

NHSGGC COVER PAPER

NHS Greater Glasgow and Clyde	Paper No. 21/30
Meeting:	NHSGGC Board Meeting
Meeting Date:	29 June 2021
Title:	The Healthcare Associated Infection Reporting Template (HAIRT)
Sponsoring Director/Manager	Professor Angela Wallace, Executive Director Infection Prevention and Control
Report Author:	Mrs Sandra Devine, Interim Infection Control Prevention and Control Manager

1. Purpose

The purpose of the attached paper is to: The Healthcare Associated Infection Reporting Template (HAIRT) is a mandatory reporting tool for the Board to have oversight of the Healthcare Associated targets (*Staphylococcus aureus* bacteraemias (SAB), *Clostridioides difficile* infections (CDI), *E. coli* bacteraemias (ECB), incidents and outbreaks and all other HCAI activities across NHS Greater Glasgow & Clyde (NHSGGC) over the period of March and April 2021.

The HAIRT will now be presented as a bi monthly report and the IPCT would welcome any comments on this new format. The full HAIRT will now be considered by the Clinical and Care Governance committee on an ongoing basis.

2. Executive Summary

The paper can be summarised as follows:

- AOP targets set for 2019-2022 for SAB, CDI and ECB are presented in this report.
- Board SAB rate remains within limits. Actions to address HCAI SAB reduction are included in the report.
- CDI remain within normal control limits for the period of the report.
- ECB remain within normal control limits.
- Surgical Site Infection (SSI) surveillance paused nationally from April 2020 to date as part of the COVID-19 response however GGC continues with local SSI surveillance programme.
- An update on the proposed IPC Quality Improvement Network - Better, Safe, Clean and Clinical Environment has been included for information.

- COVID-19 activity continued during March and April 2021. The IPCT continue to review every case and are currently assisting with 'Test and Protect' as directed by the Public Health Protection Unit. IPCT are also working closely with colleagues in H & S and Occupational Health to ensure national guidance is supported in practice.
- The IPCT are also participating in the review of nursing homes as directed by the Board Nurse Director. A recruitment process for IPC nursing support for care homes is complete and the team commenced post on the 4 May 2021.

3. Recommendations

The NHS Board is asked to consider the following recommendations:

- Note the HAIRT report.
- Note the performance in respect of the Annual Operational Plan (AOP) Standards for SAB, CDI and ECB.
- Note the detailed activity in support of the prevention and control of Healthcare Associated Infection.
- Note contribution of the IPCT to GGC response to COVID-19.

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>Neutral</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 Team. Comments were also taken into consideration from the below groups when reviewing the content and format following presentation:

- The Infection Prevention and Control Team (IPCT),
- Board Infection Control Committee (BICC),

- Acute Infection Control Committee (AICC),
- Partnerships Infection Control Support Group (PICSG), and
- Board Clinical Governance Forum.

7. Governance Route

This paper has been previously considered by the following groups as part of its development:

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

8. Date Prepared & Issued

Date the paper was written: 17 June 2021

Date issued to Board Members: 23 June 2021

Note:

*Please refer to **Appendix -1:** Health Care Associated Infection Reporting Guidance, Glossary, Definitions and Targets.*

Healthcare Associated Infection Summary – March/April 2021

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. This section of the report focuses on NHSGGC Board-wide prevention and control activity and actions.

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

	Mar 21	Apr 21	Status toward AOP target (based on trajectory to March 2022)
Healthcare Associated <i>Staphylococcus aureus</i> bacteraemia (SAB)	15	30	Below aim in March and above aim in April (23)
Healthcare Associated <i>Clostridioides difficile</i> infection (CDI)	21	19	Above aim in March and April (17)
Healthcare Associated <i>Escherichia coli</i> bacteraemia (ECB)	40	52	Above aim in March and April (38)
Hospital acquired IV access device associated SAB	5	11	
Hand Hygiene	98%	97%	
National Cleaning compliance (Board wide)	96%	95%	
National Estates compliance (Board wide)	97%	96%	

Key infection control challenges (relating to performance)

- SAB, CDI and ECB case numbers remain within control limits this month.
- Surgical Site Infection Surveillance was paused nationally (CNO letter 25 March 2020). Local SSI surveillance commenced on 1 June 2020 in is reported directly to clinical teams.

