and incorporated into Staff Learning Summary			
1.2c	General Staff	This is engagement with wider staff groups, including infection control, estates, facilities and support services. This will include: - Capturing cross-cutting system issues - Identifying themes relating to governance, communication and operational delivery - Ensuring alignment with Portfolio 3 where cultural or professional issues are identified	Staff insight captured and incorporated into Staff Learning Summary Cross-cutting themes identified and shared with Portfolio 3			

1.2d	Staff learning summary	A Staff Learning Report will be produced, following write up of sessions collating insights across all staff groups, identifying key cultural, governance and operational themes to inform improvement actions and wider SPCG work. This will include: 1. Thematic Analysis of Staff Feedback 2. Cultural and Behavioural Themes 3. Governance and Operational Issues 4. Cross-cutting Issues for Escalation to Portfolio	Staff Learning Report (SLR)			
1.3 PUBLIC ENGAGEMENT, SENTIMENT ANALYSIS & COMMUNICATIONS APPROACH / PLAN						
1.3a	Public engagement programme	A structured Public Engagement Programme will be undertaken with PEPI colleagues. This will build on existing engagement methodologies and ensure a proportionate and sensitive approach to gathering views from the public in relation to QEUH/RHC. The programme will ensure the public have appropriate opportunity and access to engage	Public Engagement approach established and baseline insights captured – Section 1			
1.3b	Sentiment Analysis	A Public Sentiment Analysis will be undertaken to establish public confidence and perception. This will include review of previous sentiment analysis and the development of updated questions and themes specific to QEUH/RHC Deadline for returns to sentiment analysis will be established in mid-June	Sentiment Analysis Report – Section 2			
1.3c	Communication approach and plan	Development of a Communications Approach and Proactive Plan informed by the outputs of public engagement and sentiment analysis. This will set out tone, transparency, frequency and communication channels to support public confidence and ensure clear, consistent messaging.	Communications Plan – Section 3			
1.3d	Summary Report	A Public Engagement, Sentiment Analysis and Communications Report will be developed with the following sections: 1. Public Engagement 2. Sentiment Analysis 3. Communications Plan Summary + Recommendations	Public Engagement, Sentiment Analysis and Communications Report			

PORTFOLIO 2: Dr John O'Dowd						
REF	ITEM	DESCRIPTION	OUTPUTS			
2.1 WATER						
2.1a	Water Audit	This is a repeated Water Audit which will be undertaken by an independent authorised water engineer. This audit will be carried out through the current Scottish Standard as well as using an additional English standard for further scrutiny.	Water Audit Report & Action Plan			
2.1b	Water System Improvement Assessment	• This is firstly the formation of an expert Water System Assessment Group (WSAG) of internal and external experts in estates, built environment, microbiology, infection control. • The WSAG will undertake a tabletop assessment to fully consider: ○ Note the issues as identified in 2018 and reference to previous DMA Canyon reports ○ Note all aspects of the improvement work undertaken to upgrade the water system ○ Review the water audit • The WSAG will produce a summary WSAG Report with Sections: 1. Historical Issues 2. System Improvements/Investment 3. Current Water Audit 4. NHS GGC Water Governance 5. Final Summary & Onward Recommendations/Actions	WSAG Report			
2.1c	Use of Bottled Water Policy	Policy to be developed which sets out the following key elements: • Use of tap water as standard for general patients • Use of STERILE bottled water for severely immunocompromised patients (criteria defined) • Use of STERILE bottled water for patients clinically assessed as severely vulnerable (process) • Use of normal bottled water as business continuity should a normal domestic water system fail A full literature search to be undertaken to inform proposal which will be sent to CNO/CMO for consideration.				

2.2 PAEDIATRIC VENTILATION						
2.2a	Ventilation Audit	This is a repeated Ventilation Audit which will be undertaken by an independent authorised ventilation engineer.	Ventilation Audit Report & Action Plan in Paediatric Ward 2B			
2.2b	Ward 2B Paed Haematology Ventilation System Improvement Assessment	- This is firstly the formation of an expert Paediatric Ventilation System Assessment Group (PVSAG) of internal and external experts from clinical, estates, built environment, microbiology, infection control. - The PVSAG will undertake a table top assessment to fully consider: - Note all aspects of the improvement work undertaken to upgrade Ward 2A Schiehallion Unit - Map work undertaken at opening v full validation process with gaps addressed - Consider annual verification - Review the recent ventilation report - The PVSAG will produce a summary PVSAG Report with Sections: - Historical Issues - System Improvements/Investment - Mapping of original process to validation and actions to address gaps and confirm - Current Ventilation Audit - Final Summary & Onward Recommendations/Actions	PVSAG Report			
2.3 ADULT BMT VENTILATION & RISK ASSESSMENT						
2.3a	Ventilation Audit	This is a repeated Ventilation Audit which will be undertaken by an independent authorised ventilation engineer.	Ventilation Audit Report & Action Plan in Adult BMT Ward 4B			
2.3b	Ward 4B Adult BMT Ventilation System Improvement Assessment	- This is firstly the formation of an expert Adult BMT Ventilation System Assessment Group (ABVSAG) of internal and external experts from clinical, estates, built environment, microbiology, infection control. - The ABVSAG will undertake a table top assessment to fully consider: - Note all aspects of the improvement work undertaken to upgrade Ward 4B Schiehallion Unit - Map work undertaken at opening v full validation process with gaps addressed - Consider annual verification - Review the recent ventilation report - The ABVSAG will produce a summary ABVSAG Report with Sections: - Historical Issues - System Improvements/Investment - Mapping of original process to validation and actions to address gaps and confirm - Current Ventilation Audit - Final Summary & Onward Recommendations/Actions	ABVSAG Report			
2.3c	Ward 4B Risk Assessment Update	Update from NHS GGC will be provided from the Risk Assessment undertaken with internal and external experts to consider the best location for care until a new BMT unit is built				
2.3d	JACIE Certification	Overview from NHS GGC will be provided in relation to JACIE Certification	JACIE Certification Overview for information AGENDA 21/05/26			
2.3e	New BMT Unit Business Case Update	Updates to be provided as the business case for the new BMT unit is developed	Business case update			
2.4 UVC Light Reviews						
2.4a	Review Option to use UVC Light	Review will be undertaken to consider potential use of UVC light to reduce risks	Update to be provided			
2.4b	Prophylaxis Reviews	Review will be undertaken to consider use of prophylaxis	Update to be provided			
2.5 Environmental Compliance & Assurance Framework developed						
2.5a	Development of Framework	Develop an Environmental Compliance & Assurance Framework utilising the workstreams above	Update to be provided			

PORTFOLIO 3: PROFESSIONAL RELATIONSHIPS, LEADERSHIP + CULTURE (Ms Tracey Gillies + Professor Tracy Myhill)						
REF	ITEM	DESCRIPTION	OUTPUTS			
3.1						
3.1a		A review of the relationships and tensions within NHS GGC between microbiology, infection control and whistleblower(s) and between NHS GGC and NHS Assure and ARHAI. This work was to better understand the tensions aligned with the issues highlighted at the SHI and beyond and to propose options for onward improvements in relationships. A key element was to inform the work undertaken by Ms Tracey Gillies (3.1b)	Report - ARHAI / GGC Infection Control Collaboration and Relationships Confidential/Sensitive Update			
3.1b		A review of the professional tensions as set out above and proposed options for NHS GGC to more effectively move forward taking into consideration the prior work of Prof Myhill.	Report and Recommendations			
3.2						
3.2a	Professional Resolution Framework	Professor Myhill will lead the work to consider the application of the DRAFT Resolution Framework as part of the NHS GGC Culture Toolkit. She will test the use of the associated algorithm/flowchart/policy to provide a new option in professional teams where there is sustained professional tension and potential loss of psychological safety. She will also consider (using historical issues) how this could aid resolution.	Proposed implementation Confidential/Sensitive Update			

SAFETY AND PUBLIC CONFIDENCE GROUP – TIMELINE AND NEXT STEPS				Discover Feb – March	Develop March - Apr	Deliver May- June	Report / Reflect July - Aug
PHASE 1: THE WORK OF SPCG – FEBRUARY - AUGUST 2026							
REF	ITEM	DESCRIPTION	OUTPUTS				
4.1							
4.1a	Phase 1	Phase 1 covers the work of the SPCG from February to August 2026 and is structured across four stages: Discovery, Development, Delivery, and Reporting & Reflection.	Phase 1 programme delivered.				
4.1b	Stage 1 _ Discovery	Initial discovery activity undertaken during February–March to understand key issues, gather information and engage stakeholders.	Insight and evidence base established				
4.1c	Stage 2 – Development	Development phase during March–April focused on shaping outputs, options and areas of improvement based on discovery findings.	Defined plans and proposals				
4.1d	Stage 3- Delivery	Delivery phase during May–June progressing key outputs, assessments and engagement activity.	Outputs and reports produced.				
4.1e	Stage 4 – Reporting & Reflection	Final phase during July–August focusing on reporting findings, reflecting on outputs and preparing recommendations via focus groups. This will progress as part of a Community of Focus Groups	Final reports and recommendations				
PHASE 2: THE WORK OF SPCG – AUGUST 2026							
REF	ITEM	DESCRIPTION	OUTPUTS	From August 2026			
4.2							
4.2a	Phase 2	Phase 2 focuses on implementation of Phase 1 recommendations, risk assessment of QEUH and development of the BMT business case from August 2026 onwards.	Implementation programme and business case				
PHASE 3: SHI RECOMMENDATIONS							
REF	ITEM	DESCRIPTION	OUTPUTS	TBC – await SHI Report			
4.3							
4.3a	Phase 3 – SHI Recommendations	Phase 3 will focus on implementation of recommendations from the final Scottish Hospitals Inquiry report once published.	SHI recommendations implemented				

PORTFOLIO 1: Public, Patient & Families Engagement and Communications DRAFT Terms of Reference

1. Background and Context

The Safety and Public Confidence Oversight Group through the work of its portfolios will **undertake a review of the safety of the QEUH and RHC hospitals**, with a focus on **ventilation, water, infection control, communication to families, public and staff**.

Portfolio 1 supports this aim by leading structured engagement and communications activity, ensuring that the experiences of patients, families and the public are consistently captured, analysed and used to inform the SPCG programme.

2. Objective

This portfolio of work exists to listen and support the families, staff and the public taking forward key actions to systematically addressing the root causes of concern through meaningful and transparent engagement.

A transparent, engagement approach will be established, ensuring that patients, families and the public are meaningfully involved, and that their experiences directly inform the key priorities and actions delivered through portfolio 1.

3. Delivery Approach

Portfolio 1 will be delivered through targeted workshops, interviews, engagement sessions and facilitated discussion, supported and coordinated by the SPCG PMO. A formal governance route into SPCG exists through the Portfolio 1 Leads

4. Roles and responsibilities

Portfolio Lead

- Lead delivery of the Portfolio 1 workplan.
- Coordinate the associated workstreams and engagement activity.
- Provide progress updates to the SPCG CoChairs.

Members / Contributors

- Provide subject matter expertise to inform portfolio activity.
- Participate in engagement activity as required.
- Contribute to the development of public facing content.

PMO

- Provide coordination and administrative support to the portfolio.
- Manage the SPCG mailbox and triage queries appropriately.
- Maintain oversight of actions, risks and progress.

Support the scheduling, analysis and documentation of engagement activity.

5. Out of Scope

Portfolio 1 does not lead or manage:

- Operational management of ventilation, water, infection control or ward conditions

- Engineering, environmental, or technical validation work (e.g., water audits, Schiehallion engineering reviews)
- Clinical risk decision making
- Media handling of individual operational or clinical incidents
- Technical matters overseen by other SPCG portfolios (i.e. Portfolio 2)

6. Phase 1: April to May 2026

The first phase of this work will be delivered during April and May and will include three key pieces of work as follows:

Portfolio 1: Public Confidence and Engagement - Phase 1 Work	
1.1	Workstream 1: Learning from Families The portfolio lead will meet with the families affected to understand and capture learning from their experiences and better understand their hopes for the future to inform the key improvements and actions that require to be taken forward. The portfolio lead will also meet with families currently accessing services to also understand their experience and again capture learning to inform key improvements and actions to be taken forward.
1.2	Workstream 2: Learning from Staff The portfolio lead will also meet staff from across the multi-disciplinary team to capturing learning this will focus on staff who support delivery of services within Ward 4B, adult and paediatric haematology/oncology services and Ward 2a within RHC and wide. Learning will be captured to inform future actions and improvement work. Outputs from the work undertaken within portfolio 3 professional relationships and culture will also be reflected into the above workstream.
1.3	Workstream 3: Public Engagement & Communication The portfolio lead will be supported by the patient experience and public involvement (PEPI) team to undertake an initial public engagement programme including a sentiment analysis. This will help gather a baseline position and further inform the portfolio 1 work plan. Portfolio 2 Environment and Facilities Assurance members will also be involved in the development of this work. Work will commence on this in April and will be launched during May (post-election period).
1.4 Development of an Action Plan and Supporting Communications Plan for Portfolio 1 – following the conclusion of the work described above a clear action plan and supporting communications plan will be developed, this will be approved by the SPCG and NHSGGC Board.	

7. Phase 2: June 2026 onwards

During phase 2 the action plan and key improvements within it will be implemented with oversight from the NHSGGC Board.

8. Governance and Reporting

Portfolio 1 operates within the SPCG governance structure.

The Portfolio Lead (supported by the PMO) will:

- Report progress, issues and outputs to the SPCG Co-Chairs
- Ensure that learning from families, staff and public engagement is translated into clear findings and actions
- Ensure Portfolio 1 work aligns with the wider SPCG programme timeline

Portfolio 1 activity, outputs and risks will be captured within SPCG's standard reporting arrangements.

9. Dependencies

Delivery of Portfolio 1 relies on collaboration with:

Portfolio 2 – technical assurance

Portfolio 3 – system relationships and governance

These dependencies ensure alignment across the SPCG programme.

10. Review of Terms of Reference

The ToR will be reviewed if required in response to SPCG decisions or priorities.

Appendix 1

Membership

Membership is flexible and activity-based and may evolve as workstreams progress.

- Portfolio Lead: Gill Imrie
- Supporting Lead: Tracy Myhill
- Non-Executive Director: Ketki Miles

- Patient and family representatives (adult & paediatric)
- Staff representatives (adult & paediatric)
- NHSGGC Communications colleagues
- Public engagement specialists
- Scottish Government colleagues (as required)
- Clinical/technical experts (IPC, microbiology, ARHAI)
- External representative (TBC)
- Members of subgroups aligned to the three output areas

PORTFOLIO 2: Environment, Facilities & Technical Assurance Terms of Reference – Draft

1. Background and Context

The Safety and Public Confidence Oversight Group through the work of its portfolios will **undertake a review of the safety of the QEUH and RHC hospitals**, with a focus on **ventilation, water, infection control, communication to families, public and staff**.

Portfolio 2 supports this aim by designing and delivering an environmental compliance and assurance framework.

2. Objective

The key objective of this portfolio of work is to design and deliver an agreed environmental compliance and assurance framework, in addition this portfolio will commission the development of a bottled water policy for NHS Scotland and undertake a review of development and approval of guidelines to support the use of all antimicrobial prophylaxis for children receiving treatment for malignancy in NHS GGC.

3. Delivery Approach

Portfolio 2 will deliver its activity through technical review and validation, expert advisory input, structured analysis of risks and system performance, and targeted discussions and workshops. This work will be supported and coordinated by the SPCG PMO, with a formal governance route into SPCG through the Portfolio 2 Leads.

4. Roles and responsibilities

Portfolio Lead

- Lead delivery of Portfolio 2 workplan
- Coordinate technical and assurance activity
- Report progress to SPCG Co-Chairs

Members / Contributors

- Provide technical and subject matter expertise
- Support validation, review and risk identification
- Contribute to assurance output

PMO

- Provide coordination and administrative support to the portfolio.
- Manage the SPCG mailbox and triage queries appropriately.
- Maintain oversight of actions, risks and progress.
- Support the scheduling, analysis and documentation of engagement activity.

