SCOTTISH HOSPITALS INQUIRY

Bundle of documents for Oral hearings commencing from 16 September 2025 in relation to the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow

Bundle 49 – Documents related to the Oversight Board, Advice and Assurance Review Group (AARG) and Healthcare Improvement Scotland (HIS)

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ADVICE AND ASSURANCE OVERSIGHT BOARD – NHS GREATER GLASGOW AND CLYDE

Date and time: 27th November 2019, 14.00 – 15.30

Venue: Fleming A, Atlantic Quay 5, 150 Broomielaw, Glasgow, G2 8LU

Attendees: see Annex A

Meeting 1 – Minute

1.	Welcome, introductions and apologies
The Chair welcomed members to the first meeting of the Advice and Assurance Oversight Board, which has been created to support the NHS Greater Glasgow and Clyde (NHSGGC) Board and provide assurance to the Cabinet Secretary for Health and Sport.	
2.	Background and purpose of group
The Chair set out the wider context leading to the establishment of the Oversight Board (OB), which is a response to the Stage 4 escalation of NHSGGC as a result of ongoing issues around the systems, processes and governance in relation to infection prevention, management and control, and associated issues relating to communications and public engagement. The Chair noted that she has met with NHSGGC Chief Executive and Chair on a number of occasions since the Board was escalated to Stage 4. The remit of the OB is focused on a small part of wider change that NHSGGC are currently engaging in. The OB will have clear boundaries and provide advice and support to NHSGGC and assurance to the Cabinet Secretary until it is appropriate for de-escalation to take place. Members agreed that they are content with the draft Terms of Reference and that they will remain draft until final membership of the OB has been confirmed, and subgroups have been formed. The Chair noted that further work is required to develop and agree the intended outcomes of the Oversight Board. **Action: SG to draft outcomes to share with OB members.**	

3.	Review draft Terms of Reference – Role and remit of group – Representation / group membership – Subgroups required - representation and purpose

Chair noted that draft Terms of Reference had been dealt with at item (2).

Membership of the OB was discussed and it was agreed that external representation from a senior medical leader would bring crucial leadership, insight and expertise; Dr Andrew Murray was suggested in relation to his work with the National Managed Service Network for Children and Young People with Cancer.

Members considered whether HPS should be represented in order to support the sharing of learning from this escalation.

The importance of representation from HIS / HEI was noted by HB, and it was suggested by the Chair that Andrew Moore from HIS be asked to contribute to the OB in addition to a subgroup.

Members also agreed that the NHSGGC HAI executive lead should be invited to join the OB as well as the NHSGGC Board Nurse Director.

Members agreed that two subgroups will be established to support the work of the Oversight Board: (a) infection prevention and control & governance, and (b) communications & engagement.

The infection prevention and control & governance subgroup will have two distinct purposes: to review systems and processes relating to infection prevention and control, and to review the channels that escalate emerging issues to board level for appropriate response. Chair of group TBC; membership will include an infection control nurse, an infection control doctor and a governance lead. Evonne Curran was suggested as a potential member. HB was asked to consider additional representation and feedback to the group.

The communications & engagement subgroup will be chaired by Professor Craig White. The purpose of the group will be to review the approach taken to communication and engagement by NHSGGC in respect of affected families up until the point at which the board was escalated to Stage 4. Membership will include a representative of the families affected. CW suggested that Lynsey Cleland, Director of Community Engagement at HIS/ the Scottish Health Council, could be approached to bring additional expertise to the subgroup and further noted the importance of relevant NHSGGC staffbeing part of this group. The need for both Sub-Groups to consider links across both of their areas of focus was acknowledged.. It was agreed that the work of this Sub-Group needs to be linked with plans to agree communications and engagement work with all of the patients and families in contact with the paediatric haemato-oncology service at NHSGGC. It was also agreed that Suzanne Hart would

join this Sub-Group in order that relevant links could be made with regard to communications. **Action: FMc to approach Lynsey Cleland and Andrew Moore to join subgroups** **Action: LS to approach Evonne Curran to join IPC&G subgroup** **Action: CMc / KW to approach Andrew Murray to join OB**	
4.	Progress to date and next steps relating to key issues: a. Infection prevention and control b. Governance c. Communications and engagement, with a focus on family members
Chair noted the division of key issues between subgroups. The immediate focus is on establishing these subgroups so they can begin exploring the issues in greater depth.	
5.	AOCB
A draft timeline and milestones will be worked up by officials from the Chief Nursing Officer Directorate for the Oversight Board. **Action: SG to draft timeline and key milestones to share with OB members.**	
6.	Next meeting
The next meeting will take place on the afternoon of Tuesday 3rd December, details tbc. **Action: CMc to send out details of meeting.**	

Annex A: List of Attendees

Fiona McQueen (chair)	Chief Nursing Officer, The Scottish Government
Keith Morris (deputy chair)	Medical Advisor, Healthcare Associated Infection/AMR
Craig White	Divisional Clinical Lead, Healthcare Quality and Improvement Directorate
Hazel Borland	Executive Director of Nursing, Midwifery and Allied Health Professionals, NHS Ayrshire and Arran (Healthcare Associated Infection Executive Lead)
Lesley Shepherd	Professional Advisor, Healthcare Associated Infection /AMR
Suzanne Hart	Team Leader, Health Communications, The Scottish Government
Kirsty Walker	Unit Head, CNOD, The Scottish Government
Claire McGrath (secretariat)	Policy Officer, CNOD, The Scottish Government

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OVERSIGHT BOARD – NHS GREATER GLASGOW AND CLYDE

Date and time: 3rd December 2019, 14.00 – 15.30

Venue: Baird A&B, Atlantic Quay 5, 150 Broomielaw, Glasgow, G2 8LU

Attendees: see Annex A

Meeting 2 – Minute

1.	Welcome, introductions, apologies
Chair welcomed attendees and noted apologies (see Annex A). Chair noted the OB was still forming with membership and Terms of Reference to be confirmed, welcomed the contributions made in this respect from members, and further noted that while members and those in attendance represented a range of different roles and perspectives, all were committed to a common purpose. Chair asked for any initial comments; DM spoke to the importance of communications with NHSGGC staff and it was agreed this would be picked up with CW directly. **Action: DM and CW to discuss communications with NHSGGC staff.**	
2.	Minutes
Minutes were agreed subject to two points of clarification. **Action: KW to amend minutes of meeting 1 as agreed.**	
3.	Matters arising
No matters arising were noted.	
4.	GGC Update
Chair noted that she had met with the Chair and Chief Executive of NHSGGC in the morning of 3 December and had discussed membership of the OB and sub-groups; the importance of two way dialogue; the need for the timeous production of information; the continuing broad media coverage; the anxieties of patients and staff, and the shared aim to restore equilibrium and support staff as well as providing assurance to the Cabinet Secretary, patients and their families, and the general public. AT and DM noted the pressure on staff, particularly in the unit in question, and welcomed support for processes to provide reassurance.	

DM noted that the ongoing criticism in the media has not reflected any of the mitigation already in place. Trade unions from NHS GGC are working with managers to support staff through this time.

5.	Terms of Reference, Governance and Membership

The draft Terms of Reference were discussed and a variety of questions and concerns raised:

DM, HB and IB noted the importance of the OB being thoughtful about the language in the ToR, particularly in using the word ‘ensure’ which suggests assumptions made about the need for improvements, and the word ‘ongoing’.

CW agreed that language was important but noted that it has been determined improvement is needed.

AM noted that the ToR should make clear whether the OB would be retrospectively assessing the issues or providing a snapshot of issues as they are now.

IB noted the importance of referring to agreed standards; that the OB should operate as a peer group for NHSGGC to work in tandem with them, and further noted the need for senior board representation from NHSGGC at the OB. In terms of the sub-group which she chairs, IB shared her first thoughts on the roles which should be represented on it including the HAI Executive Lead, board governance lead, head microbiologist and IPM.

KM noted the OB would need to look at what had happened, identify issues and then offer a gap analysis as a starting point for improvement work. He reflected that the issues the OB picks up might be very difficult for NHSGGC representatives and was mindful of any risk to honest reflections. IB agreed that it was likely there will be uncomfortable moments but it was essential that NHSGGC bring to the OB what gave them assurance to allow the OB to consider whether they would also have been assured. CW reinforced that his experience of being based in NHSGGC had been very helpful with respectful and open discussion.

DM referenced the recommendations from the Sturrock Review and noted this could be an opportunity to change ways of working at board level to enable the NHS to become more open and transparent, so it was essential the OB takes people with them.

Chair concluded the discussion noting that the OB would look back as well as seeking assurance about current processes and systems; would take a quality improvement approach while flushing out difficult issues, and confirmed again that membership was still in development and further consideration would be given to the roles that have to be represented round the table.

Action: KW to redraft Terms of Reference for next meeting (13 December).

6.	Outcomes and action list

Chair noted that the OB need to demonstrate pace while finding time to discuss, reminding attendees that they should be considering what is needed to work towards de-escalation for NHSGGC.

It was agreed that the timeline needs to be confirmed (in terms of the look back); that outcomes are subject to discussion at the sub-groups which will be fed back to OB for sign off; that measures should be agreed, using national guidelines; that everyone needs to have access to the same information, and that the governance diagram needs refined to better reflect two-way dialogue and information flow.

Action: KW to redraft governance diagram.

7.	Progress and next steps on key issues: a. Infection prevention and control b. Governance c. Communications and engagement, with a focus on family members

It was noted that the sub-group leading on (a) and (b) has not met yet but will have by the next OB on 13 December.

CW noted that the first communications and engagement sub-group meeting will be on 5 December at 1400. In advance, a survey has been sent out to all 400 families asking for their feedback on communications with NHSGGC and with CW. The results will inform the work of the sub-group. In addition, CW reported that a database has been created to be a single point of oversight for contact with families; that he had demonstrated the database for the Cabinet Secretary; that families continue to make contact and he is working with clinicians on providing answers to their questions, and that the Cabinet Secretary had written to families to inform them that Lord Brodie has been appointed to lead the Public Inquiry.

Annex A: List of Attendees

Fiona McQueen	Chief Nursing Officer, CNOD, Scottish Government
Keith Morris	HAI/AMR Professional Medical Advisor, CNOD, Scottish Government
Phil Raines	CNOD, Scottish Government
Craig White	Divisional Clinical Lead, Healthcare Quality and Improvement Directorate
Irene Barkby	Executive Director of Nurses, Midwives and Allied Health Professionals & HAI Exec Lead, NHS Lanarkshire
Hazel Borland*	Executive Director of Nursing, Midwifery and Allied Health Professionals & Healthcare Associated Infection Executive Lead, NHS Ayrshire and Arran
Andrew Murray*	Medical Director, NHS Forth Valley
Kirsty Walker (secretariat)	CNOD, Scottish Government
In attendance	
Dorothy McErlean	APF Chair Employee Director, NHS GGC
Audrey Thompson	ACF Chair Lead Pharmacist Prescribing Services, NHS GGC

*Members participated via teleconference

Apologies:

Lesley Shepherd – Professional Advisor, CNOD

Suzanne Hart – Communications, SG

Claire McGrath (secretariat) – Policy Officer, CNOD

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OVERSIGHT BOARD – NHS GREATER GLASGOW AND CLYDE

Date and time: 13th December 2019, 14.00 – 15.30
Venue: Flemming A, Atlantic Quay 5, 150 Broomielaw, Glasgow, G2 8LU
Attendees: see Annex A
Meeting 3 – Minute

1.	**Welcome, introductions and apologies** Chair welcomed attendees to the third meeting of the Oversight Board for NHS Greater Glasgow & Clyde and noted apologies (see Annex A).
2.	**Minutes** The Chair asked attendees for comments on the minutes from the previous meeting that took place on the 3rd December. Revisions were suggested and accepted and the amended minute is embedded here for reference. Meeting 2 Minutes ACTION: • CM to update minutes.
3.	**Matters arising** No matters arising were noted.
4.	**Terms of Reference, Governance and Membership:** • **Redrafted ToR for discussion** • **Governance structure diagram** The Chair asked for comments on the revised Terms of Reference. KM proposed that Marion Bain's (MB) role be referenced which prompted discussion on the Independent Case Review. In relation to this, the Chair noted that: • MB has been appointed as HAI Executive Lead for NHSGGC, accountable and responsible to the Chief Executive of NHSGGC and the Chief Nursing Officer. • MB will be invited to attend the Oversight Board and provide regular updates on her review of cases. • The review will focus on the individual clinical cases and also the wider context; a process for reviewing cases will be developed and support provided from a policy team. • The parameters of the work are still be agreed, however, Chair confirmed that it will include an epidemiological review and enable the voices of patients and families to be heard throughout the process. The role of CW's sub-group was discussed in supporting the families affected to input into the OB, taking into account the ethical considerations. MM noted that Jim Beattie is already working within NHS GGC to review cases, which may be helpful for MB.

	DM asked that under purpose and role of group, the first bullet point is changed to 'seek assurance that appropriate governance is in place to increase public confidence'. Attendees reflected on references to NHSGGC staff within the ToR and considered whether an additional point would be required around appropriate support for them. It was agreed that the 'approach' section of the ToR should be adapted to include an additional reference to NHSGGC staff. DM asked that the ToR are adapted to note that AT and DM, as ACF and APF Chairs respectively, are listed as being 'in attendance' within the membership section. Chair noted that a third sub-group is being established to focus on technical issues in relation to facilities and estates. Members discussed and agreed that once the technical sub-group is established, additional expertise will be required on the OB to provide appropriate levels of assurance. The Chair reminded members that the 'background' section of the Terms of Reference is based on wording that is in the public record and cannot be changed. Attendees reviewed and agreed the updated governance structure diagram. ACTION: • CM to revise Terms of Reference
5.	**Update from chair** The Chair provided an update on developments since the previous meeting on 3 December: • The Cabinet Secretary's statement to Parliament on Tuesday 10th December; • Dr Eleri Davies, Consultant Medical Microbiologist and Director of Infection Prevention and Control at Public Health Wales, will bring independent expertise and support the work of MB in the Independent Review; • A Programme Management Office (PMO) is being established within NHS GGC to centralise and co-ordinate requests and information flows. Discussions are taking place between Elaine Vanhegan (NHS GGC) and Jason Birch (Scottish Government) to develop a system for managing requests. Angela O'Neill has been appointed to work within NHS GGC to provide support to the OB and Independent Review. The Chair introduced Dr Andrew Murray's SBAR on prescribing to Haemato-oncology patients within the Royal Hospital for Children (RHC), and asked for comment. CW suggested that it would be useful to get a steer on whether, in light of environmental concerns, recommendations around what to provide to patients and families were implemented. AT felt it would be helpful to consider governance in more detail around decision making and the audit trail, with a more overt consideration of the role of pharmacists in prescribing. MM

	suggested that further assurance is required as to whether good practice is being implemented and evidenced through patient records. The SBAR was accepted by the OB and it was agreed actions be remitted to the Communications & Engagement subgroup and the Infection Prevention & Control and governance subgroup. ACTION: • Subgroups to provide a report for the OB on current prescribing practice in NHSGGC and how it is evidenced
7.	**Progress and next steps on key issues:** **a. Infection prevention and control** **b. Governance** **c. Communications and engagement, with a focus on family members** The Terms of Reference and minutes of initial meetings for the Communications & Engagement sub-group and the Infection Prevention & Control and Governance (IPCG) sub-group were circulated as papers in advance of the meeting. Attendees did not have comments and the Chair asked for any material comments to be sent to a member of the Scottish Government policy team following the meeting. KW fed back to the OB on the initial meeting of the IPCG sub-group, in light of apologies from the Chair. KW noted that the meeting was action focused and members discussed the methodology that they will be adopting to fulfil their objectives. A draft timeline is in development and the sub-group will follow a 'board to floor' approach. The sub-group aims to next meet on the 30th December. CW provided a report of the initial meeting of the Communications & Engagement sub-group and noted that further meetings have been arranged to take place fortnightly until April. CW noted that he has written to 400 families that have had involvement with the haemato-oncology units within NHSGGC to ask for their views on what has worked well and what could be improved in their interactions with NHSGGC and with CW; responses will be considered at the next meeting. CW highlighted the importance of creating the conditions for all family representatives to feel confident and supported to share their experience. The Chair of the OB noted that the answers that families are looking for may come from a variety of sources, including the public inquiry. The Chair asked sub-groups to begin setting out a work programme as part of a robust programme management process. Sub-groups were asked to discuss this at their next meeting. SA has been asked to provide a draft work programme. The Chair asked attendees to consider how patients and families will feed into the work of the OB, and stated that she would welcome family members around the table. CW will ask the Communications & Engagement sub-group for their views on this.

	Attendees recognised that issues relating to information governance must be considered now for the work of the OB as well as for MB role. It was agreed that SG will take this forward as an action through discussions with MB and with advice from HIS. The Chair noted a third sub-group is to be established, to be chaired by Alan Morrison (SG). ACTIONS: • Communications & Engagement sub-group to ascertain views on how family representatives can best feed into work of OB • Sub-groups to develop a work programme with support from SA • PR to consider issues relating to information governance in discussion with MB and taking advice from HIS.
	AOB KW noted that the Scottish Government is continuing to add staff resource to support the work of the OB and subgroups.
6.	**Timeline and next steps** The next meeting of the Oversight Board will take place on the 19th December. The Chair suggested the OB meets fortnightly from the New Year to enable sub-groups opportunity to meet and feed into the work of the OB. The Communications & Engagement sub-group already has dates until April. This will be used to inform the dates of the OB meetings and attempts will be made to find an opportunity to meet at the same time each week.

Annex A: List of Attendees

Fiona McQueen	Chief Nursing Officer, CNOD, Scottish Government
Keith Morris	HAI/AMR Professional Medical Advisor, CNOD, Scottish Government
Laura Imrie	Lead Consultant for Healthcare Associated Infection (HAI), Antimicrobial Resistance and Infection Prevention and Control, HPS
Sandra Aitkenhead	CNOD, Scottish Government (secondee)
Craig White	Divisional Clinical Lead, Healthcare Quality and Improvement Directorate
Lesley Shepherd	Professional Advisor, CNOD, Scottish Government
Kirsty Walker	CNOD, Scottish Government
Calum Henderson	CNOD, Scottish Government
Claire McGrath (secretariat)	CNOD, Scottish Government
In attendance	
Dorothy McErlean	APF Chair Employee Director, NHS GGC
Audrey Thompson	ACF Chair Lead Pharmacist Prescribing Services, NHS GGC
Mags Mcguire	Executive Nurse Director, NHS GGC

Apologies:
Irene Barkby - Executive Director of Nurses, Midwives and Allied Health Professionals & HAI Exec Lead, NHS Lanarkshire
Andrew Murray – Medical Director, NHS Forth Valley
Hazel Borland - Executive Director of Nursing, Midwifery and Allied Health Professionals & Healthcare Associated Infection Executive Lead, NHS Ayrshire and Arran
Angela O'Neill – NHS GGC
Phil Raines – CNOD, Scottish Government

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OVERSIGHT BOARD – NHS GREATER GLASGOW AND CLYDE

Date and time: 19th December 2019, 14.00 – 15.30
Venue: 1.2 James Watt A, Atlantic Quay 5, 150 Broomielaw, Glasgow, G2 8LU
Attendees: see Annex A
Meeting 4 – Minute

1.	**Welcome, introductions and apologies** Chair welcomed attendees to the fourth meeting of the Oversight Board for NHS Greater Glasgow & Clyde and noted apologies (see Annex A).
2.	**Minutes** The minutes of the Oversight Board on 13 December were accepted.
3.	**Matters arising** CW highlighted that the Sub Group on 18 December signed off that a lead clinician will write families to provide the assurance around prescribing. This would then allow families to have a tailored response to suit the needs of their individual children. The Board discussed the need for clinical flexibility around prescribing and that such discussions should be documented and communicated to families. The Board to review the current process in place around the documentation and governance around prescribing. PR will continue to examine the need for information governance working closely with Marion Bain and HIS to understand the necessary requirement. CW highlighted that the Communications and Engagement Sub group will undertake a review of guidance used by NHS GGC and this includes guidance on confidentiality. ACTION: • NHS GGC to review the process of reviewing the governance around the current prescribing mechanism • PR to return to next meeting with findings on information governance.
4.	**Terms of Reference, Governance and Membership:** • **Redrafted ToR for discussion** NHS GGC Board Chair has provided comments on the terms of reference, it was agreed that the Oversight Board should agree the ToR once these comments are considered and any changes made. DM asked that under purpose and role of group, the first bullet point is changed to 'seek assurance that appropriate governance is in place to increase public confidence'. ACTION: • PR to revise Terms of Reference

5.	**Update from the Chair** The Chair highlighted the NHS GGC Board summary paper, as presented to the Board meeting on 17 December. The Board is now undertaking legal action against Brookfield Multiplex over issues arising from the construction of the QEUH campus. The Scottish Government will work with external experts to provide support to the Oversight Board. Discussions are continuing with a view to securing an expert paediatrician and an expert microbiologist in supporting the work of the Oversight Board. NHS GGC highlighted there is currently a 'technical issues' group operating within the Health Board, which might match the Oversight Board's requirements for a 'technical' sub-group. The scope for Alan Morrison taking over as Chair of this Group will be actively explord with a view to the work of this group feeding into the Oversight Board. The Chair updated that there is ongoing work to bring together a programme plan of milestones and objectives across the Oversight Board and the Sub Groups. The Scottish Government to work with SA to produce a draft programme of work – as well as a set of 'success/outcome' indicators for the Board and a risk register – for discussion at an Oversight Board Meeting early in 2020. ACTION: • The Chair will update the oversight Board on 9 January regarding the ongoing commissioning of work from external experts. • Alan Morrison to discuss with NHS GGC about the creation of the Technical Sub Group. • PR and SA to provide an update on the programme plan, success indicators and risk register at a meeting of the Oversight Board early in 2020.
6.	**Progress and next steps on key issues:** **a. Infection prevention and control** **b. Governance** **c. Communications and engagement, with a focus on family members** The Chair of IPCG highlighted the meeting had taken place and that the Terms of Reference had undergone some further changes. He asked that the comments from the Chair of NHS GGC were also reflected. CW highlighted that there was an unknown number of families who did not receive the letter from the Cabinet Secretary regarding the Public Inquiry and CW regarding the experience survey. The Board will undertake to review the database to ensure their information is accurate. CW has also posted on the facebook group to try and understand the numbers of families who did not receive the correspondence. The Board will look at new measures with regards to future issuing of correspondence. ACTIONS:

	• Scottish Government secretariat to consider NHS GGC Board Chairs comments on the ICGP ToR. • NHS GGC to review database of the families to ensure that correspondence issued will reach all the families going forward.
7.	**Timeline and next steps** The Chair updated the progress of Professor Marion Bain's work, both on scoping the case/data review but also in putting in place any further necessary improvements in ICP in NHS GGC. The Scottish Government will take forward work with relevant clinicians on how to scope and set up the case review and how this will be communicated with families. IB highlighted that the Nursing and Midwifery Council had produced a lessons learned slide pack from Morecambe Bay. ACTIONS: • Scottish Government to update on progress on the case review at the next Oversight Board. • IB to share the Nursing and Midwifery Council learnings from Morecambe Bay.
8.	**AOB** The Oversight Board will next meet on 9 January 2020. The Chair highlighted that there will a programme on timescales with regards to meetings of the Oversight Board and the Sub Groups. ACTIONS: The Scottish Government to provide dates for the Oversight Board and Sub Groups for 2020.

Annex A: List of Attendees

Fiona McQueen	Chief Nursing Officer, CNOD, Scottish Government
Dr Keith Morris	HAI/AMR Professional Medical Advisor, CNOD, Scottish Government
Laura Imrie	Lead Consultant for Healthcare Associated Infection (HAI), Antimicrobial Resistance and Infection Prevention and Control, HPS
Sandra Aitkenhead	CNOD, Scottish Government (secondee)
Craig White	Divisional Clinical Lead, Healthcare Quality and Improvement Directorate
Lesley Shepherd	Professional Advisor, CNOD, Scottish Government
Irene Barkby	Executive Director of Nurses, Midwives and Allied Health Professionals & HAI Exec Lead, NHS Lanarkshire
Dr Andrew Murray	Medical Director, NHS Forth Valley
Greig Chalmers	CNOD, Scottish Government
Phil Raines	CNOD, Scottish Government
Calum Henderson (secretariat)	CNOD, Scottish Government
In attendance	
Dorothy McErlean	APF Chair Employee Director, NHS GGC
Audrey Thompson	ACF Chair Lead Pharmacist Prescribing Services, NHS GGC
Mags Mcguire	Executive Nurse Director, NHS GGC
Jonathon Best	Chief Operating Officer, NHS GGC
Angela O'Neill	Deputy Nurse Director, NHS GGC

Apologies:
Hazel Borland - Executive Director of Nursing, Midwifery and Allied Health Professionals & Healthcare Associated Infection Executive Lead, NHS Ayrshire and Arran

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OVERSIGHT BOARD – NHS GREATER GLASGOW AND CLYDE

Date and time: 9th January 2020, 09:00 – 10:30
Venue: Fleming A, Atlantic Quay 5, 150 Broomielaw, Glasgow, G2 8LU
Attendees: see Annex A
Meeting 5 – Minute

1.	**Welcome, introductions and apologies** Chair welcomed attendees to the fifth meeting of the Oversight Board for NHS Greater Glasgow & Clyde and noted apologies (see Annex A).
2.	**Remarks from Cabinet Secretary** The Cabinet Secretary gave an update to the Oversight Board. The Cabinet Secretary noted that escalation of Greater Glasgow and Clyde (GGC) Health Board and the consequent establishment of an Oversight Board required all parties to cooperate to explore and resolve, as quickly as possible, the issues which had given rise to the decision to escalate. The Cabinet Secretary highlighted that stage 4 of the NHS Scotland escalation process involves a leading role for the Scottish Government, through the chairing of the Oversight Board and the work of the Board's sub groups. The Cabinet Secretary further highlighted the continuing and legitimate interest of the Parliament in the issues connected to the escalation and the importance of the Government being able to highlight to the Parliament material progress on those issues. The next occasion to offer the Parliament an update will be a Statement scheduled for 28 January. Throughout her remarks the Cabinet Secretary highlighted the critical importance of developing improvements in practice through the active involvement of the widest range of NHS staff and in involving and communicating with patients and their families.
3.	**Update from the Chair** The Chair noted that work continues to complete the team of expert advisers required to assist the review of relevant cases of possible infection connected to QEUH / RHS. The Chair will provide an update to the Board at the next meeting. Professor Mike Stevens, Emeritus Professor of Paediatric Oncology at the University of Bristol will be in Scotland in January. He will play a critical role in validating and reviewing the case review. The Scottish Government will provide an update of the visit at the next meeting. ACTION: • SG to provide update on external support at the next meeting.
4.	**Progress and next steps on key issues:** **a. Infection prevention and control and governance** **b. Communications and engagement, with a focus on family members** **c. Technical (buildings and environment) issues**

	The **IPCG Group** met on Monday 6 January. The Sub Group agreed the overarching framework of governance that it wants to explore in detail; the sub group discussed the broad structure of governance, as related to IPC and risk, as presented by NHS GGC; and identified key areas for further exploration at forthcoming meetings. In particular, the sub group will consider the application of national guidance in particular circumstances in the context of GGC and the QEUH campus. The Chair of NHS GGC enquired about the methodology used to review governance and highlighted the ongoing review of the escalation review process at the Scottish Government. The IPCG will consider a work plan and the validation of any governance review progress. This work plan will be returned to the Oversight Board. CW updated on the **Communications and Engagement Sub Group**. The Group was to meet on the afternoon of 9 January. The Sub Group has revised membership bringing in external expertise in both Communications and Person Centred approach. The Group will undertake a review of previously used policies and procedures around communication. The Sub Group will also consider the revised GGC website content, this website will be live as soon as possible. AM provided an update on the establishment of the **Technical Sub Group**. AM and TS to discuss together to establish detailed outcomes of the group whilst maintaining clarity on what the manageable deliverables will be. AM to provide an update in advance of the next Oversight Board. ACTIONS: • IPCG Group to consider the need to ensure validation in measuring the governance around infection prevention and control. • AM to provide an update on the Technical Sub Group in advance of the next Oversight Board.
5.	**Update from Angela O'Neill and Marion Bain** MB provided an update on the role is to undertake in NHS GGC. The Chairman of NHS GGC highlighted that another strand of this work should be the work with whistle-blowers with regards to Infection Prevention and Control. MB to consider how to engage the whistle-blowers in the work with regards to Infection Prevention and Control, with the aim of facilitating the sharing of any concerns within business as usual systems in GGC. AO updated on the Boards infection rates including there has been no positive gram- negative bacterium for the last 55 days. This also included significant enhanced monthly testing and supervision with regards to weekly walk-around of a multidisciplinary team. AO highlighted the improvements made to increase the intensive person centred approach which has included the introduction of parent sessions helping families to engage further with the clinicians involved in their treatment. The Scottish Government to consider how these improvement can be highlighted in the

	Statement to Parliament on the 28 January, with the benefit of information and further updates from GGC. ACTIONS: • MB to consider how to engage the whistle-blowers in the work with regards to Infection Prevention and Control. • The Scottish Government to consider how the methods of improvement can be highlighted in the Statement to Parliament on the 28 January.
6.	**Case Review** MB took the Oversight Board through the Paper. The primary scope of the case review should be: • haemato-oncology paediatric patients who had a gram negative blood stream infection, in Wards 2A/2B in the Royal Hospital for Children; and, • haemato-oncology paediatric patients who had a gram negative blood stream infection, in Wards 6A/4C in the Queen Elizabeth University Hospital since the hospital opened in 2015. The review will consider 'triggers' that appear before harm occurs, so that the focus is not simply on where infection has already been identified as the only critical relevant factor. The Oversight Board agreed with the methodology for the Case Review. The Chief Executive and Marion Bain will engage with clinicians to provide necessary assurance and seek their views as to what could form the basis of the case review. The Communications and Engagement sub-group will consider how the proposed approach to case review would be effectively communicated with the families. The Oversight Board also agreed that external validation of the process will be sought throughout the methodology and reporting. ACTIONS: • JG and MB to engage with clinicians to provide reassurances around the Case Review • The Communications and Engagement sub-group will consider how the case review would be effectively communicated with the families. • The Scottish Government to consider the means for external validation and will update the Oversight Board at the next meeting.
7.	**Minutes** CW queried the minute on the point around information governance and Scottish Government liaising with HIS. The Scottish Government to provide an update in advance of the next Oversight Board. CW informed the action around staff communications was now complete. The Secretariat will close this action on the action tracker. ACTIONS: • The Scottish Government to update on the point raised by CW on information governance in advance of the next Oversight Board.

	• Secretariat to close action on staff communications
8.	**Matters Arising** NHS GGC raised concerns around the process of press lines clearance and the reputational impact this has on the Board. The Scottish Government to consider reviewing this process and will feedback to the Health Board. **ACTIONS:** • The Scottish Government to consider the process around media line clearance.
9.	**Terms of Reference** The Oversight Board confirmed they were content with the Terms of Reference subject to the secretariat updating the date of which NHS GGC received the letter of escalation, adding the amendment to attendance from DM, including that JB and JG to receive a copy of minutes; and an addition to the purpose around the learning for Health Boards across NHS Scotland. The Terms of Reference will be signed off by the Director General for Health and Social Care. The secretariat to share Terms of Reference with JB to allow for circulation to the wider Board of NHS GGC. The Scottish Government to consider the publication of minutes. ACTIONS: • Terms of Reference to be submitted to DG for final sign off • The Scottish Government to share Terms of Reference to allow circulation with Board of NHS GGC • The Scottish Government to consider publication of minutes of Oversight Board.
10.	**AOB** The Oversight Board will next meet on 23 January 2020.

Annex A: List of Attendees

Fiona McQueen	Chief Nursing Officer, CNOD, Scottish Government
Hazel Borland	Executive Director of Nursing, Midwifery and Allied Health Professionals & Healthcare Associated Infection Executive Lead, NHS Ayrshire and Arran
Marion Bain	Director of Infection Prevention and Control, NHS GGC
Laura Imrie	Lead Consultant for Healthcare Associated Infection (HAI), Antimicrobial Resistance and Infection Prevention and Control, HPS
Sandra Aitkenhead	CNOD, Scottish Government (secondee)
Craig White	Divisional Clinical Lead, Healthcare Quality and Improvement Directorate
Lesley Shepherd	Professional Advisor, CNOD, Scottish Government
Andrew Murray	Medical Director, NHS Forth Valley
Alan Morrison	DFCGV, Scottish Government
Greig Chalmers	Interim Deputy Director, CNOD, Scottish Government
Calum Henderson (secretariat)	CNOD, Scottish Government
In attendance	
John Brown	Chairman, NHS GGC
Jane Grant	Chief Executive, NHS GGC
Tom Steele	Director of Estates and Facilities, NHS GGC
Dorothy McErlean	APF Chair Employee Director, NHS GGC
Audrey Thompson	ACF Chair Lead Pharmacist Prescribing Services, NHS GGC
Mags Mcguire	Executive Nurse Director, NHS GGC
Jonathon Best	Chief Operating Officer, NHS GGC
Angela O'Neill	Deputy Nurse Director, NHS GGC

Apologies:
Keith Morris - HAI/AMR Professional Medical Advisor, CNOD, Scottish Government
John Cuddihy – Family Representative
Irene Barkby - Executive Director of Nurses, Midwives and Allied Health Professionals & HAI Exec Lead, NHS Lanarkshire

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OVERSIGHT BOARD – NHS GREATER GLASGOW AND CLYDE

Date and time: 23 January 2020, 14:30 – 16:00
Venue: Glennie A & B, Atlantic Quay 5, 150 Broomielaw, Glasgow, G2 8LU
Attendees: see Annex A
Meeting 5 – Minute

1.	**Welcome, introductions and apologies** Chair welcomed attendees to the fifth meeting of the Oversight Board for NHS Greater Glasgow & Clyde and noted apologies (see Annex A). The Chair welcomed Diane Murray to the meeting as Interim Chair of the IPCG Sub Group following the decision of Irene Barkby to stand down as Chair. The Chair and Oversight Board noted their thanks to Irene for her contribution.
2.	**Minute from Previous Meeting** The minute of the previous meeting was accepted.
3.	**Update from the Chair** The Chair updated the Sub Group that the Cabinet Secretary for Health and Sport will be delivering a parliamentary statement on the afternoon of the 28 January.
4.	**Progress and next steps on key issues:** **a. Infection prevention and control and Governance** **b. Communications and engagement** **c. Technical Issues Sub Group** The IPCG met on the 16 January. NHS GGC had provided an example of a recent outbreak and allowed the IPCG to further examine the measures with regards to infection prevention and control. A work plan has been drafted and will go to the Sub Group on 30 January which will focus on breaking down the relevant areas of governance. The Chair of the IPCG highlighted a peer review conducted by members of the Sub Group will take place. This will further scrutinise the processes used previously by the Board with regards to infection prevention and control. The Communications and Engagement Sub Group will meet on the 29 January. The Board has invited additional members in Angela Wallace and Jane Duncan from external Health Boards to give additional expertise in communications and person centred engagement. Jen Rodgers of the Schiehallion Unit has also joined at the request of the family representatives. The website with updated content is now live and continuing to be developed following feedback from families. The Sub Group will also consider a workplan based on the deliverables in the Terms of Reference. The Communications and Engagement Sub Group will examine the database list used by NHS GGC to consider the relevant communications methods that could be used to communicate with families with regards to the case review.

	The Sub Group will consider the person centred approach required and will feedback at the next Oversight Board. The Technical Issues Sub Group will meet following the Oversight Board. The first meeting shall clear the Term of Reference. The Sub Group will meet monthly and will provide written reports to the Oversight Board. NHS GGC will provide fortnightly updates on progress on work required. ACTIONS: • The Communications and Engagement Sub Group to consider the methodology of communicating the Case Review with families and feedback at the next Oversight Board.
5.	**Update on Case Review** Marion Bain and the Chief Medical Officer met with clinicians who were comfortable with the process and asked questions that will feed into the process. Mike Stevens will also meet with clinicians in early February to further discuss the process. The practical process is still continuing to be worked out. Pat O'Connor to lead on data extraction and the Scottish Government continue to review the staffing requirement of the Case Review. The Oversight Board acknowledged the Case Review will focus on learning for NHS Greater Glasgow and Clyde around infection control and links to the environmental impact on infections. These learnings from the work of the Case Review will feed into wider improvement across NHS Scotland. The Chair has asked that Communications to staff and Families be added as a standing item on the agenda. The group discussed the need for the trigger tool to be made understandable for the public, a paper will return to the Oversight Board clearly laying out the process of the review. The Case Review team will consider how to manage patient confidentiality with regards to reporting and information sharing. ACTIONS: • A paper to return on the process of the case review methodology at the next meeting.
6.	**Success Indicators** Phil Raines spoke to the paper. The Board wanted to further establish what evidence could be provided to support success. The Chair of the Technical Issues Sub Group was tasked to consider the outcomes of the Technical Issues Sub Group. Phil Raines was tasked to consider how the Oversight Board could be assured that actions were complete and also what was the role of the Oversight Board with regards to national learning.

	ACTIONS: • The Chair of the Technical Issues Sub Group to consider what the outcomes of the Sub Group should be. • Phil Raines to consider how the Oversight Board can be assured that actions are complete and also what is the role of the Oversight Board with regards to national learning.
7.	**Developing a Programme Plan** The Oversight Board commissioned Sandra Aitkenhead to work with the Sub group chairs and Marion Bain (for the Case Review) to pull together a programme plan for consideration for the next meeting of the OB. ACTIONS: • Sandra Aiktenhead to return to next Oversight Board with draft Programme Plan.
8.	**Date of Next Meeting** The Oversight Board will next meet on 6 February 2020.

Annex A: List of Attendees

Fiona McQueen	Chief Nursing Officer, CNOD, Scottish Government
Diane Murray	Deputy Chief Nursing Officer, Scottish Government
Marion Bain	Director of Infection Prevention and Control, NHS GGC
Laura Imrie	Lead Consultant for Healthcare Associated Infection (HAI), Antimicrobial Resistance and Infection Prevention and Control, HPS
Sandra Aitkenhead	CNOD, Scottish Government (secondee)
Craig White	Divisional Clinical Lead, Healthcare Quality and Improvement Directorate
Lesley Shepherd	Professional Advisor, CNOD, Scottish Government
Alan Morrison	DFCGV, Scottish Government
Phil Raines	CNOD, Scottish Government
Calum Henderson (secretariat)	CNOD, Scottish Government
In attendance	
Tom Steele	Director of Estates and Facilities, NHS GGC
Dorothy McErlean	APF Chair Employee Director, NHS GGC
Mags Mcguire	Executive Nurse Director, NHS GGC
Angela O'Neill	Deputy Nurse Director, NHS GGC

Apologies:
Keith Morris - HAI/AMR Professional Medical Advisor, CNOD, Scottish Government
John Cuddihy – Family Representative
Jonathon Best – Chief Operating Officer, NHS GGC
Audrey Thompson - ACF Chair, Lead Pharmacist Prescribing Services, NHS GGC
Andrew Murray – Medical Director, NHS Forth Valley
Hazel Borland - Executive Director of Nursing, Midwifery and Allied Health Professionals & Healthcare Associated Infection Executive Lead, NHS Ayrshire and Arran
Greig Chalmers - CNOD, Scottish Government

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OVERSIGHT BOARD – NHS GREATER GLASGOW AND CLYDE

Date and time: 6 February 2020, 09:00 – 10:30
Venue: Fleming A, Atlantic Quay 5, 150 Broomielaw, Glasgow, G2 8LU
Attendees: see Annex A
Minute

1.	**Welcome, introductions and apologies** Chair welcomed attendees to the fifth meeting of the Oversight Board for NHS Greater Glasgow & Clyde and noted apologies (see Annex A).
2.	**Minute from Previous Meeting** The minute of the previous meeting was accepted. The Minutes will be published on the NHS Greater Glasgow and Clyde website by the end of w/c 10 February.
3.	**Update from the Chair** The Chief Executive of NHS Greater Glasgow and Clyde highlighted the significant workload being experienced by colleagues within the Board. The Oversight Board acknowledged the need for commissions for meetings to be clear and concise. The Chair agreed this should be the case but also reminded the Oversight Board about the importance of pace to the work.
4.	**Progress and next steps on key issues:** **a. Infection prevention and control and Governance** **b. Communications and engagement** **c. Technical Issues Sub Group** The IPCG met on the 30 January. It agreed to pull together a terms of reference for the peer review commissioned by the CNO. This will further scrutinise the processes used previously by the Board with regards to infection prevention and control. The Review will be conducted by Lisa Ritchie of HPS, Christina Coloumbe of NHS Lanarkshire, Francis Lafferty of NHS Ayrshire and Arran, and Martin Connors of NHS Dumfries and Galloway. The next meeting will focus on risk management and audit with a particular attention to How have environmental/facilities risks associated with the QEUH and the RHC been linked to infection and control risks within the Board's risk and audit governance structure of NHS GGC. The Communications and Engagement Sub Group met on the 4 February. The group talked through the Cryptococcus incident in 2018. The group asked specific questions about how the Board should communicate the HIIAT escalation process with the public and what further expertise can be brought in to discuss incidents with families. The Group at the next meeting will take this forward further and go

	underneath what communications is giving to families as well as examine the Boards use of Duty of Candour. The Group also agreed that letter will go to families who have experienced a bereavement asking whether or not they would wish to receive further communications around the Public Inquiry. The Chair highlighted the positive dialogue this created and the opportunity to examine the learning identified. The Technical Sub Group met on 23 January. The terms of reference were agreed and will provide regular progress reports to the Oversight Board. The Board commissioned the Technical Sub Group to undertake a review alongside colleagues in HFS and HPS around the use of filters. This will return to the Oversight Board for recommendations that will be made to the NHS Greater Glasgow and Clyde which will have external validation. ACTIONS: • The Technical Sub Group to consider the review of filters and provide a report to the Oversight Board • The Scottish Government to produce a single action tracker to bring together outstanding actions from the Oversight Board and the Sub Groups
5.	**Update from Marion Bain** Marion Bain spoke through her paper highlighting the various channels of work that is ongoing. This will become a standing item to update on the works progress.
6.	**Update on Case Review** The numbers are currently being confirmed for the Case Review. This is being brought together with the patients master list that was commissioned by the Communications and Engagement Sub Group. The Board noted the significant progress that has been made with regards to the identification of the team will conduct the review. The 3 external panel members have been identified and the case review is expected to report by late spring. A workshop will be held bringing all those involved in the review together to create a single plan that will cover methodology, framework and communications with the families. The Oversight Board noted the importance of the plan to provide clarity on language and utilising the trigger tool to answer the following questions: • What was the impact of the child's outcomes as a result of the infection • What was the environmental impact with regards to infection prevention and control • What is the learning that can be used NHS Greater Glasgow and Clyde and across the wider NHS in Scotland ACTIONS: • The plan will be shared with Oversight Board bringing together all aspects of the case review; methodology, framework and communications with the families.

7.	**Programme Plan** The programme plan will be shared in advance of the next Oversight Board for ratification of the plan at the next meeting. The Government is considering what the outcomes of the Oversight Board process will be and how this links into the programme plan. The success indicators will be shared once they have been updated with regards to the programme plan. ACTIONS: • The Programme plan to be shared in advance of the next Oversight Board • Success Indicators to be shared once they have been updated.
8.	**Date of Next Meeting** The Oversight Board will next meet on 19 February 2020.

Annex A: List of Attendees

Fiona McQueen	Chief Nursing Officer, CNOD, Scottish Government
Diane Murray	Deputy Chief Nursing Officer, Scottish Government
Marion Bain	Director of Infection Prevention and Control, NHS GGC
Laura Imrie	Lead Consultant for Healthcare Associated Infection (HAI), Antimicrobial Resistance and Infection Prevention and Control, HPS
Hazel Borland	Executive Director of Nursing, Midwifery and Allied Health Professionals & Healthcare Associated Infection Executive Lead, NHS Ayrshire and Arran
Andrew Murray	Medical Director, NHS Forth Valley
Craig White	Divisional Clinical Lead, Healthcare Quality and Improvement Directorate
Keith Morris	HAI/AMR Professional Medical Advisor, CNOD, Scottish Government
Lesley Shepherd	Professional Advisor, CNOD, Scottish Government
Greig Chalmers	CNOD, Scottish Government
Phil Raines	CNOD, Scottish Government
Jim Dryden	CNOD, Scottish Government
Calum Henderson (secretariat)	CNOD, Scottish Government
In attendance	
Jane Grant	Chief Executive, NHS GGC
Audrey Thompson	ACF Chair, Lead Pharmacist Prescribing Services, NHS GGC
Dorothy McErlean	APF Chair Employee Director, NHS GGC
Mags Mcguire	Executive Nurse Director, NHS GGC
Angela O'Neill	Deputy Nurse Director, NHS GGC

Apologies:
John Cuddihy – Family Representative
Jonathon Best – Chief Operating Officer, NHS GGC
Tom Steele, Director of Estates and Facilities, NHS GGC
Sandra Aitkenhead, Scottish Government (secondee)
Alan Morrison, DHFCV, Scottish Government

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OVERSIGHT BOARD – NHS GREATER GLASGOW AND CLYDE

Date and time: 19 February 2020, 09:30 – 11:00
Venue: Glennie A & B, Atlantic Quay 5, 150 Broomielaw, Glasgow, G2 8LU
Attendees: see Annex A
Minute

1.	**Welcome, introductions and apologies** Chair welcomed attendees to the meeting of the Oversight Board for NHS Greater Glasgow & Clyde and noted apologies (see Annex A).
2.	**Minute from Previous Meeting** The minute of the previous meeting will be amended to reflect opportunity for the wider NHS Scotland to learn from Case Review. The Minutes are now published on the NHS Greater Glasgow and Clyde website.
3.	**Update from the Chair** Angela Wallace has joined NHS Greater Glasgow and Clyde on a part time basis from NHS Forth Valley as Operational Director for Infection Prevention and Control to support the work of Marion Bain. The Chair reflected on the significant amount of work that is being commissioned by the Oversight Board and Sub groups. It was agreed that the Scottish Government will review the rhythm currently of the various meetings and whether or not it would be advantageous to move this to three weekly. The Chair encouraged the open discussion between the Government and NHS Greater Glasgow and Clyde to ensure that any issues around scope creep or the asks within commissions are clear going forward. The Government will bring back a paper to the next meeting which will review the next steps for the Oversight Board and will include the timelines for the meetings going forward. The Chair of the IPCG has reflected on the Sub Group moving from a presentation to a SBAR, to provide clarity on the information being provided by NHS Greater Glasgow and Clyde. The Board agreed that Angela Wallace will join the IPCG Meeting in addition to her role on the Communications and Engagement Sub Group. ACTIONS: • Scottish Government and NHS Greater Glasgow and Clyde to undertake a stocktake and reflect on the work required going forward. • Scottish Government to bring a paper to the next meeting commenting on the issues explored by the sub groups and making proposals for the rhythms for meetings and the work still required.

4.	**Progress and next steps on key issues:** **a. Infection prevention and control and Governance** **b. Communications and engagement** **c. Technical Issues Sub Group** The IPCG met on the 13 February. It reflected on the governance process with regards to the incidents within 2017 and 2018. The next meeting will focus on what NHS Greater Glasgow and Clyde has taken from the learning of these incidents and how this resulted in changes to the process should it of been required. The Peer Review will review the decisions that were taken at each level, how this was communicated with staff and what learning was identified for all levels of staff. The Peer Review Terms of Reference will be brought to the next meeting of IPCG on the 27 February. The Communications and Engagement Sub group met on the 18 February. A work plan for the Sub Group is in place. The group continued the discussion around some of the issues with regards to communications. The group acknowledged the learning around introducing person centred lines when answering media queries. The Sub Group noted that the Duty of Candour processes was not activated in the incident of gram negative. The Sub Group have seen this as opportunity for national learning around the implementation of the Duty of Candour. The pairing was seen as a positive for the quality of discussion at the Sub Group. It was agreed that NHS Greater Glasgow And Clyde alongside Craig White to review the handling around correspondence with bereaved families and will define clearly what 'good' looks like. Marion Bain is also currently reviewing the 71 answers that were provided to consider whether any further information should be required. The decision around sequencing of communication to the families is ongoing however it will be handled with a focus in the best interests for the families involved. The Technical Sub group is expected to meet week commencing 24 February. A work programme is still to be developed and the group still need to define the key questions that the Sub Group will answer. Phil Raines highlighted a full work plan will brought to the next meeting for discussion. ACTIONS: • A full work plan will be presented at the next meeting.
5.	**Update from Marion Bain** Marion Bain updated on the various strands of work. The focus is on practical delivery and addressing the live issues including COVID19. The IPCG peer review will help support the IPC team. However it was acknowledged that given demand the capacity of the IPC team is stretched. Angela Wallace has been brought in to support capacity and enhance the skill set to cope with ongoing issues. Organisation development will be brought in to support the relationships between the IPC team and wider directorates with NHS Greater Glasgow and Clyde. This

	Organisational Development will be brought in to develop and understand the opportunities for learning.
6.	**Update on Case Review** A workshop of the all those involved in the Case Review will take place on Monday 24 February. This will develop a single document that will clearly lay out the sample that will be used and the define the methodologies being used. The workshop will provide clarity on the roles of all involved as well as any requirements on staffing. The Case Review workshop will focus on the questions that need to be answered, the outcomes of these questions and the intentions of the outcomes. A comms plan will also be developed and as part of this plan will highlight the communication that will be used for clinical staff to update them on progress of the case review. The Oversight Board noted the considerable work of Jennifer Rodgers to provide the support of clinicians around the learning of the case review. Communication around boundaries of the case review are important and the need for any communications to highlight what options are present with regards to getting in touch with the Board around reviews of treatment.
7.	**Programme Plan** The Oversight Board saw the first draft of the programme plan which will be used going forward to track actions and forward plan. The Chair of the Communications and Engagement Sub Group will table this at the next meeting as further additions will be required. It was agreed a consistent template on reporting from sub groups will allow a dashboard of the ongoing work to be created. A developed plan will be shared with NHS Greater Glasgow and Clyde for comment to see if this will support with regards to the commissioning of work. ACTIONS: • A developed plan will be shared with NHS Greater Glasgow and Clyde for comment
8.	**Date of Next Meeting** The Oversight Board will next meet on 5 March 2020.

Annex A: List of Attendees

Fiona McQueen	Chief Nursing Officer, CNOD, Scottish Government
Diane Murray	Deputy Chief Nursing Officer, Scottish Government
Marion Bain	Director of Infection Prevention and Control, NHS GGC
Laura Imrie	Lead Consultant for Healthcare Associated Infection (HAI), Antimicrobial Resistance and Infection Prevention and Control, HPS
Hazel Borland	Executive Director of Nursing, Midwifery and Allied Health Professionals & Healthcare Associated Infection Executive Lead, NHS Ayrshire and Arran
Craig White	Divisional Clinical Lead, Healthcare Quality and Improvement Directorate
Sandra Aitkenhead	Scottish Government (secondee)
Greig Chalmers	CNOD, Scottish Government
Phil Raines	CNOD, Scottish Government
Marie Brown	CNOD, Scottish Government
Calum Henderson (secretariat)	CNOD, Scottish Government
In attendance	
Jane Grant	Chief Executive, NHS GGC
Audrey Thompson	ACF Chair, Lead Pharmacist Prescribing Services, NHS GGC
Mags Mcguire	Executive Nurse Director, NHS GGC
Angela O'Neill	Deputy Nurse Director, NHS GGC

Apologies:
Keith Morris, HAI/AMR Professional Medical Advisor, CNOD, Scottish Government
Lesley Shepherd, Professional Advisor, CNOD, Scottish Government
Dorothy McErlean, APF Chair and Employee Director, NHS GGC
John Cuddihy – Family Representative
Jonathon Best – Chief Operating Officer, NHS GGC
Tom Steele, Director of Estates and Facilities, NHS GGC
Alan Morrison, DHFCV, Scottish Government
Andrew Murray, Medical Director, NHS Forth Valley

Publication - Minutes

NHS Greater Glasgow and Clyde Oversight Board minutes: 4 September 2020

Published: **10 May 2021**
Directorate: Healthcare Quality and Improvement Directorate
Topic: Health and social care
Date of meeting: **4 September 2020**
Date of next meeting: **30 October 2020**

Minutes from the meeting of the NHS Greater Glasgow and Clyde Oversight Board held on 4 September 2020.

Part of

NHS Greater Glasgow and Clyde Oversight Board

Attendees and apologies

Attending:

- Fiona McQueen, Chief Nursing Officer (Chair), Scottish Government Chief Nursing Officer Directorate
- Diane Murray, Deputy Chief Nursing Officer, Scottish Government Chief Nursing Officer Directorate
- Lesley Shepherd, HAI/AMR Professional Nurse Advisor, Scottish Government Chief Nursing Officer Directorate

- Angela Wallace, Nurse Director, NHS Forth Valley (and Interim Director of Infection Control, NHS GGC)
- Sandra Aitkenhead, KPMG Consultant seconded to the Scottish Government
- Hazel Borland, Executive Director of Nursing, Midwifery and Allied Health Professionals and Healthcare Associated Infection Executive Lead, NHS Ayrshire and Arran (joining after 3 pm)
- John Cuddihy, Parents representative
- Craig White, Communications and Engagement Lead, Scottish Government
- Phil Raines, Unit Head, Scottish Government QEUH Business Support Unit
- Carole Campariol-Scott, Policy Officer, Scottish Government QEUH Business Support Unit (OB Secretariat)
- Jim Dryden, Policy Officer, Scottish Government QEUH Business Support Unit (OB Secretariat)

Apologies:

- Marion Bain, Deputy Chief Medical Officer, Scottish Government
- Dr Andrew Murray, Medical Director, NHS Forth Valley

Items and actions

Introduction/update

The Chair welcomed everyone to the meeting. She took the opportunity to formally thank a number of colleagues who were previous members of the Oversight Board (OB) for their contributions to the work of the OB, namely: Greig Chalmers, Keith Morris and Marion Bain.

She acknowledged the unprecedented challenges the COVID-19 pandemic brought and which caused for the OB work to be slowed down, but not stopped. One unintended consequence was for the Case Note Review reporting to be delayed to early 2021.

Among the aims of this meeting was to:

- take stock on where the OB was in its work programme. Reports were now available from all the workstreams which had been commissioned, including the Subgroup
- agree on the steps to preparing a final report, including whether an interim report may be necessary, and what other work was needed before the OB could complete its work and
- come to a view to what practical steps to recommend NHS GGC in the report which would make a difference to patients' safety going forward

It was also noted this was a private meeting without NHS GGC representatives, providing an opportunity for open discussion by the OB.

Infection and Governance Timeline: draft final report

Sandra Aitkenhead (SA) presented her paper to the OB. SA was asked by the OB to create a timeline between 2015 and 2019 of the infection incidents in the haemato-oncology paediatric patient group, and how they were handled by various groups/committees within NHS GGC. The Chair acknowledged the complex and challenging task in producing the timeline and thanked SA for her work.

SA made the following points:

- the findings were not based on detailed forensic investigation of all information sources, but on documents provided by NHS GGC, which included minutes of meetings of relevant groups and committees
- the timeline had been revised in line with comments made by NHS GGC on an earlier version. It also incorporated comments from a number of NHS GGC clinicians who had raised concerns about the hospital with the Cabinet Secretary

John Cuddihy (JC) acknowledged the considerable work SA had put in to produce the timeline. He also added that the analysis was only as good as the information SA was provided with and asked how confident SA was about the information she had been supplied with. The Chair asked JC whether he thought some of the information was missing, to which JC agreed. SA responded to say the timeline was a factual representation of the information provided in the minutes of the key groups and committees in the NHS GGC clinical governance hierarchy.

Diane Murray (DM) suggested that the Infection Prevention and Control and Governance (IPC&G) Subgroup should examine the timeline and report, and reconvene for a meeting to discuss.

Action:

- OB Secretariat to arrange a meeting of the IPC&G Subgroup

IPC and Governance Subgroup: draft summary report

DM summarised the work of the IPC&G Subgroup, as set out in the summary report provided to the OB. She explained that the Subgroup had not yet had the opportunity to review its draft report in light of the comments on an initial draft shared with NHS GGC. The Subgroup should reconvene to consider the comments by the Health Board and agree a final report. DM added the current draft of the report echoed findings in SA's timeline report.

The key issue for the OB to explore was whether it felt the evidence suggested that NHS GGC's response to the infection incidents could have been improved significantly.

The aim of the Subgroup report was to ensure that IPC processes and systems and escalation procedures within the Health Board were fit for purpose. While the Subgroup had not been able to conclude its work programme because of the pandemic, it had been able to review a range of

issues, including in-depth examinations of key periods. Key areas that needed further consideration included:

- considering issues raised by several NHS GGC clinicians about the effectiveness of IPC arrangements within the Health Board and
- looking at the organisation's ability to learn, and the deeper implications for the organisation's culture

Phil Raines (PR) updated on engagement with several NHS GGC clinicians. The three clinicians had contacted the Cabinet Secretary previously with issues relating to IPC, governance and communications. The Chair met with them to hear the concerns in the context of the work of the OB. PR advised that their evidence warranted further engagement with the Health Board before the OB prepared its final report.

JC added that this discussion suggested that not all relevant information may have been provided to the OB yet, citing the example of how some Gram-positive bacteria infection incidents within this group of patients and the timeline of the OB were being regarded. It was agreed that the Secretariat would liaise further with JC to ensure that these issues were properly considered before the final report was prepared.

Action:

- PR to liaise with JC on key information gaps in the timeline and IPC&G Subgroup work

Case note review

PR explained that the Case Note Review was part of the OB process, but running to a different timescale. The Case Note Review would examine individual infection cases and draw observations and conclusions for the OB (as well as the individual families). The impact of Covid-19 meant that the work had continued at a slower pace, so the current anticipated deadline to complete the final report is early 2021.

One of the emerging findings related to record-keeping issues within NHS GGC. The Case Note Review team had made a number of observations about record-keeping in a paper to the OB. The findings were recommended to the OB for consideration for its final report.
PR suggested that when the Case Note Review report was completed, the OB should reconvene to consider the findings and recommendations.

Peer review

On behalf of Lesley Shepherd (LS), PR set out the Peer Review work. LS, Frances Lafferty (NHS Ayrshire & Arran) and Claire McGrath (SG) worked with NHS GGC on bringing the report together. NHS GGC commented on a draft of this report, and Lesley Shepherd considered these comments for her final draft. As a full Peer Review could not be conducted because of the pandemic, the

report recommended that such a full Review should be completed on IPC processes in NHS GGC at some stage.

In discussion, DM suggested that she meet with members of the IPC&G Subgroup to discuss key aspects of IPC that could not be covered by the Peer Review. This would be picked up as part of the proposed meeting of the Subgroup.

IPC/organisational development work within the Board

The Chair explained that, following escalation to Stage 4, Marion Bain (MB) and Angela Wallace (AW) were placed within NHS GGC to undertake senior IPC roles. MB had since moved on to take up a new role as Deputy Chief Medical Officer in the SG. Both provided reports on their experiences and the work they had undertaken in NHS GGC. AW was invited to provide her view of the current state of IPC, and what further work might be required.

DM added that these issues had not been explored before in the context of a complex and large organisation such as NHS GGC, and that acknowledgement was required of the different structure and processes to capture all of the issues. Craig White (CW) added that the role of clinical leadership was important in this context, not least the role of the Clinical Care and Governance Committee.

Communications and Engagement Subgroup: final summary report

In presenting the work of the Communications and Engagement (C&E) Subgroup, CW thanked JC, Alfie Robson, Lara Allan (SG), PR and Calum Henderson (SG) in supporting the work of the Subgroup. The C and E Subgroup summary paper had been finalised, following comments by NHS GGC on an earlier draft.

CW acknowledged that over the course of the Subgroup's work, the relationship with NHS GGC had become significantly less adversarial and real improvements had been noted. Working through the issues had resulted in the following outcomes:

- more senior executive engagement had been noted with the families
- the Subgroup offered consistent transparency, and was a consistent and reliable way to ensure families were demonstrably at the centre of action
- some improvement in thinking more innovatively had occurred, such as the closed Facebook group for the families, giving an opportunity for NHS GGC to embrace social media as one other means of engagement with the families.

The Subgroup had also discussed the issue of the organisational Duty of Candour. NHS GGC reported on the duty of candour as required by legislation, although no events had been activated under Duty of Candour within the period of QEUH infections. The Subgroup had raised issues about the Health Board's interpretation of the triggers for the organisational Duty of Candour.

JC also acknowledged there had been improvement in the Health Board, but there was still more to do. Engagement with the families had to be a corporate responsibility, especially with the Duty of Candour. It had to be embedded in the organisational culture to allow freedom to talk openly to families. He endorsed CW's comments and his particular role in engaging with the families especially around the Duty of Candour.

Technical Issues Subgroup

Alan Morrison (AM) reported that he had spoken to the Director of Facilities and Estates at NHS GGC this week to ask for an update on refurbishment of Wards 2A and 2B in the RHC and plans to invite HFS to review the current water safety policy of NHS GGC. On refurbishment, as a result of the pandemic, the revised timeline for completing Wards 2A/B was now May 2021.

Outstanding work: summary and discussion

PR talked through the remaining work that OB should consider taking forward before it prepared its final report. In the ensuing discussion, the following points were made:

- work had been identified which still needed to be done. The OB would need to go back to NHS GGC with specific questions and information requests
- Laura Imrie of ARHAI Scotland would be commissioned by the OB to produce a SBAR on HIIORTs by NHS GGC
- further work on the Health Board's approach to Significant Adverse Event Reviews would be taken forward
- follow up engagement with the NHS GGC clinicians – and the Health Board itself – was needed on selected issues

The Chair noted the following as part of the discussion:

- the meeting had demonstrated the huge amount of work that the Subgroups and others had done. They were to be thanked for these contributions
- however, to fulfil the OB's role of providing assurance, it needed to be satisfied that the relevant issues had been explored before the final report was prepared

Final report and next steps: discussion

The Chair thanked all and rounded up the meeting, with the following key questions:

- was there sufficient evidence for the OB to provide recommendations?
- should the OB consider 'phasing' the recommendations: an interim set based on the work to date, and a final view once the Case Note Review has reported?
- what were the key themes we would want to reflect in our report?
- how should we engage with NHS GGC in the development of the final report?

PR said there to be an emerging consensus around key themes for recommendations. In the following discussion, the OB concurred with this view.

The Chair agreed that the OB should reconvene to consider its reports.

A.O.B and date of next meeting

The OB agreed to work on reports building on today's discussions and other reports. It was agreed the next meeting would take place in October.

Contact

NHS Greater Glasgow and Clyde Oversight Board

Was this helpful?

- ◯ Yes
- ◯ No
- ◯ Yes, but

Publication - Minutes

NHS Greater Glasgow and Clyde Oversight Board minutes: 30 October 2020

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Date of meeting: **30 October 2020**
Date of next meeting: **19 January 2020**
Location: **MS Teams**

Minutes from the meeting of the NHS Greater Glasgow and Clyde Oversight Board held on 30 October 2020.

Part of

NHS Greater Glasgow and Clyde Oversight Board

Attendees and apologies

Attendees:

- Fiona McQueen, Chief Nursing Officer, Chair of the QEUH Oversight Board
- Craig White, Healthcare Quality and Improvement Directorate, Scottish Government, Chair of the Communications and Engagement Subgroup of the QEUH Oversight Board
- Alan Morrison, Finance Directorate, Scottish Government, Chair of the Technical Issues Subgroup of the QEUH Oversight Board

- Diane Murray, Deputy Chief Nursing Officer, Chair of the Infection Prevention and Control and Governance (IPCG) Subgroup of the QEUH Oversight Board
- Hazel Borland, Executive Director of Nursing, Midwifery and Allied Health Professionals and Healthcare Associated Infection Executive Lead, NHS Ayrshire and Arran
- John Cuddihy, Families representative
- Keith Morris, Chief Nursing Officer's Directorate, Scottish Government, Deputy Chair of the QEUH Oversight Board
- Lesley Shepherd, Chief Nursing Officer's Directorate, Scottish Government
- Sandra Aitkenhead, seconded to Chief Nursing Officer's Directorate, Scottish Government
- Angela Wallace, Interim Director of Infection Control, NHS GGC

In attendance:

- Helen Buchanan, Executive Director of Nursing, Midwifery and Allied Health Professionals and Healthcare Associated Infection Executive Lead, NHS Fife (for the IPCG Subgroup)
- Martin Connor, Infection Control Doctor, NHS Dumfries and Galloway (for the IPCG Subgroup)
- Christina Coulombe, Infection Control Manager, NHS Lanarkshire (for the IPCG Subgroup)
- Marion Bain, Deputy Chief Medical Officer, Scottish Government (for the Case Note Review)

Secretariat:

- Carole Campariol-Scott, Chief Nursing Officer's Directorate, Scottish Government
- Jim Dryden, Chief Nursing Officer's Directorate, Scottish Government
- Phil Raines, Chief Nursing Officer's Directorate, Scottish Government

Apologies:

- Dr Andrew Murray, Medical Director, NHS Forth Valley and Co-chair of Managed Service Network for Children and Young People with Cancer

Items and actions

Update on Oversight Board work programme and plans for reporting

Phil Raines reported on progress with different key programmes of work.

Work is on course to conclude early in 2021. Rather than delay any reporting within 2021, Fiona McQueen had agreed with the Cabinet Secretary that the Oversight Board should consider separating its reporting into 2 reports, with an 'Interim Report' coming out before the end of 2020. The Interim Report would focus on the work of the Communications and Engagement Subgroup and the Peer Review for the IPCG Subgroup, as this work had already been concluded

and agreed by the Oversight Board, or was on the agenda for today's meeting. A draft of the Interim Report had been prepared for the Oversight Board's consideration at today's meeting.

Phil Raines also recommended key additional pieces of work for the Oversight Board to commission:

- a review of HIIORTs relating to the RHC and QEUH infection incidents by ARHAI Scotland and
- a review of the water testing policy for the QEUH site in NHS GGC by Health Facilities Scotland

The Oversight Board agreed to these recommendations.

The Case Note Review is also expected to be completed early in 2021. Professor Mike Stevens is to be invited to the Oversight Board to report on the Case Note Review's progress at its next meeting.

Draft Interim Report

Phil Raines introduced the draft Interim Report, and summarised its key findings and recommendations, as well as the issues that would be covered in the Final Report.

Oversight Board members welcomed the document and their comments included:

- the report was felt to be well balanced and set out clearly the areas for improvement within NHS GGC, as well as across NHS Scotland
- one of the recommendations (7) needed to be more clearly expressed
- any further peer review work within NHS GGC should be led by the IPC team within the Health Board
- the Case Note Review's progress should be summarised and
- there needed to be evidence of implementation and positive change arising from the recommendations by the Health Board – indeed, in due course, an implementation plan would need to be set out by NHS GGC
- the report would become a key document for learning and improvement by other Health Boards
- the Final Report should cover the organisational duty of candour and other key review processes, such as SAER policy

The Oversight Board endorsed the draft report.

Fiona McQueen explained that the next steps would entail sharing the draft with NHS GGC for comments. Publication should still be possible before the end of 2021.

Action:

- all should consider any further and final comments on the draft and pass to Phil Raines within a week of the Oversight Board meeting

Discussion of Mycobacterium Chelonae cases

John Cuddihy had requested that the Oversight Board discuss the incident of MC cases within the QUEH and how that might be included with the consideration of gram-negative environmental bacteria incidents. He argued that the Health Board's handling of MC cases was just as important for the Oversight Board in terms of the issues highlighted for escalation.

Members of the Oversight Board commented that it was difficult to comment on the detail of these cases without further consideration. Fiona McQueen asked Phil Raines to work with John Cuddihy to review the cases and the evidence that had already been presented to the Oversight Board.

Action:

- Phil Raines will work with John Cuddihy to review the evidence of MC cases and consider whether and how to reflect in the final report

AOB

John Cuddihy explained that he had already engaged with Lord Brodie and the Public Inquiry Secretariat about engagement with the families.

It was agreed the next, and potentially last meeting of the Oversight Board would take place in January 2021 (date to be confirmed).

Contact

NHS Greater Glasgow and Clyde Oversight Board

Was this helpful?

- ◯ Yes
- ◯ No
- ◯ Yes, but

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Location: **MS Teams**

Minutes from the meeting of the NHS Greater Glasgow and Clyde Oversight Board held on 19 January 2021.

Part of

NHS Greater Glasgow and Clyde Oversight Board

Attendees and apologies

Attending:

- Fiona McQueen, Chief Nursing Officer (Chair), Scottish Government Chief Nursing Officer Directorate
- Keith Morris, Infection Control Doctor Advisor, Scottish Government Chief Nursing Officer Diredctorate
- Lesley Shepherd, HAI/AMR Professional Nurse Advisor, Scottish Government Chief Nursing Officer Directorate

- Angela Wallace, Nurse Director, NHS Forth Valley (and Interim Director of Infection Control, NHS GGC)
- Hazel Borland, Executive Director of Nursing, Midwifery and Allied Health Professions & Healthcare Associated Infection Executive Lead, NHS Ayrshire and Arran
- John Cuddihy, Parents Representative
- Craig White, Communications and Engagement Lead, Scottish Government
- Phil Raines, Scottish Government QEUH Business Support Unit (OB Secretariat)
- Carole Campariol-Scott, Scottish Government QEUH Business Support Unit (OB Secretariat)

Apologies:

- Marion Bain, Deputy Chief Medical Officer, Scottish Government
- Alan Morrison, Deputy Director, Health Infrastructure, Scottish Government
- Dr Andrew Murray, Medical Director, NHS Forth Valley

Items and actions

Introduction/update

The Chair welcomed the group to what might well be the last meeting of the Oversight Board in the current form. The key agenda item for the meeting was the draft final report, and preparations for concluding this phase of the Oversight Board work with its publication.

Update on supporting work

The Chair noted that the draft final report has been supported by a number of key workstreams. Papers were circulated on each of the different workstreams below, and updates were provided for each one.

IPC and Governance

In Diane Murray's absence, Phil Raines provided the update on the SBAR provided by the IPC and Governance Subgroup on the IPC Governance and Assurance Framework of NHS GGC. Members made the following points:

- the Framework document remains in draft, but it was noted that NHS GGC was intending to finalise after it could take account of the Oversight Board recommendations
- National work was needed to provide standard definitions and guidance around some of the key roles, such as Infection Control Doctors
- while the Framework provided a strong description of governance (with the caveats set out in the paper), how IPC governance worked in practice was the more critical issue

Water Safety Policy

Phil Raines presented the report by Ian Storrar of Health Facilities Scotland on the water safety policy description for the QEUH site of NHS GGC. Members of the Oversight Board noted the report and its recommendations.

The Chair thanked Ian Storrar for his assistance in this work.

Significant Adverse Event Reviews and Mortality/Morbidity Reviews

Craig White provided the update on the SBAR provided on SAER and Mortality/Morbidity Review policy within NHS GGC, which had been prepared with the assistance of SG policy colleagues in Healthcare Quality and Improvement. Members made the following points:

- the findings and recommendations of this work were endorsed
- the Case Note Review is also considering these issues, and their results should be fed into the Oversight Board Final Report
- it was important to understand what was known about any SAERs conducted on paediatric haemato-oncology patients within the period under review (including whether any were conducted for this patient community). Andrew Moore of Healthcare Improvement Scotland could advise on this

Action:

- Phil Raines to contact Andrew Moore regarding relevant SAERs

Draft Oversight Board Final Report

The Chair introduced the discussion on the draft final report. She noted the decision to split the findings and recommendations of the Oversight Board into two reports: the Interim Report had been published in December. The final report to be considered by the group covered the remaining key issues, particularly around IPC Governance. It was noted that it did not yet contain a recommendation around whether to de-escalate, on which members were asked to provide views.

