

NHS Greater Glasgow & Clyde	Paper No. 19/54
Meeting:	NHSGGC Board Meeting
Date of Meeting:	22nd October 2019
Purpose of Paper:	For Noting
Classification:	Board Official
Sponsoring Director:	Dr. Jennifer L. Armstrong

Healthcare Associated Infection Reporting Template (HAIRT)

Recommendation: For noting

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

Key Issues to be considered:

Validated HPS data : Quarter 2 2019 (April- June)					
		Healthcare Associated		Community Associated	
		Rate per 100 000 bed days		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. It is anticipated that the updated indicators for SAB and CDI which are expected before the end of this year, may reflect and take account of this diversity.

- **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 were two triggers investigated during this quarter both in wards in Glasgow Royal Infirmary (trigger is two cases of hospital acquired CDI in two weeks) typing confirmed that these were different types and therefore not linked to each other. There has been a noted reduction in CDI for the current local reporting quarter.

Any Patient Safety /Patient Experience Issues: 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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Date: 22/10/2019

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.

Changes to National Definitions/Denominators

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

Definitions/Denominators

Reports now have rates split into two:

- 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.

Staphylococcus aureus

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.

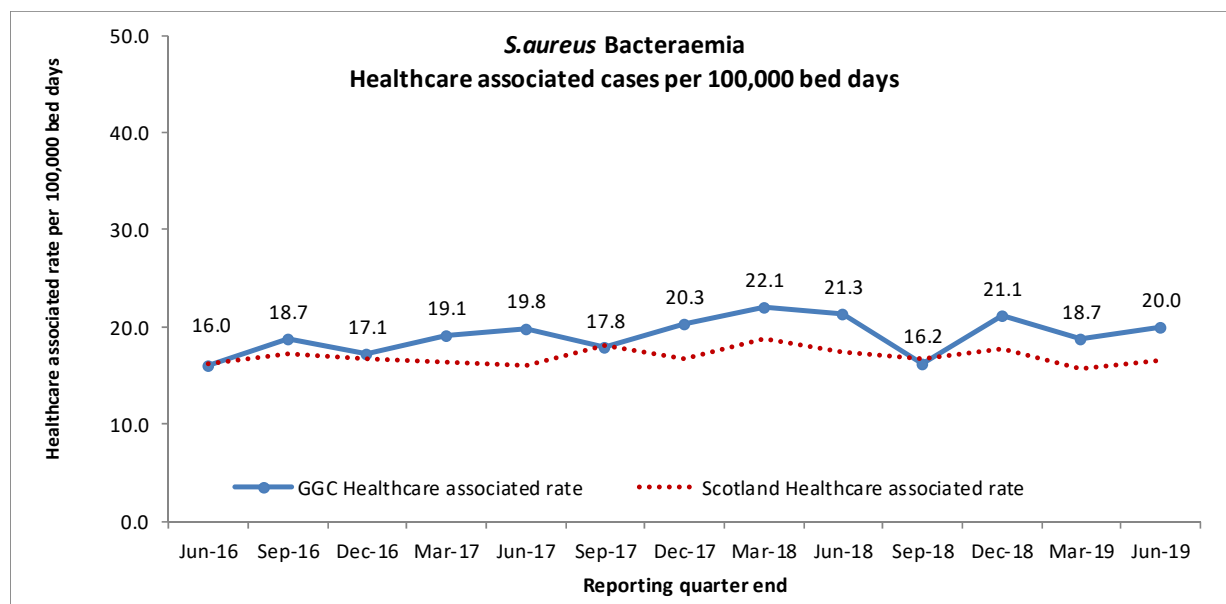


Figure 1: Healthcare associated SAB comparison by quarter for NHSGGC and Scotland.

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.