5. Out of Scope

Portfolio 2 does not lead or manage:

- Day-to-day operational management of estates, facilities or clinical environments
- Delivery of engineering works, repairs or infrastructure upgrades
- Clinical decision-making or patient-level care decisions
- Workforce or medical staffing options relating to microbiology/ICT (covered in portfolio 3)
- Implementation of service changes (beyond advisory input)

6. Phase 1: April to May 2026

The first phase of this work will be delivered during April and May and will include five key pieces of work:

Portfolio 2: Environment and Facilities Assurance – Phase 1 Work	
2.1	Water Systems Assurance A further External Authorising Engineer audit of the QEUH /RHC water system will be undertaken during May 2026.
2.2	Paediatric Haematology Service - RHC Ward 2a A tabletop review will be undertaken of what has been put in place since the new unit was opened in 2022, in addition a further external audit and risk assessment of the unit today will be undertaken.
2.3	Adult BMT and Cellular Therapy Services – QEUH Ward 4B Day to day controls will remain in place for the Adult BMT unit within wards 4b, this consists of a Gold, Silver and Bronze command structure that meets daily, 7 days a week to ensure any emerging issues are concerns are immediately addressed. The meetings are structured to cover all issues as follows: clinical issues, microbiology issues, Infection control issues, environmental estates or facilities issues, patient or family concerns, staff concerns and any other issues for escalation. An options appraisal and risk assessment will be undertaken by the multi-disciplinary team the work will determine the short-term optimal location of the service with agreed risk mitigations and any additional Infection prevention and control (IPC) and estates / facilities measures documented. A project team is in the process of being established to develop a robust business case for the development of a new BMT Unit, this will be progressed at pace and follow a standard business case process in line with Scottish Government Capital Investment Manual Guidance.
2.4	Bottled Water Policy A commission for an NHS Scotland Wide bottled water policy will be developed.
2.5	Develop an Environmental Compliance and Assurance Framework Utilising the work of the workstreams above start to develop a clear robust environmental compliance and assurance framework
2.7	Prophylaxis Undertake an external review of development and approval of guidelines to support the use of all antimicrobial prophylaxis for children receiving treatment for malignancy in NHS GGC
2.7 Development of an Action Plan and Supporting Communications Plan for Portfolio 2 – following the conclusion of the work described above a clear action plan and supporting communications plan will be developed, this will be approved by the SPCG and NHSGGC Board.	

7. Phase 2 June 2026 onwards

Phase 2 work will involve ensuring robust oversight of the implementation of the portfolio 2 action plan. In parallel a project team is in the process of being established to develop a robust business case for the development of a new BMT Unit, this will be progressed at pace and follow a standard business case (SBC) process in line with Scottish Government Capital Investment Manual Guidance. This will be overseen by the NHSGGC Board.

8. Governance and Reporting

Portfolio 2 operates within the SPCG governance structure.

The Portfolio Lead (supported by the PMO) will:

- Report progress, issues and outputs to the SPCG Chairs
- Ensure that learning from families, staff and public engagement is translated into clear findings and actions
- Ensure Portfolio 2 work aligns with the wider SPCG programme timeline

Portfolio 2 activity, outputs and risks will be captured within SPCG's standard reporting arrangements.

9. Dependencies

Portfolio 2 depends on:

Portfolio 1 - engagement and communication

Portfolio 3 - system relationships and governance s

These dependencies ensure alignment across the SPCG programme.

10. Review of Terms of Reference

The ToR will be reviewed if required in response to SPCG decisions or priorities.

Appendix 1

Membership

Membership is flexible and activity-based and may evolve as workstreams progress.

Portfolio Lead: John O'Dowd, Interim Director of Public Health

Supporting Portfolio Lead: Tracy Myhill

Non- Executive Director: Margaret Kerr

Membership will include relevant technical and clinical expertise, including:

- Estates and Facilities representatives
- Infection Prevention and Control (IPC)
- Microbiology
- NHS Assure / ARHAI (as appropriate)
- BMT Clinicians
- External subject matter experts

PORTFOLIO 3: Professional Relationships, Leadership & Culture DRAFT Terms of Reference

1. Background and Context

The Safety and Public Confidence Oversight Group through the work of its portfolios will **undertake a review of the safety of the QEUH and RHC hospitals**, with a focus on **ventilation, water, infection control, communication to families, public and staff**.

Portfolio 3 supports this aim by providing oversight of professional relationships, leadership and culture, ensuring that systems, behaviours and ways of working support safe, collaborative and effective practice and inform the SPCG programme.

2. Objective

The objective of this portfolio of work is to develop a future approach that will support a fully collaborative, respectful and psychologically safe professional culture with clear roles, strengthened relationships, and effective leadership within NHS GGC and between NHS GGC and key external advisors.

3. Delivery Approach

Portfolio 3 will operate through a combination of staff engagement and interviews, leadership and clinical workshops, governance pathway analysis, workforce modelling and options appraisal, and expert review. This activity will be supported and coordinated by the SPCG PMO, with a formal governance route into the SPCG provided through the Portfolio 3 Leads

4. Roles and responsibilities

Portfolio Lead

- Lead delivery of Portfolio 3 workplan
- Coordinate analysis and engagement
- Report progress to SPCG Co-Chairs

Members/contributors

- Provide professional insight and perspective
- Contribute to engagement and review activity
- Support identification of themes and solutions

PMO

- Provide coordination and administrative support.
- Maintain actions, risks and progress information
- Support scheduling and documentation of portfolio activity

5. Out of Scope

Portfolio 3 does not lead or manage technical validation of water, ventilation or built-environment systems, as these are covered within Portfolio 2, nor does it lead communications or public engagement activity, which sits within Portfolio 1. It is not responsible for the direct delivery of clinical care or patient-level decisions, nor for implementing structural or workforce changes beyond providing advisory input. Operational delivery remains the responsibility of the relevant NHSGGC services.

6. Phase 1: April to May 2026

The first phase of this work will be delivered during April and May and will include the following key work.

Portfolio 3: Professional Relations Leadership & Culture – Phase 1 Work	
3.1	Workstream 1: Development of a plan to further Improve professional relationships The supporting portfolio lead has started the process of meeting with NHSGGC staff and ARHAI staff, to understand the themes from professional groups including microbiology, infection control and ARHAI. This piece of work will focus on gaining an understanding of current professional interactions, systems and relationships. The work will involve discussions and agreement with key stakeholders on their objectives and develop an understanding of what is required to improve trust and confidence to develop a plan to further improve relationships.
3.2	Workstream 2: Consider and Propose Options for NHSGGC professional structure for Microbiology and Infection Control The portfolio lead will undertake discussions with the MDT and subsequently develop options for the future professional model and structure within NHSGGC. The future options will consider and informed by: • The work underway by the supporting portfolio lead who is meeting with NHSGGC staff and ARHAI staff to develop a plan to further improve relationships. This will involve reviewing the themes from the commissioned interviews with staff across microbiology, infection control and ARHAI to gain an understanding of current professional interactions, systems and relationships. • Discussion and agreement with key stakeholders their objectives and develop an understanding of what is required to improve trust and confidence specifically: • Professional & Service Relationships – to strengthen collaboration trust and relationships • Escalation, Governance and Resolution – assessing how concerns are raised and resolved. • Future Service Configuration Options – developing and assessing options for future professional structures and service working arrangements and recommending a preferred approach. This work will also inform portfolio 1 action plan.
3.3	Workstream 3: Professional Relation Develop and Implement a new Professional Resolution Framework (PRF) The development of a new Professional Resolution Framework (PRF) will provide clarification of escalation, governance and resolution routes for professional concerns. The aim of the framework is to support and strengthen professional and service relationships, particularly in high-risk or complex areas.
3.4 Following this development of a clear action plan to support implementation of key actions to support collaboration, trust and strengthening of relationships	

7. Phase 2 June 2026 onwards

Phase 2 work will involve ensuring robust oversight of the implementation by the NHSGGC Board of the portfolio 3 action plan and implementation of the preferred option for a new professional structure for microbiology and infection control.

8. Governance and Reporting

Portfolio 3 operates as part of the SPCG governance structure

The Portfolio Lead (supported by the PMO) will:

- Report progress, issues and outputs to SPCG Co-Chairs
- Ensure findings and recommendations are clearly presented
- Ensure alignment with wider SPCG programme activity

Portfolio 3 activity, outputs and risks will be captured within SPCG's standard reporting arrangements

9. Dependencies

Portfolio 3 depends on:

- Portfolio 1 – engagement and communication
- Portfolio 2 – technical assurance

These dependencies ensure alignment across the SPCG programme.

10. Review of Terms of Reference

The ToR will be reviewed if required in response to SPCG decisions or priorities.

Appendix 1

Membership

Membership is flexible and activity-based and may evolve as workstreams progress.

Portfolio Lead: Tracey Gilles, Medical Director NHS Lothian

Supporting Portfolio Lead: Tracy Myhill

Non- Executive Director: to be confirmed

Additional Contributors

Clinical representatives (adult and paediatric)

Microbiology

Infection Prevention and Control (IPC)

Workforce / HR representatives

NHSGGC operational representatives

Scottish Government representatives (as required)

External advisors (as required)

Fortnightly Update NHSGGC to the SPCG Members

Wednesday 6 May 2026

This update provides a summary of current operational, governance, and programme activity relevant to SPCG.

Bronze & Silver Command

Bronze and Silver Command structures remain in place and continue to meet daily to review clinical, infection control, estates and environmental issues relating to QEUH Ward 4B. There are no outstanding concerns at present.

Gold Command

Gold Command continues to meet daily to oversee the wider organisational response to QEUH Ward 4B issues. No issues have been escalated from Silver Command.

Incident Management Team

The IMT met again on 29 April 2026, with a further close-out meeting and learning summary scheduled for 27 May 2026. No new patient cases have been identified and the HIIAT status remains Green (since 25 Feb 2026).

Adult BMT Unit – Option Appraisal and Risk Assessment

The option appraisal and risk assessment for Ward 4B has been concluded. The process involved the NHSGGC multi-disciplinary team, ARHAI, NSD colleagues, and external independent experts. There is a clear recommendation to continue managing the service onsite within Ward 4B in the QEUH, further specific details will be considered and presented in due course. We are now focusing on securing formal clinical and organisational approval through the appropriate NHSGGC governance routes during May. A paper will be shared with SPCG members at the 21 May meeting once our governance processes have concluded.

NHS Scotland Safety and Assurance Oversight Group – Terms of Reference

The Safety and Assurance Oversight Group Terms of Reference were received from the Scottish Government on 17 April and circulated to members of the SPCG on 22 April, along with accompanying letter from Scottish Government and the Co-Chairs response to Scottish Government.

SPCG Portfolio Update

Draft minutes of the 08 April meeting were circulated to SPCG members with any amendments to be submitted. The final version of the SPCG TOR (last draft circulated on 22 April) is to be ratified at the meeting on 21 May. The work of each portfolio is progressing, supported by the SPCG PMO Team. The first status reports for each portfolio setting out progress made are currently being prepared for discussion at the SPCG meeting on 21 May.

Communications

Please note the next fortnightly communication update will be due to be issued on 20 May 2026; however, as the SPCG meeting is being held on 21 May, it is proposed that the next communications update is provided at the meeting on 21 May, with the fortnightly update on Wednesday 3 June.

NHS GGC (M) 26/02
Minutes: 32 - 65

NHS GREATER GLASGOW AND CLYDE

**Minutes of the Meeting of the NHS Greater Glasgow and Clyde Board held on Thursday
30 April 2026 at 09:30 am hybrid at Parkhead Hub
and via Microsoft Teams (recorded for the NHS GGC website)**

PRESENT

Dr Lesley Thomson KC (in the Chair)

Ms Mehvish Ashraf	Mr Graham Haddock OBE
Mr Brian Auld	Ms Margaret Kerr
Mr Michael Breen	Mr Jamie Kinloch BEM
Ms Libby Cairns	Ms Lesley McDonald
Cllr Jacqueline Cameron	Dr Morven McElroy
Ms Ann Cameron-Burns	Cllr Robert Moran
Mr Martin Cawley	Cllr Katie Pragnell Lees
Ms Cath Cooney	Dr Becky Metcalfe
Cllr Chris Cunningham	Ms Ketki Miles
Mr Gio D'Alessio	Dr Paul Ryan
Dr Scott Davidson	Mr Charles Vincent
Ms Dianne Foy	Ms Michelle Wailes
Professor Jann Gardner	Professor Angela Wallace
Mr David Gould	

IN ATTENDANCE

Ms Alexis Chappell	Chief Officer, East Renfrewshire HSCP
Mr Russell Coulthard	Interim Chief Operating Officer/Deputy Chief Executive
Prof Jesse Dawson	Director of Research and Innovation (for item
Ms Gillian Duncan	Corporate Executive Business Manager (Minutes)
Ms Helena Jackson	Head of Health and Care (Staffing) (Scotland) Act (for item
Ms Claire MacArthur	Director of Planning
Mr Billy McClean	Chief Officer, Renfrewshire HSCP
Ms Keira McLuskey	Head of Sustainability (for item
Mr Neil McSeveny	Interim Director of Communications
Ms Nicola Munro	PA to Chair
Ms Jillian Neilson	Board Secretary
Dr John O'Dowd	Interim Director of Public Health
Mr Derrick Pearce	Chief Officer, East Dunbartonshire HSCP
Sir Lewis Ritchie	Co-Chair of the SPCG
Ms Kate Rocks	Chief Officer, Inverclyde HSCP
Ms Louise Russell	Secretariat Manager (Minute)

Ms Natalie Smith		Interim Director of Human Resources & Organisational Development
Ms Paula Spaven		Director of Corporate Governance (for item
Professor Tom Steele		Director of Estates and Facilities
Mr Pat Togher		Chief Officer, Glasgow HSCP

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32.	Welcome and Apologies		
	The Chair, Dr Lesley Thomson KC, welcomed those present to the April 2026 meeting of the NHS Greater Glasgow and Clyde Board. The meeting was conducted in a hybrid format, with some members joining via video conferencing and others attending in person at the Parkhead Hub meeting rooms. The Chair also welcomed members of the public who had accepted the invitation to attend as non-participant observers. Apologies were recorded on behalf of Karen Turner, Non-Executive Board Member and Ms Beth Culshaw, Chief Officer, West Dunbartonshire HSCP. The Chair extended thanks to Mr Pat Togher, Chief Officer, Glasgow HSCP, and his team for their support in facilitating the meeting venue. It was noted that Board members would have the opportunity at the conclusion of the meeting to meet with staff based at the Parkhead Hub and to undertake a tour of the facility. <u>NOTED</u>		
33.	Declaration(s) of Interest(s)		
	The Chair invited members to declare any interests in relation to the items of business to be discussed. No declarations were made. <u>NOTED</u>		
34.	Minute of Meeting held on 18 December 2026		
	The Board considered the minutes of the NHS Greater Glasgow and Clyde Board meeting held on 26 February 2026 [NHS GGC(M)26/01], which were presented for approval. The Chair advised that amendments had been submitted to the Board Secretary in advance of the meeting. Following consideration, and on the motion of Mr David Gould, Vice Chair, seconded by Mr Jamie Kinloch BEM, Non-Executive Board Member, the Board approved the minutes as a full and accurate record of the meeting.		

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	<u>APPROVED</u>		
35.	Matters Arising		
	The Board considered the Rolling Action List [Paper No.26/31] presented by Mr Michael Breen, Director of Finance, for approval. Six actions were included within the Rolling Action List; three were proposed for closure and three remained ongoing. The following updates were noted: Item 162 – IJB Whole System Report The action was to remain ongoing. The Board acknowledged progress in relation to the Integrated Performance and Quality Report (IPQR), however noted that further development is required in respect of whole system reporting. It was noted that, upon completion, the action will require formal sign-off by the Director of Finance and Ms Michelle Wailes, Non-Executive Board Member. Item 12b – Communications and Public Engagement Update The Board noted that engagement with Non-Executive Directors is underway. Following consideration, the Board approved the Rolling Action List. <u>APPROVED</u>		
36.	Chair's Report		
	The Chair advised that she had completed a report of her activities since the last Board meeting, which will be published on the NHS GGC website. The report provides an overview of key engagements, including visits to services and facilities across NHS GGC, engagement with staff and partners, and participation in events showcasing innovation and service development. It also includes a forward plan of upcoming visits and a summary of meetings attended. The Chair paid tribute to Mr William Edwards, Deputy Chief Executive and Chief Operating Officer, and congratulated him on his appointment as Chief Executive of NHS Fife. While his tenure as a Board Member had been relatively short, the Chair noted his longstanding contribution through regular attendance at Board meetings in his Chief Operating Officer capacity. The Chair formally thanked Mr Edwards for his commitment and professionalism and wished him every success in his new role.		

