

NHS Greater Glasgow and Clyde	Paper No. 23/99
Meeting:	NHS Board
Meeting Date:	19th December 2023
Title:	The Healthcare Associated Infection Reporting Template (HAIRT) for September & October 2023
Sponsoring Director/Manager:	Professor Angela Wallace, Executive Director of Nursing
Report Author:	Mrs Sandra Devine, Director of Infection Prevention and Control

1. Purpose

The Healthcare Associated Infection Reporting Template (HAIRT) is a mandatory reporting tool for the Board to have an oversight of the Healthcare Associated targets; *Staphylococcus aureus* bacteraemias (SAB), *Clostridioides difficile* infections (CDI), *E. coli* bacteraemias (ECB), incidents and outbreaks and all other Healthcare Associated Infections' (HCAI) activities across NHS Greater Glasgow & Clyde (NHSGGC) in September & October 2023.

The full HAIRT will now be considered by the Clinical and Care Governance committee on an ongoing basis with a summary report being submitted to the NHS Board meeting.

2. Executive Summary

The paper can be summarised as follows:

- Scottish Government Standards on Healthcare Associated Infections Indicators (SGHAI) set for 2019-2024 for SAB, CDI and ECB are presented in this report.

The CNOD issued an update on 28th February 2023 which includes an extension to the standards until 2024. Available at: [https://www.sehd.scot.nhs.uk/dl/DL\(2023\)06.pdf](https://www.sehd.scot.nhs.uk/dl/DL(2023)06.pdf)

- SAB rates remain within expected limits as demonstrated in the National ARHAI funnel plots. There were 20 healthcare associated SAB reported for September & 33 in October 2023 with the aim being 23 or less per month. We remain within expected limits and continue to support improvement locally to reduce rates via the Infection Prevention and Control Quality Improvement Network (IPCQIN) and local SAB Groups.
- ECB rates remain within expected limits as demonstrated in the National ARHAI funnel plots. There were 68 healthcare associated ECB in September & 53 in October 2023. Aim is 38 or less per month. This indicator is due to be reviewed nationally as it is accepted that the improvement target is unlikely to be achieved. In terms of NHSGGC performance the NHSGGC rate in the most recently published data is below the national rate of 37.6 (GGC rate is 35 cases per 100,000 occupied bed days).

- There were 24 healthcare associated CDI in September & 17 in October 2023. Aim is 17 or less per month. CDI rates remain within expected limits as demonstrated in the National ARHAI funnel plots.
- National SSI surveillance was paused in 2020 and remains paused for the foreseeable future although continues locally.
- Clinical Risk Assessment (CRA) compliance was **92%** for CPE and **90%** for MRSA in the last validated reporting quarter (Q2-2023). In Q2 NHS Scotland reported compliance of 80% and 81% respectively. Unvalidated compliance results for quarter 3 indicate that GGC is above 90% for both assessments (96 & 94% respectively).
- The following link is the ARHAI report for the period April to June 2023. This report includes information on GGC and NHS Scotland's performance in relation to the SGHAI [Quarterly epidemiological data on Clostridioides difficile infection, Escherichia coli bacteraemia, Staphylococcus aureus bacteraemia and Surgical Site Infection in Scotland. April to June \(Q2\) 2023 | National Services Scotland \(nhs.scot\)](#).
- The Board's cleaning compliance and Estates compliance are $\geq 95\%$ for September & October 2023.
- The sixth issue of the Infection Prevention and Control Quality Improvement Network (IPCQIN) newsletter will be issued in January 2024. This ensures shared learning across the organisation on the improvements implemented thus far by the network.
- **IPC Internal Audit – October 2023.** In line with the 2023/24 Internal Audit Plan, Azets reviewed arrangements for IPC across Acute and Mental Health sites. This included consideration of training, compliance with policies, reporting of breaches and actions taken.