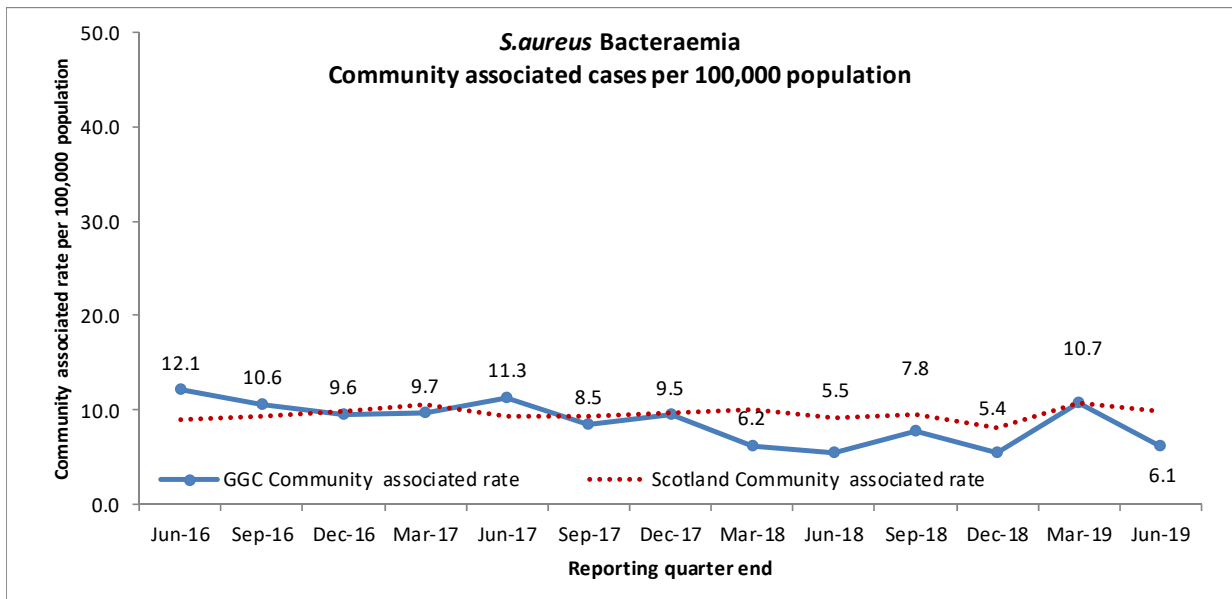


Figure 2: Community associated SAB comparison by quarter for NHSGGC and Scotland

Quarter 3: 2019 (July-September) NHSGGC Surveillance

Local surveillance is not yet complete for the current quarter, has shown a slight increase in the number of SAB cases for Quarter 3 with a total of 108 cases. 87 cases were healthcare associated and 21 were community associated.

21 IV access device related hospital acquired (HAI) SABs have been reported to date 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.

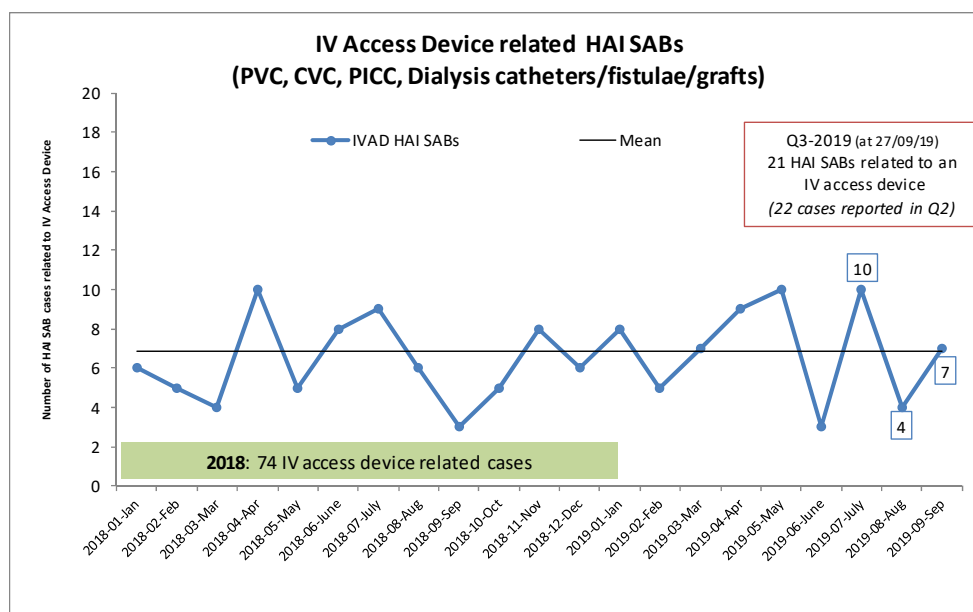


Figure 3: Number of Hospital acquired SABs by month attributed to an IV access device

SAB Actions Update

The GGC SAB group met on 3 September 2019 and work continues to reduce the amount of avoidable healthcare associated cases.