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	The Chair highlighted two recent visits undertaken. The first visit, to the Decontamination Unit, was attended with Board Members Ms Margaret Kerr and Ms Michelle Wailes. The visit was noted to be highly informative, providing valuable insight into an area of service not previously familiar to participants. The Chair expressed thanks to Mr Billy Hunter, Deputy Director, Corporate Facilities and Estates; Ms Stephanie McLean, Deputy Decontamination Manager; and Mr Sammy Gilchrist, Production Manager, for facilitating the visit. The Board recognised the critical role of the Decontamination service in supporting effective and efficient operating theatre activity, and commended the care and diligence demonstrated in ensuring the availability of surgical equipment. Potential improvement opportunities were discussed, including options to streamline processes, which will be progressed with Mr Russell Coulthard, Interim Chief Operating Officer/Deputy Chief Executive. At the invitation of UNISON and Ms Ann Cameron Burns, Employee Director, the Chair also attended a Memorial Day event at the Royal Alexandra Hospital (RAH). A commemorative bench, crafted by Shettleston Men's Shed, has been installed in memory of workers who lost their lives in the course of service. The Chair expressed her thanks to UNISON for the invitation to attend this event. The Board noted the report. <u>NOTED</u>		
37.	Chief Executive's Report		
	The Chief Executive, Professor Jann Gardner, provided an overview of key activities undertaken since the last Board meeting. Professor Gardner reported on recent engagement activity, including a visit on 4 March 2026 to the Queen Elizabeth University Hospital (QEUH) by the Cabinet Secretary, accompanied by the Chief Executive and Professor Sir Lewis Ritchie. The visit included a tour of the Bone Marrow Transplant Unit, as well as water and ventilation areas, providing an opportunity to review improvement works undertaken and to discuss ongoing challenges. The Board One-Year Summit was held on 12 March 2026, reflecting on performance over the previous financial year. The Board noted significant improvements achieved during 2025/26, including increased capacity within Planned Care, progress in addressing long waiting times, and positive developments in Interface working and the Flow Navigation Centre.		

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	Professor Gardner also highlighted wider engagement activity, including attendance at the Health and Social Care Transformation Conference on 12 March 2026. The NHS Scotland Chief Operating Officer, Ms Christine McLaughlin, visited the QEUH on 20 March 2026, and the Cabinet Secretary visited on 25 March 2026 to mark the launch of neonatal blood testing for Spinal Muscular Atrophy (SMA). The Chief Medical Officer, accompanied by colleagues from Denmark, also visited NHS GGC, providing an opportunity to showcase the innovative and pioneering work being delivered by clinicians across the Board. The Chief Executive reported that the Safety and Public Confidence Oversight Group has now been established, with further detail to be provided under item 8 of the agenda. An initial draft of the Sub-National Plan has been developed. This represents an early stage of planning, with further work required to develop collaborative approaches across 2026/27. In relation to Executive Team changes, Professor Gardner advised that Mr Russell Coulthard has taken up post as Interim Chief Operating Officer for an initial six-month period. Mr Coulthard and Mr Michael Breen, Director of Finance, have also been appointed as Deputy Chief Executives for the same period. Mr Alan Wilson has been appointed as Director of Estates and Facilities and will take up post on 5 May 2026, and Mr Alistair Graham has been appointed as Director of Digital Services and will commence on 18 May 2026. Finally, the Chief Executive reported that a number of Planned Care meetings have taken place across the West of Scotland. The Board noted that the Scottish Government will continue to prioritise this area and that the objectives set for 2025/26 have been achieved, with a number of targets exceeded. The Board noted the update. <u>NOTED</u>		
38.	Patient Story		
	OPAT Awareness Video and Update The Nurse Director, Professor Angela Wallace, introduced a short awareness video highlighting NHS Greater Glasgow and Clyde's Outpatient Parenteral Antimicrobial Therapy (OPAT) service. The Board noted the continued progress in relation to the Virtual Hospital model and the benefits this approach offers to patients. The Board Medical		

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	Director, Dr Scott Davidson, commented that accessing healthcare services can often be complex and emphasised the importance of simplifying pathways wherever possible. OPAT was recognised as a strong example of this approach, enabling patients to receive treatment in their own homes. It was noted that 82 patients are currently receiving therapy through the service, demonstrating its value in practice. The Chair expressed thanks to Dr Neil Ritchie, Consultant Physician, for his contribution to the video, and to Professor Wallace and Dr Davidson for their leadership in this area. The Board noted the update. <u>NOTED</u>		
39.	Safety and Public Confidence Oversight Group		
	The Board considered the Safety and Public Confidence Oversight Group (SPCG) update [Paper 26/32] presented by the Chief Executive, Professor Jann Gardner, and Professor Sir Lewis Ritchie, for awareness. The Chair welcomed Professor Sir Lewis Ritchie to the meeting. The Board noted that the SPCG has been established to ensure a clear understanding of the current landscape, provide transparency in relation to key safety issues, and strengthen public and staff confidence. The Group is co-chaired by Professor Gardner and Professor Sir Lewis Ritchie, with membership including family representatives, Executive colleagues, and external partners from across the wider NHS system. Draft Terms of Reference have been agreed, with reporting arrangements confirming that updates will be provided to the Board and onward to the Scottish Government Assurance Group. A Phase 1 workplan has been developed, focused on three core areas: • Engagement with families, patients and staff to understand concerns and incorporate learning; • Review of the technical environment and associated workstreams; and • Strengthening of professional relationships and organisational culture. Delivery of Phase 1 is anticipated by the end of June 2026. The Board received an update on the Options Appraisal and Risk Assessment for interim arrangements for Ward 4B, pending development of a new Bone Marrow Transplant Unit. This has been undertaken in line with the Scottish Capital Investment Manual, incorporating multidisciplinary input		

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	across NHS GGC and external expert advice, with options assessed against agreed criteria. Subject to finalisation, the report will be considered by the Corporate Management Team and Clinical and Care Governance Committee prior to submission to the SPCG. The Board noted that interim operational arrangements remain in place, including daily Gold, Silver and Bronze Command structures, with no new concerns identified. Infection Prevention and Control input has been integral to the assessment, with current findings supporting continued on-site provision while work progresses at pace on the development of a full Business Case for a new unit. The Board received assurance in relation to programme governance, resourcing, and the use of external expertise, including the establishment of an internal PMO structure. It was noted that the Phase 1 work and the interim Options Appraisal are distinct from the full Business Case, which will be developed and presented to the Board in due course in line with established governance processes. The Chair confirmed that a further update will be presented to the Board in June 2026, including an indicative timeline and the process for establishing the permanent unit. The Board was assured by the update. <u>ASSURED</u>		
40.	Board Activity Update		
	The Board considered the Board Activity Update [Paper 26/33] presented by Mr Michael Breen, Director of Finance, for awareness. Mr Breen provided an overview of key internal and external activities undertaken since the previous Board meeting. This included the One-Year Summit held on 12 March 2026, visits to the Decontamination Unit on 20 March 2026, a Board Link visit to Glasgow Dental Hospital on 21 April 2026, three Ministerial visits, and visits to the Flow Navigation Centre Plus (FNC Plus). The Board noted the update. <u>NOTED</u>		
41.	Key Updates from Standing Committees		
	The Board considered the Key Updates from Standing Committees [Paper 26/34] presented by Mr Michael Breen, Director of Finance, for awareness.		

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	Mr Breen advised that three Standing Committees had met during the reporting period. The report was presented alongside Committee Chair reports and minutes, providing an overview of the range of activity and key matters considered since the previous Board meeting.		
	The Board noted the update.		
	<u>NOTED</u>		
42.	Governance and Board Member Responsibilities - Update		
	The Board considered the Governance and Board Member Responsibilities update [Paper 26/35] presented by Mr Michael Breen, Director of Finance, for approval.		
	Mr Breen outlined a number of updates to Board membership. Councillor Colette McDiarmid resigned from the Board on 26 March 2026, and a replacement member from East Dunbartonshire Council is awaited. Professor Iain McInnes' term as a Board Member concluded on 31 March 2026, with a new University representative to be confirmed.		
	The Board also noted that Mr William Edwards stepped down as Deputy Chief Executive on 17 April 2026 to take up the post of Chief Executive at NHS Fife. It was further noted that two Interim Deputy Chief Executives have been appointed for an initial six-month period.		
	In relation to Committee membership, the Board approved the replacement of Mr Charles Vincent, Non-Executive Board Member, with Ms Lesley McDonald, Non-Executive Board Member, on the Glasgow City Integration Joint Board. The Chair thanked Mr Vincent for his service on the IJB.		
	Following consideration, the Board approved the Governance and Board Member Responsibilities update.		
	<u>APPROVED</u>		
43.	Board Annual Cycle of Business		
	The Board considered the Board Annual Cycle of Business [Paper 26/36] presented by Mr Michael Breen, Director of Finance, for approval.		
	The Board noted that the Annual Cycle of Business sets out the proposed schedule of topics and key business for 2026/27, including alignment to Corporate Objectives. It was also recognised that the Cycle maintains sufficient flexibility to reflect the evolving operating environment and ensure that emerging issues can be brought forward as required.		

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	Following consideration, the Board approved the Annual Cycle of Business.		
	APPROVED		
44.	Communication and Public Engagement Update		
	The Board considered the Communication and Public Engagement Update [Paper 26/37] presented by Mr Neil McSeveny, Interim Director of Communications, for awareness. Mr McSeveny outlined key communications and engagement activity since the previous meeting. This included the introduction of patient experience feedback on the Discharge to Scan pathway, with further pathways, including OPAT and others, to follow. Feedback from 360 respondents was broadly positive, demonstrating support for the model of care; however, issues relating to digital confidence and perceived service readiness were identified. Further focus group engagement is underway to better understand these concerns and inform ongoing development, with outputs feeding into the wider Communications Strategy. The Board noted that feedback through Care Opinion had increased by 12%, with an overall positive response rate of 80%. A total of 125 teams across the organisation have been supported to strengthen engagement approaches, alongside the introduction of new bite-sized learning resources to build capability. Digital communication channels continue to perform strongly, with website usage reaching 7.5 million visits, exceeding expectations and reflecting both increased campaign activity and effective signposting to key health information, including vaccination, screening, and access to urgent care services. Enhancements to subscription and newsletter functionality were also noted as supporting improved audience reach and engagement. In response to a question on social media reach and click-through rates, Mr McSeveny advised that engagement metrics such as reach and impressions indicate audience interaction, while website analytics provide insight into traffic and conversion The Board noted a suggestion to introduce a website prompt enabling users to sign up for campaign information, with the option to opt in or out. Mr McSeveny agreed to explore this with the Web Team. A question was posed regarding the use of Artificial Intelligence (AI) in supporting public access to health information. The Board noted that it would welcome a clearer overview of how AI could be utilised within NHS GGC to support access to accurate and trusted information.		Mr McSeveny

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	It was agreed that a dedicated Board briefing session will be scheduled to provide an overview of current use and future opportunities. Mr McSeveny reported that the 2025/26 vaccination campaign was the largest delivered to date, developed in partnership with Public Health colleagues, comprising extensive activity across digital and print media. Visits to the Vaccination Web Hub increased by 60%, and uptake improved across most eligible groups. However, increasing uptake remains a challenge, particularly within Care Homes, with further work underway to understand barriers and inform targeted, evidence-based communications. In response to questions, the Board was assured that improving Care Home uptake remains a priority. Dr John O'Dowd confirmed that work is ongoing with partners to address vaccine hesitancy through targeted messaging, countering misinformation, and locally tailored engagement, including direct work with Care Homes. In addition, and in response to a question around other groups requiring a targeted vaccination approach, the Board also noted that communications are being developed for specific groups, including younger populations and students, supported by digital channels and partnership working with universities. The Board noted that targeted communications are also being developed for specific groups, including younger populations and students, supported by digital channels and partnership working with universities. It was recognised that relatively small increases in vaccination uptake can represent significant improvement. The importance of maintaining public confidence through clear, evidence-based communication was emphasised. The Chair noted that further detailed consideration of vaccination performance is being undertaken through the Population Health and Wellbeing Committee, with an update to be provided to a future Board meeting. The Board noted the update. NOTED		Ms Neilson Dr O'Dowd
45.	Corporate Risk Register		
	The Board considered the Corporate Risk Register [Paper 26/38] presented by Mr Michael Breen, Director of Finance, for assurance. Mr Breen presented the regular update on the organisation's risk profile for the period January to February 2026. The Board noted that the Corporate		

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	Risk Register continues to be reviewed and updated on a monthly basis through Risk Owners and the Corporate Management Team, with each risk aligned to a Standing Committee for detailed scrutiny. The Board noted positive movement across the risk profile, with 11 risks reducing in score, eight remaining unchanged, and one risk closed in relation to recruitment and retention. A new risk has been added relating to the Reduced Working Week and the sustainability of capital funding over the medium to long term. The Board further noted that Risk 3816, relating to Public Inquiries, is currently under review to ensure ongoing relevance and appropriate mitigation, with a further update to be provided following consideration by Finance, Planning and Performance Committee in May 2026. The Board was assured by the Corporate Risk Register. <u>ASSURED</u>		Mr Breen/Ms Heenan
46.	Transforming Together		
	a) Transforming Together – GGC Way Forward Portfolio Report		
	The Board considered the Transforming Together – GGC Way Forward Portfolio Report [Paper 26/39] presented by Ms Claire MacArthur, Director of Planning, for assurance. Ms MacArthur reported that all programmes remained on track and continued to deliver against key milestones as at the end of February 2026. The Board noted that winter pressures were managed through the opening of 48 additional beds and a system support exercise in March 2026 to improve flow, performance and patient safety. Significant progress was highlighted across programmes. Virtual Hospital capacity increased from 217 to 271 patients, with further pathway expansion underway. Within Whole System Flow, delayed discharge performance remained close to target, with 242 patients delayed against a target of 239. Primary Care dashboard engagement increased to 110 GP practices (49%), providing improved insight into demand and access. Operational improvements were also noted, including the completion of additional nursing recruitment in Clyde, introduction of General Medicine Hot Clinics in the North, and progress towards the June 2026 opening of the Cardonald GP Walk-in Centre. The Electronic Triage Programme in Emergency Departments is advancing, with rollout imminent.		

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	In Planned Care and Cancer pathways, improvements were supported by workforce expansion and utilisation of the Independent Sector, including 123 patients seen through the Transperineal Biopsy Pathway. In Mental Health, expansion of the Clozapine pathway within the Virtual Hospital has been achieved. In Women and Children's services, Hospital @ Home activity remained stable, with 265 paediatric admissions to date and sustained neonatal activity averaging 31 patients per month. Maternity recruitment has progressed, with 30 of 34 additional midwives in post. Ongoing service redesign and triage improvements were noted, alongside development of a new diagnostic pathway for post-menopausal bleeding. In response to questions, the Board noted that evaluation of system flow initiatives is nearing completion and will inform the embedding of new models of care. It was recognised that innovation, including virtual care models, will support changes to traditional service delivery. Consideration of the estate will focus on optimising utilisation. The Board was assured by the report. <u>ASSURED</u>		
	b) Innovation Overview (Video)		
	The Board received a short video introduced by Dr Scott Davidson, Medical Director, outlining the use of mixed reality technology in spinal surgery. The Board noted that the technology enables three-dimensional imaging to be overlaid directly onto the patient during procedures, supporting enhanced visualisation and surgical precision. It was highlighted that NHS GGC is the first centre in the UK, and one of only three globally, to adopt this approach, reflecting the organisation's commitment to innovation and improving patient outcomes. The Board recognised the potential benefits in terms of surgical accuracy, patient safety and clinical outcomes. The Chair thanked Dr Davidson for the update and extended thanks to Dr Mohamed Abdelsadg, Consultant Surgeon, for his contribution to the video. <u>NOTED</u>		

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47.	NHS GGC Finance Report – Month 11		
	The Board considered the NHS GGC Finance Report [Paper 26/40] presented by Mr Michael Breen, Director of Finance, for assurance. Mr Breen reported that, at Month 11 (28 February 2026), the Board was reporting a net overspend of -£1.2m, an improvement from -£3.9m at Month 10. This position reflects a £65.1m overspend within Acute services, offset by a £63.9m underspend in corporate services. It was noted that some corporate allocations relate to Acute income and will be refined as reporting transitions into 2026/27. Combined Partnerships reported a breakeven position following the application of reserves. The Board noted a continued positive trajectory in financial performance, with sustained improvement between Months 9, 10 and 11, and a forecast year-end breakeven position. This reflects both delivery of planned savings and the effective deployment of non-recurring measures to stabilise the in-year position. In relation to the Sustainability and Value (S&V) programme, £152.0m (69.8%) of the £217.8m financial challenge had been delivered by Month 11. On a recurring basis, £29.8m (31.8%) of the £93.7m target had been achieved, with further work required to strengthen the underlying recurring financial position. Capital expenditure at Month 11 totalled £57.5m, representing 62% of the £89.9m allocation. The Board noted that the majority of the capital programme had been committed through firm orders or spend, with delivery of the full allocation anticipated by year end. The Board further noted that projected Month 12 outturn indicates that NHS GGC is expected to meet key Scottish Government financial requirements, with both revenue and capital positions forecast to be within Core Resource Limits. In response to a question regarding Scottish Government funding, the Board noted that additional funding has supported planned care and unscheduled care improvements during 2026/27. No funding gap has been assumed within the 2026/27 financial plan in line with Scottish Government planning assumptions; however, this remains an area of risk pending confirmation of recurring funding levels to support agreed recurring initiatives.		