Members of the Board made the following points:

- the final report's findings and recommendations were endorsed. The Chair went through each of the 'key questions' in the Conclusions chapter to confirm the group's agreement to the Oversight Board view on each question
- on IPC governance, it was recognised that it was difficult to fully conclude whether the key difficulties lay with what information/advice was being presented to the full Board from other parts of the IPC governance hierarchy and the extent to which it was fulfilling its challenge role in full. Nevertheless, the group agreed with the points made in the Governance chapter, especially around risk management

- the Case Note Review's findings would need to be incorporated into the final report. It was noted that on the basis of Professor Stevens' presentation to the Oversight Board before, those findings were broadly in line with what the Oversight Board was concluding

The Chair thanked the group for its views. On escalation, she would take further advice from John Connaghan and others in the Scottish Government on the approach being considered with respect to other Board escalations.

The next step entailed sharing the draft with NHS GGC for fact-checking and views. A revised version of the report would be circulated to the Oversight Board after that engagement for any final views before submission to the Cabinet Secretary.

The aim remained to publish the final report at the same times as the Case Note Review Overview Report. Mid-March remained the target date for both reports.

AOB

No other items were presented for discussion.

The Chair thanked the members of the Oversight Board and the various Subgroups for their huge contributions and patience with this work over the last year, not least in light of the challenges presented by the pandemic.

Contact

NHS Greater Glasgow and Clyde Oversight Board

Was this helpful?

- ◯ Yes
- ◯ No
- ◯ Yes, but

Healthcare Improvement Scotland

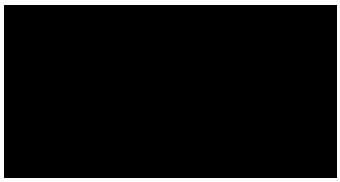
Scottish Government
Riaghaltas na h-Alba

Operating Framework:
Healthcare Improvement Scotland and Scottish Government

March 2024

A53429115

Document Version Control and Signatories

Version	Month / Year	Chief Executive Officer Healthcare Improvement Scotland *Signature / date*	Director or Deputy Director Planning and Quality Health and Social Care Scottish Government *Signature / date*
1.0	February 2019	Signed by Robbie Pearson 27/02/2019	Signed by Jason Leitch 05/03/2019
2.0	October 2022	Signed by Robbie Pearson  05/10/2022	Signed by Linda Pollock  11/10/2022
2.1	March 2024	Updated to reflect enactment of Health and Care (Staffing) (Scotland) Act 2019 from 1 April 2024	
		Signed by Robbie Pearson  03/04/2024	Signed by Lynne Nicol  03/04/2024

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Annexes

Introduction

1. This Operating Framework sets out how Healthcare Improvement Scotland (HIS) and the Scottish Government (SG) work together. It defines the key roles and responsibilities which underpins and describes the detail of the relationship between HIS and SG. HIS retains operational independence and its Executive Directors are accountable to the HIS Board through the Chief Executive.

2. Both organisations will always seek to collaborate and co-operate in the public interest in the delivery of our work while recognising our respective statutory roles, responsibilities, and operational independence.

3. This Operating Framework is the primary accountability and governance document between SG and HIS and should be reviewed and updated as necessary, and at least every 4 years. Any proposals to amend the document either by SG or HIS will be taken forward together and with due engagement, taking account of latest priorities and policy aims.

4. The Operating Framework will support:

    a. an effective, strategic working arrangement between HIS and SG based on a shared understanding of respective roles and responsibilities;
    b. risk management arrangements that allow both organisations to effectively identify and alert each other to issues and risks and potential areas of tension;
    c. a clear two-way communication channel between the organisations;
    d. a robust system for agreeing HIS' priorities, which includes a cohesive view of the priorities and resources for the future, through a formal commissioning process;
    e. early constructive dialogue and input to the formulation of SG policy and initiatives utilising HIS' evidence and intelligence; and
    f. further strengthening of our relationship based on openness, honesty, learning support, and constructive challenge.

Healthcare Improvement Scotland Legislative Context

5. HIS was established in 2011 as a Health Body, constituted by the National Health Service (Scotland) Act 1978, as amended by Public Service Reform Scotland Act 2010 and the Public Bodies (Joint Working) Act 2014. While HIS is not a special health Board, it may be grouped with NHS special health Boards in terms of SG initiatives such as shared services.

6. HIS' key statutory duties are as follows:

    a. a general duty of furthering improvement in the quality of health care;
    b. a duty to provide information to the public about the availability and quality of services provided under the health service;
    c. when requested by Scottish Ministers, a duty to provide to Scottish Ministers advice about any matter relevant to the health service functions of HIS.

7. Specifically, HIS is to exercise the following functions of Scottish Ministers:

    a. to support, ensure, and monitor the quality of healthcare provided or secured by the health service;
    b. to support, ensure, and monitor the discharge of the duty on NHS Boards to encourage public involvement (through the Scottish Health Council as described in Annex 3 Key Legislation);
    c. to evaluate and provide advice to the health service on the clinical and cost effectiveness of new and existing health technologies including drugs;
    d. to monitor the discharge of the duties on NHS Boards[1] in relation to healthcare staffing and planning and undertake additional functions in relation to staffing tools and the common staffing method.

8. HIS has the following statutory powers:

    a. Powers of access and right of entry (for the purposes of inspection) in relation to the health service and independent healthcare services;
    b. Power to direct a Health Board to close a ward to new admissions where there is a serious risk to the life, health, or wellbeing of persons;
    c. Power to require documents in relation to the functions of the Death Certification Review Service;
    d. Regulatory powers in relation to the independent healthcare sector;

[1] 'NHS boards' in this context refers to every Health Board, relevant Special Health Board and the Common Services Agency (NHS National Services Scotland)

e. Power to require information in pursuance of its functions in relation to healthcare staffing and planning

9. HIS supports the delivery of the latest National Performance Framework and the latest SG strategies and plans. This is to be reflected in HIS' latest strategic and operational plans and through its core purpose, which is 'to drive the highest quality of health and care for all'.

Healthcare Improvement Scotland operating principles and approach

10. The diagram below sets out HIS' operational approach to delivering the expectations of SG

11. This co-location of functions means that HIS can bring a range of activities in a co-ordinated and balanced way, to enable better quality in health and care.

12. The diversity of functions within HIS requires a differentiated approach. In undertaking assessments of the quality of care, HIS operates independently of SG, Health Boards, and Integration Authorities. This is set out in legislation. In relation to other functions, HIS will work in partnership and collaboration with SG and other stakeholders. Here, a close, mutually supportive working relationship is essential in order to enable and deliver improvement.

13. This differentiated approach builds on the legislative context and expectations of Scottish Ministers while retaining HIS' operational independence and respecting the complementary roles and responsibilities of Ministers, the Sponsor Function and the HIS Board Chair and Chief Executive. This includes but is not limited to the following principles:

    a. HIS will review, inspect and monitor the quality[2] of health and care services both in the NHS Scotland and the independent sector, based on intelligence and evidence and at a time and manner of its choosing; this applies to both one-off reviews and mutually planned programmes of assurance.
    b. HIS must have access to all relevant information held nationally and locally about the quality of health care and services and including in relation to healthcare staffing and planning, for the purposes of assurance, learning, enquiry and improvement.
    c. There may be occasions when HIS is directed to undertake assurance activity on behalf of Scottish Ministers via the Sponsor Function and/or relevant policy lead. When undertaking such a request, HIS will explore the issues involved and provide advice on the most appropriate approach to most effectively enable improvement.
    e. All inspections, monitoring, and assurance will be undertaken independently of SG and the findings/recommendations publicly presented. HIS will keep SG appraised of the operational progress of such scrutiny activity and may escalate concerns to Scottish Ministers via the SG Sponsor Function. Reports on the findings of the activity will be shared in advance for information.
    f. HIS may publicly escalate serious concerns about a service to SG in accordance with the agreed Annex 5,6,7 regarding specific escalation protocols in relation to inspections.
    g. HIS may also disseminate information as it deems appropriate and provide advice to Scottish Ministers via the SG Sponsor Function at any time.
    h. HIS may respond to requests by Scottish Parliament Committees for evidence on the quality of healthcare in any service, and will keep the Sponsor Function informed. HIS will carry out its activities transparently, including wherever possible publishing the sources of intelligence that are used to inform its work.

Governance and Accountability

14. Scottish Ministers are accountable to Parliament for overall health and social care and will take the lead in demonstrating this responsibility. SG are accountable to Scottish Ministers. HIS will support SG by, amongst other things, providing information to Ministers to enable them to account to Parliament.

[2] As set out in HIS' strategy 2023-28 the term 'quality' encompasses a range of dimensions including safety, effectiveness and equity of outcomes

15. HIS Chief Executive is accountable to HIS Board Chair and the Board Chair is accountable to Scottish Ministers.

16. The recruitment process for Ministerial Public Appointments is regulated by the Ethical Standards Commissioner. SG follow the Commissioner's Code of Practice which means that, as far as possible, the recruitment process is fair, transparent and based on merit.

17. Applicants must demonstrate how they meet the values of the NHS: care and compassion; dignity and respect; openness, honesty and responsibility, and quality and teamwork. They must also meet the Fit and Proper Person Test which is a requirement of the Code of Practice.

18. The Chairperson of HIS Board is appointed by and accountable to Scottish Ministers. HIS Board are appointed by Scottish Ministers and accountable to the Chairperson and, when required, Scottish Ministers.

19. The Chief Executive of HIS is appointed and employed by HIS Board with the approval of Scottish Ministers. The Chief Executive receives accountable officer status from the Permanent Secretary of SG.

20. The Chief Executive of HIS is a member of the NHS Scotland Chief Executives' Group and reports to the Director-General Health and Social Care.

21. HIS is accountable to Scottish Ministers via the Sponsor Function for the delivery of its strategic objectives. The day-to-day link between HIS and Scottish Ministers is provided by the Sponsorship Function in SG. While a number of other SG Directorates, Divisions, Unit, Teams, and Functions have direct relationships with HIS in relation to specific programmes of work, projects, and policy areas, the Sponsor Function has overall responsibility for ensuring that HIS is adequately briefed about SG policies and priorities and monitors HIS' activities on behalf of Ministers.

22. In addition, HIS has its own responsibilities to account to the public and to the Scottish Parliament. They will keep SG informed on its handling of these responsibilities. This may be demonstrated through correspondence with Members of the Scottish Parliament, appearances before Scottish Parliamentary Committees, publication of information on HIS' website, responses to letters from the public, and responses to requests under the Freedom of Information Act.

23. SG recognises the need for HIS to maintain an open and positive working relationship with a range of partners in the context of health and social care integration. There will be

a need to demonstrate sensitivity in managing these relationships in the context of the very different accountability and governance arrangements for these other partners such as local government and the third sector.

24. Specifically, HIS has a Memorandum of Understanding (MoU) to provide an agreed Operating Framework between HIS and the Convention of Scottish Local Authorities (COSLA), in relation to HIS' work with Integration Authorities, and in recognition of local government's political investment in, and accountability for, the successful implementation of integration.

25. Given HIS' legal accountabilities to SG, any changes to the MoU with COSLA will also be agreed with SG to ensure a clear three-way agreement and understanding of HIS' dual accountabilities within the integrated space.

Sponsorship Management

26. The Director and Deputy Director for Planning and Quality have responsibility for overseeing and ensuring effective relationships between SG and HIS, which support alignment of the business of HIS to SG's Purpose and National Outcomes and high performance by HIS. They will work closely with the HIS Chief Executive and be answerable to the Portfolio Accountable Officer, who is the Director-General, Health and Social Care, for maintaining and developing positive relationships with HIS characterised by openness, trust, respect and mutual support. They will be supported by a Sponsor Function in the Planning and Quality Division in discharging these functions.

27. The Sponsor Function is the key point of contact for HIS in dealing with SG and is the primary source of advice to Scottish Ministers on the discharge of their responsibilities in respect of HIS and undertakes responsibilities on behalf of the Portfolio Accountable Officer. These include but are not limited to:

    a. discharging sponsorship responsibilities in line with this document and ensuring that sponsorship is suitably flexible, proportionate, and responsive to the needs of the Scottish Ministers and other corporate requirements;
    b. ensuring that appointments to the HIS Board are made timeously and where appropriate, in accordance with the code-practice for Ministerial Appointments in Scotland;
    c. proportionate monitoring of HIS' activities through an adequate and timely flow of appropriate information, agreed with HIS on performance, budgeting, control, and risk management;

d. respond in a timely manner to any significant problems arising, alerting the appropriate HIS point of contact and the responsible Minister(s) where considered appropriate;
e. ensuring that the objectives of HIS and the risks to them are properly and appropriately taken into account within SG's risk assessment and management processes;
f. informing HIS of relevant SG policy in a timely manner.

28. HIS will meet with the Sponsor Function and Sponsor Lead or their chosen Deputy at least every quarter to explore priorities, consider resource utilisation, review performance, and consider new or existing issues, risks, and opportunities.

29. A representative from the Sponsor Function should aim to attend HIS Board Meetings to observe.

30. While the Sponsor Function is the main point of contact and has oversight of all HIS activities, other SG policy leads and budget holders in other business areas may have direct relationships with HIS and arrangements to meet with them in relation to specific programmes of work, projects and policy areas.

31. SG policy leads and budget holders are encouraged to liaise with the Sponsor Function and HIS early on in any legislation or policy development cycle in order that any implications for all parties can be understood and next steps mutually agreed. This aims to create space for HIS to provide any relevant evidence that may help shape SG policy and/or enable SG to consider implications to HIS existing improvement and assurance role.

Performance Management

32. HIS will work with SG to develop and produce strategic and operational delivery plans and report against them in line with SG Performance and Delivery requirements.

33. HIS will approach planning and delivery in a way which is consistent with SG priorities, underpinned by a robust workforce and financial plan, and requires to be submitted to SG in accordance with agreed timescales.

34. SG will respond formally and the plans will be agreed between the SG Sponsor Function and HIS and be approved by the HIS Board. The plans will be published by HIS.

35. The Annual Review (whether Ministerial or non-Ministerial) will be the focal point for the public accountability of delivery of the previous financial year. HIS will provide SG Sponsor Function with written documentation in line with published guidance. The SG Sponsor Function will formally write to HIS following the Annual Review setting out the key areas covered and agreed actions. HIS will publish this letter.

Financial Management

36. The Scottish Public Finance Manual is issued by the Scottish Ministers to provide guidance to SG and other relevant bodies on the proper handling and reporting of public funds. It sets out the relevant statutory, parliamentary, and administrative requirements, emphasises the need for economy, efficiency, and effectiveness, and promotes good practice and high standards of propriety.

37. SG continues to work with HIS to establish and maintain funding to support the majority of HIS activities. HIS and SG will mutually agree savings and efficiency targets within the context of HIS delivery of SG priorities.

38. The Sponsor Function finance responsibilities – shared with Health Finance – are:

    a. ensuring HIS are aware of their financial duties and SG financial policy, and that guidance is issued timeously;
    b. ensure HIS has arrangements in place to provide high quality budget monitoring and forecast information;
    c. co-operate with any audit requirements;
    d. check appropriate systems are in place at HIS for financial and risk management;
    e. check audit systems and arrangements are in place;
    f. review annual accounts.

Commissioning

39. The commissioning process aim is to provide a consistent, co-ordinated and transparent approach to HIS' and SG's handling of new and/or amended work. The process is underpinned by the following principles:

    a. Either party may propose that HIS undertakes new or amended programmes of work in response to changes in policy direction and/or quality issues which have been identified.

b. Commissioning proposals should be developed jointly between HIS and SG, taking into account respective data, intelligence and experience, and appropriately utilising the range of HIS functions to enable and deliver improvement. This may include HIS engagement with service providers to fully understand the issues involved.
c. HIS and SG will work together to ensure that the SG Sponsor Function has oversight of HIS commissions and directives across all policy areas and is able to provide support and advice as needed.
d. Commissions should include the strategic line of sight/priorities, purpose/background, the undertaking itself, including any financials as appropriate and timeline, and progress reporting of the work.
e. Commissions need to include a mutually agreed business case and a formal commission letter where applicable, in order to progress to HIS' work plan.
f. Where funding is required for the delivery of commissions and mutually agreed between HIS and SG, this will be set out in a formal funding allocation letter.

Communications

40. HIS will advise SG in advance of significant announcements by HIS or where there may be matters of public/media/political interest. Similarly, SG will keep HIS informed of any announcements that may directly impact on the areas of responsibility of HIS and where such announcements may impinge on wider strategic relationships.

41. HIS will routinely share its publications with SG in support of a good working and transparent relationship. They will ensure both organisations are aware in advance of any intentions that may impact either party.

42. HIS and the SG Sponsor Function will work together, using a range of mechanisms (e.g. Networks within SG) to raise awareness, identify risks, gaps and areas of overlap in commissions as well as opportunities for joint and future working.

43. Both HIS and SG Communications Leads will work collaboratively to make sure that relevant opportunities and issues are shared to maximise impact.

44. Where appropriate, HIS will support Minister's priorities by, for example, providing data and/or visit opportunities.

45. In addition, press enquiries will be highlighted to each other where there could be overlap or where the issue could become contentious.

46. HIS and SG Communications will meet regularly to discuss potential opportunities and areas of common interest and review outcomes of communications activities undertaken.

ANNEX 1 Wider Operational Areas

Scottish Government Directorates

While the Sponsor Function is the main point of contact and has oversight of all HIS activities, other SG policy leads and budget holders may have direct relationships with HIS in relation to specific programmes of work, projects and policy areas. These may include the following:

Director-General (DG) Areas:
Communities
Economy
Education and Justice
Health and Social Care, including the following Directorates: • Chief Medical Officer • Chief Nursing Officer • Digital Health and Care • Health Finance, Corporate Governance and Value Directorate • Health Workforce • Healthcare Quality and Improvement • Mental Health • NHS Scotland Chief Operating Officer • Population Health • Primary Care • Social Care and National care Services
Net Zero
Scottish Exchequer
Strategy and External Affairs

Healthcare Improvement Scotland Directorates

While the Planning and Governance Team in HIS is the main point of contact and has oversight of all HIS activities, other SG policy leads and budget holders may have direct relationships with HIS in relation to specific programmes of work, projects and policy areas.

Healthcare Improvement Scotland Directorates
Chief Executive's Office
Community Engagement and System Redesign
Evidence and Digital
Finance, Planning, Governance and Communications
Medical and Safety
Nursing and Systems Improvement
People and Workplace
Quality Assurance and Regulation

ANNEX 2 Sponsorship Mechanisms

Mechanism	Purpose	Frequency
Annual Review	To hold HIS publicly to account for performance	Annual With further reviews in-year via strategic meetings
Strategic Meeting – HIS Chair and Chief Executive	Meeting between HIS Board Chair, Chief Executive, and SG Sponsor Lead and Function to discuss progress against the strategy of HIS and to share key issues	6 monthly
Strategic Meeting	Meeting between HIS Deputy Chief Executive, Directors and Sponsor Lead and Sponsor Function to discuss progress against the strategy of HIS and to share key issues from SG	6 monthly
Sponsor Meetings	Monthly meetings between the SG Sponsor Function and HIS to discuss progress in relation to latest known actions, commissions and resulting allocations and to highlight and known concerns and opportunities	Monthly
Finance Meetings	SG provide funding to HIS throughout the year through the allocations system. The HIS Director of Finance attends the monthly Directors of Finance meeting and further meetings are held with Health Finance as required to discuss the HIS financial position and arising finance issues	Monthly Director of Finance Meetings Quarterly Meetings with Health Finance as required

ANNEX 3 Key Legislation

Relating to the duties, functions and powers of HIS

Ref	Legislation / Regulation / SSI
1	National Health Service (Scotland) Act 1978, as amended by the Public Services Reform (Scotland) Act 2010
2	Certification of Death (Scotland) Act 2011
3	Public Bodies (Joint Working) (Scotland) Act 2014
4	Health (Tobacco, Nicotine etc. and Care) (Scotland) Act 2016
5	The Controlled Drugs (Supervision of Management and Use) Regulations 2013
6	The Public Interest Disclosure (Prescribed Persons) Order 2014
7	SSI 2016 No.86 The Healthcare Improvement Scotland (Delegation of Functions) Order 2016
8	The National Health Service (Scotland) Act 1978 (Independent Clinic) Amendment Order 2016
9	Health and Care (Staffing) (Scotland) Act 2019
10	Forensic Medical Services (Modification of Functions of Healthcare Improvement Scotland and Supplementary Provision) Regulations 2022

ANNEX 4 HIS Operating Arrangements

HIS Board

The HIS Board is appointed by Scottish Ministers as determined by the Public Services Reform (Scotland) Act 2010 Schedule 1611. The Board of HIS has corporate responsibility for ensuring that HIS fulfils the aims and objectives set by Scottish Ministers.

The purpose of the Board is to:

- ensure efficient, effective and accountable governance of the organisation;
- provide strategic leadership and direction;
- determine the risks the organisation is willing to take in pursuit of its strategic objectives; and
- focus on agreed outcomes.

Membership of the Board is as follows:

- Chair (non-executive)
- Chair of the Care Inspectorate (non-executive)
- Up to 13 additional non-executive members, including the Employee Director, the Chair of the Scottish Health Council and the Whistleblowing Champion.
- Chief Executive (executive member).

The Board will create such sub-committees, as are required by, for example, statute, guidance, regulation and Ministerial direction and as are necessary for the economical efficient and effective governance of its business. These are referred to within the organisation as the governance committees of the Board. In particular:

- HIS will establish a Committee to be known as the Scottish Health Council; Scottish Ministers are to appoint a member of the HIS Board to Chair the Scottish Health Council.
- HIS will establish an Audit Committee to advise the Board on internal control (including corporate governance) and audit matters.

The Chief Executive of HIS is employed and appointed by the Board with the approval of Scottish Ministers, and reports to the Director-General Health and Social Care. The Chief Executive is the Board's principal adviser on the discharge of its functions and is accountable to the Board. Their role is to provide operational leadership to HIS and ensure that the Board's aims and objectives are met and HIS' functions are delivered and targets met through effective and properly controlled executive action. Their general responsibilities include the performance, management and staffing of HIS.

Members of the Board are required to comply with the Board Members' Code of Conduct.

Further guidance on how the Board should discharge its duties is provided in On Board – A Guide for Members of Statutory Boards

Governance of HIS

HIS has in place a Code of Corporate Governance, which is based on the general principles of the UK Corporate Governance Code and the International Framework: Good Governance in the Public Sector (the Framework). The Code is approved by HIS' Audit and Risk Committee and is ratified by the HIS Board. The Code sets out the responsibilities of the HIS Board and governance committees and includes standing financial instructions and arrangements in relation to remuneration, reporting and risk management.

HIS has adopted the 'Blueprint for Good Governance' agreed by SG and the NHSScotland Chairs Group in October 2018.

Transparency

HIS is an open organisation that will carry out its activities transparently.

HIS is required to publish an annual report setting out how it has discharged its statutory duties during the year, together with its audited accounts, after the end of each financial year.

The Auditor General for Scotland (AGS) audits, or appoints auditors to audit, HIS' annual accounts and passes them to the Scottish Ministers who shall lay them before the Scottish Parliament, together with the auditor's report and any report prepared by the AGS.

HIS holds Board meetings in public and has in place an Employee Code of Conduct, which includes rules on conflicts of interest, gifts and hospitality, openness and confidentiality and whistleblowing.

Complaints and Whistleblowing

HIS has its own complaints handling process which is in line with the Model Complaints Handling Procedure for NHSScotland. HIS comes under the scope of the Scottish Public Services Ombudsman's power to investigate complaints.

HIS has implemented a whistleblowing policy as set out by the Independent National Whistleblowing Officer.

ANNEX 5 HIS Escalation – Introduction

The purpose of this escalation framework is to ensure that HIS have a clear, consistent, and transparent process for escalation of issues to SG, and where required, direct to Scottish Ministers via the Sponsor Function.

Where Quality Assurance activity undertaken by HIS has identified improvements to be made, these are agreed with the service provider with a clear expectation through written agreement that these improvements will be delivered upon.

The improvements at this stage are agreed between HIS and the service provider in question and are based on the level of risk of harm to the patients, the public, and/or staff. These will follow a standard typology, such as:

- no further engagement necessary;
- recommendations made, but will be followed up informally by relevant inspection/review team leads;
- recommendations made, and service provider will be asked for an update on progress by a stated date;
- significant recommendations made requiring a follow-up inspection within a clear timescale;
- significant issues identified requiring immediate escalation.

In all cases, the timescales will be clearly defined e.g. for a follow-up inspection as detailed in the published inspection methodology or for the further reporting of progress by the service provider. Further engagement may be required if not all improvements have been made or we are not fully assured. However, any extension to the original timescales will be clearly recorded and new expectations clearly set.

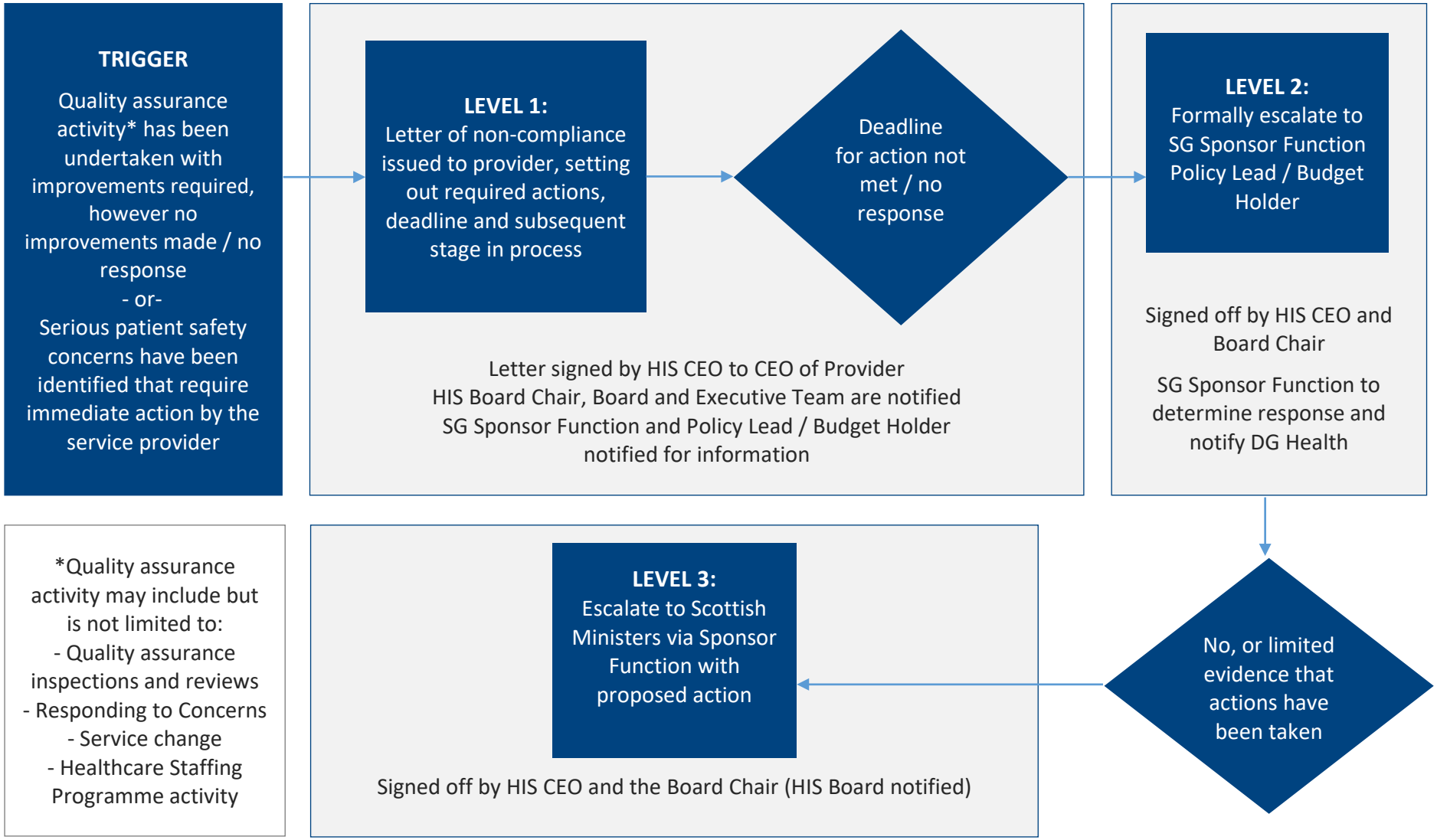
In some instances HIS may choose to escalate concerns to the SG. This escalation would be undertaken in the following situations:

- a lack of progress/response has been made by the service provider, as a result of the usual HIS processes aimed at ensuring improvement;
- HIS become aware of serious safety concerns through its activity, which require immediate action by the service provider

This process does not preclude the use of the existing process within the Quality Assurance Directorate for issues identified during hospital inspections. Should HIS use its statutory powers to close a ward to further admissions, then the escalation process would immediately trigger.

The levels of escalation are set out below. Escalation of concerns to Scottish Government and/or Scottish Ministers will be taken in to consideration as part of the wider consideration of Board performance undertaken by the SG National Planning & Performance Oversight Group (NPPOG).

ANNEX 6 HIS Escalation – Process Flow Chart



ANNEX 7 HIS Escalation – Process Table

HIS LEVEL	Situation	HIS Action	SG contact and anticipated actions	HIS Governance
LEVEL 1: Formal letter of non-compliance issued to the service provider	There is no, or limited, response from the service provider regarding lack of progress and/or lack of improvement poses a significant risk to patient care. And/Or: Serious patient safety concerns have been identified that require immediate action by the service provider. *Note: Criteria for each level of escalation will be developed.*	A letter of non-compliance will be served by HIS' Chief Executive Officer (CEO) to the CEO of the service provider, copied to the Board Chair of the service provider. This will clearly state what improvements or assurances are expected, by when and the subsequent stage in the process if no improvement has been made. The letter will be published on the HIS website. HIS will publicly report progress made in response. If joint engagement with another scrutiny body, the MoU with that body will clarify how respective escalation processes will be managed.	SG Sponsor Function and relevant policy lead / budget holder will be informed. SG may use this information to support routine monitoring of Boards' performance and to inform its own escalation framework. The information will feed into a rounded assessment by the SG of where a service provider (e.g. Health Board) sits within SG's own escalation framework. SG NPPOG may be informed for information only at this stage.	The below will be notified for information only at this stage: • HIS Executive Team (ET) • HIS Chair • HIS Board via HIS Chair • Chair and CEO of provider

HIS LEVEL	Situation	HIS Action	SG contact and anticipated actions	HIS Governance
LEVEL 2: Formally escalate to SG Sponsor Function and relevant policy lead	Lack of engagement by the service provider and, or insufficient improvement has been made even after the improvement letter issued. *Note: Criteria for each level of escalation will be developed.*	A formal external escalation letter is issued to the SG Sponsor Function and relevant policy lead / budget holder. This would be signed off by the HIS CEO (with the support from the HIS ET) and Board Chair and include a full account of action taken to date. The HIS website will be updated to reflect this further escalation.	Sponsor Function / policy lead / budget holder / DG Health SG will share this information internally in line with the processes set out in its own escalation framework and in support of the Health and Social Care Management Board's role. In many cases, this will be an opportunity to identify, in conjunction with the Board, what improvement support is required. SG Sponsor Function may escalate to NPPOG for consideration and agreement of required action in line with SG escalation processes. SG will keep HIS informed of any actions it intends to take.	• HIS CEO for approval • HIS Board Chair for approval • HIS Board via HIS Board Chair for information • Board Chair and CEO of provider notified

HIS LEVEL	Situation	HIS Action	SG contact and anticipated actions	HIS Governance
LEVEL 3: Escalate directly to Scottish Ministers	Still no, or limited, evidence that actions have been taken forward, or continued concerns regarding the risk to patient care. *Note: Criteria for each level of escalation will be developed.*	HIS concern is now so significant that escalation is required directly to Scottish Ministers. HIS will provide the SG Sponsor Function with a standard notice period of an intention to escalate along with an account of all action taken by HIS towards resolving the situation. When HIS initiates escalation to Scottish Ministers, this must be done through the SG Sponsor Function, copying in the relevant policy lead / budget holder. The HIS website will be updated to reflect this further escalation.	Sponsor Function will work with Sponsor Lead and notify Scottish Ministers to determine appropriate action. SG Sponsor Function will also escalate to NPPOG for consideration and agreement of required action in line with SG escalation processes. SG will keep HIS informed of any actions Ministers intend to take.	• Escalation discussed by ET and approved by the HIS CEO and Board Chair. • HIS Board via HIS Board Chair for information • Board Chair and CEO of provider notified

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15 January 2025

The Scottish Hospitals Inquiry
Mint House
20 Register Street
Edinburgh
EH2 2AA

To whom it may concern

SCOTTISH HOSPITALS INQUIRY

As requested, below is the response to your request for information from Healthcare Improvement Scotland.

1. When was HIS created and under what statutory authority does it operate?

HIS was established in 2011 as a health body, constituted by the National Health Service (Scotland) Act 1978, as amended by the Public Service Reform Scotland Act 2010 and the Public Bodies (Joint Working) Act 2014.

2. What is the remit of HIS?

Healthcare Improvement Scotland (HIS) is the national improvement agency for health and care in Scotland. The organisation's core purpose is to enable the people of Scotland to experience the best quality health and social care, with a specific focus on safety.

HIS's statutory functions are set out in the aforementioned legislation. Broadly, these include duties and powers to:

- further improve the quality of health and care
- provide information to the public about the availability and quality of NHS services
- support and monitor public involvement
- monitor the quality of healthcare provided or secured by the health service, and

- evaluate and provide advice to the health service on the clinical and cost effectiveness of new medicines and new and existing health technologies

3. We understand HIS undertakes inspections, reviews, and regulation, who and what do HIS inspect?

HIS provides public assurance about the quality and safety of healthcare through inspections and reviews of NHS hospitals and services, as well as regulation of independent healthcare services. Our scrutiny activity covers inspection, regulation and review. In addition to our core programme of scrutiny activity, we may also be commissioned by Scottish Government to undertake ad hoc assurance reviews in areas of emerging and urgent need. This work includes:

i. **Inspecting care in Scotland**: By inspecting care we help to ensure that healthcare services are meeting the required standards of care, that good practice is identified and areas for improvement are addressed. Our inspectors undertake announced and unannounced inspections of healthcare services. These will involve a physical inspection of the clinical areas, and discussions with staff. This includes:

   - Inspection of NHS hospitals and services
   - Inspection of mental health units, and
   - Joint inspections of care (including joint inspections of adult services, joint inspections of adult support and protection, inspecting the provision of healthcare to individuals within the criminal justice system, and joint inspections of services for children and young people).

ii. **Regulating care**: We are responsible for the registration and regulation of independent healthcare services across Scotland. This includes inspecting services to make sure they are complying with necessary standards and regulations, investigating complaints, and where necessary taking enforcement action in accordance with our statutory powers. We also enforce the Ionising Radiation (Medical Exposure) Regulations (IRMER) in Scotland on behalf of the Scottish Government and inspect NHS and independent services to ensure they comply with the regulations.

iii. **Governance, assurance and reviews of healthcare services**: We work to ensure that NHS boards have a clear and consistent approach to clinical governance in healthcare through a range of review programmes, and we make our findings public.

iv. **The Death Certification Review Service**: Arrangements for death certification and registration in Scotland changed in 2015, at which point the Death Certification Review Service (DCRS), which is run by HIS, was established. The DCRS conducts random quality assurance checks on the accuracy of death certification and provides an advice service to those seeking to certify cause of death. HIS does not undertake death certification, and the DCRS does not review the quality of care provided to the deceased prior to their death, nor suspicious deaths or deaths that should be reported to the Procurator Fiscal under the Inquiries into Fatal Accidents and Sudden Deaths etc. (Scotland) Act 2016.

v. The **Adverse Events** team works with all NHS Boards supporting their adherence to the national framework for learning from adverse events HIS has led the development of the national approach to learning from adverse events and is driving implementation through an improvement support programme which includes revision of the national framework, development of an online community of practice and data standardisation. NHS Boards are required to notify HIS when they commission a Significant Adverse Event Review. The Medicines and Pharmacy team works with the Adverse Events team in considering the implications of National Patient Safety Alerts (NPSAs) for NHS Scotland and cascading of any appropriate information to relevant parties.

HIS has a duty to respond to concerns raised by NHS Scotland staff (who wish to remain anonymous), or referred to us by another organisation, about the safety and quality of patient care, with the ultimate aim of helping to make care better. We have an organisation wide **Responding to Concerns (RTC)** process which ensures that, regardless of the route through which we receive these concerns, our process for managing them is the same. We undertake an assessment of concerns in line with our established RTC process to determine how the concerns should be managed, what steps will be taken to seek assurance from the relevant NHS Board(s) in relation to the concerns, and analysis of evidence to determine any areas for improvement/further activity.

Our scrutiny activity across all of our responsibilities is explained in our 2024-2025 Scrutiny Plan: (**202400802 HIS Quality Assurance and Regulation plan 2024-25 v1.2 (web))**

4. Can you describe a recent inspection of an Infection Prevention and Control Team within a hospital? Could HIS extend this to undertake regular inspections of the Infection Prevention and Control Teams of Health Boards?

The focus and approach of our hospital inspections has evolved over the years in response to changing quality of care and risk considerations. The Healthcare Environment Inspectorate (HEI) was introduced in 2009 to carry out hospital inspections following the Vale of Leven

Inquiry report, which highlighted deaths due to nosocomial infection attributed to Clostridium difficile. The Older People in Acute Hospital (OPAH) inspections programme commenced in 2012. The primary standards inspected through these inspection programmes were the Healthcare Associated Infection and Older People in Acute Care Standards.

As a result of Covid-19, the HEI safe and clean and OPAH inspection programmes were initially suspended from March 2020 until June 2020. HIS and Scottish Government then agreed that a programme of inspection for community hospitals should commence given the similar demographic profile of service users in community hospitals to those residents in care homes, which had emerged as an area of significant concern at the time. A Covid-19 focused hybrid of the HEI and OPAH inspection programmes was designed for community hospitals and 13 hybrid inspections were subsequently carried out.

In December 2020, Scottish Government asked HIS to move focus from community hospitals to Covid-19 focused safe and clean style inspections in acute hospitals, using methodology adapted from previous ‘safe and clean’ inspections. Fourteen inspections were carried out across thirteen territorial and one national board between January and October 2021. These inspections, whilst acknowledging the challenging situation, demonstrated positive compliance with relevant standards and guidance. As the risk considerations and pressures associated with the pandemic response continued to evolve, Scottish Government asked HIS to explore what further adaptations could be made to the focus and approach of acute hospital inspections and our Safe Delivery of Care (SDoC) inspections began in December 2021.

The Safe Delivery of Care inspection methodology seeks to provide robust and proportionate public assurance that is reflective of and responsive to pressures within the system and remains focused on helping services identify and minimise risks within the current operating environment. This approach is much broader than previous inspection approaches and considers a complex and comprehensive range of factors that impact on safety and quality of care.

In addition, we began a programme of inspections of NHS mental health in-patient services in December 2022. The initial focus of these inspections was on Infection Prevention and Control (IPC) to help services identify and minimise risks to safety and support ongoing improvements in quality of care within the current operating environment. The IPC inspections of NHS mental health in-patient services have now ended, and the programme of mental health inspections has been expanded to cover wider determinants of safe delivery of care.

Our Safe Delivery of Care inspection methodology does not focus solely on IPC but considers this as part of the wider determinants of safe delivery of care.

5. To whom do HIS make reports and recommendations following an inspection?

The remit of Healthcare Improvement Scotland in the context of inspections is to provide assurance to the Cabinet Secretary for Health and Social Care on the safety and quality of care within acute hospitals, and through our inspection reports provide reassurance to the public on the quality and safety of their local hospitals.

We report and publish our findings on performance and demonstrate accountability of these services to the people who use them.

Our inspection activity supports NHS boards to comply with national standards to improve patient outcomes, highlight areas of good practice and identify areas for improvement. During our onsite inspections high level verbal feedback is provided at ward level to senior managers. When serious concerns are found during the inspection, we will inform the NHS board while the inspection team is still onsite, or as soon as possible. This will allow the NHS board to take immediate steps to address the issues, and protect the safety and welfare of patients, staff and the wider public.

In some instances, it will be necessary for us to implement our escalation process. This will be done in line with our Operating Framework (**HIS-SG-Operating-Framework-v2.1-March-24_protected**) between Healthcare Improvement Scotland and Scottish Government. During any stage of escalation, there will be ongoing dialogue with the NHS board. If necessary, we may also refer our concern(s) to other relevant bodies to ensure NHS board compliance with a range of standards, best practice statements, legislation and national guidance and any impact this may have on the safe delivery of care.

6. Who ensures that recommendations are acted upon?

Any recommendations or requirements for change that we identify are the responsibility of the board to follow up, and each board will provide an action plan in response to the inspection report describing what action they will take and by when they will take it. Where we continue to identify risk, we may arrange a follow up inspection.

Requirements and recommendations

A requirement sets out what action is required from an NHS board to comply with the standards published by Healthcare Improvement Scotland and the Scottish Government or other relevant agencies. These are standards which every patient has the right to expect. A requirement in the inspection report means the hospital or service has not met the required standards and the inspection team are concerned about the impact this has on patients using the hospital or service. We expect all requirements to be addressed and the necessary improvements implemented.

A recommendation relates to best practice which the Healthcare Improvement Scotland believe the NHS board should follow to improve standards of care.

Improvement action plans

The NHS board producing the improvement action plan is the owner of the action plan and holds responsibility for the necessary improvements to meet the requirements. The inspection team will review the content and timeframes of the actions outlined in the improvement action plan and may provide comments back to the NHS board and hospital with suggested amendment.

7. What happens if recommendations are not acted upon?

It is important to note that our powers do not extend to enforcement of any action by the boards or to apply any sanctions for non-compliance.

The Operating Framework (**HIS-SG-Operating-Framework-v2.1-March-24_protected**) between HIS and Scottish Government includes a process for HIS to escalate concerns to Scottish Government where a lack of progress/response has been made by a service provider. The process flow chart sets out a number of stages which may culminate in escalation to Scottish Ministers.

8. HIS has a duty to monitor and develop staffing level tools under The Health and Care (Staffing) (Scotland) Act 2019.

- **Can you explain the duty?**
- **How does the duty relate to Infection Prevention and Control?**
- **How does HIS fulfil the duty?**

The purpose of HIS's role and function is to monitor the discharge, by every Health Board, relevant Special Health Board, and the Agency, of their duties as cited within the legislation as follows, as part of HIS' scrutiny function:

- Duty to ensure appropriate staffing, including related duties under Part 2, to have regard to guiding principles etc. in healthcare staffing and planning
- Duty to have real-time staffing assessment in place
- Duty to have risk escalation process in place
- Duty to have arrangements to address severe and recurrent risks
- Duty to seek clinical advice on staffing
- Duty to ensure adequate time given to clinical leaders
- Duty to ensure appropriate staffing: training of staff
- Duty to follow Common Staffing Method
- Training and consultation of staff

- Reporting on staffing Ministerial guidance on staffing

HIS will utilise an intelligence-led, multi-faceted approach and may utilise its powers to require information if necessary. In addition, HIS will support the identification and sharing of areas of good practice, shared learning and the identification and provision of appropriate improvement support.

HIS also has a legal duty under 12IR of the Health and Care (Staffing) (Scotland) Act 2019 to monitor the effectiveness of any staffing level tool or professional judgement tool which has been prescribed by the Scottish Ministers. A suite of staffing level tools is available to help NHS Scotland services plan the number of staff they need. The purpose of each tool is to provide information and recommendations on staffing levels based on workload.

Where HIS considers that any prescribed tool is no longer effective HIS may recommend the revocation or replacement of the tool to the Scottish Ministers. The Scottish Ministers may direct HIS to develop a new or revised staffing level tool or professional judgement tool for use in relation to a particular kind of health care provision.

HIS' Healthcare Staffing Programme assists boards in meeting their obligations, through:

- education and training
- staffing level tools and methodology development
- tailored support and guidance

Full details are provided in HIS' Healthcare Staffing Operational Framework (**HIS-SG-Operating-Framework-v2.1-March-24_protected)**. In relation to Infection Prevention and Control (IPC), clinical staff working within IPC teams are covered under the Act in terms of the need to ensure appropriate staffing levels. Further information on staff groups covered by the Act can be found here. In addition, IPC clinical nurse specialist roles are required to run the staffing level tool and professional judgement tool as part of the Boards duty to comply with the Common Staffing methodology to inform workforce planning.

Kind regards,

Yours sincerely

[redacted]

Ann Gow
Director of Quality Assurance and Regulation
Deputy Chief Executive
Healthcare Improvement Scotland
[redacted]

Healthcare Improvement Scotland Quality Assurance and Regulation Plan 2024-2025

Updated August 2024

Our quality assurance and regulation activity is split into three categories: inspection, regulation, and review (including ad hoc investigations or reviews). We undertake these activities in a planned and proactive manner to provide public assurance on safety and quality of care and highlight areas of good practice and opportunities for learning to support ongoing improvements across the whole of Scotland.

Our plans for each programme from April 2024 to March 2025 are outlined below. This version of the plan was updated in August 2024 and reflects new assurance activity and changing priorities that have emerged since April 2024.

As a result of this additional activity and changing priorities, adjustments have been made to our assurance and regulation plan. This means some of our planned programme activities have been paused or slowed to accommodate these priority areas of work. The assurance and regulation plan is continually reviewed and may be subject to further change in response to emergent external scrutiny priorities and changing resource considerations.

An indication of the planned number of inspections and other key assurance activities are detailed below where available, however the number of planned inspections may change during the year. There are several reasons for this, including the complexity of inspections, follow-up activity that may be required in response to inspection findings, and new requests for external quality assurance in response to emergent concerns which may require the rapid redeployment of resource and reprioritisation of existing work programmes.

An asterisk * against a programme in the tables below denotes a change from the activity detailed in the plan as at March 2024.

Inspection

NHS Inspections

Our NHS Inspections currently focus on three areas - hospital inspections, mental health services inspections and the inspection of healthcare within justice.

Over the coming year we will continue our safe delivery of care methodology for inspections of NHS hospitals. We will also continue to work in collaboration with partner agencies to inspect healthcare services within prisons and police custody.

Discussions are ongoing with Scottish Government regarding the future scope of our inspections of mental health in-patient units as part of an organisation wide package of assurance, standards implementation and service reform support for mental health services. It is anticipated that this programme will recommence in autumn 2024 with a broader scope, using our safe delivery of care methodology.

During 2024-25 we also plan to develop a new programme of inspection of perinatal (maternity and neonatal) NHS services as part of a wider HIS programme of assurance, standards development, and improvement support. The initial development phase of this programme is planned to begin by the end of 2024.

All our NHS inspections will take account of and respond to the pressures being experienced across NHS Scotland that may impact on the safe delivery of care, reporting this impact on patient care through inspection reports.

Programme	Programme Aim	Scrutiny body/ bodies involved	Inspection activity
Hospital inspections*	To provide assurance of the safe delivery of care in NHS hospitals through targeted inspection activity that is reflective of and responsive to the evolving context of service delivery.	Healthcare Improvement Scotland	Our single and multi-site inspections will continue to be risk-based and proportionate. It is intended 11 hospital inspections will be carried out within NHS board areas between April 2024 and March 2025. Inspection reports and associated improvement action plans will be published on our website. Locations of inspections are not available as these are unannounced.

Mental health adult in-patient unit inspections*	To contribute to the safety and wellbeing of patients and service users within mental health services through targeted inspection activity that is reflective of and responsive to the evolving context of service delivery.	Healthcare Improvement Scotland	Inspection activity in 2024-2025 will recommence in autumn 2024.
Inspection of acute perinatal services*	To provide assurance of the safe delivery of perinatal services in NHS hospitals through targeted inspection activity that is reflective of and responsive to the evolving context of service delivery.	Healthcare Improvement Scotland	The inspection programme will be developed during 2024-25 by adapting and extending the existing safe delivery of care inspection methodology for NHS Hospitals.
Joint inspection of prisoner healthcare	Healthcare Improvement Scotland works with His Majesty's Inspectorate of Prisons for Scotland (HMIPS) to provide expertise to the inspection of healthcare in prisons in Scotland.	His Majesty's Inspectorate of Prisons for Scotland (lead agency) and Healthcare Improvement Scotland	Four inspections planned during 2024-2025, together with several follow up inspections.
Joint inspection of police custody centres	Healthcare Improvement Scotland works with His Majesty's Inspectorate of Constabulary for Scotland (HMICS) to provide expertise to the inspection of healthcare in police custody centres in Scotland.	His Majesty's Inspectorate of Constabulary in Scotland (lead agency) and Healthcare Improvement Scotland	Three inspections planned during 2024-2025, together with follow up inspections where required.

Multi-agency Inspections

Our strategic multi-agency inspection programmes focus on three areas - joint Inspection of adult support and protection, joint inspection of adult services and joint inspection of services for children and young people.

Phase 2 of the adult support and protection programme has been designed with a clear improvement focus. It comprises four complementary workstreams including: inspection activity; the development of a quality improvement framework which will be available for use by the sector to support multi-agency self-evaluation; progress review activity with partnerships found to have significant areas for improvement during phase 1 and focused work related to early intervention and trauma informed practice.

The joint strategic inspections of services for adults, and for children and young people, will continue with the same respective methodologies as during 2023-2024. In 2024-2025 joint inspections of adult services will focus on adults living with mental illness and their unpaid carers.

Programmes will be kept under regular review for any impacts of the reduced financial envelope and any new commissions on our ability to deliver planned work with the resources available to HIS and our partner agencies.

Programme	Programme Aim	Scrutiny body/ bodies involved	Inspection activity
Joint inspection of adult support and protection (phase 2)	This work seeks assurance that adults at risk of harm in Scotland are supported and protected by existing national and local adult support and protection arrangements and supports adult protection partnerships to improve.	Care Inspectorate (lead agency), Healthcare Improvement Scotland and His Majesty's Inspectorate of Constabulary in Scotland	Completion of two joint inspections in quarter 1 of 2024-2025 (this completes the six planned inspections of partnerships last inspected in 2017). Methodology finalisation (by spring 2024) and commencement of the programme of progress reviews and the early intervention and prevention focused work late summer 2024 (work will continue into 2025-2026).
Joint inspection of adult services (integration and outcomes)	Healthcare Improvement Scotland has a statutory responsibility to undertake joint inspections of services for adults with the Care Inspectorate.	Healthcare Improvement Scotland and Care Inspectorate	The intention is to complete up to three joint inspections of health and social care partnerships during 2024-2025. These joint inspections will focus on the effectiveness of Partnership working in creating seamless services that deliver good health

			and wellbeing outcomes for people and their unpaid carers, through the lens of different service user groups.
Joint inspection of services for children and young people	The inspection programme takes account of the experiences and outcomes of children and young people in need of care and protection by looking at the services provided for them by community planning partnerships in each of Scotland's 32 local authorities.	Care Inspectorate (lead agency), Healthcare Improvement Scotland, His Majesty's Inspectorate of Constabulary in Scotland, and Education Scotland.	The intention is to complete a minimum of three routine joint inspections of community planning partnership areas during 2024-2025 plus one thematic inspection focusing on the experiences of young people leaving care in Scotland.

Regulation

Our regulation programmes focus on delivery of all elements of our regulatory responsibilities for both independent healthcare (IHC) and Ionising Radiation (Medical Exposure) Regulations (IRMER). This includes proactive inspections, responding to notifications of incidents and enforcement activity for both programmes of work, and registration of IHC services and investigations of complaints about these registered services.

Programme	Programme Aim	Scrutiny body/ bodies involved	Inspection activity
Ionising Radiation (Medical Exposure) Regulations (IRMER)	Through inspections and the notifications process, the aim of this work is to provide public assurance of the safe use of ionising radiation for medical exposure.	Healthcare Improvement Scotland	An inspection plan is in place to carry out at least 10 inspections. Routine inspections are announced. In addition, we will respond to all notifications (approximately 130 per year) and take forward recommendations from the Integrated Regulatory Review Service mission.
Independent Healthcare (IHC)*	Healthcare Improvement Scotland is the regulator of registered independent healthcare services in Scotland. Our regulatory functions include: • registering IHC services • proactive inspections of registered services • investigating complaints about registered IHC services • responding to notifications from IHC registered services • taking enforcement action of registered IHC services where necessary, and • continuing with development work to support the regulation of independent healthcare.	Healthcare Improvement Scotland	The planned number of inspections is IHC services for 2024/25 is 129 to take account of ongoing internal deep dive review of systems and process for the regulation of independent healthcare. The number of planned inspections may change throughout the year for a range of reasons including: • high priority reactive activity that requires resource to be diverted from planned inspections • cancelled registration of a service • follow-up inspections in response to initial inspection findings.

Review (including ad hoc investigations or reviews)

Our bespoke review programmes contribute to three key themes:

Working collaboratively to review and respond to concerns about the quality and safety of services:

- Responding to Concerns, and
- Sharing Health and Care Intelligence Network

Reviewing and improving national screening programmes and cancer services:

- External quality assurance of cancer quality performance indicators, and
- External quality assurance of national screening programmes

Reviewing and learning from adverse events, children and young people's deaths, and death certification:

- Management of adverse events
- National hub for reviewing and learning from the deaths of children and young people, and
- Death Certification Review Service

Our programmes to review and improve national screening programmes and cancer services will be redesigned to shape the future delivery of these programmes. This redesign has been paused to help accommodate the new assurance activity referenced on page 1 and will recommence later in the year.

In addition to the above review programmes, **responsive reviews** may be commissioned by Scottish Government or instigated by Healthcare Improvement Scotland to address an identified need. A new responsive review was commenced in April 2024:

- NHS Greater Glasgow and Clyde Emergency Department Review.

Programme	Programme Aim	Scrutiny body/ bodies involved	Key activity
Working collaboratively to review and respond to concerns about the quality and safety of services.			
Responding to concerns*	Healthcare Improvement Scotland has a duty to respond to patient safety/quality of care concerns raised about NHS services by NHS Scotland employees or referred to us by another organisation. All	Healthcare Improvement Scotland	Ongoing process of assessment and investigation of concerns raised. An external review of Responding to Concerns processes aimed at

	concerns made to us are subject to a level of assessment and investigation.		strengthening internal systems in relation to the handling of quality and safety concerns brought to the attention of HIS is underway and due to report in September 2024. A revised interim process was introduced in April 2024, pending the outcome of the external review. Recommendations from the external review will be implemented in the latter half of 2024-25.
Sharing Health and Care Intelligence Network	The Sharing Health and Care Intelligence Network (SHCIN) is a mechanism that enables seven national organisations with a scrutiny, improvement, or training role at system/service level in Scotland, and nine professional regulators, to share, consider, and respond to intelligence and emerging issues that may indicate risks about health and social care systems across Scotland.	• Audit Scotland • Care Inspectorate • General Chiropractic Council • General Dental Council • General Medical Council • General Optical Council • General Osteopathic Council • General Pharmaceutical Council • Healthcare Improvement Scotland • Health & Care Professions Council • Mental Welfare Commission for Scotland • NHS Education for Scotland • Nursing and Midwifery Council • Public Health Scotland • Scottish Public Services Ombudsman	The SHCIN focuses on prioritisation of emerging issues in the health and care system which supports a more agile and responsive approach, taking early action on new risks as individual network members or as a collaborative across the SHCIN. The group will meet on a quarterly basis during 2024-25, with the option to convene a review panel meeting should an emerging concern arise out with scheduled meetings.

		• Scottish Social Services Council	
Reviewing and improving national screening programmes and cancer services			
External quality assurance of cancer quality performance indicators*	Undertake external quality assurance of the national cancer quality performance indicators (QPIs), provide proportionate scrutiny of performance and support service improvement.	Healthcare Improvement Scotland	The programme was due to enter a re-design phase to shape the future approach to external quality assurance of cancer services. However, due to the additional assurance priorities that have emerged in April 2024, this programme has been paused until January 2025.
Review of national screening programmes*	Work with the National Screening Oversight function, and other relevant stakeholders, to develop an approach to External Quality Assurance (EQA) of screening programmes using thematic approach and begin a test of the methodology and approach.	Healthcare Improvement Scotland	The programme was due to enter a re-design phase to shape the future approach to external assurance of national screening programmes. However, due to the additional assurance priorities that have emerged in April 2024, this programme has been paused until January 2025.
Reviewing and learning from adverse events, children and young people's deaths, and death certification			
Management of adverse events*	Support a consistent national approach to identification, review, reporting and learning from adverse events based upon national and international good practice.	Healthcare Improvement Scotland	The revision of the Adverse Events Framework is due to be completed by December 2024. This will clearly define the role of HIS in assuring compliance with the requirements of framework. National Standardisation programme for adverse events reporting continues alongside a revised data management plan to allow for improved monitoring and targeted assurance interventions. Further development of the Adverse Events on-line community of practice along with the

			development of learning systems including learning summary re-design, with all NHS boards having their own area of the main hub site to share learning and other adverse events areas of interest.
National Hub for reviewing and learning from child deaths (and Sudden Unexpected Death in Infancy)	Healthcare Improvement Scotland, in collaboration with the Care Inspectorate, co-host the National Hub for Reviewing and Learning from the Deaths of Children and Young People and aim to ensure the death of every child and young person is reviewed to an agreed minimum standard.	Healthcare Improvement Scotland and Care Inspectorate	The National Hub processes data on the deaths of children and young people, from National Records Scotland, on a weekly basis. The National Hub receives and quality assures core review data sets from NHS boards and local authorities. The work of the National Hub in 2024/25 will be shaped by the findings and recommendations in the first Data Overview Report, published in March 2024. A data management plan is being devised to improve systems for monitoring and responding to signals in the data.
Death Certification Review Service	The Death Certification Review Service (DCRS) provides independent scrutiny of deaths in Scotland not reported to the Procurator Fiscal with the aim of improving: • the quality and accuracy of Medical Certificates of Cause of Death (MCCDs) • public health information about causes of death in Scotland • clinical governance issues identified during the death certification review process	Healthcare Improvement Scotland	Review of approximately 12% of Medical Certificates of Cause of Death (MCCD). Provide advice around death certification via the DCRS enquiry line. Review all applications for repatriation to Scotland and where appropriate approve disposal.

	The service is also responsible for authorising repatriation to Scotland of persons who have died abroad.		
Responsive Reviews			
NHS Greater Glasgow and Clyde Emergency Department review	Healthcare Improvement Scotland is undertaking an independently chaired review of the safety and quality of care within the main receiving Emergency departments in NHS Greater Glasgow and Clyde. The main aims of the work are to: • provide an evidence-based, balanced, objective and proportionate analysis of the key challenges facing the Emergency Department at the Queen Elizabeth including any wider implications for the other two main departments. • Offer support to NHS Greater Glasgow & Clyde to identify practical, evidence-based and sustainable actions that may be required to improve quality and safety. • Consider any wider evidence-based learning for Emergency Departments and NHS Boards across NHS Scotland.	Healthcare Improvement Scotland	Reporting in January 2025

Health and Care (Staffing) (Scotland) Act 2019

2019 asp 6

The Bill for this Act of the Scottish Parliament was passed by the Parliament on 2nd May 2019 and received Royal Assent on 6th June 2019

An Act of the Scottish Parliament to make provision about staffing by the National Health Service and by providers of care services.

PART 1

GUIDING PRINCIPLES FOR STAFFING

1 Guiding principles for health and care staffing

(1) The guiding principles for health and care staffing are—

(a) that the main purposes of staffing for health care and care services are—

(i) to provide safe and high-quality services, and

(ii) to ensure the best health care or (as the case may be) care outcomes for service users,

(b) that, in so far as consistent with those main purposes, staffing for health care and care services is to be arranged while—

(i) improving standards and outcomes for service users,

(ii) taking account of the particular needs, abilities, characteristics and circumstances of different service users,

(iii) respecting the dignity and rights of service users,

(iv) taking account of the views of staff and service users,

(v) ensuring the wellbeing of staff,

(vi) being open with staff and service users about decisions on staffing,

(vii) allocating staff efficiently and effectively, and

(viii) promoting multi-disciplinary services as appropriate.

(2) In this Part—

"care service" means a service mentioned in section 47(1) of the Public Services Reform (Scotland) Act 2010,

"health care" means a service for or in connection with the prevention, diagnosis or treatment of illness,

"multi-disciplinary services" means health care or care services delivered together by individuals from such a range of professional disciplines as necessary in order to meet the needs of, and improve standards and outcomes for, service users,

"service users" means individuals to whom or in relation to whom health care or a care service is provided,

"standards and outcomes for service users" means—

(a) in relation to health care, the standards and outcomes published by the Scottish Ministers under section 10H(1) of the National Health Service (Scotland) Act 1978, and

(b) in relation to care services, the standards and outcomes published by the Scottish Ministers under section 50 of the Public Services Reform (Scotland) Act 2010.

2 Guiding principles etc. in health care staffing and planning

(1) In carrying out the duty relating to staffing imposed by section 12IA of the National Health Service (Scotland) Act 1978, every Health Board and the Common Services Agency for the Scottish Health Service must have regard to the guiding principles for health and care staffing.

(2) In planning or securing the provision of health care from another person under a contract, agreement or arrangements made under or by virtue of the National Health Service (Scotland) Act 1978, every Health Board and the Common Services Agency for the Scottish Health Service must have regard to—

(a) the guiding principles for health and care staffing, and

(b) the need for the person from whom the provision of health care is to be secured to have appropriate staffing arrangements in place.

(3) As soon as reasonably practicable after the end of each financial year, every Health Board and the Common Services Agency for the Scottish Health Service must provide information to the Scottish Ministers on the steps they have taken to comply with subsections (1) and (2).

(4) Information provided under subsection (3) must set out how the steps taken by the Health Board or (as the case may be) Common Services Agency for the Scottish Health Service to comply with subsections (1) and (2) have improved outcomes for service users.

(5) As soon as reasonably practicable after the end of each financial year, the Scottish Ministers must collate information received under subsection (3) into a combined report to be laid before the Scottish Parliament.

(6) A report laid under subsection (5) must set out—

(a) the steps taken by Health Boards and (as the case may be) the Common Services Agency for the Scottish Health Service to comply with subsections (1) and (2), and

(b) the steps that the Scottish Ministers will take in relation to the staffing of the health service in response to the report's conclusions and recommendations.

3 Guiding principles etc. in care service staffing and planning

(1) In carrying out the duty relating to staffing imposed by section 7, any person who provides a care service must have regard to the guiding principles for health and care staffing.

(2) In planning or securing the provision of a care service from another person under a contract, agreement or other arrangements, every local authority and every integration authority (within the meaning of section 59 of the Public Bodies (Joint Working) (Scotland) Act 2014) must have regard to—

(a) the guiding principles for health and care staffing, and

(b) the duties relating to staffing imposed on persons who provide care services—

(i) by virtue of subsection (1) and sections 7 to 10, and

(ii) by virtue of Chapters 3 and 3A of Part 5 of the Public Services Reform (Scotland) Act 2010.

(3) Every local authority and every integration authority must have regard to any guidance issued by the Scottish Ministers about the operation of subsection (2).

(4) Before issuing such guidance, the Scottish Ministers must consult—

(a) Social Care and Social Work Improvement Scotland,

(b) such persons as they consider to be representative of the providers, commissioners and users of care services,

(c) such trade unions and professional bodies as they consider to be representative of individuals working in care services,

(d) such persons as they consider to be representative of carers (within the meaning of section 1 of the Carers (Scotland) Act 2016), and

(e) such other persons as they consider appropriate.

(5) The Scottish Ministers must publish any guidance issued under subsection (3).

(6) As soon as reasonably practicable after the end of each financial year, every local authority and every integration authority (within the meaning of section 59 of the Public Bodies (Joint Working) (Scotland) Act 2014) must publish information on—

(a) the steps they have taken, and

(b) any ongoing risk that may affect their ability,

to comply with subsection (2).

PART 2

STAFFING IN THE NHS

4 NHS duties in relation to staffing

(1) The National Health Service (Scotland) Act 1978 is amended as follows.

(2) After section 12I insert—

"Staffing

12IA Duty to ensure appropriate staffing

(1) It is the duty of every Health Board and the Agency to ensure that at all times suitably qualified and competent individuals, from such a range of professional disciplines as necessary, are working in such numbers as are appropriate for—

(a) the health, wellbeing and safety of patients,

(b) the provision of safe and high-quality health care, and

(c) in so far as it affects either of those matters, the wellbeing of staff.

(2) In determining what, in a particular kind of health care provision, constitutes appropriate numbers for the purposes of subsection (1), regard is to be had to—

(a) the nature of the particular kind of health care provision,

(b) the local context in which it is being provided,

(c) the number of patients being provided it,

(d) the needs of patients being provided it, and

(e) appropriate clinical advice.

12IB Duty to ensure appropriate staffing: agency workers

(1) Where, in order to comply with the duty under section 12IA, a Health Board, a relevant Special Health Board or the Agency secures the services of an agency worker (within the meaning of the Agency Workers Regulations 2010), it must comply with subsection (2).

(2) Subject to subsection (3), the amount to be paid to secure the services of that worker during a period should not exceed 150% of the amount that would be paid to a full-time equivalent employee of the Health Board, relevant Special Health Board or the Agency to fill the equivalent post for the same period.

(3) Where, despite subsection (2), in a quarterly reporting period a Health Board, relevant Special Health Board or the Agency does pay an amount higher than the amount prescribed in subsection (2), it must report to the Scottish Ministers, as soon as practicable after the end of that period—

(a) the number of occasions in that period on which it has paid an amount higher than the amount prescribed in subsection (2),

(b) the amount paid on each such occasion (expressed as a percentage of the amount that would be paid to a full-time equivalent employee of the Health Board, relevant Special Health Board or the Agency to fill the equivalent post for the same period) and,

(c) the circumstances that have required the higher amount to be paid.

(4) In subsection (3), "quarterly reporting period" means—

(a) the period from the day that the Bill for the Health and Care (Staffing) (Scotland) Act 2019 receives Royal Assent to whichever of 31 March, 30 June, 30 September and 31 December first occurs thereafter,

(b) each subsequent three-month period.

(5) The Scottish Ministers must publish in such manner and at such intervals as they consider appropriate—

(a) information from Health Boards, relevant Special Health Boards and the Agency on the amount spent on all agency workers, and

(b) reports received by them under subsection (3).

12IC Duty to have real-time staffing assessment in place

(1) It is the duty of every Health Board and the Agency to put and keep in place arrangements for the real-time assessment of its compliance with the duty imposed by section 12IA.

(2) The arrangements under subsection (1) must, in particular, include—

(a) a procedure for the identification, by any member of staff, of any risks caused by staffing levels to—

(i) the health, wellbeing and safety of patients,

(ii) the provision of safe and high-quality health care, or

(iii) in so far as it affects either of those matters, the wellbeing of staff,

(b) a procedure for the notification of any such risk to an individual with lead professional responsibility (whether clinical or non-clinical) in the area where the risk was identified,

(c) a procedure for the mitigation of any such risks, so far as possible, by such an individual, and a requirement for that individual to seek and have regard to appropriate clinical advice, as necessary, in carrying out such mitigation,

(d) raising awareness among staff about the procedures described in paragraphs (a) and (c),

(e) encouraging and enabling staff to use the procedures described in paragraphs (a) and (b),

(f) training individuals with lead professional responsibility (whether clinical or non-clinical) for particular types of health care in how to implement the arrangements put in place under paragraphs (a) to (e), and

(g) ensuring that such individuals receive adequate time and resources to implement those arrangements.

12ID Duty to have risk escalation process in place

(1) It is the duty of every Health Board and the Agency to put and keep in place arrangements for the escalation of any risk—

(a) identified during the real-time assessment of its staffing levels in accordance with arrangements put in place under section 12IC, and

(b) which it has not been possible to mitigate in accordance with the arrangements put in place under that section.

(2) The arrangements under subsection (1) must, in particular, include—

(a) a procedure for the initial reporting of a risk as described in subsection (1), by an individual with lead professional responsibility

(whether clinical or non-clinical) in the area where the risk was identified, to a more senior decision-maker,

(b) a requirement for any such decision-maker to seek and have regard to appropriate clinical advice, as necessary, in reaching a decision on the risk, including on how to mitigate it,

(c) a procedure for the onward reporting of the risk, as necessary, to a more senior decision-maker in turn, and a requirement for that decision-maker in turn to seek and have regard to appropriate clinical advice, as necessary, in reaching a decision on the risk, including on how to mitigate it,

(d) a requirement for the arrangements put in place under paragraph (c) to escalate further, as necessary, in order to reach a final decision on the risk, including in appropriate cases by the reporting of the risk to the members of the Health Board or the Agency (as the case may be),

(e) a procedure for the notification of every decision made following the initial report, and the reasons for it, to—

(i) any individual who was involved in identifying the risk in accordance with the arrangements put in place under section 12IC(2)(a),

(ii) any individual who was involved in attempting to mitigate the risk in accordance with the arrangements put in place under section 12IC(2)(c),

(iii) any individual who was involved in reporting the risk in accordance with the arrangements put in place under paragraph (a), (c) or (d) of this subsection, and

(iv) any individual who gave clinical advice in accordance with the arrangements put in place under section 12IC(2)(c), or under paragraph (b), (c) or (d) of this subsection,

(f) a procedure for those individuals to record any disagreement with any decision made following the initial report,

(g) a procedure for those individuals to be able to request a review of the final decision on a risk (other than a final decision made by the members of the Health Board or the Agency) made in accordance with the arrangements put in place under section 12IC(2)(c) or, as the case may be, paragraphs (b), (c) or (d) of this subsection,

(h) raising awareness among staff about the procedures described in paragraphs (a) to (f),

(i) training individuals with lead professional responsibility (whether clinical or non-clinical) for particular types of health care, and other senior decision-makers, in how to implement the arrangements put in place under paragraphs (a) to (h), and

(j) ensuring that such individuals receive adequate time and resources to implement those arrangements.

12IE Duty to have arrangements to address severe and recurrent risks

(1) It is the duty of every Health Board and the Agency to put and keep in place arrangements to—

(a) collate information relating to every risk escalated to such level as the Health Board or the Agency (as the case may be) consider

appropriate in accordance with the arrangements put in place under section 12ID(2), and

(b) identify and address those risks which are considered to be either or both—

(i) severe,

(ii) liable to materialise frequently.

(2) The arrangements under subsection (1) must, in particular, include a procedure for—

(a) the recording of a risk as described in subsection (1)(b),

(b) the reporting of any such risk, as necessary, to a more senior decision-maker, including in appropriate cases to the members of the Health Board or the Agency (as the case may be),

(c) the mitigation of the risk, so far as possible, and a requirement for appropriate clinical advice to be sought and had regard to in carrying out such mitigation, and

(d) the identification of actions to prevent the future materialisation of the risk, so far as possible.

12IF Duty to seek clinical advice on staffing

(1) It is the duty of every Health Board and the Agency to put and keep in place arrangements for—

(a) seeking and having regard to appropriate clinical advice in making decisions and putting in place arrangements in relation to staffing under sections 12IA to 12IE and 12IH to 12IL,

(b) recording and explaining decisions which conflict with that advice.

(2) The arrangements under subsection (1) must, in particular, include—

(a) where a Health Board or the Agency (as the case may be) reaches a decision on a matter which conflicts with the clinical advice it has received—

(i) a procedure for the identification of any risks caused by that decision,

(ii) a procedure for the mitigation of any such risks, so far as possible,

(iii) a procedure for the notification of any such decision, and the reasons for it, to any individual who gave clinical advice on the matter,

(iv) a procedure for any such individual to record any disagreement with the decision made on the matter,

(b) a procedure for individuals with lead clinical professional responsibility for a particular type of health care to report to the members of the Health Board or the Agency (as the case may be), on at least a quarterly basis, about the extent to which that individual considers that it is complying with the duties imposed by—

(i) this section, and

(ii) sections 12IA to 12IE and 12IH to 12IL,

(c) a procedure for such individuals to—

(i) enable and encourage other employees to give views on the operation of this section, and

(ii) record such views in reports made in accordance with the arrangements put in place under paragraph (b),

(d) raising awareness among individuals with lead clinical professional responsibility for particular types of health care in how to implement the arrangements put in place under paragraphs (a) to (c), and

(e) ensuring that such individuals receive adequate time and resources to implement those arrangements.