- Peripheral Venous Catheter (PVC) Care Plan is now in place across GGC.
- PVC insertion pack. SBAR has been submitted to the SAB group and Chief Nurses for final approval with recommendation for adoption in clinical practice.

- The SAB group are working with colleagues from tissue viability to replicate a process the tissue viability service developed for the rapid assessment and escalation of significant harm due to vascular ulcers. The process for SABs will be tabled at the next meeting for review. We hope that as clinical staff are already familiar with this process as it is applied to vascular ulcers that this should support the use with regards to SABs.
- It would also appear that GGC are also using more IV antibiotics than other boards, relative to board population (Figure 4). This may mean that a higher percentage of NHSGGC are in hospital relative to other boards. The high IV antibiotic use may contribute to the increased SABs in NHSGGC. Action to reduce IV antibiotic use is being implemented by the Antimicrobial Management Team and Antimicrobial Utilisation Committee.

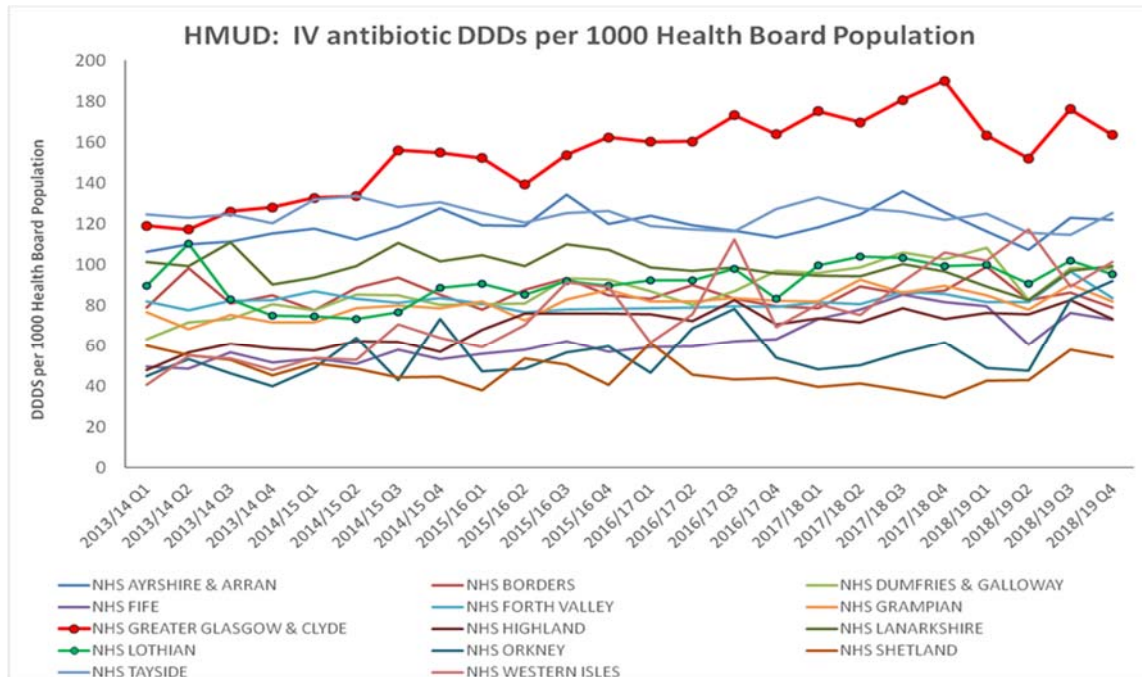


Figure 4: IV antibiotic defined daily doses (DDDs) by Healthboard.

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%	tbc

Table 2: Quarterly screening compliance- MRSA National Data Source: MDRO Admission Screening Team July 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%	93%
Scotland	78%	81%	86%	tbc

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

***Clostridioides difficile* (CDI)**

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 5). The rate for NHS Scotland was 12.1. It would appear that the other Scottish Boards have reported low numbers of HCAI CDI for the quarter (Table 4) 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.