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	The Chair thanked Mr Breen and the Finance team for the progress achieved in improving the financial position at Month 11 and welcomed the forecast break-even outturn at 31 March 2026. The Board was assured by the update. <u>NOTED</u>		
48.	Integrated Performance and Quality Report (IPQR) including Cancer Update		
	The Board considered the Integrated Performance and Quality Report (IPQR), including the Cancer Update [Paper 26/41], presented by Mr Michael Breen, Director of Finance/Interim Deputy Chief Executive, and Mr Russell Coulthard, Interim Chief Operating Officer/Interim Deputy Chief Executive. Mr Breen presented the latest iteration of the IPQR, which covered the period to February 2026 unless otherwise stated. He reported that 22 performance measures were rated Green, 9 Amber, and 13 Red. The Red-rated measures predominantly related to Delayed Discharges and performance against the four-hour Emergency Department target, both of which continued to reflect sustained system pressures across acute and community services. In response to a query regarding long-term absence, Ms Natalie Smith, Interim Director of Human Resources and Organisational Development, advised that significant work was underway to address the position. Approximately 30% of long-term absence was attributed to psychological factors. A strengthened HR approach, including additional resource, was now in place to support managers with earlier intervention, improved case management and consistent application of policy, with improvement anticipated over the next 3–6 months. Mr Coulthard reported that additional MRI capacity had been secured, with further work progressing at both a local and regional level. Engagement with referring teams remained a key priority to better manage increasing demand and to ensure appropriate use of diagnostic capacity, supporting both access and flow through pathways. The Board noted that KPI measures continued to be reviewed, with further input to be incorporated as part of this process. Mr Breen confirmed that a full cycle of the IPQR process was nearing completion. Initial feedback indicated that the report was broadly meeting requirements in providing an integrated view of performance, although further refinement would be considered to enhance its value for Board oversight.		

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	Members requested, where possible, the inclusion of forward-looking information to strengthen alignment across related reports and provide a clearer line of sight between performance, planning and risk. In addition, members requested further development of patient experience reporting, including greater clarity on how available information would support continuous improvement. It was confirmed that work was underway to bring together relevant data in a more coherent and accessible format, and that these areas would be taken forward. Attendance management remained an area of concern, with no material reduction in absence levels noted. HR and Staff Side continued to work jointly to review and strengthen the implementation of reasonable adjustments to support staff to return to or remain in work. Survey feedback indicated that 80–90% of respondents reported that reasonable adjustments had been implemented. A focused deep dive would be undertaken through the People and Staff Governance Committee to provide additional assurance and identify further actions. While progress had been made in reducing overdue Significant Adverse Event Reviews (SAERs), a recent plateau was noted. Strengthened oversight arrangements were now in place through Local Adverse Event Oversight Groups and Corporate oversight mechanisms. This remained an area of sustained focus, with regular monitoring and escalation where required to ensure improvements in timeliness and quality. Statutory and mandatory training compliance stood at 89.3%, just below the 90% target. The Board noted updates to training requirements, including changes to the Fire Module frequency and the introduction of a Fraud Awareness Module, alongside ongoing work to support protected learning time within the context of wider workforce and service pressures. Mr Coulthard presented the Cancer Deep Dive, noting that 62-day cancer performance had fallen below the required standard in January 2026, prompting a review of data tracking, reporting and performance management arrangements. Improvement plans were now in place across tumour types, underpinned by strengthened oversight and increased focus on pathway management. Performance for March 2026 was reported at 76.7% (based on look-forward data), demonstrating improvement from February 2026 and increasing confidence in recovery trajectories. Early April 2026 data indicated further incremental progress. Improvements were particularly evident in colorectal and urology pathways, supported by enhanced use of data, including routine modelling by tumour group to better anticipate activity and manage performance risks. While challenges remained in breast and cervical pathways, trajectories had been established and targeted improvement actions were being progressed.		

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	Members also noted the positive trajectory in cancer performance, improving from 70% in February to 77% in March, with further improvement anticipated. The Chair recommended that the Cancer Deep Dive remain a standing agenda item to maintain focus and provide ongoing assurance to the Board. The Board welcomed the continued development and clarity of the IPQR, noting that it provided an increasingly coherent and integrated view of organisational performance and improvement. The Board approved the IPQR. <u>APPROVED</u>		
49.	Financial Plan 2026/27 to 2028/29		
	The Board considered the Financial Plan 2026/27 to 2028/29 [Paper 26/42] presented by Mr Michael Breen, Director of Finance, for assurance. Mr Breen reported that the Financial Plan submitted to the Scottish Government in March 2026 had been approved in full, with no amendments required. The Plan identifies a recurring 2026/27 financial gap of -£208.6 million, reflecting the ongoing structural mismatch between available resources and expenditure commitments. In 2026/27, additional income of £214.13 million, alongside associated expenditure of £200 million, results in a net £14 million improvement. Mr Breen outlined that the Board set a balanced financial position for 2026/27, contingent upon the successful delivery of £194.7 million in savings and value measures. Mr Breen emphasised that delivery at this scale represents a significant operational and financial challenge and will require sustained focus and oversight. The Financial Plan incorporates Scottish Government financial assumptions in full. The Financial Plan also includes an expectation that all Integration Joint Boards (IJBs) will achieve break-even positions within their allocated resources, despite the challenging financial environment. The Financial Plan also assumes receipt of the £41.3 million Capital Formula Allocation, together with other agreed capital funding to support priority investment. Full funding has also been assumed for both planned and unscheduled care (OIP) in line with Scottish Government guidance. Mr Breen noted that this area remains a risk in 2026-27 until funding		

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	confirmation from Scottish Government is received to cover the level of previously approved recurring expenditure from 2025-26. Further key assumptions include that Agenda for Change reform costs will be contained within the funding provided across the 3-year period, that no additional NRAC negative adjustments will be applied, and that inflationary pressures have been appropriately considered. In this context, energy costs are assumed to remain at a 0% increase, reflecting the current Scottish Government planning assumption, although this will continue to be subject to review given market volatility. In line with national guidance, no provision has been made for any new unfunded Scottish Government policy developments. Savings proposals totalling £194.7 million have been identified using the Scottish Government 15-box framework, supported by detailed analysis of NHS GGC's cost base and expenditure drivers. These proposals span a range of service and corporate areas and will require coordinated delivery across the organisation. A revised and strengthened approach to the Sustainability and Value (S&V) programme has been agreed by the Corporate Management Team. This includes a transition to a more formal programme management model, with an increased emphasis on transformational change and reduction in reliance on non-recurring measures. Investment has been made in additional HR capacity to support improvement in attendance and dedicated programme management resource to support delivery, enhance grip and control, and improve the achievement of recurring savings over the medium term. A key strategic priority within the Plan is the development of a medium-term Estates Strategy, with a clear objective to reduce the overall physical footprint of NHS GGC. This is intended to better align the estate with future service models, improve utilisation, and contribute to the delivery of financial sustainability. While a balanced position is planned for 2026/27, Mr Breen highlighted that the financial outlook for 2027/28 and 2028/29 remains highly challenging, with deficits currently projected in both years. This reflects the scale of the underlying recurring gap and reinforces the need for sustained transformational change. In response to questions, Mr Breen confirmed that potential impacts on drug costs arising from the situation in the Middle East are being actively monitored. A return has been submitted to the Scottish Chief Operating Officer, and at present no supply or pricing issues have been identified		

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	internally as cost pressures. Whilst suppliers have indicated underlying cost pressures, no pricing changes have been agreed to date, and this position will continue to be closely monitored.		
	Mr Breen further advised that significant preparatory work had been undertaken during the final quarter of 2025/26 to strengthen delivery arrangements for the S&V programme. This included ensuring that appropriate governance, capacity and programme infrastructure were in place to support implementation from the start of 2026/27.		
	The Board noted the update and took assurance		
	NOTED		
50.	Sustainability Strategy Annual Update		
	The Board considered the Sustainability Strategy Annual Update [Paper 26/43] presented by Ms Keira McLuskey, Head of Sustainability. Ms McLuskey advised that it is a requirement for all NHS Boards to produce an annual update to support transparent and comprehensive reporting against sustainability objectives. The report provides an overview of progress against the Board's sustainability ambitions and reflects ongoing alignment with national targets. Members noted that the overall position was positive, with a reported 3.6% reduction in emissions compared to the previous year. Progress had also been made in enhancing green space across the estate and advancing a range of sustainable development projects. Key areas of focus continue to include the decarbonisation of buildings, improvement in energy efficiency, and the strengthening of recycling and waste management infrastructure. It was noted that, subject to Board approval, the report will be formally submitted to the Scottish Government as part of the national reporting framework. In response to a question regarding the extent of staff engagement and the mechanisms available to drive behavioural change, Ms McLuskey described a mixed position across the organisation. While some areas are well engaged, others require additional support and targeted intervention. It was recognised that achieving sustained behaviour and culture change will take time and require ongoing leadership, engagement and reinforcement.		

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	Notwithstanding this, there is strong enthusiasm among a number of clinical teams, with some staff contributing beyond their core roles to support sustainability initiatives. Members acknowledged that the annual programme continues to deliver measurable benefits, both in terms of environmental impact and wider organisational value. The Parkhead Hub was highlighted as a leading example, demonstrating how purpose-designed infrastructure can support new models of care, enhance patient and staff wellbeing, and promote integrated working with local communities. The facility was recognised as a tangible expression of the Board's commitment to sustainability and service users, and as a model to inform future developments. The Board approved the report. <u>APPROVED</u>		
51.	Healthcare Associated Infection Report Template (HAIRT)		
	The Board considered the Healthcare Associated Infection Report (HAIRT) [Paper 26/44], presented by Professor Angela Wallace, Nurse Director, for assurance. Professor Wallace provided an overview of performance against the Scottish Government Standards on Healthcare Associated Infections Indicators (SGHAI), including Staphylococcus aureus bacteraemia (SAB), Clostridioides difficile infections (CDI), E. coli bacteraemia (ECB), alongside incidents, outbreaks, and wider Healthcare Associated Infection (HCAI) activity across NHS GGC for January and February 2026. It was noted that NHS GGC's performance compared favourably with other Boards across Scotland, with consistently high compliance in relation to hand hygiene. A detailed deep dive on hand hygiene performance had recently been presented to the Clinical and Care Governance Committee. The Board noted that there had been one incident during the reporting period involving a small number of patients. Ongoing work through the Improvement Network was highlighted, with continued local engagement and a positive response from staff. It was also confirmed that further work had been undertaken to align HAIRT reporting with the Integrated Performance and Quality Report (IPQR). Professor Wallace explained that a small number of epidemiologically linked cases (less than 3) were identified within a ward, with patient overlap		

			Action
	between 6 and 7 February 2026, confirming cross-transmission. Immediate control measures were implemented. To assure care, targeted audits identified deficiencies in Standard Infection Control Precautions (SICPs) and Hand Hygiene compliance, which were addressed through immediate action plans, estates remediation and enhanced ward-level IPC education. The incidents HIIAT was initially scored at Red and subsequently downgraded to Green and formally closed following evidence of effective control and no further cases. The Board were assured by the report provided. <u>ASSURED</u>		
52.	Disposal of West Glasgow Ambulatory Care Hospital Site (Update)		
	The Board considered the Disposal of West Glasgow Ambulatory Care Hospital Site (Update) [Paper 26/45] presented by Professor Tom Steele, Director of Strategic Infrastructure Planning and Delivery. Professor Steele provided an overview, noting that the WGACH site had been formally declared surplus to requirements following the relocation of services. In line with statutory requirements, the Scottish Government internal trawl process had been completed, during which the site was offered across the wider public sector. No expressions of interest were received, enabling NHS GGC to progress to the next phase of disposal via the open market. The Board noted that preparatory work to support disposal was well advanced, with a range of professional property and planning advisers appointed. Consistent with the NHS Scotland Property Transactions Handbook, a marketing brochure would be prepared to support the disposal process. Professor Steele confirmed that engagement with a range of stakeholders would continue, and that potential future uses of the site would be considered in the context of its importance to the local community. In response to a query regarding engagement with Glasgow City Council and whether further detail on potential future use would be presented to the Board, Professor Steele confirmed that responsibility for determining future use of the site rests with the Planning Authority. While NHS GGC is not in a position to direct the end use of the site, ongoing dialogue with stakeholders would help inform the planning process.		

			Action
	The Board emphasised the importance of recognising the site's historical significance and requested that this be appropriately reflected in the final approach. Professor Steele referred to the emerging masterplan, which includes provision for green space. Discussions had included the potential for a memorial garden, although it was suggested that commemorative elements could be incorporated within the wider green space, subject to further engagement with the community and the appointed developer. In response to a question on community engagement, the Board noted that the Communications Department was leading this work. A range of options were being considered, including providing members of the public with an opportunity to access parts of the site prior to enclosure and prior to development. The Chair highlighted that the development of the site would be progressed through an appropriate and proportionate governance process over an extended period. It was requested that the next paper to the FPPC clearly set out the proposed disposal arrangements, including the key points at which Committee input and approval would be required. The Board noted that a further paper would be submitted to the Finance, Planning and Performance Committee (FPPC). The Board were content to approve the report. <u>APPROVED</u>		Prof Steele
53.	Stakeholder Communications and Engagement Strategy 2024-27 Annual Impact Report		
	The Board considered the Stakeholder Communications and Engagement Strategy 2024-27 Annual Impact Report [Paper 26/46] presented by Mr Neil McSeveny, Deputy/Interim Director of Communications, for assurance. The report provided a comprehensive overview of progress in delivering NHS Greater Glasgow and Clyde's Stakeholder Communications and Engagement Strategy 2024–2027 during year two (2025–2026), building on the foundations established in year one and continuing implementation of the Strategy approved by the Board on 30 April 2024. Mr McSeveny reported that the majority of actions were either completed or on track, with appropriate mitigations in place for a small number of areas where progress had not yet been possible. The paper highlighted the role of communications in delivering public-facing campaigns aligned to organisational priorities. This included winter communications to reinforce urgent and unscheduled care messaging at		

			Action
	scale, supporting system resilience during periods of peak demand, alongside delivery of vaccination campaigns. The report also set out the scale and depth of engagement activity undertaken and the volume of communications delivered across services. It was noted that the OASIS framework had been embedded within campaign delivery to strengthen evaluation. Mr McSeveny advised of a correction within the report, confirming that website page views totalled 7.5 million rather than the 5.8 million stated. This represented a 60% increase, as opposed to the 21% originally reported. In summary, Mr McSeveny highlighted that the report demonstrated significant, measurable delivery, with clear alignment to organisational priorities. In discussion, Members reflected on the importance of evidencing impact and requested that future reports further strengthen the articulation and measurement of outcomes arising from communications activity. The Board noted the RAG reporting in the appendix detailed areas that were behind schedule. This included considering other languages more generally, noting the number of patients for whom English was not a first language and assurance was sought that this had been taken into account in planning and delivery. Mr McSeveny reported that a widget had been added to the website for front facing communications to be translated, however further work on languages was required. In relation to the Citizens' Panel, the Board sought clarification on the timeline for establishment. Mr McSeveny agreed to provide further detail out with the meeting. The Board were assured by the update provided. <u>ASSURED</u>		Mr McSeveny Mr McSeveny
54.	NHS GGC Duty of Candour Annual Report Addendums: 2023-24 and 2024-25		
	The Board considered the NHS GGC Duty of Candour Annual Report Addendums: 2023-24 and 2024-25 [Paper 26/47] presented by Dr Scott Davidson, Board Medical Director and Ms Paula Spaven, Director of Clinical and Care Governance for approval. Ms Spaven advised that NHS GGC publishes an annual Duty of Candour report, with the most recent report approved by the Board in October 2025		