Various areas of good practice were noted in the report, including:

- Well-established IPCT and work is embedded throughout GGC. Weekly visits to all wards have enabled them to deliver a 'Theme of the week / month' to provide continuous delivery of education. This was praised by all the wards we visited throughout the audit.
- Policies and procedures for all IC related incidents and care plans for each infection that enables the timely implementation of care for all patients and staff.
- An effective evaluation process in place conducted by the Learning and Education team and subject matter experts (module leads) which keeps Learnpro modules up to date.
- The IC team use ICNet to centrally record and monitor infection throughout GGC. The data team regularly report on infection rates, which enables management throughout the health board to identify trends and patterns of infection cases and where appropriate investigation and actions can take place. This information is shared and reported to four levels of management.
- The IC conduct audits on an ongoing basis to identify issues and recommend actions. These are followed up upon to ensure timely implementation.

Out of 6 control assessments, 5 were reported as green and one reported as amber. Amber was associated with Control Objective 2 – *Training completion rates for staff*. This had 3 management actions, all of which are now in progress and will be completed by the end of December 2023.

3. Recommendations

The NHS Board is asked to consider the following recommendations:

- Note the content of the HAIRT report.
- Note the performance in respect of the Scottish Government Standards on Healthcare Associated Infections and Indicators for SAB, CDI and ECB.
- Note the detailed activity in support of the prevention and control of Healthcare Associated Infections.
- Note the summary of the internal audit report by Azets.

4. Response Required

This paper is presented for assurance

5. Impact Assessment

The impact of this paper on NHSGGC's corporate aims, approach to equality and diversity and environmental impact are assessed as follows:

- | | |
|------------------------|------------------------|
| • Better Health | <u>Positive</u> impact |
| • Better Care | <u>Positive</u> impact |
| • Better Value | <u>Positive</u> impact |
| • Better Workplace | <u>Positive</u> impact |
| • Equality & Diversity | <u>Neutral</u> impact |
| • Environment | <u>Positive</u> impact |

6. Engagement & Communications

The issues addressed in this paper were subject to discussion with the Infection Prevention and Control (IPC) Team and the IPC Surveillance & Data Team. Comments were also taken into consideration from the below groups when reviewing the content and format of the full HAIRT following presentation to:

- Partnerships Infection Control Support Group (PICSG)
- Acute Infection Control Committee (AICC)
- Board Infection Control Committee (BICC)

7. Governance Route

The HAIRT Report has been previously considered by the following groups as part of its development:

- The Infection Prevention and Control Team (IPCT)
- Partnerships Infection Control Support Group (PICSG)
- Acute Infection Control Committee (AICC)
- Board Infection Control Committee (BICC)
- Clinical and Care Governance Committee (CCGC)

This paper is then shared with the Board Clinical Governance Forum for information and a summary (this paper) presented at the NHS Board for assurance.

8. Date Prepared & Issued

Date the paper was written: 29/11/2023

Date issued to NHS Board on: 12/12/2023

Healthcare Associated Infection Summary – September & October 2023

The HAIRT Report is the national mandatory reporting tool and is presented every two months to the Clinical and Care Governance Committee with a summary report to the NHS Board. This is a Scottish Government requirement and informs NHSGGC of activity and performance against the Scottish Government Standards on Healthcare Associated Infections and Indicators. Other available indicators are included for assurance.

Performance at a glance relates only to the 2 months reported and should be viewed in the context of the overall trend over time in the following pages.

	September 2023	October 2023	Status toward SGHAI (based on trajectory to March 2024)
Healthcare Associated <i>Staphylococcus aureus</i> bacteraemia (SAB)	20	33	Aim is 23 per month
Healthcare Associated <i>Clostridioides difficile</i> infection (CDI)	24	17	Aim is 17 per month
Healthcare Associated <i>Escherichia coli</i> bacteraemia (ECB)	68	53	Aim is 38 per month
Hospital acquired IV access device (IVAD) associated SAB	12	10	
Healthcare associated urinary catheter associated ECB (includes suprapubic catheter)	11	12	
Hand Hygiene	96	97	
National Cleaning compliance (Board wide)	95	95	
National Estates compliance (Board wide)	96	96	

Healthcare Associated Infection (HCAI) Surveillance

NHSGGC has systems in place to monitor key targets and areas for delivery. An electronic HCAI surveillance system and ways of working allow early detection and indication of areas of concern or deteriorating performance.