***Staphylococcus aureus* bacteraemia (SAB)**

	Mar 21	Apr 21	HCAI Aim	Healthcare associated <i>S. aureus</i> bacteraemia total for a rolling year: April 2020 to March 2021= 216 and May 2020 to April 2021 = 288. HCAI yearly aim is 280. *Hospital and Healthcare are the cases which are included in the SG reduction target (n=15) in March and (n=30) in April 2021.
Hospital	12*	20*	23	
Healthcare	3*	10*		
Community	15	12		
Total cases	30	42		
Comment:				

- The number of SAB cases has been variable but within expected limits since April 2019. This includes HAI and HCAI.
- Overall SAB numbers have been stable since April 2019, however the aim is to drive down rates over time. There has been an increase in cases in April 2021 but this increase can still be considered to be natural variation.
- Increased number of community cases in March and decreased numbers in April 2021.
- In addition to the nationally set targets, infections from an Intra-vascular access device caused by *S. aureus* are investigated fully and reported. IV access device cases decreased in March, following a month on month increase from November 2020 but increased again in April 2021.
- Enhanced bacteraemia surveillance temporarily switched to light methodology as directed by SG because of the acknowledged increased workload of IPCTs responding to the challenges of COVID-19. No data on source of SAB was collected in April 2020 but recommenced in May 2020 and has continued since for the vast majority of cases.
- There were 5 hospital acquired IV Access Device associated SAB cases in March and 11 in April 2021. Ward audits of device care plan undertaken by the IPCT and results were fed back to nursing team. Common themes were the failure to complete the care plan and consequently the care bundle, however this does not mean care was suboptimal completion of documentation to demonstrate care was incomplete.

***Escherichia coli* bacteraemia (ECB)**

	Mar 21	Apr 21	HCAI Aim
Hospital	23*	24*	38
Healthcare	17*	28*	
Community	35	49	
Total cases	75	101	

Healthcare associated *E. coli* bacteraemia total for a rolling year:
 April 2020 to March 2021 = 548 and
 May 2020 to April 2021 = 569
 HCAI yearly aim is 452.

* Hospital and Healthcare are the cases which are included in the SG reduction target (n=40) in March and (n=52) in April

Comment:

- Sustained improvement is indicated over time (since April 2019). There had been an increase in cases in April 2021 but still below the control limit.
- Urinary catheters were associated with 18% in March and 25% in April 2021 of all healthcare associated cases.
- The IPC Nurse Consultant is currently undertaking a review of measures to reduce avoidable harm in cases associated with invasive devices including urinary catheters. Device associated infection is one of the work streams in the improvement collaborative and it is anticipated that this work will support local improvement plans to reduce infections due to urinary catheters.

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

	Mar 21	Apr 21	HCAI Aim
Hospital	17*	9*	17
Healthcare	4*	8*	
Indeterminate onset	0*	2*	

Healthcare associated *Clostridioides difficile* total for a rolling year:
 April 2020 to March 2021 = 216 and
 May 2020 to April 2021 = 220
 HCAI yearly aim is 204.

Community	9	10	
Total cases	30	29	

* Hospital, Healthcare and Indeterminate are the cases which are included in the SG reduction target (n=21) in March and (n=19) in April 2021.

Comments:

Case numbers remain within control limits. Sustained improvement is indicated over time.

Hospital acquired cases and actions

- All patients are reviewed by the IPCT and advice is given regarding antimicrobial prescribing, isolation and transmission based precautions.
- The IPCNs visit the patient and discuss the infection and what this means for them.
- Any ward with two cases of HAI in two weeks is automatically visited daily and the SCN is assisted with the completion of the ARHAI Trigger Tool. Any clusters (2) are sent to the Reference Lab for testing. There was one cluster in GRI ward 4 in March 2021 – different Ribotypes, therefore cases were not due to cross infection. There were no clusters/triggers in April and all cases were antibiotic associated.
- Each ward receives an updated CDI SPC each month.

Surgical Site Infection Surveillance (SSIS)

March and April 2021 procedures - SSI surveillance was temporarily paused in April and May 2020 due to COVID-19 response. Local surveillance recommenced on 1 June 2020. Surveillance is currently ongoing for January and February procedures. Rates are returned to local clinical teams for action if any is required.

A healthcare infection data exceedance is defined as a greater than expected rate of infection compared with the usual background rate for the place and time where the incident has occurred.

For SSI surveillance longitudinal data is used to create Statistical Process Control (SPC) Charts for each procedure category and hospital site included in the surveillance programme.