NHS Board	Q2 Cases	Q2 Bed Days	Q2 Rate (per 100,000 bed days)
AA	15	109,585	13.7
BR	4	31,065	12.9
DG	6	45,667	13.1
FF	6	87,857	6.8
FV	11	81,334	13.5
GR	10	131,370	7.6
GGC	71	419,871	16.9
HG	6	74,804	8.0
LN	16	145,187	11.0
LO	30	244,255	12.3
NWTC	0	11,897	0.0
OR	0	3,445	0.0
SH	1	2,542	39.3
TY	6	113,495	5.3
WI	1	7,013	14.3
Scotland	183	1,509,387	12.1

Table 4: Published HPS data for Healthcare associated CDI, Quarter 2, 2019.

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.

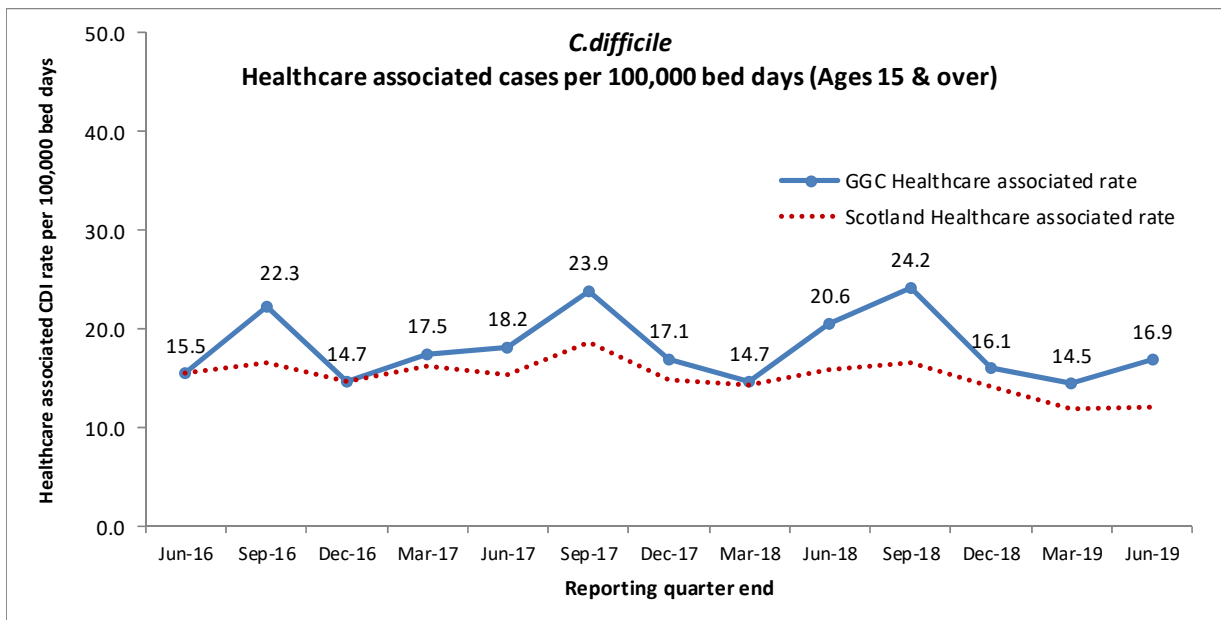


Figure 5: Healthcare associated CDI rates comparison by quarter for NHSGGC and Scotland.

12 community associated CDI cases were reported for the quarter with a rate of 4.1 per 100,000 population (Figure 6). The rate for NHS Scotland was 4.9.