Staphylococcus aureus bacteraemia (SAB)

	September 2023	October 2023
Total	30	40
*Healthcare	20	33
Community	10	7

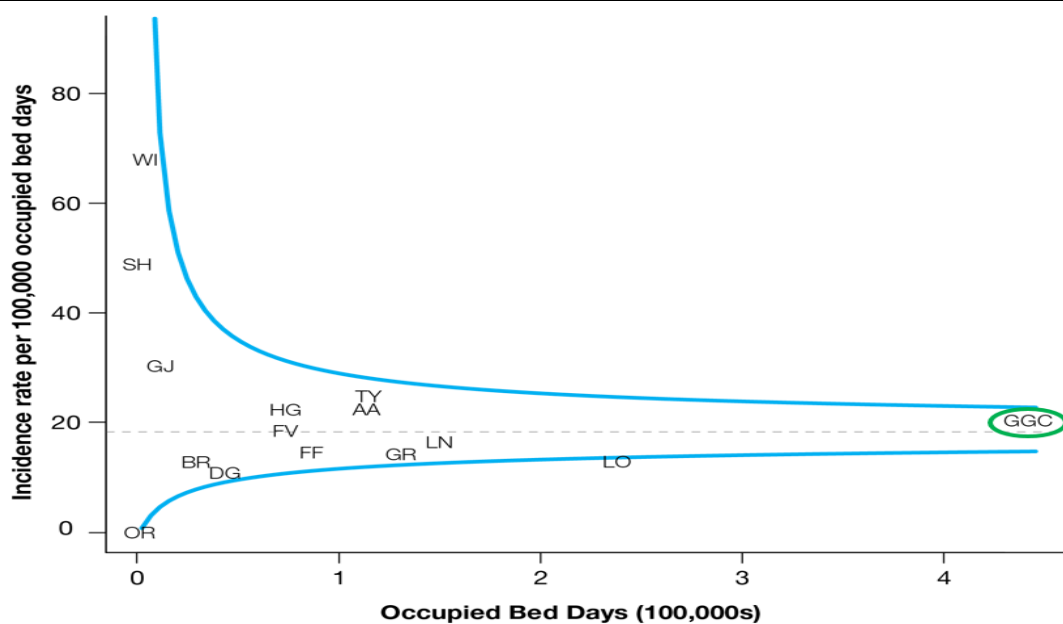
Healthcare associated *S. aureus* bacteraemia total for the rolling year November 2022 to October 2023 = 327.

HCAI yearly aim is **280**.
***Healthcare associated are the cases which are included in the SG reduction target.**

Monthly Aim for Healthcare Associated Infections is 23 patient cases.

Comments

- There has been a slight increase in the overall SAB cases. 33 cases were reported in October, compared to 20 cases reported in September and 27 in August. The number of Healthcare Associated SAB cases has been variable but within expected limits since 2020.
- Community cases have shown a reduction since March 2021 and remain in control with minimal variation.
- In addition to the nationally set targets and mandatory surveillance, in GGC infections from an IVAD caused by *S. aureus* or *E.coli* are investigated fully and reported in the monthly directorate reports and in the quarterly SAB & ECB reports. Data is also shared with the Acute Clinical Governance Group. This data is used to drive improvement in the local SAB groups.
- Information for all acute hospital cases are available in real time on the MicroStrategy IPC dashboard.

ARHAI Validated Q2 (April – June 2023) funnel plot – HCAI SAB cases

Rate: **20.4** per 100,000 OBDs.

NHSGGC rate is within the control limits for this quarter and above the national rate of 18.3.

E.coli bacteraemia (ECB)

	September 2023	October 2023
Total	114	84
Healthcare*	68	53
Community	46	31

Monthly Aim for Healthcare Associated Infections is 38 patient cases.

Healthcare associated *E. coli* bacteraemia total for the rolling year November 2022 to October 2023 = 634.