Mandatory National surveillance procedures as reported to ARHAI

- **Caesarean-section:** In March 2021, there were 10 SSIs detected to day 10 and 2 further SSIs detected on readmission to hospital up to day 30 following surgery. This is considered an increase in incidents. In April there have been only 2 SSIs to date, which is within expected limits for this procedure category. Local reviews will be carried out to identify if there are any amenable areas for quality improvement.
- **Hip Arthroplasty:** case numbers remain within control limits. Elective surgery paused in April 2020.
- **Large Bowel Surgery:** case numbers remain within control limits.
- **Major Vascular:** Case numbers remain within control limits although slightly higher in April 2021.

Voluntary surveillance procedures - GGC

- **Knee Arthroplasty:** case numbers remain within control limits. Elective surgery paused in April 2020.
- **Repair of NOF:** case numbers remain within control limits.
- **Cranial Surgery:** In March 2021, there were 6 SSIs detected to 30 day readmission for cranial surgery performed at INS. This is considered an increased incidence. An IMT was held on 07/05/2021 and details will be included in incidents/outbreaks section of the May HAIRT report.
- **Spinal Surgery - INS only:** case numbers remain within control limits.
- **Free flap – OMFS surgery:** SSI surveillance of free flap donor sites e.g. arm or leg for major maxillofacial reconstructive surgery has been undertaken at the QEUH site since November 2016. There have been zero SSI detected (to day 30 readmission) for 19 consecutive months in this innovative surveillance programme.

IPCAT – Audit Programme

The SG oversight board made the following recommendation “With the support of ARHAI Scotland and Healthcare Improvement Scotland, NHS GGC should undertake a wide-ranging programme to benchmark key IPC processes. Particular attention should be given to the approach to IPC audits, surveillance and the use of Healthcare Infection Incident Assessment Tools (HIATs)”.

Benchmarking has been completed and GGC has met with colleagues from ARHAI, HEI and neighbouring boards to review all processes. A SBAR is being prepared with recommendations and submitted to the relevant clinical governance groups for review/approval. We anticipate that this process will be complete by the end of June 2021.

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

There were two deaths in March 2021 and one in April 2021 where hospital acquired *Clostridioides difficile* was recorded on the death certificate, all were antibiotic associated and not due to cross transmission. A Datix for each case was raised and the clinical team were asked to complete a clinical review for each case. There were no deaths in March or April 2021 due to hospital acquired MRSA.

**Hand Hygiene Monitoring Compliance
NHSGGC Board**

	Apr 20	May 20	Jun 20	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21
Board Total	99	99	98	98	97	98	98	97	98	98	98	98	97

Better Safe, Clean and Clinical Environment Quality Improvement Network Proposal -Update

Meetings of the Steering and Operational Groups continue. A core brief was issued inviting clinical colleagues from across GGC to participate in this collaborative. QI training has commenced and offered to those who wish to participate in the collaborative and dates have been issued to those who have expressed interest. A ‘critical friend’ from a neighbouring

board has been recruited. TOR, driver diagram, communication strategy and vision statement have been developed and agreed. Workstreams have been determined:

- What matters to patients re Health Care Associated Infections
- Quality Improvement Capacity and Capability Building
- Consistent application of CIPCS to reduce transmission
- Reduction in Healthcare Associated Bacteraemia Infections

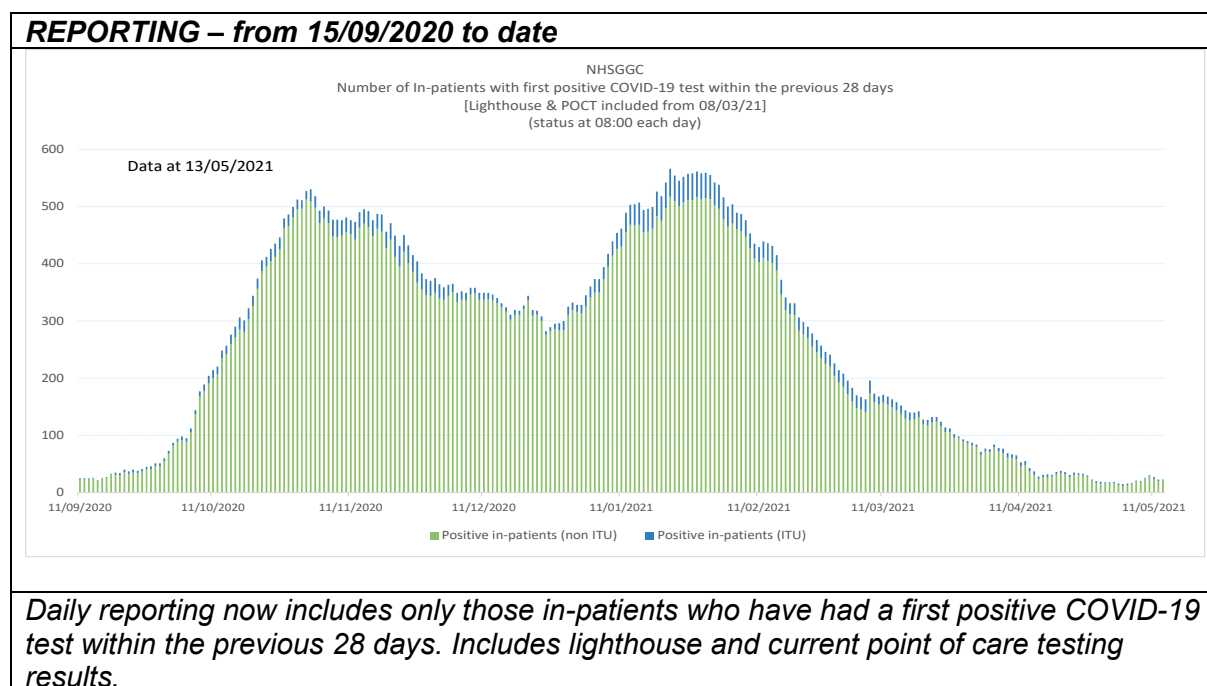
The workstream leads have been identified and will be expected to provide update flash reports to the Operational Group.

