

NHS Greater Glasgow & Clyde	Paper No. 19/65
Meeting:	NHSGGC Board Meeting
Date of Meeting:	Tuesday 17 th December 2019
Purpose of Paper:	For Noting
Classification:	Board Official
Sponsoring Director:	Dr Jennifer Armstrong Medical Director

Healthcare Associated Infection Reporting Template (HAIRT)

Recommendation: For noting

<u>Purpose of Paper</u>: Update on NHSGGC performance against Healthcare Associated Infection standards and performance measures.

Key Issues to be considered:

There is no update in this report for validated data for Quarter 3 (July-September) 2019 as this will not be available until early January 2020.

Validated HPS data : Quarter 2 2019 (April - June)											
		Healthcare As Rate per 100 0		Community Associated Rate per 100 000 population							
		GGC	National	GGC	National						
S. aureus Bacteraemia	102 cases	20.0	16.6	6.1	9.8						
C. difficile in age 15+	83 cases	16.9	12.1	4.1	4.9						

Table 1: NHSGGC and national comparison rates for 01/04/2019- 30/06/2019.

• **102** validated *Staphylococcus aureus* Bacteraemia (SAB) cases were reported for April to June 2019 with a Healthcare Associated rate of 20.0 cases per 100,000 bed days (n=84). This is above the national rate but within expected confidence intervals. At the moment rates are calculated for each individual health board area. Comparisons across diverse boards may not reflect the range and complexity of patients and services delivered in each.

• 83 validated *Clostridioides difficile* (CDI) cases in ages 15 and over were reported for April to June 2019 with a Healthcare Associated rate of 16.9 cases per 100,000 bed days (n=71). This is an increase in CDI cases upon the previous reporting quarter and is above the national rate and marginally above confidence intervals. There has been a noted reduction in CDI for the current local reporting quarter.

On the 10th of October 2019 the CNO issued a letter to Health Boards titled Standards on Healthcare Associated Infections and Indicators on Antibiotic Use. A copy of this letter is attached at Appendix 1. These standards will replace the existing ones and our performance against the updated standards will be reported in the February HAIRT.

<u>Any Patient Safety / Patient Experience Issues</u>: Please refer to the outbreaks and incidents section of this report.

Any Financial Implications from this Paper: No

Any Staffing Implications from this Paper: No

Any Equality Implications from this Paper: No

Any Health Inequalities Implications from this Paper: No

Has a Risk Assessment been carried out for this issue? If yes, please detail the outcome:

No

Highlight the Corporate Plan priorities to which your paper relates:

Patient Safety and improving quality, efficiency and effectiveness.

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Tel No: 0141 451 6750 **Date:** 17/12/2019

Healthcare Associated Infection Reporting Template (HAIRT)

Section 1 - Board Wide Issues

This is the bi-monthly publication of the reporting template for submission to the NHS Board as required by the national HAI Action Plan.

National Definitions/Denominators

This HAIRT presents data based on the national definitions of Healthcare Associated and Community Infections. Below is a short summary of the definitions which have been applied to the presented data.

- Healthcare Associated Infections i.e. any infections associated with Healthcare (hospital or GP). Rates are worked out by number of infections over total occupied bed days (OBDs).
- Community Associated Infections. Rates are calculated as the number of infections per 100,000 population.

October 2019: Updated Healthcare Associated Infection (HCAI) standards and antibiotic use indicators for Scotland

The CNO issued an update on the standards and indicators for HCAI for Scotland on 10th October 2019 (Appendix 1).

Baseline data from 2018/19 will be used for the reduction target for **healthcare associated** cases of:

- E.coli bacteraemia initial reduction of 25% by 2021/22
- S.aureus bacteraemia reduction of 10% from 2019 to 2022
- C. difficile reduction of 10% from 2019 to 2022

The Infection Prevention & Control Team have devised local reduction aims for each acute sector based on the new standards and these will be included in existing Sector and Directorate monthly reports for discussion at local clinical governance meetings.

Board performance against the standards will be included in the next HAIRT.

Staphylococcus aureus

There is no update in this report for validated data for Quarter 3 (July-September) 2019 as this will not be available until early January 2020.

Staphylococcus aureus Bacteraemia (SAB) Surveillance and Actions

Quarter 2: 2019 (April - June) Surveillance

For the last published reporting quarter (April - June 2019) NHS Greater Glasgow & Clyde reported a total of **102** validated SAB cases. These are further classified as healthcare associated (n=84) or community infections (n=18).

84 healthcare associated cases were reported for the quarter equating to a rate of 20.0 per 100,000 occupied bed days (Figure 1). This is above the NHS Scotland rate of 16.6. The GGC rate remains within expected confidence intervals.

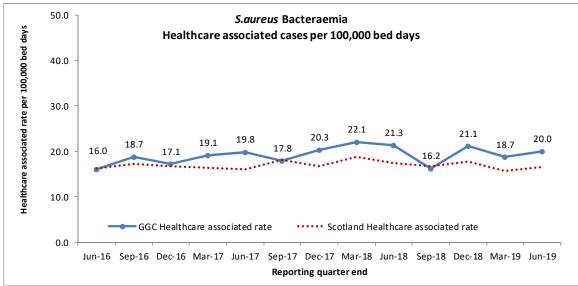


Figure 1: Healthcare associated SAB comparison by quarter for NHSGGC and Scotland.

Community associated infections are reported against a denominator rate per 100,000 population (Figure 2). These cases include SABs in people who have had no healthcare interaction as an in-patient, out-patient or via Health & Social Care Partnerships (HSCP) in the 30 days prior to SAB onset and are not users of registered medical devices such as urinary catheters. These cases are therefore less amenable to reduction measures within GGC Acute hospitals. The rate of community associated infections in NHSGGC was 6.1 which was below the NHS Scotland rate of 9.8. It should be noted that the process for reviewing all cases in NHSGGC is rigorous and includes all available sources of data.