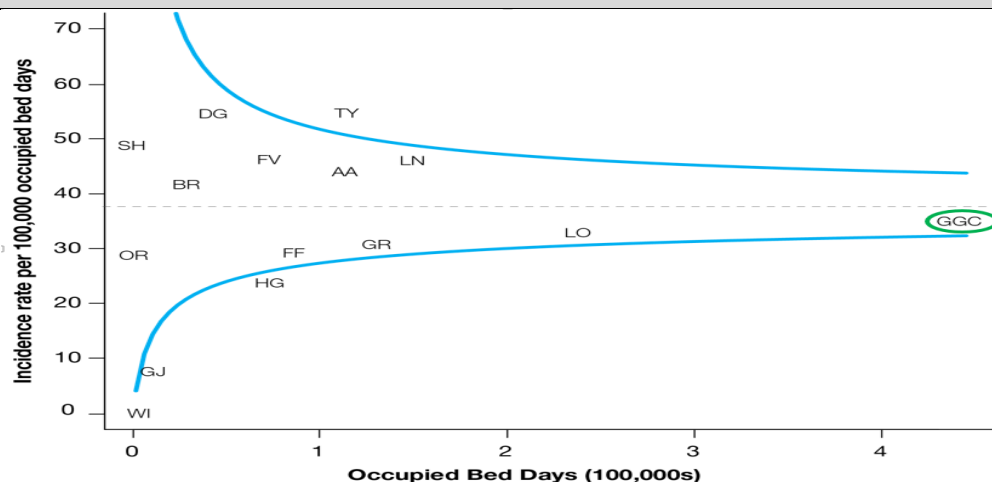
HCAI yearly aim is **452**.

***Healthcare associated are the cases which are included in the SG reduction target.**

Comments:

- There has been an increase in total cases over the past few months and they reached the upper control limit in September 2023, however, the numbers have decreased again in October 2023 to 84 which is below the established mean. Teams across GGC continue to monitor and implement improvements, including promoting good urinary catheter care and the use of the urinary catheter care passport. At the meeting of the IPCQIN on 14th November 2023 a new work stream was proposed in relation to preventing infections associated with urinary catheters and membership of a subgroup was agreed.
- The number of HCAI cases had reached the upper control limit in September 2023 but have dropped again in October 2023 to within control limits. Enhanced surveillance of ECB continues and is prospectively available to view by clinicians on Microstrategy, however, teams across GGC continue to monitor and implement improvements as noted above.
- There is variability in monthly community onset cases, however cases remain within control limits.
- Ward level data of entry point of bacteraemia is available via MicroStrategy. This provides real time information to clinical staff to assist in the decision to use improvement methodology to test interventions that may lead to a reduction in the number of patients with this infection.

The Public Health Scotland Urinary Catheter Care Passport contains guidelines to help minimise the risk of developing an infection and is available at: [HPS Website - Urinary Catheter Care Passport \(scot.nhs.uk\)](https://www.scot.nhs.uk/hps/urinary-catheter-care-passport)

ARHAI Validated Q2 (April – June 2023) funnel plot – HCAI ECB cases

Rate: **35** per 100,000 OBDs.

NHSGGC rate is within the control limits for this quarter and below the national rate of 37.6. This also demonstrates good performance when compared to other boards.