(3) Every Health Board and the Agency must have regard to the reports received in accordance with the arrangements put in place under subsection (2)(b).

12IG Duty to ensure appropriate staffing: number of registered healthcare professionals etc.

(1) The Scottish Ministers must take all reasonable steps to ensure that there is a sufficient number of—

(a) registered nurses,

(b) registered midwives,

(c) medical practitioners, and

(d) such other types of employees as the Scottish Ministers may by regulations prescribe,

available to every Health Board, relevant Special Health Board and the Agency to enable the Health Board and the Agency to comply with the duty in section 12IA.

(2) In fulfilling their obligations under subsection (1), the Scottish Ministers must have regard to—

(a) the number of people training for professions mentioned in or by virtue of subsection (1) in Scotland,

(b) any information as to variation in staffing needs caused by differences in the geographical areas for which Health Boards are responsible, for example in areas containing rural or island communities, and

(c) any information provided to them by a Health Board, relevant Special Health Board or the Agency about how it has carried out its duties under this Act.

(3) As soon as reasonably practicable after the end of each financial year, the Scottish Ministers must lay before the Parliament a report setting out—

(a) how they have complied with subsection (1), and

(b) the extent to which Ministers' compliance with subsection (1) enabled Health Boards, relevant Special Health Boards and the Agency to comply with the duty imposed by section 12IA.

12IH Duty to ensure adequate time given to clinical leaders

In complying with the duty imposed by section 12IA, every Health Board and the Agency must ensure that all individuals with lead clinical professional responsibility for a team of staff receive sufficient time and resources to

discharge that responsibility and their other professional duties, including, in particular, time—

(a) to supervise the meeting of the clinical needs of the patients in their care,

(b) to manage, and support the development of, the staff for whom they are responsible, and

(c) to lead the delivery of safe, high-quality and person-centred health care.

12II Duty to ensure appropriate staffing: training of staff

In complying with the duty imposed by section 12IA, every Health Board and the Agency must ensure that its employees receive—

(a) such training as it considers appropriate and relevant for the purposes set out in section 12IA(1)(a) and (b), and

(b) such time and resources as it considers adequate to undertake such training.

12IJ Duty to follow common staffing method

(1) In relation to health care of a type mentioned in section 12IK, a Health Board or the Agency (as the case may be) must, no less often than at the frequency specified in regulations by the Scottish Ministers, use the common staffing method set out in subsection (2).

(2) The common staffing method means that a Health Board or the Agency (as the case may be)—

(a) uses the staffing level tool and the professional judgement tool as prescribed in regulations under subsection (3) and takes into account the results from those tools,

(b) takes into account, in so far as relevant, any measures for monitoring and improving the quality of health care which are published as standards and outcomes under section 10H(1) by the Scottish Ministers (including any measures developed as part of a national care assurance framework),

(c) takes into account—

(i) its current staffing levels and any vacancies,

(ii) the different skills and levels of experience of its employees,

(iii) the role and professional duties, in particular, of any individual with lead clinical professional responsibility for the particular type of health care,

(iv) the effect that decisions about staffing and the use of resources taken for the particular type of health care may have on the provision of other types of health care including, in particular, those to which this section does not apply,

(v) the local context in which it provides health care,

(vi) patient needs,

(vii) appropriate clinical advice,

(viii) any assessment by HIS, and any relevant assessment by any other person, of the quality of health care which it provides,

(ix) experience gained from using the real-time assessment arrangements under section 12IC(1) and the risk escalation processes under sections 12ID and 12IE,

(x) comments by patients, and by individuals who have a personal interest in their health care (for example family members and carers within the meaning of section 1 of the Carers (Scotland) Act 2016), which relate to the duty imposed by section 12IA, and

(xi) comments by its employees which relate to the duty imposed by section 12IA,

(d) identifies and takes all reasonable steps to mitigate any risks, and

(e) having followed the steps described in paragraphs (a) to (d), decides what changes (if any) are needed as a result to its staffing establishment, and to the way in which it provides health care.

(3) The Scottish Ministers may by regulations prescribe—

(a) a "staffing level tool" designed to provide quantitative information relating to workload, based on patient needs, in order to assist in determining the appropriate staffing levels for a particular kind of health care provision, and

(b) a "professional judgement tool" designed to provide quantitative information relating to professional judgement in order to assist in determining the appropriate staffing levels for a particular kind of health care provision.

(4) For the purposes of this section, a reference to a Health Board's (or, as the case may be) the Agency's staffing establishment is a reference to the number of employees of a particular kind (or kinds) that the Board (or, as the case may be) the Agency have determined as being appropriate to deliver a type of health care mentioned in section 12IK.

(5) The Scottish Ministers may by regulations amend subsection (2) so as to change the description of the common staffing method.

12IK Common staffing method: types of health care

(1) The types of health care are those described in the first column of the table below, in so far as they are provided at any one of the kinds of locations and by any one of the kinds of employees listed in the corresponding entries in the second and third columns.

Type of health care	*Location*	*Employees*
Adult inpatient provision	Hospital wards with 17 occupied beds or more on average	Registered nurses
Clinical nurse specialist provision	Hospitals Community settings	Registered nurses who work as clinical nurse specialists
Community nursing provision	Community settings	Registered nurses

Type of health care	*Location*	*Employees*
Community children's nursing provision	Community settings	Registered nurses
Emergency care provision	Emergency departments in hospitals	Registered nurses
		Medical practitioners
Maternity provision	Hospitals	Registered midwives
	Community settings	
Mental health and learning disability provision	Mental health units in hospitals	Registered nurses
	Learning disability units in hospitals	
Neonatal provision	Neonatal units in hospitals	Registered midwives
		Registered nurses
Paediatric inpatient provision	Paediatric wards in hospitals	Registered nurses
Small ward provision	Hospital wards with 16 occupied beds or fewer on average	Registered nurses

(2) In the third column of the table in subsection (1), references to—

(a) registered nurses,

(b) registered midwives, and

(c) medical practitioners,

include other individuals providing care for patients and acting under the supervision of, or discharging duties delegated to the individual by, the registered nurse, registered midwife or medical practitioner (as the case may be).

(3) But those references do not include individuals who are engaged in a course of studies in order to be admitted to—

(a) the register of members maintained by the Nursing and Midwifery Council under section 60 of the Health Act 1999, or

(b) the register of medical practitioners maintained by the General Medical Council under section 2 of the Medical Act 1983 (with the exception of persons who are already provisionally registered under section 15 of that Act).

(4) The Scottish Ministers may by regulations amend subsections (1) to (3) so as to add, remove, or change the description of a type of health care, including where and by whom it is provided (for example, so as to add to the third column of the table in subsection (1) employees of a kind included in the register of members maintained by the Health and Care Professions Council under section 60 of the Health Act 1999).

12IL Training and consultation of staff

In complying with the duty imposed by section 12IJ, every Health Board and the Agency must—

(a) encourage and support its employees to give views on its staffing arrangements for the types of health care described in section 12IK,

(b) take into account and use any such views it receives to identify best practice, and areas for improvement, in relation to such staffing arrangements,

(c) train employees (including, in particular, employees of a type mentioned in the third column of the table in section 12IK(1)) using the common staffing method on how to use it,

(d) ensure that those employees receive adequate time to use the common staffing method, and

(e) provide information to employees engaged in the types of health care described in section 12IK about its use of the common staffing method, including about—

(i) the results from using the staffing level tool and the professional judgement tool under paragraph (a) of section 12IJ(2),

(ii) the steps taken under paragraphs (b) and (c) of that subsection, and

(iii) the results of its decision under paragraph (e) of that subsection.

12IM Reporting on staffing

(1) Before the end of the period of 1 month beginning with the last day of each financial year, every Health Board and the Agency must publish, and submit to the Scottish Ministers, a report setting out how during that financial year it has carried out its duties under—

(a) section 12IA (including reference to the related duties under section 2 of the Health and Care (Staffing) (Scotland) Act 2019 to have regard to guiding principles etc. in health care staffing and planning),

(b) section 12IC,

(c) section 12ID,

(d) section 12IE,

(e) section 12IF,

(f) section 12IH,

(g) section 12II,

(h) section 12IJ, and

(i) section 12IL.

(2) Following the receipt of such reports from every Health Board and the Agency and before the beginning of the next financial year, the Scottish Ministers must—

(a) collate the reports submitted to them under subsection (1) into a combined report for the year to which the reports relate,

(b) lay that combined report before the Scottish Parliament, and

(c) lay an accompanying statement setting out how they have taken into account and plan to take into account, in their policies for the staffing of the health service, the information included in the combined report.

(3) Information provided under subsection (1) must set out—

(a) whether each Health Board or the Agency has faced any challenges or risk in carrying out its duties under—

(i) section 12IA (including reference to the related duties under section 2 of the Health and Care (Staffing) (Scotland) Act 2019 to have regard to guiding principles etc. in health care staffing and planning),

(ii) section 12IJ, and

(iii) section 12IL, and

(b) the steps the Health Board or the Agency will take to address such challenges.

(4) As soon as reasonably practicable after the end of each financial year, the Scottish Ministers must publish a report (in such manner as they consider appropriate) setting out how each Health Board and the Agency has carried out its duties under—

(a) section 12IA (including reference to the related duties under section 2 of the Health and Care (Staffing) (Scotland) Act 2019 to have regard to guiding principles etc. in health care staffing and planning),

(b) section 12IJ, and

(c) section 12IL.

(5) A report under subsection (4) must set out—

(a) whether the Scottish Ministers have identified any challenges or risk faced by the Health Board or the Agency in carrying out its duties under—

(i) section 12IA (including reference to the related duties under section 2 of the Health and Care (Staffing) (Scotland) Act 2019 to have regard to guiding principles etc. in health care staffing and planning),

(ii) section 12IJ, and

(iii) section 12IL, and

(b) the steps that the Scottish Ministers will take as a result.

(6) The Scottish Ministers must lay before the Parliament—

(a) a summary and evaluation of the information submitted to them under subsection (1), and

(b) a report under subsection (4).

12IN Ministerial guidance on staffing

(1) Every Health Board and the Agency must have regard to any guidance issued by the Scottish Ministers about the carrying out of its duties under sections 12IA to 12IM.

(2) Such guidance may, in particular, include provision about—

(a) the related duties under section 2 of the Health and Care (Staffing) (Scotland) Act 2019 to have regard to guiding principles etc. in health care staffing and planning, and

(b) the use of the common staffing method, including—

(i) each of the steps described in paragraphs (a) to (d) of section 12IJ(2), and

(ii) decision-making, under paragraph (e) of that subsection, about staffing establishments and about the way in which health care is provided, and

(c) procedures for the identification, mitigation and escalation of risks caused by staffing levels in arrangements put in place under sections 12IC to 12IE.

(3) Before issuing such guidance, the Scottish Ministers must consult—

(a) every Health Board,

(b) every relevant Special Health Board,

(c) every integration authority (within the meaning of section 59 of the Public Bodies (Joint Working) (Scotland) Act 2014),

(d) HIS,

(e) the Agency,

(f) such trade unions and professional bodies as they consider to be representative of employees of the persons mentioned in paragraphs (a) to (e),

(g) such professional regulatory bodies for employees of the persons mentioned in paragraphs (a) to (e) as they consider appropriate, and

(h) such other persons as they consider appropriate.

(4) The Scottish Ministers must publish any guidance issued under this section.

12IO Interpretation of sections 12H to 12IN

In sections 12H to 12IN—

"appropriate clinical advice" means advice obtained from the appropriate level and area of clinical professional structures depending on the particular circumstances of each case (for example from an individual holding a senior executive role in the provision of nursing services),

"employee" means an individual in paid employment by, as the case may be, a Health Board, the Agency or (where an integration scheme under Part 1 of the Public Bodies (Joint Working) (Scotland) Act 2014 applies) a local authority, whether under a contract of service or apprenticeship or under a contract for services,

"health care" means a service for or in connection with the prevention, diagnosis or treatment of illness,

"relevant Special Health Board" means a Special Health Board which is required, by virtue of an order made under section 2, to comply with any of the duties imposed by sections 12IA to 12IN.".

(3) Section 12H(3) is repealed.

(4) In section 105(3) (orders, regulations and directions), after "section 10Z7" insert ", section 12IJ(5), section 12IK(4)".

5 Application of duties to certain Special Health Boards

(1) The State Hospitals Board for Scotland Order 1995 (S.I. 1995/574) is amended in accordance with subsections (2) and (3).

(2) In Part I of the schedule—

(a) in column 1—

(i) after the entry relating to section 10(4) of the National Health Service (Scotland) Act 1978, insert "Section 12IA",

(ii) after the entry inserted by sub-paragraph (i), insert "Section 12IC",

(iii) after the entry inserted by sub-paragraph (ii), insert "Section 12ID",

(iv) after the entry inserted by sub-paragraph (iii), insert "Section 12IE",

(v) after the entry inserted by sub-paragraph (iv), insert "Section 12IF",

(vi) after the entry inserted by sub-paragraph (v), insert "Section 12IH",

(vii) after the entry inserted by sub-paragraph (vi), insert "Section 12II",

(viii) after the entry inserted by sub-paragraph (vii), insert "Section 12IJ",

(ix) after the entry inserted by sub-paragraph (viii) , insert "Section 12IL",

(x) after the entry inserted by sub-paragraph (ix), insert "Section 12IM", and

(xi) after the entry inserted by sub-paragraph (x), insert "Section 12IN", and

(b) in column 2—

(i) in the place corresponding to the entry inserted by paragraph (a)(i), insert "Duty to ensure appropriate staffing",

(ii) in the place corresponding to the entry inserted by paragraph (a)(ii), insert "Duty to have real-time staffing assessment in place",

(iii) in the place corresponding to the entry inserted by paragraph (a)(iii), insert "Duty to have risk escalation process in place",

(iv) in the place corresponding to the entry inserted by paragraph (a)(iv), insert "Duty to have arrangements to address severe and recurrent risks",

(v) in the place corresponding to the entry inserted by paragraph (a)(v), insert "Duty to seek clinical advice on staffing",

(vi) in the place corresponding to the entry inserted by paragraph (a)(vi), insert "Duty to ensure adequate time given to clinical leaders",

(vii) in the place corresponding to the entry inserted by paragraph (a)(vii), insert "Duty to ensure appropriate staffing: training of staff",

(viii) in the place corresponding to the entry inserted by paragraph (a)(viii), insert "Duty to follow common staffing method",

(ix) in the place corresponding to the entry inserted by paragraph (a)(ix), insert "Duties of training and consultation of staff",

(x) in the place corresponding to the entry inserted by paragraph (a)(x), insert "Duty of reporting on staffing", and

(xi) in the place corresponding to the entry inserted by paragraph (a)(xi), insert "Duty to have regard to Ministerial guidance on staffing".

(3) In Part II of the schedule—

(a) in column 1, at the end, insert "Section 2 of the Health and Care (Staffing) (Scotland) Act 2019", and

(b) in column 2, in the place corresponding to the entry inserted by paragraph (a), insert "Duties to have regard to guiding principles etc. in health care staffing and planning".

(4) The Scottish Ambulance Service Board Order 1999 (S.I. 1999/686) is amended in accordance with subsections (5) and (6).

(5) In Part I of the schedule—

(a) in column 1—

(i) after the entry relating to section 10(4) of the National Health Service (Scotland) Act 1978, insert "Section 12IA",

(ii) after the entry inserted by sub-paragraph (i), insert "Section 12IC",

(iii) after the entry inserted by sub-paragraph (ii), insert "Section 12ID",

(iv) after the entry inserted by sub-paragraph (iii), insert "Section 12IE",

(v) after the entry inserted by sub-paragraph (iv), insert "Section 12IF",

(vi) after the entry inserted by sub-paragraph (v), insert "Section 12IH",

(vii) after the entry inserted by sub-paragraph (vi), insert "Section 12II",

(viii) after the entry inserted by sub-paragraph (vii), insert "Section 12IM", and

(ix) after the entry inserted by sub-paragraph (viii), insert "Section 12IN",

(b) in column 2—

(i) in the place corresponding to the entry inserted by paragraph (a)(i), insert "Duty to ensure appropriate staffing",

(ii) in the place corresponding to the entry inserted by paragraph (a)(ii), insert "Duty to have real-time staffing assessment in place",

(iii) in the place corresponding to the entry inserted by paragraph (a)(iii), insert "Duty to have risk escalation process in place",

(iv) in the place corresponding to the entry inserted by paragraph (a)(iv), insert "Duty to have arrangements to address severe and recurrent risks",

(v) in the place corresponding to the entry inserted by paragraph (a)(v), insert "Duty to seek clinical advice on staffing",

(vi) in the place corresponding to the entry inserted by paragraph (a)(vi), insert "Duty to ensure adequate time given to clinical leaders",

(vii) in the place corresponding to the entry inserted by paragraph (a)(vii), insert "Duty to ensure appropriate staffing: training of staff",

(viii) in the place corresponding to the entry inserted by paragraph (a)(viii), insert "Duty of reporting on staffing", and

(ix) in the place corresponding to the entry inserted by paragraph (a)(ix), insert "Duty to have regard to Ministerial guidance on staffing", and

(c) in column 3—

(i) in the place corresponding to the entry inserted by paragraph (a)(viii), insert "Applied in so far as it relates to sections 12IA, 12IC and 12ID of the Act and section 2 of the Health and Care (Staffing) (Scotland) Act 2019", and

(ii) in the place corresponding to the entry inserted by paragraph (a)(ix), insert "Applied in so far as it relates to sections 12IA, 12IC and 12ID of the Act and section 2 of the Health and Care (Staffing) (Scotland) Act 2019".

(6) In Part II of the schedule—

(a) in column 1, at the end, insert "Section 2 of the Health and Care (Staffing) (Scotland) Act 2019", and

(b) in column 2, in the place corresponding to the entry inserted by paragraph (a), insert "Duties to have regard to guiding principles etc. in health care staffing and planning".

(7) The NHS 24 (Scotland) Order 2001 (S.S.I. 2001/137) is amended in accordance with subsections (8) and (9).

(8) In Part I of the schedule—

(a) in column 1—

(i) after the entry relating to section 10(4) of the National Health Service (Scotland) Act 1978, insert "Section 12IA",

(ii) after the entry inserted by sub-paragraph (i), insert "Section 12IC",

(iii) after the entry inserted by sub-paragraph (ii), insert "Section 12ID",

(iv) after the entry inserted by sub-paragraph (iii), insert "Section 12IE",

(v) after the entry inserted by sub-paragraph (iv), insert "Section 12IF",

(vi) after the entry inserted by sub-paragraph (v), insert "Section 12IH",

(vii) after the entry inserted by sub-paragraph (vi), insert "Section 12II",

(viii) after the entry inserted by sub-paragraph (vii), insert "Section 12IJ",

(ix) after the entry inserted by sub-paragraph (viii), insert "Section 12IL",

(x) after the entry inserted by sub-paragraph (ix), insert "Section 12IM", and

(xi) after the entry inserted by sub-paragraph (x), insert "Section 12IN", and

(b) in column 2—

(i) in the place corresponding to the entry inserted by paragraph (a)(i), insert "Duty to ensure appropriate staffing",

(ii) in the place corresponding to the entry inserted by paragraph (a)(ii), insert "Duty to have real-time staffing assessment in place",

(iii) in the place corresponding to the entry inserted by paragraph (a)(iii), insert "Duty to have risk escalation process in place",

(iv) in the place corresponding to the entry inserted by paragraph (a)(iv), insert "Duty to have arrangements to address severe and recurrent risks",

(v) in the place corresponding to the entry inserted by paragraph (a)(v), insert "Duty to seek clinical advice on staffing",

(vi) in the place corresponding to the entry inserted by paragraph (a)(vi), insert "Duty to ensure adequate time given to clinical leaders",

(vii) in the place corresponding to the entry inserted by paragraph (a)(vii), insert "Duty to ensure appropriate staffing: training of staff",

(viii) in the place corresponding to the entry inserted by paragraph (a)(viii), insert "Duty to follow common staffing method",

(ix) in the place corresponding to the entry inserted by paragraph (a)(ix), insert "Duties of training and consultation of staff",

(x) in the place corresponding to the entry inserted by paragraph (a)(x), insert "Duty of reporting on staffing", and

(xi) in the place corresponding to the entry inserted by paragraph (a)(xi), insert "Duty to have regard to Ministerial guidance on staffing".

(9) In Part II of the schedule—

(a) in column 1, at the end, insert "Section 2 of the Health and Care (Staffing) (Scotland) Act 2019", and

(b) in column 2, in the place corresponding to the entry inserted by paragraph (a), insert "Duties to have regard to guiding principles etc. in health care staffing and planning".

(10) The National Waiting Times Centre Board (Scotland) Order 2002 (S.S.I. 2002/305) is amended in accordance with subsections (11) and (12).

(11) In Part I of the schedule—

(a) in column 1—

(i) after the entry relating to section 10(4) of the National Health Service (Scotland) Act 1978, insert "Section 12IA",

(ii) after the entry inserted by sub-paragraph (i), insert "Section 12IC",

(iii) after the entry inserted by sub-paragraph (ii), insert "Section 12ID",

(iv) after the entry inserted by sub-paragraph (iii), insert "Section 12IE",

(v) after the entry inserted by sub-paragraph (iv), insert "Section 12IF",

(vi) after the entry inserted by sub-paragraph (v), insert "Section 12IH",

(vii) after the entry inserted by sub-paragraph (vi), insert "Section 12II",

(viii) after the entry inserted by sub-paragraph (vii), insert "Section 12IJ",

(ix) after the entry inserted by sub-paragraph (viii), insert "Section 12IL",

(x) after the entry inserted by sub-paragraph (ix), insert "Section 12IM", and

(xi) after the entry inserted by sub-paragraph (x), insert "Section 12IN", and

(b) in column 2—

(i) in the place corresponding to the entry inserted by paragraph (a)(i), insert "Duty to ensure appropriate staffing",

(ii) in the place corresponding to the entry inserted by paragraph (a)(ii), insert "Duty to have real-time staffing assessment in place",

(iii) in the place corresponding to the entry inserted by paragraph (a)(iii), insert "Duty to have risk escalation process in place",

(iv) in the place corresponding to the entry inserted by paragraph (a)(iv), insert "Duty to have arrangements to address severe and recurrent risks",

(v) in the place corresponding to the entry inserted by paragraph (a)(v), insert "Duty to seek clinical advice on staffing",

(vi) in the place corresponding to the entry inserted by paragraph (a)(vi), insert "Duty to ensure adequate time given to clinical leaders",

(vii) in the place corresponding to the entry inserted by paragraph (a)(vii), insert "Duty to ensure appropriate staffing: training of staff",

(viii) in the place corresponding to the entry inserted by paragraph (a)(viii), insert "Duty to follow common staffing method",

(ix) in the place corresponding to the entry inserted by paragraph (a)(ix), insert "Duties of training and consultation of staff",

(x) in the place corresponding to the entry inserted by paragraph (a)(x), insert "Duty of reporting on staffing", and

(xi) in the place corresponding to the entry inserted by paragraph (a)(xi), insert "Duty to have regard to Ministerial guidance on staffing".

(12) In Part II of the schedule—

(a) in column 1, at the end, insert "Section 2 of the Health and Care (Staffing) (Scotland) Act 2019", and

(b) in column 2, in the place corresponding to the entry inserted by paragraph (a), insert "Duties to have regard to guiding principles etc. in health care staffing and planning".

6 Role of Healthcare Improvement Scotland in relation to staffing

(1) The National Health Service (Scotland) Act 1978 is amended as follows.

(2) After section 12IO (as inserted by section 4) insert—

"HIS functions in relation to staffing

12IP HIS: monitoring compliance with staffing duties

HIS must monitor the discharge, by every Health Board, relevant Special Health Board and the Agency, of their duties under—

(a) section 12IA (including the related duties under section 2 of the Health and Care (Staffing) (Scotland) Act 2019 to have regard to guiding principles etc. in health care staffing and planning),

(b) section 12IC,

(c) section 12ID,

(d) section 12IE,

(e) section 12IF,

(f) section 12IH,

(g) section 12II,

(h) section 12IJ,

(i) section 12IL,

(j) section 12IM, and

(k) section 12IN.

12IQ HIS: monitoring and review of common staffing method

(1) In respect of each type of health care mentioned in section 12IK, HIS must monitor—

(a) the effectiveness of the common staffing method described in section 12IJ(2), and

(b) the way in which Health Boards, relevant Special Health Boards and the Agency are using the common staffing method.

(2) In exercising the duty imposed by subsection (1), HIS must from time to time as it considers appropriate carry out reviews of the matters listed in subsection (1)(a) and (b).

(3) In carrying out such a review, HIS must—

(a) consult—

(i) the Scottish Ministers,

(ii) Social Care and Social Work Improvement Scotland,

(iii) every Health Board,

(iv) every relevant Special Health Board,

(v) every integration authority,

(vi) the Agency,

(vii) such trade unions and professional bodies as HIS considers to be representative of employees of the persons mentioned in sub-paragraphs (iii) to (vi),

(viii) such professional regulatory bodies for employees of the persons mentioned in sub-paragraphs (iii) to (vi) as HIS considers appropriate,

(ix) such other providers of health care as HIS considers to have relevant experience of using staffing level tools and professional judgement tools, and

(x) such other persons as HIS considers appropriate, and

(b) have regard to the guiding principles for health and care staffing set out in section 1 of the Health and Care (Staffing) (Scotland) Act 2019.

(4) The Scottish Ministers may direct HIS to carry out a review under subsection (2).

(5) Following a review under subsection (2), HIS may recommend changes to the common staffing method to the Scottish Ministers.

(6) Where HIS makes such recommendations it must submit to the Scottish Ministers, and then publish, a report setting out—

(a) a summary of the review it has carried out under subsection (2),

(b) its recommendations for changes to the common staffing method, and

(c) the reasons for those recommendations.

(7) In recommending changes to the common staffing method, HIS may take into account the development of a new or revised staffing level tool or professional judgement tool under section 12IR(2).

12IR HIS: monitoring and development of staffing tools

(1) HIS must—

(a) monitor the effectiveness of any staffing level tool or professional judgement tool which has been prescribed by the Scottish Ministers under section 12IJ(3) (including any new or revised tools which have been developed under this section), and

(b) where it considers that any such tool is no longer effective, recommend the revocation or replacement of the tool to the Scottish Ministers.

(2) HIS may develop and recommend to the Scottish Ministers new or revised staffing level tools and professional judgement tools for use in relation to any kind of health care provision.

(3) In developing such tools, HIS must collaborate with—

(a) the Scottish Ministers,

(b) Social Care and Social Work Improvement Scotland,

(c) every Health Board,

(d) every relevant Special Health Board,

(e) every integration authority,

(f) the Agency,

(g) such trade unions and professional bodies as HIS considers to be representative of employees of the persons mentioned in paragraphs (c) to (f),

(h) such professional regulatory bodies for employees of the persons mentioned in paragraphs (c) to (f) as HIS considers appropriate,

(i) such other providers of health care as HIS considers to have relevant experience of using staffing level tools and professional judgement tools, and

(j) such other persons as HIS considers appropriate.

(4) In undertaking such collaboration—

(a) HIS must have regard to—

(i) such guidance, published by professional bodies of the kind described in subsection (3)(g) or by other bodies with experience in relevant fields, as HIS considers appropriate, and

(ii) relevant clinical evidence and research,

(b) HIS and the persons mentioned in subsection (3)(a) to (j) must have regard to the guiding principles for health and care staffing set out in section 1 of the Health and Care (Staffing) (Scotland) Act 2019.

(5) The Scottish Ministers may direct HIS to develop a new or revised staffing level tool or professional judgement tool for use in relation to a particular kind of health care provision specified in the direction.

(6) The Scottish Ministers may by regulations require that assumptions on certain matters (for example, as to staff absence and bed occupancy levels) must be made by HIS in the process of making a recommendation to them under subsection (2).

12IS HIS: duty to consider multi-disciplinary staffing tools

(1) When HIS is developing a new or revised staffing level tool or professional judgement tool under section 12IR, it must consider whether the tool should apply to more than one professional discipline.

(2) HIS may at any time recommend to the Scottish Ministers that a staffing level tool or professional judgement tool which has been prescribed by the Scottish Ministers under section 12IJ(3) should apply to more than one professional discipline.

12IT HIS: duty on Health Boards to assist staffing functions

Every Health Board, relevant Special Health Board and the Agency must give such assistance to HIS as it requires in the performance of its functions under sections 12IP to 12IS.

12IU HIS: power to require information

(1) HIS may, in pursuance of its functions under sections 12IP to 12IS, serve a notice on a Health Board, relevant Special Health Board or the Agency requiring the Board or the Agency (as the case may be)—

(a) to provide HIS with information about any matter specified in the notice, and

(b) to provide that information by a date specified in the notice.

(2) A notice under subsection (1) must explain why, and in pursuance of which function, the information is required.

(3) A Health Board, relevant Special Health Board or the Agency (as the case may be) must comply with any such notice served on it.

12IV HIS: ministerial guidance on staffing functions

(1) The following persons must have regard to any guidance issued by the Scottish Ministers about the operation of sections 12IP to 12IU—

(a) HIS,

(b) every Health Board,

(c) every relevant Special Health Board, and

(d) the Agency.

(2) Before issuing such guidance, the Scottish Ministers must consult the persons listed in paragraphs (b) to (j) of section 12IR(3) (reading the references to HIS as if they were references to the Scottish Ministers).

(3) The Scottish Ministers must publish any guidance issued under this section.

12IW Interpretation of sections 12IP to 12IV

In sections 12IP to 12IV—

"employee" has the meaning given by section 12IO,

"integration authority" has the meaning given by section 59 of the Public Bodies (Joint Working) (Scotland) Act 2014,

"relevant Special Health Board" has the meaning given by section 12IO,

"staffing level tool" and "professional judgement tool" are to be construed in accordance with section 12IJ(3).".

(3) In section 10C (health service functions)—

(a) after subsection (3), insert—

"(3A) HIS is to exercise the functions in relation to staffing conferred by virtue of sections 12IP to 12IS and section 12IU.",

(b) at the end of subsection (5), insert ", and by virtue of sections 12IP to 12IS and section 12IU.",

(c) in subsection (6), for "and section 10D" insert ", section 10D, sections 12IP to 12IS and section 12IU,",

(d) in subsection (7), for "and section 10D" insert ", section 10D, sections 12IP to 12IS and section 12IU,".

(4) In section 10I(1) (inspections of services provided under the health service)—

(a) the word "or" at the end of paragraph (a) is repealed,

(b) at the end of paragraph (b), insert ", or

(c) in pursuance of its functions under sections 12IP to 12IS and section 12IU.".

PART 3

STAFFING IN CARE SERVICES

7 Duty on care service providers to ensure appropriate staffing

(1) Any person who provides a care service must ensure that at all times suitably qualified and competent individuals are working in the care service in such numbers as are appropriate for—

(a) the health, wellbeing and safety of service users,

(b) the provision of safe and high-quality care, and

(c) in so far as it affects either of those matters, the wellbeing of staff.

(2) In determining what constitutes appropriate numbers for the purposes of subsection (1), regard is to be had to—

(a) the nature of the care service,

(b) the size of the care service,

(c) the aims and objectives of the care service,

(d) the number of service users, and

(e) the needs of service users.

8 Training of staff

(1) Any person who provides a care service must ensure that individuals working in the care service receive—

(a) appropriate training for the work they are to perform, and

(b) suitable assistance, including time off work, for the purpose of obtaining further qualifications appropriate to their work.

(2) In subsection (1)(a), "appropriate training" includes training in how to use any method for staffing required in regulations by the Scottish Ministers under section 82B(1) of the Public Services Reform (Scotland) Act 2010.

9 Annual report on staffing in care services

(1) As soon as reasonably practicable after the end of each financial year, the Scottish Ministers must publish, and lay before the Scottish Parliament, a report setting out—

(a) a summary of how the duties imposed by sections 3, 7 and 8 on persons who provide, plan and secure care services are being discharged,

(b) the effect that staffing levels in care services have on the discharge of those duties,

(c) the steps that Ministers have taken to support staffing levels in care services in order to assist the discharge of those duties,

(d) how the matters mentioned in paragraphs (a), (b) and (c) will be taken into account in determining the future supply of—

(i) registered nurses,

(ii) medical practitioners, and

(iii) such other kinds of care professionals as the Scottish Ministers consider relevant to the discharge of the duties imposed by sections 3 and 7, and

(e) the steps that Ministers have taken to ensure that funding is available to any person who provides a care service in order to assist the discharge of those duties.

(2) In subsection (1), "staffing levels in care services" means the numbers of the following types of individuals working in care services—

(a) registered nurses,

(b) medical practitioners, and

(c) such other kinds of care professionals as the Scottish Ministers consider relevant to the discharge of the duties imposed by sections 3, 7 and 8.

(3) In preparing a report under subsection (1), the Scottish Ministers must have regard to—

(a) any review carried out by SCSWIS under section 82D(1) of the Public Services (Reform) (Scotland) Act 2010,

(b) any information from persons who provide care services on the use of staffing methods prescribed under section 82B of that Act,

(c) any performance report published by an integration authority under section 42(4) of the Public Bodies (Joint Working) (Scotland) Act 2014,

(d) any report or other information provided to the Scottish Ministers by the Scottish Social Services Council under paragraph 10 of schedule 2 of the Regulation of Care (Scotland) Act 2001,

(e) any information provided by local authorities which relates to—

(i) how they carry out the duties imposed on them by section 3 of this Act, and

(ii) how persons who provide care services carry out the duties listed in section 3(2)(b) of this Act,

including, in particular, any information relating to risks caused by staffing levels which local authorities have previously reported to the Scottish Ministers, and

(f) any other information which the Scottish Ministers consider relevant.

10 Ministerial guidance on staffing

(1) Any person who provides a care service must have regard to any guidance issued by the Scottish Ministers about the carrying out of its duties under sections 7 and 8.

(2) Such guidance may, in particular, include provision about the related duty under section 3(1) to have regard to the guiding principles for health and care staffing.

(3) Before issuing such guidance, the Scottish Ministers must consult—

(a) SCSWIS,

(b) the Scottish Social Services Council,

(c) such persons as they consider to be representative of the providers, commissioners and users of care services,

(d) such trade unions and professional bodies as they consider to be representative of individuals working in care services,

(e) such persons as they consider to be representative of carers (within the meaning of section 1 of the Carers (Scotland) Act 2016), and

(f) such other persons as they consider appropriate.

(4) The Scottish Ministers must publish any guidance issued under this section.

11 Interpretation of sections 7 to 10

In sections 7 to 10—

"care service" means a service mentioned in section 47(1) of the Public Services Reform (Scotland) Act 2010,

"SCSWIS" means Social Care and Social Work Improvement Scotland,

"service users" means individuals to whom or in relation to whom a care service is provided,

"working in a care service", in relation to an individual, includes—

(a) working for payment or as a volunteer, and

(b) working under a contract of service or apprenticeship, a contract for services or otherwise than under a contract.

12 Functions of SCSWIS in relation to staffing methods

(1) The Public Services Reform (Scotland) Act 2010 is amended as follows.

(2) After section 82 insert—

"**CHAPTER 3A**

CARE SERVICES: STAFFING

82A Development of staffing methods

(1) SCSWIS may develop and recommend to the Scottish Ministers staffing methods for use by persons who provide—

(a) care home services for adults, and

(b) such other care services as the Scottish Ministers may by regulations specify.

(2) In developing such methods, SCSWIS must collaborate with—

(a) the Scottish Ministers,

(b) Healthcare Improvement Scotland,
(c) the Scottish Social Services Council,
(d) every Health Board,
(e) every local authority,
(f) every integration authority,
(g) such persons as SCSWIS considers to be representative of the providers and users of the care services to whom the staffing methods are to apply,
(h) such trade unions and professional bodies as SCSWIS considers to be representative of individuals working in those care services, and
(i) such other persons as SCSWIS considers appropriate.

(3) In undertaking such collaboration, SCSWIS and those other persons must have regard to—
(a) any guidance issued by the Scottish Ministers about the operation of this section, and
(b) the guiding principles for health and care staffing set out in section 1 of the Health and Care (Staffing) (Scotland) Act 2019.

(4) The Scottish Ministers must publish any guidance issued under subsection (3)(a).

(5) A staffing method developed and recommended under subsection (1) must include the use of staffing level tools designed to provide—
(a) quantitative information relating to workload, based on the needs of service users, and
(b) quantitative or qualitative information relating to professional judgement,

in order to assist in determining the appropriate staffing levels for a care service.

(6) A staffing method developed and recommended under subsection (1) may require persons who provide care services to put and keep in place risk management procedures that are appropriate to the care services provided.

(7) A staffing method developed and recommended under subsection (1) may include, in particular, the taking into account of—
(a) the current staffing levels of a care service and any vacancies,
(b) the local context in which a care service is provided,
(c) the physical environment in which a care service is provided,
(d) any assessment of the quality of a care service,
(e) the needs of the users of a care service,
(f) comments by the users of a care service, and by individuals who have a personal interest in their care (for example family members and carers within the meaning of section 1 of the Carers (Scotland) Act 2016), which relate to the duty imposed by section 7 of the Health and Care (Staffing) (Scotland) Act 2019,
(g) comments by the individuals working in a care service which relate to the duty imposed by section 7 of the Health and Care (Staffing) (Scotland) Act 2019,

(h) recommendations of senior care sector or health care professionals with qualifications and experience that are appropriate to the care services in question,

(i) the standards and outcomes applicable to care services published by the Scottish Ministers under section 50,

(j) such indicators or measures relating to the quality of care as SCSWIS considers appropriate,

(k) such guidance, published by professional bodies of the kind described in subsection (2)(h) or by other bodies with experience in relevant fields, as SCSWIS considers appropriate, and

(l) such clinical evidence and research as SCSWIS considers appropriate.

82B Regulations: requirement to use staffing methods

(1) Following the development and recommendation by SCSWIS under section 82A or 82C of a staffing method for use by persons who provide care services, the Scottish Ministers may by regulations require the use of that method (with or without modifications) by persons who provide those care services.

(2) Regulations under subsection (1) may prescribe—

(a) the types of care settings and individuals working in a care service in relation to which, and whom, a staffing method is to be used,

(b) the minimum frequency at which a staffing method is to be used, and

(c) the staffing level tools for the purpose of section 82A(5).

82C Review and redevelopment of staffing methods

(1) SCSWIS may—

(a) carry out reviews, from time to time as it considers appropriate, of the effectiveness of any staffing method which has been prescribed by the Scottish Ministers under section 82B (including any revised methods which have been developed under this section), and

(b) where it considers that any such method is no longer effective, recommend the revocation or replacement of the method to the Scottish Ministers.

(2) SCSWIS may develop and recommend to the Scottish Ministers revised staffing methods for use by persons who provide care services.

(3) Subsections (2), (3), (5) and (7) of section 82A apply to the redevelopment of staffing methods under this section as they apply to their development under that section.

(4) The Scottish Ministers may direct SCSWIS to develop a revised staffing method for use in relation to a particular kind of care service specified in the direction.

82D Review of duty on care service providers to ensure appropriate staffing

(1) SCSWIS may carry out reviews, from time to time as it considers appropriate, of the effectiveness of the operation of the duty under section 7 of the Health and Care (Staffing) (Scotland) Act 2019.

(2) Having carried out a review under subsection (1), SCSWIS may publish a report to the Scottish Ministers on the operation of that duty.

(3) A report under subsection (2) may be published in such manner as SCSWIS considers appropriate.

82E Duty to consider multi-disciplinary staffing tools

(1) When SCSWIS is developing a staffing level tool as part of a staffing method under section 82A or a revised staffing method under section 82C, it must consider whether the tool should apply to more than one professional discipline.

(2) SCSWIS may at any time recommend to the Scottish Ministers that a staffing level tool which has been prescribed as part of a staffing method by the Scottish Ministers under section 82B should apply to more than one professional discipline.

82F Interpretation of Chapter

In this Chapter—

"care home services for adults" means care home services provided for individuals who have reached the age of 18 years,

"care services" excludes care services provided by individuals who do not employ, or have not otherwise made arrangements with, other persons to assist with the provision of that service,

"integration authority" has the meaning given by section 59 of the Public Bodies (Joint Working) (Scotland) Act 2014,

"working in a care service", in relation to an individual, includes—

(a) working for payment or as a volunteer, and

(b) working under a contract of service or apprenticeship, a contract for services or otherwise than under a contract.".

13 Care services: consequential amendments

(1) In the Public Services Reform (Scotland) Act 2010—

(a) in section 60 (grant or refusal of registration), in subsection (3)(a), after "section 78" insert "or 82B(1)",

(b) in section 104 (orders and regulations: procedure), in subsection (2), for "or 78" substitute ", 78, 82B(1)".

(2) Regulation 15 of the Social Care and Social Work Improvement Scotland (Requirements for Care Services) Regulations 2011 (S.S.I. 2011/210) is revoked.

PART 4

GENERAL PROVISIONS

14 Ancillary provision

(1) The Scottish Ministers may by regulations make any incidental, supplementary, consequential, transitional, transitory or saving provision they consider appropriate for the purposes of, in connection with or for giving full effect to this Act.

(2) Regulations under subsection (1) may—

(a) modify any enactment (including this Act),

(b) make different provision for different purposes.

(3) Regulations under subsection (1)—

(a) are subject to the affirmative procedure if they add to, replace or omit any part of the text of an Act,

(b) otherwise, are subject to the negative procedure.

15 Commencement

(1) This section and sections 14 and 16 come into force on the day after Royal Assent.

(2) The other provisions of this Act come into force on such day as the Scottish Ministers may by regulations appoint.

(3) Regulations under this section may—

(a) include transitional, transitory or saving provision,

(b) make different provision for different purposes.

16 Short title

The short title of this Act is the Health and Care (Staffing) (Scotland) Act 2019.

Publication - Advice and guidance

Health and Care (Staffing) (Scotland) Act 2019: overview

Last updated: **1 November 2024** - see all updates
Directorate: Chief Nursing Officer Directorate
Topic: Health and social care

Overview of the Health and Care (Staffing) (Scotland) Act 2019. The provisions in the Act came into force 1 April 2024.

Choose section

Health and Care (Staffing) (Scotland) Act 2019 - roles in scope

Introduction

The Health and Care (Staffing) (Scotland) Act 2019 places duties on the NHS and providers of care services. The Scottish Government have been asked for clarification on who the Act applies to so we have set out our interpretation of this below.

Please note that this list has been designed specifically for use in conjunction with the Health and Care (Staffing) (Scotland) Act 2019 and should not be used for any other purpose.

This list may change as new roles are developed over time.

- health care staff

- care services
- students

Health care staff

Section 12IA(1) of the Act states:

“It is the duty of every Health Board and the Agency to ensure that at all times suitably qualified and competent individuals, from such a range of professional disciplines as necessary, are working in such numbers as are appropriate for-

(a) the health, wellbeing and safety of patients,
(b) the provision of safe and high-quality health care, and
(c) in so far as it affects either of those matters, the wellbeing of staff.”

Our opinion is that ‘professional disciplines’ would cover clinical staff and staff who provide clinical advice, comprising:

Close all

Allied health professions (All HCPC registrants, all bands, working in all areas)

- art therapist
- occupational therapist
- podiatrist
- diagnostic radiographer
- orthoptist
- prosthetist
- dietician
- orthotist
- speech and language therapist
- drama therapist
- paramedic
- therapeutic radiographer
- music therapist
- physiotherapist

Ambulance services roles not covered elsewhere in the list

- ambulance care assistant
- ambulance dispatcher
- ambulance technician
- emergency call handler
- paramedic

Anaesthetics

- anaesthesia associate

Dental

- dentist
- dental hygienist
- dental technician
- dental therapist
- dental nurse
- orthodontic therapist
- clinical dental technician

Healthcare scientists

- anatomical pathology technologist
- audiologist
- biomedical scientist: blood transfusion
- biomedical scientist: clinical biochemistry
- biomedical scientist: reproductive science (embryology & andrology)
- biomedical scientist: clinical genetics
- biomedical scientist: clinical immunology

- biomedical scientist: cytopathology
- biomedical scientist: haematology
- biomedical scientist: histocompatibility and Immunogenetics
- biomedical scientist: histology
- biomedical scientist: microbiology
- biomedical scientist: molecular pathology
- biomedical scientist: virology
- cervical cytologist
- clinical perfusionist
- clinical scientist: audiology
- clinical scientist: biomedical engineering
- clinical scientist: blood transfusion
- clinical scientist: cardiac physiology
- clinical scientist: clinical biochemistry
- clinical scientist: clinical bioinformatics and Genomics
- clinical scientist: clinical engineer
- clinical scientist: critical care
- clinical scientist: clinical genetics
- clinical scientist: clinical immunology
- clinical scientist: clinical measurement
- clinical scientist: clinical pharmaceutics
- clinical scientist: cytopathology
- clinical scientist: data science and modelling
- clinical scientist: decontamination and sterile services
- clinical scientist: gastrointestinal physiology
- clinical scientist: haematology
- clinical scientist: health Informatics
- clinical scientist: histocompatibility and Immunogenetics
- clinical scientist: histology
- clinical scientist: imaging with ionising radiation
- clinical scientist: imaging with non-ionising radiation
- clinical scientist: medical equipment management

- clinical scientist: microbiology
- clinical scientist: molecular pathology
- clinical scientist: neurophysiology
- clinical scientist: nuclear medicine physics
- clinical scientist: ophthalmic science
- clinical scientist: radiation physics and radiation safety physics
- clinical scientist: radiotherapy physics
- clinical scientist: rehabilitation engineering
- clinical scientist: renal technology
- clinical scientist: reproductive science (embryology & andrology)
- clinical scientist: respiratory physiology
- clinical scientist: sleep physiology
- clinical scientist: vascular science
- clinical scientist: vision science
- clinical scientist: virology
- clinical technologist: biomedical engineering
- clinical technologist: DEXA
- clinical technologist: medical equipment management
- clinical technologist: nuclear medicine
- clinical technologist: radiation physics and radiation safety physics
- clinical technologist: radiotherapy engineering
- clinical technologist: radiotherapy physics
- clinical technologist: rehabilitation engineering
- clinical technologist: renal technology
- decontamination technician
- epidemiologist
- hearing aid therapist
- medical illustration: clinical photographer
- medical illustration: graphic designer
- medical illustration: ophthalmic imaging technician
- medical illustration: videographer
- phlebotomist

- physiologist: cardiac physiology
- physiologist: gastrointestinal physiology
- physiologist: neurophysiology
- physiologist: ophthalmic science
- physiologist: respiratory physiology
- physiologist: sleep physiology
- physiologist: vision science
- reconstructive scientist

Assistant practitioners, associate practioners, healthcare support workers, maternity care assistants and medical laboratory assistants

- non-registered staff, all bands in all working areas

Medical

- GMC registered doctors (including doctors in training)

Nursing and midwifery

- all bands and all parts of the NMC register

NHS24 call handlers

Operating department practitioner

Optometry

- dispensing opticians
- optometrist

Pharmacy

- pharmacists
- pharmacy technician
- pharmacy support worker

Physician associate

Public Health roles not covered elsewhere in the list

- public health consultant
- public health practitioner
- public health scientist

Psychology

- assistant psychologist
- clinical associate in applied psychology
- clinical psychologist
- counselling psychologist
- counsellor
- forensic psychologist
- health psychologist
- neuropsychologist

For clarity, within health services, we do not consider housekeeping, administration, maintenance, catering or any volunteers to be subject to the duties within the Act. This does not mean that these roles are not vital in the running of health services, it is simply that they are not within the scope of this Act.

Volunteers in health care services are not referred to in the Act, however it is recognised that in some situations there are volunteers working in clinical roles in health care, for example as community first responders and wildcat cardiac responders in the Scottish Ambulance Service. These individuals have an important role in delivering emergency health care, particularly in remote and rural locations. However, they have no minimum contractual requirement, are not rostered on shifts and do not replace clinical employees. For these reasons, they are not considered to be within the scope of the Act.

In general, non-clinical managers are also not within scope of the Act, and there is no requirement to report on the use of high-cost agency workers for this group, no requirement to ensure adequate leadership time etc. However, non-clinical managers could have specific duties under the Act in certain circumstances. For example, they could be involved in the identification, mitigation and escalation of risks relating to staffing. It is important, therefore, that these individuals have an understanding of the Act and receive sufficient training and resources to allow them to carry out their specific role.

Care services

Section 7 of the Act states:

“Any person who provides a care service must ensure that at all times suitably qualified and competent individuals are working in the care service in such numbers as are appropriate for-

(a) the health, wellbeing and safety of service users,
(b) the provision of safe and high-quality care, and
(c) in so far as it affects either of those matters, the wellbeing of staff.”

Care services operate differently to health care services and it is our opinion that ‘suitably qualified and competent individuals’, in a care environment, includes all those involved in the care of the person using the service. This would include, but is not limited to;

- nursing staff
- care staff
- housekeeping
- catering
- maintenance

- volunteers
- those supporting social activities and engagement in the community
- visiting staff such as chiropodists, district nursing, GP's etc

There will be staff who are working for the care service but are not directly involved in the care of the person using the service, such as those in finance and marketing, and these individuals would not be included within the scope of the Act.

This approach is in line with how Regulation 15 of the Social Care and Social Work Improvement Scotland (Requirements for Care Services) Regulations 2011 was interpreted and how the Care Inspectorate also interprets appropriate staffing.

The Act applies to the following care services:

- a support service
- a care home service
- a school care accommodation service
- a nurse agency
- a childcare agency
- a secure accommodation service
- an offender accommodation service
- an adoption service
- a fostering service
- an adult placement service
- child minding
- day care of children
- a housing support service

It has been brought to our attention that social work services were inadvertently included in the list of care services that were within the scope of the Act. This is incorrect and we have subsequently removed it from this list. To confirm, social work services are not within the definition of a 'care service' within the Act. (updated 06 October 2023).

Students

Students are referenced in the Act in section 12IK which details the types of health care, locations and employees to which the common staffing method applies. This states that when applying the common staffing method, "employees" does not include students studying to enter the Nursing & Midwifery Council register or the register of medical practitioners maintained by the General Medical Council.

This applies to pre-registration nursing, midwifery and medical students that undertake any defined ‘supernumerary placement’ as part of their learning programme. Staff undertaking training whilst employed or supported on apprenticeships or other ‘earn as you learn’ models, should be included in the definition of a ‘student’ and so be treated as supernumerary, when they are participating in a supernumerary placement or are undertaking protected learning time as detailed within the relevant course outline or conditions of employment.

PREVIOUS
Overview

Contact

Email: [redacted]

First published: **22 February 2023**
Last updated: **1 November 2024** - show all updates

Was this helpful?

- Yes
- No
- Yes, but

A53429115

THEME	Rec	ACTIVITY	Exec	Lead	Update	STATUS
Single Assurance - Independent Review	6	NHS Boards should prepare information resources to remind local people about past decisions on siting of health facilities.	Director of Communications & Public Engagement	SB	This is been completed. This information is available via NHSGGC public website.	Completed
Single Assurance - Independent Review	21	There should be greater use of digital technologies to create, log and store project documentation. This would allow relevant information to be shared with project partners. It would also facilitate governance, and review of project activities and decisions. (5.7.1)	Director of Estates & Facilities / Director of e-Health	TS/WE	In Place - GGC has in place an electronic standard folder structure and process for storing project documentation. In addition GGC is working with NSS / NHS Scotland Assure to progress with the pilot and implementation of a Common Data environment.	Completed
Single Assurance - Independent Review	22	There should be a reliable system of retaining major project records, with greater use of digital technologies to record images and other documents, as evidence of critical 'hold points' for future checking. (5.7.2)	Director of Estates & Facilities / Director of e-Health	TS/WE	In Place - GGC has in place an electronic standard folder structure and process for storing project documentation. In addition GGC is working with NSS / NHS Scotland Assure to progress with the pilot and implementation of a Common Data environment.	Completed
Single Assurance - Independent Review	24	Suitably qualified individuals from the IP&C team, with knowledge and understanding of the built environment, or someone representing the interests of the IP&C team (either from the NHS Board or the new National Centre for Reducing Risk in the Healthcare Built Environment) should have sight of IPC & Critical works for comment and have the opportunity to raise any concerns throughout the life of a project. (5.7.4)	Director of Estates & Facilities / Into Director of IPC	AW/TS/SD	Monitored through NHS Assure framework - Project alerts are issued at all design stages to ensure full visibility. There are also specific HAI-SCRIBE reviews held at key stages.	Completed
Single Assurance - Independent Review	28	There should be a transparent approach of presumption of data sharing with stakeholders in a way that fully evidences assurances that internal governance and external authorities seek. (6.7.3)	Director of Estates & Facilities / Director of IPC	TS/AW/SD	Monitored through NHS Assure's verification process.	Completed
Single Assurance - Independent Review	42	There should be a fully integrated management structure for microbiology and infection control services, bringing together team leadership, management and accountability. (8.41.1)	Director of IP&C/ Chief Operating Officer	AW	Following agreement between the Scottish Government Chief Nursing Officer and the NHSGGC Chief Executive, a substantive Director of Infection Prevention and Control has been recruited and is in post.	Completed
Single Assurance - Independent Review	45	Regardless of their professional background, those with Infection Control as part of their job role should undergo regular performance appraisal. This should include enquiry about challenges and problems encountered in the role, including team effectiveness. (9.4.1)	Director of Human Resources & OD/ Director of IP&C	AM	The Director of Infection Prevention and Control is subject to regular appraisals using the same process as all of senior leaders in NHSGGC.	Completed
Single Assurance - Independent Review	46	Enhanced professional appraisal must, similarly, encompass critical appraisal and reflection. Critical incidents where Incident Management Teams (IMTs) present dilemmas and challenges should provide candid and confidential material for discussion with a view to continuous improvement. (9.4.2)	Medical Director/ Director of IP&C	JA	1. Professional appraisal- was discussed at the National RO meeting in Oct 2020. Confirmation from the meeting that appraisal would be done within the service 2. Chief of Medicine - Diagnostics has confirmed that reflective discussion and learning from incidents and IMTs will be included into appraisals. 3. Minutes of RO Network meetings (Oct 20 Sec. 4.1/ Mar 21) 4. Email from Chief of Medicine to ICD Doctors	Completed
Single Assurance - Independent Review	55	We therefore report examples of team and individual behaviour that were inappropriate. We ask the teams we have identified to reflect on these remarks, and the extent to which the IP&C function has left behind the tendency to focus on the dispute rather than the problem needing to be solved for the benefit of the patients at the centre of the incident. We commend initiatives already underway to address this matter. We direct readers to the recent (2019) reports from John Sturrock QC and Coia and West on inappropriate behaviour care and compassion for staff, and urge stakeholders to examine and apply the recommendations of these reports in their own context. (9.12.9)	Director of Human Resources & OD/ Director of IP&C	AM	Evidence of action plans agreed by each team in the department for improving employee voice, improving use of iMatter and other team communications, leadership visibility and how the team celebrates success. Agreed actions for collective leadership which aligns to our NHS values and behaviours (such as those described in Civility Saves Lives), time allocated for high quality PDP conversations to agree appropriate development such as 'Line Manager as Coach'. Evidence that high quality PDP discussions have informed Succession Planning in the department. Coaching agreed and underway, workshops delivered and framework for governance established. Plan agreed to improve joined up working. Reference OD process in IPCT and Microbiology in actions against Overnight Board Recommendation Interim-16.	Completed
Single Assurance - Oversight Board	Final-10	The Health Board should finalise and implement its IPC Assurance and Accountability Framework.	Int. Director of IPC	AW	IPC Assurance and Accountability Framework has been approved by the Corporate Management Team and is now in place.	Completed
Single Assurance - Oversight Board	Final-11	A review should be undertaken of how the environmental risk of significant water contamination within the QEUH is being assessed and managed in the Health Board's approach to risk management, and changes made to relevant risk registers and risk management planning as a result.	Dir. Of E&F / Head of Gov	TS / EV	The Water Plan for both hospitals has been updated by the site Authorised Person (AP) as well as external review by an independent Authorising Engineer. This Plan has detailed site management actions as well as escalation and governance arrangements. The Water Plan review has been completed and reported through the annual water safety risk assessment, which is part of NHSGGC business as usual. Enhance approach to corporate and business risk is part of our overall review of risk governance (see below).	Completed
Single Assurance - Oversight Board	Final-12	The Health Board should set out a clearer, more targeted focus on the corporate risk process.	Head of Governance	EV	The Risk Management Strategy and guidance documents have been revised and are gone through routine governance processes. Board Seminar session on risk appetite has taken place. Suite of key documents relating to Risk Management gone through Audit and Risk Committee in September 2021 illustrating an overall enhanced approach to Risk Management.	Completed
Single Assurance - Oversight Board	Final-13	The Health Board should review how concerns raised about environmental risks are communicated to senior Committees and the Board, and the procedures to ensure that such concerns are addressed. Moreover, it should also ensure the responses are communicated appropriately to those raising concerns.	Head of Governance	EV	Part of NHSGGC approach to Active Governance, with routine updates to the Board with robust Action Plan around the Assurance Framework.	Completed
Single Assurance - Oversight Board	Final-14	Given that organisational duty of candour was considered, but not formally activated, NHS GGC should review its approach to ensure that it is not simply focused on patient safety incidents and circumstances where causality is clear. There should be greater consideration of the duty where events could result in death or harm. There should also be improved guidance on how the Health Board will balance with other duties perceived as barriers to meeting the organisational duty of candour obligations.	Medical Director	JA	Revised Duty of Candour policy has been agreed and taken through appropriate governance in September 2021. This follows an audit of NHSGGC duty of candour conducted by Azets in March of 2021.	Completed
Single Assurance - Oversight Board	Final 16	The Health Board should expedite the refurbishment of Wards 2A and 2B in the RHC as safely and quickly as possible, and keep affected children, young people and families fully informed of the developments.	Director of E&F	TS	Reopening of wards complete	Completed
Single Assurance - Oversight Board	Final-18	The various action plans and reviews attached to these recommendations should be compiled into a single response to the Oversight Board, and implementation overseen by NHS GGC and the Scottish Government.	Chief Executive	SW	Action Plan complete and submitted to AARG GGC governance arrangements have been agreed through key Standings Committees to the Board.	Completed
Single Assurance - Oversight Board	Interim-10	NHS GGC should ensure that the recommendations and learning set out in this report should inform an updating of the Healthcare Associated Infection Communications Strategy and an accompanying work programme for the Health Board.	Director of Comms &PE	SB / AW / SD	HAI communication strategy has been approved by the Corporate Management Team in August 2021	Completed
Single Assurance - Oversight Board	Interim-15	NHS GGC should learn from other Health Boards' good practice in addressing the demand for speedier communication in a quickly developing and social media context. The issue should be considered further across NHS Scotland as a point of national learning.	Director of Comms & PE	SB	Social Media strategy in place	Completed
Single Assurance - Case Note Review	2.1	Given the unexplained but significant excess of female patients in the Case Note Review, the Paediatric Haematology Oncology service should audit all bacteraemia for a sufficient period either to reassure that there is no real gender effect, or to investigate further if this proves to be the case.	COO	WE/SD	All patients in ward 2a who have a bacteraemia have a clinical review completed. In 2023 there were 17 reviews completed, 8 were from male patients and 9 from female. Review of cases in 2024 to Oct 2024; of the 11 cases of gram negative bacteraemia 8 were from males and 3 from females.	Completed
Single Assurance - Case Note Review	10.1	NHS GGC must (continue to) develop a comprehensive and searchable database that allows details of microbiology reference laboratory reports to be compared between samples of the same bacteria obtained from different patients or environmental sites.	Director of eHealth /COO	DB / WE	Action Complete. NHSGGC has developed a system to provide the capability to report on various data items in relation to samples, patient locations and sampling data taking into account the need for a more streamlined process for the management of reference laboratory results has been completed. The database system takes data from the Telepath, Specialist Service Providers and the StrainID for water, environmental and clinical samples and results. This data is now searchable and available through a series of reports to the IC Teams. Report with screenshots of new database system available as evidence. Joint session with stakeholders from IC, Microbiology Team and Estates - Database in place - evidence of clinical review provided as evidence of its completion.	Completed
Single Assurance - Case Note Review	10.2	The system for integrating microbiology reference laboratory reports into the patient microbiology record needs to be reviewed and strengthened. Similarly, the system for ensuring that microbiology reference laboratory information is available to and used by the IMT process, including the investigation of clusters and outbreaks, needs to be reviewed and strengthened.	Director of eHealth /COO	DB / WE	In place in the NHSGGC Estates Management system	Completed
Single Assurance - Case Note Review	11.1	NHS GGC should undertake a review of the current effectiveness of the system for collating, storing and integrating both scanned hand written records and digitally recorded records and how this achieves an accurate, accessible and chronologically accurate health record for each patient.	Director of eHealth	DB	A workshop has been held with Health Records Services and eHealth Clinical Leads to assess the effectiveness of scanned and digitally recorded clinical records. An assessment of areas for improvement has been completed. A report has been compiled with the detail of the review and recommendations.	Completed
Single Assurance - Case Note Review	11.2	NHS GGC should clarify their strategy for further evolution towards fully digital records	Director of eHealth	DB	GGC eHealth Delivery Plan includes implementation of Active Clinical Notes (ACN) to replace scanned records. This functionality is available in the TrakCare system following the system upgrade to version T2021 in October 2021. Priority areas for the implementation of ACN are Emergency Department and Nursing Admission Record (My Admission Record - MAR). A programme of implementation is complete (end 2022) which replaced acute scanned notes.	Completed

Single Assurance - Case Note Review	11.3	Consideration should be given to the integration of the microbiology recommendations regarding the diagnosis and management of infections, as currently documented in the Telepath patient notepad, into the patient clinical record.	Director of eHealth	DB	Telepath notepad records any guidance given by Labs staff to the requester or local ward staff regarding a sample result or sample submitted. This is only visible to the internal Lab staff. Following discussions with the Chief of Medicine, Diagnostics -There is already very close clinical liaison with the Haematology Oncology teams and the Paediatric MDTs. The majority of communication is verbal and on a 1-1 basis discussing results and recommendations and advice in terms of treatment. This will often involve follow up dialogue and review. There is also attendance at the Paediatric MDT meetings when required and this can be extended to a regular attendance to ensure further integration. An SBAR report detailing the current use of the Telepath Notepad and recommendation for ensuring relevant information is discussed at the Paediatric MDT and stored in Clinical Portal has been prepared.	Completed
Single Assurance - Case Note Review	12.1	It should not be possible to code patient activity to a clinical area in which the patient was not present: this should be addressed.	Director of eHealth	JT	New SOP in place and staff reminders issued - ongoing monitoring underway.	Completed
Single Assurance - Case Note Review	13.2	The PTT offers a useful tool to identify and monitor trends in the occurrence of adverse events that occur during care.	COO	SD / AM	Local evaluation of PTT undertaken.	Completed
Single Assurance - Case Note Review	14.1	The Paediatric Haematology Oncology service should review the practice of 'challenging' central venous lines in line with evidence for its risks and benefits.	COO	SD / AM	Guidance document and SOP have been published. In addition these guidance documents have been made available to all clinical staff through clinician webpage.	Completed
Single Assurance - Case Note Review	14.2	When it is agreed that a central line should be removed for optimal management of a patient's infection, operating theatre and anaesthetic resources must be made available to ensure its prompt removal (within 24 hours).	COO	SD / NS / AM	Guidance document and SOP have been published. In addition these guidance documents have been made available to all clinical staff through clinician webpage.	Completed
Single Assurance - Case Note Review	15.4	The Managed Service Network and NHS GGC should review any changes to the use of shared care that have evolved as a result of the service disruption experienced in recent years, and ensure the structures and processes in place adequately address patient safety and staff support across the shared care network.	COO / Chair of Network	SD / AM / Chair	NHSGGC has engaged with the Managed Service Network regarding their involvement at an operational level.	Completed
Repeated Annual Review - Independent Review	31	NHS GG&C should allocate and sustain resources that reflect the QEUH building's continuing need for maintenance above expected levels. (7.7.1)	Director of Estates & Facilities / Director of IPC	TS/AW/SD	Regular review of staffing levels to understand what level of resource is required on the site to meet the operational demands. This will be consistently checked and reviewed. Significant remedial work, funded by SG. In additional, 24/25 finance plan outlines additional [redacted] for QEUH maintenance	Completed
Repeated Annual Review - Independent Review	32	A re-evaluation is needed of resources specifically to service single rooms, taking account of the increased workload, impact of new technologies and procedures for Infection Prevention and Control (IP&C), and new guidance issued. For future projects, resource based on analysis of the requirement rather than solely historical cost should guide decisions on facilities and estates. New buildings contain sophisticated systems and require requisite skill in monitoring, problem assessment and correction. (7.7.2)	Director of Estates & Facilities	TS	NHS Assure have completed review and shared findings with NSFG and with Scottish Government	Completed
Repeated Annual Review - Independent Review	35	An Authorised Person for water safety must be trained and competent as per HSE guidance (L8) and NHS Boards must have sign off for the appointment. (7.7.5)	Director of Estates & Facilities	TS	NHSGGC has introduced this post for all key infrastructure systems - for monitoring and assurance.	Completed
Repeated Annual Review - Independent Review	37	The scope of the roles an ICD, ICN and IP&C Team involved in a major construction project should conform to the specification laid out in guidance and good practice documents. (8.24.1)	Director of Estates & Facilities / Director of IPC	TS	Job descriptions cover these roles and evidence showing ICD input to INS building project.	Completed
Repeated Annual Review - Independent Review	40	All hospitals need to plan and have in place assured air ventilation systems that perform in the way they are intended or designed. (8.33.2)	Director of Estates & Facilities	TS	Critical AR systems are managed in accordance with appropriate guidance. Board Ventilation Group in place which reports to Infection Control Built Environment Group.	Completed
Repeated Annual Review - Independent Review	41	Without knowing the thresholds for air quality that would quantify and minimise infection risk, we look to general measures: there should be continuing efforts to ensure the performance of the systems in place, assuring air quality for all patients, particularly patients vulnerable to airborne pathogens, and make specific provision for positive and negative pressure facilities for specific groups of patients and nearby patients and staff. (8.33.3)	Director of Estates & Facilities / Director of IPC	TS/AW/SD	In place and demonstrated through: 1. Proposed Maintenance Schedule. 2. SBAR re air sampling Ward 2A 30.3.22. 3. South Sector Ventilation Group Minutes 23.06.2022.	Completed
Repeated Annual Review - Independent Review	48	Incident management and problem assessment inevitably involves hypothesis development and testing; governance must ensure that hypotheses are sound, contestable and the debate that strengthens or removes hypotheses is respectful and transparent. (9.5.2)	Director of Public Health/ Director of IP&C	AW/SD	Debriefing templates available and Incident Management Process Framework in place	Completed
Repeated Annual Review - Independent Review	50	The data on which those with responsibility offer assurance must be sharable to ensure transparency, complete with information on context and, where available and appropriate, valid comparison and external peer challenge. (9.9.3)	Head of Corporate Governance	EV	Various audits and processes highlighted. Development of dashboards and increased availability of data for info and decision making	Completed
Repeated Annual Review - Independent Review	51	Stakeholders advising on critical systems such as IP&C should be: - Properly trained, experienced, capable of management and organisation of resource, capable of effective influence and have scoped the highly specialist functions of a healthcare building; - Capable of escalating problem solving, and networking with evidence providers nationally and internationally when the situation demands it; -Capable of understanding the implications of derogations, guidance and compliance; -Diligent in documenting decision-making that is transparent and accountable. (9.9.4)	Director of IPC	AW/SD	IC Drs have been on the Engineering Aspects of IC course	Completed

Advice Assurance & Review Group

Briefing Note | 11th August 2021

Summary:

NHS Greater Glasgow and Clyde Health Board has made substantial progress on the 108 recommendations from across the three reports into the Queen Elizabeth University Hospital and Royal Children's Hospital. Actions are being delivered against an accelerated delivery timescale, with all action at this time either completed or underway. NHSGGC is therefore on course to conclude 90% of all recommendations from the three reports, by the end of August 2021 and anticipates concluding all actions by the end of September 2021.

Progress to Date:

- Independent Review:

  Of the 41 Recommendations, 36 are either Complete or in place, this accounts for 87.8% of the total recommendations. Of the remaining 5 recommendations, work is underway on all. By the end of August 2021 NHSGGC expects that the majority (95%) of the Independent Review action will be concluded.

- Oversight Board Actions:

  Of the 24 Recommendation, 14 have been completed to date, this equates to 58.6% of the Oversight Board recommendations. Of the remaining 10 recommendations, work is underway on all. By the end of August 2021, NHSGGC expects that the majority (75%) of the recommendations will be concluded.

- Case Note Review

  Of the 43 Recommendations, 38 have been completed to date, this accounts for 88.4% of the total Case Note Review recommendations. Of the 5 recommendations currently not complete, work is underway on all. By the end of August 2021, NHSGGC expects that the majority (93%) of the recommendations will be concluded.

Action Plan Process and Progress:

NHSGGC has, in delivering our response to the 108 recommendation developed a senior executive group, each with delegated responsibility for delivering against the recommendation in their area of expertise. There are regular senior management

progress reviews undertaken, led by the Chief Executive. Gold and Silver command in place to ensure oversight and delivery of this programme. A strong working relationship between the AARG group and NHSGGC has been developed, which has been mutually beneficial and essential in delivering this highly complex and multifaceted programme of work.

The set of action plans have been updated, clarifying status and evidence of completion/action. In evidencing the significant work undertaken in delivering against each recommendation, NHSGGC has created a comprehensive evidence portfolio, held in an electronic document library. All actions outlined as complete have supporting evidence of work undertaken recorded in the evidence of completion portfolio.

Next Steps:

As a Board, we are nearing a point of completion for actions against all the recommendation, from across the three reports. Substantial work has been undertaken to transform, improve and enhance our services to deliver better care for our community. Following the completion of this initial phase of work, our focus will be on ensuring we sustain and build upon the progress we have made as a Board through this process.

Jane Grant

NHS Greater Glasgow and Clyde

Chief Executive

Greater Glasgow and Clyde NHS Board

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Christine Ward
Deputy Director
Chief Nursing Officer's Directorate

By email: [redacted]

Date: 13th August 2021
Our Ref: JG/GD

Enquiries to: Jane Grant
Direct Line: [redacted]
E-mail: [redacted]

Dear Christine

QEUH/RHC Action Plans - AARG

Please find enclosed the combined Action Plans and some key supporting evidence in respect of the recommendations made within the Scottish Government's Oversight Board Report, the Independent Case Note Review and the QEUH Independent Review led by Drs Frazer and Montgomery. These Action Plans were first presented to the AARG in June 2021, and were updated and submitted to the Scottish Government on the 6th August. Further to discussion between Scottish Government colleagues and NHSGGC, the Action Plans have been further updated to provide additional clarity. An accompanying presentation is also being prepared for the next AARG meeting, now scheduled for the 19 August.

A robust process has been undertaken to ensure our approach to fulfilling the recommendations has been comprehensive, whilst doing so at pace. There has been regular senior management progress reviews, led by myself, with Gold and Silver command arrangements in place to ensure oversight and delivery. NHSGGC has established a Board wide document library of our completed work and all associated evidence of work undertaken against each recommendation to provide assurance.

I trust this approach underlines the priority that NHS GGC has given to this process and the seriousness with which we have considered and acted upon the many recommendations, providing assurance to the Scottish Government. Work will continue with our focus on ensuring we sustain and build upon the progress we have made as a Board through this process as many actions become business as usual.

Ultimately, the substantial effort that has been made will improve and enhance our services to deliver better care for our community.

Yours sincerely

[redacted]

Jane Grant
Chief Executive
NHS Greater Glasgow and Clyde

Enc

Queen Elizabeth University Hospital Campus

AARG – Oversight Board
19th August 2021

Chief Executive Summary

- Acceleration of Action Plan delivery.