			Action
	and subsequently published. As noted within that report, an addendum was scheduled for later publication to incorporate updated information, including newly triggered Duty of Candour cases and those which remained open at the time of the original report. It was confirmed that the 2023–24 addendum had been submitted retrospectively to ensure appropriate governance and completeness of reporting. The Board noted that further work is underway to strengthen the quality and consistency of reporting, including improved information on Duty of Candour activation, learning from events, and support provided to staff. Ms Spaven highlighted that the reported increase in case numbers reflects a refinement in the retrospective identification of Duty of Candour requirements following completion of Significant Adverse Event Reviews (SAERs). Work is in progress to improve the timeliness of SAERs and to introduce a prospective Duty of Candour tracking system through Datix. The Board recognised that the reported activity levels were consistent with the scale and complexity of NHS GGC. Members noted that actions arising from Duty of Candour incidents are managed through Significant and Local Adverse Event Review processes and tracked to completion within Datix, with overdue actions appropriately flagged. Oversight is provided by the Corporate Adverse Event Oversight Group, with assurance reported through the established governance structure, including the Board Clinical Governance Forum. In response to discussion regarding organisational learning, Ms Spaven outlined ongoing work to develop a Board-wide learning system. This will integrate learning from adverse events, complaints, and wider quality improvement and safety processes. A searchable template and Learning Hub are in development to support consistent capture and dissemination of learning. Arrangements are also being introduced to report both detailed insights and thematic trends to the Clinical and Care Governance Committee. The new system and Learning Hub are expected to be launched in summer 2026. The Board were content to approve the paper. <u>APPROVE</u>		

			Action
55.	Department of Research and Innovation Annual Report 2025		
	The Board considered the Department of Research and Innovation Annual Report 2025 [Paper 26/48] was introduced by Dr Scott Davidson, Board Medical Director and presented by Professor Jesse Dawson, Director of Research and Innovation, for assurance. Professor Dawson provided a comprehensive overview of key achievements and activity during 2025, alongside outlining areas of recognised strength and strategic priorities for the year ahead in support of the Board's wider objectives. In presenting the report, Professor Dawson highlighted the continued emphasis on improving productivity in commercial clinical trials, reflecting this as a key national priority across the UK. Significant targeted investment had been made to support this objective, including enhancements to imaging facilities and the expansion of aseptic pharmacy services. These developments are intended to underpin the delivery of the next generation of novel clinical trials, particularly within oncology and other high-impact therapeutic areas, and to ensure that NHS GGC remains competitive within the UK research environment. Encouragingly, recruitment to clinical trials had increased by 15% compared to the previous year, accompanied by improved revenue performance and a strengthening of the overall commercial portfolio. Professor Dawson expressed confidence that this positive trajectory would continue and noted that the full benefits of recent investment were expected to be realised over the coming year, further enhancing both patient access and financial sustainability. The Board also noted the significant and ongoing work undertaken to ensure that the Research and Innovation portfolio is fully aligned with wider Board objectives and the Transforming Together Programme. This has included a strengthened focus on delivering research within community settings, ensuring that Primary Care is both fully embedded within, and increasingly leading, research activity. This approach supports improved inclusion, enhances access to research opportunities, and targets conditions that have a disproportionate impact on the population of Glasgow. Particular progress was noted in developing capacity to support the next generation of obesity and cardiometabolic trials, alongside continued investment in the oncology research portfolio, which remains one of the most extensive and diverse in the UK. This breadth of activity continues to position NHS GGC as a leading centre for clinical research and innovation.		

			Action
	The Chair acknowledged the significant progress made and the strategic direction of travel, and conveyed appreciation to Professor Dawson and the wider team for their continued contribution, leadership, and delivery of a high-performing research portfolio. The Board were content to approve the report. APPROVED		
56.	Health & Care (Staffing) (Scotland) Act 2019 (HCSSA) Annual Report		
	The Board considered the Health & Care (Staffing) (Scotland) Act 2019 (HCSSA) Annual Report [Paper 26/49] introduced by Professor Angela Wallace, Director of Nursing, and presented by Ms Helena Jackson, Head of HCSSA Programme, for approval. Ms Jackson reported that this was the second legislated Annual Report under the HCSSA. She noted that previous feedback provided to the Scottish Government regarding the report format had been incorporated, resulting in a significantly improved presentation. It was noted that NHS GGC currently remains at a position of reasonable assurance; however, progress is being made towards achieving substantial assurance across a number of statutory duties. This work will continue over the coming years. One of the original programme workstreams has been escalated and established as a standalone programme, Workforce Business Systems. This programme will support the transition from reasonable to substantial assurance by enhancing oversight and enabling improved real-time staffing information, including more robust reporting on protected learning time. Ms Jackson highlighted that the care-related elements of the report were submitted directly by the Integration Joint Boards to the Scottish Government in June 2025. However, whole-system working with Integration Joint Board colleagues continues to further develop and strengthen this approach. It was noted that transitional oversight arrangements have now been completed. Approval has been granted to stand down the Oversight Board, with reporting arrangements now partially embedded within business-as-usual processes. The Board were content to approve the report. APPROVED		

			Action
57.	Area Clinical Forum		
	The Board considered the following for assurance: a) Chair's Report from Meeting 16 April 2026 [Paper 26/50] b) Minutes from Meeting 12 February 2025 [ACF(M)26/01] The Board were assured by the report. <u>ASSURED</u>		
58.	Audit and Risk Committee		
	The Board considered the following for assurance: c) Chair's Report from Meeting 19 March 2026 [Paper 26/51] d) Minutes from Meeting 2 December 2025 [ACF(M)25/05] The Board were assured by the report. <u>ASSURED</u>		
59.	Clinical and Care Governance Committee		
	The Board considered the following for assurance: e) Chair's Report from Meeting 5 March 2026 [Paper 26/52] f) Minutes from Meeting 4 December 2025 [ACF(M)25/04] The Board were assured by the report. <u>ASSURED</u>		
60.	Finance Planning and Performance Committee		
	The Board considered the following for assurance: a) Chair's Report from Meeting 25 March 2026 [Paper 26/53] b) Minutes from Meeting 26 January 2026 [FPPC(M)26/01] The Board were assured by the report. <u>ASSURED</u>		

			Action
61.	Population Health and Wellbeing Committee		
	The Board considered the following for assurance: a) Chair's Report from Meeting 23 April 2026 [Paper 26/54] b) Minutes from Meeting 22 January 2026 [PC(M)26/01] The Board were assured by the report. <u>ASSURED</u>		
62.	People and Staff Governance Committee (PSGC)		
	The Board considered the following for assurance: a) Chair's Update [Paper 26/55] The Board were assured by the report. <u>ASSURED</u>		
63.	Inquiries Oversight Sub Committee (IOSC)		
	The Board considered the following for assurance: a) Chairs Report from Meeting 24 March 2026 and 23 April 2026 [Paper 26/56] The Board were assured by the report. <u>ASSURED</u>		
64.	IJB Leads Reports		
	The Board considered the following for assurance: a) East Dunbartonshire Paper [26/57] b) East Renfrewshire Paper [26/58] c) Glasgow City Paper [26/59] d) Inverclyde Paper [26/60] e) Renfrewshire Paper [26/61] f) West Dunbartonshire Paper [26/62] The Board were assured by the reports. <u>ASSURED</u>		

			Action
65.	Date and Time of Next Scheduled Meeting		
	The next meeting will be held on Thursday 25 June 2026 at 9.30 am, on a hybrid basis at JB Russell House and via MS Teams. In closing, the Chair reflected that the value of Board meetings is underpinned by the quality of the papers presented. The Chair extended thanks to the Chief Executive and colleagues for the consistently high standard of documentation. She also acknowledged the importance of Board Members thoroughly reviewing papers in advance and actively seeking further assurance where required and expressed her appreciation for their continued diligence in this regard. The Chair further noted that her role is to ensure that appropriate levels of assurance are in place. In this context, consideration has been given to how Board time is best utilised to maximise its effectiveness. It was therefore confirmed that, from the June meeting onwards, the scheduled timing for Board meetings will be extended to 9.30 am to 3.30 pm. <u>NOTED</u>		

NHS Greater Glasgow and Clyde	Paper No. 26/74
Meeting:	NHSGGC Board Meeting
Meeting Date:	25 June 2026
Title:	Safety and Public Confidence Group
Sponsoring Director/Manager:	Claire MacArthur, Director of Planning
Report Author:	Scott Wilson, Head of Business and Corporate Programmes

1. Purpose

The purpose of the paper is to provide an update on the progress of the Safety and Public Confidence Group (SPCG).

2. Executive Summary

The paper can be summarised as follows:

- The SPCG has continued to make significant progress across its three portfolios since the last Board update in April 2026, moving from initial discovery and planning into the delivery of agreed Phase 1 priorities.
- Key developments include the ongoing engagement with patients, families and staff, progression of activity relating to water, ventilation and the Adult Bone Marrow Transplant (BMT) options appraisal and risk assessment and work to strengthen professional relationships, leadership and organisational culture in infection control and microbiology.
- Phase 1 activity will continue through July and August 2026, with a structured programme of reporting, reflection and small group engagement to review emerging findings, test conclusions and inform recommendations.
- Governance arrangements remain robust, with regular SPCG meetings and fortnightly member updates. Small focus groups are also planned in July and August to allow time and space for deeper reflection and feedback on findings and outputs of each of the three portfolio workstreams.
- The SPCG continues to provide oversight, assurance and learning through transparent governance and communication arrangements.

3. Recommendations

The Board is asked to note the significant process outlined above as an update for its assurance.

This paper has been developed to provide assurance of the work of the SPCG to date and to highlight that the three portfolio workstreams provide a structured framework and risk-based approach to improving safety, assurance, engagement, and organisational culture.

4. Response Required

This paper is presented for assurance.

5. Impact Assessment

The impact of this paper on NHSGGC's corporate aims, approach to equality and diversity and environmental impact are assessed as follows:

• Better Health	<u>Positive</u> impact
• Better Care	<u>Positive</u> impact
• Better Value	<u>Positive</u> impact
• Better Workplace	<u>Positive</u> impact
• Equality & Diversity	<u>Positive</u> impact
• Environment	<u>Positive</u> impact

6. Engagement & Communications

The issues addressed in this paper were subject to the following engagement and communications activity:

- Initial SPCG update to the NHSGGC Board on 30 April 2026
- Regular updates to the SPCG through formal meetings and fortnightly updates
- Appendix 1 the Ward 4B Option Appraisal and Risk Assessment paper was considered at CMT, Acute Clinical Governance Forum and approved at the Finance Planning and Performance Committee in May. In addition it was shared for information with SPCG members at their May meeting.

7. Governance Route

This paper has been previously considered by the following groups as part of its development:

- As outlined above

8. Date Prepared & Issued

Date Prepared: 12 June 2026

Date Issued: 17 June 2026

NHS Greater Glasgow and Clyde	Paper No. 26/74
Meeting:	NHSGGC Board Meeting
Meeting Date:	25 June 2026
Title:	Safety and Public Confidence Oversight Group
Sponsoring Director/Manager:	Claire MacArthur, Director of Planning
Report Author:	Scott Wilson, Head of Business and Corporate Programmes

1. Introduction

The purpose of this paper is to provide the Board with an update on the work of the Safety and Public Confidence Oversight Group (SPCG) since the previous Board update on 30 April 2026.

The paper summarises progress across the three SPCG portfolios, outlines the next phase of reporting and reflection, and provides an update on the planned focus group approach.

2. Background and Remit

The Safety and Public Confidence Oversight Group (SPCG) has been established to strengthen safety, assurance and public confidence in the QEUH and RHC, with a particular focus on ventilation, water, infection control and communication.

The group is jointly chaired by Professor Jann Gardner and Professor Sir Lewis Ritchie, and includes independent experts, family representatives, executive and non-executive directors, and clinical leaders.

SPCG reports directly to the NHSGGC Board, with onward reporting to the Scottish Government's Chief Operating Officer NHS GCCs Safety and Assurance Oversight Group. A PMO and independent expert advisors are in place to support delivery and oversight.

The work continues to be delivered through three portfolios this paper provides an update of progress for each portfolio as follows:

- Public Confidence and Engagement
- Environment, Facilities and Technical Assurance
- Professional Relationships, Leadership and Culture

3. Progress Since April 2026

Since April, the SPCG has continued to progress its Phase 1 activity, across all three portfolios. The programme has moved from early discovery and workplan development into delivery of agreed priorities.

3.1 Portfolio 1 – Public Confidence, Engagement and Learning

The following section updates on each workstream in Portfolio 1.

3.1.1 Learning from Families

A patient and family experience survey has been issued to approximately 400 patients and families (current and recent adult Bone Marrow Transplant (BMT) and paediatric haemato-oncology cohorts). The questions focus on understanding key aspects of care experience and is designed to provide both valuable insight on past experiences and practical learning to inform future activity. Approximately 60 responses have been received to date, with further feedback anticipated prior to collating and reporting. Work is also progressing on gathering views and feedback from patients and families who have experience of the services over a more historic period.

Direct family and carer meetings are also underway, the one to one meetings (either in person and online) with the Independent Portfolio lead are an opportunity for people to share their experiences in more detail and they will support the development of anonymised thematic outputs that will be part of the portfolio 1 report and action plan. Around 20 individuals have already indicated an interest in the offer of a one-to-one discussion the meetings have commenced and thematic findings are being collated.

3.1.2 Learning from Staff

Staff engagement meetings are also progressing. The approach is intended to capture staff experience, operational challenges and opportunities for improvement, while recognising the complexity and sensitivity of the issues being considered.

3.1.3 Public Engagement & Communication

Public sentiment analysis work is also progressing with support from the Patient Experience and Public Involvement (PEPI) Team. Initial activity will be reported in July, with further follow up activity planned for later in the year.

During July and August, the focus will be on reporting findings, reflecting on outputs via the focus groups and developing an action plan.

3.2 Portfolio 2 – Environment, Facilities and Technical Assurance

Key assurance work across water, ventilation, infection control and BMT services has progressed. The key workstreams include:

- Completion of the BMT options appraisal and risk assessment, confirming Ward 4B with phased refurbishment as the preferred option pending the development of a new BMT unit – a summary paper is available in **Appendix 1**
- Completion of an External Authorising Engineer independent water audit
- Establishment of expert assessment groups to review systems, improvements and assurance arrangements
- Ventilation audits across paediatric and adult services
- Progression of the business case for a new Adult BMT Unit
- Development of a bottled water policy
- Development of an Environmental Compliance and Assurance Framework to provide a consistent approach to assurance across key risk areas.

Work across Portfolio 2 is complex and continues to evolve. This work is supported by a developing the evidence base, including literature review, audit data and expert input, to ensure a robust and proportionate approach.

During July and August, the focus will be on reporting findings, reflecting on outputs via the focus groups and developing an action plan.

3.3 Portfolio 3 – Professional Relationships, Leadership and Culture

Work is progressing to support improved professional relationships, leadership, culture and routes for escalation and resolution. This includes:

- Professional Relationships and Structures – engagement with clinical and professional groups including one to one and group meetings have taken place. Findings are being developed with the identification of actions to support collaboration, trust and strengthened working relationships
- Developing and implementing a new Professional Resolution Framework – work is underway to develop a Professional Resolution Framework, along with a standard operating procedure for its use and process.

The outputs from Portfolio 3 will inform a Portfolio 3 Action Plan and will also support cross-cutting learning from staff engagement undertaken through Portfolio 1.

4. Governance and Communication

The SPCG continues to operate with a focus on transparency and open communication, including:

- Regular SPCG meetings - the next meeting is on 02 July followed by 02 September, with the small focus groups running in between these meetings. These have been established to allow for additional time for reflection and feedback of findings due to the volume of information and importance on this work
- Agreed key messages are discussed and agreed at the end of every SPCG meeting – they are then published following each meeting. These key messages are agreed with all members of the SPCG
- Focus groups planned in July will provide a forum for the initial presentation of each portfolio's findings. Following this in August a second round of focus groups will support a further discussion of the work, this will allow time for reflective discussion, follow up any queries and feedback from SPCG members
- Fortnightly updates to SPCG members which outline the progression of work
- Ongoing engagement with families and stakeholders
- Updates published through the dedicated SPCG website

5. Next Steps

Phase 1 will continue through July and August 2026 with time built in to facilitate a period of reporting and reflection of the portfolio outputs. This will be enabled through the structured programme of focus groups involving SPCG members and stakeholders to review emerging findings, test conclusions and inform recommendations for the next phase of work.

The next steps are:

- Completion of Phase 1 outputs across all portfolios
- Delivery of small focus group engagement activity during July and August 2026 to consider the outputs from the three portfolios of work
- SPCG meetings will continue in July and September
- Development of portfolio action plans and supporting outputs
- Review of evidence and learning gathered through Phase 1.

This approach reflects a transition to a more focused and thematic engagement format and supports structured discussion of specific themes as Phase 1 work concludes. Governance, oversight and reporting arrangements will continue to be maintained throughout this period.

6. Summary

Significant progress has been made across all three portfolios, with Phase 1 work advancing in line with the agreed portfolio priorities.

The focus remains on providing clear oversight, assurance and learning, supported by appropriate governance and reporting arrangements.