***Clostridioides difficile* infection (CDI)**

	September 2023	October 2023
Total	29	27
Healthcare*	24	17
Community	5	10

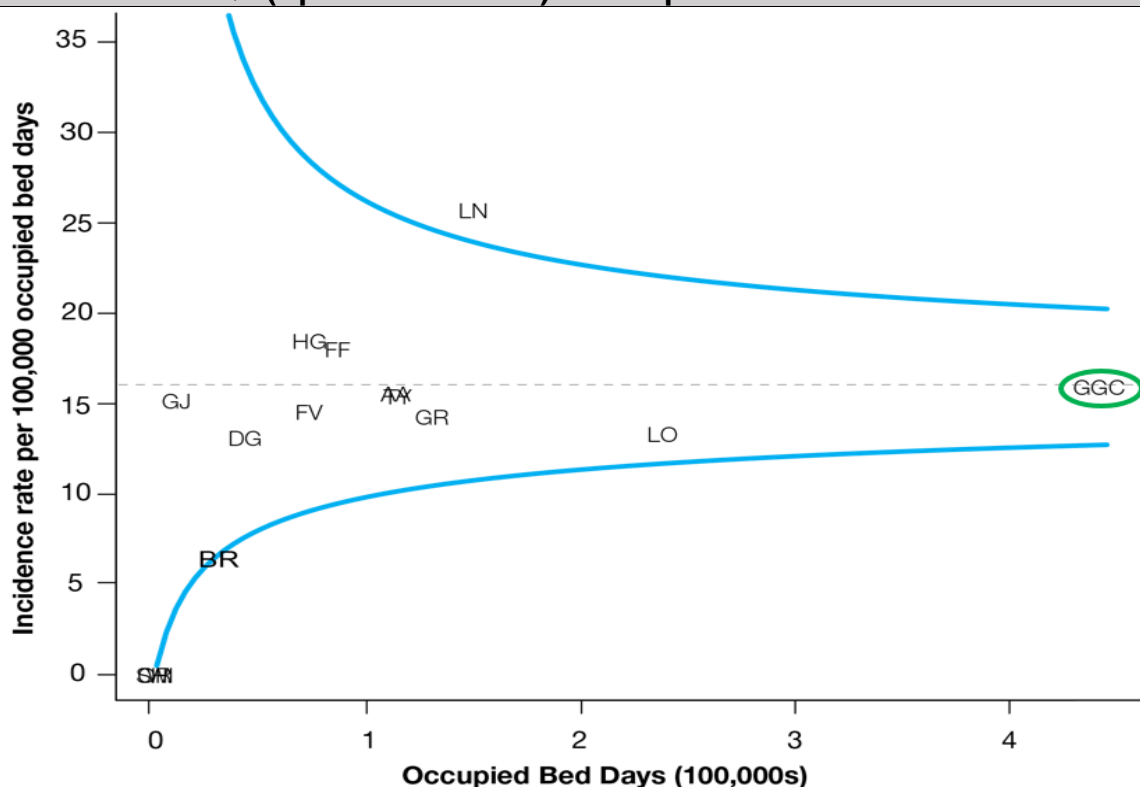
Healthcare associated *Clostridioides difficile* total for the rolling year November 2022 to October 2023 = 244.
HCAI yearly aim is **204**.

Monthly aim for Healthcare Associated Infection is 17.

***Healthcare associated are the cases which are included in the SG reduction target.**

Comments:

- There had been an increase in the overall CDI cases in June 2023 (28) however the numbers have returned to expected levels, i.e. 24 in September and 17 in October. The IPCT continue to closely monitor and implement local actions in any areas with higher than expected numbers.
- Community acquired cases within the last two months remain within the chart's control limits. Information on all Acute hospital cases is available on Micro-Strategy.

ARHAI Validated Q2 (April – June 2023) funnel plot – HCAI CDI cases

Methicillin resistant *Staphylococcus aureus* (MRSA) and *Clostridioides difficile* recorded deaths

The National Records of Scotland monitor and report on a variety of death causes recorded on the death certificate. Two organisms are monitored and reported; MRSA and *C. difficile*. Please click on the link for further information:

<https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths>

There were zero deaths in September 2023 and three in October 2023, where hospital acquired *Clostridioides difficile* was recorded in on the patient's death certificate. These were all considered to be antibiotic associated and not due to cross infection (all were in different wards and did not cross in time or place). Datix incident reports were raised and the clinical teams were asked to complete clinical reviews.

September 2023	Nil		
Hospital acquired CDI recorded on one part of the Death Certificate	Nil		
October 2023	WOS CC	RAH	QEUH
Hospital acquired CDI recorded on one part of the Death Certificate	1	1	1

There were no deaths this period where hospital acquired MRSA was recorded on the death certificate.

NHS GGC Hand Hygiene Monitoring Compliance (%)



In NHSGGC there is a dedicated Hand Hygiene Coordinator. This colleague support education, innovation and audit of practice across all areas. Every month each individual clinical area carries out a hand hygiene audit and there results of this are entered onto the Care Assurance and Improvement Resource (CAIR) dashboard. This data is reviewed by the coordinator and a series of assurance audits are undertaken in areas with reported high and low compliance. Any areas requiring improvement are identified and supported.