- Regular senior management progress reviews, led by the Chief Executive. Gold and Silver command arrangements in place to ensure oversight and delivery.

- NHSGGC has established a Board wide document library of our completed work and all associated evidence of work undertaken against each recommendation.

- As at the middle of August 2021, all actions underway, approx. 86% complete (33% in June). Aim to complete majority (91%) of actions by 31st August 2021.

Summary Position as of 13th August

- **Independent Review**
  - 41 Recommendations, 37 of which are completed or in place to date (90.2%).
  - The remaining 4 actions all are underway, 3 are on course to complete in September and 1 is dependent on action concluding in the Oversight Board Plan.

- **Oversight Board Actions**
  - 24 Recommendations, 17 of which are completed to date (70.8%).
  - The remaining 7 are all underway. Of these 7, 1 was due in June but work is still ongoing with national partners, 3 are on course to be completed in August 2021, 3 are due to be completed in September 2021

- **Case Note Review**
  - 43 Recommendations, 38 of which are completed to date (88.4%) .
  - Of the remaining 5 all are underway, 3 are eHealth programmes which are on track, one is in place but with further organisational development work ongoing.

Progress - Some Examples

- Infection Prevention and Control - Incident Management Process
- Estates and Facilities
- eHealth and Data Management
- Patient and Case Management
- Communication & Engagement
- Governance & Risk

IPCT Implementation of Recommendations

- **IPC** - 33 recommendations complete (3 remain in progress and will be completed by end of August – 2 of the 3 are ARHAI dependant).

- GGC **Outbreak and Incident Management Plan** is the extant guidance in place for IMTs. GGC **IPCT Incident Management Process Framework** has been developed to support this in the context of IPC. Requirements with regards to duty of candour, risk management, escalation, governance, assurance and communications with patients and families are included within this framework.

- IPCT contributed to recommendations related to:
  - Duty of Candour
  - SCRIBE processes
  - Communications and engagement

- Members of the IPCT also contributed to the response nationally, e.g. three members of the IPCT were members of Covid 19 Nosocomial Review Group (CNRG).

Infection Prevention & Control Action

- Incident Management Team (IMT) Process Framework
- Quality Improvement Collaborative
- Benchmarking with other Health Boards
- Standard Operating Procedures (SOP)
- Organisational Development
- Sharing Information
- Strong Performance

• GGC Performance 2021

- Quarterly epidemiological data on Clostridioides difficile infection, Escherichia coli bacteraemia, Staphylococcus aureus bacteraemia and Surgical Site Infection in Scotland

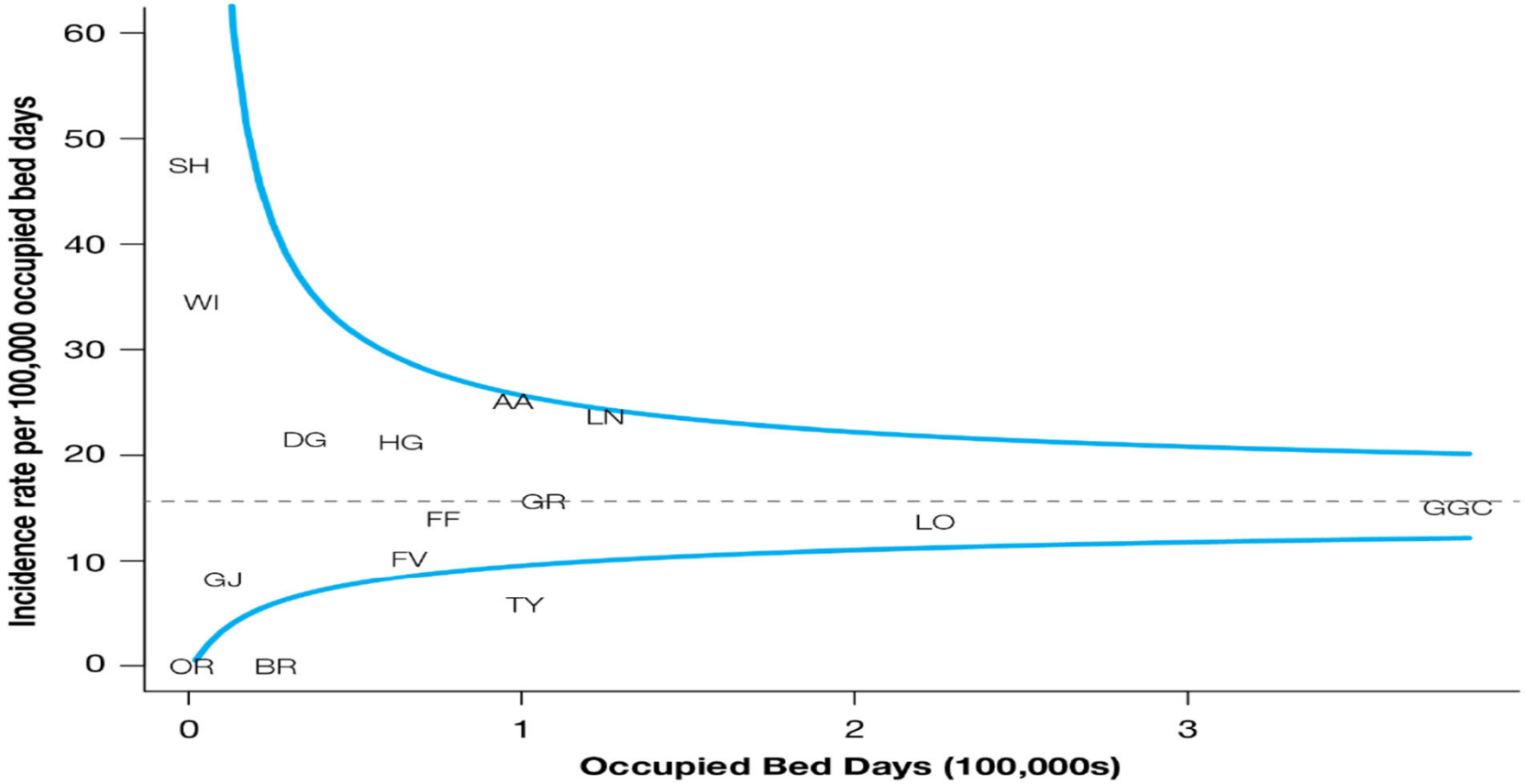
- Q1-2021 and rolling year Q1 2020 – Q1 2021

Q1-2021	HCAI CASES - GGC	GGC rate per 100,000 OBDs	SCOTLAND rate per 100,000 OBDs
CDI	58	15.1	15.6
ECB	122	31.7	34.7
SAB	59	15.4	18.4

Year end Q1-2020-Q1 2021	HCAI CASES - GGC	GGC rate per 100,000 OBDs	SCOTLAND rate per 100,000 OBDs
CDI	248	17.0	16.2
ECB	548	37.6	39.3
SAB	277	19.0	18.6

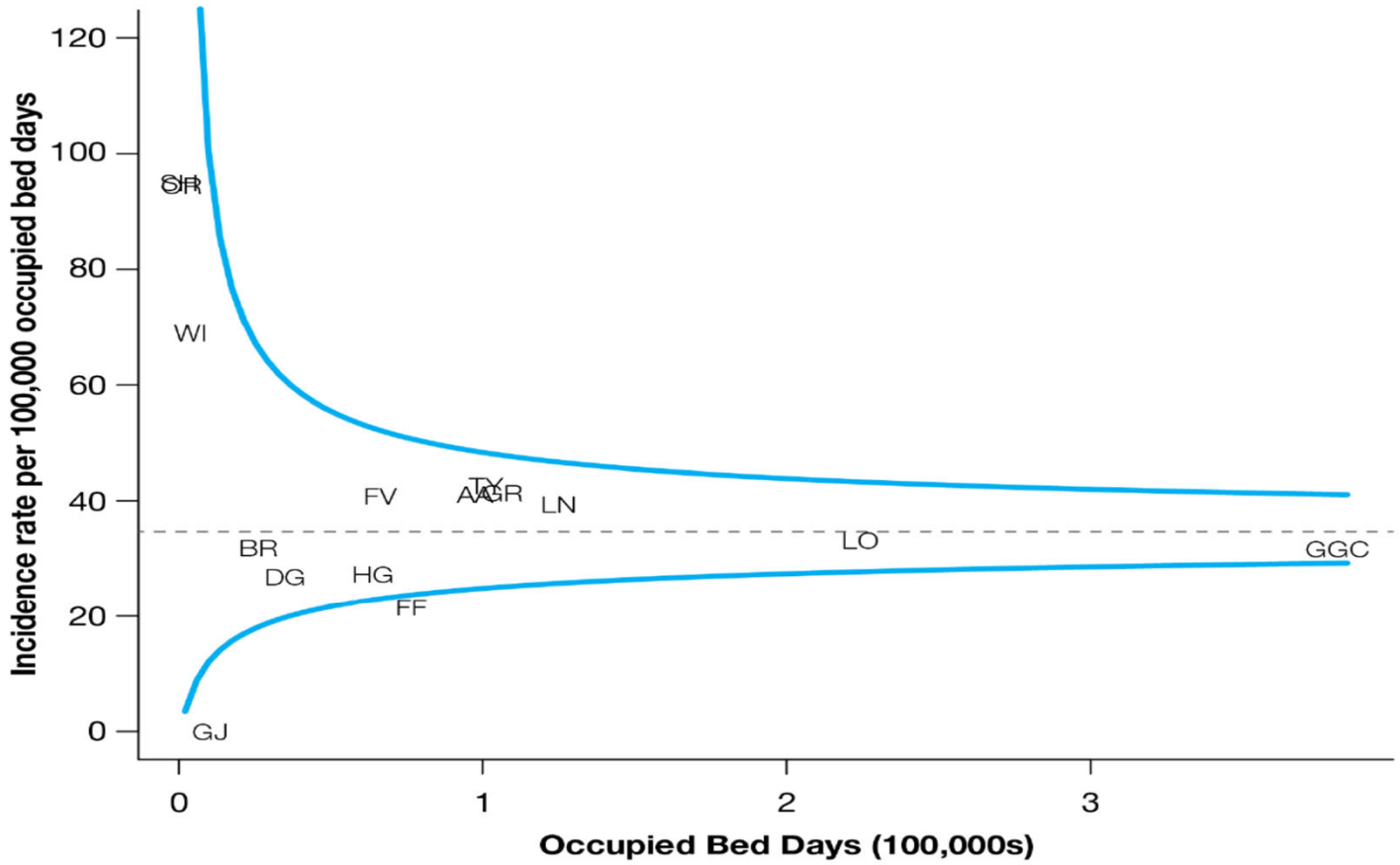
Greater Glasgow and Clyde

Figure 1: Funnel plot of CDI incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS boards in Scotland in Q1 2021.[1]



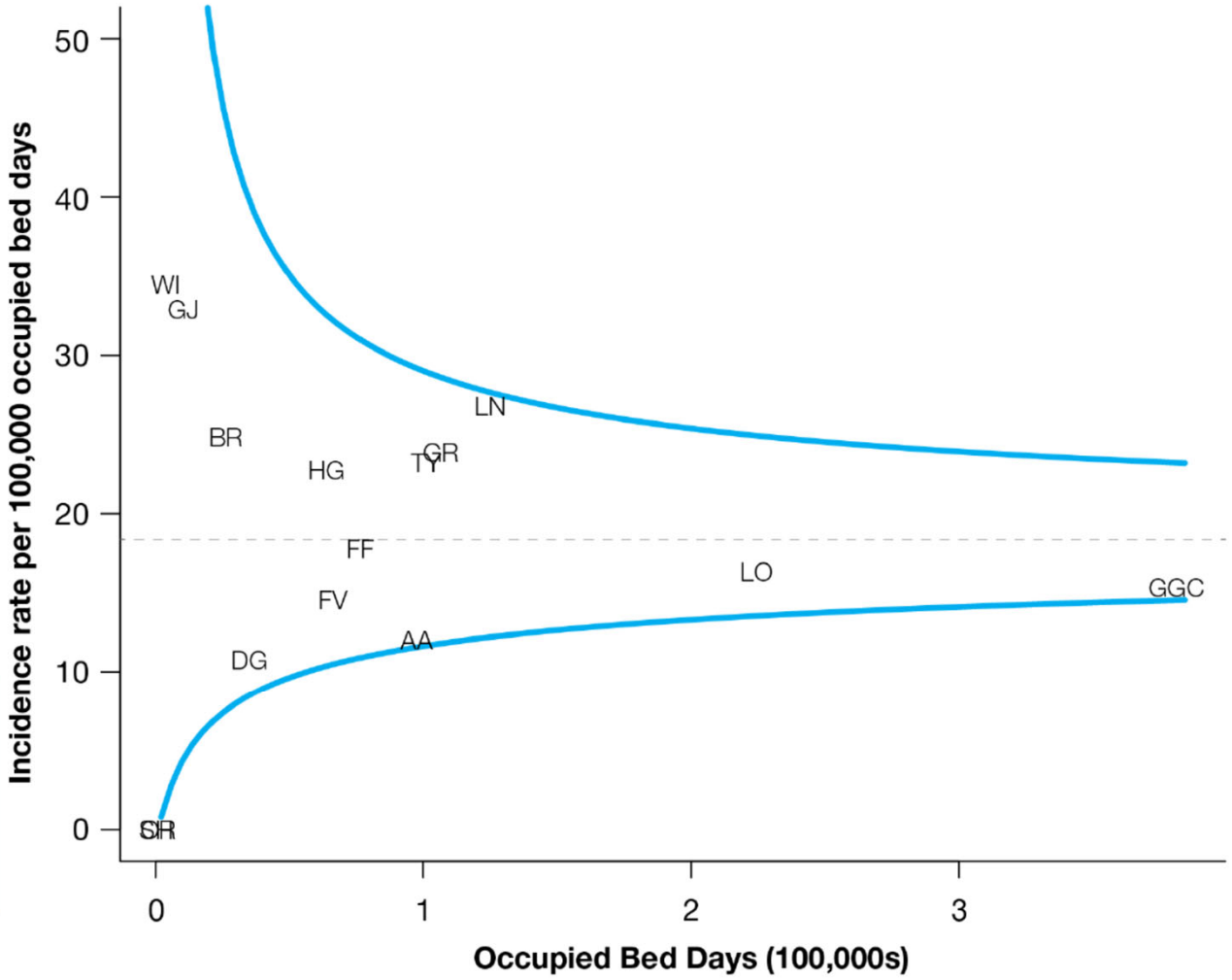
1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.

Figure 3: Funnel plot of ECB incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS boards in Scotland in Q1 2021.[1]



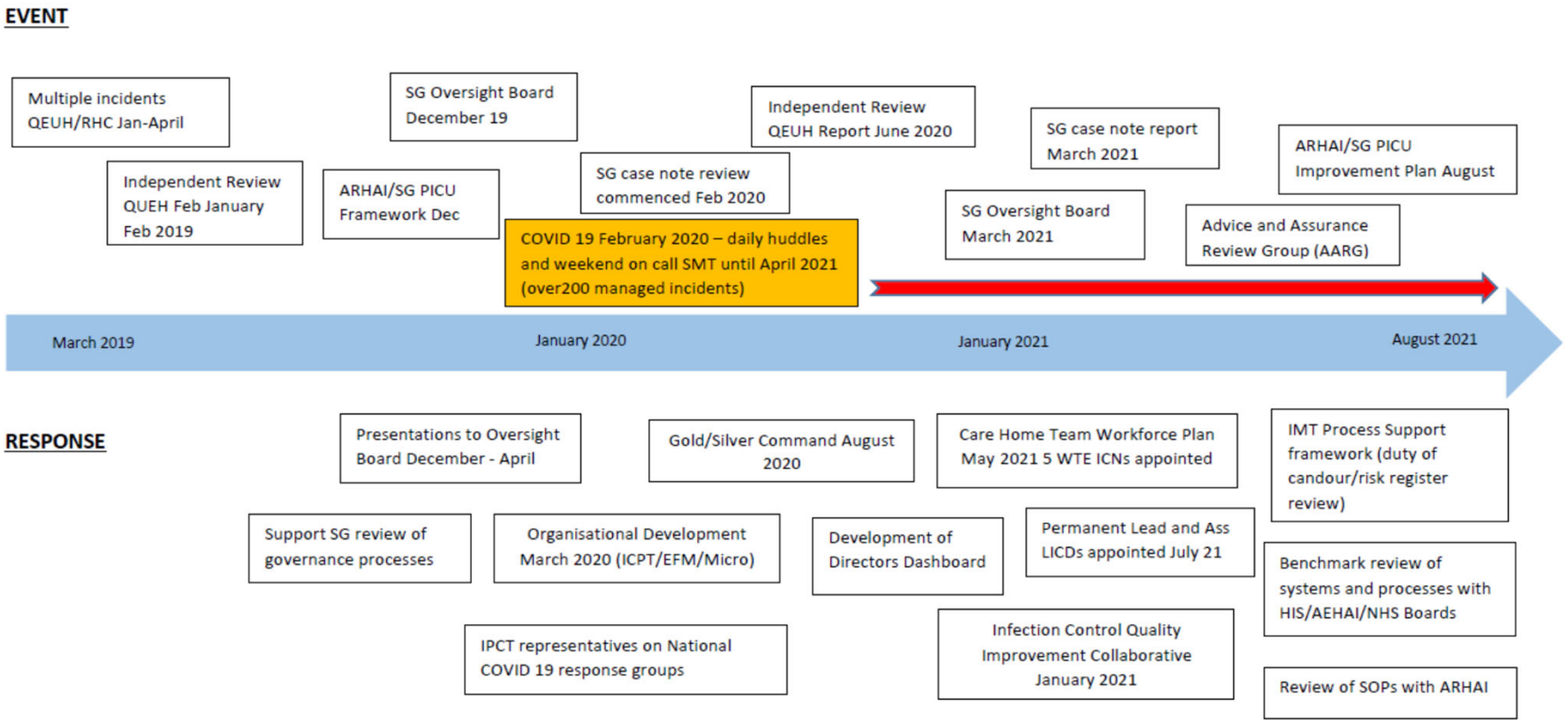
1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.

Figure 5: Funnel plot of SAB incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS boards in Scotland in Q1 2021.[1,2]



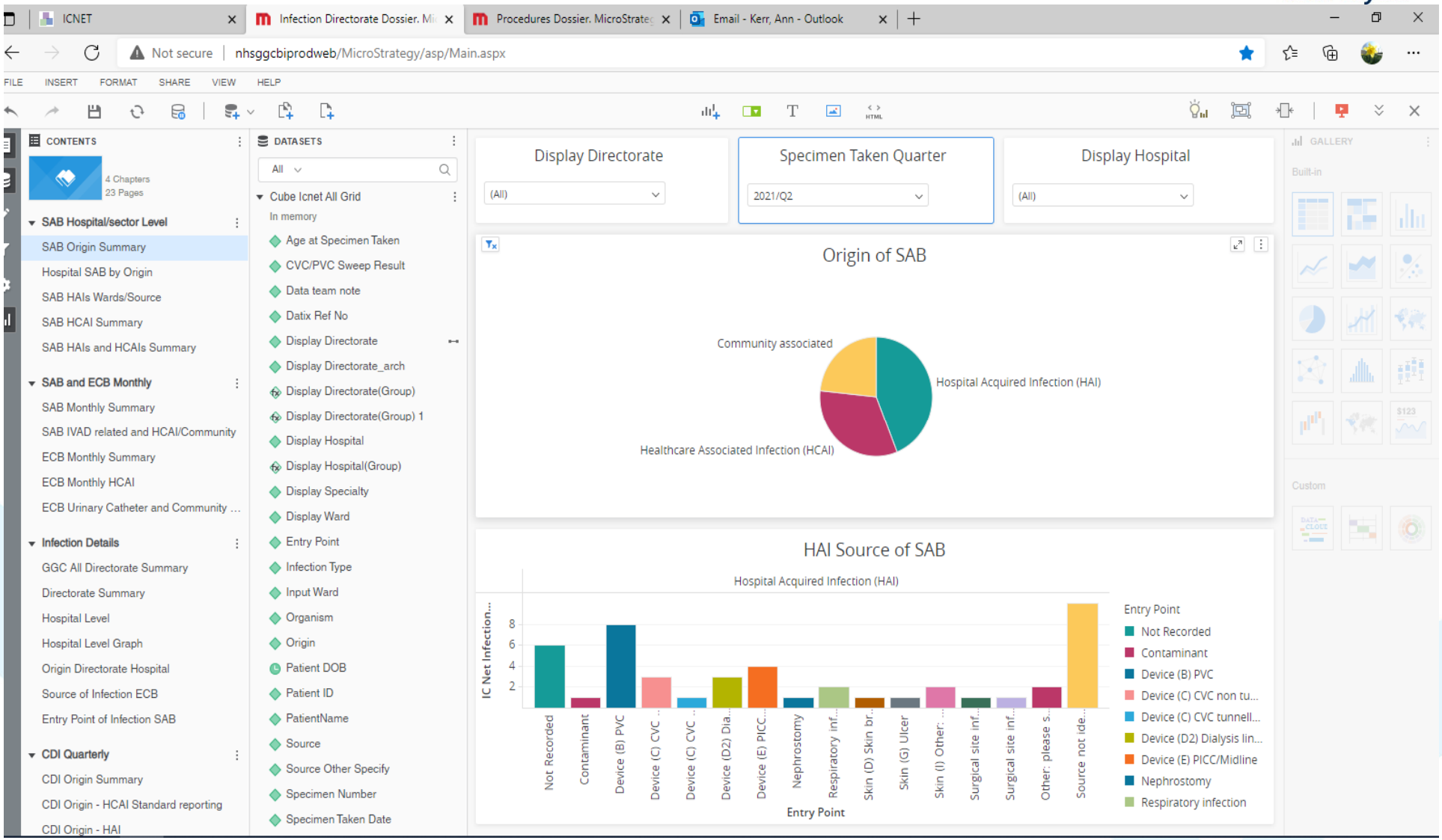
1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.

IPC Timeline



IPC Dashboard – Real time data for safe care

Greater Glasgow and Clyde



IPCT Journey

- Inspection to improvement.
- Organisational development facilitated the articulation of the GGC vision for the IPCT and supported the strengthening of relationships with other key stakeholders.
- Safe space to innovate in highly complex environments.
- Workforce plan now includes different types of roles within the team, e.g. epidemiologist, environmental scientist, business manager, healthcare support workers.
- Established a Care Home team.
- National Support Framework for PICU in RHC – stood down on 6th August 2021

Estates and Facilities

- **Water Safety Plans**
  - in place across all NHSGGC hospital sites.
  - reviewed by Board Water Safety Group.
  - process developed with national agencies and follows national guidance.
  - audited/reviewed annually by NHSGG&C's independent Water Authorising Engineer.

- **CLO2** introduction into water at the QEUH and RHC improved the water quality. Estates are monitoring any effect on the stainless steel pipework.

- **HAI-SCRIBE** process reviewed and supported by HFS with additional bespoke training provided by HFS.

- **Wards 2A and 2B** planned opening date October 2021.
  - appropriate resourcing and expertise within project team demonstrated.
  - a compliant 'Commissioning, Certification and Validation' process clearly documented with focus on water and ventilation systems.

- **NHS Scotland Assure** was launched in June 2021 and assurance process already being applied to New North East Hub Building.
  - A programme of future projects in development within NHSGGC is with HFS/NHS Assure to plan future application of assurance process.

- **Common Data Environment** (CDE) pilot project at Stobhill Hospital is underway with HFS and NHSGGC improving collation of asset information.

eHealth & Data Management

- Full process review undertaken covering processes for water, environmental and clinical microbiology sampling in order to identify the improvements made and also the development of the **new database system.**

- **Estates management system** amended to ensure mandatory capture of precise location of maintenance activities within QEUH & RHC.

- Additional location fields added to the **water sampling** request process, with additional data items now being passed back to NHS GGC by water management contractor to support future interrogation and inclusion. Enhanced data for both scheduled and adhoc sampling.

- **Hard surface sampling** data available for extraction to new database.

- **New database** in place that receives extracts for Microbiology samples taken, date, location, results & strain id. Supporting a retrospective analysis of a point in time.

- For any given CHI number, location, laboratory number and strain ID a report can be created to provide IC teams with details of patients, staff, results and hospital site location for any given period of time.

Duty of Candour Recommendations (OB)

- Azets (Internal Audit) completed an internal audit of DoC in May 2021 – very positive outcome.

- Robust review of Duty of Candour Policy (NHSGGC wide service consultation, Scottish Government consultation, Central Legal Office review).

- Duty of Candour Revised Policy subject to the final approval by Board Clinical Governance Forum mid August and Clinical and Care Governance Committee in September 2021.

- Implementation plan developed to support the adoption of the reviewed Duty of Candour Policy.

- Guidance on the application of Duty of Candour in relation to HAIs has been developed and agreed through collaboration with the Infection Prevention and Control Team. (*Independent Review action 63 re DoC*)

Datix - Recommendation (CNR)

NHS GGC should assure and report consistent utilisation of the Datix system, and audit the validity of the classification and risk categorisation given to incidents by its staff.

- In line with the recommendation contained within the QEUH/RHC Case Note Review Report, a Datix metric report has been developed.
- The purpose of the report is to report consistent utilisation of the Datix system in NHSGGC, through auditing the validity of the classification and risk categorisation given to incidents by its staff.
- A quarterly summary of the Datix metric report will be presented at the Divisional Clinical Governance Forums and will highlight specific recommendations for improvement.

Operational Management - Acute

- Listening and learning from others.
- Engagement and consultation with peers and specialist leads across other Boards.
- Review and redesign processes.
- Increased collaboration and sharing of information across Sectors and Directorates.
- Development of Standard Operating Procedures to inform processes, decision making and escalation.
- Internal PTT Review – Benchmarked.
- Embedding a culture of continuous improvement and quality assurance.

Communications and Engagement

- **Updated HAI Communications Strategy** approved by Corporate Management Team in August 2021 and now being progressed through governance committees.

- Best practice **communications guidance** developed for Incident Management Team incorporating learning from QEUH/RHC.

- Independent Consultation Institute **engagement with families** underway with more than 20 in-depth interviews which will also help inform a further quantitative survey. Tailored approach to initial engagement with families and young people, with guidance and input from from Professor White.

Communications and Engagement

- **Deputy Director, Public Engagement** took up post in early August 2021.

- Communications Plan developed for re-opening of **Ward 2A and 2B**, families' update on progress was well received.

- New engagement methods being tested, including use of social media and virtual meetings.

- New **Internal Communications and Engagement Strategy.**

Governance & Risk

- Embedding the work into the approach to **Active Governance** in line with the Blueprint for Good Governance.

- **Independent Review** of the Board's approach to governance undertaken by the **RCPE Quality Governance Collaborative** – Reported in April 21.

- Active Governance Programme approved by the Board in April 2021 - significant progress with implementation and milestones reported at each Board meeting.

- Focussed approach to **Board development** in terms of Active Governance – Development Seminar July 2021 considering;
  - Risk Appetite
  - Reflection on the RCPE Report
  - Presentation on data and information - NES

Governance & Risk

- Azets (Internal Auditors) commissioned in a consultancy capacity.

- Revised and **enhanced approach** to risk - core to Active Governance Programme.

- Revised risk arrangements being established - updated;
  - Risk Management Strategy
  - Policy Guidance
  - Board's Risk Appetite
  - Corporate Risk Register
  - Operational Registers

- New **Senior Risk Officer** about to be appointed.

Summary

- Progress made is a clear demonstration of the high priority all recommendations are for NHSGGC.
- Robust approach to action planning and delivery.
- Large portfolio of evidence of progress in place .
- Majority of actions complete by end of August.
- Next steps and moving forward.

Chief Nursing Officer Directorate
Professor Alex McMahon, Chief Nursing Officer

Scottish Government
Riaghaltas na h-Alba
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QEUH Advice, Assurance & Review Group (AARG)

17 December 2021

Time: 09:00 – 10:00 (Microsoft Teams)

Attending:
Alex McMahon, Chief Nursing Officer, Scottish Government (Chair) (AM)
Jane Grant, Chief Executive, NHS Greater Glasgow & Clyde (JG)
Elaine Vanhegan, Head of Corporate Governance and Administration, NHS GGC (EV)
Angela Wallace, Nurse Director, NHS Forth Valley (AW)
Christine Ward, CNO Deputy Director Scottish Government (CW)
Irene Barkby, Professional Nursing Advisor – Infection Prevention and Control, Scottish Government (IB)
Shalinay Raghavan, Head of QEUH Response Team, Scottish Government (SR)
Calum Henderson, Team Leader, QEUH Response Team, Scottish Government (CH)
John Lewis, QEUH Response Team, Scottish Government (Secretariat) (JL)

1. Welcome, apologies and introductions – Chair

Welcome and introductions. AM introduced himself as the new Chair. The following people gave their apologies due to alternative commitments: Shalinay Raghavan, Scottish Government.

2. Notes and Actions from previous meeting – Chair

- The following Actions from the previous meeting were discussed:

Action Log		Completed
1	**JB** to work with CNOD/Scottish Government colleagues to take forward the work shared within the AARG and provide advice to the Director General Health and Social Care / Chief Executive NHS Scotland (DG-HSC/CE-NHS), particularly in relation to the Board's Stage 4 escalation status	✓
2	**JB** / CNOD to confirm if scheduled meeting with Cabinet Secretary will proceed following this AARG meeting and discussion with DG-HSC/CE-NHS	*
3	**ChW** and CNOD team to work with Board team to agree a process for sharing the PTT Report with the families, while considering any Data Protection issues for patients and their families in the process	✓
4	**JL** to write up and distribute notes of the meeting for comment	✓

- Discussion occurred on the completeness of the notes of the meeting of 19 August 2021 and the need to update them to more accurately reflect the discussion and progress made by NHS GGC.
- **IB** suggested that if meetings are intended to continue then a recording of them would help ensure a full, accurate record of the discussion.
- **JL/CH** to review and amend the notes of the previous meeting to more accurately reflect the progress made by NHS GGC as well as assurances that were provided. EV and CH to liaise in order to seek approval on the draft.
- * Action 2 was superseded by the submission of a paper to the Health and Social Care Management Board (HSCMB) on NHS GGC's progress against their action plans.

3. Update on actions closed since 19 August – NHS GGC

JG and **EV** talked through the paper submitted by the Board to provide an update on progress in relation to actions previously met up to 19 August 2021 and since that time. See the accompanying paper, *NHS Greater Glasgow and Clyde Summary Update – 15th December 2021*.

There are two issues that remain outstanding going forward – structure and posts:

1. Structure: In terms of Wards 2A and 2B there have been a small number of commissioning issues, but the Board understands that the Wards will be handed back in December 2021, with a plan to occupy them in January 2022. The date is to be confirmed once confirmation is provided to the Board, at which point the date will be notified to Scottish Government. Confirmed that dialogue would occur with clinicians regarding the reoccupation of these wards, but also the importance being placed on communication with the families.
2. Posts – Board finalising job description for the substantive Associate Director of Infection Prevention and Control to be forwarded to AM over next few days for agreement. Once agreed the advertisement will probably be listed in the first week of January, as job listing over the Christmas period doesn't attract many applicants. The substantial and effective work carried out by AW will need to be fed into the transitional phase while recruiting. **AM** to review and sign off ASAP.

AM observed that this was a big step for NHS GGC as it represents not just a managerial and leadership change, but also significant step in the addressing the recommendations. The communications around this process need to be clear so that the purpose of this change is well understood in terms of the transitional period from AW's role to the recruitment of the new Associate Director of Infection Prevention and Control and the timelines for it. **AW** highlighted that the work taken forward in support of the recommendations had been developed with sustainability from a leadership and a delivery perspective, therefore ensuring a transition plan would be relatively straight forward. **AW** advised that the transition was an important step in moving forward and that NHS GGC was well placed for the transition.

AM suggested that AW provide Scottish Government and the AARG with a report covering the assurance activity – what AW was asked to do, what has been done, etc. – to enable this work to move on through the transitional arrangements and beyond. **AW** confirmed that she would be happy to undertake this piece of work if directed to – she came into the role as part of the Oversight Board, but there needs to be a formal function as to what's expected of her in terms of such a report. **AM** to discuss with Scottish Government and JG to agree what would be the most useful approach in the context of the AARG and HAI. **IB** suggested that this might take the form of a 'legacy piece' that may be used to help take people through NHS GGC's journey of improvement, including for the (national) Future Workforce Strategy. Some of AW's recommendations could be utilised in this report so that colleagues can be informed about how nationally they consider their leadership in IPC as well as considerations from an improvement perspective. **JG** to consider this in the context of the existing pressures experienced within the Board.

JG described how NHS GGC began the AARG programme of audit and review in November 2021 where a selection of recommendations from across the three reviews are selected for a random audit on a monthly basis. This is to provide assurance on the policy, governance and ensure that best practice is in place as a fully embedded part of NHS GGC's routine processes. The intention of this programme is to ensure that the whole process is audited within one year, while prioritising the most important aspects. **AM** agreed that this was a reasonable approach. **IB** and **CW** were also reassured by this.

4. Update on all outstanding actions – NHS GGC

JG confirmed that it's NHS GGC's belief that they have covered all of the actions from the recommendations across the three reports, notwithstanding the four that remain open as of 15 December 2021, which relate to the outstanding recommendations on the completion of the Wards 2A and 2B refurbishment and the governance and management structure of IPC.

CW will ensure that Scottish Government will check that the outstanding actions are checked against Scottish Government reporting for consistency and accuracy between both NHS GGC and Scottish Government reporting in terms of the evidence.

AM requested that EV and CH to have a discussion after the NHS GGC Board meeting on 21 December 2021 to ensure that Scottish Government is up to date on any developments.

5. AOCB – All

AM suggested that quarterly meetings are set up, with the next meeting of the AARG to take place at a time to be confirmed in March 2022. **CW** confirmed that the quarterly meetings would by 'light touch/keep in touch' update discussions with the Chief Nursing Officer (CNO) and the Chief Operating Officer (COO). At the same time a Monthly Exception Report (MER) would be provided by NHS GGC. It was highlighted that it required to be clear what was to actually be reported, while acknowledging that there were few outstanding actions. NHS GGC had indicated that they had a structure for the MER that

would be shared with Scottish Government, which should be sufficient for the governance. Regarding the escalation process, this will be discussed with the Director General – Health and Social Care, with the next stage being a requirement for officials to go to the National Performance and Oversight Group at Scottish Government for presenting the case for de-escalation, which officials will discuss with COO.

AM asked JG to write to him in January 2022 to provide and update, particularly regarding Wards 2A and 2B and progress on the recruitment of the Associate Director of Infection Prevention and Control and any other relevant business. EV and CH would meet to agree the scope and level of granularity of the Monthly Report, so that both Scottish Government and NHS GGC have clarity about what's required.

AM thanked everyone, particularly JG, EV and AW and confirmed that the discussion and accompanying paper was very constructive and helpful and that for both NHS GGC and Scottish Government it was really important that we all have clarity on the next steps.

Action Log		**Completed**
1	**JG / EV** to notify Scottish Government once a date for the reopening of Wards 2A and 2B is confirmed.	
2	**JL / CH** to review and amend the notes of the previous meeting to more accurately reflect the progress made by NHS GGC as well as assurances that were provided. **EV** and **CH** to liaise in order to seek approval on the draft.	
3	**NHS GGC** to share finalised job description for the Associate Director of Infection Prevention and Control post to AM over next few days for **AM** to review and sign off ASAP.	
4	**AW** to provide Scottish Government and the AARG with a report covering the assurance activity to support transitional arrangements and beyond. **AM** to discuss with Scottish Government and JG to agree what would be the most useful approach in the context of the AARG and HAI.	
5	**EV** and **CH** to have a discussion after the NHS GGC Board meeting on 2 December 2021 to update on any developments.	
6	Next quarterly update discussions with NHS GGC, CNO and COO to be arranged for March 2022. **JL** to convene with **CNO**, **COO** and **EV** to arrange.	
7	NHS GGC to share structure for the Monthly Highlight Report with Scottish Government – **CH** and **EV** to agree the scope and level of granularity.	

Chief Nursing Officer Directorate
Professor Alex McMahon, Chief Nursing Officer

Scottish Government
Riaghaltas na h-Alba
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QEUH Advice, Assurance & Review Group (AARG)

28 February 2022

Time: 14:15 – 15:00 (Microsoft Teams)

Attending:
Alex McMahon, Chief Nursing Officer, Scottish Government (Chair) (CNO)
Jane Grant, Chief Executive, NHS Greater Glasgow & Clyde (JG)
Elaine Vanhegan, Head of Corporate Governance and Administration, NHS GGC (EV)
Angela Wallace, Nurse Director, NHS Forth Valley (AW)
Sandra Bustillo, Director of Communications and Public Engagement, NHS GGC (SB)
Tom Steele, Director of Estates & facilities, NHS GGC (TS)
Mary Morgan, Chief Executive NSS (MM)
Laura Imrie, Lead Consultant for National ARHAI, NHS Assure (LI)
William Edwards, Chief Operating Officer NHS GGC (WE)
Christine Ward, CNO Deputy Director Scottish Government (CW)
John Burns, Chief Operating Officer Scottish Government (JB)
Irene Barkby, Professional Nursing Advisor – Infection Prevention and Control, Scottish Government (IB)
Alan Morrison, DD Infrastructure, Investment and PPE (AB)
Shalinay Raghavan, Head of QEUH Response Team, Scottish Government (SR)
Calum Henderson, QEUH Response Team Leader, Scottish Government (CH)
Lezli-an Glennie, Scottish Government (Covering Secretariat) (LG)
Apologies:
Julie Critchley, Director, NHS Assure

1. Welcome, apologies and introductions – Chair

CNO welcomed everyone to the meeting and individual introductions were made.

2. Notes and Actions from previous meeting – Chair

The minutes of the 17th December 2021 were agreed by correspondence and provided for noting. It was agreed by all that these were accepted as accurate and added as record.

3. Update on recruitment of the Director of IPC – Jane Grant

JG highlighted that the role of Director of IPC advert went live on Friday 25 February and is due to close on the 11 March . The previous points made by AM and AW have been incorporated throughout the job description. The job-holder will report to the newly appointed AW, as Executive Nurse Director. This governance structure will offer a level of continuity.

4. Update on readiness assessment and agreed way forward Wards 2A and 2B – GGC /NHS Assure:

CNO invited **JG** to provide an update on their current position regarding the sign off of wards 2A/2B

JG reported that NHS Greater Glasgow and Clyde met with NSS several times recently in order to develop an acceptable position. There were a number of areas where information and/or action was requested. The position of NHS Assure is that they are content for the wards to open provided NHS Greater Glasgow and Clyde complete the few outstanding actions.

TS highlighted that they have received an extensive briefing statement from NSS with 7 Actions to be taken; 4 have already closed and the remaining 3 will be responded to by Wednesday. There is a need for internal logistics around visibility regarding the Water Testing Group; the fortnightly Infection Control Committee (who have already met last week); and across the Acute Clinical Governance Forum. A Risk Assessment around the drainage request will be considered a reduced risk in comparison to the rest of the estate and will be subject to a sanitisation process. Beyond that, NHS Greater Glasgow and Clyde have worked through the 14-page spreadsheet. Although not required to feedback to NSS, the team will continue to do so. **TS** is confident NHS Greater Glasgow and Clyde can complete their actions.

LI queried if the Pre-flush samples would be done prior to opening. **TS** confirmed samples have been taken, *Legionella* is confirmed as zero, await *Clostridium difficile* results on 1 March.

CNO noted this position regarding the engineering and Risk Management structures in place, invited NHS Greater Glasgow and Clyde colleagues to provide an update on the pathway towards a date of the opening as well as the proposed communications that they will issue to patients and families.

JG confirmed NHS Greater Glasgow and Clyde had a meeting today with the planning team. The clinical team have agreed to the opening of the wards on the 9 March.

SB confirmed there is a plan of action after this meeting today following agreement. A number of communications would be made on Tuesday 1 March; including inpatients and parents, outpatients, the Board whilst issuing Government communications and media lines.

The clinical staff have also produced an orientation video that will be shared with patients/parents later in the afternoon (1 March) as well as shared on their Facebook page alongside frequently asked questions. **SB** also confirmed elected representatives will be informed through the weekly updates already established by the Board. **SB** to make the orientation video available to politicians and to send a copy to **CNO**.

CNO agreed that with Comms commencing tomorrow, CNOD will brief Cabinet Secretary and First Minister on the 28 February regarding the opening date of 9 March. **CH** to provide this briefing.

GG&C Summary Update – 28 February 2022[Paper]

JG spoke through NHS Greater Glasgow and Clyde summary paper enclosed with the agenda.

JG sought confirmation that AARG members are content that all their recommendation/ actions have been met.

CNO confirmed that given the assurance and evidence provided by NHS Greater Glasgow and Clyde alongside the assurance from NSS; and that there are clear Comms plans in place this allows AARG to be content with the opening of the wards with the caveat that the Risk Management plan is in place and there is nothing in the future to counteract that. The AARG agreed with this position.

CW thanked **JG** for the GGC summary around the outstanding 4 actions and will keep the responses for auditing purposes along with the supplementary assurance from NSS.

5*. Review of decisions and agreed way forward:*

CNO took the opportunity to reflect on the amount of work that the NHS Greater Glasgow and Clyde had undertaken which allows us to close all of the 108 actions from the various reports and reviews.
JG sought the assurance that the AARG were content with the material provided by NHS Greater Glasgow and Clyde.

CNO highlighted that with the recruitment of the Director of IPC providing continuity; all actions undertaken regarding GGC/NSS Assure in relation to water he was content to accept the assurance and evidence provided by NHS Greater Glasgow and Clyde.

CNO also confirmed that once the actions have closed regarding the IPC Director recruitment and opening of Wards 2A/2B, as AARG Chair is content with to recommend AARG is no longer required, however Scottish Government will still support the opening on the 9 March and beyond.

5. AOB – Chair (5 mins):

IB asked if there was a contingency for the interim should the post for IPC Director not be filled. NHS Greater Glasgow and Clyde colleagues confirmed there was a contingency

CNO confirmed a copy of the minutes will be circulated shortly after the meeting to accommodate a quick sign off process.

The meeting was closed.

Action Log	
1	SB to make the orientation video available to politicians and to send a copy to CNO. - closed
2	CH to provide briefing to Cabinet Secretary and First Minister on the 28 February regarding the opening date of 9th March. - completed

1. GG&C Summary Update – 28 February 2022

Since the initial Advice Assurance and Review Group meeting in June 2021, NHS Greater Glasgow and Clyde has undertaken a detailed and highly complex programme to implement and evidence the 108 recommendations outlined in the Independent Review, Oversight Board report and Case Note Review.

This represents a substantial Board wide programme of work, with clinical, managerial and support staff all contributing to the successful completion of the recommendations. As at 28 February, all of the recommendations are on schedule for completion during March 2022.

As reported at the previous meeting, an audit process has been established, with audit actions being monitored and tracked and a portfolio of evidence being maintained.

2. Outstanding Recommendations since last reporting period

Of the 108 recommendations identified, 104 have already been completed as reported at the last meeting. The remaining four are now recommended for closure.

These four recommendations relate to the completion of the Wards 2A/B refurbishment and the future structure of Infection prevention and control:

- Independent Review: Action 42
- Oversight Board: Final 3, Final 4 and Final 16
- Case Note Review: None outstanding

3. **Oversight Board Final 16**: **Completion of Wards 2A / 2B**

Following the recent discussions with, and review by, Scottish Government colleagues, including the Chief Nursing Officer, and NHS Assure, both parties have confirmed their support for a move back into Wards 2A/B. There are a number of further recommendations that NHS Assure have identified which will be incorporated into the overall review process. NHS Assure have also confirmed that none of these actions would prevent an imminent move back to the wards. Following dialogue with the clinical team it is now planned to re-open the wards on 9th March 2022, subject to agreement by the AARG.

4. Oversight Board Final 3, Final 4 and Independent Review 42: Future arrangements for infection prevention and control

Following agreement between the Scottish Government Chief Nursing Officer and the NHSGGC Chief Executive, the structure and recruitment of a substantive Director of Infection Prevention and Control is now underway with the post currently being advertised. This post will report directly to the Board Nurse Director.

This concludes the remaining actions.

5. Summary

In summary, NHSGGC now considers that all the recommendations associated with the above reports have been concluded and seek AARG agreement to that position.

AARG Action Plan | Summary Position Briefing

23rd June 2022

Summary of AARG Programme:

In spring of 2022 NHS Greater Glasgow and Clyde Health Board concluded the AARG action plan process, with the opening of Ward 2A/B at the Royal Hospital for Children. In total the Board has completed a total of 108 actions across the Independent Review, Oversight Board and Case Note review.

Following the completion of the actions required of the Board, across the three independent reports on the Queen Elizabeth Hospital Campus, the Board has moved into the Audit and Review phase. The audit and review phase is essential to demonstrate the action undertaken are fully embedded and continue to sustain and drive improvements to patient care and our Board governance processes.

Progress Update 22nd June 2022:

- As of the end of May 2022, of the 29 'Single Assurance', 28 were completed, with one audit outstanding. The remaining audit has been followed up, with the executive lead.
- The single assurance evidence of audit completion has been collated and saved in the 'NHS Greater Glasgow and Clyde AARG SharePoint'
- NHSGGC is now focused on the completion of the two remaining audit categories. As of 22nd June, 2022 NHSGGC has begun 16 out of the 61 'Repeated Annual Review' audits with executive leads contacted and returns expected by early July. With the first year of annual assurance work is timetabled to conclude in December 2022.

Audit and Review Process:

The Board broke down the combined 108 actions of the three independent reviews into three subcategories: Single Assurance of Action, Project Specific Actions and Repeat Annual Reviews.

(Figure 1.0)

Single Assurance of Action	Number of Actions
Independent Review	9
Oversight Board	9
Case Note Review	11
	29

Single Assurance of Action
Single Assurance of Action: This is a one time audit of policy, process or agreement from the action plans. Once reviewed and supporting evidence has been submitted, these actions will close permanently.

Project Specific Actions - Checklists	Number of Actions
Independent Review	17
Oversight Board	1
Case Note Review	0
	18

Project Specific Actions - Checklists
Project Specific Action: This refers to actions that can only be assessed when undertaking a project. This most commonly relates to action around building upgrade or development work.

Repeated Annual Review	Number of Actions
Independent Review	15
Oversight Board	14
Case Note Review	32
	61

Repeated Annual Review
Repeated Annual Review: These actions should be reviewed every six months to ensure ongoing compliance with NHSGGC and Scottish Government policy and best practice.

There are 29 'Single Assurance' - these audits are to provide clear evidence the action is complete and in place, following the end of the initial AARG process. This programme has concluded with 28 out of 29 audits complete, 1 audit is behind scheduled and this has been followed up with the executive lead responsible.

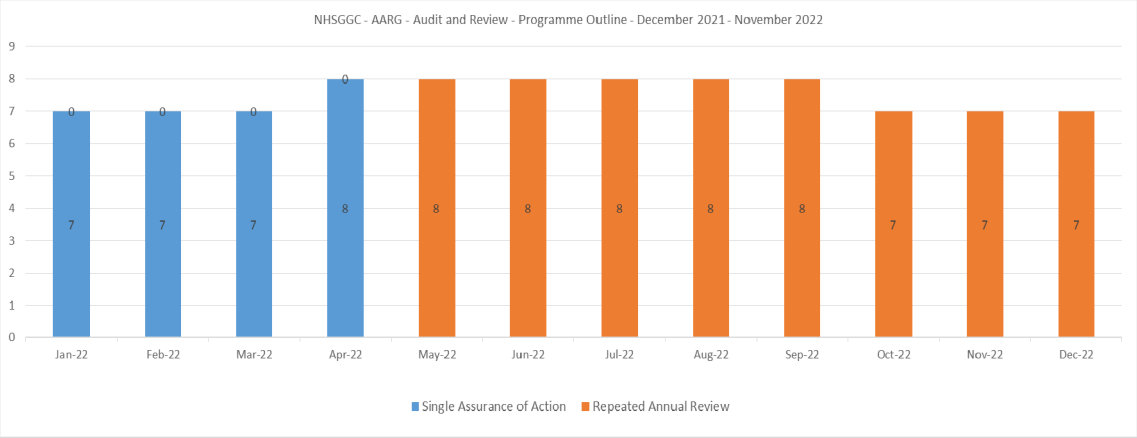
In the Second Category, there are 18 'Project Specific Action' – the audit of these action and recommendations will carried out as and when appropriate to building development and refurbishment work or in specific IC Team processes.

In addition, there are 61 actions for audit categorised as 'Repeated Annual Review' - These audits will be required repeatedly due to the criticality of ensuring ongoing maintenance of our high standards and practice. NHSGGC has begun the Audit and Review process and as of the 22nd of June 2022 16 out of the 61 audits have commenced, all annual reviews are expect to have concluded by the end of 2022.

Audit Delivery Outline:

Between January and April of 2022, NHSGGC have undertaken the single assurance work. These one off audits of implementation were to ensure actions outlined in the three independent reviews have been undertaken and fully implemented. As outline in figure 2.0, NHSGGC since May 2022 has begun the annual process of reviewing actions which require repeated assurance of effectiveness. Our final category of audit, is ad hoc in nature due to it relating to bespoke project specific work, such as building works.

Figure 2.0



Conclusion

NHS Greater Glasgow and Clyde has now been deescalated following the conclusion of the 108 action identified across three independent reviews. Our focus remains on ensuring the improvement made through this process are fully embedded. As such our audit process is fully underway. At present NHSGGC remains on track to complete the 90 audits it set as target for 2022, with 28 already closed as of June 2022.

Standard Operating Procedure:

WQS – 017

Procedures in the event of out of specification sample for Legionella and other monitored bacteria, moulds etc.

References

1. Health and Safety at Work act 1974.
2. Management of Health and Safety at Work Regulations 1999.
3. Current approved code of practice L8 Legionnaires Disease : The control of legionella Bacteria in Water Systems.
4. COSHH Regulations (1999).
5. SHTM 04-01 Water Safety for Healthcare Premises.
6. Risk Assessments for QEUH Campus.
7. Written Scheme for QEUH Campus.
8. Water Systems Log Books.
9. Water Incident Report Form (Record Form 04)

Sampling and monitoring

NHS QEUH utilises external service providers to carry out sampling and monitoring of the water systems

1. DMA (NHS Specialist Water Service Provider) carry out sampling within the QEUH Estate of outlets on a rotational basis as follows :-

Adults and Childrens

Area	Frequency	Notes	Analysis
Ward 6A	Weekly	¼ of outlets sampled weekly on rotational basis	Potable, Pseudomonas, GNB AMS on ¼ of samples each month (rotating)
Ward 1D PICU	Weekly	¼ of outlets sampled weekly on rotational basis	Potable, Pseudomonas, GNB AMS on ¼ of samples each month (rotating)
Critical Care Areas (6C, HDU, CCW, NICU)	Monthly		Legionella, Potable & Pseudomonas
A&C CWSTs & Filter Units	Monthly	As agreed with Microbiology to run July – Sep 2020	Legionella, Potable Pseudomonas GNB SAB
A&C Sentinel Outlets	Monthly	Submitted to Intertek	Legionella, Potable Pseudomonas SAB

Retained Estate

Neurosurgery	Quarterly		Legionella, Potable
Neurology	Quarterly		Legionella, Potable
Maternity	Quarterly		Legionella, Potable
Neo-Natal (New Maternity)	Quarterly		Legionella, Potable
PDRU	Quarterly		Legionella, Potable
Spinal	Quarterly		Legionella, Potable
Westmarc	Quarterly		Legionella, Potable
Podiatry	Quarterly		Legionella, Potable
ICE Building	Quarterly		Legionella, Potable

2. The following is sampled from the water :-
    a. TVC @ 37°C cfu/ml
    b. TVC @ 22°C cfu/ml
    c. Coliform cfu/100ml
    d. E.coli cfu/100ml
    e. Legionella cfu/L
3. These are sent to NHS Laboratory at Glasgow Royal Infirmary (GRI) for analysis and results are sent to DMA, who then extrapolate the results for the respective buildings into specific spreadsheet for buildings. This is forwarded to Estates Management and Microbiology in the form of a Sampling Matrix. The only exception to this is the A&C Sentinel Outlets which are submitted to Intertek Laboratories.

Legionella out of spec

I. When out of spec results are discovered DMA will carry out sampling of that outlet until a minimum of 3 clear results are obtained.

II. This spreadsheet sent to the NHS highlights all of the results and any out of spec results. This will be sent as soon as practicable on discovery of out of spec results. In the event of any serious issues DMA would make contact with the Lead Authorised Person (LAP) immediately.

III. If any Legionella results are found to be out of spec an Incident Report is completed and recorded on the Incident Log by the LAP. The incident report lists the issue (work request number) and on completion is signed off by the allocated resource and LAP.

IV. The LAP will then extract the information to the out of spec summary which list the same information from the analysis from DMA however also lists all actions taken and history of that specific outlet.

V. The person allocated the work request will carry out the works and complete the job on their PDA. The LAP will then update the L8 out of spec summary sheet with any actions and date that the work request was completed.

VI. After further re-sampling additional information will be added to the out of spec summary and on receiving a 'not detected' result the record will be moved to the second tab on the spreadsheet which lists all previous 'not detected' results. If however further results are found to be out of spec the record is extracted and placed in the 'out of spec' tab. In specific circumstances the LAP may request the Ward to add the outlet to their little used outlet list.

VII. The spreadsheet is then sent regularly to Estates Management and Microbiology by email also summarising any new, recurring and 'not detected' results.

Other out of spec results

I. For other out of spec results e.g. High TVC's, Coliforms an Incident Report is completed and recorded on the Incident Log by the LAP. The incident report lists the issue (work request number) and on completion is signed off by the allocated resource and LAP.

II. The person allocated the work request will carry out the works and complete the job on their PDA. The LAP will then update the L8 out of spec summary sheet with any actions and date that the work request was completed.

III. The LAP will continue to monitor the results and take any further actions (which will also be recorded as a new Incident and the process above followed again).

IV. In specific circumstances the LAP may request the Ward to add the outlet to their little used outlet list.

Other sampling

I. On a monthly basis further sampling is carried out within the Adults and Childrens Hospitals testing additionally for the following :-
    a. Pseudomonas Species.
    b. SAB @ 30C & Mould @ 25oC.
    c. SAB @ 22C & Yeast @ 25oC.
    d. Cupriavidus.
    e. AMS cfu/ 100ml.
    f. Other e.g. Gram Negative bacteria.

II. The "Sentinel Outlet" samples are sent to Intertek Labs for analysis and results are sent to DMA, who then extrapolate the results for the respective buildings into specific spreadsheet for buildings. This is forwarded to Estates Management and Microbiology.

III. Other areas where this analysis is carried out analysed at Glasgow Royal Infirmary (GRI) labs with results reported as previously described.

IV. If any out of spec results are identified, Microbiology and Infection Control will request Estates to agree appropriate actions e.g. change tap or shower filters as per Pseudomonas Protocol.

V. An Incident Report is completed and recorded on the Incident Log by the LAP. The incident report lists the issue (work request number where appropriate) and on completion is signed off by the allocated resource and LAP.

VI. The LAP will continue to monitor the results and take any further actions (which will also be recorded as a new Incident and the process above followed again).

VII. The LAP will also have continuous dialogue with Infection Control and Microbiology regarding the out of spec results. This may also include discussions with Wards and Facilities Management regarding operating protocols and including but not limited to the cleaning regime.

VIII. DMA will continue to resample until the results are clear (or within the defined acceptable parameters).

IX. In specific circumstances the LAP may request the Ward to add the outlet to their little used outlet list.

NHS Greater Glasgow and Clyde - QEUH/RHC Improvements

Significant work has been undertaken across the QEUH and RHC to ensure high quality care and infrastructure improvements in the past 2 years. Some of these form part of the actions in respect of the AARG Action Plans in relation to the Independent Review, the Case Note Review and the Oversight Board Report and others were core to the organisational approach.

The Gold Command Structure chaired by the Chief Executive has overseen developments and provides assurance as to action.

Infrastructure

We have spent significant capital sum, broadly [redacted], so far, across a range of issues to remediate infrastructure failings identified by the Health Board's forensic technical review undertaken in 2019 that form part of our ongoing litigation against the construction company.

Specifically on wards 2A/B, [redacted] on specialist ventilation and fabric refit; a further [redacted] on Ward 4B ventilation; [redacted] on a chlorine dioxide water hygiene dosing plant, with an additional revenue of [redacted] for ongoing water hygiene management controls; [redacted] on ground level overhead protection from glazing failures to ensure staff and patient safety .

In addition, through the work of the Gold Command there has been a focus on 'First Impressions count' which includes:

- A green space master plan - including relaxation gardens, bio diversity and active travel
- Investment in frontline support services staff

Infection Control

Significant activity has been undertaken in this arena much of which has been previously shared through the work of the Oversight Board

- Infection Prevention and Control Quality Improvement Network (IPCQIN). Four work streams are underway and are utilising the HIS Quality Management System to provide continuous and sustained improvement in IPC. Output from the IPCQIN will inform the information contained in the dashboard. First for Scotland.
- IPC Dashboard. Available for all staff to access via microstrategy gives real time information to front line clinical staff and will inform facilitate the priorities for the IPCQIN. First for Scotland.
- AOP – QEUH IPCT performance data for ECB, SAB and CDI in relation to other comparable hospitals (ERI, ARI, Crosshouse, Monklands) is the same if not better in these three key categories – only in one are they outperformed and that is SAB rates in ERI.
- Infection Prevention and Control Assurance and Accountability Strategy. Developed by NHSGGC this is now required by every board as a stand alone document in the Draft 2022 HIS Standards.

Acute Services – South Sector

Work has been undertaken within Acute Services focussing on the South Sector – significantly the QEUH. Key actions described below:

People

1. Celebrating staff in team brief
2. Template for good news stories
3. Wellbeing programme
4. Local and central wellbeing hubs
5. Local engagement sessions

Quality

1. Quality Improvement South Structure (QISS) programme
2. QISS awards
3. 4p Programme - Prioritise people, Practice effectively, Preserve Safety Professionalism and Trust

Environment

1. Welcome to QEUH programme
2. Art strategy
3. Local displays / local community work / music strategy
4. Caught in the act of care showcasing staff
5. Outside and internal improvement

Engagement

1. Internal and local newsletter
2. Culture survey
3. Greenspace survey
4. Welcome to QEUH engagement

Workforce

In terms of culture the Board has consciously made an effort to ensure a positive staff experience. Key aspects to action:

- A Work force Strategy is in place approved by the Board
- Investors in people is underway
- iMatter
  - Despite challenges 23,036 staff engaged in iMatter
  - 74% Employee Engagement Index Score
  - 89% Team Reports generated

- Whistleblowing and Employee Voice
  - Whistleblowing standards rolled out June 2020-confidential contacts established.
  - Independent review of whistleblowing process by whistleblowing champion
  - Finalising our Internal Communications and Employee Engagement Strategy

- Collective Leadership
  - Management Development Programme for CMT and SMT

- Revised development programme for operational managers on good practice and policy
- Promoting KSF ensuring wellbeing conversations
- Launched our Peer Support model for all staff funded by NHS Charities Together fund- now rolling out initially in clinical teams
- Launched our new Medical Leaders Programme

Back up papers on all activity described available.

CASE NOTE REVIEW ACTIONS 3.1, 3.3, 10.1 & 10.2 REPORT

eHealth Actions

Version 1.2

22 July 2021

Introduction

The purpose of this document is to set out the mapping of current data sets, workflows and processes identified within the Case Note Review Action Plan[1] for the following actions:

Section 3.1:

The data systems used to document facilities maintenance activity in clinical areas need to consistently capture the exact location of the work done; the date(s) on which the work was actually done; and be accessible to inform the IPC process, including the investigation of clusters and outbreaks.

Section 3.3:

The precise location of any swab or water sample taken for microbiological surveillance, and the date on which it was obtained, must be recorded and the results made accessible to inform the IPC process, including the investigation of clusters and outbreaks.

Section 10.1:

NHS GGC must (continue to) develop a comprehensive and searchable database that allows details of microbiology reference laboratory reports to be compared between samples of the same bacteria obtained from different patients or environmental sites.

Section 10.2:

The system for integrating microbiology reference laboratory reports into the patient microbiology record needs to be reviewed and strengthened. Similarly, the system for ensuring that microbiology reference laboratory information is available to and used by the IMT process, including the investigation of clusters and outbreaks, needs to be reviewed and strengthened.

This report will further detail actions taken forward as part of the work streams reviewed.

Work to be undertaken in relation to these actions follows on directly from the Case Note Review Overview Report[2] (March 2021).

Progressing this work aligns with local and national strategic priorities to implement innovation in technology, support ambitions for digitisation and improvement, and build confidence in technology deployment and benefits for patients, system users and the organisation.

Contents

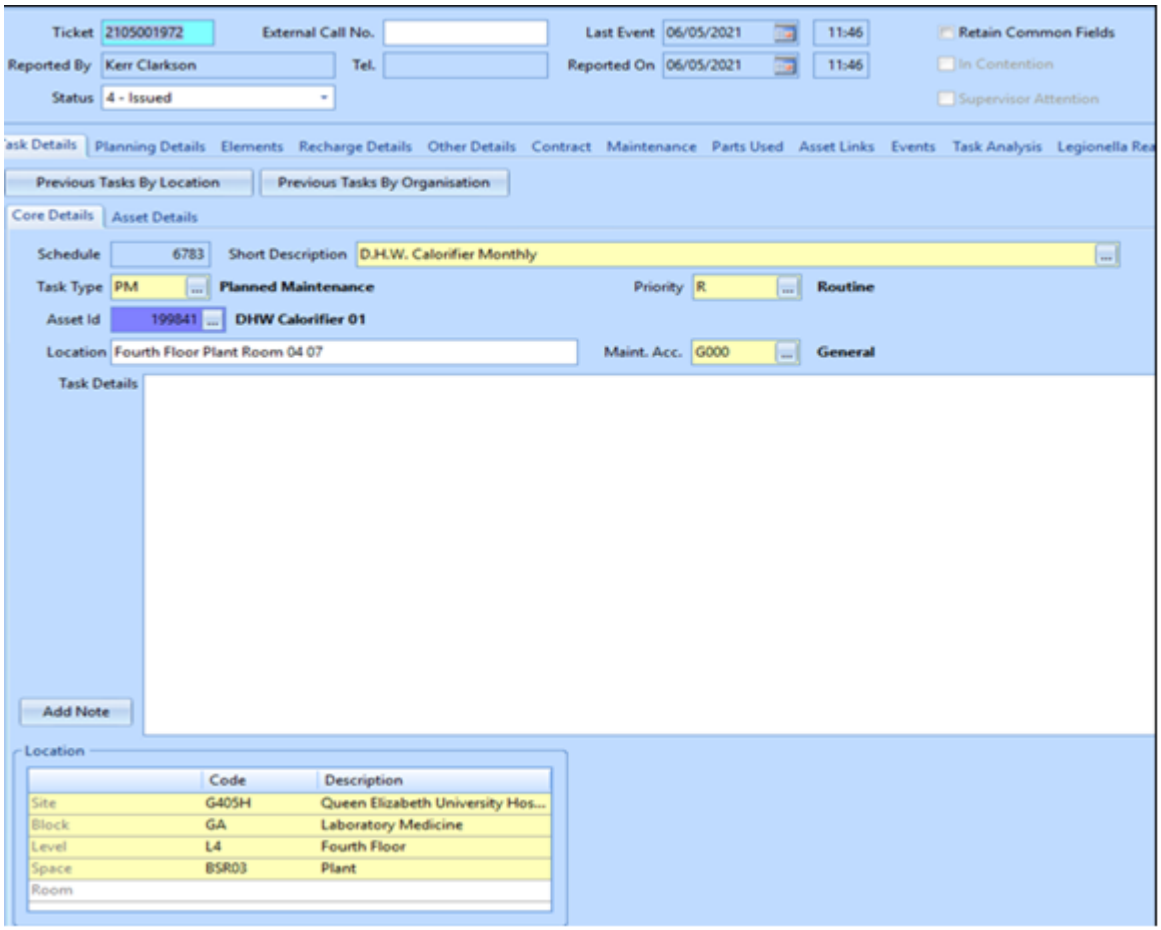
Review of Current Processes – as at March 2021

Current Processes are written to be true at the time of the Case Note Review Overview Report – March 2021

Planned Preventative Maintenance (PPM)

Documenting PPM within FM First

Work request information pertaining to planned preventative maintenance is recorded within the Estates & Facilities system FM First. Each PPM recorded within FM First is issued a unique ticket number. The date reported on, last event and the person reported by is also documented. Within the Task Details tab within the Core Details section is the opportunity to add notes detailing the description of the work requested.



As part of PPM the precise location is detailed within the Location section of the Task Details tab of FM First. This section holds:

- Site
- Block
- Level
- Space

- Room

Environmental, air, ad hoc water and patient sampling is not stored or carried out as PPM. Please see further sections for detail of how these sampling requests are processed

PPM Water Sampling QEUH, other Greater Glasgow Hospital Locations and VoL

PPM sampling and monitoring is recorded within FM First with the precise location details held within the Location section of the Task Details section as stated above. PPM Water sampling is conducted by external service providers on behalf of NHSGGC Estates & Facilities. NHS Specialist Water Service Provider DMA conduct water sampling within the estates on a rotational basis. The PPM sampling programme is carried out on a weekly, monthly and quarterly basis spread across multiple acute locations.

PPM water sampling is logged within FM First and is then issued electronically to a DMA specialist's personal digital assistant (PDA). When the sampling is undertaken and the PDA is updated, this in turn completes the work request within FM First. The following isolates are sampled from the water captured by DMA:

- TVC @ 37°C cfu/ml
- TVC @ 22°C cfu/ml
- Coliform cfu/100ml
- E.coli cfu/100ml
- Legionella cfu/L

Samples captured are sent by DMA to NHSGGC laboratory for analysis accompanied with a hard copy of the following Request for Analysis[3] forms:

GLASGOW ROYAL INFIRMARY DEPARTMENT OF MICROBIOLOGY
REQUEST FOR ANALYSIS

Tel:	01412018551	**Building:**		Received by:	
Email:		**Sampled by:**		Date Received:	
Web:		**Date:**		Date Commenced:	

Analysis Label 3 - WATER TESTING POT + GNB TEST REQUIRED: **TVC/COLI/EC/PS/GNB (including Cupriavidus species)**

Laboratory Number	Sample Number	TVC @ 37°C	TVC @ 22°C	Coliforms	Faecal E.Coli	Pseudomonas	GNB	Other
		cfu/ml	cfu/ml	cfu/100ml	cfu/100ml	cfu/ml	cfu/ml	(As directed by ICT)

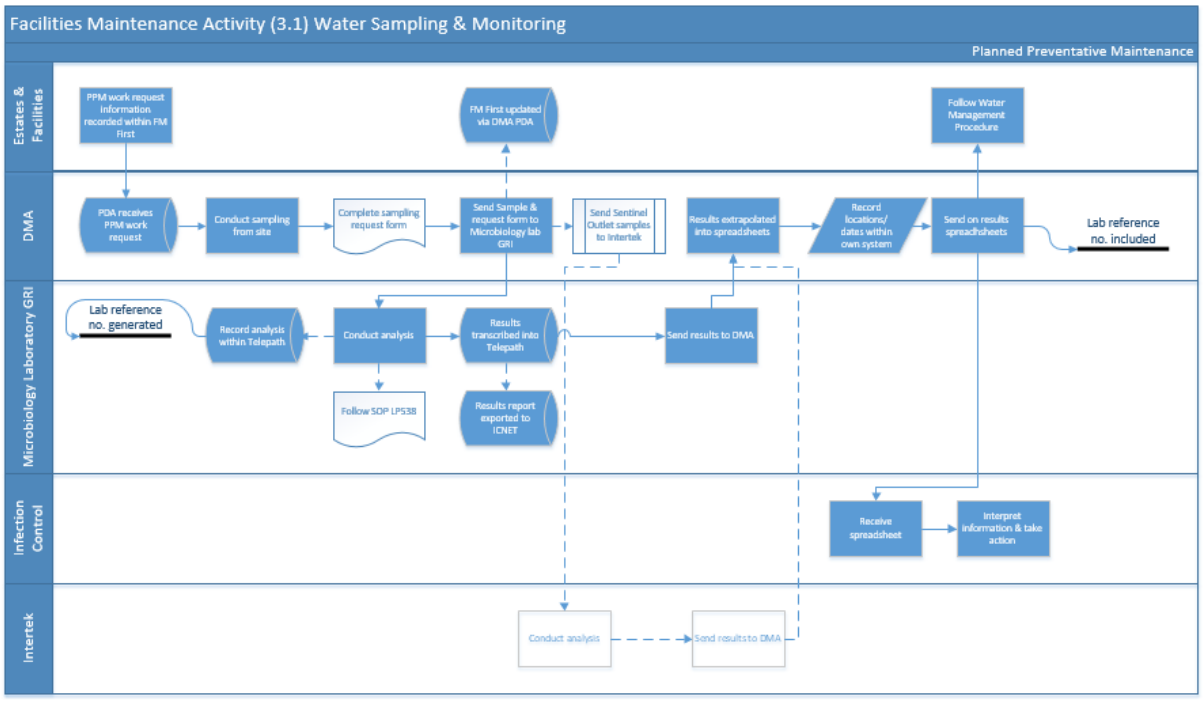
The Request for Analysis form does not possess fields detailing the precise location of sampling

To compensate for the exclusion of the precise location details, the DMA descriptor sheet[4] below, is a supplementary sheet DMA provided to NHSGGC laboratory staff.

Site: QEUH - Adults & Royal Hospital for Children Weekly Resamples

DMA Sample Number	Re sample	Sample Date	Time Sample Taken	Site	Building	Dept / Floor	Unique Outlet Id	Sample Point	Outlet Type (Tap Shower, CWST)	Hot, Cold, Mixed (TMV)	1st Flush or Post Flush	Sample Taken Through Pall Filter (Yes/No)	Temp	ClO2	Analysis Required	Sampled by
KID 10613	Y	21/04/21	1115	QEUH	Adults	11th Floor Ward 11A	GENW21-081	Clean Utility Sink	Tap	Cold	1st Flush	No	17.6	0.28	GNB	[redacted]
KID 10614	Y	21/04/21	1110	QEUH	Adults	5th Floor Ward C	GENWC-066	Facilities	Cold Tap	Cold	Post	No	11.1	0.30	SAB,Mould, Yeast	[redacted]
KID																

Laboratory staff do not currently use this sheet to add additional information into the Telepath (LIMS) system. This document is under review with Microbiology and DMA to identify if precise location information could be added to the request for analysis form. This would allow for the need of only a single document and enable downstream data gathers and information to be input to the Telepath (LIMS) system, ensuring a more transparent and robust way of working.



PPM Water Sampling IRH and RAH

RAH and IRH PPM water sampling and monitoring is conducted by external service providers on behalf of NHSGGC Estates & Facilities. Third party specialist water service provider Chemtech Consultancy conduct the capturing of water sampling and send the obtained samples to sub-contractor Express Micro Science for analysis. The PPM sampling programme is carried out on a weekly, monthly and quarterly basis.

Clyde IRH and RAH PPM water sampling is logged within FM First with the precise location captured within the Location section of the Task Details tab.

PPM sampling requests are communicated to Chemtech Consultancy verbally via telephone and/or via email by either the Water Quality Authorised Person or the Site Manager.

Chemtech Consultancy document the required sampling on internal systems and carry out the required sampling. Upon obtaining the required samples Chemtech Consultancy create a unique sample ID, record the precise location, date and deliver to Express Micro Science for analysis. Following completion of analysis the results are returned to Chemtech Consultancy who create a PDF certificate of analysis[5] and email to the Estates Management Team.