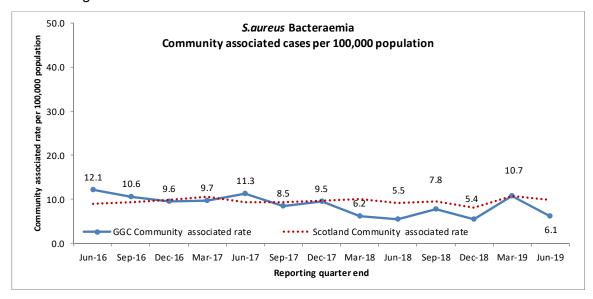


Figure 2: Community associated SAB comparison by quarter for NHSGGC and Scotland

Quarter 3: 2019 (July-September) NHSGGC Surveillance

Local surveillance has shown a slight increase of 11 in the number of SAB cases for Quarter 3 with a total of 113 cases. 90 cases were healthcare associated and 23 were community associated.

22 IV access device related hospital acquired (HAI) SABs were reported in the current quarter (Figure 3). IPCT will continue to monitor and return information to clinical sectors and directorates for action. The SAB group continue to implement new initiatives to drive this number down.

Enhanced surveillance of SAB continues and in October 2019, as displayed in Figure 3, there were **zero hospital acquired cases** related to an IV access device.

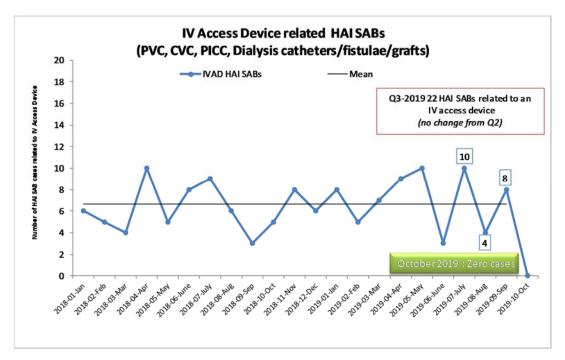


Figure 3: Number of Hospital acquired SABs by month attributed to an IV access device

SAB Actions Update

The GGC SAB group continues to meet and work to reduce the amount of avoidable healthcare associated cases is ongoing.

• The Vascular Access Service in GGC is a department dedicated to inserting central lines in patients who required long term intravenous medications, e.g. antibiotics, chemotherapy. From December 2019 they will use a Chlorhexidine Gluconate impregnated dressing following insertion of a Central Venous Catheter. This dressing can remain in place for up to seven days before being changed on a weekly basis thereafter for the duration of the device, or as advised by the clinical team. This additional step may help to prevent infections associated with these types of lines.

This may provide increased patient comfort and offer some protection in reducing bloodstream infections associated with the entry site. The use of this type of dressing is also included as a consideration in the HPS Key Recommendation <u>"Preventing infections when inserting and maintaining a CVC"</u>

 PVC insertion pack has been approved for use and will be available shortly in all clinical areas in GGC.

Multi-Drug Resistant Organism (MDRO) Screening Clinical Risk Assessment uptake. (Includes MRSA Screening and CPE Screening).

MRSA (Meticillin Resistant Staphylococcus aureus)

Mandatory Clinical Risk Assessment (CRA) compliance for GGC in Q2 (July-September 2019) is **87%.** This is a substantial improvement on recent reporting quarters, however just falls short of the required 90% for national reporting requirements. The IPCT will continue to target education in individual areas that do not meet the target. In addition compliance with the assessment this CRA and the CPE CRA have been included as criteria in the updated Infection Prevention & Control Audit Tool (IPCAT).

MRSA screening CRA uptake	2018-19 Q3 (Oct-Dec)	2018-19 Q4 (Jan-Mar)	2019-20 Q1 (Apr-Jun)	2019-20 Q2 (Jul-Sep)
Greater Glasgow & Clyde	69%	69%	92%	87%
Scotland	83%	83%	89%	88%

Table 2: Quarterly screening compliance- MRSA National Data Source: MDRO Admission Screening Team October 2019.

CPE (Carbapenemase-producing Enterobacteriaceae)

Enterobacteriaceae are a family of Gram-negative bacteria (sometimes called coliforms) which are part of the normal range of bacteria found in the gut. Carbapenemase-Producing Enterobacteriaceae (CPE) are a type of bacteria that are extremely resistant to antibiotics.

Table 3 below shows the CRA compliance rate since national reporting was implemented. Improvement in compliance has been sustained in Q2. Although CPE screening is mandatory, there is no national target set for compliance.

CPE screening - CRA uptake	2018-19 Q3 (Oct-Dec)	2018-19 Q4 (Jan-Mar)	2019-20 Q1 (Apr-Jun)	2019-20 Q2 (Jul-Sep)
Greater Glasgow & Clyde	76%	78%	94%	92%
Scotland	78%	81%	86%	86%

Table 3: Quarterly screening compliance - CPE National Data Source: MDRO Admission Screening Team October 2019.

Clostridioides difficile (CDI)

There is no update in this report for validated data for Quarter 3 (July-September) 2019 as this will not be available until early January 2020.

Quarter 2: 2019 (April - June) Surveillance

83 validated cases were reported in the last published quarter (April- June). This would appear to be normal seasonal variation for NHSGGC. 71 cases were healthcare associated and this provided a rate of 16.9 cases per 100,000 bed days (Figure 4). The rate for NHS Scotland was 12.1. The other Scottish Boards have reported low numbers of HCAI CDI for the quarter (Table 3) therefore the Scottish rate fell but the rate in NHSGGC did not.