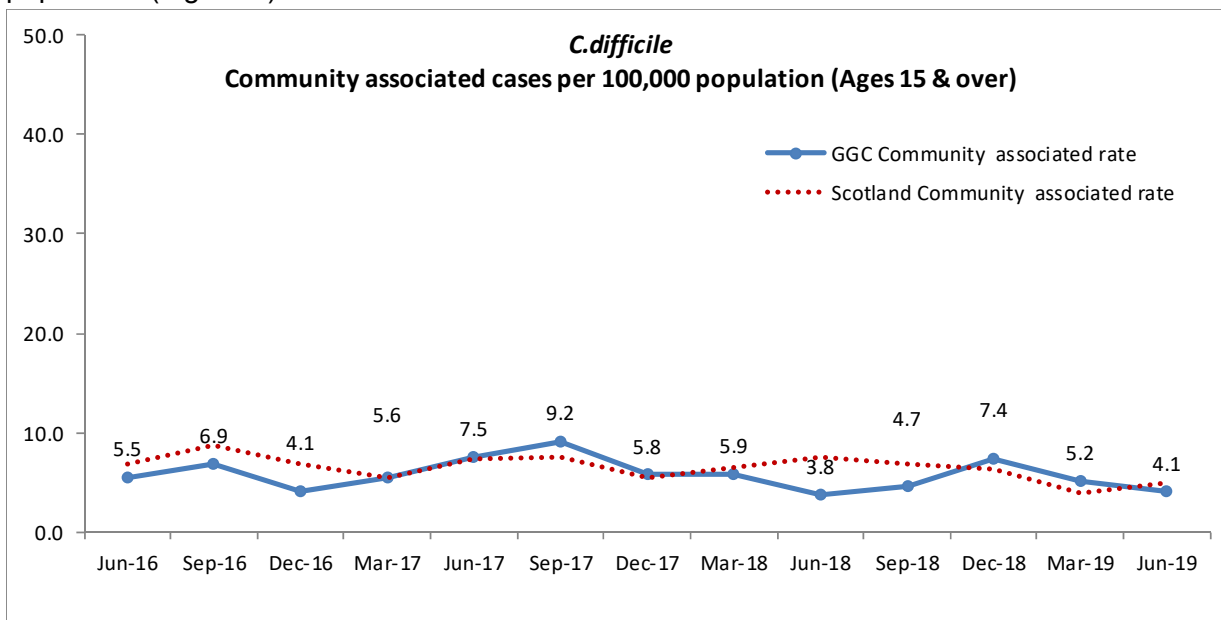


Figure 6: Community associated CDI comparison by quarter for NHSGGC and Scotland.

Quarter 3: 2019 (July-September) NHSGGC Surveillance

Local surveillance is not yet complete for this quarter, however, there has been 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 5.)

Year – Quarter 3 (July-September)	Number of Healthcare Associated CDI
2016	100
2017	102
2018	100
2019	55

Table 5: Quarter 3 healthcare associated *C.difficile* cases. Please note 2019 data has not been validated by HPS.

GGC continue to issue a letter to the GP of every adult in-patient who has been diagnosed with CDI signed by the Lead Infection Control Doctor, Lead Physician, Lead Microbiologist and Lead Pharmacist. This letter provides information on CDI and includes links to best practice guidance for the use of antibiotics and proton-pump inhibitors (PPIs) (Appendix 1).

As illustrated in Figure 7, total 4C antibiotic use is down 8406 DDDs (8.3%) (Q3 2019 compared with Q3 2018). Following the MHRA warning regarding serious side effects related to quinolone antibiotics there has been a significant reduction in quinolone antibiotic use in GGC.