Detailed below is an example of the returned PDF certificate of analysis from Chemtech:

CHEMTECH CONSULTANCY LTD | AWT WATER & ENVIRONMENTAL SERVICES

Mr Hugh McCartan
Sites Estates Manager
Royal Alexandra Hospital
Corsebar Road
Paisley
PA2 9PN
3rd May 2021
Cc. Colin Purdon & David Gemmell

Microbiological Monitoring – Royal Alexandra Hospital
Dear Mr McCartan,

Please find attached a copy of the certificate of analysis for the weekly sampling carried out at the Royal Alexandra Hospital on 16th, 23rd & 26th April 2021.
Analysis carried out was for Pseudomonas aeruginosa and was satisfactory at the locations below:-

Sample Date	Sample ID	Sampling Point	Pseudomonas aeruginosa
16/04/2021	2766244	NEW ITU - Cold Pre Flush - Bed 9 - TMT WHB - Sample No 1 - 8.15	0
16/04/2021	2766245	NEW ITU - Hot Pre Flush - Bed 9 - TMT WHB - Sample No 1 - 8.15 (Mixed)	0
16/04/2021	2766246	Maternity - SCBU - Cold Pre Flush - Room 4 - TMT WHB 2nd From RHS - Sample no 69 - 8.20	0
16/04/2021	2766247	Maternity - SCBU - Hot Pre Flush - Room 4 - TMT WHB 2nd From RHS - Sample no 69 - 8.20 (Mixed)	0
23/04/2021	2775425	NEW ITU - Cold Pre Flush - Bed 2 - TMT WHB - Sample No 2 - 10.40	0
23/04/2021	2775426	NEW ITU - Hot Pre Flush - Bed 2 - TMT WHB - Sample No 2 - 10.40 (Mixed)	0
23/04/2021	2775427	Maternity - SCBU - Cold Pre Flush - Room 4 - TMT WHB 1st From RHS - Sample no 70 - 10.55	0
23/04/2021	2775428	Maternity - SCBU - Hot Pre Flush - Room 4 - TMT WHB 1st From RHS - Sample no 70 - 10.55 (Mixed)	0
26/04/2021	2777196	NEW ITU - Cold Pre Flush - Bed 1 - TMT WHB - Sample No 3 - 9.50	0
26/04/2021	2777197	NEW ITU - Hot Pre Flush - Bed 1 - TMT WHB - Sample No 3 - 9.50 (Mixed)	0
26/04/2021	2777198	Maternity - SCBU - Cold Pre Flush - Room 4 - TMT WHB at door- Sample no 71 - 10.00	0
26/04/2021	2777199	Maternity - SCBU - Hot Pre Flush - Room 4 - TMT WHB at door- Sample no 71 - 10.00 (Mixed)	0

We recommend that you retain these records for a minimum period of 5 years in accordance with ACoP L8 and HSG 274 part 2 paragraph 25.
Should you wish to discuss further then please do not hesitate to contact us.

Yours sincerely,

Accompanied with the above certificate of analysis, Chemtech also provide the Express Micro Science certificate of analysis[6]. See below example:

EXPRESS MICRO SCIENCE

FAO Alan Watson
ChemTech Consultancy Ltd
East Fulton Farm
Darluith Road
Linwood
Renfrewshire
PA3 3TP

Certificate of Analysis

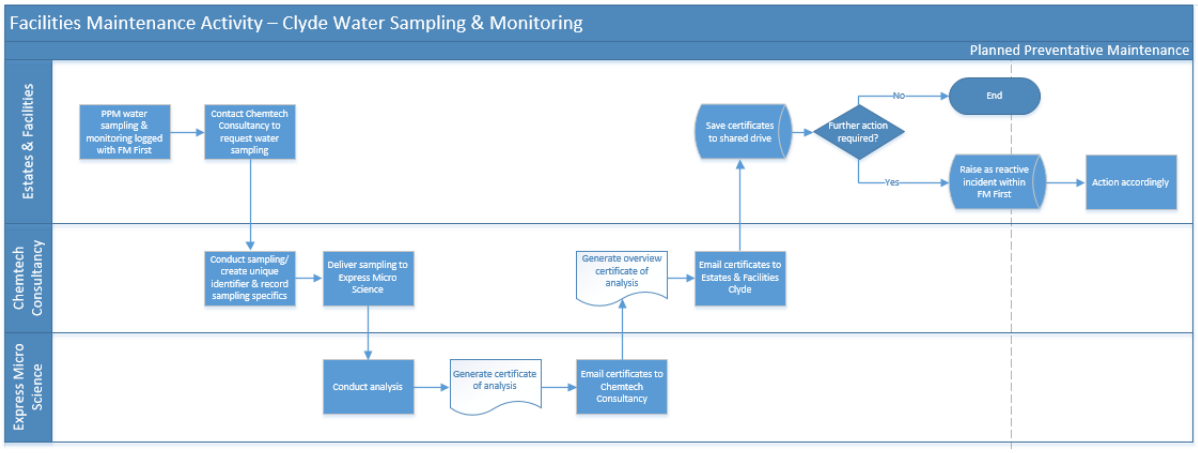
Date received:	16 April 2021
Date tested:	16 April 2021
Report Date:	26 April 2021
Certificate:	2 / 1
EMS Batch No:	F52589
Sampling Date:	16 April 2021
Order No:	NHS GGC 13445

Customer: NHS Greater Glasgow and Clyde

Site Reference: Royal Alexandra Hospital

Lab Ref	Sampling Point	Pseudomonas aeruginosa cfu/100ml 8wp 15.4.3
2766244	NEW ITU - Cold Pre Flush - Bed 9 - TMT WHB - Sample No 1 - 8.15 21 ℃	0
2766245	NEW ITU - Hot Pre Flush - Bed 9 - TMT WHB - Sample No 1 - 8.15 (Mixed) 41 ℃	0
2766246	Maternity - SCBU - Cold Pre Flush - Room 4 - TMT WHB 2nd From RHS - Sample no 69 - 8.20 23 ℃	0
2766247	Maternity - SCBU - Hot Pre Flush - Room 4 - TMT WHB 2nd From RHS - Sample no 69 - 8.20 (Mixed) 43 ℃	0

On receipt of the certificates of analysis it is the responsibility of the Water Quality Authorised Person or the Site Manager to check the certificate, store within the Estates Management shared drive in the appropriate year and month folder and check if any returned analysis requires further action. If there is a requirement for further action to be carried out this will be raised within FM First as a reactive incident and will be actioned accordingly.



The precise location of sampling is detailed within the Chemtech Consultancy and Express Micro Science reports.

Reports pertaining to the precise location of sampling carried out is conducted by Chemtech Consultancy and is available to Clyde Estates Management upon request.

Raising Reactive Work Requests via FM First

NHSGGC staff have the capability of raising reactive work requests via the FM First Web Client icon.

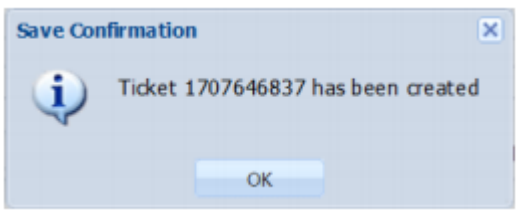
After logging in to FM First, users select the Create General Request option to raise a new work request. To begin creating the request, the user must enter the following information:

- The name of the person raising the work request.
- Contactable telephone number.
- Short Description.
- Task type (This is a pre-fixed drop down box).
- Location space.

Users use the Task Details section to add additional work request information.

Pre Case Note Review, users were required to manually add free text the precise location details into the Task Details section.

Once detail of the work request has been manually entered and saved a unique ticket number for the work request is generated.



Following this method there is currently no way of Estates Management reporting on the precise location and sampling point requested.

Environmental Sampling

Initial requesting for environmental screens or hard surface samples are set up by the Microbiology screening bench.

The Microbiology screening bench defines the section of the laboratory that processes and reports all 'screening type' samples such as MRSA, VRE, CRO & Environmental swabs.

Any area of an acute NHSGGC location may be monitored on an ad hoc basis at the request of the Infection Control Team and namely the Infection Control Microbiology Consultants. Once introduced via the IMT the LI's purpose is to ensure that the bench carry out target testing relevant to the investigation parameters. To facilitate this the ICD liaises with both the bench technical manager and laboratory management to request the testing be undertaken.

Following agreement of work to be undertaken, the Infection Control Nurse is tasked with capturing the necessary sampling detailed within request form LF591: Environmental Request – Non Water[7], for swabs/materials.

LF591 Ad Hoc/Additional Environmental Request (Non Water)

For Completion by Infection Control Team			
Date of Issue		**Authorising Infection Control Consultant**	
Expected Sampling Date		**Frequency of Testing (e.g. One Off / Each Thurs)**	
Estimated Numbers		**Location(s)** **Hospital Site / Ward**	
Sample Type(s)			
Examination Request & **Clinical Rational for Testing**	*Example: Specify target organism only / All isolates / GNB only as part of IMT investigation*		
Result Notification	*List all staff to receive email copy of results as they become available*		

Samples taken by the ICN are then sent to the GGC Laboratory accompanied with the completed environmental request form. Upon receipt at the laboratory each sample is given a unique lab number. These received samples are then booked into the laboratory system, Telepath (LIMS), using the Laboratory Instruction Environmental Monitoring PID LI720[8]. Samples are processed and investigated following the direction specified within the accompanying LF591.

Information booked into Telepath (LIMS) may not always be consistent due to information being added to documentation is user driven. One main example of this would be:

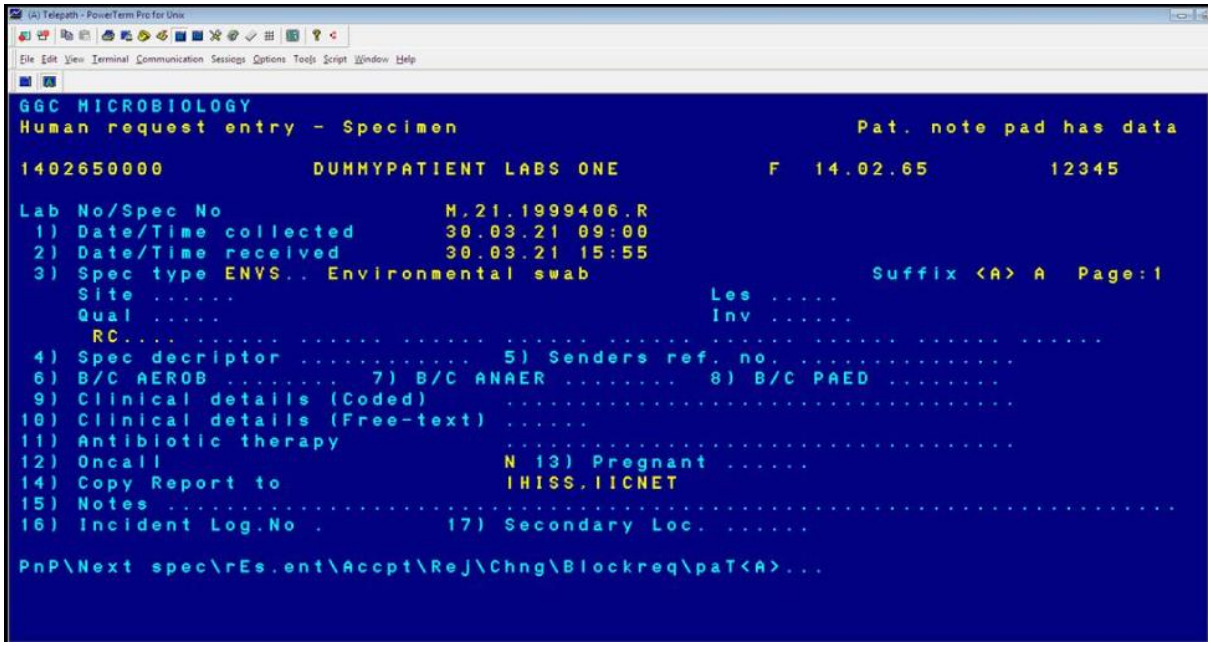
Locations can be input differently. E.g. 'RHC2A swab shower' in one instance and then 'RHC Ward 2A – swab shower head'

For trending a location or sampling point this is made extremely difficult.

Within Telepath (LIMS), Environmental swabs are allocated with a ZM number which pertains to the specific ward, the DOB for such a sample is always stated as 12.12.12.

The following information is used to record sample information within Telepath (LIMS):

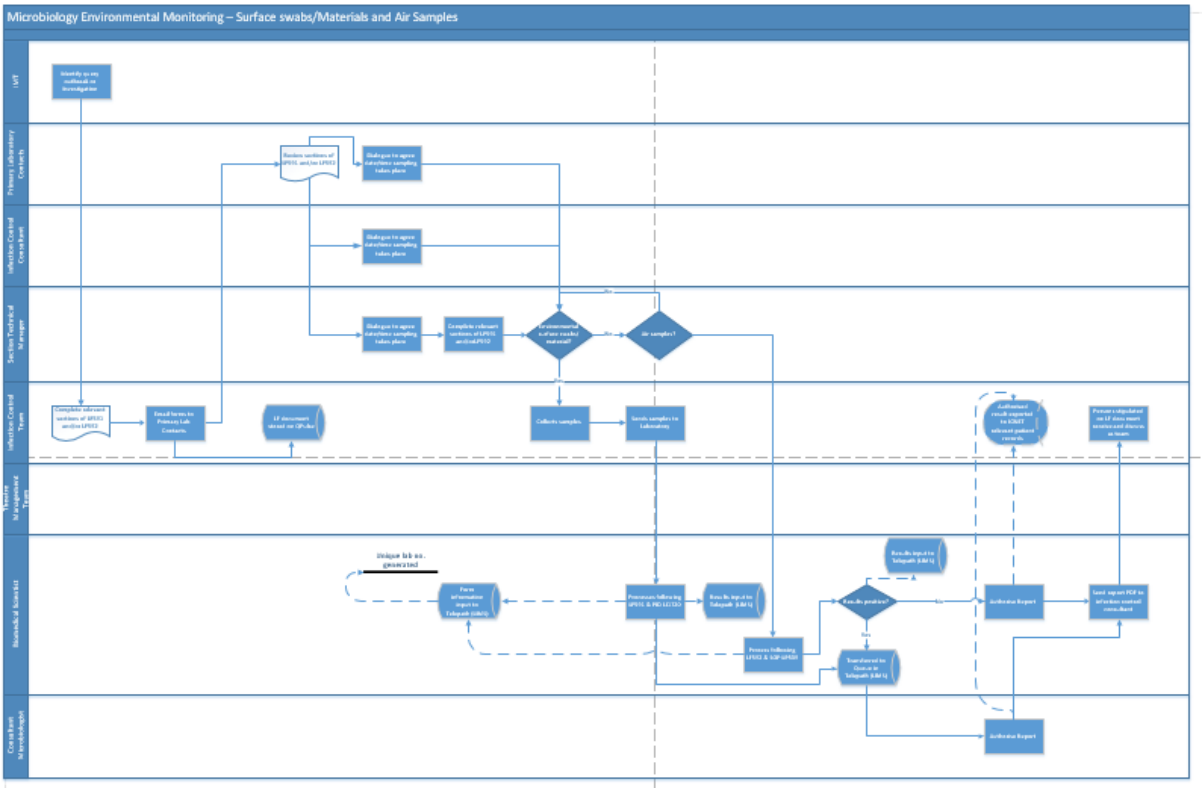
- Requesting clinician will be the authorising Infection Control Consultant.
- Location will be sector specific 'SBACT' or 'RBACT'.
- Search using "K" in CHI No. and 12.12.12 in DOB field, this will show a list of all existing Environmental ZM numbers, disregard any ZM numbers which have "Environmental" as forename. If no ZM number is available create new one using above protocol.
- The patient's forename is generated from the testing location as follows: ENV (hospital name – QEUH/RHC) (ward/theatre name/number) with a space between each of the constituent parts, as shown in the example below:
  - Surname: SCREEN
  - Forename: ENV RHC 2B
  - DOB/Age 12.12.12
  - Address RHC WARD 2B
  - Cons/GP 6112527 Dr Linda Bagrade
  - Location RBACT



Following processing of submitted samples, all relevant information/results are entered into Telepath (LIMS) by BMS staff. All environmental samples are transferred to the Telepath (LIMS) Queue awaiting authorisation by the Consultant Microbiologist.

Once Telepath (LIMS) entry of results has been authorised, a copy of the report is scanned to DART and then emailed to the professional/s stipulated on the LF591 document. The infection control team review and action results accordingly.

Simultaneously to the report being authorised a copy of the report automatically pulls in to ICNET from microbiology laboratory.



Air sampling

Initial requesting for air sampling follows the same pathway as environmental swabs to the point where the sampling is to be collected. Key changes to the air sampling process include:

- BMS staff conduct air sampling based off information detailed within document LF592: Environmental Request – Air/Water[9].
- SOP LP539[10] is utilised by BMS Staff to process sampling.
- Results returned positive? 'No': BMS staff authorise results report.
- Results returned positive? 'Yes': BMS staff transfer to Telepath (LIMS) queue for authorisation from the Consultant Microbiologist.

Ad hoc Water sampling

Initial query or request for investigation of a possible water outbreaks is discussed at the IMT. Following the IMT IPCT complete the following sections of document LF592: Environmental Request – Air/water:

- Date of Issue.
- Authorising Infection Control Consultant.
- Expected Sampling Date.
- Frequency of Testing.
- Estimated Numbers.
- Location/s: Site/Ward & Contact Details.

The document is then shared with the Primary Laboratory Contacts, Infection Control Consultant and the Senior Technical Manager for discussion and review. Once agreement has been reached for the required sampling to be undertaken it is then the responsibility of the IPCT to email Estates Management and request that DMA carry out the necessary sampling detailed on the attached LF592 document.

Currently the only trail of ad hoc water sampling requests sits within the mailboxes of Infection Control and Estate Management.

Estates Management then proceed to forward the requested ad hoc water sampling request to third party specialties company DMA, copying in Microbiology and Infection Control.

The sample request is then issued to a DMA specialist who attends the required site/ward location and captures the requested samples completing the relevant sections of the request for analysis form. Samples captured are sent by DMA to NHSGGC laboratory at the GRI for analysis accompanied with a hard copy of the following request for analysis forms:

GLASGOW ROYAL INFIRMARY DEPARTMENT OF MICROBIOLOGY
REQUEST FOR ANALYSIS

Tel:	01412018551	**Building:**		Received by:	
Email:		**Sampled by:**		Date Received:	
Web:		**Date:**		Date Commenced:	

Analysis Label 3 - WATER TESTING POT + GNB TEST REQUIRED: **TVC/COLI/EC/PS/GNB (including Cupriavidus species)**

Laboratory Number	Sample Number	TVC @ 37°C	TVC @ 22°C	Coliforms	Faecal E.Coli	Pseudomonas	GNB	Other
		cfu/ml	cfu/ml	cfu/100ml	cfu/100ml	cfu/ml	cfu/ml	(As directed by ICT)

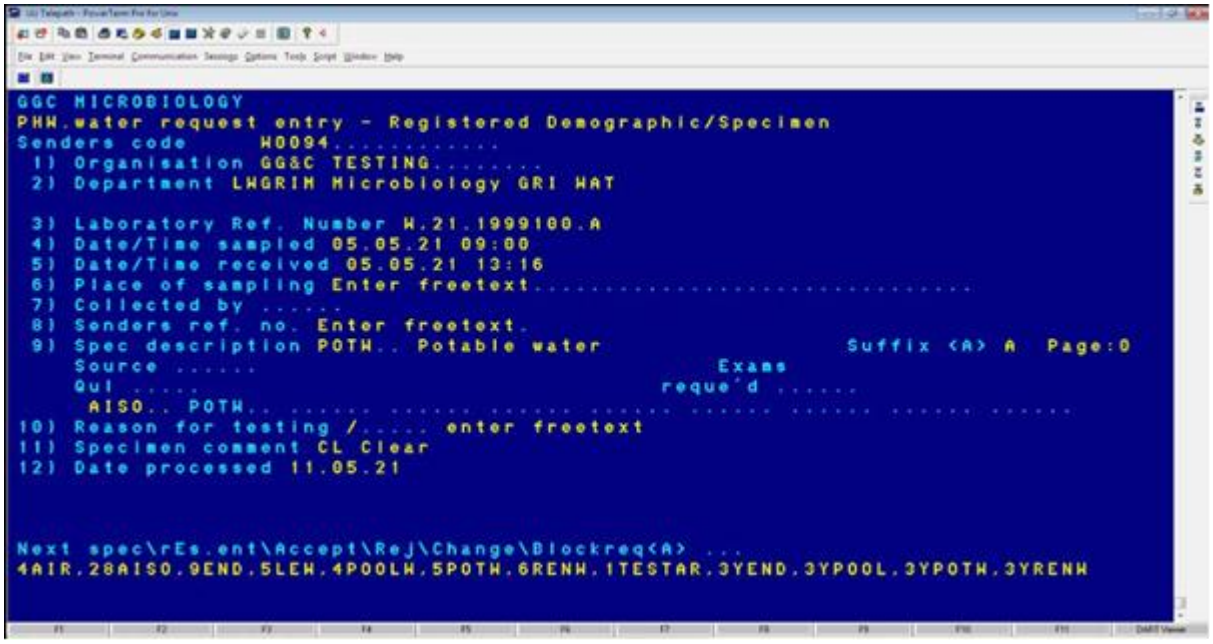
- DMA complete all non-highlighted fields.
- Laboratory GRI complete all highlight yellow fields.

The DMA descriptor sheet below, is a supplementary sheet DMA provide to NHSGGC laboratory staff. Laboratory staff do not use this to add any additional information into the Telepath (LIMS) system. This document has been reviewed with Microbiology and DMA to identify if sampling site information could be added to the request for analysis forms. This would allow for specific location information, downstream data gathers and information to be input to the Telepath (LIMS) system therefore ensuring a more transparent and robust way of working.

Site: QEUH - Adults & Royal Hospital for Children
Weekly Resamples

DMA Sample Number	Re sample	Sample Date	Time Sample Taken	Site	Building	Dept / Floor	Unique Outlet Id	Sample Point	Outlet Type (Tap Shower, CWST)	Hot, Cold, Mixed (TMV)	1st Flush or Post Flush	Sample Taken Through Pall Filter (Yes/No)	Temp	ClO2	Analysis Required	Sampled by
KID 10613	Y	21/04/21	1115	QEUH	Adults	11th Floor Ward 11A	GENW21-081	Clean Utility Sink	Tap	Cold	1st Flush	No	17.6	0.28	GNB	[redacted]
KID 10614	Y	21/04/21	1110	QEUH	Adults	5th Floor Ward C	GENWC-066	Facilities	Cold Tap	Cold	Post	No	11.1	0.30	SAB,Mould, Yeast	[redacted]
KID																

Laboratory GRI create a unique laboratory reference number within Telepath (LIMS) and conduct analysis following SOP LP538[11]. Once analysis of samples has been completed Laboratory GRI transcribe the results into Telepath (LIMS) against the previously laboratory reference number.

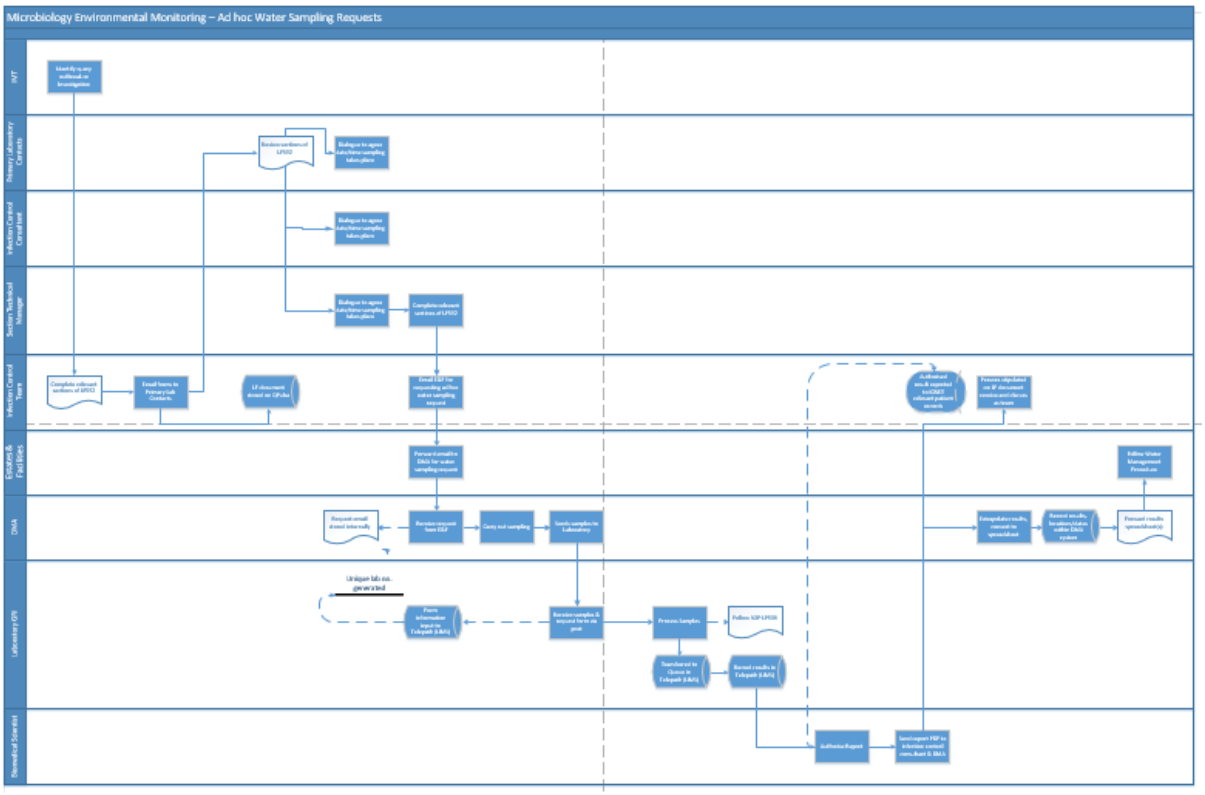


A PDF results report is created and transferred to the Telepath (LIMS) queue. BMS staff proceed to authorise the report and send a copy of the results report to DMA who extrapolate the results, convert into a spreadsheet and forward on to Estates & Facilities. Once the Telepath (LIMS) report has been authorised a copy of the report automatically pulls in to ICNET. The report is then emailed to the professional/s stipulated on the LF592 document. The infection control team review and action results accordingly.

The extrapolated spreadsheet sent to Estates & Facilities from DMA includes the unique laboratory reference number created by laboratory GRI, department/floor, door reference number and sampling point, see below:

QEUH (Adults & Royal Hospital for Children)											
DMA Sample Number	Re sample	Lab Reference	Sample Date	Time Sample Taken	Results Date	Analysis Required	Sample Area (Adult, Childrens or Plastrooms)	Department/Floor	GENW-001	Sample Location	Asset Sample (Tap, Shower CWST Cal)
W&A 506	N	21.1842128.G	23/03/21	09:39	30/03/21	Potable, Pseudomonas, GNB	A&C	6th Floor Ward 6A	GENW1-018	Room 7 En-Suite (With Filter)	Shower

Following receipt of the above results spreadsheet Estates & Facilities proceed to follow the Water Management Procedure.



Patient Samples

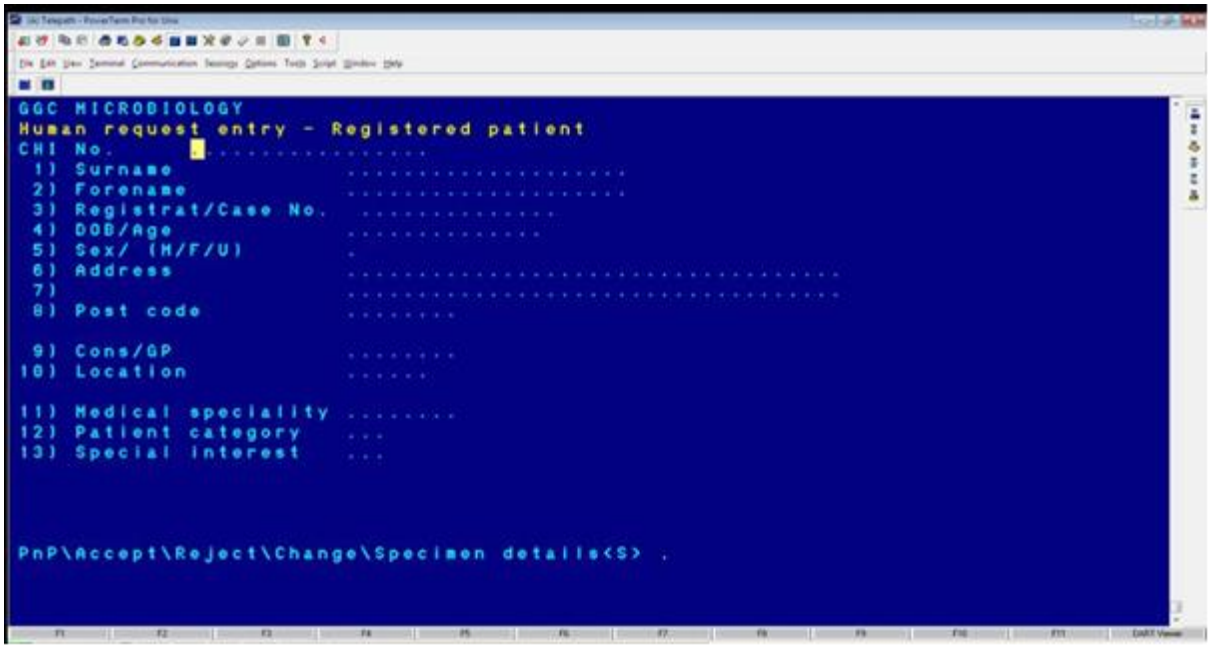
ED, Out-patient and In-Patient sample requests are requested via 'New Request' within the electronic patient management system TrakCare.

When a new request is actioned via TrakCare it is sent automatically to the microbiology laboratory. Samples are captured by ward staff and are delivered to microbiology accompanied with the printed

request form from TrakCare. Microbiology labs use the tracking order number to match the physical specimen with the electronic order.

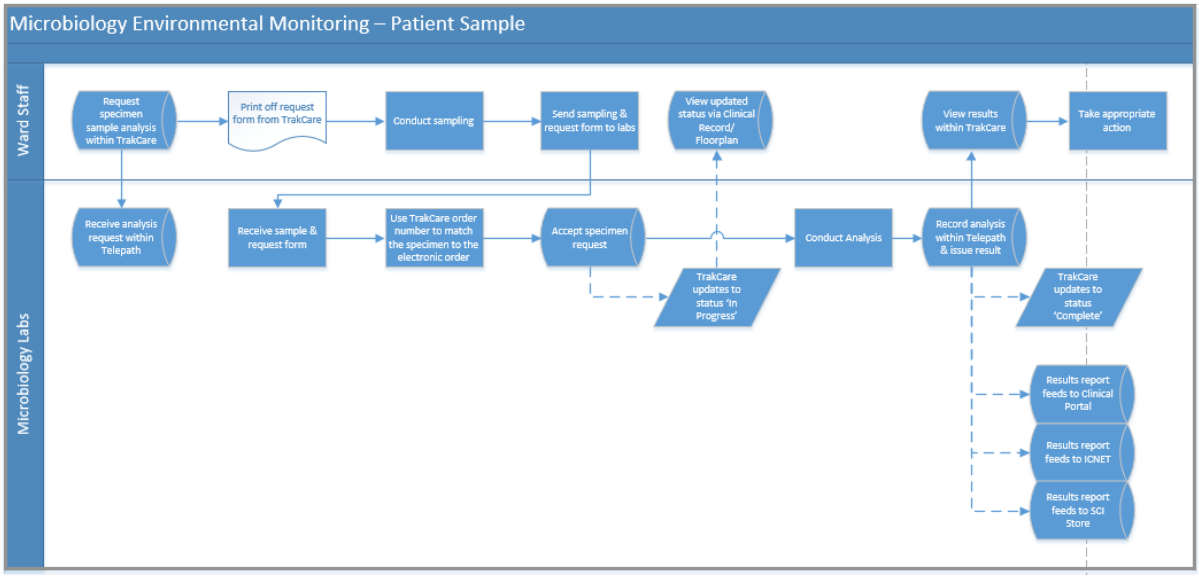
Due to the sample request being sent via TrakCare all patient demographic, location of patient and sample area is known to Microbiology. Patient information obtained from the request is entered into Telepath (LIMS) and a unique lab number is generated. Once the specimen is accepted this updates the status of the TrakCare request in the 'Labs Result' tab to 'In Progress'. Following completion of analysis microbiology issue the results within Telepath (LIMS) which again updates the status within Trakcare and delivers the analysis directly to TrakCare.

The example below is of the Telepath (LIMS) Human Request Entry screen:



Result information is exported from Telepath (LIMS) to Clinical Portal, SCI Store and ICNET and will file against the patient record. Within ICNET, if microorganisms are identified as one of a pre-defined list of alert organisms, the system will automatically alert the Infection Prevention and Control Team.

Using labsift, Infection Control possess the ability to create a set of rules within ICNET to identify alert organisms of interest. Rule options can include Organism, Specimen Type and Locations. Once rule parameters have been identified and set, automatic actions can be added, these include: Adding a notification tag to a patient record or open a case and add extended properties to the case. Extended properties are a series of questions with predetermined answers that the infection control nurse complete with relevant information. These predetermined options allow for quantitative reporting of data and save the infection control nurse vast amounts of manual transcribing.



Microbiology Reporting.

All samples are tested and analysed within Microbiology labs. Hard surfaces/swabs are tested in the core microbiology labs at either QEUH or GRI, depending on where the samples are taken from. Water samples are tested at the specialist water section of microbiology GRI. Once laboratory services receive samples it is the responsibility of the microbiology team to grow organisms and identify Gram Negative organisms. The decision of which isolates require sending to PHE Colindale for further analysis is currently at the Consultant Microbiologists discretion.

If there are Gram Negative Organisms requiring further analysis then these are sent via post to third party specialist company PHE Colindale, accompanied with the H2 Microbiology request form[12], to seek confirmation of identification and/or to identify any clusters and source of isolates. At the time of sending isolates to PHE Colindale the BMS update Telepath (LIMS) with the report code of either 'refer' or 'sent', this allows the isolate case to remain open on Telepath (LIMS). When entering in either code 'refer' and 'sent' to the Telepath (LIMS) there appears a # symbol which allows the BMS to enter information accordingly. Please see example below:

SENT # (The BMS will use the # to select the location the isolate is being sent to)

Example: **Specimen sent for testing to PHE/HPA, Colindale**

REFER # (The BMS will use the # to select the isolate that is being referred)

Example: **Escherichia coli sent to reference laboratory**

As isolates are sent to reference labs, laboratory reports are released from Telepath (LIMS) as interims, with a final report to follow.

Simultaneously to this the microbiology bench update document LF515: Samples Sent to Reference Laboratories for Confirmation[13], highlights open isolate cases sent to PHE Colindale and not yet returned with result reports. On a daily basis the microbiology team conduct a 'Daily Outstanding Work Check', which comprises of running a report from Telepath (LIMS) of open cases and cross referencing the LF515 document. Work outstanding greater than two days and two weeks is recorded on document LF524: WINP WNOUT.

Documents are stored locally and reviewed by the microbiology screening bench.

Following receipt and processing of received isolates, PHE Colindale return the laboratory reports with completed patient demographic (if applicable), 'Opportunistic Pathogens Section', 'Result Comments' and StrainID to the generic microbiology mailbox.

Laboratory Reports returned to Microbiology from PHE Colindale are in PDF format and contain the isolate StrainID

It is the responsibility of the microbiology administration staff to process, following the below work streams:

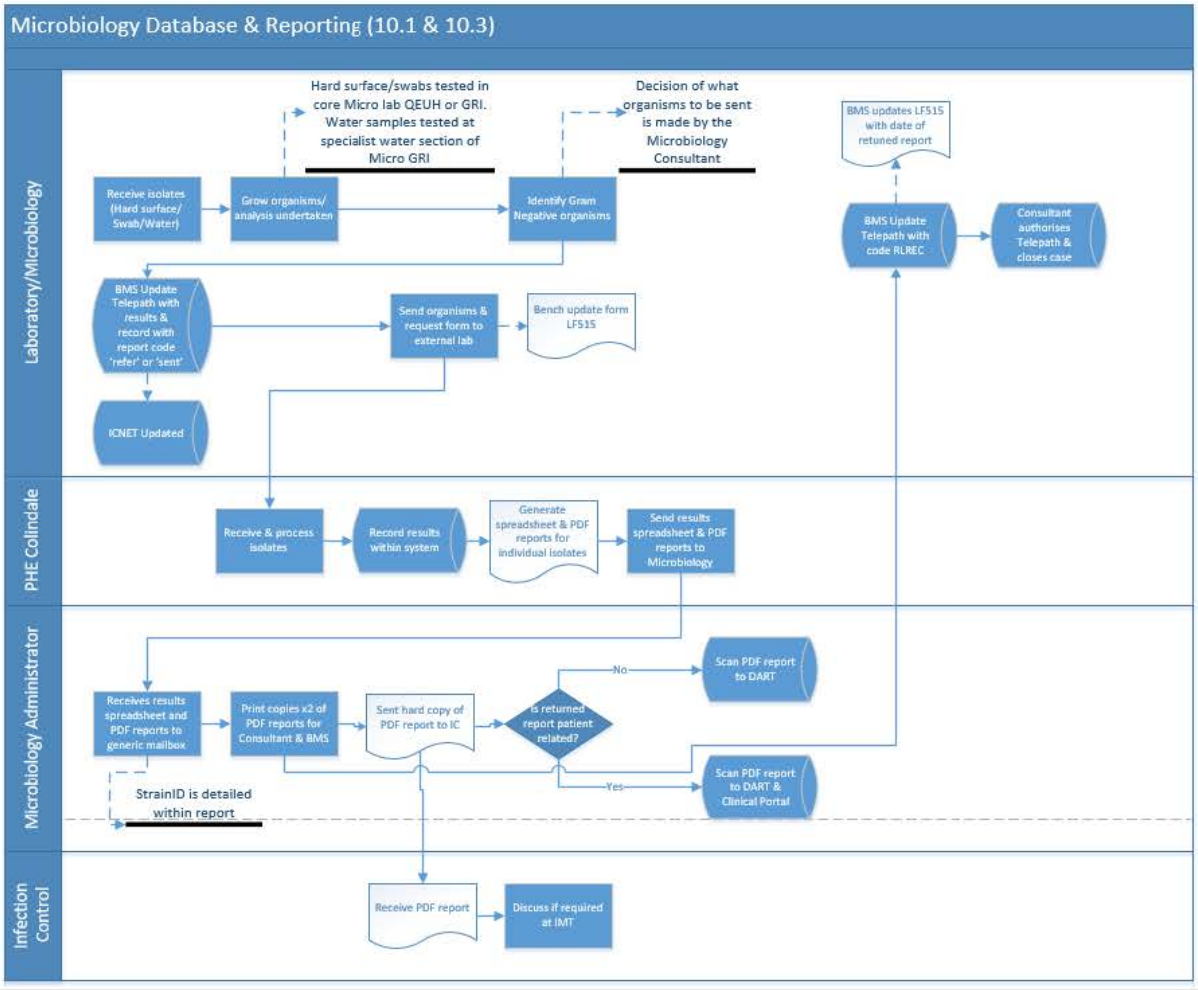
Patient Isolate: A copy of the laboratory report is scanned and uploaded into DART accompanied with the relevant Telepath (LIMS) lab number and Indexed within the Clinical Information Summary of the patients Clinical Portal.

Non Patient Isolate: A copy of the laboratory report is scanned and uploaded into DART accompanied with the relevant Telepath (LIMS) lab number.

In addition to the two pathways listed above the microbiology administration staff print of two copies of the laboratory report and pass to the Consultant Microbiologist and the Biomedical Scientist for review. It is then the BMS responsibility to update Telepath (LIMS) with the code RLPORT, stating that the reference lab report has been received and is visible on Clinical Portal and/or DART. The BMS then authorises the report as 'Final' which in turn closes the record within Telepath (LIMS). The LF515 document is then signed, dated and marked as complete to finalise the process, these records would now not appear on the subsequent 'Daily Outstanding Work Check'. A copy of all returned laboratory reports are then forwarded as hard copies to Infection Control.

Due to the complex nature of the PDF laboratory reports that are returned from PHE Colindale, results are not currently transcribed into Telepath (LIMS) and therefore are only visible within the DART system and Clinical Portal if patient isolate. This leaves no opportunity to search and report on identify clusters and outbreaks.

Following meetings between Microbiology, eHealth and PHE Colindale is has been confirmed that the electronic submission of reports received from PHE Colindale is not possible. Therefore eHealth and Microbiology have explored the option to manually add the returned StrainID into the newly developed Microbiology Reporting System (MRS) via an electronic import form.


Microbiology Database & Reporting (10.1 & 10.3)
Laboratory/Microbiology
PHE Colindale
Microbiology Administrator
Infection Control
Hard surface/swabs tested in core Micro lab QEUH or GRI. Water samples tested at specialist water section of Micro GRI
Decision of what organisms to be sent is made by the Microbiology Consultant
Receive isolates (Hard surface/ Swab/Water)
Grow organisms/ analysis undertaken
Identify Gram Negative organisms
BMS updates LF515 with date of retuned report
BMS Update Telepath with code RLREC
Consultant authorises Telepath & closes case
BMS Update Telepath with results & record with report code 'refer' or 'sent'
Send organisms & request form to external lab
Bench update form LF515
ICNET Updated
Receive & process isolates
Record results within system
Generate spreadsheet & PDF reports for individual isolates
Send results spreadsheet & PDF reports to Microbiology
Receives results spreadsheet and PDF reports to generic mailbox
Print copies x2 of PDF reports for Consultant & BMS
Sent hard copy of PDF report to IC
Is returned report patient related?
No
Scan PDF report to DART
Yes
Scan PDF report to DART & Clinical Portal
StrainID is detailed within report
Receive PDF report
Discuss if required at IMT

Actions Taken Forward

A number of Standard operating Procedures (SOPs) have been developed by the relevant services in support of the recommendations in the report.

LI725 – Lab instruction for the new PID from DMA water samples

LF593 Example updated sample request form (highlighted areas in yellow that are the additions made)

MI521 Ad Hoc testing instruction

LF592 Ad Hoc testing request

Capturing the precise location and date of work requests in FM First (Action 3.1)

As part of the Case Note Review it was highlighted that within NHGGC's Estates Management system FM First, there was a difficulty in identifying the precise location of raised work requests.

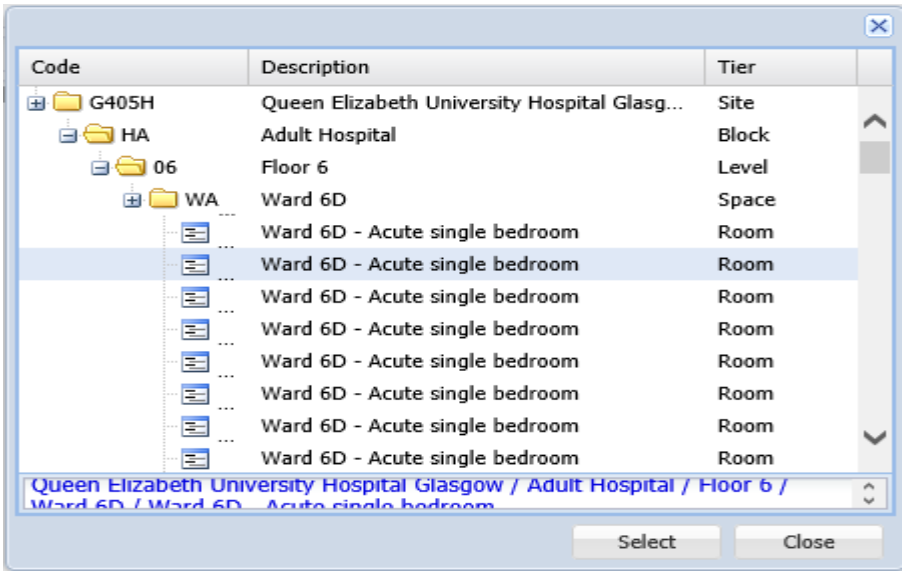
In order to resolve this discussions were held between the FM First software developer/contractor and NHSGGC Estates Management. An additional 'drop down' box has been added to FM First in order to capture the precise location.

Upon raising a new reactive work request within the Estates Management system FM First, staff must now complete mandatory location fields in order for the work request to save.

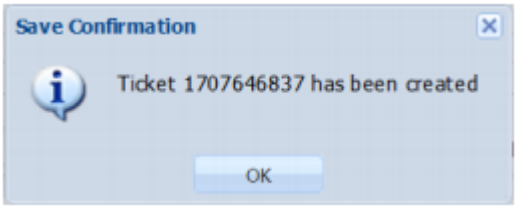
Mandatory fields:

- The name of the person raising the work request.
- Contactable telephone number.
- Short Description.
- Task type (This is a pre-fixed drop down box).
- Location space.

Once selecting the Location Space, the user is prompted to select the precise location for maintenance activity.



Selecting this option ensures that the precise location of required maintenance work is capture. Once entered and saved a unique ticket number for the work request is generated.



Currently, the mandatory field and drop down options for selecting the precise location is available at the QEUH & RHC. NHSGGC Estates Management are currently undergoing a large project to update this section for all acute sites across GGC. This involves ensuring that all rooms and locations are allocated a unique location identifier. It is estimated at this time that completion of project will be April 2022.

The following indicative timeline has been provided by Estates Management:

Site	Start Date	Completion Date
QEUH A&C		Complete
QEUH Retained Estate	28 June 2021	30 July 2021
RAH Campus	2 August 2021	27 August 2021
IRH Campus	30 August 2021	24 September 2021
Gartnavel Campus	27 September 2021	22 October 2021
VoL Campus	25 October 2021	12 November 2021
GRI Campus	15 November 2021	10 December 2021
CDU & TSSU Greenock	13 December 2021	15 January 2022
GDH	18 January 2022	5 February 2022

Stobhill Campus	8 February 2022	26 February 2022
Leverndale Campus	1 March 2022	18 March 2022
Dykebar Campus	21 March 2022	31 March 2022
WoGACH	1 April 2022	22 April 2022
Hillington Laundry & CC	25 April 2022	29 April 2022

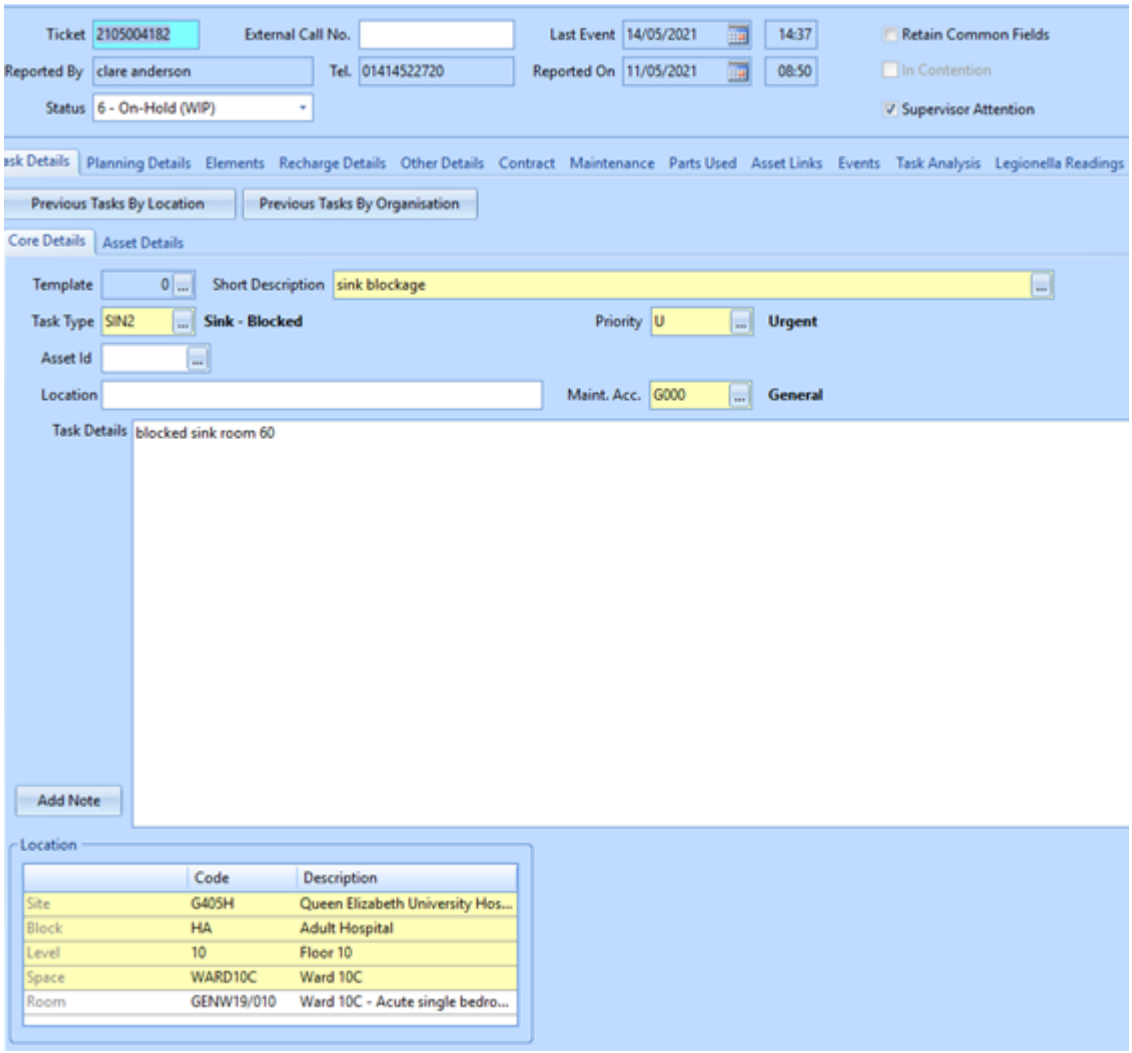
The project plan will be monitored and discussed at both the FM First User Group and FM First Steering Group moving forward. Any delay to the project will be challenged by these groups as it is imperative that the indicative dates are met in full.

The introduction of the mandatory precise location field will allow Estates Management to better search, report and identify raised work requests and their precise location.

FM First , which is the Estates Management System has been updated for the QEUH site with precise locations as per the updated form. The precise locations are now available within FM First on a drop down menu. This will also be rolled out to other major sites by end Feb 2022

An Estates Management representative will be present at all IMT meetings. This will allow for the ability to check FM First for status updates and subsequent raised work request detail as and when is required.

Creating a new work request will set the Current Status as 'Created'. It is then the responsibility of the Estates Management supervisor to review the 'Created' list and allocate accordingly. The visual aid below details the information Estates Management see when a work request has been created with the included mandatory precise location details option.



Once the work request has been allocated it is then the responsibility of the allocated person to update the status and detail accordingly.

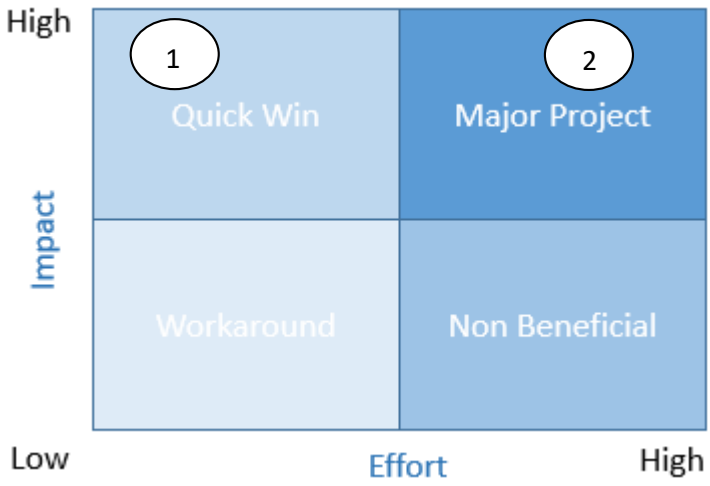
In addition an Estates Management representative will be present at all IMT meetings. This will allow for the ability to check FM First for status updates and subsequent raised work request detail as and when is required.

Recommendation/s Scoring Matrix

1: Capture of precise location of work requests in FM First – QEUH & RHC.

2: Capture of precise location & date of work requests in FM First board wide

3: An Estates Management representative will be present at all IMT meetings. This will allow for the ability to check FM First for status updates and subsequent raised work request detail as and when is required.



Timescales for completion of Actions Taken Forward:

1: Capture of precise location & date of work requests in FM First at the QEUH: June 2021

2: Capture of precise location & date of work requests in FM First board wide: April 2022

Capturing the precise location and date of work requests within the Request for Analysis form (Action 3.3)

The review has identified that the addition of specific location fields to the water sampling Request for Analysis form issued by DMA to microbiology would be of benefit. Additional fields requested are as follows:

- Building.
- Ward/Department.
- Sample Point.

Obtaining and detailing this information within the water sampling Request for Analysis form will allow microbiology staff to add more detailed information in to the Telepath (LIMS) system at the time of taking receipt of samples (PID) and conducting analysis. This would mean that for list gathers going forward there will been more sampling information in the one system.

Detailed below is a visual of the water sampling request form with the additional fields' highlighted yellow:

Tel:	01698 536790	Building:		Received by:	
Email	office@dmacanyon.co.uk	Ward/Department:		Date Received:	
Web / Address:	www.dmacanyon.co.uk	Sampled By:		Date Commenced:	
DMA Admin Contact:	Susanne Crabtree	Date:		Sample Code & Initial:	
Analysis Label:	**Potable + Pseudo**	**Tests Required:**	TVC/Coli/EC/PS	**DMA Note:** Use separate sheet for each Ward/Department samples being taken from.	

	DMA Use														Lab Use
DMA & Laboratory Numbers	**Resample Y/N**	**Sample Time** HH:MM	**Sample Point (Room) (Lab use Site)**	**Unique Door ID**	**Outlet Type** (Tap Shower CWST)	**Hot Cold Mixed TMV**	**1st or Post Flush**	**Thro' Sample** Y/N	**Temp Sample** °C	**ClO2 Sample** ppm	**TVC 37°C** cfu/ml	**TVC 22°C** cfu/ml	**Coliform** cfu/100ml	**E.Coli** cfu/100ml	**Pseudo monas** cfu/ml	**Species Info**
DMA No.															
Lab No.															
			Page 1												Page 4

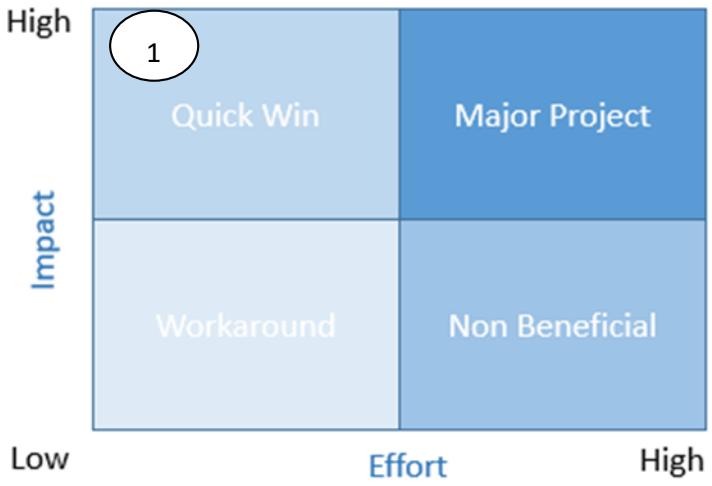
The DMA dataset within the spreadsheet contains all the outcomes of both scheduled inspections and ad-hoc requests. This is a more complete dataset and would allow the necessary information to be extracted and searched upon following the introduction of recommendations within Section Microbiology Reporting and Database (Action 10.1 & 10.3) of this paper.

Following the review with NHSGGC Microbiology staff and DMA, the inclusion of the above mentioned additional fields were added to the water sampling Request for Analysis form and went live on the 1st June 2021.

Improvements have been identified in addition to the new request form that has been implemented. These include how results from Specialist Service Providers are reported, a summary of the result as part of the incident report and the need for the result to be searchable in the Telepath Laboratory system. Following analysis and improvements of data recorded in Facilities, Infection Control and Laboratory systems the precise location of the sample and also the result is recorded within the relevant forms and also within the Telepath Laboratory system. This information is now extracted to the new database system and available to the IC Team. the water sampling requests are now also recorded in the FM First system where previously this had been reliant on email communication.

Recommendation/s Scoring Matrix

1: Water sampling paper request form enhancements.



Timescales for completion of recommendations:

1: Water sampling Request for Analysis form enhancements: 1st June 2021

The precise location of any swab or water sample taken for microbiological surveillance, and the date on which it was obtained, must be recorded and the results made accessible to inform the IPC process, including the investigation of clusters and outbreaks. (Action 3.3)

The current process for environmental and clinical swabbing remains unchanged as all necessary information regarding location and patient is included within the laboratory system.

This is then in turn available for importing into the new database system allowing this to be visible and searchable.

Changes and improvements to the capturing of ad hoc water sampling have been made and are detailed below.

Capturing ad hoc water sampling request within FM First

Through investigation and discussion between eHealth, Infection Control, Estates Management and Microbiology it became evident that the requesting of ad hoc water sampling is heavily reliant on email communication between Infection Control and Estates Management and there was no centralised database utilised for recording such requests.

eHealth and Estates Management have agreed to continue logging ad hoc water sampling requests via FM First as this allows for a clear and consistent approach. Infection Control, Microbiology and Estates and Facilities would be able to monitor and audit requests made via the IMT.

The agreed approach will have minimal impact on IPCT and Estates Management.

Initial query or request for investigation of a possible water outbreak will continue to be discussed at the IMT. Following on from the IMT, the Infection Control Team complete the following sections of document LF592: Environmental Request – water:

- Date of Issue.
- Authorising Infection Control Consultant.
- Expected Sampling Date.
- Frequency of Testing.
- Estimated Numbers.
- Location/s: Site/Ward & Contact Details.

The document is then shared with the Primary Laboratory Contact, Infection Control Consultant and the Senior Technical Manager for discussion and review. Once agreement has been reached for the required sampling to be undertaken it is then the responsibility of the Infection Control Team to email Estates Management and request that DMA carry out the necessary sampling detailed on the attached LF592 document.

Estates Management will generate a work request and issue the Unique Ticket Number to IPCT

Estates Management will create a new work request within FM First detailing the information from the LF592 document. Once created FM First will generate a unique ticket number.

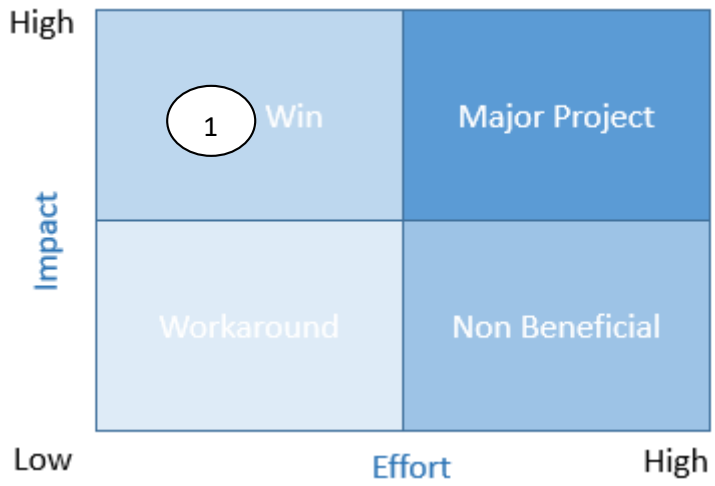
Estates Management then proceed to forward the requested ad hoc water sampling request/s email with accompanying document/s and unique ticket number/s to third party specialties company DMA, copying in Microbiology and Infection Control.

The sample/s request is then issued to a DMA specialist who attends the required site/ward location and captures the requested samples completing the relevant sections of the Request for Analysis form.

The ability to view the status of an ad hoc water sampling request via its unique ticket number within FM First will provide the IPCT, Microbiology and Estates and Facilities team with greater visibility and access.

Recommendation/s Scoring Matrix

1: Capturing ad hoc water sampling request within FM First.



Timescales for completion of recommendations:

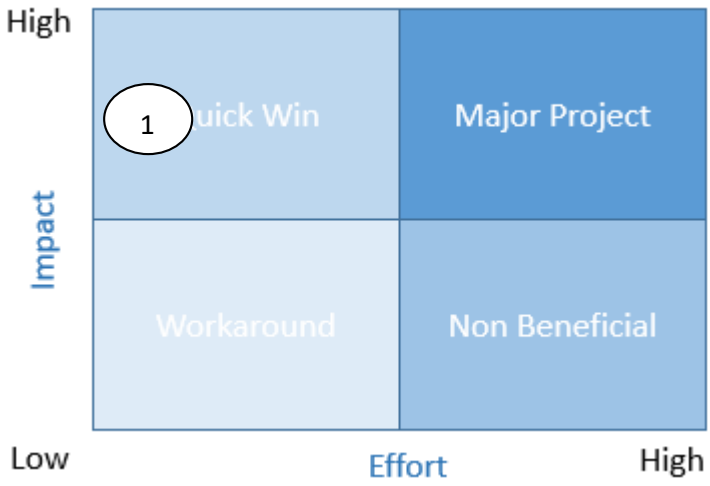
1: Capturing ad hoc water sampling request within FM First: 28th June 2021

IPCT – Access to FM First (Action 3.3)

Following on from the previous point, it is agreed that an Estates Management representative will be present at all IMT meetings. This will allow for the ability to check FM First for status updates and subsequent raised work request detail as and when is required.

Recommendation/s Scoring Matrix

1: Capturing ad hoc water sampling request within FM First.



Timescales for completion of recommendations:

1: IPCT – Access to FM First: 30th June 2021

Microbiology Reporting and Database (Action 10.1 & 10.2)

New Database System – Microbiology Reporting System (MRS)

A new database system has been developed which has the capability to import the following datasets:

- Water based sample data from Telepath (LIMS) and DMA (3rd party) and other 3rd parties
- Environmental based samples from Telepath (LIMS)
- Clinical samples from Telepath (LIMS)
- Reports from third party systems

A field container has also been included for the purpose of the StrainID. A form has been developed for the Labs staff to enter this StrainID data, when notified by the relevant laboratory, so that it can be imported into the new system whilst the Telepath LIMS system is further developed to hold this data. This data will be sortable and searchable.

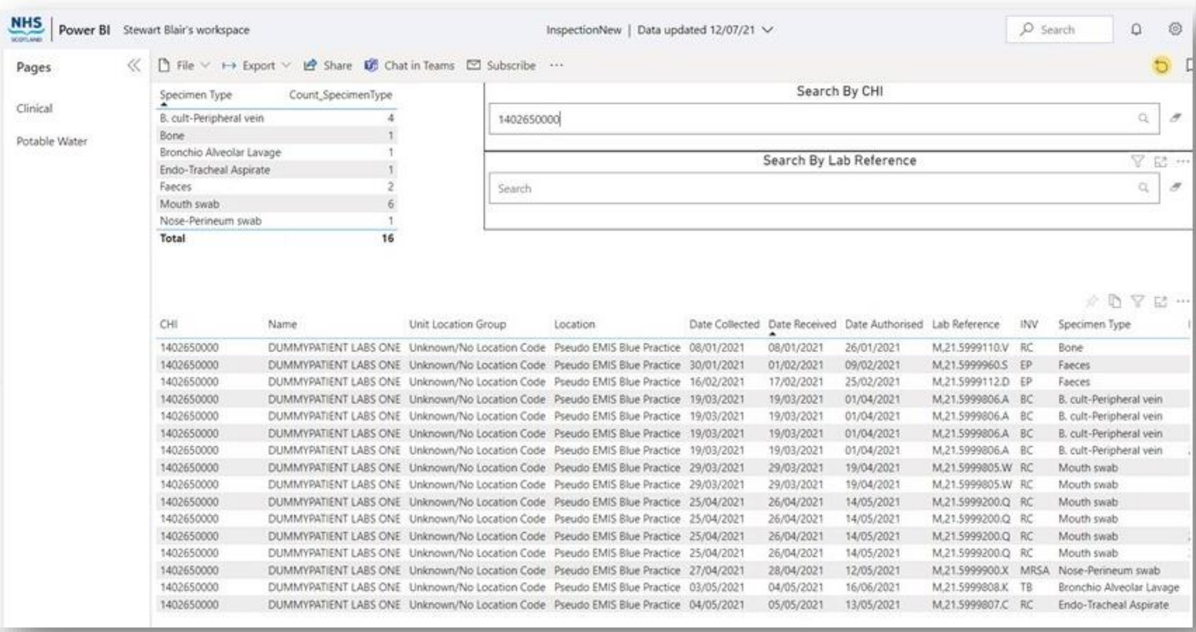
Reporting is provided by Microsoft PowerBI, which gives the ability to provide searches on key fields and create cohorts and data extraction facilities.

For any given CHI number, location, laboratory number and StrainID a data report can be created to give details of patients, staff, results, and hospital site location for any given period of time.

Database overview sessions have been scheduled with representative from Microbiology, Infection Control, Estates Management and eHealth with a view to continue development.

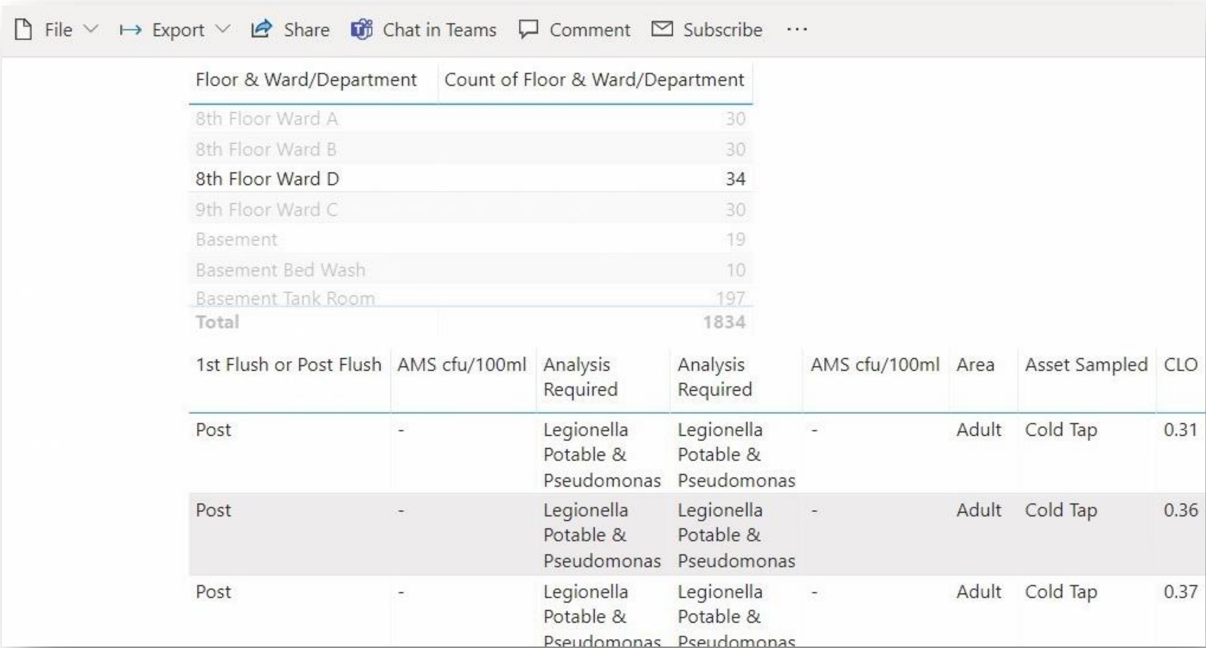
PowerBI Dashboard

Whilst the new database system provides searchable reports, an additional development is being progressed on a PowerBI dashboard. This will continue to be refined through the month of July 2021. An example of the dashboard is shown below:



Specimen Type	Count_SpecimenType
B. cult-Peripheral vein	4
Bone	1
Bronchio Alveolar Lavage	1
Endo-Tracheal Aspirate	1
Faeces	2
Mouth swab	6
Nose-Perineum swab	1
Total	**16**

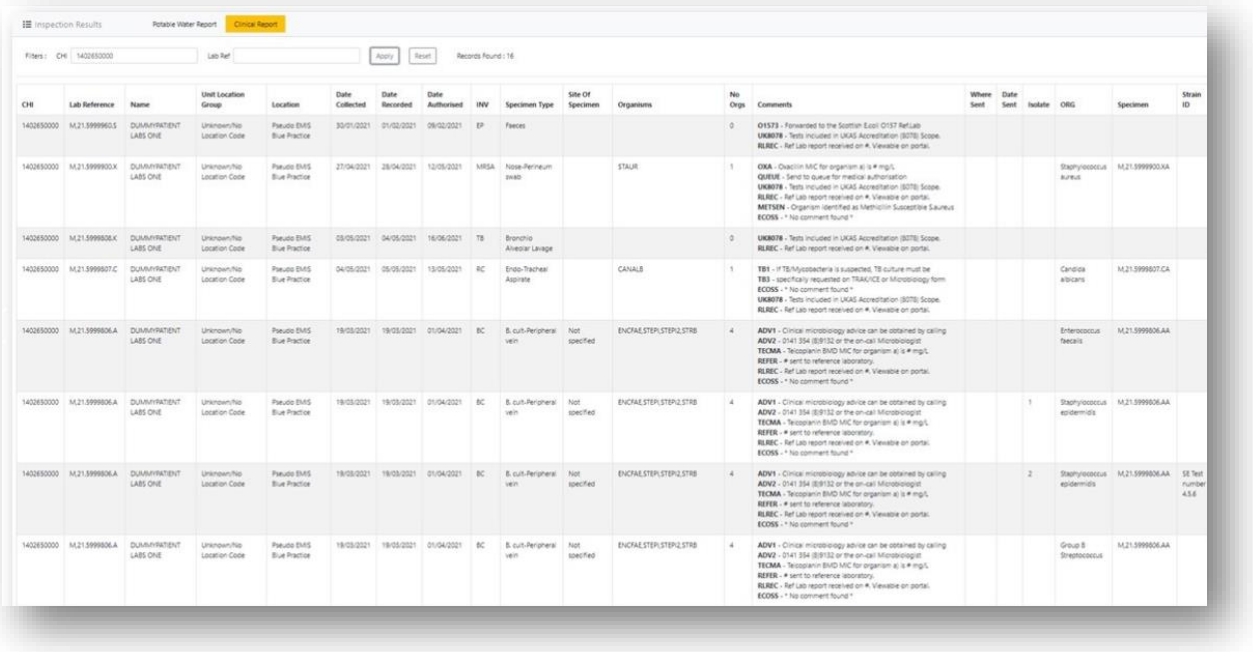
CHI	Name	Unit Location Group	Location	Date Collected	Date Received	Date Authorised	Lab Reference	INV	Specimen Type
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	08/01/2021	08/01/2021	26/01/2021	M,21.5999110.V	RC	Bone
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	30/01/2021	01/02/2021	09/02/2021	M,21.5999960.S	EP	Faeces
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	16/02/2021	17/02/2021	25/02/2021	M,21.5999112.D	EP	Faeces
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	19/03/2021	19/03/2021	01/04/2021	M,21.5999806.A	BC	B. cult-Peripheral vein
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	19/03/2021	19/03/2021	01/04/2021	M,21.5999806.A	BC	B. cult-Peripheral vein
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	19/03/2021	19/03/2021	01/04/2021	M,21.5999806.A	BC	B. cult-Peripheral vein
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	19/03/2021	19/03/2021	01/04/2021	M,21.5999806.A	BC	B. cult-Peripheral vein
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	29/03/2021	29/03/2021	19/04/2021	M,21.5999805.W	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	29/03/2021	29/03/2021	19/04/2021	M,21.5999805.W	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	25/04/2021	26/04/2021	14/05/2021	M,21.5999200.Q	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	25/04/2021	26/04/2021	14/05/2021	M,21.5999200.Q	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	25/04/2021	26/04/2021	14/05/2021	M,21.5999200.Q	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	25/04/2021	26/04/2021	14/05/2021	M,21.5999200.Q	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	27/04/2021	28/04/2021	12/05/2021	M,21.5999900.X	MRSA	Nose-Perineum swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	03/05/2021	04/05/2021	16/06/2021	M,21.5999808.K	TB	Bronchio Alveolar Lavage
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	04/05/2021	05/05/2021	13/05/2021	M,21.5999807.C	RC	Endo-Tracheal Aspirate



Floor & Ward/Department	Count of Floor & Ward/Department
8th Floor Ward A	30
8th Floor Ward B	30
8th Floor Ward D	34
9th Floor Ward C	30
Basement	19
Basement Bed Wash	10
Basement Tank Room	197
Total	1834

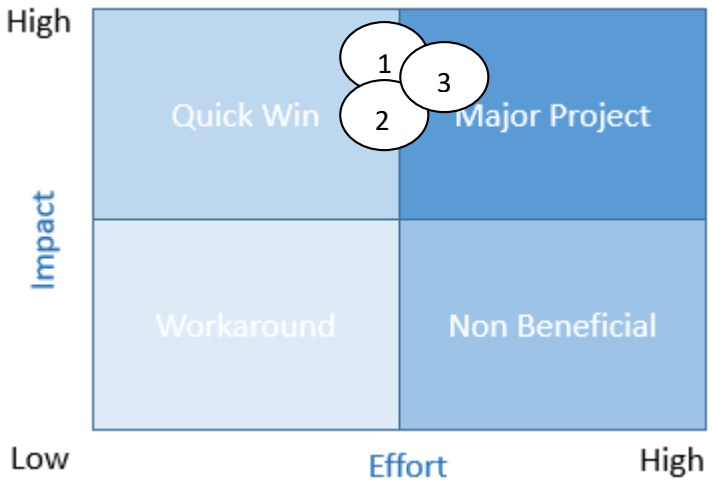
1st Flush or Post Flush	AMS cfu/100ml	Analysis Required	Analysis Required	AMS cfu/100ml	Area	Asset Sampled	CLO
Post	-	Legionella Potable & Pseudomonas	Legionella Potable & Pseudomonas	-	Adult	Cold Tap	0.31
Post	-	Legionella Potable & Pseudomonas	Legionella Potable & Pseudomonas	-	Adult	Cold Tap	0.36
Post	-	Legionella Potable & Pseudomonas	Legionella Potable & Pseudomonas	-	Adult	Cold Tap	0.37

In addition custom applications can also be provided via web based .NET applications



Data can also be imported and joined to existing datasets in MicroStratagy such as TrakCare admission and discharge datasets.