In 2018, NHSGGC reported a higher number of HCAI cases (n=75) for the same quarter and had a higher OBD rate (18.0) but remained within 95% confidence intervals.

There were two HAI CDI Triggers investigated in Glasgow Royal Infirmary in May and June (Trigger is two cases of hospital acquired CDI in a clinical area in a two week period). Typing was undertaken on three of the four samples and all were found to be different. The fourth sample was unable to be typed.

Action to address this rate include:

- Enhanced surveillance of CDI is ongoing in NHSGG&C and will continue.
- For clarity and shared learning GGC will share its process with the ICN Scottish Network and add any additional actions other boards have in place.

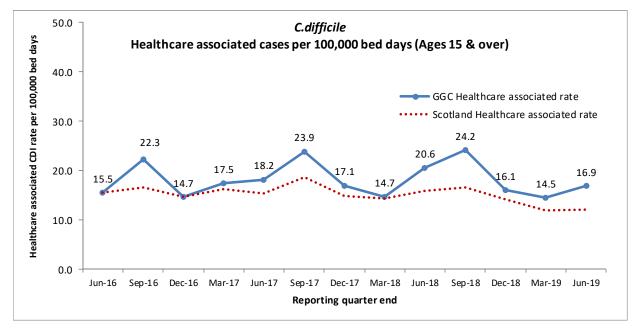


Figure4: Healthcare associated CDI rates comparison by quarter for NHSGGC and Scotland.

12 community associated CDI cases were reported for the quarter with a rate of 4.1 per 100,000 population (Figure 5). The rate for NHS Scotland was 4.9.

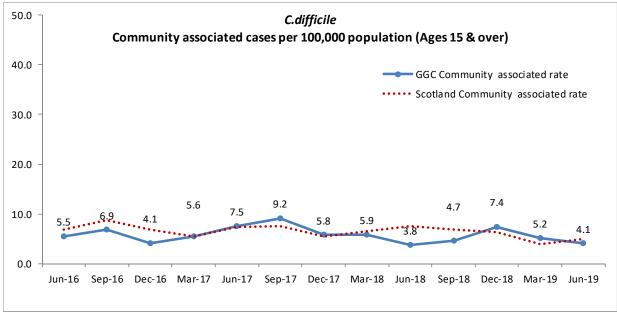


Figure 5: Community associated CDI comparison by quarter for NHSGGC and Scotland.

Quarter 3: 2019 (July-September) NHSGGC Surveillance

Local surveillance for this quarter has shown a decrease in *C.difficile* (CDI) this reporting quarter with 80 cases in total. 55 are healthcare associated and 25 are community associated. This is the lowest Quarter 3 for healthcare associated cases in the past three years (Table 4.)

Year – Quarter 3 (July-September)	Number of Healthcare Associated CDI
2016	100
2017	102
2018	100

2019 55

Table 4: Quarter 3 healthcare associated C.difficile cases. Please note 2019 data has not been validated by HPS.

PREVIOUSLY REPORTED OUTBREAKS / EXCEPTIONS - UPDATE

QEUH – ITU 1 & 2 – Two patients with Mucoraceous Mould found in clinical specimens. HIIAT assessed as RED on 21 & 28 January 2019. Assessed as GREEN as of 15 February 2019.

In one case the Procurator Fiscal has concluded that the cause of death was infection with Influenza A & B. The PF also stated that mucoraceous mould while present did not contribute to the death and as such the PF also concluded that death was from natural causes and was likely unavoidable. In the other case, the patient was colonised and did not have infection. This patient was discharged home.

OUTBREAKS / EXCEPTIONS

(Reported are those that are assessed as AMBER or RED using the HPS Hospital Infection Incident Assessment Tool (HIIAT))

Queen Elizabeth University Hospital (QEUH) Campus, Ward 6A (Haematology/Oncology). Blood Stream Infections. HIIAT assessed as GREEN on the 14th November 2019. The ward is now open to all admissions.

For several months, an Incident Management Team have been assessing a possible rise in gram negative blood stream infections in the paediatric haematology/oncology ward (6A). Health Protection Scotland were asked to independently assess rates of infection in the unit over a number of years to help inform NHSGGC investigations.

The Health Protection Scotland (HPS) Epidemiological Report has been published on the HPS website and Board members are encouraged to read it in full. The report can be viewed at the following link:

HPS Review of Paediatric/Oncology BSI Report

The report contains detail covering a time period from 2013 to October 2019 which will be of use for the Board's ongoing scrutiny and assurance responsibilities.

In relation to the 2019 investigations in to gram negative infections linked to ward 6A, and the decision to reopen the ward, the following points from the report are highlighted:

When comparing the overall hospital rate of positive blood cultures since the move to RHC (June 2015 to September 2019) to the combined rate of the other two Scottish children's hospitals Royal Aberdeen Children's Hospital (NHS Grampian) and Royal Hospital for Sick Children (NHS Lothian)), the incidence of positive blood cultures, using the case definitions 2 to 5, was higher in RHC for environmental including enteric group (RR= 1.86 95%Cl 1.42-2.47, p<0.001), but lower for Gram-positive group (RR=0.76, 95%Cl 0.70-0.83, p<0.001). There was no difference in the rates of Gram-negative group (RR=1.18, 95%Cl 0.96-1.42, p=0.07) or environmental group (RR=1.42, 95%Cl 0.94-2.16, p=0.11).