Additional time has been created for Phase 1 to allow time for reflection and detailed feedback on the findings of the portfolio workstreams.

The next phase will support reflection on the evidence gathered, development of recommendations and preparation for Phase 2.

7. Recommendations

This paper is presented for assurance. Board members are asked to note the significant process outlined above as an update for its assurance.

APPENDIX 1

Ward 4B Option Appraisal and Risk Assessment

May 2026

Background

The Adult BMT & Cellular Therapy Service at Queen Elizabeth University Hospital requires a short-term relocation due to built environment issues in Ward 4B. An option appraisal following Scottish Capital Investment Manual principles was conducted through workshops with NHSGGC, ARHAI, and NSS colleagues beginning in March 2026, ensuring transparent decision-making. This interim solution will remain in place for at least two years while NHSGGC develops a new BMT Unit.

Option Appraisal and Risk Assessment Process

The option appraisal gathered input from over 20 NHSGGC multidisciplinary staff, NHS Scotland Assure, ARHAI, NSD commissioners, and seven independent external experts from NHS England and NHS Lothian. A long list of options was developed and then shortlisted based on ability to meet technical specifications, JACIE standards, capacity requirements, and deliverability as a short-term solution until the new BMT unit is built.

Shortlisted Options

The following options were taken forward for scoring:

- Option 1: Service Remains within Ward 4B with additional mitigations and measures
- Option 2a: Whole service remains within Ward 4B with a phased refurbishment
- Option 4a: Split site solution: QEUH & the Beatson West of Scotland Cancer Centre
- Option 4b: Split site solution: QEUH & NHS England

Scoring Process

The criteria used for the scoring included points below, which resulted in an average score across participants, and a weight score. Criteria used for the scoring included:

- Ability to access ITU critical care
- Ability to deliver environmental standards
- Ability to deliver service / JACIE standards
- Patient Access and Service Capacity
- Minimising service disruption
- Support safe staffing, staff retention and development of staff skills and expertise
- Timescale of delivery

Scoring from both the GGC multidisciplinary team and external expert panel identified Options 1 and 2a as preferred, with weighted scores of 747.6 (74.8%) and 744.8 (74.5%) respectively, a margin of just 0.3%. Sensitivity testing confirmed this result is robust and not driven by any single criterion, though external experts ranked Option 2a at 8.5% higher than Option 1. Options 4a and 4b ranked lowest and are not considered viable. Two rooms in Ward 4B are currently closed pending investigation, with a HAI SCRIBE process underway to support remediation.

Outcome

This appraisal balances competing risks rather than identifying a single optimal short-term solution. The preferred option is

- 2a: the whole service remains in Ward 4B with phased refurbishment

Further, GGC will ensure progression of a HAI SCRIBE for the two closed rooms and then a rolling refurbishment programme, while simultaneously advancing the business case for the new unit. NHSGGC will revisit this appraisal if further changes to the ward environment occur.

Governance

The Ward 4B Option Appraisal and Risk Assessment process was discussed at the NHSGGC Board in April and was formally approved by Acute Clinical Governance Forum, CMT, Finance, Performance and Planning Standing Committee in May. The approval will be noted at the next Board meeting on 30 June 2026. In addition the Ward 4B Option Appraisal and Risk Assessment process was shared for information with SPCG members at their ay meeting.

NHS Greater Glasgow and Clyde	Paper No. 26/79
Meeting:	NHS Board Meeting
Meeting Date:	25 June 2026
Title:	The Healthcare Associated Infection Reporting Template (HAIRT) for March and April 2026
Sponsoring Director/Manager:	Professor Angela Wallace, Executive Director of Nursing
Report Author:	Miss Natalia Hedo, IPC Surveillance Operations Manager

1. Purpose

The Healthcare Associated Infection Reporting Template (HAIRT) is a mandatory reporting tool for the Board to have oversight of GGCs performance with regards to the Scottish Government's Healthcare Associated Infection indicators; *Staphylococcus aureus* bacteraemias (SAB), *Clostridioides difficile* infections (CDI), *E. coli* bacteraemias (ECB), incidents and outbreaks and all other Healthcare Associated Infections' (HCAI) activities across NHS Greater Glasgow & Clyde (NHSGGC) in March and April 2026.

The full HAIRT will now be considered by the Clinical and Care Governance Committee on an ongoing basis with a summary being submitted to the NHS Board meeting.

2. Executive Summary

The paper can be summarised as follows:

- Scottish Government Standards on Healthcare Associated Infections Indicators (SGHAI) set for 2026 for SAB, CDI and ECB are presented in this report DL(2025)25. The agreed standard is that there should be no increase in the incidence (number of cases) of CDI, ECB, and SAB in the period between April 2025 and March 2026, from the 2023/2024 case numbers.
- In the most recently reported National ARHAI Data (Q4-2025) the HCAI SAB rate for NHSGGC was 17.9 which is within the control limits and below the national rate of 18.4. There were 29 healthcare associated SAB cases reported in March and 30 in April 2026, with the aim being 26 cases or less per month. We continue to support improvement locally to reduce rates via the Infection Prevention and Control Quality Improvement Network (IPCQIN) and local SAB Groups.
- In the most recently reported National ARHAI Data (Q4-2025) the HCAI ECB rate for NHSGGC was 36.6 which is within the control limits and below the national rate of 40.7. There were 58 healthcare associated ECB cases in March and 57 in April 2026. Aim is 51 cases or less per month.
- In the most recently reported National ARHAI Data (Q4-2025) the HCAI CDI rate for NHSGGC was 13.8 which is within the control limits and below the national rate of

14.2. There were 16 healthcare associated CDI cases in March and 22 in April 2026. The aim is 21 or less per month.

- The following link is the ARHAI report for the period of October to December 2025. This report includes information on GGC and NHS Scotland's performance for quarterly epidemiological data on *Clostridioides difficile* infection, *Escherichia coli* bacteraemia, and *Staphylococcus aureus* bacteraemia. [Quarterly epidemiological data on Clostridioides difficile infection, Escherichia coli bacteraemia, Staphylococcus aureus bacteraemia and Surgical Site Infection in Scotland. October to December \(Q4\) 2025 | National Services Scotland.](#)
- National SSI surveillance was paused in 2020 and remains paused for the foreseeable future. Local surveillance continues in the following procedures: caesarean section, hip arthroplasty and spinal and cranial surveillance in the INS.
- Clinical Risk Assessment (CRA) compliance was **94.4%** for CPE and **81.2%** for MRSA in the last validated reporting quarter (Q1 -2026). The standard is 90%. In Q1, NHS Scotland reported compliance of **86.9%** and **81.7%** respectively.
- The Board's cleaning compliance and Estates compliance are $\geq 95\%$ for March and April 2026.
- The 14th and the 15th editions of the IPCQIN newsletter have been published and included in the report.

3. Recommendations

The NHS Board is asked to consider the following recommendations:

- Note the content of the HAIRT report.
- Note the performance in respect of the Scottish Government Healthcare Associated Infection Indicators for SAB, ECB and CDI.
- Note the detailed activity in support of the prevention and control of Healthcare Associated Infections.

4. Response Required

This paper is presented for assurance.

5. Impact Assessment

The impact of this paper on NHSGGC's corporate aims, approach to equality and diversity and environmental impact are assessed as follows:

- | | |
|------------------------|------------------------|
| • Better Health | <u>Positive</u> impact |
| • Better Care | <u>Positive</u> impact |
| • Better Value | <u>Positive</u> impact |
| • Better Workplace | <u>Positive</u> impact |
| • Equality & Diversity | <u>Neutral</u> impact |
| • Environment | <u>Positive</u> impact |

6. Engagement & Communications

The issues addressed in this paper were subject to discussion with the Infection Prevention and Control (IPC) Team and the IPC Surveillance & Data Team. Comments were also taken into consideration from the below groups when reviewing the content and format following presentation:

- Partnerships Infection Control Support Group (PICSG)
- Acute Infection Control Committee (AICC)
- Board Infection Control Committee (BICC)

7. Governance Route

This paper has been previously considered by the following groups as part of its development:

- The Infection Prevention and Control Team (IPCT)
- Partnerships Infection Control Support Group (PICSG)
- Acute Infection Control Committee (AICC)
- Board Infection Control Committee (BICC)

This paper is finally presented to the Clinical and Care Governance Committee (CCGC) for assurance.

This paper is then shared with the Board Clinical Governance Forum for information once considered by CCGC.

8. Date Prepared & Issued

Date Prepared: 11 June 2026

Date Issued: 17 June 2026

Healthcare Associated Infection Report Template (HAIRT) Summary

Angela Wallace

Executive Nurse Director

March and April 2026

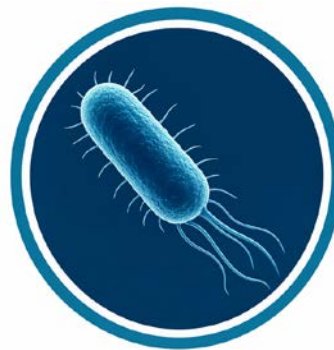


Healthcare Associated Infection Report Template (HAIRT)

Summary – March and April 2026

The HAIRT Report is the national mandatory reporting tool and is presented to the Clinical and Care Governance Committee for assurance with a summary report to the NHS Board.

This is a Scottish Government requirement and informs NHSGGC of activity and performance against the Scottish Government Standards on Healthcare Associated Infection indicators; *Staphylococcus aureus bacteraemias* (SAB), *E. coli bacteraemias* (ECB) and *Clostridioides difficile* infections (CDI). Other available indicators are included for assurance.



Healthcare Associated Infection (HCAI) Surveillance

NHSGGC has systems in place to monitor key targets and areas for delivery. An electronic HCAI surveillance system supports early detection and indication of areas of concern or deteriorating performance.

Performance at a glance relates only to the 2 months reported and should be viewed in the context of the overall trend over time.

Staphylococcus aureus bacteraemia (SAB), Escherichia coli Bacteraemia (ECB) & Clostridioides difficile infection (CDI) targets.

SAB, ECB and CDI targets are described in DL(2025)25. The agreed standard is that there should be no increase in the incidence (number of cases) of CDI, ECB, and SAB in the period between April 2025 and March 2026, from the 2023/2024 case numbers. The targets have been updated accordingly and displayed in this report.

Information on performance against all three targets is available to the Directorate/Division in three ways: monthly summary reports, SAB and ECB specific quarterly reports and via the micro strategy dashboard. All SABs/ECBs associated with an IVAD are followed up by an audit of PVC/CVC practice in the ward or clinical area of origin and the results are returned to the Chief Nurse for every Sector/Directorate. The analysis of the data and subsequent reports enable the IPCT to identify trends in particular sources of infections such as central line infections etc, and it also enables the IPCT to identify areas requiring further support. The data collected on all targets influences the IPC Annual Work Plan and the IPCQIN.

Measure	March 2026	April 2026	Status toward SGHAI from April 2025
Healthcare Associated Staphylococcus aureus bacteraemia (SAB)	29	30	Aim is 26 per month
Healthcare Associated Clostridioides difficile infection (CDI)	16	22	Aim is 21 per month
Healthcare Associated Escherichia coli bacteraemia (ECB)	58	57	Aim is 51 per month
Hospital acquired IV access device (IVAD) associated SAB	9	8	
Healthcare associated urinary catheter associated ECB (includes suprapubic catheter)	12	14	
Hand Hygiene	95	96	
National Cleaning compliance (Board wide)	95	95	
National Estates compliance (Board wide)	96	97	

Staphylococcus aureus bacteraemia (SAB)

Healthcare associated *S. aureus* bacteraemia total for the rolling year May 2025 to April 2026 = 352. HCAI yearly aim is 312.

In the most recently reported National ARHAI Data (Q4-2025) the HCAI SAB rate for NHSGGC was 17.9 which is within the control limits and below the national rate of 18.4. There were 29 healthcare associated SAB cases reported in March and 30 in April 2026, with the aim being 26 cases or less per month.

We continue to support improvement locally to reduce rates via the Infection Prevention and Control Quality Improvement Network (IPCQIN) and local SAB Groups.

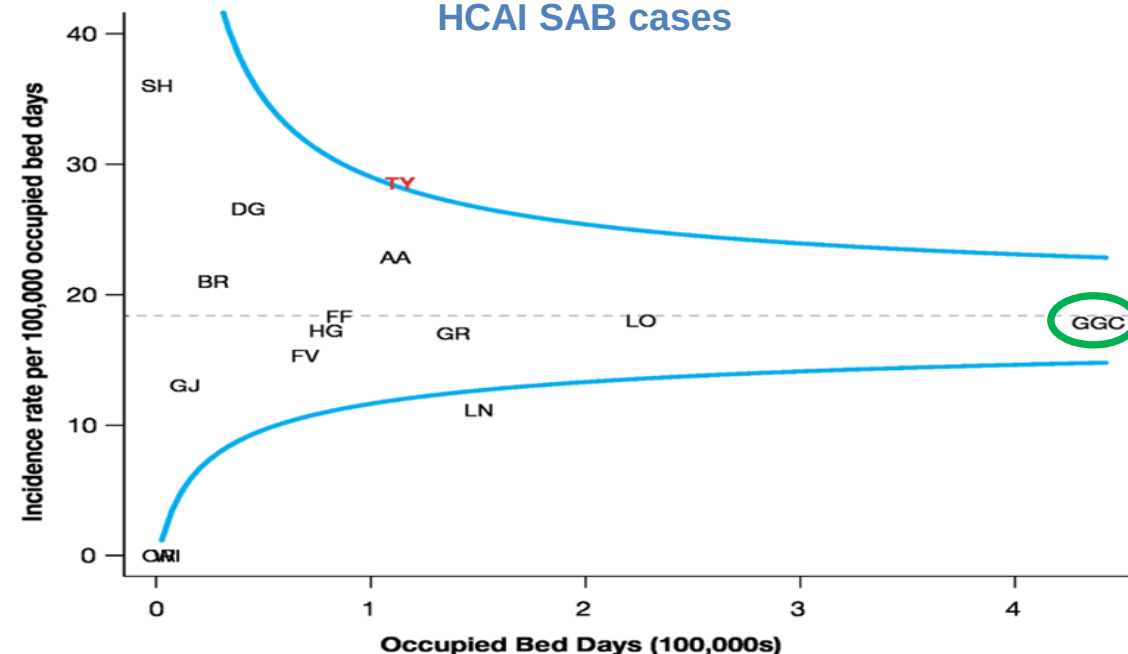
Actions primarily driven by the IPCQIN to reduce cases include:

- Roll out of an updated PVC care plan.
- PVC sweeps in areas with cases (audit of adherence to the PVC care plan).
- Review of vascular access training implementation.
- SAB Toolbox Talks discussed with ward teams.
- Videos promoting line care for renal patients in development.
- QR codes with links to videos for patients relating to PVC care.
- Local SAB groups in place and these groups review local data and actions.

***Healthcare associated are the cases which are included in the SGT reduction target.**

SAB Infection Rates	March 2026	April 2026	Monthly Aim
Healthcare*	29	30	26
Community	3	6	-
Total	32	36	-

ARHAI Validated Q4 (October to December 2025) funnel plot
HCAI SAB cases



NHSGGC rate of **17.9** per 100,000 OBDs is within the control limits for this quarter and below the national rate of 18.4

Escherichia coli Bacteraemia (ECB)

Healthcare associated *E. coli* bacteraemia total for the rolling year May 2025 to April 2026 = 696. HCAI yearly aim is 612.

In the most recently reported National ARHAI Data (Q4-2025) the HCAI ECB rate for NHSGGC was 36.6 which is within the control limits and below the national rate of 40.7. There were 58 healthcare associated ECB cases in March and 57 in April 2026. Aim is 51 cases or less per month.

Enhanced surveillance of ECB continues and is prospectively available to view by clinicians on Micro-strategy, however, teams across GGC continue to monitor and implement improvements. Ward level data of entry point of bacteraemia is available via MicroStrategy. This provides real time information to clinical staff to assist in the decision to use improvement methodology to test interventions that may lead to a reduction in the number of patients with this infection.