A Microbiology Reporting System and Database overview session was held on the 19th July 2021 with key stakeholders in attendance from Estates Management, Infection Control and Microbiology. The new system was greatly received with ideas being discussed regarding further and future developments.



Timescales for completion of recommendations:

1. Work on the new Database began week commencing 7th June 2021 with a completion date of 31st June 2021.

2. PowerBI Dashboards have a scheduled Go Live date of the end of August 2021.

The key datasets within the new system are detailed below:

Key Datasets

Dataset 1 – Potable Water

The Telepath (LIMS) LIMS system is key to joining all the various datasets utilised across the system. Currently there is no database field container within the Telepath (LIMS) LIMS system to store the StrainID that is returned from the 3rd party PHE laboratory, however work is currently being undertaken by the department to add this field to the Telepath (LIMS) LIMS system. Once complete, a standard operating procedure will be in place to have the StrainID manually added to the result providing a capability for colleagues in Infection Control to look back at previous occurrences of particular strains. A service would be set up to extract the dataset on an agreed scheduled basis with the possibility to explore a real time feed. The dataset will then be copied to the database structure. In the meantime eHealth have provided a method to allow separate capture of the StrainID so that it can be imported into the new database system and matched to all the relevant datasets.

Potable Water Dataset

Field Name	Type	Description
Lab Number	String (PK)	15 digit cypher which includes commas, these are truncated in the DMA results (M,21.1111111.Y)
Date Received	Date/Time	Date and time that the sample was received in the lab
Date Collected	Date/Time	The date the specimen was collected
Date Authorised	Date/Time	Date that the result was authorised
Specimen Type	String	e.g. Mid-Stream Urine
Site of Specimen	String	e.g. Room 88, Shower Head
Organism	String	Description of the organism found in the result (Klebsiella pneumoniae)
Strain/Profile	String	Comma separated string (e.g. VNTR 1,3,5,IS,1,2,2,4,3,2,4) manually entered
CHI	String	10 Digit CHI number
Forename	String	Forename of a Patient
Surname	String	Patient Surname
Sex	String	
DOB	Date/Time	Date of Birth
Age	Integer	Calculated from datediff (now(),dob)

Hospital	String	Hospital Location
Ward	String	Hospital Ward
TVC @37'c/48H/1ml	Float	
TVC @22'c/72H/1ml	Float	
Coliform/18H/100ml	Float	
E.Coli/18H/100ml	Float	
Pseudomonas sp/48H/100ml	Float	
Ps Aeruginosa/48H/100ml	Float	
Atypical mycobacteria	String	Detected / Not Detected
Atyp.myco CFU@35'C/42D/100ml	String	Detected / Not Detected
SAB@22	Float	
SAB@30	Float	

Joining the dataset to the DMA data will potentially negate the need for manual transcription of the results into an Excel spreadsheet

Dataset 2 – DMA (joined to dataset 1 for Potable Water)

DMA issue a spreadsheet that is updated cumulatively over a six month period, when new rows are put into the spreadsheet an email is sent to let the service know updates are ready to be viewed. eHealth have obtained a copy of the updated spreadsheet and have imported into the new Database. This will be an ongoing process to include other third party water sampling companies such as Chemtech Consultancy that are currently utilised by the IRH and RAH hospitals.

DMA Dataset:

Field Name	Type	Description
DMA Sample No	String (PK)	e.g. KID 4964
Re Sample	Bool	Yes or No (Y/N)
Sample Date	Date/Time	
Hospital / Site	String	e.g. QUEH
Building	String	e.g. A&C
Department/Floor	String	e.g. 1st Floor HDU 3
Unique Outlet ID	String	e.g. CCW-120 maps to codes in FM First

Sample Point	String	e.g. Clean Utility Sink
Outlet Type	String	e.g. Tap
Hot / Cold / Mixed	String	Hot / Cold / Mixed
Temp	Float	e.g. 18.7 'c
Analysis required	String	e.g. Legionella, Potable, Pseudomonas
Sampled By	String	Initials
Lab Number	String (FK)	Foreign Key to the results, however there is a

Dataset 3 – Clinical

Patient samples taken on the ward are imported into separate Clinical Table within the database called Clinical. Cross reference to StrainID in the other supporting tables can be made easily

Clinical Dataset:

Field Name	Type	Description
CHI	String	Foreign Key mapping to the
Name	String	
Unit Location Group	String	
Location	String	
Date Collected	Date/Time	
Date Recorded	Date/Time	
Date Authorised	Date/Time	
INV	String	
Specimen Type	String	
Organisms	String	
No of Organisms	Integer	
Comment Code	String	
Comment	String	
Where Sent	String	
Date Sent	Date/Time	

Isolate	String	
ORG	String	
Specimen	String	
StainID	Integer	Foreign Key to StringID table

Dataset 4 – Environmental

Swabs taken on wards from items such as computer keyboards, lights, trolleys etc are also imported into their own data table and linked on StrainID and Lab Reference Number, the dataset is as follows:

Field Name	Type	Description
CHI	String	This is A dummy CHI in the format of ZM22334455
Lab Reference No	String	
Unit Location Group	String	
Name	String	
Site of Specimen	String	
SENDRN	String	
Date Collected	Date/Time	
Specimen Type	String	
Place of Sampling	String	
Search Identifiers	String	
Organisms	String	
COMCDE	String	
COMCDE Values	String	
ORG	String	
Specimen	String	
Growth	String	
StrainID	Integer	

Dataset 5 – SSTS – Future Development

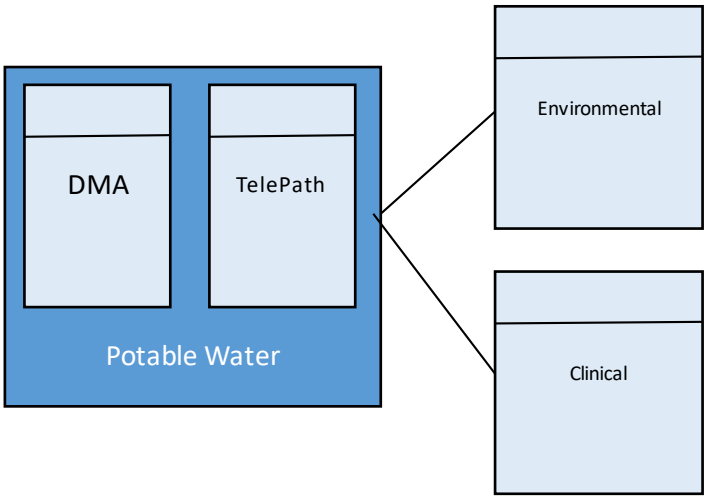
The SSTS Dataset could potentially identify any members of staff rostered between specific time periods and specific locations should an organism of concern be identified as being present on a ward location. It's hoped that this dataset could be gathered on request instead of potentially storing lots of information unnecessarily.

SSTS Dataset:

Field Name	Type	Description
SSTS	String	
Forename	String	
Surname	String	
DOB	Date/Time	
Hospital	String	Foreign Key mapping to the DMA dataset
Ward	String	Foreign Key mapping to the DMA dataset

Data Relationship

The table in the structure described below can all be linked and reported on using the Lab Reference Number and/or StrainID:



Conclusion

This report sets out the current processes in relation to the recommendations in the Case Note Review as at March 2021

Following a series of review meetings a number of improvements have been identified and actioned. This includes changes to the data collection internally within NHSGGC and also involving 3rd party suppliers. Focus has been on the QEUH processes and these will rolled out across other areas where necessary.

A comprehensive new database system has been developed with the Microbiology Service and demonstrated to a number of key stakeholders. This addresses the need for a searchable database of the key datasets in scope and also provides reports and dashboard views of the data. This will be developed further with the relevant services.

A number of Standard Operating Procedures have been developed by the services and are included separately with the evidence submission.

Glossary

Microbiology Screening Bench	The Microbiology Screening Bench defines the section of the laboratory that processes and reports all 'screening type' samples such as MRSA, VRE, CRO & Environmental Swabs. The samples received at this section are generally examined for a limited number of organisms and are for a particular purpose.
Gram Negative Organisms	Gram negative bacteria is bacteria that does not retain the crystal violet stain used in the gram staining method. Gram-negative bacteria are more resistant to antibiotics and can cause serious infections both in the blood stream and other sites of the human body. Gram straining is a method used to distinguish one bacteria from another, according to the chemical and physical properties of their cell walls.
Cluster	Refers to suspected linked isolates cases.
Hard Surface Sample	Hard surface sample refers to samples taken for microbiological examination from environmental surfaces in the hospital environment. Examples would include samples taken from equipment, floors, chilled beams, sinks, and drains.
Water Sample	Water samples can be taken from a wide variety of sources in the water supply and delivery system for the hospital - for example: taps; showers; and tanks.
Planned Preventative Maintenance	Planned Preventative Maintenance is work that is routinely carried out on a weekly, monthly and quarterly basis spread across multiple acute locations.

Table of Abbreviations

BMS	Biomedical Scientist
CAN	Active Clinical Notes
DART	Document Management System
ED	Emergency Department
GRI	Glasgow Royal Infirmary
ICD	Infection Control Doctor
ICN	Infection Control Nurse
IMT	Incident Management Team
IPC	Infection Prevention Control
IPCT	Infection Prevention Control Team
IRH	Inverclyde Royal Hospital
LAP	Lead Authorised Person
LI's	Laboratory Instructions
LIMS	Laboratory Information Management System
LP's	Laboratory Procedures
NHSGGC	National Health Service Greater Glasgow and Clyde
PDA	Personal Digital Assistant
PHE	Public Health England
PID	Person Identifiable Data
PIN	Prior Information Notice
PNP	Patient Note Pad
PPM	Planned Preventative Maintenance
QEUH	Queen Elizabeth University Hospital
RAH	Royal Alexandra Hospital
RHC	Royal Hospital for Children
SOP	Standard Operating Procedures
SSTS	Scottish Standard Time System

References

1. NHSGGC. Queen Elizabeth University Hospital and Royal Hospital for Children: Case Note Review Action Plan
2. NHSGGC. Queen Elizabeth University Hospital and Royal Hospital for Children: Case Note Review Report
3. DMA. Request for Analysis form
4. DMA. Descriptor Sheet
5. Chemtech Consultancy. Certificate of Analysis
6. Express Micro Science. Certificate of Analysis
7. NHSGGC. Document LF591 – Environmental Request – Non Water
8. NHSGGC. Document LI720 – Environmental Monitoring PID
9. NHSGGC. Document LF592 – Environmental Request – Air/Water
10. NHSGGC. Document SOP539 – Environmental Monitoring
11. NHSGGC. Document SOP538 – Water Sampling
12. Public Health England. Document H2 – Microbiology Request Form, Healthcare Pathogens
13. NHSGGC. Document LF515 – Samples Sent to Reference Laboratories for Confirmation
14. NHSGGC. Document LF524 – WINP WOUT

Distributed to:

Date issued	Version	Reviewer	Issued by
14/07/21	1.0	Denise Brown & Andrew Hardy	Ross Furlong
22/7/21	1.2	William Edwards	Denise Brown

CASE NOTE REVIEW ACTION 3.1, 3.3, 10.1 & 10.2 REPORT

JULY 22, 2021

NHS GREATER GLASGOW & CLYDE

Version 2.0

Introduction

The purpose of this document is to set out the mapping of current data sets, workflows and processes identified within the Case Note Review Action Plan[1] for the following actions:

Section 3.1:

The data systems used to document facilities maintenance activity in clinical areas need to consistently capture the exact location of the work done; the date(s) on which the work was actually done; and be accessible to inform the IPC process, including the investigation of clusters and outbreaks.

Section 3.3:

The precise location of any swab or water sample taken for microbiological surveillance, and the date on which it was obtained, must be recorded and the results made accessible to inform the IPC process, including the investigation of clusters and outbreaks.

Section 10.1:

NHS GGC must (continue to) develop a comprehensive and searchable database that allows details of microbiology reference laboratory reports to be compared between samples of the same bacteria obtained from different patients or environmental sites.

Section 10.2:

The system for integrating microbiology reference laboratory reports into the patient microbiology record needs to be reviewed and strengthened. Similarly, the system for ensuring that microbiology reference laboratory information is available to and used by the IMT process, including the investigation of clusters and outbreaks, needs to be reviewed and strengthened.

This report will further detail actions taken forward as part of the work streams reviewed.

Work to be undertaken in relation to these actions follows on directly from the Case Note Review Overview Report[2] (March 2021).

Progressing this work aligns with local and national strategic priorities to implement innovation in technology, support ambitions for digitisation and improvement, and build confidence in technology deployment and benefits for patients, system users and the organisation.

Contents

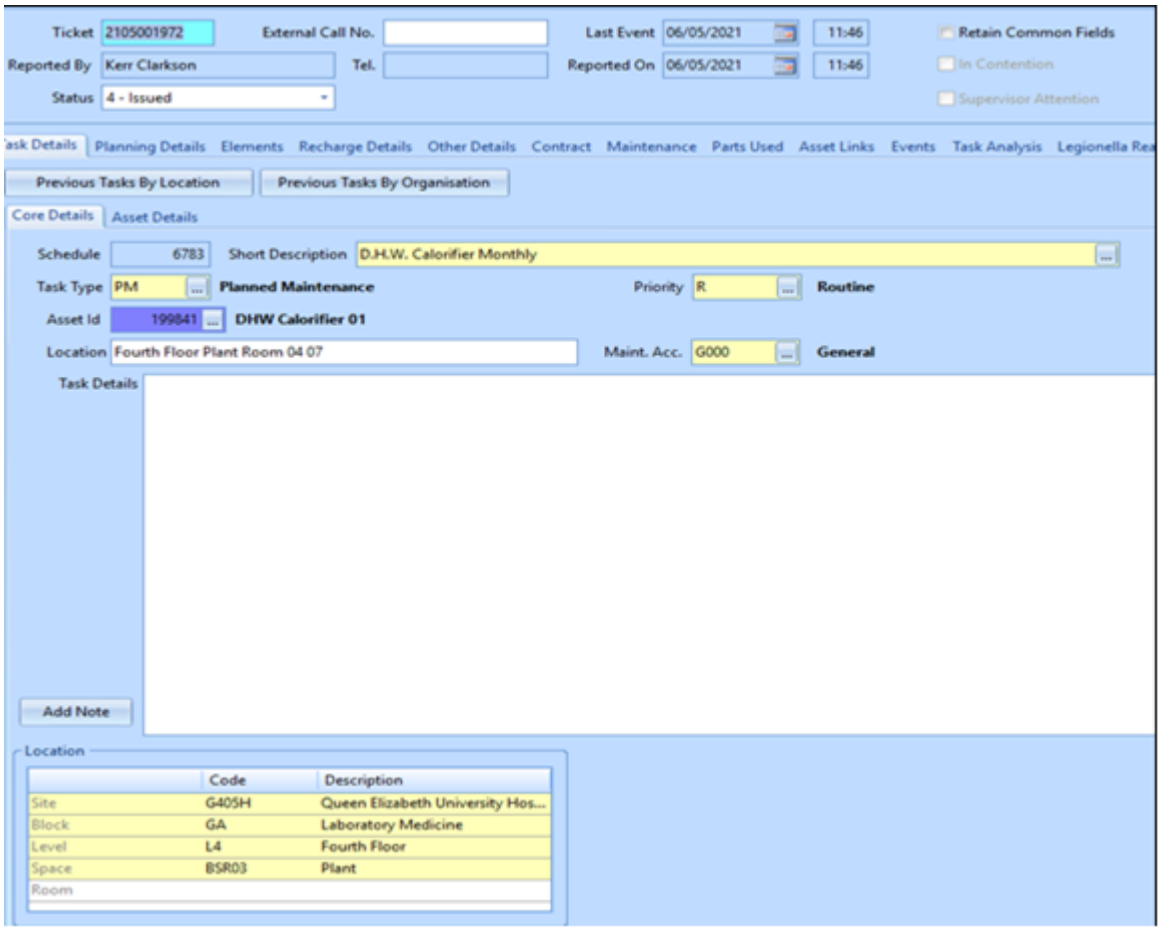
Review of Current Processes

Current Processes are written to be true at the time of the Case Note Review Overview Report – March 2021

Planned Preventative Maintenance (PPM)

Documenting PPM within FM First

Work request information pertaining to planned preventative maintenance is recorded within the Estates & Facilities system FM First. Each PPM recorded within FM First is issued a unique ticket number. The date reported on, last event and the person reported by is also documented. Within the Task Details tab within the Core Details section is the opportunity to add notes detailing the description of the work requested.



As part of PPM the precise location is detailed within the Location section of the Task Details tab of FM First. This section holds:

- Site
- Block
- Level
- Space

- Room

Environmental, air, ad hoc water and patient sampling is not stored or carried out as PPM. Please see further sections for detail of how these sampling requests are processed

PPM Water Sampling QEUH, Additional Greater Glasgow Hospital Locations and VoL

PPM sampling and monitoring is recorded within FM First with the precise location details held within the Location section of the Task Details section as stated above. PPM Water sampling is conducted by external service providers on behalf of NHSGGC Estates & Facilities. NHS Specialist Water Service Provider DMA conduct water sampling within the estates on a rotational basis. The PPM sampling programme is carried out on a weekly, monthly and quarterly basis spread across multiple acute locations.

PPM water sampling is logged within FM First and is then issued electronically to a DMA specialist's personal digital assistant (PDA). When the sampling is undertaken and the PDA is updated, this in turn completes the work request within FM First. The following isolates are sampled from the water captured by DMA:

- TVC @ 37°C cfu/ml
- TVC @ 22°C cfu/ml
- Coliform cfu/100ml
- E.coli cfu/100ml
- Legionella cfu/L

Samples captured are sent by DMA to NHSGGC laboratory for analysis accompanied with a hard copy of the following Request for Analysis[3] forms:

GLASGOW ROYAL INFIRMARY DEPARTMENT OF MICROBIOLOGY
REQUEST FOR ANALYSIS

Tel:	01412018551	**Building:**		Received by:	
Email:		**Sampled by:**		Date Received:	
Web:		**Date:**		Date Commenced:	

Analysis Label 3 - WATER TESTING POT + GNB TEST REQUIRED: **TVC/COLI/EC/PS/GNB (including Cupriavidus species)**

Laboratory Number	Sample Number	TVC @ 37°C cfu/ml	TVC @ 22°C cfu/ml	Coliforms cfu/100ml	Faecal E.Coli cfu/100ml	Pseudomonas cfu/ml	GNB cfu/ml	Other (As directed by ICT)

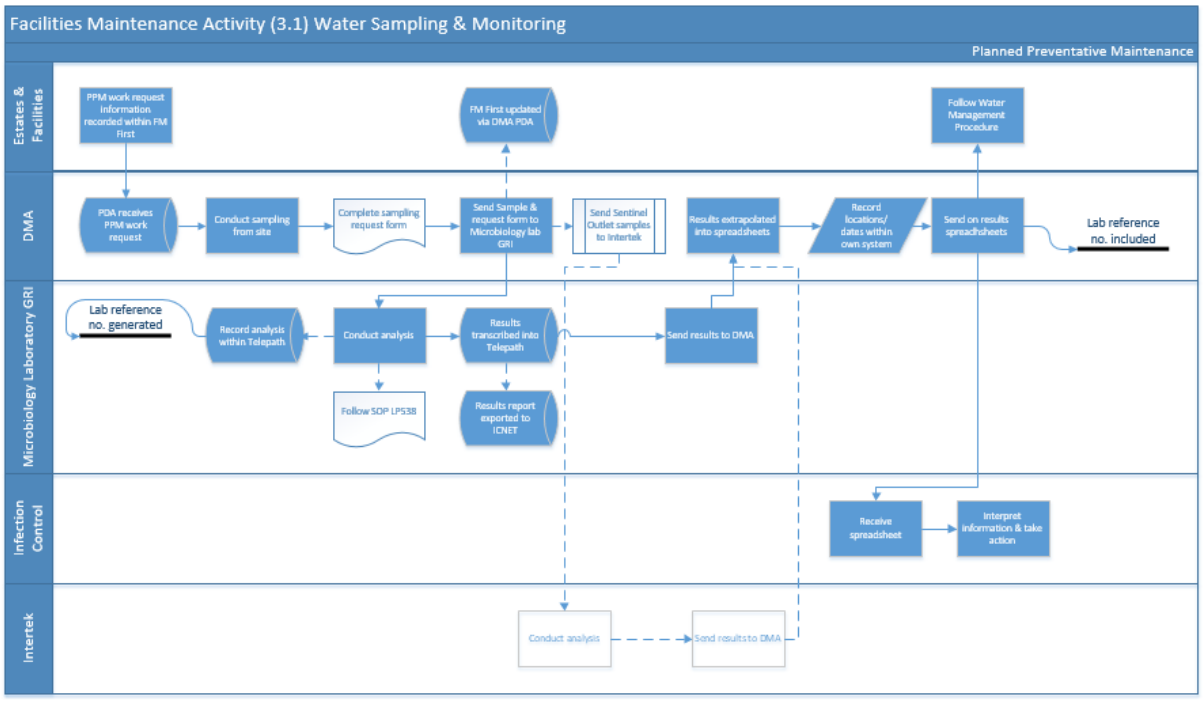
The Request for Analysis form does not possess fields detailing the precise location of sampling

To compensate for the exclusion of the precise location details, the DMA descriptor sheet[4] below, is a supplementary sheet DMA provide to NHSGGC laboratory staff.

Site: QEUH - Adults & Royal Hospital for Children
Weekly Resamples

DMA Sample Number	Re sample	Sample Date	Time Sample Taken	Site	Building	Dept / Floor	Unique Outlet Id	Sample Point	Outlet Type (Tap Shower, CWST)	Hot, Cold, Mixed (TMV)	1st Flush or Post Flush	Sample Taken Through Pall Filter (Yes/No)	Temp	ClO2	Analysis Required	Sampled by
KID 10613	Y	21/04/21	1115	QEUH	Adults	11th Floor Ward 11A	GENW21-081	Clean Utility Sink	Tap	Cold	1st Flush	No	17.6	0.28	GNB	[redacted]
KID 10614	Y	21/04/21	1110	QEUH	Adults	5th Floor Ward C	GENWC-066	Facilities	Cold Tap	Cold	Post	No	11.1	0.30	SAB,Mould, Yeast	[redacted]
KID																

Laboratory staff do not currently use this sheet to add additional information into the Telepath (LIMS) system. This document is under review with Microbiology and DMA to identify if precise location information could be added to the request for analysis form. This would allow for the need of only a single document and enable downstream data gathers and information to be input to the Telepath (LIMS) system, ensuring a more transparent and robust way of working.



PPM Water Sampling IRH and RAH

RAH and IRH PPM water sampling and monitoring is conducted by external service providers on behalf of NHSGGC Estates & Facilities. Third party specialist water service provider Chemtech Consultancy conduct the capturing of water sampling and send the obtained samples to sub-contractor Express Micro Science for analysis. The PPM sampling programme is carried out on a weekly, monthly and quarterly basis.

Clyde IRH and RAH PPM water sampling is logged within FM First with the precise location captured within the Location section of the Task Details tab.

PPM sampling requests are communicated to Chemtech Consultancy verbally via telephone and/or via email by either the Water Quality Authorised Person or the Site Manager.

Chemtech Consultancy document the required sampling on internal systems and carry out the obtaining of required sampling. Upon obtaining the required samples Chemtech Consultancy create a unique sample ID, record the precise location, date and deliver to Express Micro Science for analysis. Following completion of analysis the results are returned to Chemtech Consultancy who create a PDF certificate of analysis[5] and email to the Estates Management Team.

Detailed below is an example of the returned PDF certificate of analysis from Chemtech:

CHEMTECH CONSULTANCY LTD | AWT WATER & ENVIRONMENTAL SERVICES

Mr Hugh McCartan
Sites Estates Manager
Royal Alexandra Hospital
Corsebar Road
Paisley
PA2 9PN
3rd May 2021
Cc. Colin Purdon & David Gemmell

Microbiological Monitoring – Royal Alexandra Hospital
Dear Mr McCartan,

Please find attached a copy of the certificate of analysis for the weekly sampling carried out at the Royal Alexandra Hospital on 16th, 23rd & 26th April 2021.
Analysis carried out was for Pseudomonas aeruginosa and was satisfactory at the locations below:-

Sample Date	Sample ID	Sampling Point	Pseudomonas aeruginosa
16/04/2021	2766244	NEW ITU - Cold Pre Flush - Bed 9 - TMT WHB - Sample No 1 - 8.15	0
16/04/2021	2766245	NEW ITU - Hot Pre Flush - Bed 9 - TMT WHB - Sample No 1 - 8.15 (Mixed)	0
16/04/2021	2766246	Maternity - SCBU - Cold Pre Flush - Room 4 - TMT WHB 2nd From RHS - Sample no 69 - 8.20	0
16/04/2021	2766247	Maternity - SCBU - Hot Pre Flush - Room 4 - TMT WHB 2nd From RHS - Sample no 69 - 8.20 (Mixed)	0
23/04/2021	2775425	NEW ITU - Cold Pre Flush - Bed 2 - TMT WHB - Sample No 2 - 10.40	0
23/04/2021	2775426	NEW ITU - Hot Pre Flush - Bed 2 - TMT WHB - Sample No 2 - 10.40 (Mixed)	0
23/04/2021	2775427	Maternity - SCBU - Cold Pre Flush - Room 4 - TMT WHB 1st From RHS - Sample no 70 - 10.55	0
23/04/2021	2775428	Maternity - SCBU - Hot Pre Flush - Room 4 - TMT WHB 1st From RHS - Sample no 70 - 10.55 (Mixed)	0
26/04/2021	2777196	NEW ITU - Cold Pre Flush - Bed 1 - TMT WHB - Sample No 3 - 9.50	0
26/04/2021	2777197	NEW ITU - Hot Pre Flush - Bed 1 - TMT WHB - Sample No 3 - 9.50 (Mixed)	0
26/04/2021	2777198	Maternity - SCBU - Cold Pre Flush - Room 4 - TMT WHB at door- Sample no 71 - 10.00	0
26/04/2021	2777199	Maternity - SCBU - Hot Pre Flush - Room 4 - TMT WHB at door- Sample no 71 - 10.00 (Mixed)	0

We recommend that you retain these records for a minimum period of 5 years in accordance with ACoP L8 and HSG 274 part 2 paragraph 25.
Should you wish to discuss further then please do not hesitate to contact us.

Yours sincerely,

Accompanied with the above certificate of analysis, Chemtech also provide the Express Micro Science certificate of analysis[6]. See below example:

EXPRESS MICRO SCIENCE

FAO Alan Watson
ChemTech Consultancy Ltd
East Fulton Farm
Darluith Road
Linwood
Renfrewshire
PA3 3TP

Certificate of Analysis

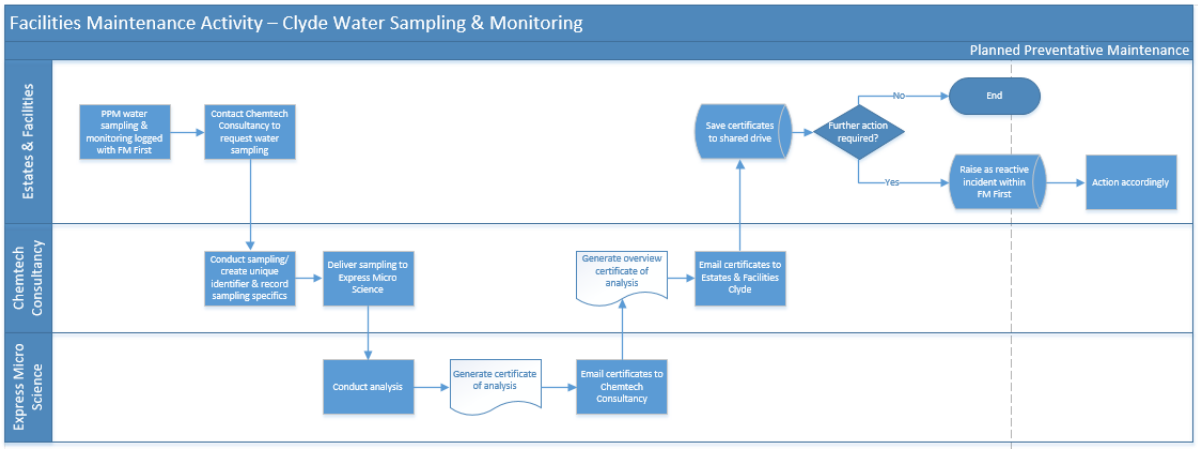
Date received:	16 April 2021
Date tested:	16 April 2021
Report Date:	26 April 2021
Certificate:	2 / 1
EMS Batch No:	F52589
Sampling Date:	16 April 2021
Order No:	NHS GGC 13445

Customer: NHS Greater Glasgow and Clyde

Site Reference: Royal Alexandra Hospital

Lab Ref	Sampling Point	Pseudomonas aeruginosa cfu/100ml 8wp 15.4.3
2766244	NEW ITU - Cold Pre Flush - Bed 9 - TMT WHB - Sample No 1 - 8.15 21 ℃	0
2766245	NEW ITU - Hot Pre Flush - Bed 9 - TMT WHB - Sample No 1 - 8.15 (Mixed) 41 ℃	0
2766246	Maternity - SCBU - Cold Pre Flush - Room 4 - TMT WHB 2nd From RHS - Sample no 69 - 8.20 23 ℃	0
2766247	Maternity - SCBU - Hot Pre Flush - Room 4 - TMT WHB 2nd From RHS - Sample no 69 - 8.20 (Mixed) 43 ℃	0

On receipt of the certificates of analysis it is the responsibility of the Water Quality Authorised Person or the Site Manager to check the certificate, store within the Estates Management shared drive in the appropriate year and month folder and check if any returned analysis requires further action. If there is a requirement for further action to be carried out this will be raised within FM First as a reactive incident and will be actioned accordingly.



The precise location of sampling is detailed within the Chemtech Consultancy and Express Micro Science reports.

Reports pertaining to the precise location of sampling carried out is conducted my Chemtech Consultancy and is available to Clyde Estates Management upon request.

Raising Reactive Work Requests via FM First

NHSGGC staff have the capability of raising reactive work requests via the FM First Web Client icon.

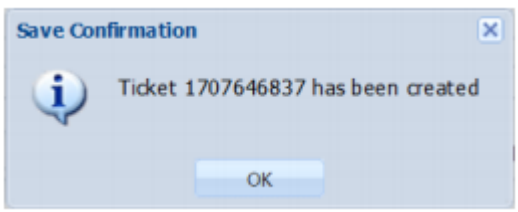
After logging in to FM First, users select the Create General Request option to raise a new work request. To begin creating the request, the user must enter the following information:

- The name of the person raising the work request.
- Contactable telephone number.
- Short Description.
- Task type (This is a pre-fixed drop down box).
- Location space.

Users are to utilise the Task Details section to add additional work request information.

Pre Case Note Review, users were required to manually free text the precise location details into the Task Details section.

Once detail of the work request has been manually entered and saved a unique ticket number for the work request is generated.



Following this method there is currently no way of Estates Management reporting on the precise location and sampling point requested.

Environmental Sampling

Initial requesting for environmental screens or hard surface samples are set up by the Microbiology screening bench.

The Microbiology screening bench defines the section of the laboratory that processes and reports all 'screening type' samples such as MRSA, VRE, CRO & Environmental swabs.

Any area of an acute NHSGGC location may be monitored on an ad hoc basis at the request of the Infection Control Team and namely the Infection Control Microbiology Consultants. Once introduced via the IMT the LI's purpose is to ensure that the bench carry out target testing relevant to the investigation parameters. To facilitate this the ICD liaises with both the bench technical manager and laboratory management to request the testing be undertaken.

Following agreement of work to be undertaken, the Infection Control Nurse is tasked with capturing the necessary sampling detailed within request form LF591: Environmental Request – Non Water[7], for swabs/materials.

LF591 Ad Hoc/Additional Environmental Request (Non Water)

For Completion by Infection Control Team			
Date of Issue		**Authorising Infection Control Consultant**	
Expected Sampling Date		**Frequency of Testing (e.g. One Off / Each Thurs)**	
Estimated Numbers		**Location(s)** **Hospital Site / Ward**	
Sample Type(s)			
Examination Request & **Clinical Rational for Testing**	*Example: Specify target organism only / All isolates / GNB only as part of IMT investigation*		
Result Notification	*List all staff to receive email copy of results as they become available*		

Samples taken by the ICN are then sent to Diagnostic Laboratory accompanied with the completed environmental request form. Upon receipt at the laboratory each sample is given a unique lab number. These received samples are then booked into the laboratory system, Telepath (LIMS), using the Laboratory Instruction Environmental Monitoring PID LI720[8]. Samples are processed and investigated following the direction specified within the accompanying LF591.

Information booked into Telepath (LIMS) may not always be consistent due to information being added to documentation is user driven. One main example of this would be:

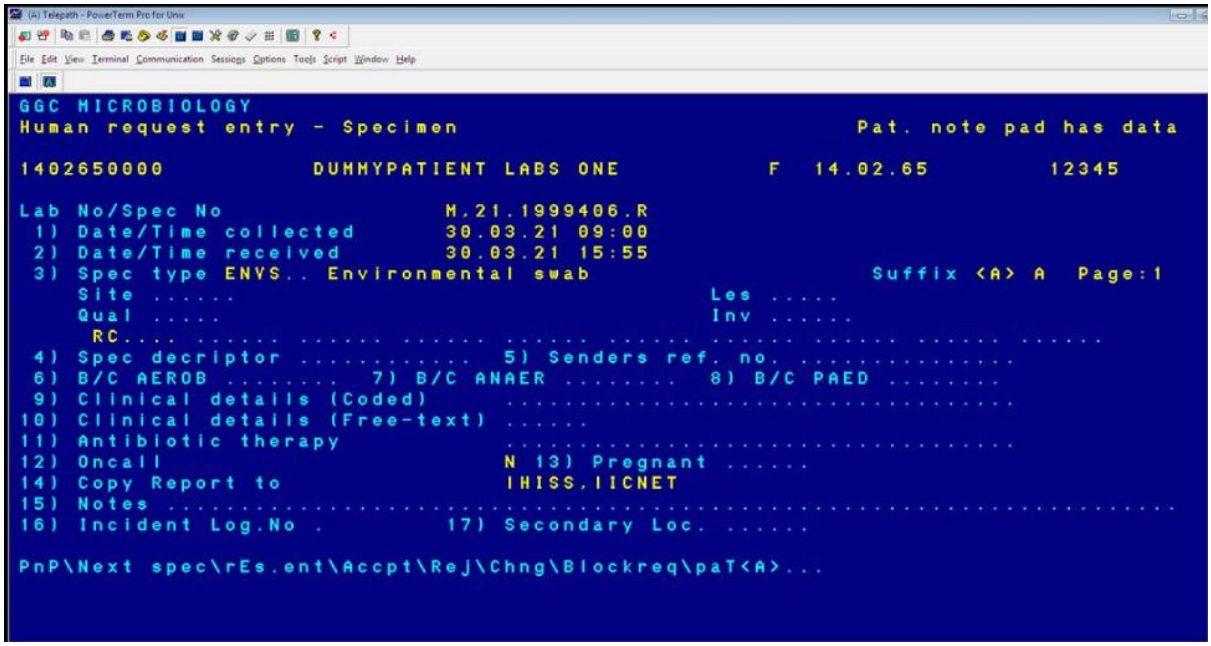
Locations can be input differently. E.g. 'RHC2A swab shower' in one instance and then 'RHC Ward 2A – swab shower head'

For trending a location or sampling point this is made extremely difficult.

Within Telepath (LIMS), Environmental swabs are allocated with a ZM number which pertains to the specific ward, the DOB for such a sample is always stated as 12.12.12.

The following information is used to record sample information within Telepath (LIMS):

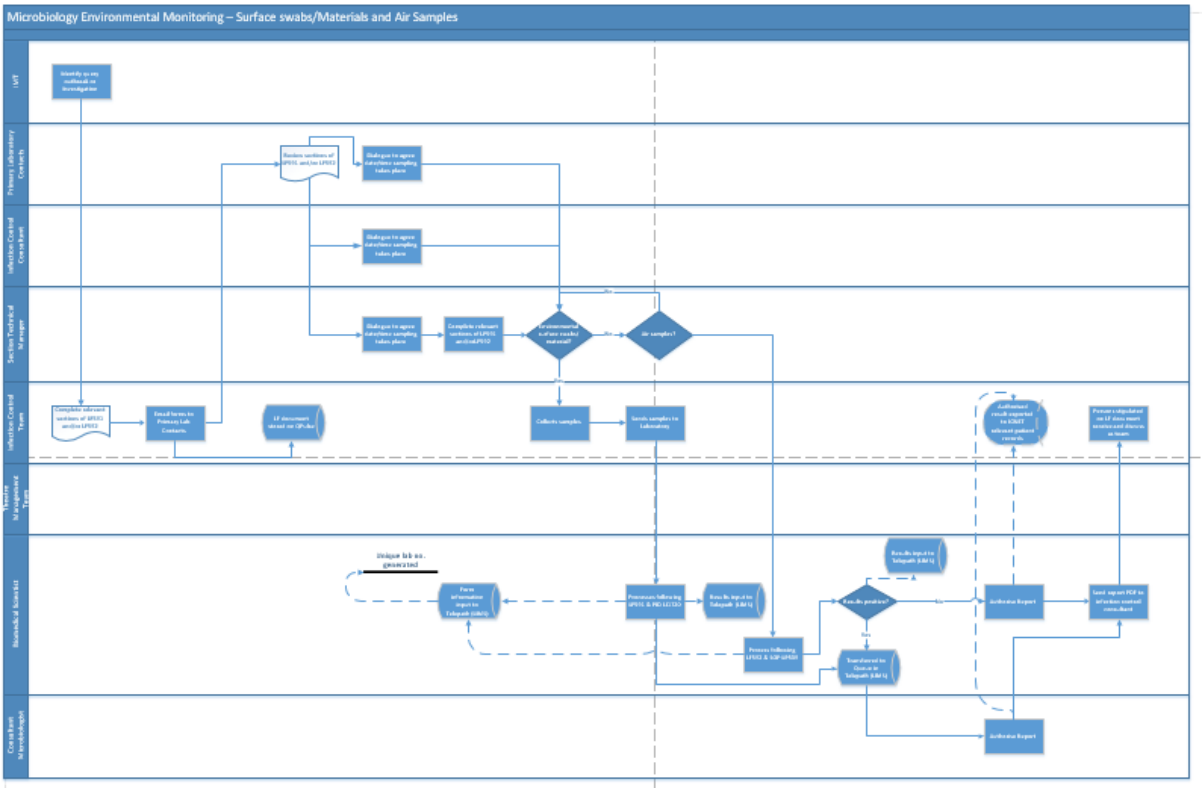
- Requesting clinician will be the authorising Infection Control Consultant.
- Location will be sector specific 'SBACT' or 'RBACT'.
- Search using "K" in CHI No. and 12.12.12 in DOB field, this will show a list of all existing Environmental ZM numbers, disregard any ZM numbers which have "Environmental" as forename. If no ZM number is available create new one using above protocol.
- The patient's forename is generated from the testing location as follows: ENV (hospital name – QEUH/RHC) (ward/theatre name/number) with a space between each of the constituent parts, as shown in the example below:
  - Surname: SCREEN
  - Forename: ENV RHC 2B
  - DOB/Age 12.12.12
  - Address RHC WARD 2B
  - Cons/GP 6112527 Dr Linda Bagrade
  - Location RBACT



Following processing of submitted samples, all relevant information/results are entered into Telepath (LIMS) by BMS staff. All environmental samples are transferred to the Telepath (LIMS) Queue awaiting authorisation by the Consultant Microbiologist.

Once Telepath (LIMS) entry of results has been authorised, a copy of the report is scanned to DART and then emailed to the professional/s stipulated on the LF591 document. The infection control team review and action results accordingly.

Simultaneously to the report being authorised a copy of the report automatically pulls in to ICNET from microbiology laboratory.



Air sampling

Initial requesting for air sampling follows the same pathway as environmental swabs to the point where the sampling is to be collected. Key changes to the air sampling process include:

- BMS staff conduct air sampling based off information detailed within document LF592: Environmental Request – Air/Water[9].
- SOP LP539[10] is utilised by BMS Staff to process sampling.
- Results returned positive? 'No': BMS staff authorise results report.
- Results returned positive? 'Yes': BMS staff transfer to Telepath (LIMS) queue for authorisation from the Consultant Microbiologist.

Ad hoc Water sampling

Initial query or request for investigation of a possible water outbreaks is discussed at the IMT. Following the IMT IPCT complete the following sections of document LF592: Environmental Request – Air/water:

- Date of Issue.
- Authorising Infection Control Consultant.
- Expected Sampling Date.
- Frequency of Testing.
- Estimated Numbers.
- Location/s: Site/Ward & Contact Details.

The document is then shared with the Primary Laboratory Contacts, Infection Control Consultant and the Senior Technical Manager for discussion and review. Once agreement has been reached for the required sampling to be undertaken it is then the responsibility of the IPCT to email Estates Management and request that DMA carry out the necessary sampling detailed on the attached LF592 document.

Currently the only trail of ad hoc water sampling requests sits within the mailboxes of Infection Control and Estate Management.

Estates Management then proceed to forward the requested ad hoc water sampling request to third party specialties company DMA, copying in Microbiology and Infection Control.

The sample request is then issued to a DMA specialist who attends the required site/ward location and captures the requested samples completing the relevant sections of the request for analysis form. Samples captured are sent by DMA to NHSGGC laboratory at the GRI for analysis accompanied with a hard copy of the following request for analysis forms:

GLASGOW ROYAL INFIRMARY DEPARTMENT OF MICROBIOLOGY
REQUEST FOR ANALYSIS

Tel:	01412018551	**Building:**		Received by:	
Email:		**Sampled by:**		Date Received:	
Web:		**Date:**		Date Commenced:	

Analysis Label 3 - WATER TESTING POT + GNB TEST REQUIRED: **TVC/COLI/EC/PS/GNB (including Cupriavidus species)**

Laboratory Number	Sample Number	TVC @ 37°C	TVC @ 22°C	Coliforms	Faecal E.Coli	Pseudomonas	GNB	Other
		cfu/ml	cfu/ml	cfu/100ml	cfu/100ml	cfu/ml	cfu/ml	(As directed by ICT)

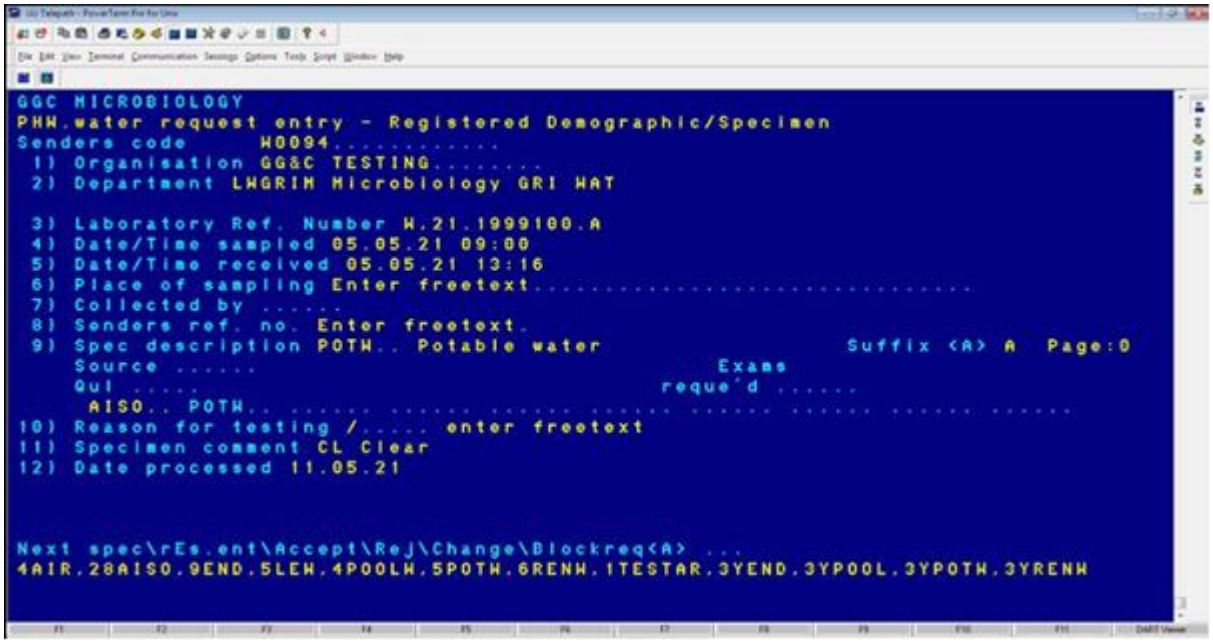
- DMA complete all non-highlighted fields.
- Laboratory GRI complete all highlight yellow fields.

The DMA descriptor sheet below, is a supplementary sheet DMA provide to NHSGGC laboratory staff. Laboratory staff do not use this to add any additional information into the Telepath (LIMS) system. This document has been reviewed with Microbiology and DMA to identify if sampling site information could be added to the request for analysis forms. This would allow for specific location information, downstream data gathers and information to be input to the Telepath (LIMS) system therefore ensuring a more transparent and robust way of working.

Site: QEUH - Adults & Royal Hospital for Children
Weekly Resamples

DMA Sample Number	Re sample	Sample Date	Time Sample Taken	Site	Building	Dept / Floor	Unique Outlet Id	Sample Point	Outlet Type (Tap Shower, CWST)	Hot, Cold, Mixed (TMV)	1st Flush or Post Flush	Sample Taken Through Pall Filter (Yes/No)	Temp	ClO2	Analysis Required	Sampled by
KID 10613	Y	21/04/21	1115	QEUH	Adults	11th Floor Ward 11A	GENW21-081	Clean Utility Sink	Tap	Cold	1st Flush	No	17.6	0.28	GNB	[redacted]
KID 10614	Y	21/04/21	1110	QEUH	Adults	5th Floor Ward C	GENWC-066	Facilities	Cold Tap	Cold	Post	No	11.1	0.30	SAB,Mould, Yeast	[redacted]
KID																

Laboratory GRI create a unique laboratory reference number within Telepath (LIMS) and conduct analysis following SOP LP538[11]. Once analysis of samples has been completed Laboratory GRI transcribe the results into Telepath (LIMS) against the previously laboratory reference number.

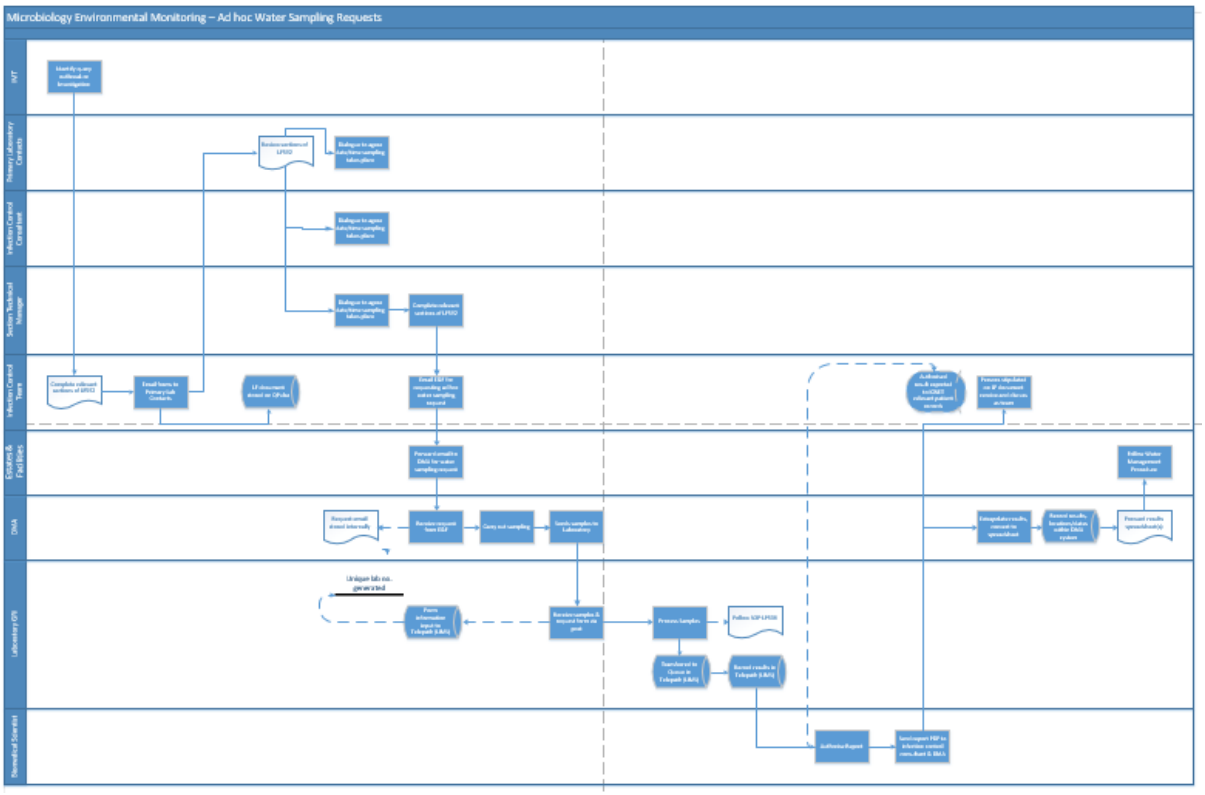


A PDF results report is created and transferred to the Telepath (LIMS) queue. BMS staff proceed to authorise the report and send a copy of the results report to DMA who extrapolate the results, convert into a spreadsheet and forward on to Estates & Facilities. Once the Telepath (LIMS) report has been authorised a copy of the report automatically pulls in to ICNET. The report is then emailed to the professional/s stipulated on the LF592 document. The infection control team review and action results accordingly.

The extrapolated spreadsheet sent to Estates & Facilities from DMA includes the unique laboratory reference number created by laboratory GRI, department/floor, door reference number and sampling point, see below:

		QEUH (Adults & Royal Hospital for Children)									
DMA Sample Number	Re sample	Lab Reference	Sample Date	Time Sample Taken	Results Date	Analysis Required	Sample Area (Adult, Childrens or Plastrooms)	Department/Floor	GENW-001	Sample Location	Asset Sample (Tap, Shower CWST Cal)
W&A 506	N	21.1842128.G	23/03/21	09:39	30/03/21	Potable, Pseudomonas, GNB	A&C	6th Floor Ward 6A	GENW1-018	Room 7 En-Suite (With Filter)	Shower

Following receipt of the above results spreadsheet Estates & Facilities proceed to follow the Water Management Procedure.



Patient Samples

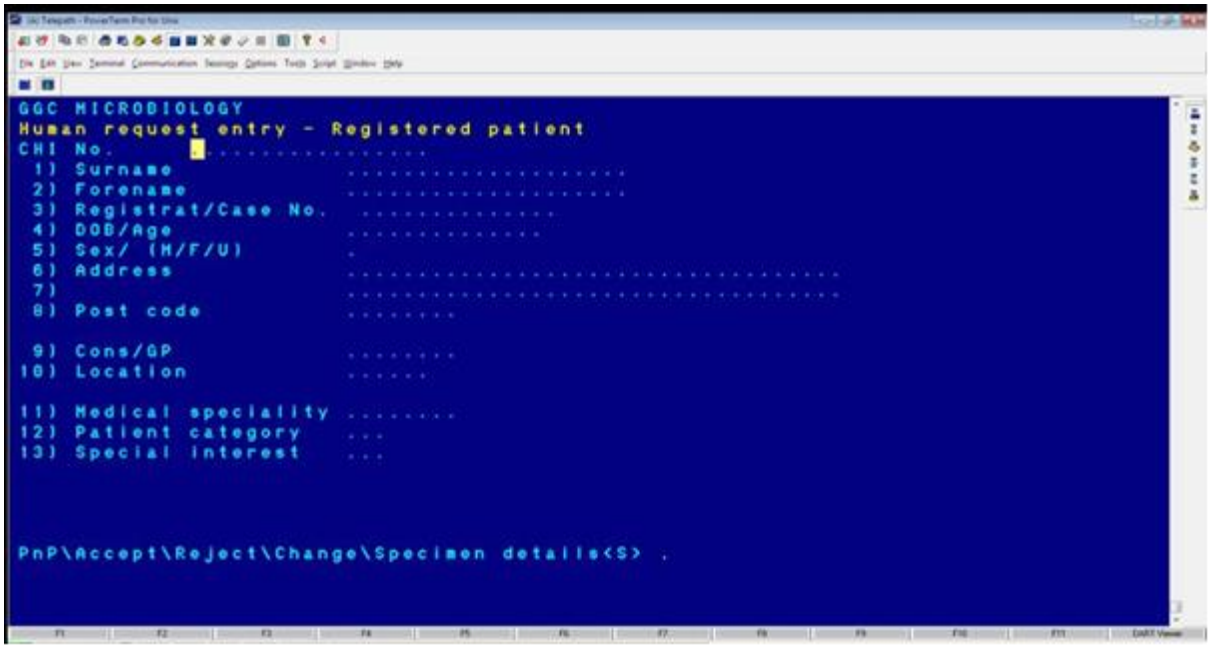
ED, Out-patient and In-Patient sample requests are requested via 'New Request' within the electronic patient management system TrakCare.

When a new request is actioned via TrakCare it is sent automatically to the microbiology laboratory. Samples are captured by ward staff and are delivered to microbiology accompanied with the printed

request form from TrakCare. Microbiology labs use the tracking order number to match the physical specimen with the electronic order.

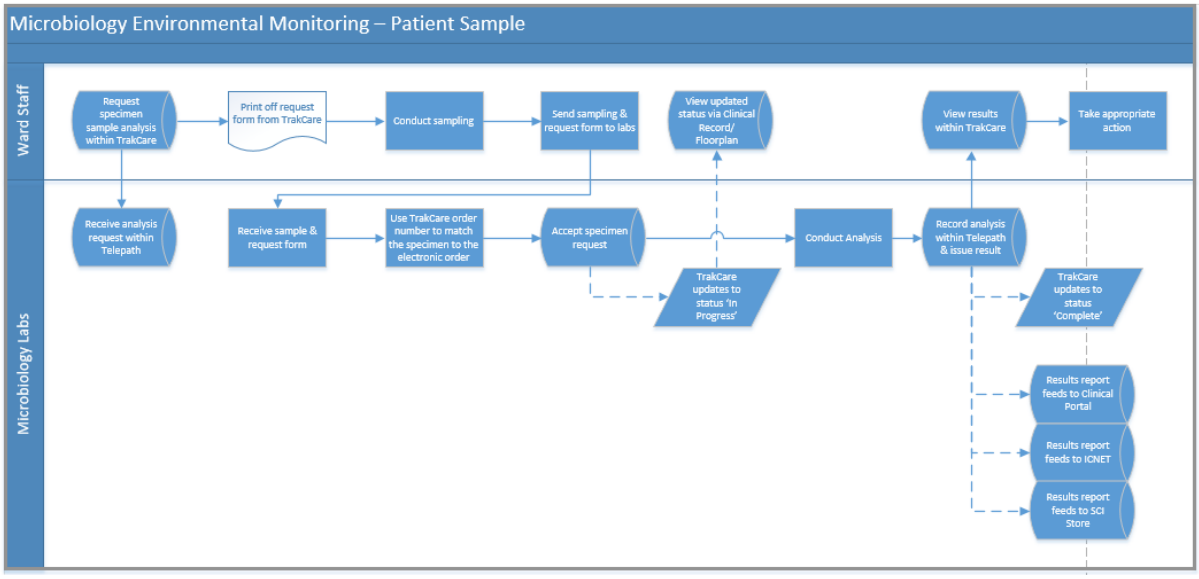
Due to the sample request being sent via TrakCare all patient demographic, location of patient and sample area is known to Microbiology. Patient information obtained from the request is entered into Telepath (LIMS) and a unique lab number is generated. Once the specimen is accepted this updates the status of the TrakCare request in the 'Labs Result' tab to 'In Progress'. Following completion of analysis microbiology issue the results within Telepath (LIMS) which again updates the status within Trakcare and delivers the analysis directly to TrakCare.

The example below is of the Telepath (LIMS) Human Request Entry screen:



Result information is exported from Telepath (LIMS) to Clinical Portal, SCI Store and ICNET and will file against the patient record. Within ICNET, if microorganisms are identified as one of a pre-defined list of alert organisms, the system will automatically alert the Infection Prevention and Control Team.

Using labsift, Infection Control possess the ability to create a set of rules within ICNET to identify alert organisms of interest. Rule options can include Organism, Specimen Type and Locations. Once rule parameters have been identified and set, automatic actions can be added, these include: Adding a notification tag to a patient record or open a case and add extended properties to the case. Extended properties are a series of questions with predetermined answers that the infection control nurse complete with relevant information. These predetermined options allow for quantitative reporting of data and save the infection control nurse vast amounts of manual transcribing.



Microbiology Database & Reporting.

All samples are tested and analysed within Microbiology labs. Hard surfaces/swabs are tested in the core microbiology labs at either QEUH or GRI, depending on where the samples are taken from. Water samples are tested at the specialist water section of microbiology GRI. Once laboratory services receive samples it is the responsibility of the microbiology team to grow organisms and identify Gram Negative organisms. The decision of which isolates require sending to PHE Colindale for further analysis is currently at the Consultant Microbiologists discretion.

If there are Gram Negative Organisms requiring further analysis then these are sent via post to third party specialist company PHE Colindale, accompanied with the H2 Microbiology request form[12], in an attempt to seek confirmation of identification and/or to identify any clusters and source of isolates. At the time of sending isolates to PHE Colindale the BMS update Telepath (LIMS) with the report code of either 'refer' or 'sent', this allows the isolate case to remain open on Telepath (LIMS). When entering in either code 'refer' and 'sent' to the Telepath (LIMS) there appears a # symbol which allows the BMS to enter information accordingly. Please see example below:

SENT # (The BMS will use the # to select the location the isolate is being sent to)

Example: **Specimen sent for testing to PHE/HPA, Colindale**

REFER # (The BMS will use the # to select the isolate that is being referred)

Example: **Escherichia coli sent to reference laboratory**

As isolates are sent to reference labs, laboratory reports are released from Telepath (LIMS) as interims, with a final report to follow.

Simultaneously to this the microbiology bench update document LF515: Samples Sent to Reference Laboratories for Confirmation[13], which highlights open isolate cases sent to PHE Colindale and not yet returned with result reports. On a daily basis the microbiology team conduct a 'Daily Outstanding Work Check', which comprises of running a report from Telepath (LIMS) of open cases and cross referencing the LF515 document. Work outstanding greater than two days and two weeks is recorded on document LF524: WINP WNOUT.

LF documents are stored locally and reviewed by the microbiology screening bench.

Following receipt and processing of received isolates, PHE Colindale return the laboratory reports with completed patient demographic (if applicable), 'Opportunistic Pathogens Section', 'Result Comments' and StrainID to the generic microbiology mailbox.

Laboratory Reports returned to Microbiology from PHE Colindale are in PDF format and contain the isolate strainID

It is the responsibility of the microbiology administration staff to process as according, following the below work streams:

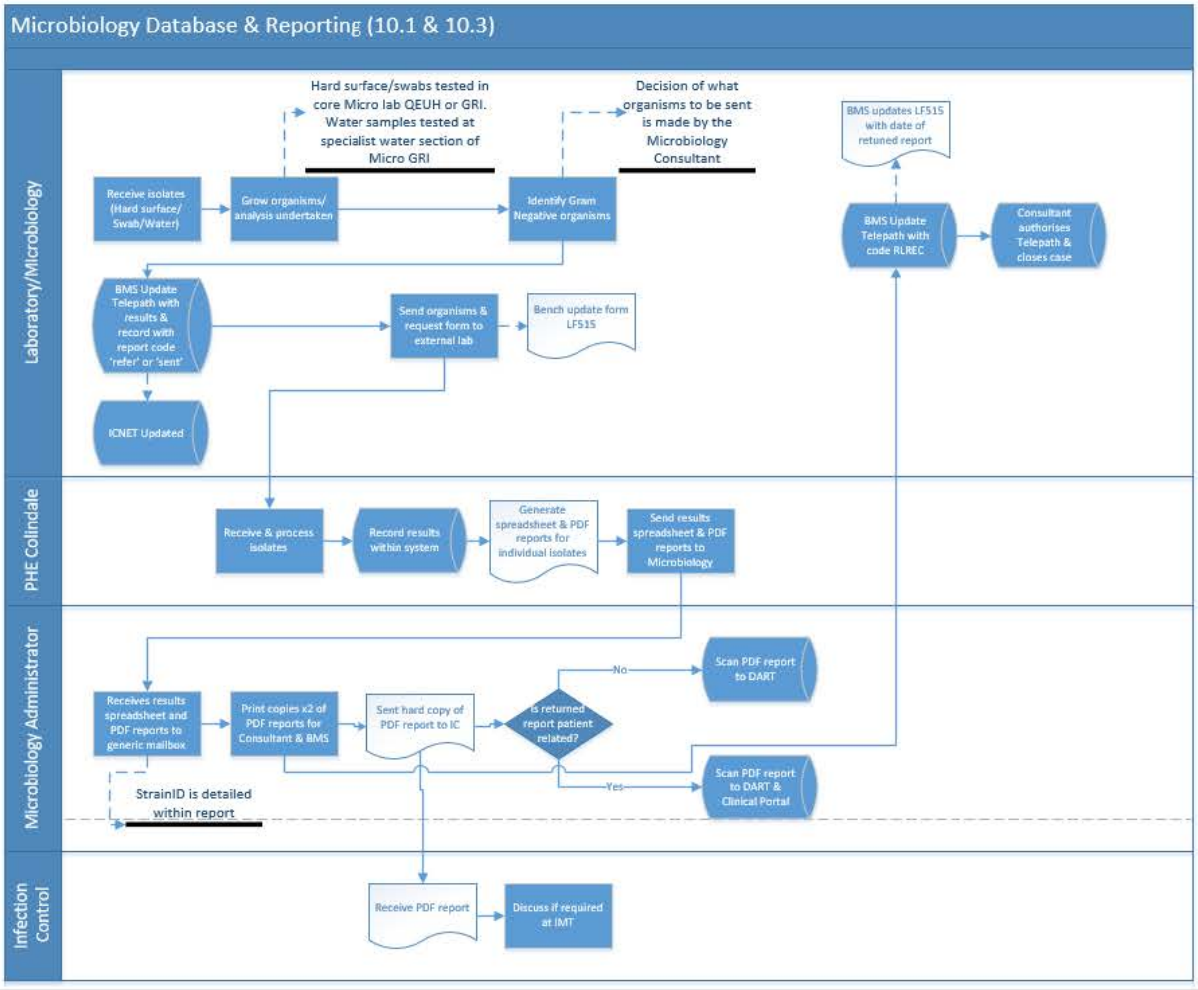
Patient Isolate: A copy of the laboratory report is scanned and uploaded into DART accompanied with the relevant Telepath (LIMS) lab number and Indexed within the Clinical Information Summary of the patients Clinical Portal.

Non Patient Isolate: A copy of the laboratory report is scanned and uploaded into DART accompanied with the relevant Telepath (LIMS) lab number.

In addition to the two pathways listed above the microbiology administration staff print of two copies of the laboratory report and pass to the Consultant Microbiologist and the Biomedical Scientist for review. It is then the BMS responsibility to update Telepath (LIMS) with the code RLPORT, stating that the reference lab report has been received and is visible on Clinical Portal and/or DART. The BMS then authorises the report as 'Final' which in turn closes the record within Telepath (LIMS). The LF515 document is then signed, dated and marked as complete to finalise the process, these records would now not appear on the subsequent 'Daily Outstanding Work Check'. A copy of all returned laboratory reports are then forwarded as hard copies to Infection Control.

Due to the complex nature of the PDF laboratory reports that are returned from PHE Colindale, results are not currently transcribed into Telepath (LIMS) and therefore are only visible within the DART system and Clinical Portal if patient isolate. This leaves no opportunity to search and report on identify clusters and outbreaks.

Following meetings between Microbiology, eHealth and PHE Colindale is has been discovered that the electronic submission of reports received from PHE Colindale is not possible. Therefore eHealth and Microbiology have explored the option to manually add the returned StrainID into the newly developed Microbiology Reporting System (MRS).


Microbiology Database & Reporting (10.1 & 10.3)
Laboratory/Microbiology
PHE Colindale
Microbiology Administrator
Infection Control
Hard surface/swabs tested in core Micro lab QEUH or GRI. Water samples tested at specialist water section of Micro GRI
Decision of what organisms to be sent is made by the Microbiology Consultant
Receive isolates (Hard surface/ Swab/Water)
Grow organisms/ analysis undertaken
Identify Gram Negative organisms
BMS updates LF515 with date of retuned report
BMS Update Telepath with code RLREC
Consultant authorises Telepath & closes case
BMS Update Telepath with results & record with report code 'refer' or 'sent'
Send organisms & request form to external lab
Bench update form LF515
ICNET Updated
Receive & process isolates
Record results within system
Generate spreadsheet & PDF reports for individual isolates
Send results spreadsheet & PDF reports to Microbiology
Receives results spreadsheet and PDF reports to generic mailbox
Print copies x2 of PDF reports for Consultant & BMS
Sent hard copy of PDF report to IC
Is returned report patient related?
No
Scan PDF report to DART
Yes
Scan PDF report to DART & Clinical Portal
StrainID is detailed within report
Receive PDF report
Discuss if required at IMT

Actions Taken Forward

Capturing the precise location and date of work requests in FM First (Action 3.1)

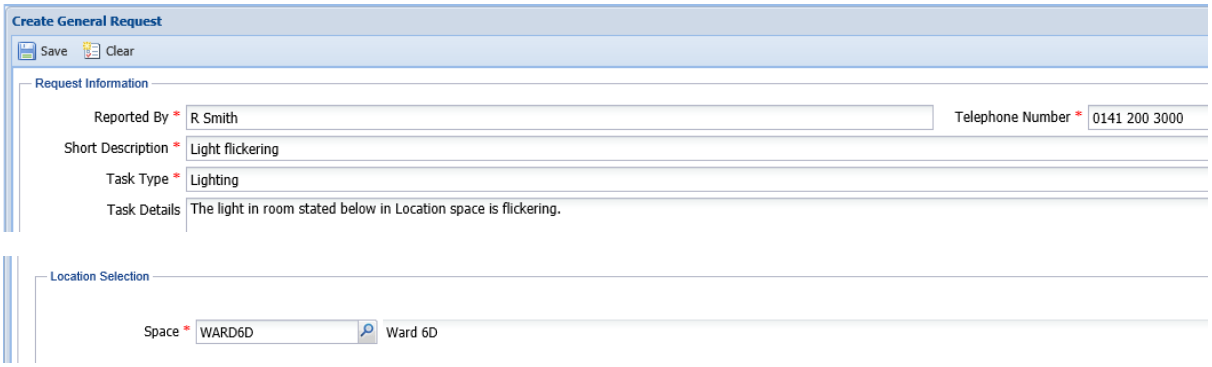
As part of the Case Note Review it was highlighted that within NHGGC's Estates Management system FM First, there was a difficulty in identifying the precise location of raised work requests.

In an attempt to resolve this, discussions were held between the FM First software developer/contractor and NHSGGC Estates Management. Following discussions it has been agreed that an additional 'drop down' box would be added to FM First in order to capture the precise location.

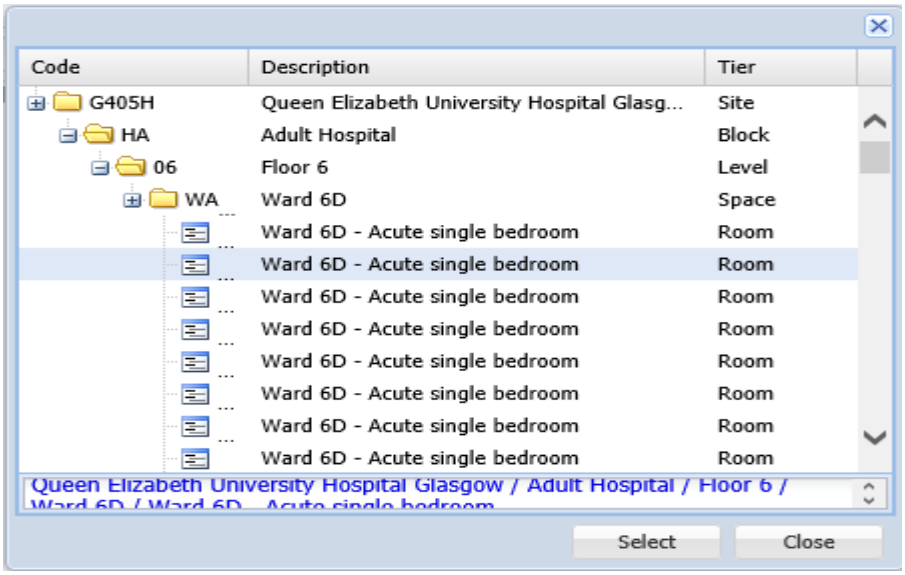
Upon raising a new reactive work request within the Estates Management system FM First, staff must now complete mandatory location fields in order for the work request to save.

Mandatory fields:

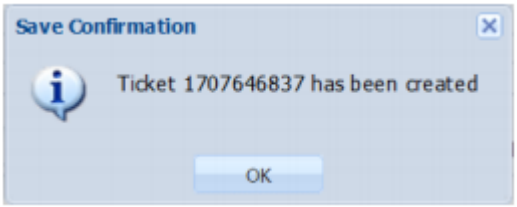
- The name of the person raising the work request.
- Contactable telephone number.
- Short Description.
- Task type (This is a pre-fixed drop down box).
- Location space.