When compared over two years (October 2017 to September 2019), the rate of positive blood cultures was higher in RHC for environmental including the enteric group (RR=1.70,

95%CI 1.17-2.53, p<0.005) and Gram-negative group (RR=1.31, 95%CI 1.00-1.73, p=0.05) but lower for the Gram-positive group (RR=0.74, 95%CI 0.66-0.84, p<0.001).

There was no difference in the rates of the environmental group (RR=1.36, 95%CI 0.77-2.52, p=0.39).

• In the last year following the move to QEUH (October 2018 to September 2019) there was no difference in the rate for Gram-negative group (RR=1.23, 95%Cl 0.85-1.80, p=0.30), environmental including the enteric group (RR=1.26, 95%Cl 0.74-2.18, p=0.44) or environmental group (RR=0.93, 95%Cl 0.41-2.23, p=1) however the rate was lower for the Gram-positive group (RR=0.77, 95%Cl 0.64-0.93, p=0.005). No single source of 'exposure' to specific micro-organisms which may cause infections has been identified across the six year period.

The report recommended that "NHSGG&C should consider current control measures around restriction on services for newly diagnosed patients as there is no evidence from the HPS review of the data that supports the continued restriction of services."

In order to provide assurance going forward NHSGGC have agreed the following actions:

- From October 2019, monthly environmental sampling of the ward has been initiated for water and surfaces, including drains.
- HPS have provided NHSGGC with the background epidemiological data that they have based their report upon and NHSGGC will continue to update this and provide clinical staff with monthly updates.
- Every case of blood stream infection will be subject to a root cause analysis (RCA) which will be done in real time by clinical staff in the unit and the IPCT. The RCA tool has been developed in conjunction with HPS.
- HEPA filters have been placed in all en suite rooms. This is in addition to those already placed in bedrooms and adjacent clinical areas.

On the basis of the IMT investigation's findings and the results from the Health Protection Scotland review, the ward re-opened to new patient admissions on Thursday 21 November.

Institute for Neurological Sciences (INS), QEUH Campus, Increase in Surgical Site Infections (SSI) in Spinal Surgery. Initially HIIAT assessed as RED this was subsequently HIIAT assessed as GREEN on the 29 November 2019.

There is ongoing prospective surveillance of surgical site infections in spinal and cranial procedure in the INS. This is one of the few units in the UK that does prospective surveillance on this group of patients. Surveillance staff are dedicated to this programme and are funded by the Directorate. Please note, patients are followed up for 30 days after the procedure (Including post discharge) so infections are identified in the month following the procedure. In August four SSI were identified and in September the number identified was three. A problem assessment group met and implemented the following actions:

- Review of the Infection Control Audits undertaken over the past 12 months within Theatre Suite and Neuro Surgical wards. Any points raised in the audits were used as a focus for Staff observations of practice.
- Time line of cases was developed and reviewed to exclude common bacteria, surgeons, theatres etc. There has been no single common factor identified.
- Retention for typing of all isolates sent to the Microbiology Lab from patients with confirmed or suspected SSIs. So far typing results confirm that it is different organism causing infections.

- Review of theatre practice.
- Review of current dressing protocol.

Unfortunately despite the above actions the increase continued into October and seven infections were identified. Additional actions were put in place and these included:

- Peer theatre audit by clinicians from another unit.
- Review of instrumentation.
- Lead Nurse IPC and Lead Nurse INS have undertaken sessions of enhanced supervision in all wards in INS. This includes staff compliance with the use of personal protective equipment, hand hygiene, equipment cleanliness, environmental cleanliness.

There have been no infections identified in November to date. There are currently two inpatients with SSI. Neither are giving any cause for concern due to infection. The incident was downgraded to HIIAT Green on the 29 November 2019.

Royal Hospital for Children. Single case of *Serratia marcescens* in blood culture. HIIAT assessed as AMBER on 25 November 2019.

A single case of hospital acquired *Serratia marcescens* was reviewed by an Incident Management Team (IMT) on the 25 November. This was a tertiary referral of a patient with significant disease, to the Paediatric Intensive Care Unit at RHC. The IMT scored this incident at Amber using the national HIIAT assessment tool. There will be a post mortem and therefore it is yet to be established whether Serratia has contributed to this patient's death. This was reported to HPS as per Chapter 3 of the National Infection Prevention and Control Manual. Ongoing surveillance has highlighted no further cases of *Serratia marcescens* in a two week period. A further IMT held on the 10th December assessed the incident at Green. A number of actions were agreed and a follow up meeting is planned to monitor the implementation of these.

Norovirus

There were 4 wards closed in 3 hospitals due to Norovirus activity September-October 2019.

Month	Nov-18	Dec-18	Jan -19	Feb -19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug -19	Sep-19	Oct-19
Ward Closures	2	4	1	7	3	5	2	3	2	0	0	4
Bed Days Lost	93	50	7	42	106	188	49	49	11	0	0	46

Table 5: NHSGGC Ward closures due to suspected / confirmed Norovirus

Data on the number of wards closed due to confirmed or suspected Norovirus is available from HPS on a weekly basis: http://www.hps.scot.nhs.uk/giz/norovirussurveillance.aspx

Healthcare Environment Inspectorate (HEI)

There was an unannounced inspection of wards and departments in QEUH Campus from the 19-21 November 2019. The report on this visit will be published on the 13 February 2020.

HEI reports and action plans can be viewed by clicking on the link below. http://www.healthcareimprovementscotland.org/our_work/inspecting_and_regulating_care/nhs hospitals and services/hei inspections/all hei reports.aspx

Other HAI Related Activity

Surgical Site Infection (SSI) Surveillance

There is no update in this report for validated data for Quarter 3 (July-September) 2019 as this will not be available until early January 2020.

All NHS Boards are required to undertake in-patient and 30-day re-admission surveillance as per HDL (2006) 38, CEL (11) 2009and DL (2015)19.