Estate and Cleaning Compliance (per hospital)

The data is collected through audit by the Domestic Services Team using the Domestic Monitoring National Tool. Areas chosen within each hospital are randomly selected by the audit tool. Any issues such as inadequate cleaning is scored appropriately and if the score is less than 80%, a re-audit is scheduled. Estates compliance assesses whether the environment can be effectively cleaned; this can be a combination of minor non-compliances such as missing screwcaps, damaged sanitary sealant, scratches to

woodwork etc. The results of these findings are shared with Serco/Estates for repair. Similar to the cleaning audit. Scores below 80% trigger a re-audit.

Infection Prevention and Control Quality Improvement Network (IPCQIN) Update

The IPCQIN aim is to create the organisational conditions to facilitate and support the reduction of preventable infections associated with healthcare delivery. The Steering Group and the Operational Group have been merged into one group and the first meeting for the merged group was held in September 2023, and the next meeting is scheduled for the 9th January 2024. The three main work streams continue to progress and provide flash reports to the group. The sixth issue of the newsletter will be available in January 2024.

Outbreaks or Incidents in September & October 2023

Outbreaks / Incidents

Outbreaks and incidents across NHSGGC are identified primarily through ICNet (surveillance software package), microbiology colleagues or from the ward. ICNet automatically identifies clusters of infections of specific organisms based on appendix 13 of the National Infection Prevention & Control Manual (NIPCM) to enable timely patient management to prevent any possible spread of infection. The identification of outbreaks is determined following discussion with the Infection Control Doctor/Microbiologist. In the event of a possible or confirmed outbreak/incident, a Problem Assessment Group (PAG) or Incident Management Team (IMT) meeting is held with staff from the area concerned, and actions are implemented to control further infection and transmission.

The ARHAI Healthcare Infection Incident Assessment Tool (HIIAT) is a tool used by the IMT to assess the impact of the outbreak or incident. The tool is a risk assessment and allows the IMT to rate the outbreak/incident as **RED**, **AMBER**, or **GREEN**.

All incidents that are HIIAT assessed are reported to the Antimicrobial Resistance & Healthcare Associated Infection (ARHAI) group.

HIIAT

The HIIAT is a tool used by boards to assess the impact of an outbreak or incident. The tool is a risk assessment and allows boards to rate the outbreak/incident as **RED**, **AMBER**, or **GREEN**. ARHAI are informed of all incidents who onward report to the Scottish Government Health and Social Care Directorate (SGHSCD).

HIIAT **GREEN** – reported 9 in September and 4 in October 2023.

HIIAT **AMBER** - reported 6 in September and 10 in October 2023.

HIIAT **RED** – reported 1 in September and 5 in October 2023.

(COVID-19 incidents are now included in the above totals but not reported as incident summaries)

Outbreaks/Incidents (HIIAT assessed as AMBER or RED excluding COVID-19)

QEUH, INS – Pseudomonas – HIIAT assessed as AMBER

Three patients had *Pseudomonas aeruginosa* identified from clinical samples. At the same time two patients had *Klebsiella pneumoniae* isolated from External Ventricular Draining (EVD) devices.

A Problem Assessment Group (PAG) meeting was held on 21st September 2023 and additional control measures were agreed and implemented. The HIIAT was assessed as **AMBER** on 27th September 2023 (moderate for both patient impact and risk of transmission, minor for impact on services and public anxiety), then assessed as **GREEN** on 5th October 2023. Investigations included water sampling which was negative for *pseudomonas aeruginosa*. An Inspection was undertaken by estates colleagues to identify any water ingress in patient areas; none were identified. Standard Infection Control Precautions (SICPs) water safety checklists and hand hygiene audits were undertaken by the Infection Prevention and Control team. Extra cleaning of the area was put in place and Transmission Based Precautions were implemented for patients. The incident was closed on 10th October 2023. All available specimens were sent for typing. Two cases of *Pseudomonas aeruginosa* were typed and were different, the two cases of *K. pneumoniae* were the same. Surveillance in this area continues no other triggers with these organisms have been reported to date. All the patients have recovered and two have been discharged home.