Once selecting the Location Space, the user is prompted to select the precise location for maintenance activity.



Selecting this option ensures that the precise location of required maintenance work is capture. Once entered and saved a unique ticket number for the work request is generated.



Currently, the mandatory field and drop down options for selecting the precise location is available at the QEUH & RHC. NHSGGC Estates Management are currently undergoing a large project to update this section for all acute sites across GGC. This involves ensuring that all rooms and locations are allocated a unique location identifier. It is estimated at this time that completion of project will be April 2022.

The following indicative timeline has been provided by Estates Management:

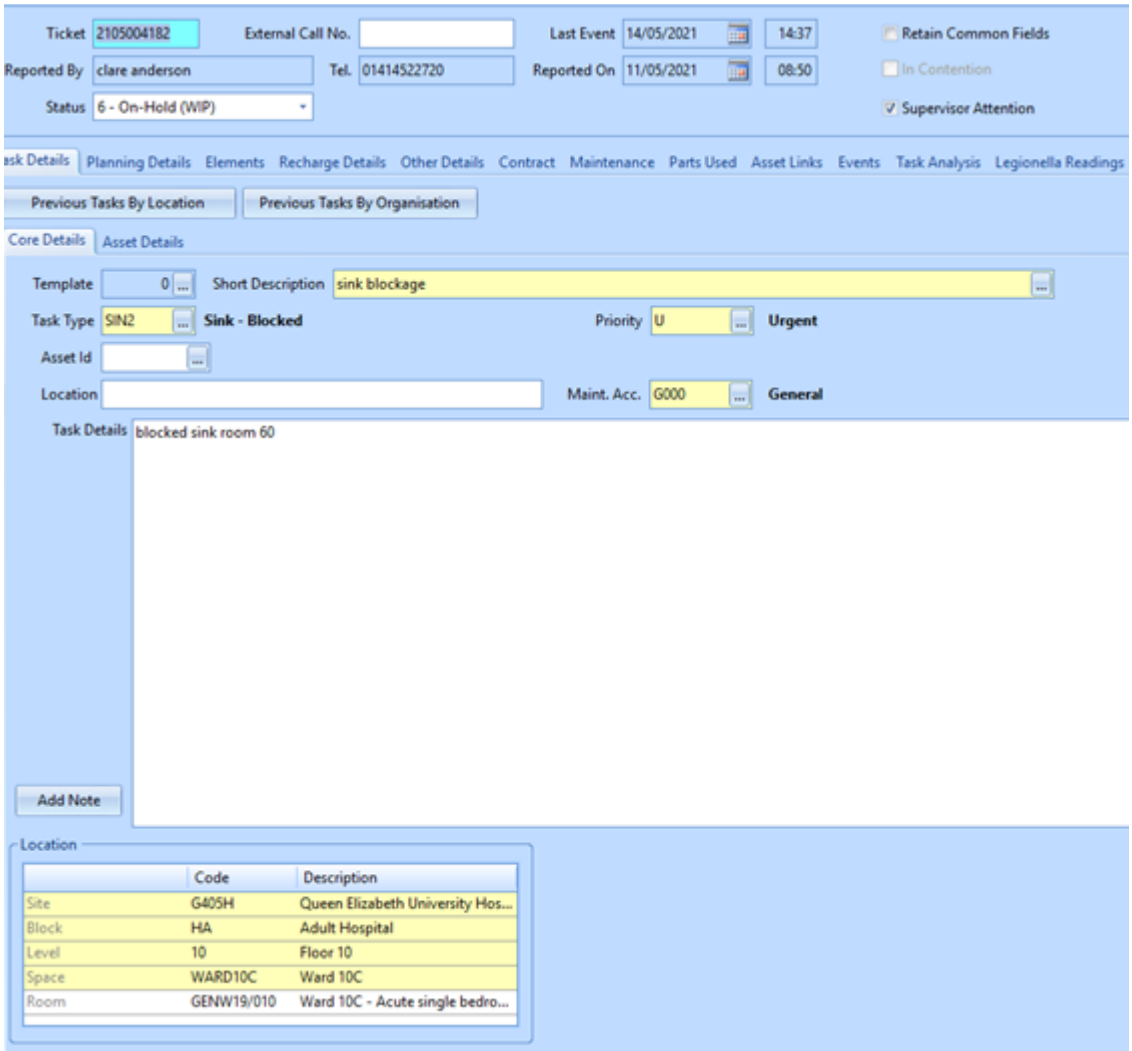
Site	Start Date	Completion Date
QEUH A&C		Complete
QEUH Retained Estate	28 June 2021	30 July 2021
RAH Campus	2 August 2021	27 August 2021
IRH Campus	30 August 2021	24 September 2021
Gartnavel Campus	27 September 2021	22 October 2021
VoL Campus	25 October 2021	12 November 2021
GRI Campus	15 November 2021	10 December 2021
CDU & TSSU Greenock	13 December 2021	15 January 2022
GDH	18 January 2022	5 February 2022

Stobhill Campus	8 February 2022	26 February 2022
Leverndale Campus	1 March 2022	18 March 2022
Dykebar Campus	21 March 2022	31 March 2022
WoGACH	1 April 2022	22 April 2022
Hillington Laundry & CC	25 April 2022	29 April 2022

The project plan will be monitored and discussed at both the FM First User Group and FM First Steering Group moving forward. Any delay to the project will be challenged by these groups as it is imperative that the indicative dates are met in full.

The introduction of the mandatory precise location field will allow Estates Management to better search, report and identify raised work requests and their precise location.

Creating a new work request will set the Current Status as 'Created'. It is then the responsibility of the Estates Management supervisor to review the 'Created' list and allocate accordingly. The visual aid below details the information Estates Management see when a work request has been created with the included mandatory precise location details option.

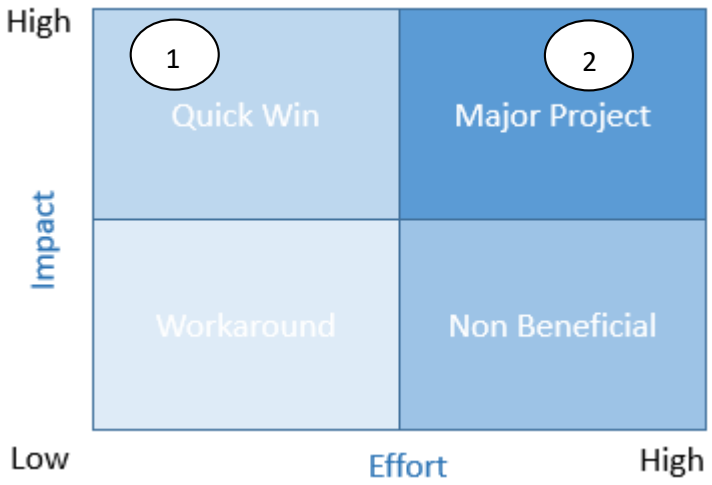


Once the work request has been allocated it is then the responsibility of the allocated person to update the status and detail accordingly.

Recommendation/s Scoring Matrix

1: Capture of precise location of work requests in FM First – QEUH & RHC.

2: Capture of precise location & date of work requests in FM First board wide



Timescales for completion of Actions Taken Forward:

1: Capture of precise location & date of work requests in FM First at the QEUH: June 2021

2: Capture of precise location & date of work requests in FM First board wide: April 2022

Capturing the precise location and date of work requests within the Request for Analysis form (Action 3.3)

The review has identified that the addition of specific location fields to the water sampling Request for Analysis form issued by DMA to microbiology would be of benefit. Additional fields requested are as follows:

- Building.
- Ward/Department.
- Sample Point.

Obtaining and detailing this information within the water sampling Request for Analysis form will allow microbiology staff to add more detailed information in to the Telepath (LIMS) system at the time of taking receipt of samples (PID) and conducting analysis. This would mean that for list gathers going forward there will been more sampling information in the one system.

Detailed below is a visual of the water sampling request form with the additional fields' highlighted yellow:

Tel:	01698 536790	Building:		Received by:	
Email	office@dmacanyon.co.uk	Ward/Department:		Date Received:	
Web / Address:	www.dmacanyon.co.uk	Sampled By:		Date Commenced:	
DMA Admin Contact:	Susanne Crabtree	Date:		Sample Code & Initial:	
Analysis Label:	**Potable + Pseudo**	**Tests Required:**	**TVC/Coli/EC/PS**		**DMA Note:** Use separate sheet for each Ward/Department samples being taken from.

	DMA Use														Lab Use
DMA & Laboratory Numbers	**Resample Y/N**	**Sample Time** HH:MM	**Sample Point (Room) (Lab use Site)**	**Unique Door ID**	**Outlet Type** (Tap Shower CWST)	**Hot Cold Mixed TMV**	**1st or Post Flush**	**Thro' Sample** Y/N	**Temp Sample** °C	**ClO2 Sample** ppm	**TVC 37°C** cfu/ml	**TVC 22°C** cfu/ml	**Coliform** cfu/100ml	**E.Coli** cfu/100ml	**Pseudomonas** cfu/ml	**Species Info**
DMA No.															
Lab No.															
			Page 1												Page 4

The DMA dataset within the spreadsheet contains all the outcomes of both scheduled inspections and ad-hoc requests. This is a more complete dataset and would allow the necessary information to be extracted and searched upon following the introduction of recommendations within the Database & Reporting section of this paper.

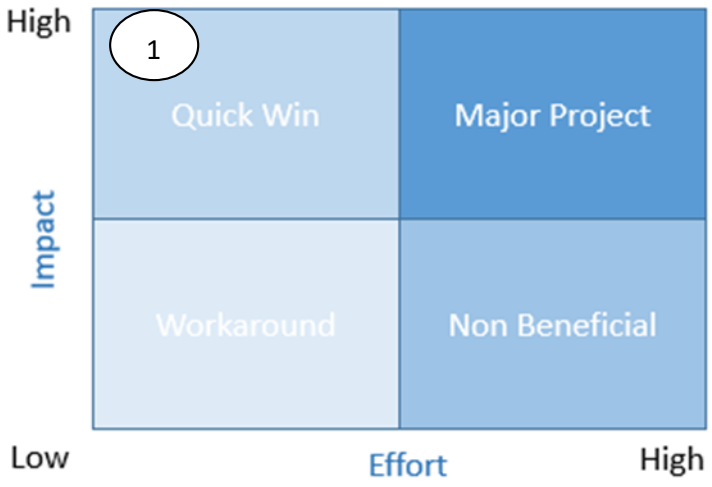
Following the review with NHSGGC Microbiology staff and DMA, the inclusion of the above mentioned additional fields were added to the water sampling Request for Analysis form and went live on the 1st June 2021.

Please see Appendix A for enhanced water sampling request form.

To support the input into Telepath (LIMS) of additional fields added to the water sampling request form, microbiology have generated a new standard operating procedure document detailing clear instruction for laboratory staff. Please see Appendix B.

Recommendation/s Scoring Matrix

1: Water sampling paper request form enhancements.



Timescales for completion of recommendations:

1: Water sampling Request for Analysis form enhancements: 1st June 2021

Ad hoc Water Sampling Requests (Action 3.3)

Capturing ad hoc water sampling request within FM First

Through investigation and discussion between eHealth, Infection Control, Estates Management and Microbiology it became evident that the requesting of ad hoc water sampling is heavily reliant on email communication between Infection Control and Estates Management and there was no centralised database utilised for recording such requests.

eHealth and Estates Management have agreed to continue logging ad hoc water sampling requests via FM First as this allows for a clear and consistent approach. Infection Control, Microbiology and Estates and Facilities would be able to monitor and audit requests made via the IMT.

The agreed approach will have minimal impact on IPCT and Estates Management.

Initial query or request for investigation of a possible water outbreak will continue to be discussed at the IMT. Following on from the IMT, the Infection Control Team complete the following sections of document LF592: Environmental Request – water:

- Date of Issue.
- Authorising Infection Control Consultant.
- Expected Sampling Date.
- Frequency of Testing.
- Estimated Numbers.
- Location/s: Site/Ward & Contact Details.

The document is then shared with the Primary Laboratory Contact, Infection Control Consultant and the Senior Technical Manager for discussion and review. Once agreement has been reached for the required sampling to be undertaken it is then the responsibility of the Infection Control Team to email Estates Management and request that DMA carry out the necessary sampling detailed on the attached LF592 document.

Estates Management will generate a work request and issue the Unique Ticket Number to IPCT

Estates Management will create a new work request within FM First detailing the information from the LF592 document. Once created FM First will generate a unique ticket number.

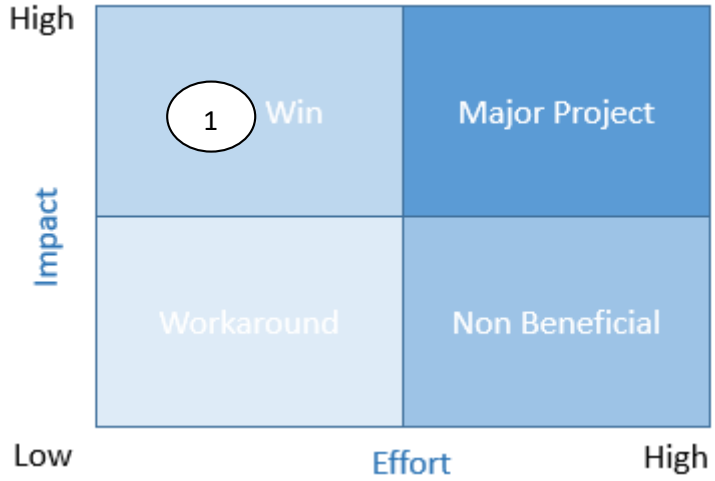
Estates Management then proceed to forward the requested ad hoc water sampling request/s email with accompanying document/s and unique ticket number/s to third party specialties company DMA, copying in Microbiology and Infection Control.

The sample/s request is then issued to a DMA specialist who attends the required site/ward location and captures the requested samples completing the relevant sections of the Request for Analysis form.

As stated above, the ability to view the status of an ad hoc water sampling request via its unique ticket number within FM First will provide the IPCT, Microbiology and Estates and Facilities team with greater transparency.

Recommendation/s Scoring Matrix

1: Capturing ad hoc water sampling request within FM First.



Timescales for completion of recommendations:

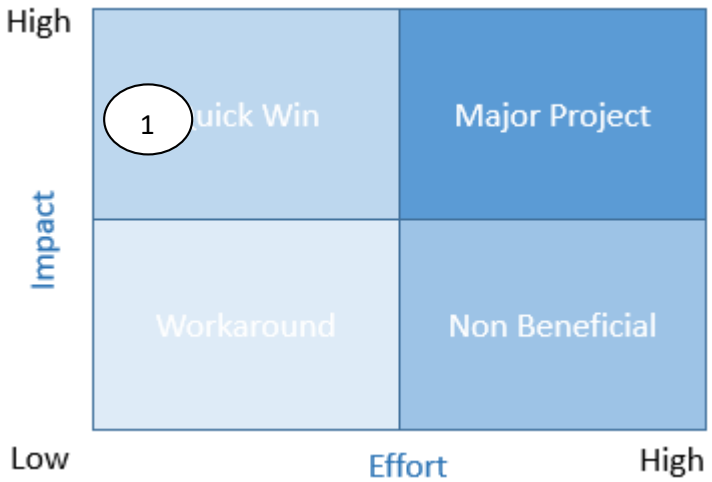
1: Capturing ad hoc water sampling request within FM First: 28th June 2021

IPCT – Access to FM First (Action 3.3)

Following on from the previous point, it is agreed that an Estates Management representative will be present at all IMT meetings. This will allow for the ability to check FM First for status updates and subsequent raised work request detail as and when is required.

Recommendation/s Scoring Matrix

1: Capturing ad hoc water sampling request within FM First.



Timescales for completion of recommendations:

1: IPCT – Access to FM First: 30th June 2021

Microbiology Reporting and Database (Action 10.1 & 10.3)

The Case Note Review Overview Report showed that a number of key datasets exist in the various systems that support the whole process. Collating the Key Datasets together into a single searchable database will greatly enhance the ability to cross reference data items and provide the capability to report on the whole system. The Key Datasets and Database proposal are detailed below:

Key Datasets

Dataset 1 – Potable Water

The Telepath (LIMS) LIMS system is key to joining all the various datasets utilised across the system. Currently there is no database field container within the Telepath (LIMS) LIMS system to store the StrainID that is returned from the 3rd party PHE laboratory, however work is currently being undertaken by the department to add this field to the Telepath (LIMS) LIMS system. Once complete, a standard operating procedure will be in place to have the StrainID manually added to the result providing a capability for colleagues in Infection Control to look back at previous occurrences of particular strains. A service would be set up to extract the dataset on an agreed scheduled basis with the possibility to explore a real time feed. The dataset will then be copied to the database structure. In the meantime eHealth have provided a method to allow separate capture of the StrainID so that it can be imported into the new database system and matched to all the relevant datasets.

Potable Water Dataset

Field Name	Type	Description
Lab Number	String (PK)	15 digit cypher which includes commas, these are truncated in the DMA results (M,21.1111111.Y)
Date Received	Date/Time	Date and time that the sample was received in the lab
Date Collected	Date/Time	The date the specimen was collected
Date Authorised	Date/Time	Date that the result was authorised
Specimen Type	String	e.g. Mid-Stream Urine
Site of Specimen	String	e.g. Room 88, Shower Head
Organism	String	Description of the organism found in the result (Klebsiella pneumoniae)
Strain/Profile	String	Comma separated string (e.g. VNTR 1,3,5,IS,1,2,2,4,3,2,4) manually entered
CHI	String	10 Digit CHI number
Forename	String	Forename of a Patient
Surname	String	Patient Surname

Sex	String	
DOB	Date/Time	Date of Birth
Age	Integer	Calculated from datediff (now(),dob)
Hospital	String	Hospital Location
Ward	String	Hospital Ward
TVC @37'c/48H/1ml	Float	
TVC @22'c/72H/1ml	Float	
Coliform/18H/100ml	Float	
E.Coli/18H/100ml	Float	
Pseudomonas sp/48H/100ml	Float	
Ps Aeruginosa/48H/100ml	Float	
Atypical mycobacteria	String	Detected / Not Detected
Atyp.myco CFU@35'C/42D/100ml	String	Detected / Not Detected
SAB@22	Float	
SAB@30	Float	

Joining the dataset to the DMA data will potentially negate the need for manual transcription of the results into an Excel spreadsheet

Dataset 2 – DMA (joined to dataset 1 for Potable Water)

DMA issue a spreadsheet that is updated cumulatively over a six month period, when new rows are put into the spreadsheet an email is sent to let the service know updates are ready to be viewed. eHealth have obtained a copy of the updated spreadsheet and have imported into the new Database. This will be an ongoing process to include other third party water sampling companies such as Chemtech Consultancy that are currently utilised by the IRH and RAH hospitals.

DMA Dataset:

Field Name	Type	Description
DMA Sample No	String (PK)	e.g. KID 4964
Re Sample	Bool	Yes or No (Y/N)
Sample Date	Date/Time	
Hospital / Site	String	e.g. QUEH

Building	String	e.g. A&C
Department/Floor	String	e.g. 1st Floor HDU 3
Unique Outlet ID	String	e.g. CCW-120 maps to codes in FM First
Sample Point	String	e.g. Clean Utility Sink
Outlet Type	String	e.g. Tap
Hot / Cold / Mixed	String	Hot / Cold / Mixed
Temp	Float	e.g. 18.7 'c
Analysis required	String	e.g. Legionella, Potable, Pseudomonas
Sampled By	String	Initials
Lab Number	String (FK)	Foreign Key to the results, however there is a

Dataset 3 – Clinical

Patient samples taken on the ward are imported into separate Clinical Table within the database called Clinical. Cross reference to StrainID in the other supporting tables can be made easily

Clinical Dataset:

Field Name	Type	Description
CHI	String	Foreign Key mapping to the
Name	String	
Unit Location Group	String	
Location	String	
Date Collected	Date/Time	
Date Recorded	Date/Time	
Date Authorised	Date/Time	
INV	String	
Specimen Type	String	
Organisms	String	
No of Organisms	Integer	
Comment Code	String	

Comment	String	
Where Sent	String	
Date Sent	Date/Time	
Isolate	String	
ORG	String	
Specimen	String	
StainID	Integer	Foreign Key to StringID table

Dataset 4 – Environmental

Swabs taken on wards from items such as computer keyboards, lights, trolleys etc are also imported into their own data table and linked on StrainID and Lab Reference Number, the dataset is as follows:

Field Name	Type	Description
CHI	String	This is A dummy CHI in the format of ZM22334455
Lab Reference No	String	
Unit Location Group	String	
Name	String	
Site of Specimen	String	
SENDRN	String	
Date Collected	Date/Time	
Specimen Type	String	
Place of Sampling	String	
Search Identifiers	String	
Organisms	String	
COMCDE	String	
COMCDE Values	String	
ORG	String	
Specimen	String	

Growth	String	
StrainID	Integer	

Dataset 5 – SSTS – Future Development

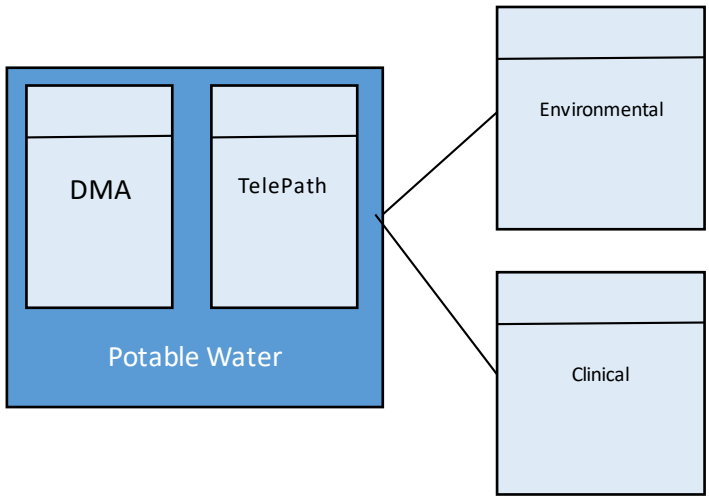
The SSTS Dataset could potentially identify any members of staff rostered between specific time periods and specific locations should an organism of concern be identified as being present on a ward location. It's hoped that this dataset could be gathered on request instead of potentially storing lots of information unnecessarily.

SSTS Dataset:

Field Name	Type	Description
SSTS	String	
Forename	String	
Surname	String	
DOB	Date/Time	
Hospital	String	Foreign Key mapping to the DMA dataset
Ward	String	Foreign Key mapping to the DMA dataset

Data Relationship

The table in the structure described below can all be linked and reported on using the Lab Reference Number and/or StrainID:



New Database System – Microbiology Reporting System (MRS)

A new database system has been developed which has the capability to import the following datasets:

- Water based sample data from Telepath (LIMS) and DMA
- Environmental based samples from Telepath (LIMS)
- Clinical samples from Telepath (LIMS)
- Reports from third party systems

A field container has also been included for the purpose of the StrainID. A form has been developed for the Labs staff to enter this StrainID data so that it can be imported into the new system whilst the Telepath LIMS system is further developed to hold this data.

Reporting

A new SQL Server database system has been developed that can import data from; Telepath, 3rd party laboratories and 3rd party sample collation systems. The datasets have been split into:

- Potable Water reports
- Clinical Samples
- Environmental Samples

Should a sample be sent away to a 3rd party laboratory any Strain Identities found will be imported into the database and made searchable.

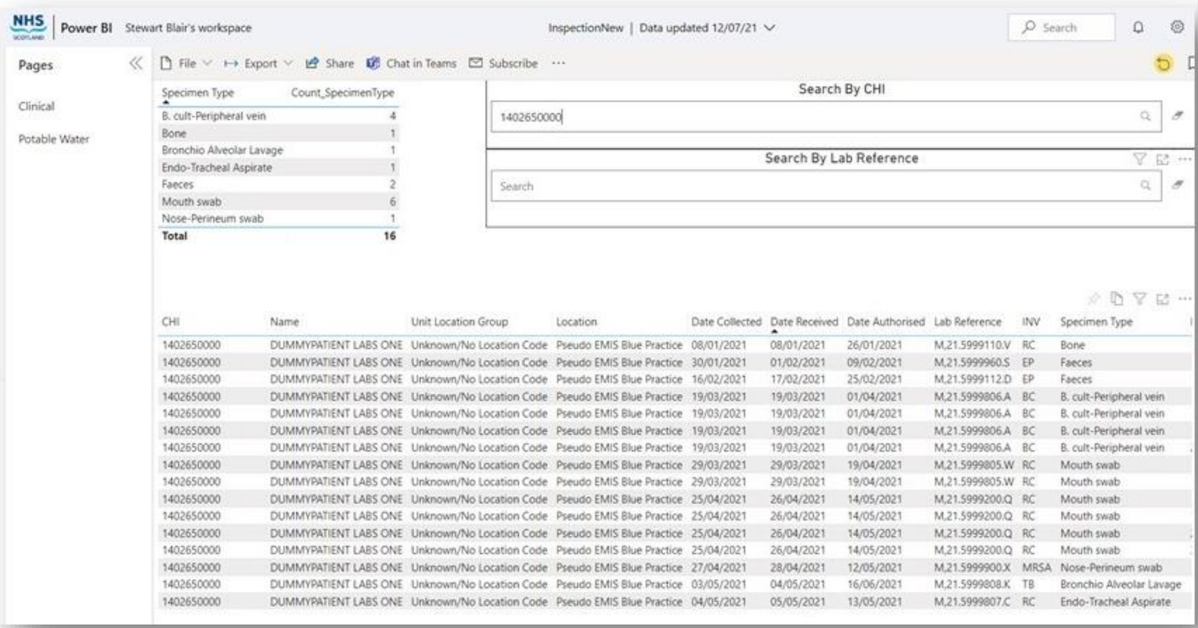
Reporting can be provided by Microsoft PowerBI, which gives the ability to provide searches on key fields and create cohorts and data extraction facilities.

For any given CHI number, location, laboratory number and StrainID a data report can be created to give details of patients, staff, results, and hospital site location for any given period of time.

Database overview sessions have been scheduled with representative from Microbiology, Infection Control, Estates Management and eHealth with a view to continue development.

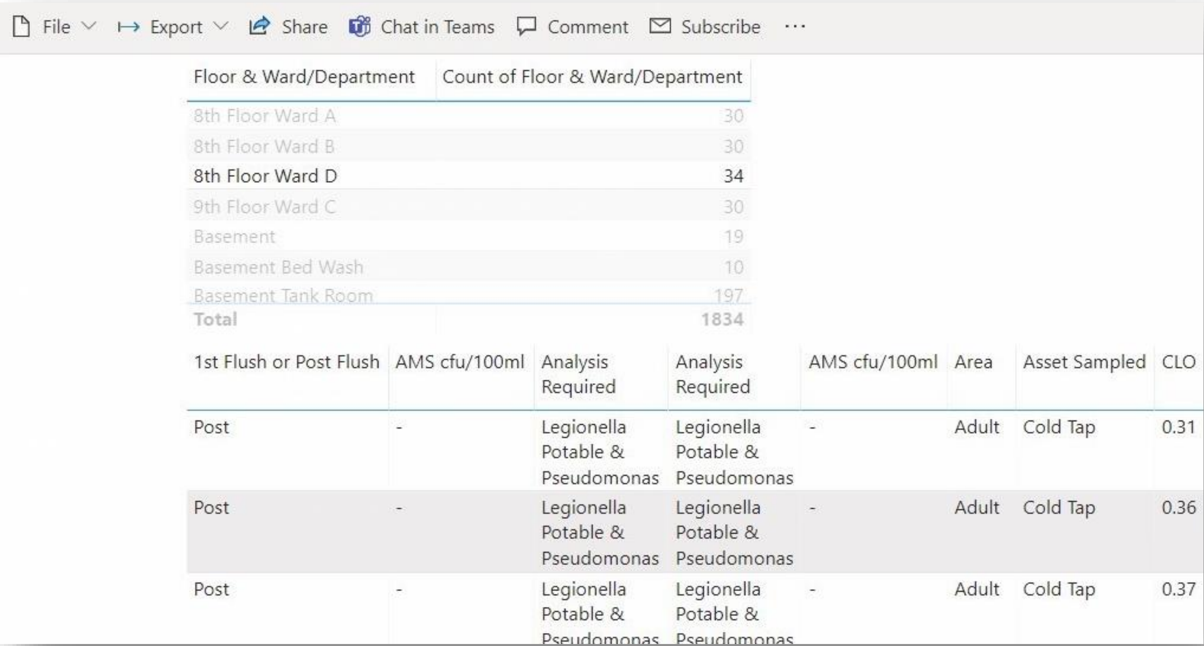
PowerBI Dashboard

Development is being progressed on a PowerBI dashboard which will continue to be refined through the month of July 2021. Please see an example of current workings below:



Specimen Type	Count_SpecimenType
B. cult-Peripheral vein	4
Bone	1
Bronchio Alveolar Lavage	1
Endo-Tracheal Aspirate	1
Faeces	2
Mouth swab	6
Nose-Perineum swab	1
Total	**16**

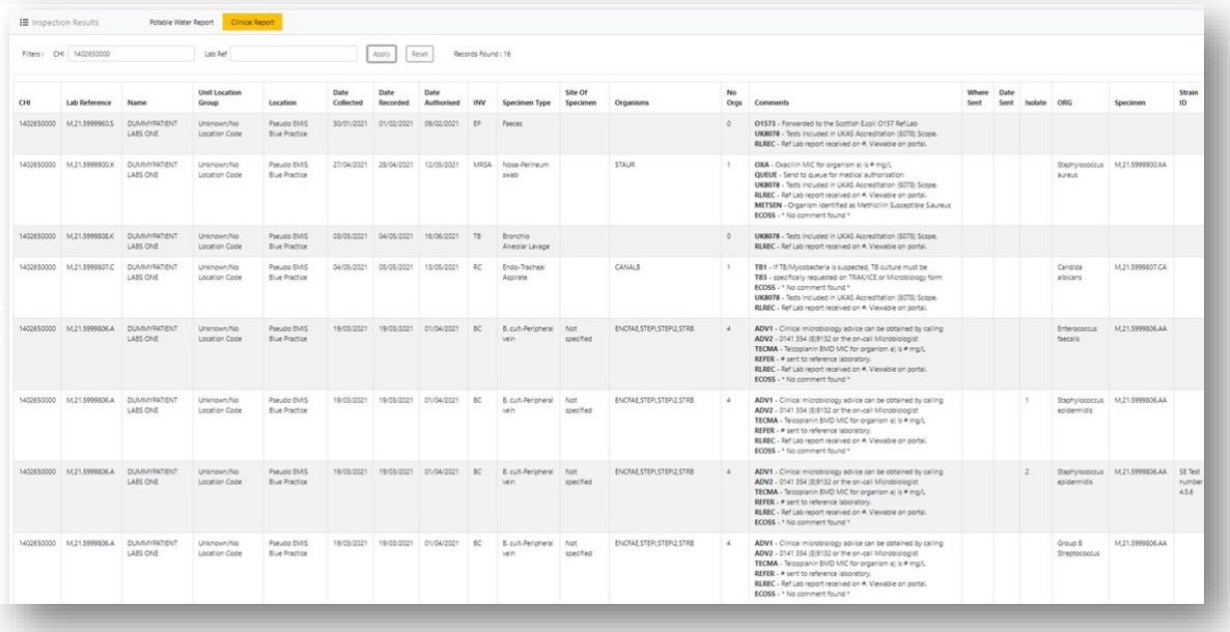
CHI	Name	Unit Location Group	Location	Date Collected	Date Received	Date Authorised	Lab Reference	INV	Specimen Type
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	08/01/2021	08/01/2021	26/01/2021	M,21.5999110.V	RC	Bone
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	30/01/2021	01/02/2021	09/02/2021	M,21.5999960.S	EP	Faeces
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	16/02/2021	17/02/2021	25/02/2021	M,21.5999112.D	EP	Faeces
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	19/03/2021	19/03/2021	01/04/2021	M,21.5999806.A	BC	B. cult-Peripheral vein
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	19/03/2021	19/03/2021	01/04/2021	M,21.5999806.A	BC	B. cult-Peripheral vein
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	19/03/2021	19/03/2021	01/04/2021	M,21.5999806.A	BC	B. cult-Peripheral vein
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	19/03/2021	19/03/2021	01/04/2021	M,21.5999806.A	BC	B. cult-Peripheral vein
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	29/03/2021	29/03/2021	19/04/2021	M,21.5999805.W	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	29/03/2021	29/03/2021	19/04/2021	M,21.5999805.W	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	25/04/2021	26/04/2021	14/05/2021	M,21.5999200.Q	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	25/04/2021	26/04/2021	14/05/2021	M,21.5999200.Q	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	25/04/2021	26/04/2021	14/05/2021	M,21.5999200.Q	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	25/04/2021	26/04/2021	14/05/2021	M,21.5999200.Q	RC	Mouth swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	27/04/2021	28/04/2021	12/05/2021	M,21.5999900.X	MRSA	Nose-Perineum swab
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	03/05/2021	04/05/2021	16/06/2021	M,21.5999808.K	TB	Bronchio Alveolar Lavage
1402650000	DUMMYPATIENT LABS ONE	Unknown/No Location Code	Pseudo EMIS Blue Practice	04/05/2021	05/05/2021	13/05/2021	M,21.5999807.C	RC	Endo-Tracheal Aspirate



Floor & Ward/Department	Count of Floor & Ward/Department
8th Floor Ward A	30
8th Floor Ward B	30
8th Floor Ward D	34
9th Floor Ward C	30
Basement	19
Basement Bed Wash	10
Basement Tank Room	197
Total	1834

1st Flush or Post Flush	AMS cfu/100ml	Analysis Required	Analysis Required	AMS cfu/100ml	Area	Asset Sampled	CLO
Post	-	Legionella Potable & Pseudomonas	Legionella Potable & Pseudomonas	-	Adult	Cold Tap	0.31
Post	-	Legionella Potable & Pseudomonas	Legionella Potable & Pseudomonas	-	Adult	Cold Tap	0.36
Post	-	Legionella Potable & Pseudomonas	Legionella Potable & Pseudomonas	-	Adult	Cold Tap	0.37

In addition custom applications can also be provided via a web based .NET applications



Data can also be imported and joined to existing datasets in MicroStratergy such as TrakCare admission and discharge datasets.

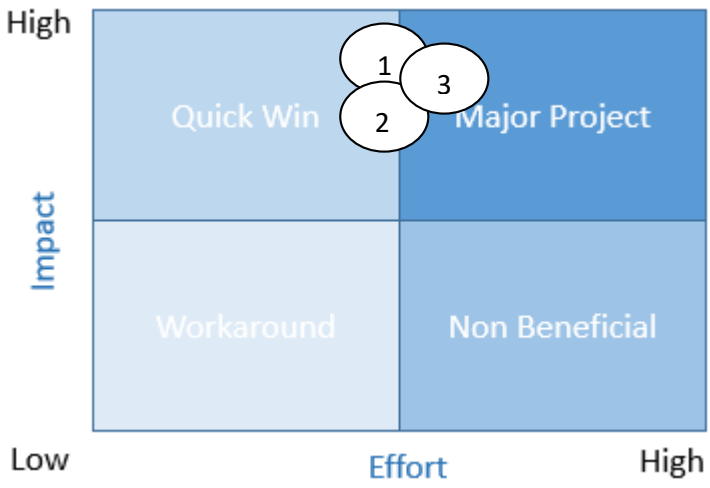
A Microbiology Reporting System and Database overview session was held on the 19th July 2021 with key stakeholders in attendance from Estates Management, Infection Control and Microbiology. The new system was greatly received with ideas being discussed regarding further and future developments. These have been noted by the Development and Informatics team and will continue to be worked on.

Recommendation/s Scoring Matrix

1. Creation of a SQL Database to capture the key datasets – Microbiology Reporting System (MRS)

2. Create Data import jobs and complete a data mapping exercise on locations.

3. Provide a user friendly PowerBI dashboard to report on the joined-up datasets.



Timescales for completion of recommendations:

1. Work on the SQL Database began week commencing 7th June 2021 with a completion date of 31st June 2021.

2. Data mapping work commenced in July 2021. Completion of this recommendation is scheduled for the end of August 2021.

3. PowerBI Dashboards have a scheduled Go Live date of the end of August 2021.

Conclusion

NHSGGC has identified the further digitisation and enhancement of Microbiology, Infection Control and Estates Management sampling processes and work streams. The Case Note Review has increased the urgency to better support the services within project scope. Increasing the digitisation of processes offers a range of potential benefits including safety, efficiency and improving the patients' experience of care and safety.

Sampling request processes are complex with multiple teams of professionals interacting within and between care settings. Elements of the sampling life cycle are still paper-based, and information relating to patients and samples is fragmented across multiple partially overlapping electronic systems.

NHSGGC has identified a number of projects that are and could be taken forward in the short, medium and long term to progress enhancing the end-to-end process of sampling. Some projects identified could be progressed within NHSGGC, while other aspects will require collaboration on a regional or national basis with other key stakeholders.

This report describes how NHSGGC currently work, identifies a number of potential improvements we are taking forward now and in the future, and assesses these options from the perspective of impact and effort.

Glossary

Microbiology Screening Bench	The Microbiology Screening Bench defines the section of the laboratory that processes and reports all 'screening type' samples such as MRSA, VRE, CRO & Environmental Swabs. The samples received at this section are generally examined for a limited number of organisms and are for a particular purpose.
Gram Negative Organisms	Gram negative bacteria is bacteria that does not retain the crystal violet stain used in the gram staining method. Gram-negative bacteria are more resistant to antibiotics and can cause serious infections both in the blood stream and other sites of the human body. Gram straining is a method used to distinguish one bacteria from another, according to the chemical and physical properties of their cell walls.
Cluster	Refers to suspected linked isolates cases.
Hard Surface Sample	Hard surface sample refers to samples taken for microbiological examination from environmental surfaces in the hospital environment. Examples would include samples taken from equipment, floors, chilled beams, sinks, and drains.
Water Sample	Water samples can be taken from a wide variety of sources in the water supply and delivery system for the hospital - for example: taps; showers; and tanks.
Planned Preventative Maintenance	Planned Preventative Maintenance is work that is routinely carried out on a weekly, monthly and quarterly basis spread across multiple acute locations.

Table of Abbreviations

BMS	Biomedical Scientist
CAN	Active Clinical Notes
DART	Document Management System
ED	Emergency Department
GRI	Glasgow Royal Infirmary
ICD	Infection Control Doctor
ICN	Infection Control Nurse
IMT	Incident Management Team
IPC	Infection Prevention Control
IPCT	Infection Prevention Control Team
IRH	Inverclyde Royal Hospital
LAP	Lead Authorised Person
LI's	Laboratory Instructions
LIMS	Laboratory Information Management System
LP's	Laboratory Procedures
NHSGGC	National Health Service Greater Glasgow and Clyde
PDA	Personal Digital Assistant
PHE	Public Health England
PID	Person Identifiable Data
PIN	Prior Information Notice
PNP	Patient Note Pad
PPM	Planned Preventative Maintenance
QEUH	Queen Elizabeth University Hospital
RAH	Royal Alexandra Hospital
RHC	Royal Hospital for Children
SOP	Standard Operating Procedures
SSTS	Scottish Standard Time System

References

1. NHSGGC. Queen Elizabeth University Hospital and Royal Hospital for Children: Case Note Review Action Plan
2. NHSGGC. Queen Elizabeth University Hospital and Royal Hospital for Children: Case Note Review Report
3. DMA. Request for Analysis form
4. DMA. Descriptor Sheet
5. Chemtech Consultancy. Certificate of Analysis
6. Express Micro Science. Certificate of Analysis
7. NHSGGC. Document LF591 – Environmental Request – Non Water
8. NHSGGC. Document LI720 – Environmental Monitoring PID
9. NHSGGC. Document LF592 – Environmental Request – Air/Water
10. NHSGGC. Document SOP539 – Environmental Monitoring
11. NHSGGC. Document SOP538 – Water Sampling
12. Public Health England. Document H2 – Microbiology Request Form, Healthcare Pathogens
13. NHSGGC. Document LF515 – Samples Sent to Reference Laboratories for Confirmation
14. NHSGGC. Document LF524 – WINP WOUT

Appendix A

Water Sampling Request form

Tel:	01698 536790	Building:		Received by:	
Email	office@dmacanyon.co.uk	Ward/Department:		Date Received:	
Web / Address:	www.dmacanyon.co.uk	Sampled By:		Date Commenced:	
DMA Admin Contact:	Susanne Crabtree	Date:		Sample Code & Initial:	
Analysis Label:	**GNB (Target- Only)**	**Tests Required:**	**Target GNB (Identify):**	**DMA Note:** Use separate sheet for each Ward/Department samples being taken from.	

DMA & Laboratory Numbers	**DMA Use**										**Lab Use**		
	Resample Y/N	**Sample Time** HH:MM	**Sample Point (Room) (Lab use Site)**	**Unique Door ID**	**Outlet Type** (Tap Shower CWST)	**Hot Cold Mixed TMV**	**Flush 1st or Post**	**Sample Thro' Y/N**	**Sample Temp °C**	**Sample ClO_2 ppm**	**Target GNB** cfu/ml	**Comments**	**Species Info**
DMA No.													
Lab No.													
DMA No.													
Lab No.													
DMA No.													
Lab No.													
DMA No.													
Lab No.													
Reported By:					Date:					Comments:			
DMA No.													

Appendix B

Microbiology water sampling SOP: Laboratory Instruction for the new PID from DMA water samples

Microbiology GG&C	LI725

Environmental PID - POTABLE WATER

1. In the Environmental PID screen, input the **SENDER'S CODE** (e.g. W017) and confirm the ORGANISATION (e.g. DMA)
2. At **DEPARTMENT**, enter the exact ward/department as stated on the request form - **exact locations can be found by searching the list that is available at this field. ALL Locations have the PREFIX LW e.g. LWR1D (Ward 1D PICU, RHC), LWQ6A (Ward 6A, QEUH)**
3. At **LABORATORY REF. NUMBER**, scan in the laboratory specimen number
4. At **DATE/TIME SAMPLED** enter the sampling date and time from the request form
5. At **DATE/TIME RECEIVED**, enter the date and time of sample receipt from the request form
6. At **PLACE OF SAMPLING**, free text the Sample Point (room) information exactly from the request form
7. DO NOT ENTER COLLECTED BY INFORMATION (return through this field)
8. At **SENDERS REF NUMBER**, input the external reference number exactly from request form if provided (e.g. KID 10163)
9. At **SPECIMEN DESCRIPTION**, enter investigation e.g. POTW or WL and at SOURCE enter Water
10. DO NOT ENTER ANY INFORMATION AT THIS FIELD (return through this field)
11. DO NOT ENTER ANY INFORMATION AT THIS FIELD (return through this field)
12. At **DATE PROCESSED**, enter the date testing commenced as stated on the request form

If there is more than one lab number on the request form then type in NRS, ctrl N and this will let you continue to PID. If there is only one lab number then NRQ. Once you have finished PID on all samples, put the label below on the bottom **back corner** of the request form and write your initials in the PID box. Form should be returned to the environmental lab.

PID'd	EG
Entered Results	
Emailed Results	
DARTED	
Filed reports	

Environmental PID	Controlled document	Page 1 of 1

Distributed to:

Date issued	Version	Stakeholder	Issued by
14/07/21	1.0	Denise Brown & Andrew Hardy	Ross Furlong
22/07/21	2.0	Denise Brown, William Edwards & Andrew Hardy	Ross Furlong

NHS Greater Glasgow and Clyde

CLINICAL GUIDELINES

Paediatric Line- Related Sepsis Management Guidelines

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

Version Number:	1
Does this version include changes to clinical advice:	N/A
Date Approved:	19/02/2020
Date of Next Review:	28/02/2023
Lead Author:	Ysobel Gourlay
Approval Group:	Antimicrobial Utilisation Committee

Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Guidelines for the management of paediatric line-related sepsis

Contents

Remit of guideline

This document aims to provide assistance with clinical management of probable or confirmed paediatric line-related sepsis in GG&C, including diagnosis, decisions regarding line salvage if necessary, and use of antimicrobial agents. The prevention of line related infections, and the use of line locks to prevent line infections, is outwith the scope of this guideline.

From the perspective of managing infections as well as to conserve valuable antibiotics and prevent resistance from developing, it is always ideal to remove infected lines or other prosthetic material. Line salvage therapy should only be considered when it is thought to be in the best interests of the patient and the benefits associated with this are thought to outweigh the risks. For example, in patients with multiple previous lines, limited ongoing options for vascular access, or a significant bleeding risk, one might have a lower threshold for considering line salvage. In all cases, the best decisions regarding line removal or salvage are made in the context of the wider multi-disciplinary team which should include a member of the vascular access team. These discussions may be informed by up to date imaging to assess available options for subsequent replacement of central venous access. Risks of line salvage therapy include ongoing or worsening sepsis due to continuing indwelling source of infection, and failure of salvage therapy or recurrence of infection.

It is always good practice to ensure individualised management plans tailored to each patient's unique needs and circumstances. These guidelines are purely to facilitate this process and are not a substitute for senior clinical review and discussion with an infection specialist where appropriate. Local departmental guidelines may already be in use to facilitate management of line related infections; these should be referred to and if in any doubt the most appropriate course of action should be discussed with an infection specialist.

This document does not provide a comprehensive account of the pathophysiology, potential sources or metastatic complications associated with individual organisms. Organisms not covered in this document, or line sepsis with mixed organisms, should also be discussed with an infection specialist.

"Infection specialist" refers to a specialist in clinical microbiology or infectious diseases.

General approach to line infections

It is recognised that each patient and situation is unique. The following initial actions are recommended in patients with possible or probable line related sepsis:

1. Urgent senior clinical review

2. Blood cultures (preferably pre-antibiotic)
    - Paired line and peripheral blood cultures taken with clear labelling of the request forms
    - All lumens of multilumen lines should be sampled separately
    - If peripheral cultures are not obtainable, consideration should be given to arterial cultures
3. Review for other sources of infection – may require further investigations/imaging etc. Even with an underlying primary source of infection, the line may be secondarily infected.
4. Consultation of previous microbiology results – previous resistant or unusual infections may mean that empirical antimicrobials recommended in this guideline or in the therapeutics formulary are inappropriate and alternative regimes may be required. For haemato-oncology and other patients at high-risk of recurrent line infections there may be a condition specific guideline or an existing individualised line infection antibiotic plan which should be followed.
5. If in any doubt, early senior clinical review and discussion with an infection specialist should occur
6. It is generally against best infection specialist advice to salvage an infected line. However, an early decision regarding salvage, along with institution of lock and systemic antibiotic therapy (through the line to be salvaged) should be made. Where a lock cannot be used, systemic antibiotics should be administered through the line.
7. In a patient in whom line sepsis is suspected, and in whom there is a strong reason why line salvage is being considered, line locks and systemic antibiotics down the line should be used. In addition, due to the risk of metastatic septic complications and physiological instability, an early discussion with critical care services is warranted based on level of concern and the species of pathogen isolated. If continued use of the line results in ongoing signs of sepsis then the line should be removed.
8. In well patients, single positive cultures with Coagulase Negative Staphylococci might not be significant and these should be repeated prior to initiation of specific therapy.
9. Repeat line and peripheral cultures with tailoring of treatment (lock and systemic) to microbiology results are essential if line salvage is attempted. Discuss any antibiotic resistant organisms with an infection specialist. The line should ideally be removed if blood cultures remain positive at 72 hours post initiation of salvage therapy.
10. Line removal forms the mainstay of optimal management of these infections. When line sepsis is likely, line tips should be sent for culture and the results chased. If lines are removed but line sepsis is not likely, there is no clinical need to send line tips for culture. In problem situations or when problem organisms are cultured, renewed efforts should be made to remove the line. Certain situations may also prompt a search for other deep sources or metastatic complications (see tables 1 & 2, page 12).

11. When line retention and salvage has been attempted using systemic and lock therapy for the recommended durations, line and peripheral cultures should be obtained 48 hours after stopping all antimicrobial therapy

Line Rest

Line rest and rechallenge a few days later may allow more bacteria to grow within the line and risk severe septic showers on rechallenge. This might reduce the efficacy of salvage therapy. Removal of an infected line is always ideal when managing line infections, but if this is not possible then a decision to salvage should be made early and salvage therapy that includes line locks, instituted as soon as practicable, guided by senior clinical input. Line removal is indicated in patients who are severely unwell, haemodynamically unstable, or with signs of insertion site infection, severe exit site infection or tunnel infection. If line removal is still not possible then discuss the case urgently with senior clinicians, intensive care and infection specialists.

Line tips

Line tips should only be sent to microbiology for culture when there is a clinical suspicion of line sepsis. When these are sent, the results should be chased up by the responsible clinical team.

There is evidence that the following organisms, when cultured from a line tip but not blood cultures, MAY warrant clinical review, further investigations, consideration of a period of intravenous antimicrobial treatment, due to the association with deep sources or metastatic septic complications:

- *Staphylococcus aureus* or *lugdunensis* (typically 5-7 days IV treatment post line-removal)
- Candida species or other fungi/yeasts
- Gram-negative organisms

If in doubt, discuss with an infection specialist.

Lock therapy

Paediatric patients weighing less than 3kg should be discussed with the paediatric infectious diseases team prior to using locks.

Antimicrobial line locks deliver a high concentration of antimicrobial agent direct to the lumen of the line and remain in situ for a period of time before being aspirated and replaced. Line locks should be replaced at least every 24 hours. The line lock should be removed before infusion of the next dose of systemic antibiotic down the line, or, where applicable, other intravenous solution, or medication.

Line locks are an adjunct and not a replacement for systemic antimicrobials and are used as a final attempt at line salvage. For suspected bacterial line related infection, the initial choice of lock therapy suggested is taurolock. Lock therapy can then be guided by culture results and antimicrobial sensitivities. When using antibiotic locks, the choice of lock should ideally be a different class of antimicrobial from the agent used systemically. A number of different antibiotics can be used as a lock. Antibiotic locks not mentioned in this guideline may be considered under the guidance of microbiology and pharmacy based on the organism and antibiotic sensitivities.

For fungal/candidal infection and *Staphylococcus aureus/lugdunensis* infection, line removal is strongly recommended. Line salvage with antibacterial or antifungal locks should not be attempted unless in exceptional circumstances and should be discussed with an infection specialist first.

There may be instances where it is not possible to use antibiotic lock therapy, or locks cannot be instilled or changed with regularity, and these cases should be discussed with an infection specialist.

Lastly, the volume of lock instilled will vary according to the length and type of line: this cannot be defined in a protocol and must be individualised for the patient.

See pull-out Quick Reference Guideline at the end of the document for suggested antibiotic lock formulations and clinical management flowchart.

Blocked Lines

Urokinase administration may be required if a line cannot be aspirated or is considered to be blocked. Further information on troubleshooting and general line-related care can be found at the vascular access device practice website:

http://www.staffnet.ggc.scot.nhs.uk/Acute/Division%20Wide%20Services/Practice%20Development/GGC%20PD%20Calendar/Pages/default.aspx

Replacing lines

If a line has been removed due to line sepsis and another line is required, this should ideally be placed in a different location. Guidewire exchange in insertion site infections is not appropriate as it can lead to bacteraemia and septic emboli.

Ideally, clearance of bacteraemia should be documented prior to replacing a line. This usually means a minimum of 48 hours of negative cultures.

Duration of antibiotic therapy post line-removal

This should be discussed with an infection specialist and may vary according to the organism and clinical circumstances. In patients with suspected deep foci of infection, such as endocarditis, septic thrombophlebitis, bony infection, or another deep or potentially infected nidus of infection or prosthesis, a more prolonged course of antibiotics may be required on discussion with the infection specialist

As a general guide:

- *Staphylococcus aureus* or candida species: Assuming the line has been removed, these organisms require at least 14 days of IV antimicrobial therapy from the date of the first negative blood culture at or after line removal, provided no deep sources or metastatic complications present
- Gram negative bacilli and enterococci: 7-14 days post line removal
- Coagulase-negative staphylococci: 5- 7 days post line removal depending on other comorbid factors, but may not require treatment at all

Further Reading

Up to Date: Intravascular catheter-related infection: treatment. Available from: https://www.uptodate.com/contents/intravascular-catheter-related-infection-treatment?search=line%20sepsis&source=search_result&selectedTitle=1~93&usage_type=default&display_rank=1#H1778902482
[Cited 06/09/2019]

Mermel *et al*. Clinical practice guidelines for the diagnosis and management of intravascular catheter-related infection: 2009 update by the Infectious Diseases Society of America. Clin Infec Dis 2009 49 (1): 1-45

Line Sepsis and Antibiotic Lock Guidance for On Call Pharmacists and Clinicians – Quick Reference Guideline

- In order to avoid errors in preparation, it is suggested that a commercially pre-prepared preparation such as taurolock be used out of hours if required, and antibiotic locks be prepared during working hours after choice of antibiotic lock is agreed by an infection specialist.
- Maximum dwell time should be 24 hours.
- The concentration of lock suggested in different guidelines varies.
- If heparinised solutions are required to lock the line, consult with pharmacy prior to initiating antimicrobial lock therapy.
- The risk of accidentally flushing an antibiotic lock will depend on the volume and concentration flushed, and patient factors. If antimicrobial locks are accidentally flushed into a patient, get a senior clinical review and discuss with pharmacy.

Vancomycin (5mg/mL) and sodium chloride 0.9% antibiotic lock:

Method for preparation and administration

1. Reconstitute 500mg vial of Vancomycin with 10mL water for injection (to give concentration of 50mg/mL) – **draw up 1mL (50mg)**.
2. Add 1mL (50mg) of Vancomycin to 9mL of sodium chloride 0.9% to give a final concentration of 5mg/mL Vancomycin and a total volume of 10mL.
3. Instil the required volume for size and type of central venous access device
4. *****Make sure that the line is not flushed during this time by labelling appropriately**Repeat the preceding steps as appropriate for each lumen.***
5. Aspirate the solution from the line prior to using the line or changing the lock
6. Document in patient's medical notes & get senior clinical review if unable to aspirate.

Gentamicin (5mg/mL) and sodium chloride 0.9% antibiotic lock:

Method of preparation and administration

1. Use Gentamicin 20mg/2ml injection, withdraw 2ml.
2. Add 2 mL of 0.9% Sodium Chloride to give a final concentration of Gentamicin 5mg/1mL and a total volume of 4 mL.
3. Instil the required volume for size and type of central venous access device
4. ****Make sure that the line is not flushed during this time by labelling appropriately**** ***Repeat the preceding steps as appropriate for each lumen.***
5. Aspirate the solution from each lumen prior to using the line or changing the lock

6. Document in patient's medical notes & get senior clinical review if unable to aspirate.

Ciprofloxacin (2mg/mL):

Method for preparation and administration

1. Use Ciprofloxacin infusion bag (concentration of 2mg/mL)
2. Instil the required volume for size and type of central venous access device
3 ***Make sure that the line is not flushed during this time by labelling appropriately** Repeat the preceding steps as appropriate for each lumen.***
4 Withdraw the volume added to each lumen prior to using the line or changing the lock
5 Document in patient's medical notes & get senior clinical review if unable to aspirate.

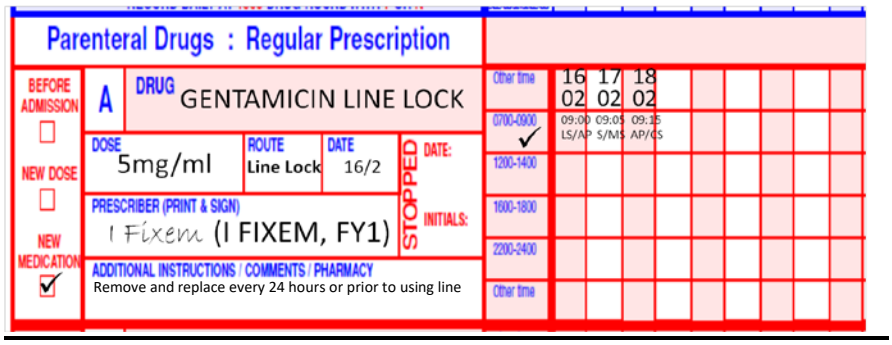
Taurolock

Instructions for use can be found at: https://www.taurolock.com/en/download/instructions-use

However, always check the actual instructions supplied with the product on the ward.

<u>Prescription of locks and labelling of lumens:</u>

Line locks should be prescribed on the Kardex as illustrated below.



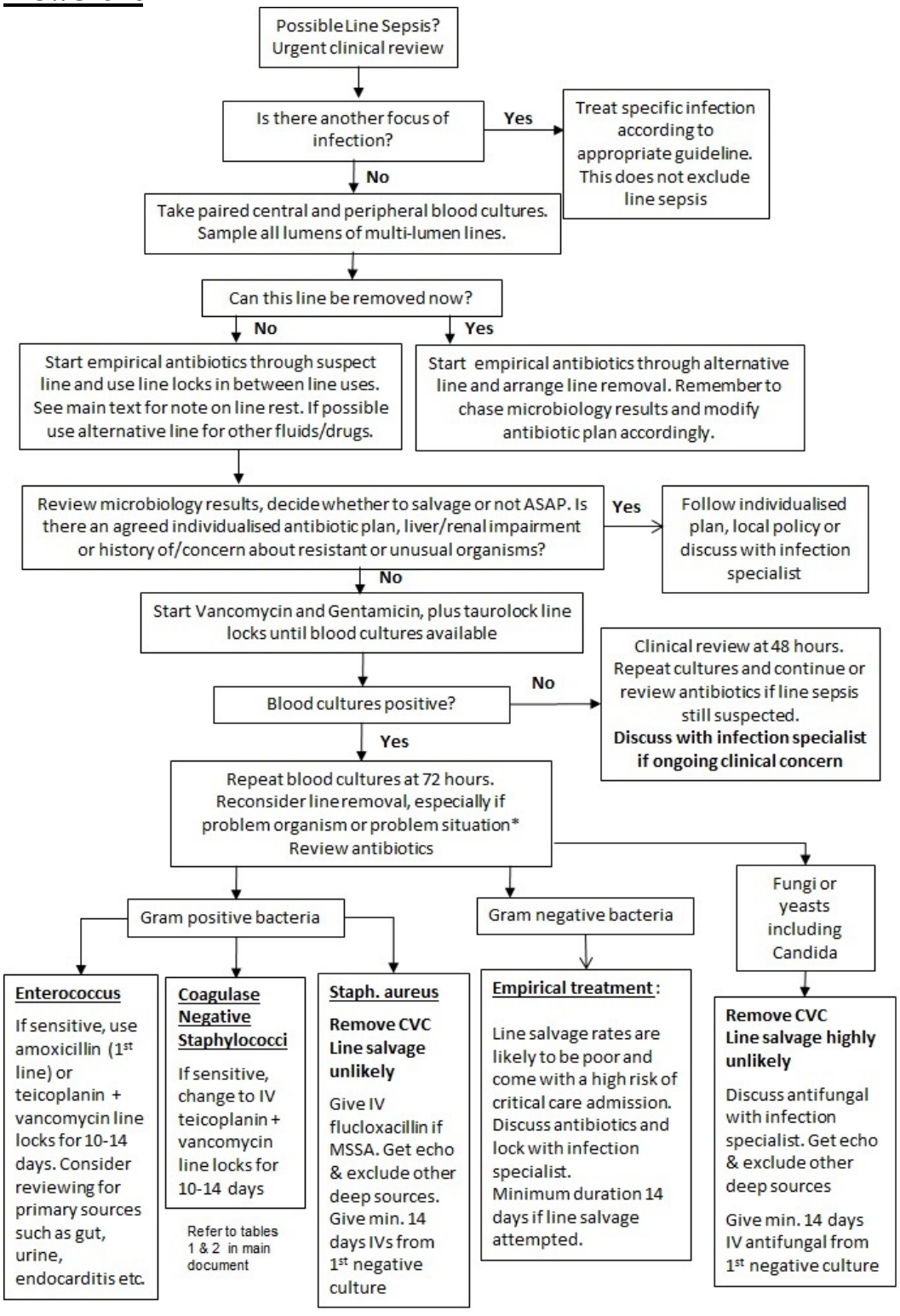
When salvaging a line, it is ideal to reserve the line purely for antimicrobial therapy (locks and systemic antibiotics) for the duration of salvage treatment. Peripheral access should be cited for any other IV therapies.

For multilumen lines where peripheral access is not available and the patient requires IV therapy of any description in addition to IV antibiotics, it may be necessary to lock different lumens on rotation.

For single lumen lines where peripheral access is not available, the lumen must be locked with antibiotic solution when not in use. Prior to using the line, the lock should be removed and discarded, and the line flushed. After using the line, fresh lock should be instilled until the next use, or 24 hours, whichever is first.

Lumens that are locked should be clearly labelled.

Flowchart


Possible Line Sepsis? Urgent clinical review
Is there another focus of infection?
Yes
Treat specific infection according to appropriate guideline. This does not exclude line sepsis
No
Take paired central and peripheral blood cultures. Sample all lumens of multi-lumen lines.
Can this line be removed now?
No
Yes
Start empirical antibiotics through suspect line and use line locks in between line uses. See main text for note on line rest. If possible use alternative line for other fluids/drugs.
Start empirical antibiotics through alternative line and arrange line removal. Remember to chase microbiology results and modify antibiotic plan accordingly.
Review microbiology results, decide whether to salvage or not ASAP. Is there an agreed individualised antibiotic plan, liver/renal impairment or history of/concern about resistant or unusual organisms?
Yes
Follow individualised plan, local policy or discuss with infection specialist
No
Start Vancomycin and Gentamicin, plus taurolock line locks until blood cultures available
Blood cultures positive?
No
Clinical review at 48 hours. Repeat cultures and continue or review antibiotics if line sepsis still suspected.
Discuss with infection specialist if ongoing clinical concern
Yes
Repeat blood cultures at 72 hours. Reconsider line removal, especially if problem organism or problem situation* Review antibiotics
Gram positive bacteria
Gram negative bacteria
Fungi or yeasts including Candida
Enterococcus
If sensitive, use amoxicillin (1st line) or teicoplanin + vancomycin line locks for 10-14 days. Consider reviewing for primary sources such as gut, urine, endocarditis etc.
Coagulase Negative Staphylococci
If sensitive, change to IV teicoplanin + vancomycin line locks for 10-14 days
Refer to tables 1 & 2 in main document
Staph. aureus
Remove CVC
Line salvage unlikely
Give IV flucloxacillin if MSSA. Get echo & exclude other deep sources. Give min. 14 days IVs from 1st negative culture
Empirical treatment:
Line salvage rates are likely to be poor and come with a high risk of critical care admission. Discuss antibiotics and lock with infection specialist.
Minimum duration 14 days if line salvage attempted.
Remove CVC
Line salvage highly unlikely
Discuss antifungal with infection specialist. Get echo & exclude other deep sources
Give min. 14 days IV antifungal from 1st negative culture

Problem situations and organisms

Line removal is strongly recommended in specific problem situations or in infections with problem organisms (Tables 1 and 2). If line removal is not deemed possible or is deemed unsafe, discuss with an infection specialist for individualised advice as a prolonged course of targeted antibiotic therapy along with specific line locks may be required. Unstable patients should be discussed early with an intensive care specialist.

Table 1: Problem Situations where line removal strongly recommended
Severe sepsis
Haemodynamic instability
Infectious Endocarditis or evidence of metastatic complications
Erythema or exudate due to suppurative thrombophlebitis
Persistent bacteraemia after 72 hours of antimicrobial therapy to which an organism is susceptible
Evidence of tunnel infection
Evidence of insertion site infection or severe exit site infection

Table 2: Problem organisms
<u>Highly virulent organisms:</u> • Fungi • *Staphylococcus aureus* or *lugdunensis* • *Pseudomonas aeruginosa*
<u>Organisms that may be less virulent but can be difficult to eradicate:</u> • Mycobacterium species • Bacillus species • Propionibacterium/Cutibacterium species • Micrococcus species
<u>Environmental and multidrug resistant organisms:</u> • Multidrug resistant Gram-negative organisms • Pseudomonas species • Stenotrophomonas species • Chryseomonas species • Chryseobacterium species • Acinetobacter species • Elizabethkingia species • Cupriavidus species • Vancomycin or linezolid resistant Enterococci and other resistant Gram-positive organisms

WARD 6A QEUH ENHANCED SUPERVISION REPORT APRIL 2020-MARCH 2021

Background

Enhanced supervision is a multi-disciplinary quality assurance process involving the ward Senior Charge Nurse, Lead Nurse, Estates supervisor, Facilities supervisor, and Infection Control Nurse. The process is a walkround of the clinical environment in Ward 6A focussed on ensuring ward compliance with infection control policies and processes, evidence of high standard of cleanliness throughout the ward and examining the ward environment to ensure that it is a safe area to deliver clinical care. The frequency of the walk rounds can vary from twice weekly to monthly depending on the circumstances within the ward at the time of the supervision. Enhanced supervision commenced in Ward 2A RHC (Royal Hospital for Children) in March 2018 following IMT (Incident Management Team) meetings held due to a cluster of infections noted in inpatients during that time. This process continued when the ward moved to its current location of Ward 6A in QEUH (Queen Elizabeth University Hospital).

The enhanced supervision team meet at ward level and examine all patient charts for infection control care plan compliance including CVC (central venous catheter) and PVC (peripheral venous cannula) care plans. The team work together at all times and examine all parts of the clinical environment together focussing on all aspects of their remit. Any non compliance, improvement or rectifications noted are detailed on the initial report, which is sent by the infection control nurse to the team for updating with actions achieved, then returned to the infection control nurse to collate and produce a completed enhanced supervision report for that month. This report is shared with the senior management team and key infection control stakeholders.

Analysis of Assurance Visits

The teams working together on the supervision visits has led to better communication between ward staff and facilities, estates and the infection control teams. . The presence of each discipline regularly on the ward together has also led to a greater understanding of how the teams work together to strive for and achieve the same goal in terms of the best possible clinical care environment for patients and families.

Enhanced Supervision Ward 6A April 2020-March 2021-06-02

Within the reporting period the total rectifications can be seen in fig. 1 below. Nursing had a total of 24 actions arising over the year ranging with a median of 2 actions required per walkround. Estates had a total of 29 actions arising over the year with a median of 2.5 actions per occasion and facilities had a total of 6 actions arising with a median of 0.5 actions required per enhanced supervision inspection. In fig. 2 below the spread across the year can be seen for each area of responsibility.

Fig.1. total rectifications from enhanced supervision for reporting period April 20-21

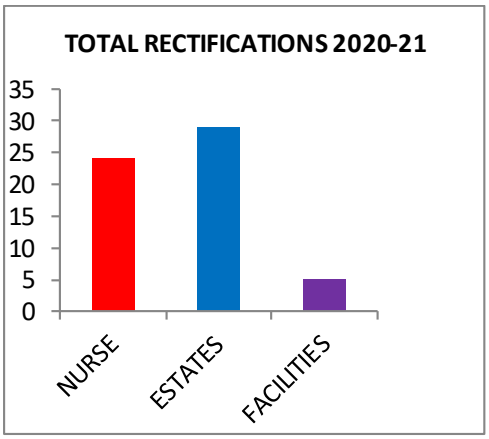
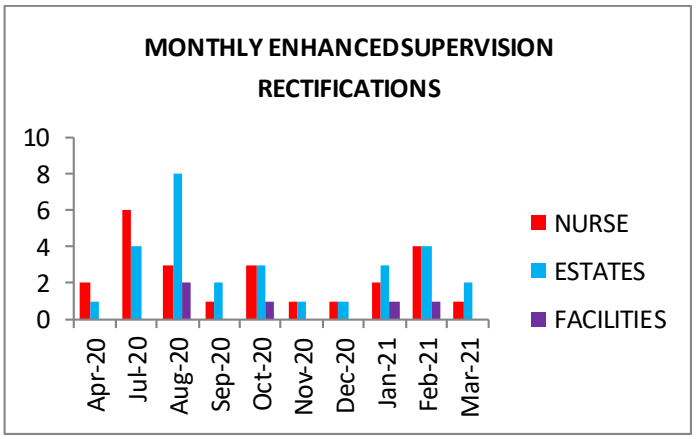


Fig.2 Rectifications monthly from enhanced supervision reporting period April 20-21



NURSING

The following improvements have been made in nursing in response to actions identified at enhanced supervision.

1. Daily Leadership walk rounds from Lead Nurse and Senior Charge Nurse – observing all aspects of the ward. Looking at the environment to ensure that cleaning is of a high standard and that equipment is clean. Observing documentation – cleaning checklists/daily infection control care plans/PVC (peripheral venous cannula) and CVC (central venous cannula) maintenance bundles are completed. Observing staff – ensuring compliance with uniform policy, hand hygiene opportunities are being taken and technique is compliant. Since Covid-19 pandemic it has also been necessary to ensure social distancing is being achieved, along with correct and appropriate wearing of PPE.

2. Daily bedside cleaning protocols as per IPCM (Infection Prevention and Control Manual) have been updated, revised and printed available on each isolation room door along with refreshed

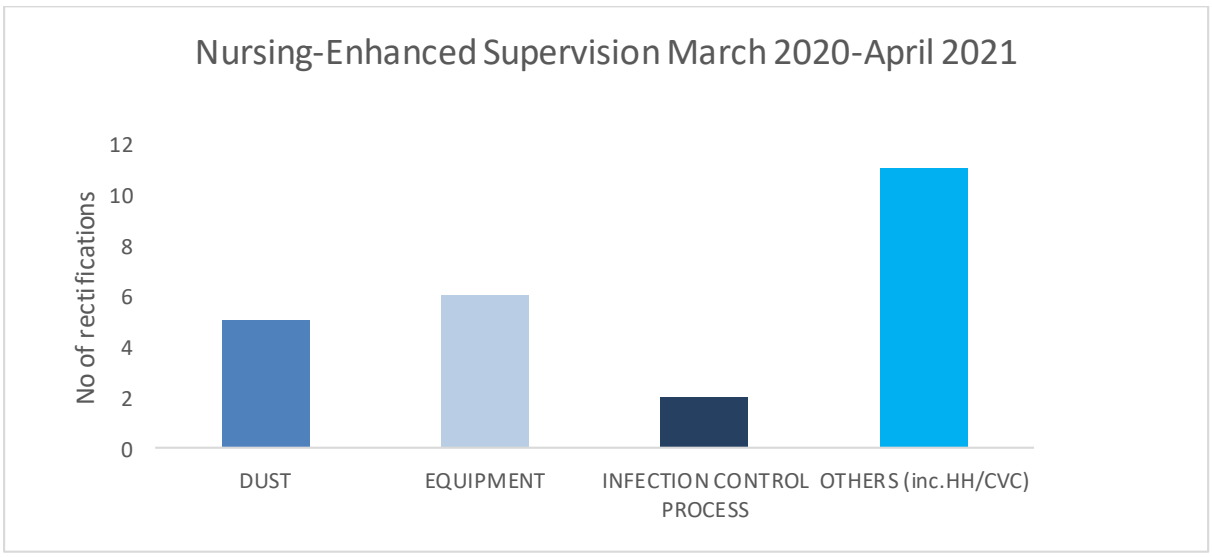
education programme around completion and process implemented to ensure registered nurse is assuring the patient environment and equipment is clean and in good repair.

3. Equipment which was stored outwith patient rooms in the ward storage cupboard was identified during enhanced supervision as being an area requiring further attention. To assist in ensuring this equipment was kept up to standard, and to aid in managing all aspects of ward storage, a further 1wte. Housekeeper was employed. This role has been very valuable in supporting ward infection control standards.

4. Following the introduction of enhanced supervision we hold regular meetings with all disciplines of ward staff, sharing our purpose and goal for safe person centred care and ensuring all staff understand and are involved in the process of enhanced supervision. We have a consistent focus on patient safety and the healthcare environment. Where learning needs are identified the SCN meets with staff on a one to one basis and they are then supported and monitored for improvement.