Quarter 2: 2019 (April- June)

For the last published reporting quarter the SSI rate for caesarean-section remained lower than the national dataset SSI rate (Table 6).

There were zero hip arthroplasty SSI reported for the quarter.

Category of Procedure	Operations	Infections	NHSGGC SSI rate (%)	NHSGGC 95% CI	National Dataset SSI rate (%)	National 95% CI
Caesarean section	1219	4	0.3	0.1-0.8	1.0	0.7-1.3
Hip arthroplasty	397	0	0.0	0.0-1.0	0.4	0.2-0.8

Table 6: SSI rates for Caesarean section (in-patient and PDS to day-10), Hip arthroplasty (in-patient and re-admission to day-30), NHSGGC

Quarter 3: 2019 (July-September) NHSGGC Surveillance

Local surveillance is complete for the quarter. Current status is displayed in Table 8.

Quarter 3 -19 (Ju	Quarter 3 -19 (July-September) : Local SSI Surveillance (status at 13/11/2019)											
	Category of Procedure	Operations	Infections	NHSGGC SSI Rate (%)								
	Caesarean section	1367	3	0.2								
Mandatory	Hip arthroplasty	348	4	1.1								
(reported to HPS)	Large Bowel Surgery	213	3	1.4								
	Major Vascular Surgery	228	2	0.9								
Voluntary	Knee arthroplasty	338	5	1.5								
voluntary	Repair of neck of femur	397	4	1.0								
Additional	Cranial Surgery	153	5	3.3								
INS,QEUH only	Spinal Surgery	184	9	4.9								

Table 7: Local SSI Surveillance. Procedures undertaken 01/07/19 - 30/09/19 (In-patient and 30 day readmission; C-section inpatient and PDS to day 10)

Statistical Process Control Charts

Statistical Process Control Charts (SPCs) continue to remain within normal control limits in all sites.

Cleaning and the Healthcare Environment

All areas within NHSGGC scored **GREEN (>90%)** in the most recent report on the National Cleaning Specification.

Healthcare Associated Infection Reporting Template (HAIRT)

Section 2 – Healthcare Associated Infection Report Cards

The following section is a series of 'Report Cards' that provide information for each acute hospital and key non-acute hospitals in the Board, on the number of cases of *Staphylococcus aureus* blood stream infections and *Clostridioides difficile* infections, as well as hand hygiene and cleaning compliance. In addition, there is a single report card which *C. difficile* specimens identified from non-hospital locations, e.g. GPs, hospices, care homes, prisons etc. The information in the report cards is provisional local data and may differ from the national surveillance reports carried out by HPS and HFS. The national reports are official statistics which undergo rigorous validation which means final national figures may differ from those reported here. However these reports aim to provide more detailed and up-to-date information on healthcare associated infection activities at local level than is possible to provide through the national statistics.

Understanding the Report Cards – Infection Case Numbers

Clostridioides difficile infections (CDI) and Staphylococcus aureus bacteraemia (SAB) cases are presented for each hospital, broken down by month.

• Healthcare associated cases

For each hospital the total number of cases for each month is included in the report cards. These include those that are considered to be **hospital acquired**, i.e. reported as positive from a laboratory report on samples taken <u>more than</u> 48 hours after admission and **healthcare associated** in which the patient has a positive sample taken from <u>within</u> 48 hours of admission and the patient has also had healthcare interaction in the previous 30 days for SAB or 12 weeks for *C. difficile*.

Community associated cases

For community associated cases, the patient has had no healthcare interaction as specified in the time frame above, however the specimen was obtained from a current hospital in-patient that did not meet the reporting criteria for a healthcare associated case.

More information on these organisms can be found on the HPS website:

Clostridioides difficile:

https://www.hps.scot.nhs.uk/a-to-z-of-topics/clostridioides-difficile-infection/

Staphylococcus aureus Bacteraemia

https://www.hps.scot.nhs.uk/a-to-z-of-topics/staphylococcus-aureus-bacteraemia-surveillance/

Understanding the Report Cards – Hand Hygiene Compliance

Hospitals carry out regular audits of how well their staff are complying with hand hygiene. The Board report card presents the combined percentage of hand hygiene compliance with both opportunity taken and technique used broken down by staff group.

Understanding the Report Cards – Cleaning Compliance

Hospitals strive to keep the care environment as clean as possible. This is monitored through cleaning and estates compliance audits. More information on how hospitals carry out these audits can be found on the HFS website:

http://www.hfs.scot.nhs.uk/

NHS GREATER GLASGOW & CLYDE

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	29	31	31	24	25	29	31	25	38	28	24	18
Community Associated	6	5	14	16	5	7	7	4	8	11	4	8
Total	35	36	45	40	30	36	38	29	46	39	28	26

Clostridioides difficile infection monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	18	27	20	18	18	16	30	23	19	17	19	35
Community Associated	10	9	10	6	7	8	2	5	9	9	7	5
Total	28	36	30	24	25	24	32	28	28	26	26	40

Hand Hygiene Monitoring Compliance (%)

	Nov 2018	Dec 2018			Mar 2019		May 2019			•	Sep 2019	Oct 2019
Board Total	97	98	97	97	97	97	97	97	97	97	98	97

Cleaning Compliance (%)

	Nov 2018	Dec 2018						Jun 2019				
Board Total	95.3	95.5	95.1	94.8	95.2	95.3	94.3	95.0	94.9	93.7	94.1	94.5

					Mar 2019		,	Jun 2019		Aug 2019		
Board Total	99.0	99.0	98.7	97.9	98.0	96.9	97.3	97.2	96.3	96.1	96.5	96.3