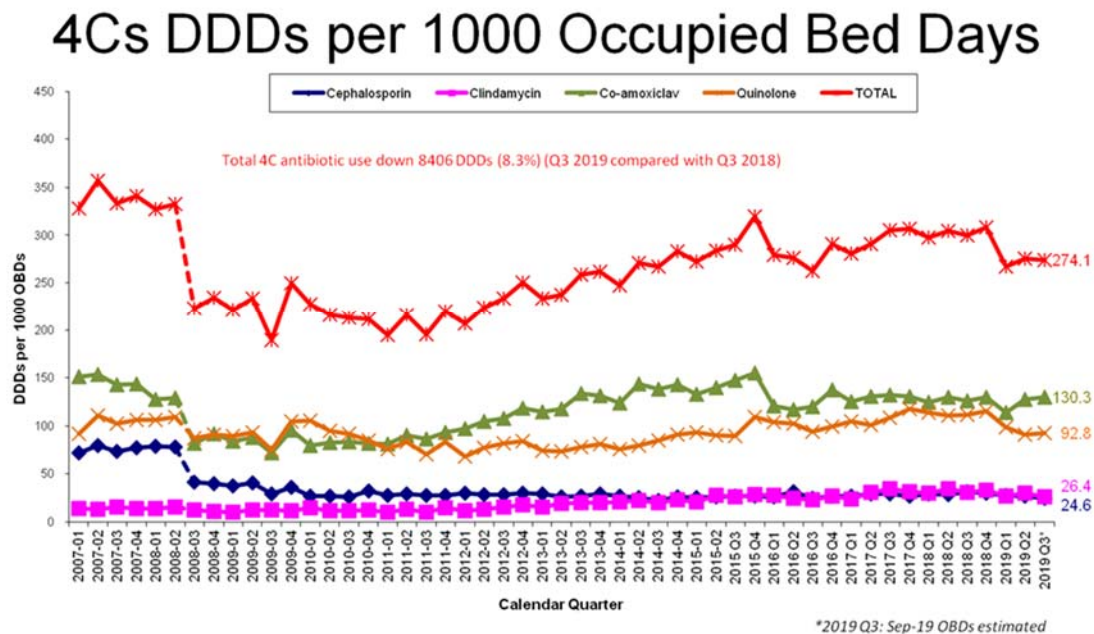


Figure 7: 4C antibiotic use in NHSGGC

UPDATE ON PREVIOUSLY REPORTED OUTBREAKS AND INCIDENTS

Cryptococcus neoformans

There have been no further cases of *Cryptococcus neoformans* infection in patients since the identification of the two cases in late November/ December 2018.

The Expert Advisory sub-group, continues to meet. The report will be available by the end of October 2019.

OUTBREAKS / EXCEPTIONS June 2019 – present

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

Queen Elizabeth University Hospital Campus, Ward 6A (Hematology/Oncology). Blood Stream Infections. HIIAT assessed as AMBER on the 8 October 2019.

Since April 2019 there had been 13 cases of gram negative bacteraemia (GMB) and one case of mycobacteria in the paediatric haematology/oncology unit in the QEUH. Restrictions on admission of new patients was put in place on the 2 August 2019 to facilitate the completion of the action plan agreed by the Incident Management Team (IMT). The IMT continue to meet and are supported by Health Protection Scotland who have commissioned an external analysis of available data by the Mathematics and Statistics Department of Strathclyde University, as the numbers are low and interpretation is therefore complex.

Some of the actions put in place are as follows:

- IPCT continue to visit the ward frequently but once per week a more formal review occurs. The Senior Charge Nurse or Lead Nurse, Infection Prevention and Control Nurse and a Domestic Manager review all areas of the ward and address any issues identified immediately. This includes practice issues, e.g. compliance with hand hygiene.
- Point of Use Filters (POU) were in place in all clinical sinks within the ward. This was extended to include all areas in the patient pathway, e.g. theatres, radiology. POU filters were also fitted to the ward kitchen and the domestic services room in the ward (these are areas not accessed by patients or carers but were added in as an additional precaution).
- Review of line care was undertaken by practice development nurses.
- Cleaning of chilled beams in the area was also increased to 6 weekly (recommendation is that these should be cleaned yearly). Chilled beam technology was also modified to take account of significant changes in the external temperature and a biocide was added to the system.
- Bespoke HEPA filters are being procured and will be fitted to the shower areas.
- Communication with patients and families is ongoing.

All of the patients have been treated and have recovered from infection.

Royal Hospital for Children (RHC), Paediatric Intensive Care Unit (PICU), Bordetella pertussis (whooping cough). HIIAT assessed as AMBER on the 23 September then GREEN on the 27 September

A healthcare worker (HCW) was confirmed as having possibly acquired Bordetella pertussis (BP) in PICU. The index case was a patient in PICU with BP who was discharged home well. 5 patients were treated as high risk contacts, i.e. they had been in contact with the HCW and were screened and were negative. 54 healthcare workers were given chemoprophylaxis. Verbal and written information was provided to staff and parents.

Norovirus

There were 2 wards closed in 1 hospital (GRI) due to Norovirus activity July - August 2019.

Month	Sep-18	Oct-18	Nov-18	Dec-18	Jan -19	Feb -19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug -19
Ward Closures	1	0	2	4	1	7	3	5	2	3	2	0
Bed Days Lost	21	0	93	50	7	42	106	188	49	49	11	0

Table 6: 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/norovirus-surveillance.aspx>

Healthcare Environment Inspectorate (HEI)

There was an unannounced inspection of wards and departments in Inverclyde Royal Hospital on the 15th and 16th of July 2019. 6 wards and departments were inspected against HAI Standards (6) Policy and procedure, (7) Invasive devices and (8) Decontamination. The final report was published on the 25th September 2019. The report highlighted that the standard of domestic cleaning was good, as was staff knowledge of standard infection control precautions. Areas for improvement focused on documentation for PVC insertion and monitoring and maintenance of the care environment. The inspection resulted in 4 requirements:

1. The IPCT must have oversight of IPC ward level audits.
2. The PVC care bundle must be completed in the ward /department where it was inserted and allow all staff to record all insertion criteria.
3. Patient environment and equipment is clean and ready for use to reduce risk of infection.
4. The patient environment is suitably monitored to ensure it is maintained to allow effective cleaning to ensure effective IPC.