COVID-19 update

NHS Scotland is now experiencing a second bi-modal wave of COVID-19. To date in NHSGGC there have been over 69,000 confirmed positive cases however many people do not require admission to our hospitals.

As well as the IPCNs providing advice and expertise to the local clinical teams, the IPCT monitor all COVID-19 positive cases to assist with the provision of overall case numbers, ITU admissions and deaths.

The bar graph displays the number of in-patients across all GGC hospitals who are positive for COVID-19. In blue are the number of people in intensive care areas. During the summer months the number of new cases decreased, and the methodology of counting in-patient cases was no longer viable for the reporting of recent onset of first positive COVID cases.



From 8th March 2021, GGC Lighthouse positive test results are fully integrated into ICNet. This allows visibility of people who have had a positive result out with our hospital if they are subsequently admitted.

Ward closures due to COVID-19

There were 14 ward closures due to COVID-19 in March 2021.

Month	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sept-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21
Ward Closures	16	5	1	0	1	9	44	37	35	49	34	14	3
Bed Days Lost	1270	184	35	0	38	310	3583	3992	3665	4938	4122	1103	16

Estate and Cleaning Compliance

The data is collected through audit by the Domestic Services Team using the Domestic Monitoring National Tool, and areas chosen within each hospital is randomly selected by the audit tool. Any issues such as inadequate cleaning is scored appropriately and if the score is less than 80% then a re-audit is scheduled. The results of these findings are shared with Serco/Estates for repair. Similar to the cleaning audit, scores below 80% triggers a re-audit. All results have been above target within this reporting period.

Incidents/Outbreaks

Incidence and outbreaks across NHSGGC are identified primarily through ICNet, microbiology or from the ward. The identification of outbreaks is determined following discussion with the microbiologist. In the event of a declared outbreak, 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.

All outbreaks/incidents are notified to ARHAI and Scottish Government.

Healthcare Infection Incident Assessment Tool (HIIAT)

The HIIAT is a tool used by boards to assess the impact of an incident or outbreak. The tool is a risk assessment and allows boards to rate the incident/outbreak as a RED, AMBER, or GREEN. The tool also directs boards whether to inform ARHAI/SGHD of the incident (if AMBER or RED), release a media statement etc.

HIIAT GREEN - 4
 HIIAT AMBER - 2
 HIIAT RED - 0

(COVID 19 incidents are now included in the above totals)

Healthcare Environment Inspectorate (HEI)

There were no HEI inspections in March or April 2021.

Multi-drug resistant organism screening (no update since last report)

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 Methicillin resistant *Staphylococcus aureus* (MRSA). Assessment to screen depends on a clinical risk assessment performed on all admissions to indicate whether the

BOARD OFFICIAL

patient requires to be screened. On a quarterly basis we assess compliance of completing this risk assessment to provide assurance of effective screening and report this nationally. The national expectation of compliance is 90% and GGC have met this target.

Last validated quarter Oct - Dec 2020		NHSGGC 86% compliance rate for CPE screening	Scotland 79%
		NHSGGC 86% compliance rate for MRSA screening	Scotland 82%
Current quarter Jan – March 2021		NHSGGC 91% compliance rate for CPE screening	Scotland tbc
		NHSGGC 90% compliance rate for MRSA screening	Scotland tbc