BOARD OFFICIAL GLASGOW ROYAL INFIRMARY / PRINCESS ROYAL MATERNITY

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	8	9	9	7	3	7	8	8	6	7	10	6
Community Associated	3	1	6	5	-	1	3	1	2	4	1	2
Total	11	10	15	12	3	8	11	9	8	11	11	8

Clostridioides difficile infection monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	6	9	4	5	8	4	8	7	6	6	5	7
Community Associated	1	2	1	2	-	3	-	-	-	1	1	-
Total	7	11	5	7	8	7	8	7	6	7	6	7

Hand Hygiene Monitoring Compliance (%)

	Nov 2018	Dec 2018		Feb 2019			•			Aug 2019	Sep 2019	Oct 2019
Board Total	96	97	96	97	97	97	95	96	97	98	98	98

Cleaning Compliance (%)

							May 2019					
Board Total	95.8	95.7	95.6	95.6	95.0	95.2	95.3	95.3	95.5	95.0	94.7	95.1

			Jan 2019									
Board Total	99.5	99.6	99.5	99.2	98.7	97.9	96.9	95.7	92.0	90.8	90.0	89.5

ROYAL ALEXANDRA HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	5	1	5	4	7	4	7	3	3	7	2	3
Community Associated	1	2	4	4	1	1	2	1	3	2	1	4
Total	6	3	9	8	8	5	9	4	6	9	3	7

Clostridioides difficile infection monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	2	4	7	5	2	-	7	3	3	-	2	6
Community Associated	1	2	-	2	-	1	-	1	-	-	1	2
Total	3	6	7	7	2	1	7	4	3	0	3	8

Hand Hygiene Monitoring Compliance (%)

	Nov 2018	Dec 2018	Jan 2019			Apr 2019	May 2019			Aug 2019		Oct 2019
Board Total	97	98	97	97	97	96	98	98	96	96	99	96

Cleaning Compliance (%)

								Jun 2019				
Board Total	95.9	95.2	95.7	94.7	94.7	93.3	95.0	95.5	95.5	95.1	94.1	95.0

								Jun 2019				
Board Total	96.5	95.0	96.2	93.4	93.5	93.6	98.0	96.5	94.6	94.6	93.0	94.1

INVERCLYDE ROYAL HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	1	2	2	1	-	3	3	1	3	-	-	1
Community Associated	-	-	2	-	-	1	-	-	-	2	-	-
Total	1	2	4	1	0	4	3	1	3	2	0	1

Clostridioides difficile infection monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	-	2	2	2	-	3	2	1	-	2	2	3
Community Associated	1	-	-	-	1	-	-	-	-	-	-	1
Total	1	2	2	2	1	3	2	1	0	2	2	4

Hand Hygiene Monitoring Compliance (%)

	Nov 2018	Dec 2018	Jan 2019		Mar 2019		•	Jun 2019		Aug 2019		Oct 2019
Board Total	99	99	99	98	98	98	99	99	98	98	97	99

Cleaning Compliance (%)

								Jun 2019				
Board Total	96.0	95.2	95.6	94.7	93.6	94.9	95.2	95.1	95.3	94.6	93.8	94.4

		Dec 2018										
Board Total	97.3	97.4	96.6	95.4	95.2	96.5	96.6	96.9	96.9	94.2	93.9	94.4

VALE OF LEVEN HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	-	1	1	-	-	-	-	3	4	1	1	1
Community Associated	-	-	-	-	-	1	-	-	-	-	-	-
Total	0	1	1	0	0	1	0	3	4	1	1	0

Clostridioides difficile infection monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	-	1	-	-	-	-	-	-	-	-	1	-
Community Associated	-	-	-	-	-	-	-	-	1	-	-	-
Total	0	1	0	0	0	0	0	0	1	0	1	0

Hand Hygiene Monitoring Compliance (%)

	Nov 2018	Dec 2018			Mar 2019		•	Jun 2019			Sep 2019	Oct 2019
Board Total	99	99	99	98	100	99	100	99	99	98	98	98

Cleaning Compliance (%)

											Sep 2019	
Board Total	97.7	97.7	97.6	97.9	97.3	97.2	97.2	97.5	97.4	97.4	97.5	97.8

							May 2019					
Board Total	99.6	99.7	99.6	99.3	98.5	98.7	99.1	99.3	99.2	99.1	98.6	99.0

GARTNAVEL GENERAL HOSPITAL

REPORT CARD

Figures combined for Gartnavel General Hospital, Beatson WoSCC and Homeopathic Hospital

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	2	ı	1	1	2	1	2	2	1	2	3	-
Community Associated	-	-		ı	-	-	-	ı	-	1	-	-
Total	2	0	1	1	2	1	2	2	1	3	3	0

Clostridioides difficile infection monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	3	2	1	1	-	-	1	1	1	-	1	5
Community Associated	1	ı	1	-	1	-	-	ı	-		ı	-
Total	4	2	2	1	1	0	1	1	1	0	1	5

Hand Hygiene Monitoring Compliance (%)

	Nov 2018		Jan 2019		Mar 2019	Apr 2019	•	Jun 2019		Aug 2019		Oct 2019
Board Total	97	97	96	97	95	99	97	97	96	98	98	97

Cleaning Compliance (%)

			Jan 2019									
Board Total	96.0	96.7	96.1	96.1	96.7	96.1	95.4	95.6	95.4	95.6	95.9	95.8

							May 2019					
Board Total	99.2	99.7	99.5	99.1	99.1	99.0	98.6	98.5	98.5	98.4	98.8	99.1