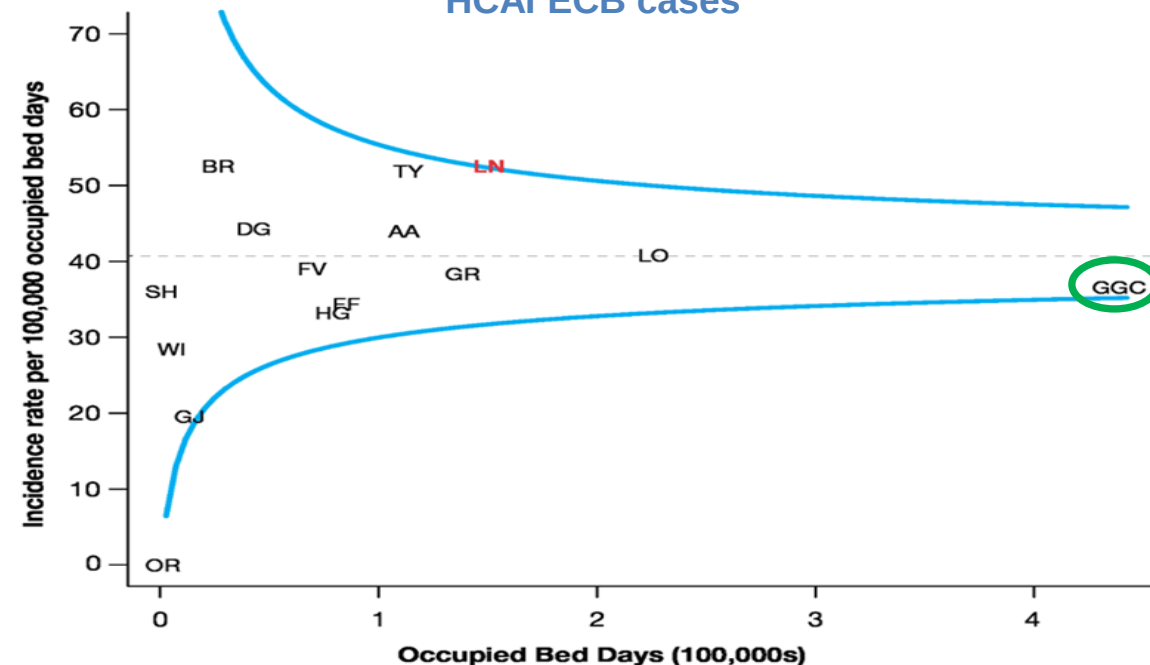
The Public Health Scotland **Urinary Catheter Care Passport** contains guidelines to help minimise the risk of developing an infection and is available at: [HPS Website - Urinary Catheter Care Passport \(scot.nhs.uk\)](https://scot.nhs.uk/hps-website-urinary-catheter-care-passport)

The CAUTI toolbox talk has been reviewed and has been added to the IPC Intranet page.

***Healthcare associated are the cases which are included in the SG reduction target.**

ECB Infection Rates	March 2026	April 2026	Monthly Aim
Healthcare*	58	57	51
Community	27	30	-
Total	85	87	-

ARHAI Validated Q4 (October to December 2025) funnel plot
HCAI ECB cases



NHSGGC rate of **36.6** per 100,000 OBDs is within the control limits for this quarter and below the national rate of 40.7

Clostridioides difficile infection (CDI)

Healthcare associated *Clostridioides difficile* total for the rolling year May 2025 to April 2026 = 248. HCAI yearly aim is 252.

In the most recently reported National ARHAI Data (Q4-2025) the HCAI CDI rate for NHSGGC was 13.8 which is within the control limits and below the national rate of 14.2. There were 16 healthcare associated CDI cases in March and 22 in April 2026. The aim is 21 or less per month.

***Healthcare associated are the cases which are included in the SG reduction target.**

Methicillin resistant *Staphylococcus aureus* (MRSA) and *Clostridioides difficile* recorded deaths

The National Records of Scotland monitor and report on patients cause of death. Two organisms are monitored and reported: MRSA and *C. difficile*. The link below provides further information:

<https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths>

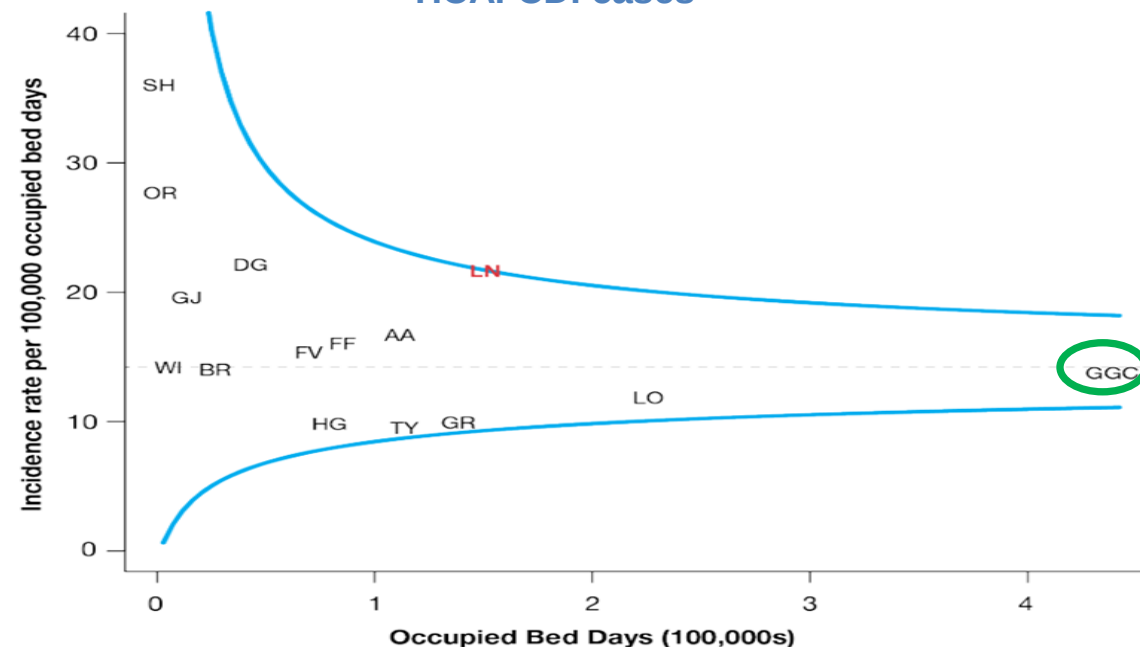
There was one death in March 2026 and one death in April 2026, where hospital acquired *Clostridioides difficile* was recorded on the patient's death certificate.

There were zero deaths in March 2026 and zero deaths in April 2026 where hospital acquired MRSA was recorded on the death certificate.

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CDI Infection Rates	March 2026	April 2026	Monthly Aim
Healthcare*	16	22	21
Community	2	7	-
Total	18	29	-

ARHAI Validated Q4 (October to December 2025) funnel plot HCAI CDI cases



NHSGGC rate of **13.8** per 100,000 OBDs is within the control limits for this quarter and below the national rate of 14.2

NHS GGC Hand Hygiene (HH) Monitoring Compliance

In NHSGGC there is a dedicated Hand Hygiene Coordinator. This colleague supports education, innovation and audit of practice across all areas. Every month each clinical area carries out a HH audit, and the results of these are entered into the Care Assurance and Improvement Resource (CAIR) dashboard. An average of 350 audits are completed monthly. The local IPCT will also carry out HH audits if required during incidents and outbreaks of infection.

Quality assurance audits take place on a monthly basis and are carried out by the Local Health Board Coordinator (LHBC), completing ten to twenty audits monthly. These are snapshot audits focussing on wards that are consistently reporting higher or lower than average scores. The data collected from the wards and departments is collated and forms the basis of the HAIRT HH data, averaged by site and as a total for the Board.

Although the audit tool used by the wards/departments and the LHBC is the same, the method of data collection is different. The LHBC undertakes a snapshot audit on a specific day whereas the ward or department will collect 20 HH opportunities over a period of a month.

Hospital Site	March 2026 %	April 2026 %
Glasgow Royal Infirmary/Princess Royal Maternity	94	93
Gartnavel General Hospital/Beaton Oncology Centre	98	99
Inverclyde Royal Hospital	95	96
Queen Elizabeth University Hospital	96	95
Royal Alexandra Hospital	90	89
Royal Hospital for Children	91	93
Vale of Leven Hospital	98	98
NHSGGC Total	95	96



IPC Statutory Mandatory Training - Standard Infection Prevention and Control (SIPCs) module:

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Area/Sector/HSCP	March 2026 %	April 2026 %
Acute	87%	87%
Clyde Sector	87%	87%
Diagnostics Directorate	90%	90%
North Sector	88%	88%
Regional Services	90%	90%
South Sector	86%	86%
Women & Children's	84%	83%
Partnership	90%	91%

Estate and Cleaning Compliance (per hospital)

The data is collected through audit by the Domestic Services Team using the Domestic Monitoring National Tool.

Areas chosen within each hospital are randomly selected by the audit tool. Any issues such as inadequate cleaning is scored appropriately and if the score is less than 80%, a re-audit is scheduled. Estates compliance assesses whether the environment can be effectively cleaned; this can be a combination of minor non-compliances such as missing screwcaps, damaged sanitary sealant, scratches to woodwork etc.

The results of these findings are shared with Serco/Estates for repair. Like the cleaning audit, scores below 80% trigger a re-audit.

Only main hospitals are included in these tables; however, the "total" percentages include all hospital sites across GG&C.

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Cleaning Compliance - Hospital Site	March 2026 %	April 2026 %
Glasgow Royal Infirmary	93	94
Gartnavel General Hospital	95	96
Inverclyde Royal Hospital	94	94
Queen Elizabeth University Hospital	94	94
Royal Alexandra Hospital	94	95
Royal Hospital for Children	95	95
Vale of Leven Hospital	96	96
NHSGGC Total	95	95

Estates Compliance - Hospital Site	March 2026 %	April 2026 %
Glasgow Royal Infirmary	93	94
Gartnavel General Hospital	97	98
Inverclyde Royal Hospital	93	96
Queen Elizabeth University Hospital	95	97
Royal Alexandra Hospital	96	97
Royal Hospital for Children	95	97
Vale of Leven Hospital	98	98
NHSGGC Total	96	97

Infection Prevention and Control Quality Improvement Network (IPCQIN)

The IPCQIN continues to meet bi-monthly, with the most recent meeting held on 9th April 2026. The meeting focused on reviewing progress across a wide range of workstreams, sharing learning across sectors, and agreeing next steps to support ongoing improvement work.

Good progress continues across several key areas, including person-centred care, Standard Infection Control Precautions (SICPs), and work to reduce SABs across all sectors. Improvements are underway to SICPs audit tools and supporting educational resources, alongside continued development of staff and patient education materials, including Toolbox Talks and Vascular Access Device (VAD) patient education videos.

Sector SAB groups across North, South, Clyde, Regional and Paediatrics continue to meet regularly, with targeted improvement activity focused on PVC/CVC audits, education, walk rounds and shared learning.

Flash reporting from the Mental Health IPC Support Group will now form part of routine IPCQIN reporting, strengthening shared learning across services.

Quality Improvement activity continues to be supported through education, toolbox talks, ward-based engagement and improved communication via SharePoint and newsletters. The 14th and 15th issues of the newsletter have been published and are included below:



IPCQIN - 14th
Issue.pdf



IPCQIN - 15th
Issue.pdf

Outbreaks or Incidents in March and April 2026

Outbreaks / Incidents

Outbreaks and incidents across NHSGGC are identified primarily through ICNet (surveillance software package), microbiology colleagues or from the ward. ICNet automatically identifies clusters of infections of specific organisms based on appendix 13 of the National Infection Prevention & Control Manual (NIPCM) to enable timely patient management to prevent any possible spread of infection. The identification of outbreaks is determined following discussion with the Infection Control Doctor/Microbiologist. In the event of a possible or confirmed outbreak/incident, a Problem Assessment Group (PAG) or Incident Management Team (IMT) meeting is held with staff from the area concerned, and actions are implemented to control further infection and transmission.

The ARHAI Healthcare Infection Incident Assessment Tool (HIIAT) is a tool used by the IMT to assess the impact of the outbreak or incident. The tool is a risk assessment and allows the IMT to rate the outbreak/incident as **RED**, **AMBER**, or **GREEN**.

All incidents that are HIIAT assessed are reported to the Antimicrobial Resistance & Healthcare Associated Infection (ARHAI) group.

ARHAI are informed of all incidents and they onward report to the Scottish Government Health and Social Care Directorate (SGHSCD) on any incidents/outbreaks that are assessed as amber or red.

HIIAT **GREEN** – reported 3 in March and 3 in April 2026.

HIIAT **AMBER** - reported 2 in March and 2 in April 2026.

HIIAT **RED** – reported 1 in March and 0 in April 2026.

(COVID-19, RSV and Influenza Incidents are now included in the above totals but not reported as individual incident summaries)

Outbreaks/Incidents (HIIAT assessed as AMBER or RED excluding COVID-19 and Influenza A)

QEUH, Ward 4B - *Exophiala dermatitidis* and *Mucor velutinosus* Environmental Incident:

An Infection Prevention and Control incident was declared on Ward 4B (Adult Bone Marrow Transplant Unit), QEUH, following identification of fungal infections with suspected links to the built environment, particularly recurrent water ingress and environmental contamination. The incident involved two confirmed healthcare-associated fungal infections (*Exophiala dermatitidis* and *Mucor velutinosus*) cases and one possible case, with all affected patients having been discharged and clinically improving. No ongoing clinical concern relating to fungal infection has been identified.

A formal Incident Management Team (IMT) was established on 25th February 2026, with ongoing involvement from IPC, Estates, ARHAI, NHS Assure and external expert advisors. Extensive investigations confirmed no further cases since February 2026. Environmental inspections identified widespread historic and active water ingress, ventilation compromise and reservoir risks, resulting in the closure of multiple rooms, enhanced environmental remediation, HPV cleaning, repeat air sampling, and a structured programme of repairs and assurance testing.

A comprehensive programme of control measures was implemented, including antifungal prophylaxis review, daily multidisciplinary huddles, strengthened command structures (Gold/Silver/Bronze), enhanced environmental and equipment controls (including fridge replacement), and continuous IPC oversight. Retrospective case reviews did not demonstrate a clear correlation between clinical cases and air sampling results.

The HIIAT status initially escalated to **RED**, reflecting public concern and service impact, but has since been downgraded to **GREEN**, with no new cases identified, improved environmental assurance, and strengthened governance arrangements now embedded. The incident remains under active assurance oversight, with estates works ongoing in a small number of rooms and routine monitoring continuing.

Outbreaks or Incidents in March and April 2026 – Continued

GRI, Wards 47&48 - Vancomycin resistant *Enterococcus faecium* (VRE) Incident:

An Infection Prevention and Control incident was declared following identification of six Vancomycin-resistant *Enterococcus faecium* (VRE) cases associated with Wards 47 and 48 (Plastic Surgery), Glasgow Royal Infirmary, between January and March 2026. Of these, four were hospital acquired infections (HAIs) and two were non-HAIs. Only one case required treatment for active VRE infection; the remaining cases were managed as colonisation.

A Problem Assessment Group (PAG) was convened on 3rd March 2026 and comprehensive control measures were implemented, including patient isolation, enhanced cleaning, staff communication, hand hygiene and PPE reinforcement, and environmental actions. Epidemiological overlap between cases was identified, though no shared bays were involved. Molecular typing was consistent with transmission between three HAI cases, while other cases were genetically distinct or not linked to transmission. The incident was HIIAT assessed as **AMBER**.

Compliance audits demonstrated good hand hygiene and SICPs performance, with improvement actions identified and addressed. Estates issues were escalated and resolved, including vent cleaning. An antimicrobial prescribing review found no atypical prescribing patterns.

No staff cases were identified. No further VRE cases have occurred since 4th March 2026, and the incident was downgraded to **GREEN** and closed on 24th March 2026, with continued monitoring and assurance in place.

Healthcare Improvement Scotland (HIS)

There have been no HIS inspections in GGC in March and April 2026.