Fig. 3 below shows the trends in actions required from enhanced supervision. Included with the 'other' actions are the requirements from hand hygiene and CVC audits, no trend was identified for remaining 'other' actions as occurred once only. Infection control processes refers to Actichlor labelling and use of green indicator tape on a clean commode.

Fig.3 Trends of actions identified at enhanced supervision March 2020-April 2021



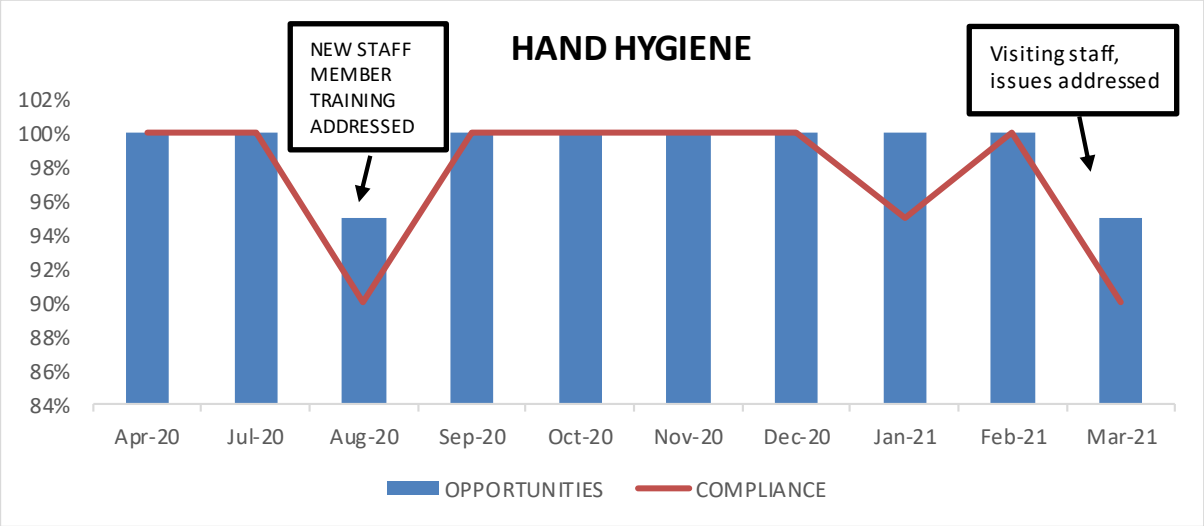
HAND HYGIENE

Hand hygiene audits are completed monthly by a large group of nursing staff who have been given additional training in completing hand hygiene audits. By having a large variety of staff members it has meant that there is no recognition of a team member undertaking an audit within the ward and thus influencing behaviours.

The hand hygiene audits detailed below in fig. 3 are undertaken as part of enhanced supervision and are completed at a different time to the supervision walkround by NHSGGC hand hygiene co-ordinator. The co-ordinator is careful to have a discreet presence, while on the ward observing staff behaviours towards hand hygiene, for the same reasons noted as before.

The opportunities and compliance failures noted on annual audit graph were addressed immediately following the audit. It was escalated to the SCN (Senior Charge Nurse) of the ward who had a conversation with the relevant staff member involved during which she ensured the staff member was aware of their responsibility towards hand hygiene and the reasons why this is so important to our patient care. Education was provided and further observation of the staff member when undertaking their duties to ensure moving forward that opportunities were taken for all episodes of hand hygiene and that technique was compliant.

Fig.4 Hand hygiene opportunities taken and compliance with technique during reporting period Apr. 20-21



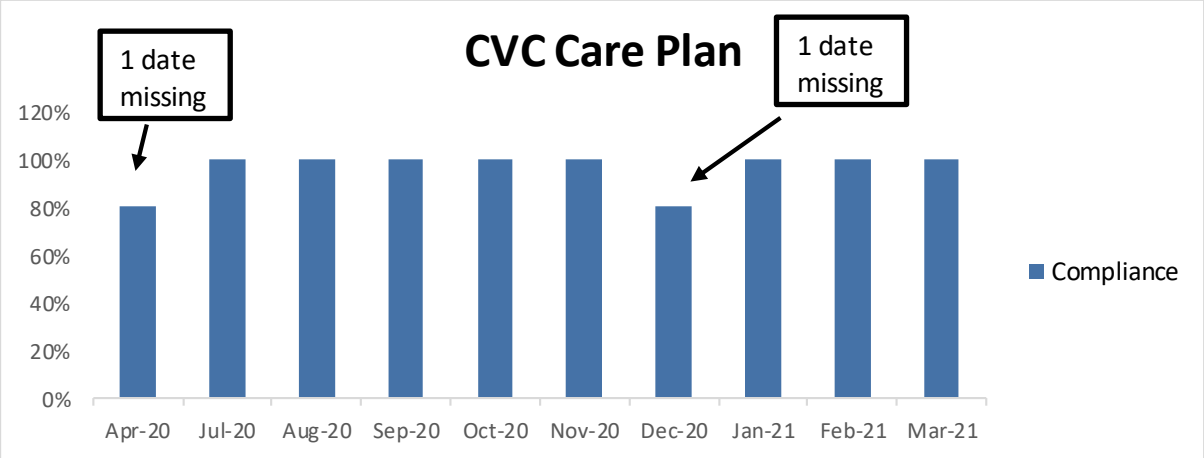
IPCT CARE PLANS including CVC/PVC

All infection control care plans are audited as part of enhanced supervision. This includes all IPCM (infection prevention and control manual) care plans including for example those for patients with loose stools or respiratory infection as well as peripheral (PVC) and central (CVC) venous catheter maintenance care plans. All IPCM care plans were compliant during period of reporting. All PVC care plans were compliant with all elements of the care bundle. Below in fig. 4 demonstrates the two

episodes during the reporting year where there was one date missing from one of the CVC care plans in place during enhanced supervision visits in April and December 2020.

Following identification of each episode noted below, there was a local investigation to identify why there was missing data. On both occasions the nurse caring for the child noted that the care had been given and care plan requirements for CVC had been met, however there had been a failure in their documentation on both occasions. CVC care planning compliance was highlighted via ward safety briefs with staff reminded of need to ensure documentation completed prior to finishing their shift. Following the December episode on non-compliance, each shift now has a PVC/CVC champion who promotes best care and documentation for those indwelling catheters amongst all ward staff caring for our patients.

Fig.5 CVC care plan compliance with all measures April 2020-March 2021



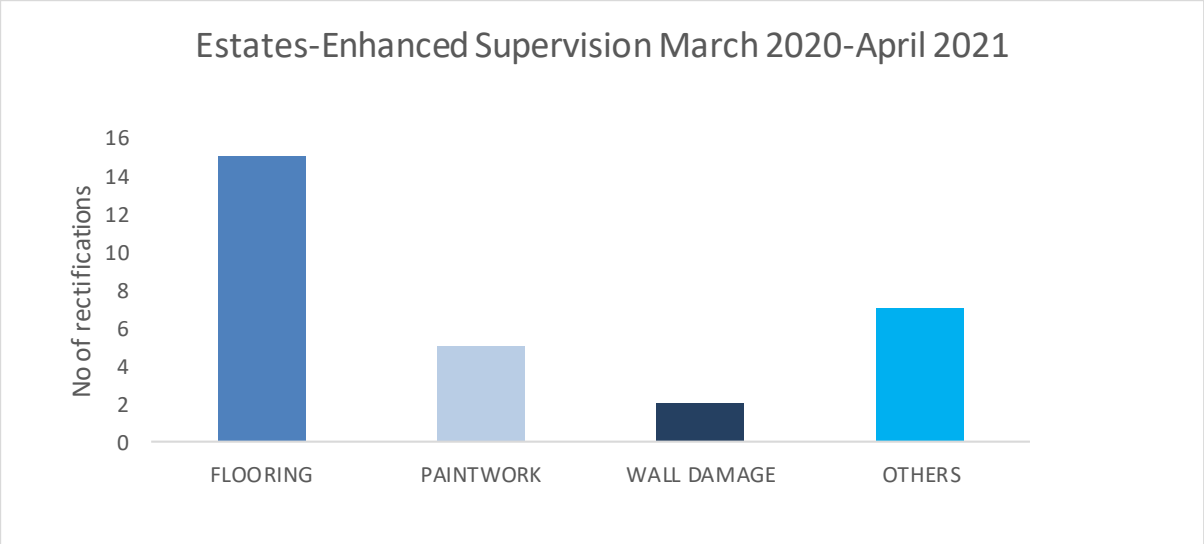
All nursing rectifications were actioned and completed on the day of enhanced supervision ensuring that there was no delay in addressing issues highlighted.

ESTATES

Having estates presence on the walkrounds is invaluable in building team relationships with the ward staff and in sharing understanding of clinical implications of any rectifications required for our patients and their families. Having a named senior member of the estates team dedicated to Ward 6A has led to greater communication between departments and we have seen a faster response to issues raised both on supervision walkrounds and outwith when raised via FM first and followed up with an email to our contact member of the estates team. Estates staff discuss the requirements of HEI scribe if necessitated by the repair with the staff at time of walkround. The SCN is then able to

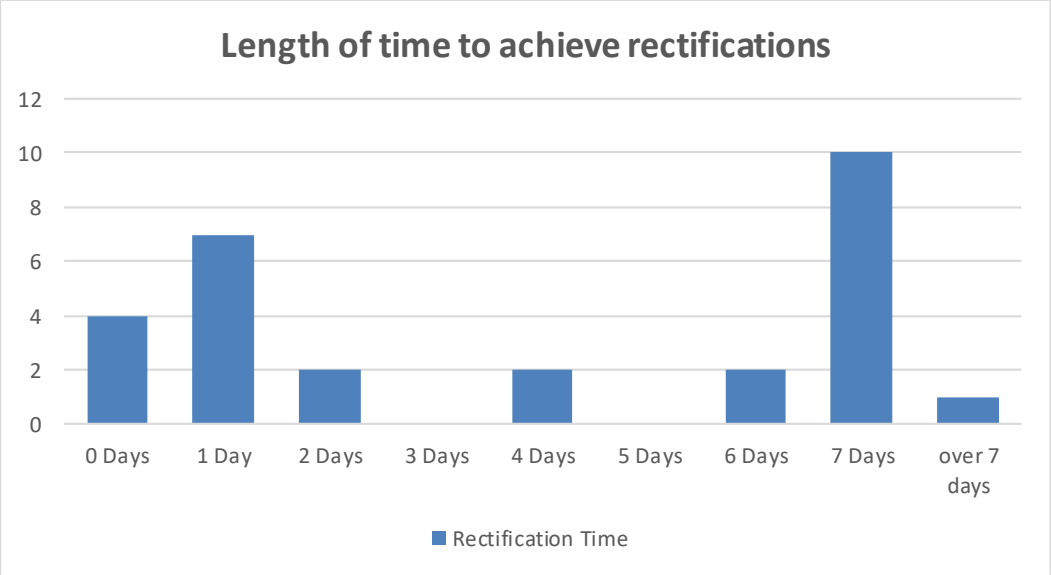
ensure that this is communicated to all ward staff via safety briefs. Sharing this knowledge has been incredibly useful within the ward in promoting infection control awareness and the scope of their remit in ensuring our environment is safe and being maintained safely.

Within the requirements for estates department, flooring repairs have been a common theme. These problems arise over time and use of the areas and are subtle requiring an experienced close inspection of the materials and area covered to detect concerns. The supervision rounds allow for this experienced in depth overview and has meant that there has been sharing of information between the disciplines to allow nursing and facilities staff to better identify potential areas of concern. Flooring issues identified within these reports were all actioned immediately for repair by dedicated flooring team when possible and where there was a wait it was only when deemed safe to do so and to allow the patient to move rooms giving access to the repair team.



An improvement within estates department that emerged through performing enhanced supervision walkrounds was not only improved oral communication but development of a written process between ward staff, general services and estates department. This new communication process ensures robust governance for clinical areas undergoing estates work. A comprehensive document has been developed by the estates team which details location and work to be completed, along with any scribe requirements etc. and then shows process for handover back to the ward detailing completion of works, domestic cleaning and enhanced cleaning, including any point of use filter renewal if required. This allows the ward staff to sign over an area of the ward to

estates and similarly allows a seamless handover of the area back to the ward with a record of what has been undertaken.

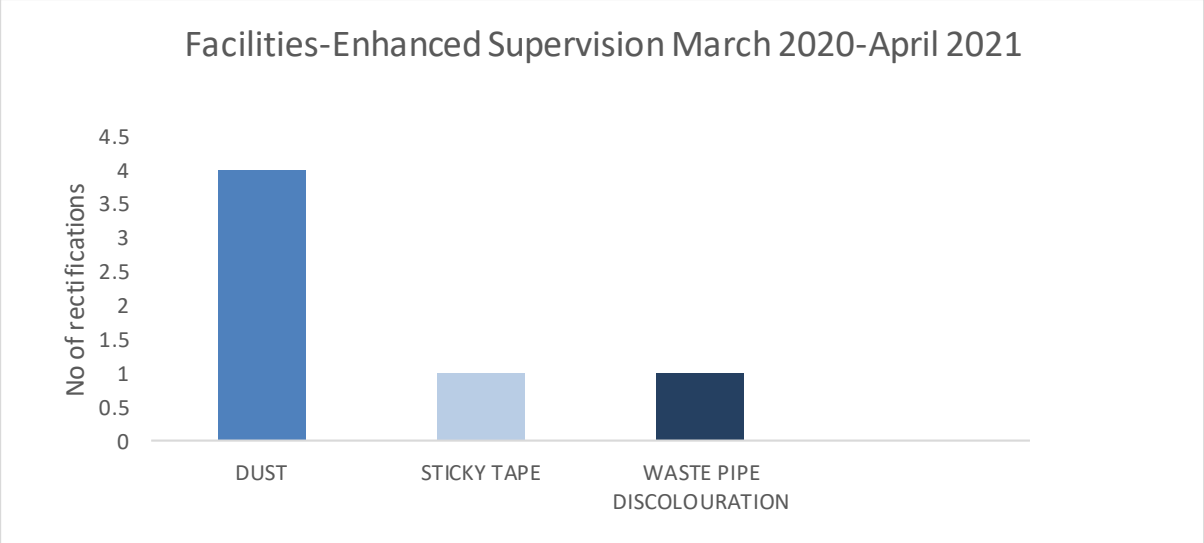


FACILITIES

There was a total of 6 rectifications for domestic service staff during the reporting year, with a median of 0.5.

Attending enhanced supervision for facilities was initially a member of their senior management team which developed relationships between the ward and the lead nurse which benefitted our patients even beyond enhanced supervision visits and meant that Facilities staff were better able to understand the particular requirements of our patients and families and were able to positively influence change with regards to unrelated concerns such as catering. During enhanced supervision the facilities team were also able to discuss how best they could support any upcoming estates actions that may have HEI scribe requirements and discussed how they could best support any needs that the ward may have identified during the preceding weeks.

A change in domestic cleaning that was made in response to enhanced supervision was the introduction of steam cleaning for the patient cots. This allowed cleaning of areas which were difficult to reach by conventional cleaning. All staff are now aware of the process of cot cleaning and ensure that they are made available to the domestic staff at terminal clean once a patient is discharged or once monthly if the patient required a longer inpatient stay.



All facilities actions were completed on the day of audit.

CONCLUSION

Enhanced supervision reports have not only enhanced communication and co-operation between the ward team and other disciplines such as facilities and estates but has also positively influenced how the teams interact at all times to best meet the needs of our patients and families. It has provided a forum for senior members of the ward nursing, estates and facilities teams to meet, share ideas, knowledge and expertise and discuss current and upcoming ward issues that are likely to affect all the teams.

The reports are shared with the Senior Management team cultivating engagement and oversight. . All the initiatives and focus on patient and environment safety from enhanced supervision has participated in developing a culture of high standard of infection control awareness and compliance within all grades and disciplines of ward staff. Nursing staff in particular are champions who feel equipped with the knowledge and support required to challenge all ward and visiting staff to ensure that the needs of the patient and their family are being met at all times.

NHS Greater Glasgow and Clyde	NHS GREATER GLASGOW & CLYDE BOARD CONTROL OF INFECTION COMMITTEE	Page	1 of 9
		Effective from	Nov 2019
	Audit Schedule and Process Infection Prevention and Control Audit Tool (IPCAT) Strategy	Review date	Nov 2021
		Version	3
The most up-to-date version of this document can be viewed at the following website: www.nhsggc.org.uk/infectionpreventionandcontrol			

This strategy applies to all staff employed by NHS Greater Glasgow & Clyde and locum staff on fixed term contracts.

KEY CHANGES FROM THE PREVIOUS VERSION OF THIS POLICY

- **Update to SCN/Departmental Manager requirement when completing IPCAT action plan**
- **Addition of action required by IPCT/SCN/Departmental Manager to monitor for sustained improvement following IPCAT**

Document Control Summary

Approved by and date	Board Infection Control Committee 25th November 2019
Date of Publication	15th January 2020
Developed by	Associate Nurse Director Infection Prevention and Control
Related Documents	National Infection Prevention & Control Manual:- • Chapter 1 - Standard Infection Control Precautions (SICPs) • Chapter 2 – Transmission Based Precautions (TBPs) National Monitoring Framework to Support Safe and Clean Care Audit Programme (HPS Resource)
Distribution/ Availability	NHSGGC Infection Prevention and Control homepage www.nhsggc.org.uk/infectionpreventionandcontrol
Lead Manager	Board Infection Control Manager
Responsible Director	Board Medical Director

Contents

1. Safe and Clean Care Audit

The introduction of external infection and prevention and control (IPC) scrutiny by Health Improvement Scotland (HIS) in 2009 resulted in increased auditing of IPC practice within healthcare. Not all IPC audit is completed by the Infection Prevention and Control Team (IPCT) and currently within NHSGGC audit is undertaken by personnel including Senior Charge Nurses (SCN), Facilities teams and peers.

During 2018 Health Protection Scotland developed a National Monitoring Framework to Support Safe and Clean Care Audit Programmes with 'Safe and Clean Care Audit' being the term used to encompass audits including:-

- Infection Prevention & Control Audit (IPCAT)
- Standard Infection Control Precautions Audit (SICPs)
- Invasive device audit (PVC/CVC/UUC)
- Facilities Monitoring Tool

The framework is 'an agreed recommended minimum approach to auditing for all NHS boards' with the purpose of the framework being to provide a set of principles for Safe and Clean Care auditing and to support a quality improvement approach.

2. Safe and Clean Care Audits by Clinical Team

Safe and Clean Care Audits undertaken by the clinical team include:-

- Biannual Standard Infection Control Precautions Audit CNO letter (2012) 1
- Monthly hand hygiene audit CEL 5 (2009)
- Weekly cleaning assurance checklists
- Combined Care Assurance Audit Tool (CCAT)

Local frameworks for Safe and Clean Care Audits undertaken by the clinical team should take account of the principles set out in the National framework and data gathered should be managed by the clinical team. Prior to IPCAT and during an outbreak or incident the IPCT will review SICPs and hand hygiene data via the CAIR dashboard.

3. Safe and Clean Care Audit by IPCT

IPCT involvement in Safe and Clean Care Audit is via IPCAT which comprises a suite of audit tools including:-

- Safe Infection Prevention & Control Practice in Acute Care
- Safe Infection Prevention & Control Practice in Theatre Care
- Safe Infection Prevention & Control Practice in Mental Health Care (HSCP)
- Safe Infection Prevention & Control Practice in OPD
- Safe Infection Prevention & Control Practice in Dental
- Safe Infection Prevention & Control Practice in Decontamination

IPCAT is a combined tool used by the IPCT to measure staff knowledge and practice in relation to SICPs, transmission based precautions, safe patient environment (SPE) and quality assurance. The SPE element of IPCAT includes environmental criteria which are not captured by the Facilities Monitoring Tool. Quality assurance measures clinical risk assessment compliance for MRSA and CPE as well as compliance with care bundles aimed at reducing the risk from invasive devices such as peripheral venous catheter (PVC), urethral urinary catheter (UUC).

4. IPCAT process

IPCAT criteria are measured through question, observation and checks by auditor. To reduce variation and subjectivity IPCAT tools have been designed to provide the auditor with audit criteria and the expectancy in terms of outcomes.

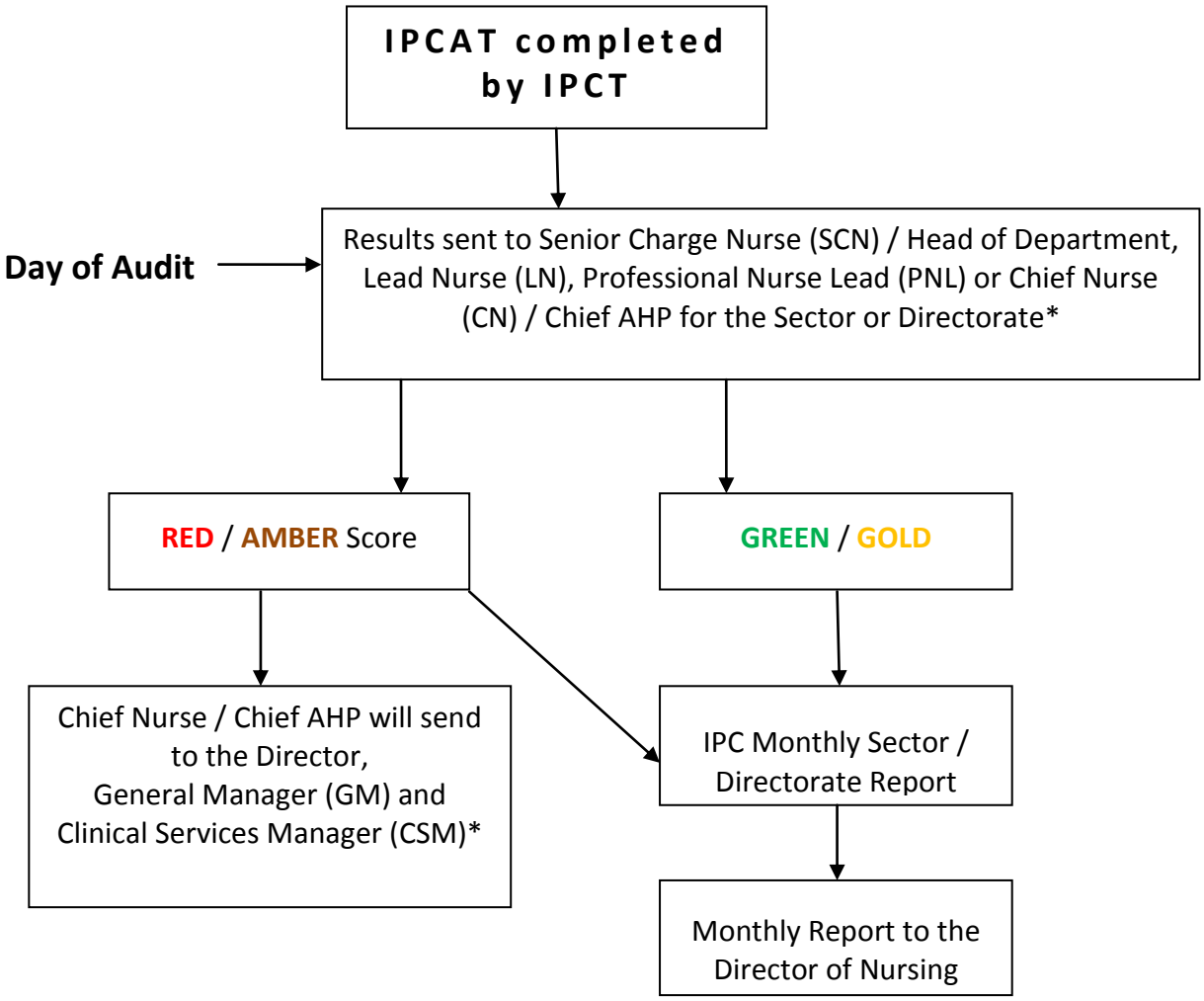
Scoring: Each section of the audit is scored individually and scores are presented on a dashboard with re-audit by IPCT timeframes based on the combined score.

The scoring system and re-audit cycle is as follows:

	GOLD: 91% or above	Re-audit in one year*
	GREEN: 80-90%	Re-audit in one year*
	AMBER: 66-79%	Re-audit in 6 months
	RED: <66%	Re-audit in 3 months

*OPD areas will have Safe Infection Prevention & Control Practice in OPD completed every 2 years as a minimum.

IPCAT will be unannounced:



IPCAT results are included in the IPC Monthly Sector / Directorate Reports. Bimonthly reports containing IPCAT results are issued to the Board Infection Control Committee (BICC), the Acute Infection Control Committee (AICC) and Partnership Infection Control Support Group (PICSG).

5. Action Plan Following IPCAT

Following IPCAT an action plan is automatically generated with a timeframe for completion. Critical non-compliances (CNC) or **short term actions** will require immediate attention or action within 24 hours. CNC are highlighted during any immediate post-audit feedback for ease of identification. **Medium term actions** must be completed within one month of IPCAT. **Long term actions**, for example, installation of a fully compliant clinical wash hand basin within a room used for isolation of a patient with a known/suspected alert organism, will require to be placed on the risk register for the individual Service until the action is complete. Action plans are available on the day of IPCAT completion.

The 'responsible person' should ensure completed actions (see Appendix 1) are recorded to provide a brief summary of rectifications/action taken. There should also be a process of investigatory management by the 'responsible person' to identify cause and support improvement; details of this should be included in the action plan. The findings of any investigatory management during action plan completion should highlight local changes/interventions required to achieve reliability. An example of this may be:-

- Monitoring Criteria - The appropriate bed space checklists and weekly assurance checklists are in place and up to date.
- IPCAT Finding – Auditor unable to locate evidence of weekly assurance checklists.
- Investigation – SCN who completes weekly assurance checklist has been on leave and this activity was not allocated to a nominated person.
- Action – Weekly assurance checklist completed and in future this activity will be allocated to a nominated person to complete in SCN absence.

It is expected that the 'responsible person' will ensure the action plan is completed. The IPCT will issue the 'responsible person' with a total of three reminder emails sent at weekly intervals if actions are not completed within the defined timescale. Outstanding actions and details of reminder emails issued are reported in the monthly Sector/Directorate Report.

- Week 1 - 1st reminder issued to SCN/Departmental Manager
- Week 2 - 2nd reminder issued to SCN, Lead Nurse/Head of Department*
- Week 3 - 3rd reminder issued to SCN, Lead Nurse, Chief Nurse/Chief AHP*

* or equivalent role

6. Monitoring for Sustained Improvement Following IPCAT

One month following completion of IPCAT the IPCN and SCN/Departmental Manager will re-audit together any red or amber sections of the audit. Audit results and an action plan will be available on the IPCAT dashboard immediately following any re-audit.

Following re-audit with IPCN, SCN/Departmental Manager must then discuss with their Lead Nurse/Head of Department and agree an ongoing programme of re-audit locally to monitor for sustained improvement. The frequency of monitoring as well as the outcome measure linked to improvement should be agreed between SCN/Departmental Manager and Lead Nurse/Head of Department.

SCN/Departmental Manager have access to a SICPs monitoring tool and can access a quality assurance monitoring tool via IPC homepage should this section of IPCAT score red or amber. Re-audit by SCN/Departmental Manager should follow the process of developing an action plan which should be approved by the Lead Nurse/Head of Department. Completed action plans generated as a result of re-audit should be retained for a period of one year.

Appendix 1

Following completion of IPCAT:

1. You will receive an email from SIGMA/Synbiotix stating that your audit has been completed and is ready for review/action.
2. You will be asked to click on the link then enter your Username and Password.
3. Before accessing the system for the first time you will be supplied with a user name and password.
4. (if you are having problems with access please contact the IC data team via ICDataTeam@ggc.scot.nhs.uk).
5. When you open your audit it will outline the percentage for each section and this is further broken down into scores for individual elements. An aggregated score is also shown for the full audit.

Action plan completion:

6. At the end of each action there is an **ACTIVITY** link -click this and then the tab for **ADD NOTE.** This allows you to update an action.
7. When updating an action a brief summary of action taken/rectifications must be provided.
8. The completed action plan should provide details of any investigatory management to identify cause and promote improvement.
9. Once you have updated the **ADD NOTE** section, click save before clicking the **BACK** tab which will take you back to the dashboard.
10. Once returned to the dashboard, under the **ACTION** column click on the **EDIT** tab. This will take you to a screen with drop down box providing the options Not Started/In Progress/ Complete— change the drop down status to **COMPLETE** and save.

All actions will turn green when completed and drop to the bottom of the action list. Overdue actions will be highlighted in red.

NHS Greater Glasgow and Clyde	NHS GREATER GLASGOW & CLYDE (GGC) CONTROL OF INFECTION COMMITTEE	Page	1 of 29
		Effective From	
	Infection Prevention & Control Team (IPCT) Incident Management Process Framework	Review Date	
		Version	1
The most up-to-date version of this document can be viewed at the following website: www.nhsggc.org.uk/your-health/public-health/infection-prevention-and-control			

Objective

To ensure that Infection Prevention and Control Teams in Greater Glasgow & Clyde (GGC) has processes in place to initiate the NHS GG&C Boards Outbreak and Incident Management Plan & Chapter 3 of the National Infection Prevention and Control Policy

https://www.nhsggc.org.uk/media/267383/outbreak-incident-management-plan-june-21.pdf
https://www.nipcm.hps.scot.nhs.uk/chapter-3-healthcare-infection-incidents-outbreaks-and-data-exceedance/

This framework applies to all staff employed by NHS Greater Glasgow & Clyde and locum staff on fixed term contracts.

KEY CHANGES FROM THE PREVIOUS VERSION OF THIS DOC

- New Document

Document Control Summary

Approved by and date	Board Infection Control Committee
Date of Publication	
Developed by	Infection Prevention and Control Team
Related Documents	National IPC Manual – Chapter 3 https://www.nipcm.hps.scot.nhs.uk/chapter-3-healthcare-infection-incidents-outbreaks-and-data-exceedance/ GGC Outbreak-Incident Plan https://www.nhsggc.org.uk/media/267383/outbreak-incident-management-plan-june-21.pdf
Distribution/ Availability	NHSGGC Infection Prevention and Control Internet www.nhsggc.org.uk/your-health/public-health/infection-prevention-and-control
Lead Manager	Board Infection Control Manager
Responsible Director	Executive Lead for Healthcare Associated Infections

CONTENTS

1. Introduction

This is the first version of the Greater Glasgow & Clyde IPCT Incident Management Process Framework which supports the implementation of the GG&C Outbreak and Incident Management plan and Chapter 3 of the National Infection Prevention and Control Manual in the context of the Infection Prevention and Control service within NHSGGC.

The purpose of this document is to provide those responsible for responding to incidents and outbreaks within the IPCT, a framework to ensure compliance with both local and national policies and that ward to board governance systems are informed.

This framework should be read in conjunction with other local and national guidance.

2. IPCT IMT Process

2.1. Initial Assessment/Problem Assessment Group

An initial assessment is required to determine if an outbreak or incident is taking place. In hospital this will be carried out by the IPCT, or through a Problem Assessment Group (PAG).

The initial assessment will be based on available information. It may not be possible to make a decision on the information available immediately and further investigations may be required. A PAG may not always be required, and it is not necessary to hold a PAG prior to activating an Incident Management Team (IMT).

If an assessment is required or a PAG is held the IPCT will complete a NHS GGC IPC Incident summary (Appendix 1). If the assessment is that either:

- No significant risk to public health, PAG stood down, monitoring continues, or
- Assessed as Healthcare Infection Incident Assessment Tool (HIIAT) green then this document will be held by each sector IPCT. HIIAT greens must be recorded on the Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) Outbreak Reporting Tool (ORT). IPCT incident summary should be sent to the IPCT Senior Management Team (SMT).

If an incident is scored amber or red as assessed using the ARHAI HIIAT assessment tool, then the IPC Incident Summary should be submitted to the IPCT SMT for onward sharing with Service Director, Chief of Nursing and Chief of Medicine prior to the completion of the ORT by the IPCT.

2.2 Incident Management Team (IMT)

The IMT is an independent multi-disciplinary group with the responsibility for investigating and managing the incident. Incidents must all be managed as per the:

- Chapter 3 of the National Infection Prevention & Control Manual (NIPCM); and
- NHSGGC Outbreak and Incident Management Plan

The IPCT will provide administrative support for this process and the documents from all outbreaks and incidents will be held in the NHSGGC IPCT pan Glasgow shared drive. Key documents in bold which must be held in each folder is:

- **NHS GGC IPC Incident summary** (**Appendix 1**)
- **GGC IPCT IMT Decision & Improvement Log** (**Appendix 2**)
- **ARHAI SBAR**
- **Hot Debrief** (**Appendix 12**)
- Any results from environmental samples if done
- Any typing results if done
- Timeline if done
- Press releases
- Any other relevant reports/items

This folder will be audited twice per year to provide assurance.

2.3 IMT Process and Standing Actions

The IPCT process has three standard agendas:

- New Incident (Appendix 3)
- Ongoing Incident (Appendix 4)
- Incident Closure (Appendix 5)

These should ensure that all of the core actions required of an IMT as detailed in Chapter 3 of the NIPCM and NHSGGC Outbreak and Incident Management Plan are adhered to.

2.4 Action Log

Decisions must be clearly documented. The record must include not only the decision made, but the alternative options considered and the rationale for the choice(s) made.

All actions must be concluded at the end of the final IMT or if this is not possible there is a clearly documented account of the actions that are to be included in another process or action plan.

2.5 Environmental Sampling

Environmental sampling should only be undertaken at the instruction of the Infection Control Doctor (ICD) or chair of the IMT. Those instructing or undertaking sampling must ensure that the correct documentation is completed:

- Ad Hoc/Additional Environmental Request Swabs etc -Non Water (Appendix 6)
- Ad Hoc/Additional Environmental Request Air & Water (Appendix 7)

And whomever is collecting the sample must ensure that full details are included on the request form:

- Room number (both ward ID and estates if applicable);
- Location within the room, e.g. bedroom, en-suite etc;
- Item, e.g. sink, bed table etc and
- any other relevant details.

2.6 Communicating with Patients, Carers and Families

The NHS Scotland Quality strategy provides a clear commitment to patients to ensure:

- clear communication and explanation about conditions and treatment;
- effective collaboration between clinicians, patients and others.

The importance of a culture of openness, transparency and candour was also a key recommendation from the Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry (Francis Report) and there is little doubt, that improving the type and clarity of information given to patients supports these principles and ensures patients and if

appropriate their carers, are key participants in the choices they make with regards to their care.

The primary aim of the documents listed below which were developed by GG&C Communications Team is to set out the key principles which should be adhered to when communicating with patients with infections and their relatives and carers, other cohorts of patients and families, ward staff, NHSGGC staff, and the public during incidents and outbreaks and should guide IMT participants at all time in the decision process with regards to what, whom and when.

- Healthcare Associated Infection Communications Strategy (insert link when available).
- Communications during an incident or outbreak: Guidance for Problem Assessment Groups and Incident Management Teams (insert link when available).

A representative from Corporate Communications must be invited to all IMTs.

2.7 Risk Register

At the end of each incident the IMT will discuss if there is the requirement to consider if any actions or risks identified should be included on either the service or IPCT Risk Register.

This will also be considered in the hot debrief or IMT report which will be submitted to the relevant IPC Clinical Governance Committees (see section 3).

The IPCT Risk Register will be reviewed at each meeting of the IPCT Clinical Governance Committees and updated immediately if required.

2.8 Duty of Candour

IPC Guidance on the Duty of Candour will be considered at the end of every incident (Appendix 8) and members of the IMT will be required to follow the Health Boards Duty of Candour Policy:

http://www.staffnet.ggc.scot.nhs.uk/Corporate%20Services/Clinical%20Governance/Clinical%20Risk/Duty%20of%20Candour/DoC%20Policy%20and%20Guidance%20GGC%20Final%20v1%20(2018).pdf

3. Reporting and Governance

National Reporting

All incidents and outbreaks that are HIIAT assessed are reported to ARHAI via the ARHAI Online Reporting Tool (ORT). A summary of **all** incidents will be presented at all IPC governance groups [Board Infection Control Committee (BICC), Acute Infection Control Committee (AICC) and Partnership Infection Control Support Group (PICSG).

GGC Senior Management Team

A weekly report which contains a brief description of any incidents or outbreaks which are assessed as amber/red is completed and submitted to Board Executive Directors, Service Directors and Heads of Nursing and Medicine. An update on any incidents or outbreaks previously reported is also included until the incident is closed.

Infection Prevention and Control Governance Committees

All Incidents that score AMBER/RED using the ARHAI HIIAT assessment will be reported to the relevant IPC governance groups, i.e. AICC or PICSG. All red/amber incidents will have a hot debrief/IMT report completed within one month of the closure of the incident. All hot debrief documents/IMT reports and ARHAI SBARs will be submitted to either PICSG/AICC as appropriate and all will be submitted for review to Board Infection Control Committee (BICC).

The hot debrief/IMT report once completed will be submitted to the Infection Control in the Built Environment Group (ICBEG) in all instances where the environment was considered as a potential source during the development of the hypothesis(s).

Any actions from the IMT which have implications for the wider organisation will be included in the hot debrief document and also recorded in a rolling IMT improvement plan and, where relevant, added to the most appropriate risk register. This improvement plan will be submitted to the BICC to ensure that actions are complete and that lessons are shared.

Acute Services

A summary of any incidents or outbreaks which are assessed as HIIAT amber/red will be included in the IPC report which is presented monthly to the Acute Clinical Governance Committee (ACGC).

Clinical & Care Governance Committee

The Healthcare Associated Infection Reporting Template (HAIRT) will include a summary of all incidents including actions taken and lessons learned in order to support immediate or ongoing improvement. The HAIRT will be submitted to all IPC governance groups for information and review and to the Clinical Care Governance Group for Assurance. A summary HAIRT will be submitted to the NHS Board for assurance.

HAIRT – The HAIRT Report is the national mandatory reporting tool and is presented bi-monthly to the NHS Board. This is a requirement by the Scottish Government HAI Task Force and informs NHSGGC of activity and performance against Healthcare Associated Infection Standards and performance measures.

Summary HAIRT – Summary HAIRT will include performance against Local Development Plan (LDP) targets, mandatory surveillance, cleaning and estates audit results. A summary of all incidents and outbreaks will also be included.

Escalation

The IPCT will complete an IPC Incident summary (Appendix 1) for all amber/red incidents and outbreaks. This will be submitted to the Service Director/or equivalent and their SMT for review/comment prior to inclusion in the ARHAI ORT.

The IMT chair will give consideration to using a formal 'Executive Update' reporting template for incidents that are likely to have a significant impact on patients, services, or are likely to or have incurred significant public anxiety or if there is a possibility that the incident has the potential to be complex or prolonged. (Appendix 9). The executive in receipt of this update must consider if this summary should be submitted to the Senior Executive Group.

IMT Governance and Assurance chart is included in Appendix 10.

4. Assurance

Each quarter, four IMTs will be audited to ensure that the framework is in place and functioning correctly (Appendix 11). A summary of this process will be reported to the IPCT SMT to provide assurance and recommendations for improvement.

The IMT will provide advice to service about identifying duty of candour incidents in line with the agreed IMT-Duty of Candour process If the event triggers Duty of Candour the Service will report as an incident in line with Management of Significant Adverse Event

Policy Clinical Risk monitor duty of candour as part of Significant Adverse Even Reporting (SAER) process and report accordingly through governance structures. Where further action is required to support compliance clinical risk will highlight this to service

Appendix 1

NHSGGC IPC Incident summary

Date reporting / Update no.	
Sector / Hospital	
Ward / departments	
Incident statement	
Patient cases	
Control measures	
Investigations	
Hypothesis	
HIIAT Score	
Patient Services Transmission Public Anxiety	
Communications / next steps	
Press statement	

Date	Incident update

Instruction for completion:

1. *Complete the above following all non-COVID incident /PAG meetings*
2. *Send to ICM and ANDIPC (or deputy) for approval*
3. *ICM/ANDIPC will send to directorate for info/comments*
4. *ICM/ANDIPC will sent summary to Acute SMT (COO, AND, AMD, DIPCT)*
5. *ICM/ANDIPC will ask IPCT to complete ORT*
6. *IPC Data team will update ORT to ARHAI*

Appendix 2

GGC IPCT IMT Decision Log & Improvement Plan

Meeting:		**Meeting called by:**	
		Date:	
Attendees:		**Apologies**	
Next Meeting:		**Venue:**	

DATE	AGENDA ITEM	WHAT: (Action)	WHEN: (Commit)	WHO: (Owner)	RESULT: (Conclusion)

CLOSED ACTIONS:

DATE	AGENDA ITEM	WHAT: (Action)	WHEN: (Commit)	WHO: (Owner)	RESULT: (Conclusion)

Appendix 3

Agenda
First Meeting (Hospital, ward/dept/organism if applicable)
Date
Location

1. Agree Chair and terms of reference

2. Introduction (Reminder of confidentiality and need for accurate records)

3. Appropriate membership

4. Declarations of conflicts of interest

5. Items not on the agenda

6. Incident summary

   a) General situation statement
   b) Patient report
   c) Microbiology report
   d) Epidemiology
   e) Other relevant reports

7. Risk Management/Control Measures

   a) Patients
   b) General
   c) Public Health
   d) Staff

8. Further Investigation

   a) Epidemiological
   b) Environmental
   c) Standard Infection Control Precautions Standards (SICPS) audit
   d) HH audit
   e) Route Cause Analysis (RCA)

9. Case definition
10. Hypothesis
11. Healthcare Infection Incident Assessment Tool (HIIAT)
12. Communications

    a) Advice to patients and carers
    b) Advice to public
    c) Advice to Staff
    d) Media (print, radio, TV, websites, social networking sites)
    e) Executive management team
    f) Any need to inform other authorities e.g. Procurator fiscal
    g) Health Protection Scotland (HPS) / Scottish Government (SG) HAI Policy Unit (HIIORT)

13. Review (standing agenda items)
    a) Appropriate membership
    b) Resourcing
    c) Other management groups formed or required

14. AOCB
15. Action list with timescale and allocated responsibility
16. Date and time of next meeting

Appendix 4

Agenda
Meeting Number (Hospital, ward/dept/organism if applicable)
Date
Location

1. Welcome from the chair

2. Apologies

3. Reminder of confidentiality and need for accurate records

4. Declarations of conflicts of interest

5. Items not on the agenda

6. Incident summary

   a) General situation statement
   b) Patient report
   c) Microbiology report
   d) Epidemiology
   e) Other relevant reports

7. Risk Management/Control Measures

   a) Patients
   b) General
   c) Public Health
   d) Staff

8. Investigation Results

   a) Environmental
   b) SICPS audit
   c) Hand Hygiene audit

9. Hypothesis

10. Case Definition

11. Healthcare Infection Incident Assessment Tool (HIIAT)

12. Communications

    a) Advice to patients and carers
    b) Advice to public/Staff
    c) Media (print, radio, TV, websites, social networking sites)
    d) Executive management team
    e) Any need to inform other authorities e.g. Procurator fiscal
    f) Health Protection Scotland (HPS) / Scottish Government (SG) HAI Policy Unit (HIIORT)

13. Review (standing agenda items)

    a) Appropriate membership
    b) Resourcing
    c) Assess effectiveness of action
    d) Other management groups formed or required

14. AOCB

15. Action list with timescale and allocated responsibility

16. Date and time of next meeting

Appendix 5

Final Agenda

Meeting Number (Hospital, ward/dept/organism if applicable)
Date
Location

1. Welcome from the chair

2. Apologies

3. Reminder of confidentiality and need for accurate records

4. Declarations of conflicts of interest

5. Items not on the agenda

6. Incident summary

   a) General situation statement
   b) Patient report
   c) Microbiology report
   d) Epidemiology
   e) Other relevant reports

7. Risk Management/Control Measures

   a) Patients
   b) General
   c) Public Health
   d) Staff

8. Investigation Results

   a. Environmental
   b. SICPS audit
   c. HH audit

9. Hypothesis Update

10. Healthcare Infection Incident Assessment Tool (HIIAT)

11. Communications

    a) Advice to patients and carers
    b) Advice to public/Staff
    c) Media (print, radio, TV, websites, social networking sites)
    d) Executive management team
    e) Any need to inform other authorities e.g. Procurator fiscal
    f) HPS / SG HAI Policy Unit (HIIORT)

12. Duty of Candour Considerations

13. Review of any risks to be included in risk register IPCT/Service

14. Outstanding actions and timescales for completion

15. Step down of any additional screening due to incident

16. Hot Debrief/ARHAI SBAR

17. Clinical Governance (AICC/BICC/HAIRT/CCG/ACGF)

18. AOCB

19. Thanks and agree closure of the incident

Appendix 6

LF591v2 Ad Hoc/Additional Environmental Request (Swabs etc -Non Water)

For Completion by Infection Control Team					
Date of Issue		**Authorising Infection Control Consultant**			
Expected Sampling Date		**Frequency of Testing (e.g. One Off / Each Thurs)**			
Estimated Numbers		**Location(s)** **Hospital Site / Ward**			
Sample Type(s)					
Estimation Request & **Clinical Rational for Testing**	*Example: Specify target organism only / All isolates / GNB only as part of IMT investigation*				
Result Notification	*List all staff emails to receive a copy of results as they become available*				
ALL SAMPLES TO BE SUBMITTED WITH A COMPLETED ENVIRONMENTAL REQUEST FORM					
For Completion by Laboratory Staff **(in conjunction with Infection Control Consultant)**					
Booking in PID as per LI720	*Ensure full details of locations are included so all samples are PID'd using the same location for duration of incident*				
Reporting Criteria	*Example: Any isolate present to be reported /Only target organism to be reported*				
Set Up & Reporting Procedure	**Media to be set up**				
	Temperature & Atmosphere		**Duration of Incubation & Read Frequency**		
	Reporting Criteria	*Example: NG2D/'Target Organism' Not Detected*			
All reported organisms to be stored in freezer					

Appendix 7

LF592v2 Ad Hoc/Additional Environmental Request (Air & Water)

For Completion by Infection Control Team			
Date of Issue		**Authorising Infection Control Consultant**	
Expected Sampling Date		**Frequency of Testing (e.g. One Off / Each Thurs)**	
Estimated Numbers		**Location(s) Hospital Site / Ward & Contact Details**	
Examination Request & Clinical Rational for Testing	**Air:** */ Air Sampling / Target Organism /Particle Count* **Water:** *Specify if target organism only / TVC / All GNB only as part of IMT investigation*		
Result Notification	*List all staff emails to receive a copy of results as they become available*		
ALL SAMPLES TO BE SUBMITTED WITH A COMPLETED ENVIRONMENTAL REQUEST FORM			
For Completion by Laboratory Staff (in conjunction with Infection Control Consultant)			
Booking in PID as per LI720	*Ensure full details of locations are included so all samples are PID'd using the same location for duration of incident*		
Reporting Criteria	*Example: Any isolate present to be reported /Only target organism to be reported*		
Set Up & Reporting Procedure	**Media to be set up / Additional Plates set up**		
	Reporting Criteria	*Example: Target organism Isolated/'Target Isolate' Not Detected etc*	
	All reported organisms to be stored in freezer		

Appendix 8

Duty of Candour Considerations for Infection Control Incidents

For an infection incident to be considered as a Duty of Candour Event, there are a number of points to consider.

Incident Definition

An 'incident' as defined in NHS GGC Incident Management Policy is any event or circumstance that led to unintended or unexpected harm.

Was the patient harmed?

For the purposes of the Duty of Candour legislation, harm can be:

- death of the person
- a permanent lessening of bodily, sensory, motor, physiologic or intellectual functions
- an increase in the person's treatment
- changes to the structure of the person's body
- the shortening of the life expectancy of the person
- an impairment of the sensory, motor or intellectual functions of the person which has lasted, or is likely to last, for a continuous period of at least 28 days
- the person experiencing pain or psychological harm which has been, or is likely to be, experienced by the person for a continuous period of at least 28 days
- the person requiring treatment by a registered health professional in order to prevent – (i) the death of the person, or (ii) any injury to the person which, if left untreated, would lead to one or more of the outcomes mentioned above

Was the event causing the harm avoidable?

Harm may occur as a result of the natural progression of a disease or is an inherent risk of the treatment given. That harm may be deemed unavoidable, in which case Duty of Candour legislation would not apply. There does however need to be evidence that this was considered. If the infection control review process is unable to determine that the harm was avoidable, a SAER should be commissioned to seek to answer this in line with the NHS GGC Management of Significant Adverse Events Policy.

	Was the Patient Harmed?	Yes	No
1	As a result of the infection, did the patient suffer harm (in line with the Organisational Duty of Candour Legislation definitions)? **Was the patient harmed?** For the purposes of the Duty of Candour legislation, harm can be: • death of the person • a permanent lessening of bodily, sensory, motor, physiologic or intellectual functions • an increase in the person's treatment • changes to the structure of the person's body • the shortening of the life expectancy of the person • an impairment of the sensory, motor or intellectual functions of the person which has lasted, or is likely to last, for a continuous period of at least 28 days • the person experiencing pain or psychological harm which has been, or is likely to be, experienced by the person for a continuous period of at least 28 days • the person requiring treatment by a registered health professional in order to prevent – (i) the death of the person, or (ii) any injury to the person which, if left untreated, would lead to one or more of the outcomes mentioned above		
If answered no, this does not meet the threshold for Duty of Candour.			
	On balance of probability was the unintended or unexpected infection incident avoidable?	Yes	No
2	Was there a systems issue e.g. guidance not followed, lack of PPE, poor practice identified?		
If answered no, this does not meet the threshold for Duty of Candour.			

IMT

If you have answered yes to question 1 and 2, the infection incident meets the threshold for Organisational Duty of Candour, pass to service specialty to progress a review in line with the NHS GGC Management of Significant Adverse Event Policy.

If the answer is no, a SAER would not normally be required, evidence that the avoidability has been considered should be retained for future evidence.

SERVICE SPECIALTY (follow local SAER process)
Ensure Datix has been completed
Complete briefing note and commission of SAER
Forward briefing note to clinical.risk@ggc.scot.nhs.uk

Appendix 9

Situation Report Template

[Incident title] [Update no #]
Date and time:
Author:
IMT Chair:

Introduction and incident background

This update was produced using data available at [date and time]
[Background to incident, including response tier, case definitions, completed investigations and risk assessment]

Common data set

[Key information agreed by IMT– no. Of cases/contacts/hospitalisations/deaths/recoveries etc]

Objectives

[Current principle objectives of the IMT]

Agencies/departments:

Participating in IMT
Receiving updates

Summary of control measures

Summary of ongoing investigations

Operational Issues

Forward look (including de-escalation plan)

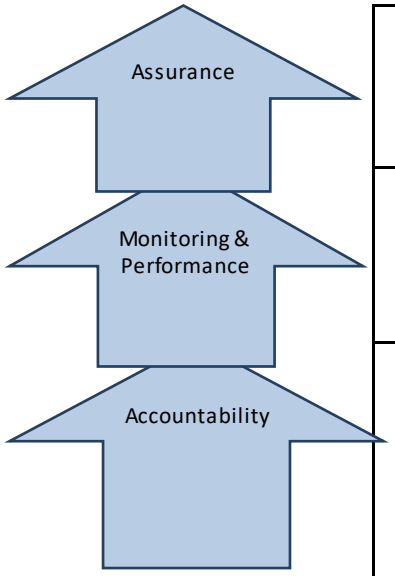
Communications

Requests for additional support (including legal issues)

Appendix 10

Governance and Assurance IMT Process

Escalation
Chair of IMT completes executive brief within 24 hours of IMT and sends to Exec Lead IPC



- Summary *HAIRT NHS GGC Board.
- HAIRT to Clinical Care Governance Committee.
- HAIRT Board Clinical Governance Committee.
- HAIRT/Hot Debriefs/ARHAI SBAR to Board Infection Control Committee.

- HAIRT/Hot Debriefs/ARHAI SBAR & IPC Risk Register to Acute Infection Control Committee & Partnership Infection Control Support Group.
- Weekly update to Board Executives, Service Directors, Chiefs of Medicine and Chiefs of Nursing re ongoing red/amber incidents.
- Director's dashboard to include details on incident and outbreaks.

- IMT Process and associated paperwork.
- IMT process audit report to committees twice per year.
- Incident summary to Service Director CoM/CoN within 24hours of incident being identified (mon-Friday).
- Incident update in monthly sector reports to be tabled at service governance groups. Outstanding actions to be included in monthly report.
- ARHAI SBAR to be included in sector reports and weekly reports to microbiology.

*HAIRT – Hospital Associated Infection Reporting Template includes a summary of all incident and outbreaks that score red/amber after HIIAT assessment.

Appendix 11

IPCT IMT Audit Template

1	The NHS board has undertaken a risk assessment following receipt of initial information.
2	The NHS Board has recorded whether there is a significant risk to public health; • scale of problem; • severity of problem; • possible cause of incident/outbreak; • initial actions to be taken and why.
3	Decisions on whether the situation should be declared an incident/outbreak, and whether an IMT should be called recorded.
4	All agencies/disciplines involved in investigation and control represented at IMT meeting
5	Roles and responsibilities of IMT members agreed and recorded
6	Case definition agreed and recorded
7	Descriptive epidemiology undertaken and reviewed at IMT. To include: number of cases in line with case definition; epidemic curve.
8	Decisions on microbiological and environmental investigations agreed by IMT and recorded
9	Analytical study considered and rationale for decision recorded
10	The IMT has kept records of decisions made about incident control measures and documented: whether these measures have been applied; and • if not, the reason why; • if yes, by whom, when and where they have been carried out; • any further action arising from above.
11	The IMT has reviewed the impact of control measures at each IMT meeting and documented its view on this.
12	Communications strategy agreed at first IMT meeting and reviewed throughout the investigation.
13	The Director of Communications has agreed a single press spokesperson and press officer who have regularly reported to the IMT on the tone and content of communications and responses to them.
14	The IMT Chair has regularly reported on the incident to relevant senior management of the LA and NHS board.
15	The IMT has agreed criteria for stepping down the IMT, and recorded when these criteria have been met
16	The IMT Chair has conducted a debrief immediately at the conclusion of the response phase. (within 2-4 weeks of step down)
17	The IMT Chair has arranged for a report, in the format agreed in consultation with the IMT, and submitted the report to the relevant NHS board committee (within 3 months of step down)
18	The IMT Chair has forwarded the report to relevant persons with responsibility for taking forward its recommendations and has agreed means of ensuring recommendations are followed up.

19	Responsibilities regarding duty of candour have been considered
20	Formal recording of if any risk should be included on either the IPCT or service risk register.
21	The auditor will check that each outbreak folder contains the documents listed below. The first four of which must be filed in the relevant folder in the IPC pan Glasgow drive. • **NHS GGC IPC Incident summary** • **GGC IPCT IMT Decision & Improvement Log** • **ARHAI SBAR** • **Hot Debrief** • Any results from environmental samples if done • Any typing results if done • Timeline if done • Press statements • Any other relevant reports/items

Appendix 12

Hot Debrief Tool

Hot debriefing document

This is not a mandatory requirement but for the purpose of sharing lessons learned across Scotland particularly for rare or unusual events. The IPCT/HPT or chair of the IMT should complete this immediately following the end of an incident. It may be deemed that a full IMT report is not needed and this document may be sufficient. A full IMT reporting template can be found in the resources section of the NIPCM

1. Incident reference

Please provide a reference/title for this incident.

2. Details of incident

Please provide a brief summary of incident: Include details of the following where relevant: dates when incident started/ended; case definition; description, number and features of cases; care areas/locations affected; source and modes of cross-transmission/exposure; diagnosis and treatment, any enhanced surveillance of interventions, any hypotheses.

3. What went well?

Please list aspects of the incident considered to have been managed well:

4. What did not go well?	
Please list aspects of the incident considered not to have been managed well:	
5.Lessons Learned	
Please provide details of any learning points or recommendations:	
6. IMT lead details	
Name:	Email:
Job Title:	Address:
Contact number:	Contact number (mobile):
Date:	Signed:
Completed templates to be returned to: NSS.HPSInfectionControl@nhs.net	

Glossary

AICC	Acute Infection Control Committee
ARHAI	Antimicrobial Resistance and Healthcare Associated Infection
BICC	Board Infection Control Committee
HIIAT	Healthcare Infection Incident Assessment Tool
ICBEG	Infection Control in the Built Environment Group
ICD	Infection Control Doctor
IMT	Incident Management Team
IPCT	Infection Prevention and Control Team
NIPCM	National Infection Prevention Control Manual
ORT	Online Reporting Tool
PAG	Problem Assessment Group
PICSG	Partnership Infection Control Support Group
SAER	Significant Adverse Event Report
SBAR	Situation Background Assessment Recommendation

NHS GREATER GLASGOW & CLYDE

STANDARD OPERATING PROCEDURE (SOP)

FOR MINIMISING THE RISK OF *Pseudomonas aeruginosa* INFECTION FROM WATER

Applicable in all adult and paediatric intensive care units and neonatal units (Levels 1, 2 and 3)

Effective from: October 2020 Review date: October 2022 Version: 4

This SOP applies to all staff employed by NHS Greater Glasgow & Clyde and locum staff on fixed term contracts and volunteer staff.

SOP Objective

To minimise the risk of *Pseudomonas aeruginosa* infection in healthcare premises from water.

Key changes from previous version :

1. Reference update
2. Revised PA audit / checklist to include identification of water ingress/ estates works at time of incident

Document Control Summary

Approved by and date	Board Infection Control Committee, NHS GGC Board Water Safety Group, NHS GGC
Date of Publication	Oct 20
Developed by	IPCT
Related Documents	Standard Infection Control Precautions (SICPs) - (NIPCM) NHS GGC Water Safety Policy
Distribution/Availability	NHSGGC Infection Prevention and Control web page www.nhsggc.org.uk/infectioncontrol
Lead Manager	Board Infection Control Manager
Responsible Director	Board Medical Director

NHS GREATER GLASGOW & CLYDE
STANDARD OPERATING PROCEDURE (SOP)
FOR MINIMISING THE RISK OF *Pseudomonas aeruginosa* INFECTION FROM WATER
Applicable in all adult and paediatric intensive care units and neonatal units (Levels 1, 2 and 3)
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Contents

Introduction

This SOP provides direction and guidance for ward based staff to meet their responsibilities as stated in *HPS(2018) Draft Guidance for neonatal units (NNUs) (levels 1,2&3), adult and paediatric intensive care units (ICUs) in Scotland to minimise the risk of Pseudomonas aeruginosa infection from water.* This document refers to critical control points 2 – 4 (inclusive) only. (Critical points 1, 5 and 6 are considered in the NHSGGC Water Safety Policy and Written Scheme).

All wards / departments listed in the risk assessment for additional control measures to minimise the risk of *Pseudomonas aeruginosa* infection from water should be included in this guidance.

1. Responsibilities

Senior Charge Nurses (SCNs) must:

- Follow this SOP.
- Undertake flushing of taps on clinical hand wash basins in clinical areas on days when the Facilities exception reports highlight that daily cleaning of those sinks has not been possible.
- Keep records of flushing of these taps for at least one month.
- Inform a member of the local Estates Team if this SOP cannot be followed in relation to flushing water outlets.
- Inform a member of the local Estates Team of infrequently used outlets which could be removed.
- Allow members of the local Estates Team access to complete maintenance as appropriate.

Estates must:

- Undertake actions deemed the responsibility of the local Estates Department as per the Water Safety Policy and Written Scheme.
- Keep a record of outlets reported that are deemed to be infrequently used and actions taken by them to remove this risk.
- Provide a report of maintenance actions and issues/ anomalies to the Sector Water Safety Group.
- Support staff locally to undertake their responsibilities in terms of reducing risk associated with pseudomonas.

Managers must:

- Make this SOP available to their staff.
- Support SCNs in following this SOP.

Board Water Systems Safety Group must:

- Keep this SOP up-to-date.
- Audit compliance with this SOP.
- Provide guidance via the Water Systems Safety Policy.

2. Critical Point 2: Flushing Water Outlets to reduce the risk of Pipework System Contamination

Flushing of water outlets is necessary to control the build-up of biofilm in water systems to reduce the risk of transmission of pathogens via the environment and equipment to patients.

The Senior Charge Nurse (SCN) in each unit has responsibility (under current guidance) to ensure that the following recommendations are complied with in their area. The SCN should ensure that:

1.1 All water outlets are flushed in high-risk environments (patient areas and areas where clinical procedures are prepared or performed) daily, first thing in am for 1 minute at full flow (but not so that splashing goes beyond the basin). This must be recorded. In practice this will be assigned to the Facilities department as part of the local cleaning schedule. Where this has not been possible e.g. access issues, then the flushing will be carried out by the SCN and a record kept (See Appendix 2).

1.2 Any problems or concerns relating to the safety, maintenance, reduced usage, any changes in use and cleanliness of all water outlets must be identified and reported to the ICT and the Estates Department as relevant.

3. Critical Points 3 -4

The check list at **Appendix 1** should be used by the SCN as a guide and assessment tool to provide assurance that risks from contamination by *P. aeruginosa* are managed as far as possible by ward staff in high risk areas.

Where units do not meet the guidance, an action plan should be developed to remedy any risks identified through this process.

Those high risk areas in NHS GGC which have flow straighteners on water outlets in patient areas, will be subject to 6 monthly water sampling for PA as per regime outlined in **Appendix 3**

4. Critical Control Point 5: Surveillance and preparedness

IPCTs will:

- Include *Pseudomonas aeruginosa* from blood culture as an alert organism from all in-patient areas and from all specimens from ICUs, NICUs, PICUs and transplant units.
- Liaise with microbiology if further water testing required (e.g. suspected / confirmed outbreak)

Clinical Managers will:

- Support IPCT to undertake an assessment of the patients and ward
- Have a contingency plan for NICUs, PICU and ICUs to continue safe patient care without use of tap water, if identified as a source.

5. Critical Control Point 6: Investigation and control measures for clinical incidents

Where alert surveillance identifies *Pseudomonas aeruginosa* bacteraemia in one of the adult high risk areas, or in any specimen from NICUs and PICU, the IPCT will undertake immediate assessment to determine if this is healthcare associated. Consideration should be given to: previous colonisation / infection with PA; review of patient's care; possible reservoirs in the clinical area and all relevant microbiology results. The following action should be undertaken:

1 isolate of PA in a high risk unit: The IPCT will undertake an audit using the PA Ward Audit Checklist (Appendix 1). If no issues, then no further action. If actions required , liaison with SCN to support remedial action. Summarise actions in SBAR for IPCT and SCN.

2 isolates of PA in 2 patients in 2 weeks
The IPCT will undertake an audit using the PA Ward Audit Checklist (Appendix 1). An incident meeting will be arranged with IPCT, clinical team and relevant staff, including estates and or microbiology to agree investigation and action required. Minutes should be kept and the incident summarised in an SBAR for IPCT and Sector Management Team.

6. References

HPS (2018) Draft Guidance for neonatal units (NNUs) (levels 1,2 &3), adult and paediatric intensive care units (ICUs) in Scotland to minimise the risk of *Pseudomonas aeruginosa* from water.

NIPCM: Interim Guidance. Prevention and management of healthcare water – associated infection incidents/outbreaks (August 2019)

Appendix 1: PA Ward Audit Checklist / Assessment Tool:

Critical Control Point 3: Preventing Direct Water Usage Colonising / Infecting Vulnerable Patients		**Requirement met Yes/No**	**Actions required/ completed**
1.1	**Washing Babies and high risk patients:** Patients are washed (inc. face, body wash, top & tail, bed bath, nappy change and immersion bath) using clean, fresh tap water/ commercial wipes.		
1.2	**Defrosting Breast Milk:** Breast milk is defrosted either: • in a designated milk fridge • outside fridge at room temperature OR • using a warming/ defrosting device designed to ensure no direct contact with the bottle/ syringe with non-sterile water. • Using sterile water warmed in a warming cabinet NB: Discard any milk not used once defrosted DO NOT USE WARM TAP WATER		
1.3	**Warming Breast/ Formula Milk:** • Milk is taken out of fridge one hour prior to use OR • Milk is warmed using a warming device designed to ensure no direct contact with the bottle/ syringe with non-sterile water. • Use warmed (in warming cabinet), sterile water		
1.4	**Use of Ice:** • Ice is not used for direct baby care in NNUs (all levels). • Ice for consumption by severely immunocompromised patients should be made with sterile water and not taken from an ice machine.		

Critical Control Point 4: Preventing Indirect Contact with *P. aeruginosa* from Colonised/ Infected Patients		**Requirement met Yes/No**	
2.1	**Hand Wash Stations:** • Clinical hand wash sinks are used for hand washing only. • Clinical Hand wash sinks are cleaned at least daily as per National Cleaning Specification. • Hand hygiene product bottles are never topped up • Hand hygiene should be undertaken as per National Infection Prevention and Control Manual (NIPCM) • Clinical hand wash sinks are cleaned daily as per National Cleaning Specification		
2.2	**Aseptic Procedures:** • Aseptic procedures are prepared and/ or performed in an area where there are no concurrent procedures being undertaken that generate splashing which could contaminate a sterile surface. • Decontaminate all aseptic procedure surfaces with a detergent or alcohol wipe		
2.3	**Aerosol Generating Procedures:** Existing guidance in the NIPCM for aerosol generating procedures is followed.		
2.4	**Discarding Potentially Contaminated water/ fluids:** • Small volumes of fluid, e.g. ET/ ventilator condensate, are discarded into clinical waste bags. • Larger volumes, e.g. bath water etc, are safely transported to a sink (not a hand wash sink) or sluice.		

Critical Control Point 4: Preventing Indirect Contact with *P. aeruginosa* from Colonised/ Infected Patients		**Requirement met Yes/No**	
2.5	**Suction/ Chest Drain Bottles:** Disposable suction container liners are sealed and discarded in a suitable container or solidifying gel is used prior to discarding in healthcare waste.		
2.6	**Equipment Decontamination: Incubators** All re-usable equipment is thoroughly dried including mattress and all other parts, following decontamination.		
2.7	**Humidifiers:** • Humidifiers on incubators: Only sterile or distilled water is used to fill and top up. • Re-usable humidifiers are decontaminated in a Central Decontamination unit (CDU). If not able to withstand reprocessing in a CDU, then manufacturer's instructions must be followed.		
2.8	**Storage of Equipment:** Patient equipment is not stored where they may be exposed to splash contamination.		
2.9	**Non-Clinical Procedures that create a spray:** • No fluid containers are topped up • Spray bottles are not used for cleaning solutions and in areas where aseptic procedures are being prepared or are ongoing.		
3.0	**Water Ingress/ Ongoing repairs** There have been no water ingress or ongoing repairs in the patient environment		

Appendix 2: Example of Flushing Record for high risk areas

DAILY FLUSHING OF WATER OUTLETS

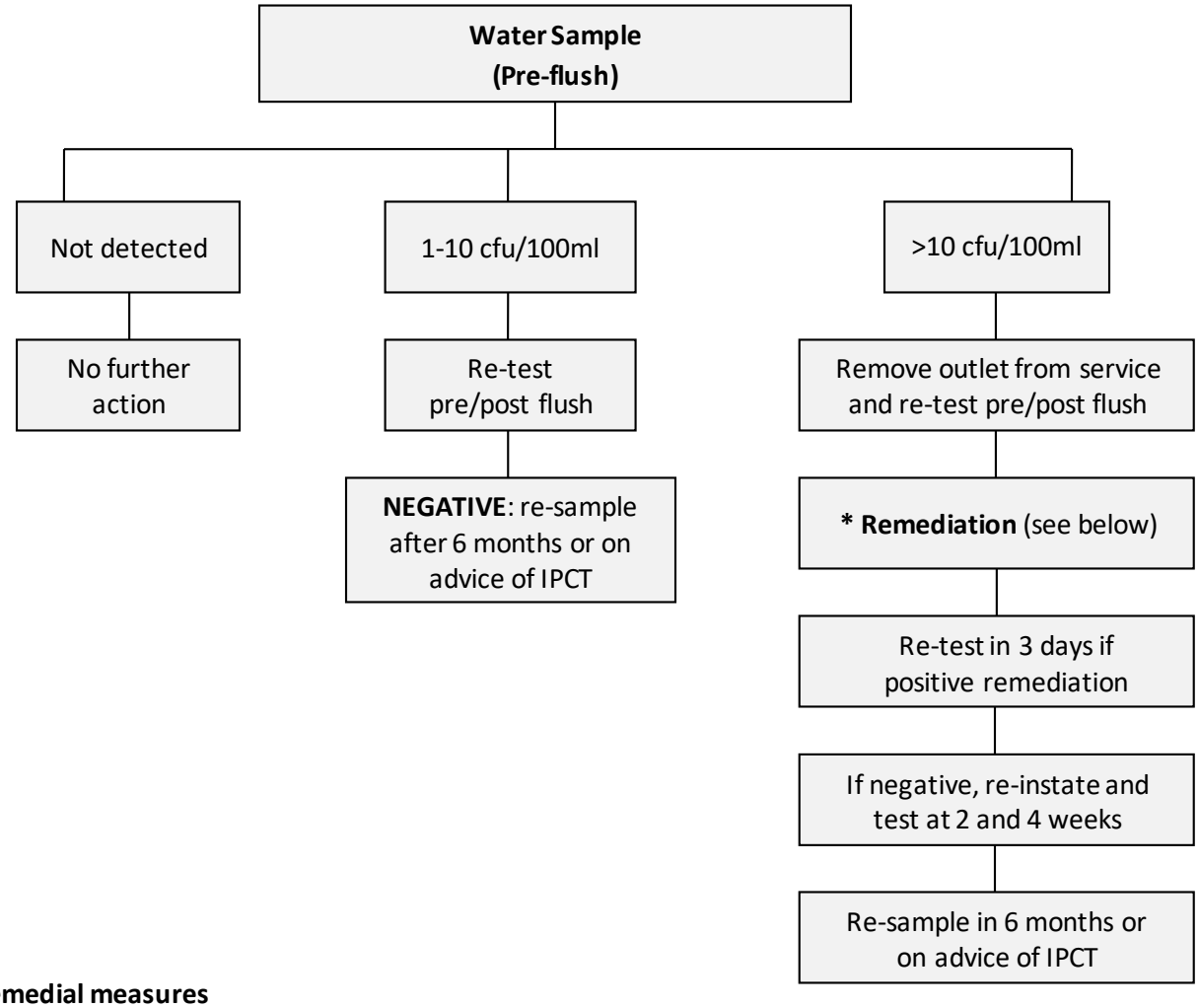
ROOM NUMBER/ BED SPACE	DATE	SIGNATURE

Appendix 3: Water testing protocol for Pseudomonas aeruginosa in NICU

High risk areas whose water outlets in patient areas have flow straighteners should be sampled 6-monthly

Water outlets which should be sampled include those with supply water that have:

- direct contact with patients
- used to wash staff hands before and after clinical procedures
- used to clean equipment that will have contact with patients



* **Remedial measures**

Consider the following:

- Continue daily flushing while out of use
- If practical consider removal of flow straighteners
- Hand washing should be supplemented by the use of alcohol gel

- Check unit for little-used outlets and if possible remove
- Check pipework for deadlegs and blind ends
- Consider disinfection e.g. chlorine dioxide
- Consider replacement taps
- Ensure best practice in relation to handwash basins
- Use bottled water for baby bathing until re-test –ve

Interpreting pre and post flush counts

High counts pre-flush (> 10 cfu/100ml) and low post flush (<10cfu/100ml) suggests local water outlet problem.

High count pre and post flush (> 10cfu/100ml) suggests wider problem with the water supply. In this situation most outlets are likely to be positive and other points in the water system should be sampled.

SCOTTISH HOSPITALS INQUIRY

Bundle of documents for Oral hearings commencing 16 September 2025 in relation to the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow

Bundle 49 – Documents related to the Oversight Board, Advice and Assurance Review Group (AARG) and Healthcare Improvement Scotland (HIS)

A53429115