QUEEN ELIZABETH UNIVERSITY HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	11	14	13	8	10	5	10	6	17	10	6	8
Community Associated	2	2	1	5	4	3	1	1	2	2	1	1
Total	13	16	14	13	14	8	11	7	19	12	7	9

Clostridioides difficile infection monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	4	7	4	4	7	8	11	7	6	8	6	9
Community Associated	2	1	2	-	1	3	-	-	4	3	4	2
Total	6	8	6	4	8	11	11	7	10	11	10	11

Hand Hygiene Monitoring Compliance (%)

	_	Dec 2018									Sep 2019	Oct 2019
Board Total	97	97	96	96	96	97	96	96	96	96	96	97

Cleaning Compliance (%) QEUH only

	_		Jan 2019				May 2019				Sep 2019	
Board Total	94.5	94.4	94.3	93.1	93.7	92.9	93.2	93.2	93.2	93.5	94.4	94.3

Cleaning Compliance (%) Langlands building only

			Jan 2019				May 2019			_	Sep 2019	
Board Total	91.8	92.6	88.7	88.7	N/A	N/A	85.5	90.7	93.1	77.7	81.6	100

Scores not available for March & April 2019

Following further NHS GGC scrutiny the external service provider responsible for Domestic Services within Langlands Building is taking remedial action to ensure that the appropriate level of service improvement is taken to achieve satisfactory standards of cleanliness which fully complies with the quality framework set out within the NHS Scotland National Cleaning Services Specification. NHSGGC have instigated contractual remediation action on the contractor and SPV.

				Feb 2019								
Board Total	99.9	99.8	99.3	97.7	97.9	93.8	94.8	96.3	96.2	96.1	98.1	98.0

ROYAL HOSPITAL FOR CHILDREN

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	-	3	-	2	2	6	-	1	4	1	1	0
Community Associated	-	-	1	2	-	-	1	1	1	-	1	1
Total	0	3	1	4	2	6	1	2	5	1	2	1

Clostridioides difficile infection monthly case numbers (in ages 15 & over only)

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	-	-	-	-	-	-	-	-	-	-	-	-
Community Associated	-	-	-	-	-	-	-	-	-	-	-	-
Total	0	0	0	0	0	0	0	0	0	0	0	0
1	-	· · · · · ·	· · · · · · · · · · · · · · · · · · ·			<u> </u>						

Hand Hygiene Monitoring Compliance (%)

	Nov 2018	Dec 2018	Jan 2019		_	Apr 2019	,		Jul 2019	Aug 2019		Oct 2019
Board Total	98	95	96	95	98	98	96	97	98	98	97	97

Cleaning Compliance (%)

							May 2019					
Board Total	95.0	94.9	94.5	94.1	93.7	95.2	93.8	94.5	94.2	93.8	94.6	94.5

		Dec 2018										
Board Total	99.1	99.7	97.8	97.3	98.5	95.1	94.4	95.2	94.6	95.4	94.7	96.2

NHS GREATER GLASGOW & CLYDE

NON-ACUTE HOSPITALS REPORT CARD

The hospitals covered in this report card include:

- Lightburn Hospital
- Dykebar Hospital
- Gartnavel Royal Hospital
- Leverndale Hospital
- MacKinnon House
- Mearnskirk House (Closed 03 March 2019)
- New Victoria Hospital
- Orchard View (Inverclyde Royal Hospital campus)
- Stobhill Hospital

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	2	1	ı	1	1	3	1	1	ı	ı	1	-
Community Associated	ı	ı	ı	ı	ı	ı	-	ı	ı	ı	ı	-
Total	2	1	0	1	1	3	1	1	0	0	1	0

Clostridioides difficile infection monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	-	-	-	1	-	-	-	-	-	-	1	-
Community Associated	-	-	-	-	-	-	-	-	-	-	-	-
Total	0	0	0	1	0	0	0	0	0	0	1	0

NHS GREATER GLASGOW & CLYDE

Non hospital locations (GP practices, care homes & hospices) report card *Clostridioides difficile* infection monthly case numbers

	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019
Healthcare Associated	3	2	2	-	1	1	1	4	3	1	1	5
Community Associated	4	4	6	2	4	1	2	4	4	5	1	-
Total	7	6	8	2	5	2	3	8	7	6	2	5

GLOSSARY (updated August 2019)