All HIS reports and action plans for previous inspections can be viewed by clicking on the link below:

http://www.healthcareimprovementscotland.org/our_work/inspecting_and_regulating_care/nhs_hospitals_and_services/find_nhs_hospitals.aspx

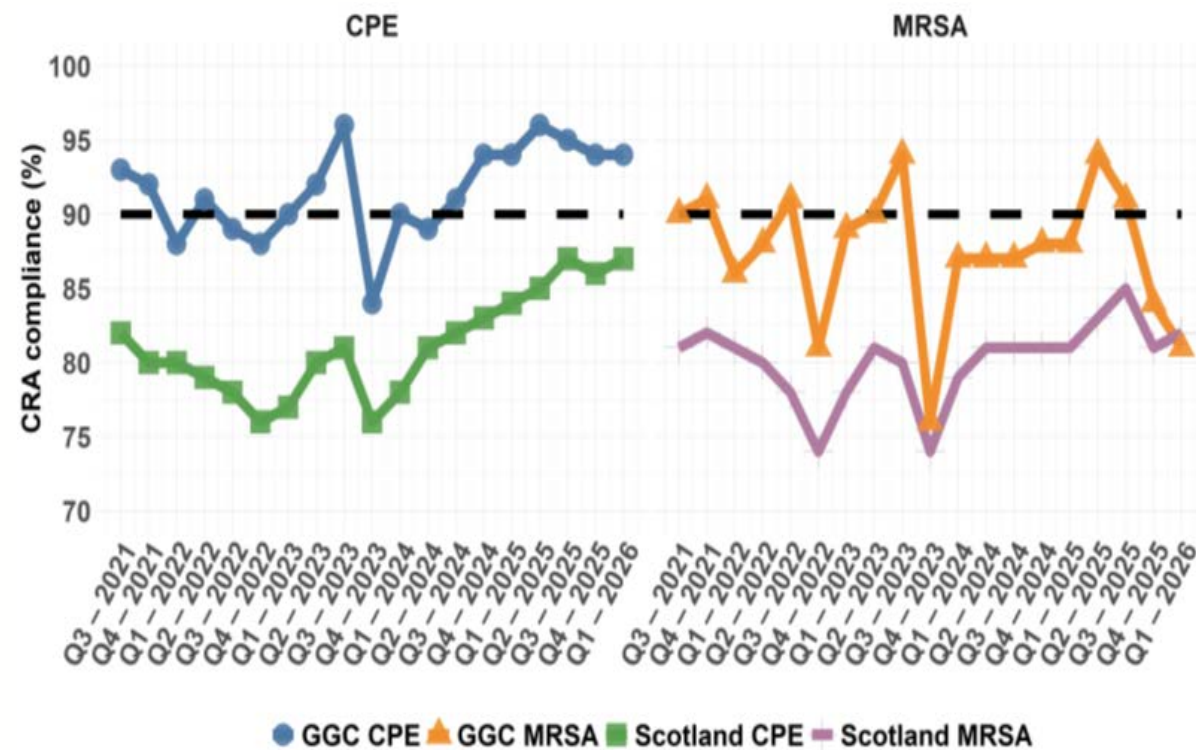
Multi-Drug Resistant Organism Screening

As part of the national mandatory requirements, each board is expected to screen specific patients for resistant organisms. These are Carbapenemase producing Enterobacteriaceae (CPE) and MRSA. The decision to screen depends on the outcome of a clinical risk assessment performed on all admissions.

On a quarterly basis we assess compliance of completing this risk assessment to provide assurance of effective screening and this is reported nationally. The national expectation of compliance is **90%** (black dashed line). National data for Q1 has been validated and included. The 90% compliance standard for Q1 has been achieved for CPE but not for MRSA by NHS GGC. IPCT will continue to work towards achieving 90% for MRSA by supporting front line clinical teams through education and improvement initiatives to promote the completion of this assessment.

We continue to support clinical staff to implement this screening programme, and work is currently underway with eHealth to incorporate this information electronically into the patient admission eRecord.

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**Last
validated
quarter 1 –
January to
March 2026**

NHSGGC 94.4%
compliance rate for CPE
screening

**Scotland
86.9%**

NHSGGC 81.2%
compliance rate for MRSA
screening

**Scotland
81.7%**

Executive Summary

FOR THE ATTENTION OF FIONA DAVIES, CHIEF EXECUTIVE, NHS
HIGHLAND

CMP REFERENCE NUMBER: NHSG21 – B5

CREATED BY GABBYHEYCOCK

SUBMITTED ON 26 NOVEMBER 2025

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1 Introduction and purpose of the document

- 1.1 This report presents findings from an independent investigation into whistleblowing concerns raised by the Whistleblower (WBer), an employee of NHS Grampian, regarding the design and construction of the Baird Family Hospital (BFH) and the Anchor Centre (TAC). The concerns were investigated under the National Whistleblowing Standards (April 2021).

2 Complaint and Summary of Findings

- 2.1 WBer raised seven concerns primarily focused on non-compliance with HAI SCRIBE guidance—a mandatory infection prevention risk management process for healthcare construction projects—and associated risks to patient safety, staff wellbeing, and public expenditure.
- 2.2 Key Findings:
- Concern 1 (HAI SCRIBE compliance): Upheld. No evidence of Stage 2 HAI SCRIBE during design phase, contributing to infection control risks, delays, and increased costs.
 - Concern 2 (Infection Prevention Control Team (IPCT) engagement): Partially Upheld. IPCT were marginalised early; engagement improved post-COVID.
 - Concern 3 (Downplaying risks): Partially Upheld. Historical minimisation of IPC risks; governance improved recently.
 - Concern 4 (Patient safety): Inconclusive. Non-compliance and unresolved issues present potential risks; mitigation ongoing.
 - Concern 5 (Financial impact): Upheld. Significant remedial costs and delays resulted from design flaws and lack of early compliance.
 - Concerns 6 & 7 (Board transparency and other risks): Not Upheld. Governance improvements now in place.

3 Conclusions and Recommendations

- 3.1 21 Learning Points were identified, including:
- Treat HAI SCRIBE as mandatory with formal accountability for Project Managers.
 - Embed multi-disciplinary engagement and technical expertise at design stage.
 - Establish robust escalation frameworks and decision-making processes for safety groups.
 - Conduct cultural reviews to address hierarchical behaviours and promote psychological safety.

- Share lessons learned nationally to improve future healthcare construction projects.

3.2 Systemic Issues identified include:

- Inadequate governance and escalation processes during early project stages.
- Cultural challenges, including hierarchical behaviours and gender bias, impacting IPC engagement.
- Fragmented communication and unclear role definitions within IPC governance.
- Outdated technical standards and lack of early specialist input.

3.3 Failures in governance, compliance, and engagement contributed to significant risks and costs. While recent improvements demonstrate progress, ongoing vigilance, external assurance, and cultural change are essential to safeguard patient safety and organisational integrity.

Scottish Hospitals Inquiry

Witness Statement of

Brian Auld

26.06.26

Introduction

1. My name is Brian Auld. I am currently a non-executive director of NHS Greater Glasgow and Clyde ('NHS GGC') and the appointed Whistleblowing Champion.
2. The Scottish Hospitals Inquiry (the 'Inquiry') has asked me to provide a written statement in relation to my role as NHS GGC's Whistleblowing Champion.

Background

3. I am a Chartered Environmental Health Officer, Chartered Environmental Health Practitioner, and Certified Health and Safety Practitioner with over 20 years' experience in public health regulation, enforcement and assurance. I have held a number of senior leadership positions in both the public and third sector in Scotland and I am currently employed full-time as the Interim Director of People, Safety, and Governance with Scottish Canals, a Non-Departmental Public Body (NDPB) of the Scottish Government. I have significant experience of raising concerns as a Whistleblower and investigating serious whistleblowing concerns on behalf of my employer.
4. I previously worked in the NHS in Scotland between 2009 and 2014 where I was one of the first appointed Inspectors in the then newly created Healthcare Environment Inspectorate (HEI). My role was to lead a team of Inspectors in the inspection of NHS Services across Scotland and to provide public assurance on the safety of services against national standards and legal requirements.
5. I was appointed to NHS GGC Board as non-executive director on 1st July 2024 and I am currently a member of the following committees: People and Staff

Governance Committee; Audit and Risk Committee, and the Finance, Planning and Performance Committee.

6. I was appointed to Whistleblowing Champion on joining the NHS GGC Board.

Whistleblowing Champion role

7. The Whistleblowing Champion role was developed by the Scottish Government to support the work of the Independent National Whistleblowing Officer (INWO) and was first introduced in 2020. Each NHS Board in Scotland has a Whistleblowing Champion who monitors and supports the effective delivery of the organisation's whistleblowing policy.
8. The Whistleblowing Champion is predominantly an assurance role which helps NHS Boards comply with their responsibilities in relation to whistleblowing. The Whistleblowing Champion provides critical oversight, ensuring managers are responding to whistleblowing concerns appropriately, in accordance with the National Whistleblowing Standards published by the INWO. The Whistleblowing Champion is also expected to raise any issues of concern with the Board as appropriate, either in relation to the implementation of the National Whistleblowing Standards, patterns in reporting of concerns or in relation to specific cases.
9. The Whistleblowing Champion has responsibility for ensuring that the organisation has appropriate systems in place in order that all services delivered are meeting the requirements of the National Whistleblowing Standards.
10. The Whistleblowing Champion does not become operationally involved in whistleblowing cases and does not have any personal authority or powers in relation to individual cases.
11. The Whistleblowing Champion has a responsibility to seek assurance that:
 - Staff are actively encouraged and supported to report any concerns about patient safety or malpractice they may have;

- Boards have systems in place that are used and monitored appropriately to ensure that all reported concerns are investigated in a timely and appropriate way;
 - Boards have systems in place to ensure that any learning from whistleblowing concerns is identified, shared and used to deliver improvements where appropriate;
 - The staff member (the whistleblower), and any other staff member implicated in the reported concern, is supported and updated on progress throughout the process; Boards should have systems in place to protect from detriment anyone who raises a concern;
 - The outcome is fed back to the member of staff who raised the concern, and any resultant recommended actions are progressed by the Board; and
 - Any detriment or potential detriment to the whistleblower is properly addressed.
12. It should be noted that although this is a dedicated role, it is undertaken on behalf of the Board. All board members including the Whistleblowing Champion retain collective responsibility for Board governance.
13. The Whistleblowing Champion can raise concerns/issues with the system of governance in a Board in relation to whistleblowing. The Whistleblowing Champion cannot take on the role of Board Chair or Vice Chair and may be appointed to other Board or Committee roles provided that the Board is satisfied as to the management of potential conflicts of interest and the time commitments.

Whistleblowing Champion postholder

14. The previous Whistleblowing Champion was Charles Vincent, a non-executive director of NHSS GGC Board. He held the role between 2020 and 2025. He was a member of the Audit and Risk Committee, Staff Governance Committee, and

the Finance, Planning and Performance Committee, and the Chair of the Endowments Management Committee and the Population Health and Wellbeing Committee.

15. As stated above, I was appointed Whistleblowing Champion on 1st July 2024 and I am a member of the following committees: Staff Governance Committee; People Committee; Audit and Risk Committee and Finance, Planning and Performance Committee.

Whistleblowing Champion focus

16. My understanding is that the previous Whistleblowing Champion's focus was procedural with a focus on embedding the whistleblowing process and associated support into the Board governance arrangements. He conducted a gap analysis to identify areas that required further work which highlighted that there was a good understanding of the National Whistleblowing Standards across the organisation, however areas for further development were:
 - Misclassification of whistleblowing cases resulting in some cases either not being investigated as whistleblowing or cases being investigated as whistleblowing which are not reflective of the classification of whistleblowing under the standards;
 - Promotion of the importance of the Stage 1 process and that all whistleblowing cases should be investigated at Stage 1 unless there is good reason to escalate a concern to Stage 2 immediately;
 - The need for a corporate logging and tracking system to ensure all cases are recorded, investigated, and any improvements or learning is fully implemented and embedded;
 - Improvements to staff training and education on whistleblowing to increase staff awareness, confidence and competency in the whistleblowing standards and NHS GGC policies and procedures;

- Improve support to all staff involved in the whistleblowing process;
 - Improved documented process required for the escalation of serious concerns to senior managers; and
 - All potential whistleblowing cases should be logged on a corporate database irrespective of the determination of the validity of the whistleblowing case.
17. When I was appointed the Whistleblowing Champion, my priority was to continue the work undertaken by Charles Vincent and build upon the improvements to the systems, processes and governance arrangements relating to whistleblowing and focus on cultural and behavioural factors across the organisation. One key activity was the promotion of the annual 'Speak Up' programme which aims to ensure that NHS GGC has an open, transparent and accessible culture and approach to whistleblowing and that all our staff know how to access and have confidence in our arrangements for whistleblowing. I have been fully supported by Dr Lesley Thomson KC, Board Chair, and by Professor Jann Gardner, Chief Executive, who are both equally passionate about ensuring all employees, contractors, students, volunteers and service users have the ability and confidence to raise any concerns at any time. My focus has been on engagement with the national standards, moving away from a predominant executive level assurance model to seeking additional assurance from service managers and front-line staff about their roles and responsibilities in the whistleblowing process which ultimately supports the Board in their accountabilities for whistleblowing
18. I have conducted targeted outreach with individual services to encourage engagement with the available support systems and increase overall awareness of the process. These conversations have been instrumental in identifying service specific needs and enhancing trust and communication to encourage engagement with the available support systems and increase overall awareness of the process. Last year, NHS GGC launched a second anonymous survey to all staff through our daily Core Brief to explore our current approach and arrangements for 'Speaking Up'. Although there was limited uptake in responding

to the survey there was an increase in the number of responses from the previous survey. In summary, 39% of employees who completed the survey stated that a fear of retaliation would prevent them from speaking up about a concern regarding patient safety and only 50% of respondents believed that NHS GGC learned from feedback from concerns raised. Although this analysis may seem alarming, all feedback is useful, and I have taken steps to ensure that we address the key issues identified from the survey by developing and implementing an action plan focussed at increasing organisational awareness of the Whistleblowing standards and confidence in both accessibility and application.

19. Key objectives of the action plan:

- Focus on the recruitment and expansion of 'Confidential Contacts'. These individuals provide a vital point of contact for colleagues across the organisation, offering support and guidance around a number of the national 'Once for Scotland' policies. This provides a holistic and accessible support system for colleagues. We have recruited a further seven Confidential Contacts and implemented enhanced induction processes to ensure that they are fully confident in their role. We have also updated our training arrangements to ensure that more regular training and support is provided to our wider cohort of confidential contacts as well as increasing their visibility and accessibility across the organisation.
- The contacts are also actively involved in promoting the Speak Up campaign, including engagement stalls in atrium spaces across the campus, contributing to wider training initiatives, and supporting events such as the EDI Conference held on 14th August 2025. Their visibility plays a crucial role in normalising speaking up and reinforcing a culture of openness and support.
- Promoting NHSGGC's Speak Up! programme which supports NHS GGC staff to ensure they know that if they have any concerns about: issues affecting their working life; the quality-of-service GGC offers; or the care provided to patients, there is someone within the organisation to listen to their concerns.

- Participation in induction programmes for medical and nursing staff to ensure early awareness of the whistleblowing process and Speak Up! support.
20. Building on the success of the 2025/26 action plan, a development plan has been created for 2026/27 which focusses on other aspects of the National Whistleblowing Standards and to ensure that effort and momentum is maintained. The development plan for 2026/27 includes the following objectives:
- Proactive engagement with university partners to ensure that student nurses and medical trainees are fully informed about how to access support during their placements.
 - Work with primary care providers to ensure that the Whistleblowing Standards are fully embedded in local governance arrangements and that all contractors have confidence in accessing and reporting concerns;
 - Review processes and arrangements for those involved through the whistleblowing process to provide feedback on their experiences so that we can learn and continuously improve our systems and processes for 'Speaking up'. This is important to ensure that we close the loop and take every opportunity to learn from the experiences of everyone involved with 'Speaking Up'.;
 - Explore with the INWO and other Health Boards how the Whistleblowing Champion role could be further developed alongside a framework for culture development and culture maturity that can be used to benchmark what good looks like across NHS Scotland;
 - Further explore the barriers highlighted in the 2025 survey to raising concerns within a psychological safety approach to ensure that historical and learned behaviours can be deconstructed to ensure that every employee, volunteer, contractor, student and visitor has the confidence to raise concerns and that they will be heard, treated fairly and with the upmost dignity and respect.

Trade Union colleagues and professional bodies will be invited to contribute to this work and this will be undertaken in parallel to increase Board visibility through onsite visits and engagement events; and

- Continue to work with line managers and hard-to-reach groups to promote the National Whistleblowing Standards including roles, responsibilities and expectations, should anyone wish to raise a concern.
21. Whistleblowing is reported on a quarterly basis through the Audit and Risk Committee, ensuring regular oversight and accountability. These reports are also shared with the Independent National Whistleblowing Officer (INWO), and an annual whistleblowing report is submitted to both the ARC and Board for scrutiny prior to publication.
22. I meet with other Whistleblowing Champions from across NHS Scotland as part of a Whistleblowing Champion Network. This is an invaluable opportunity to explore through peer support how other NHS Boards are implementing the National Standards and to explore and discuss challenges, opportunities and learning from other Whistleblowing Champions experiences. The network is attended by the INWO which allows for the opportunity to discuss evolving issues and contribute to the development of the wider whistleblowing work programme.

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.



SCOTTISH HOSPITALS INQUIRY
**Bundle of documents following oral hearings in relation to the Queen Elizabeth
University Hospital and the Royal Hospital for Children, Glasgow**
Bundle 52 - Volume 14
Miscellaneous Material Arising Post Close of Hearings