Greater Glasgow & Clyde COVID-19 Incidents:

During September and October 2023, there were **21** outbreaks of COVID 19 which scored either **AMBER** (15) or **RED** (6). As a precautionary principle, during incidents and outbreaks in GGC, if COVID 19 appeared on any part of a patient's death certificate, the assessment was considered to be automatically **RED**.

All incidents and outbreak are reported to ARHAI regardless of the assessment.

Sector	RAH	GRI	IRH	Lightburn
COVID-19 (RED HIIAT)	2	2	1	1

Healthcare Environment Inspectorate (HEI)

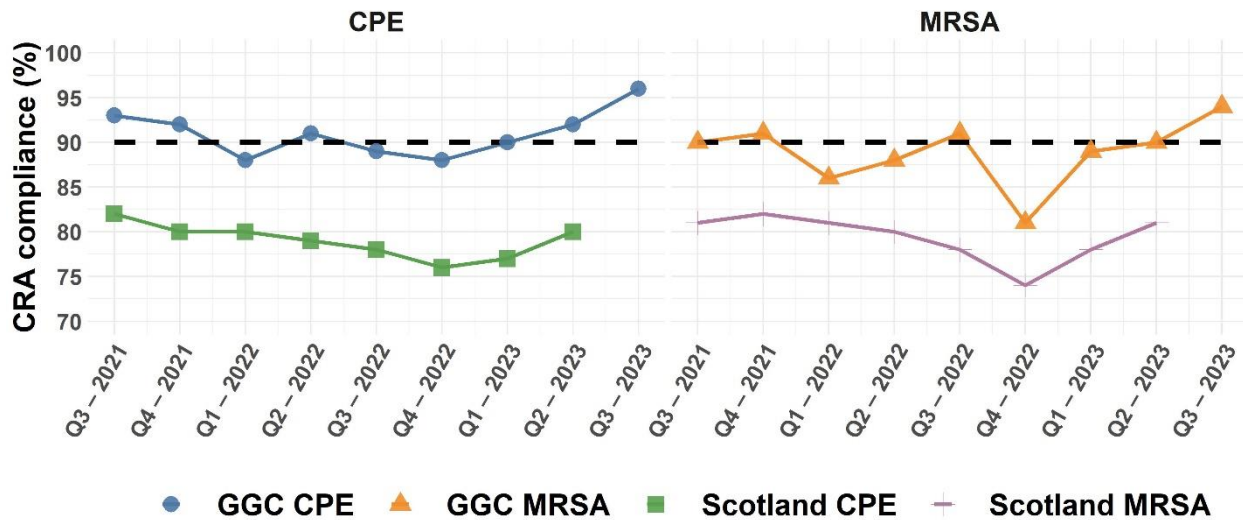
No HEI inspections were carried out in September and October 2023. All HEI reports and action plans for previous inspections can be viewed by clicking on the link:

http://www.healthcareimprovementscotland.org/our_work/inspecting_and_regulating_care/nhs_hospitals_and_services/find_nhs_hospitals.aspx

Multi-drug resistant organism screening

As part of the national mandatory requirements, each board is expected to screen specific patients for resistant organisms. These are Carbapenemase producing Enterobacteriaceae (CPE) and MRSA. The decision to screen depends on the outcome of a clinical risk assessment performed on all admissions. On a quarterly basis we assess compliance of completing this risk assessment to provide assurance of effective

screening and this is reported nationally. The national expectation of compliance is **90%** (black dashed line). National data for Q2 has been validated and included along with the local data for Q3. The 90% compliance standard has been achieved.



Last validated quarter April - June 2023		NHSGGC 92% compliance rate for CPE screening	Scotland 80%
		NHSGGC 90% compliance rate for MRSA screening	Scotland 81%
Local data July – September 2023		NHSGGC 96% compliance rate for CPE screening	TBC
		NHSGGC 94% compliance rate for MRSA screening	TBC

We continue to support clinical staff to implement this screening programme and work is currently underway with eHealth to incorporate this information electronically into the patient admission eRecord.