Alert organism	Any of a number of organisms or infections that could indicate, or cause, outbreaks of infection in the hospital
alert condition	or community.
Bacteraemia	Infection in the blood. Also known as Blood Stream Infection (BSI).
CDI	Clostridioides difficile Infection. Also referred to as C. diff is a Gram-positive spore-forming anaerobic
	bacterium. C.difficile is the most common cause of gastro-intestinal infection in hospitals. It causes two
	conditions; antibiotic associated diarrhoea and the more severe and occasionally life-threatening
	pseudomembranous colitis. Control of the organism can be problematic due to the formation of spores and
	difficulty in removing them. Patients who have had antibiotics within the last eight weeks are most at risk of
	acquisition of the organism.
CEL	Chief Executive Letter issued by Scottish Government Health Directorates (SGHD)
CPE	Carbapenemase-producing <i>Enterobacteriaceae</i> . A type of Gram-negative bacteria that are extremely
CPE	
004	resistant to antibiotics.
CRA	Clinical Risk Assessment
CVC	Central Venous Catheter. This also includes those that are peripherally inserted i.e. PICC
Code of	Code of Practice - The NHS Scotland Code of Practice for the Local Management of Hygiene and Healthcare
Practice	Associated Infection issued 2004 contains the components that must be complied with by all NHS HCWs in
	Scotland. http://www.scotland.gov.uk/Publications/2004/05/19315/36624
HAI	Originally used to mean hospital acquired infection, the official 'Scottish Government' term is now Healthcare
	Associated Infection. These are considered to be infections that were not incubating prior to contact with a
	healthcare facility or undergoing a healthcare intervention. It must be noted that HAI infection is not always an
	avoidable infection. Please note that for S.aureus Bacteraemia surveillance - HAI refers to 'hospital acquired
	cases as per HPS National reporting requirements.
	See https://hpspubsrepo.blob.core.windows.net/hps-website/nss/1964/documents/1_esab-protocol-2016-04-v1.0.pdf
HCAI	Healthcare Associated Infection (for CDI and SAB classification)
HCW	Healthcare Worker
HDL	Health Department Letter
HEAT Target	Health Efficiency and Access to Treatment. Targets set by the Scottish Government.
HEPA	High-Efficiency Particulate Air. An efficiency standard of air filter. Filters meeting the HEPA standard must
I I I I	satisfy certain levels of efficiency.
HFS	Health Facilities Scotland
HH	Hand Hygiene
HIIAT	Hospital Infection Incident Assessment Tool
HIIORT	Healthcare Infection Incident and Outbreak Reporting Template
HPS	Health Protection Scotland
HSCP	Health & Social Care Partnerships
IPCN /T/D/M	Infection Prevention & Control Nurse / Team / Doctor / Manager
IVAD	Intravenous Access Device. An invasive device placed into a vein which is used to administer intravenous
	fluids or medication. Examples are PVC or CVC
KPI	Key Performance Indicator
MAR	My Admission Record is the acute inpatient nursing admission document
MDRO	Multi Drug Resistant Organism
MRSA	Meticillin resistant Staphylococcus aureus. A Staphylococcus aureus resistant to first line antibiotics; most
	commonly known as a hospital acquired organism.
MSSA	Meticillin Sensitive Staphylococcus aureus
NHSN	National Healthcare Safety Network – risk factor score for determining risk of SSI after surgery.
OBD	Occupied Bed Days
OPAT	Outpatient Parenteral Antibiotic Therapy
PDS	Post Discharge Surveillance (Caesarean Section procedures only)
	Public Health Protection Unit
PHPU	
PICC	See CVC
PPI	Proton Pump Inhibitors. A group of medications used to decrease gastric acid production.
PVC	Peripheral Venous Catheter
RSV	Respiratory Syncytial Virus. A contagious respiratory infection.
SAB	Staphylococcus aureus Bacteraemia
SBAR	Situation, Background, Assessment, Recommendation. A standardised template used facilitate prompt
	and appropriate communication
SCN / M	Senior Charge Nurse / Midwife
SICP	Standard Infection Control Precautions
SGHD	Scottish Government Health Directorate
SOP	Standard Operating Procedure
SPC	Statistical Process Control (Charts)
SSI	Surgical Site Infection
VRE	Vancomycin resistant enterococcus - an alert organism. A common organism that can be inherently resistant
VIXL	to Vancomycin but can also acquire (and transfer resistance) to other organisms. Has caused outbreaks
Í	reported in the literature in a variety of high-risk settings, e.g. renal or bone marrow transplant units.

Appendix 1

Chief Nursing Officer Fiona McQueen

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NHS Board Chief Executives

Copy: NHS Board Chairs

10 October 2019

Dear Colleagues

Standards on Healthcare Associated Infections and Indicators on Antibiotic Use

On 24 January 2019, the UK government published a 20-year vision for AMR and a 5-year national action plan for tackling AMR (2019-24). These documents were developed collaboratively by a UK High Level Steering Group which included officials from all four UK countries. The UK plan set ambitious targets to reduce inappropriate prescribing of antibiotics and to reduce healthcare associated Gram-negative bacteraemia. The Scottish Government agreed in principle to endorse reductions in prescribing and Gram-negative bacteraemia in line with the UK national action plan, but reserved the right to set standards at levels that were appropriate for Scotland.

The new Standards and Indicators have been approved by the Cabinet Secretary for Health and Sport, and are attached at Annex A. They build on work by expert groups such as Health Protection Scotland and the Scottish Antimicrobial Prescribing Group.

I trust these standards and indicators provide useful benchmarks to support a local quality improvement framework as we take forward our important work to prevent and control healthcare associated infections and to contain antimicrobial resistance. We recognise that Boards may need time to develop and test effective interventions to support implemention of these standards and indicators. I look forward to working with you in this process.

Kind regards

France (William

Fiona McQueen Chief Nursing Officer

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ANNEX A: Updated HCAI standards and antibiotic use indicators for Scotland

Antibiotic use indicators

- 1. A 10% reduction of antibiotic use in Primary Care (excluding dental) by 2022, using 2015/16 data as the baseline (items/1000/day).
- Use of intravenous antibiotics in secondary care defined as DDD / 1000 population / day will be no higher in 2022 than it was in 2018.
- Use of WHO Access antibiotics (NHSE list) ≥60% of total antibiotic use in Acute hospitals by 2022.

Gram-negative bacteraemia standard

 Reduction of 50% in healthcare associated E. coli bacteraemia by 2023/24, with an initial reduction of 25% by 2021/22. 2018/19 should be used as the baseline for E. coli bacteraemia reduction.

Staphylococcus aureus bacteraemia (SAB) standard

 Reduction of 10% in the national rate of healthcare associated SAB from 2019 to 2022, with 2018/19 used as the baseline for the SAB reduction target.

Clostridioides difficile infection (CDI) standard

 Reduction of 10% in the national rate of healthcare associated CDI from 2019 to 2022, with 2018/19 used as the baseline for the CDI reduction target.

Please note that percentage reductions in SABs, CDI and ECB will be measured against individual NHS Scotland Boards' current levels, rather than taking a "best in class" approach as previously.