54 patient questionnaires were returned. Patients reported that the standard of cleanliness was always good and the equipment used was always clean.

The full report and action plan 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

All NHS Boards are required to undertake in-patient and 30-day re-admission surveillance as per HDL (2006) 38, CEL (11) 2009 and 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 7).

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 7: 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 not yet complete for the quarter. Current status is displayed in Table 8.

Quarter 3 -19 (July-September) : Local SSI Surveillance (status at 24/09/2019)				
	Category of Procedure	Operations	Infections	NHSGGC SSI Rate (%)
Mandatory (reported to HPS)	Caesarean section	1260	2	0.2
	Hip arthroplasty	326	2	0.6
	Large Bowel Surgery	193	3	1.6
	Major Vascular Surgery	215	2	0.9
Voluntary	Knee arthroplasty	321	2	0.6
	Repair of neck of femur	368	2	0.5
Additional INS, QEUH only	Cranial Surgery	146	3	2.1
	Spinal Surgery	167	8	4.8

Table 8: Local SSI Surveillance. Procedures undertaken 01/07/19 - 23/09/19 (In-patient and 30 day readmission; C-section in-patient and PDS to day 10)

Incident CDU 2018

Following the incident in the CDU in October 2018 active surveillance (both retrospective and prospective) for fungal isolates was undertaken on the following procedures:

- Caesarean section
- Large Bowel Surgery
- Major Vascular Surgery
- Hip arthroplasty
- Knee arthroplasty
- Repair of neck of femur
- Cranial Surgery
- Spinal Surgery
- Free flap harvest for OMFS major procedures

There have been no fungal isolates identified in any SSI associated with a surgical procedure performed in any of the above categories from 1st January 2018 to present date.

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 more than 48 hours after admission and **healthcare associated** in which the patient has a positive sample taken from within 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

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Healthcare Associated	22	28	29	31	31	24	25	29	31	25	38	28
Community Associated	4	4	6	5	14	16	5	7	7	4	8	11
Total	26	32	35	36	45	40	30	36	38	29	46	39

Clostridioides difficile infection monthly case numbers

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Healthcare Associated	28	17	18	27	20	18	18	16	31	23	19	17
Community Associated	6	13	10	9	10	6	7	8	2	5	9	9
Total	34	30	28	36	30	24	25	24	33	28	28	26

Hand Hygiene Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	97	98	97	98	97	97	97	97	97	97	97	97

Cleaning Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	95.4	95.1	95.3	95.5	95.1	94.8	95.2	95.3	94.3	95.0	94.9	93.7

Estates Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	99.1	98.9	99.0	99.0	98.7	97.9	98.0	96.9	97.3	97.2	96.3	96.1

GLASGOW ROYAL INFIRMARY / PRINCESS ROYAL MATERNITY

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

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

Clostridioides difficile infection monthly case numbers

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

Hand Hygiene Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	97	97	96	97	96	97	97	97	95	96	97	98

Cleaning Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	95.5	95.6	95.8	95.7	95.6	95.6	95.0	95.2	95.3	95.3	95.5	95.0

Estates Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	99.6	99.7	99.5	99.6	99.5	99.2	98.7	97.9	96.9	95.7	92.0	90.8

ROYAL ALEXANDRA HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

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

Clostridioides difficile infection monthly case numbers

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

Hand Hygiene Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	97	97	97	98	97	97	97	96	98	98	96	96

Cleaning Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	95.8	95.8	95.9	95.2	95.7	94.7	94.7	93.3	95.0	95.5	95.5	95.1

Estates Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	96.8	96.0	96.5	95.0	96.2	93.4	93.5	93.6	98.0	96.5	94.6	94.6

INVERCLYDE ROYAL HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

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

Clostridioides difficile infection monthly case numbers

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

Hand Hygiene Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	97	99	99	99	99	98	98	98	99	99	98	98

Cleaning Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	94.5	94.4	96.0	95.2	95.6	94.7	93.6	94.9	95.2	95.1	95.3	94.6

Estates Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	96.8	96.2	97.3	97.4	96.6	95.4	95.2	96.5	96.6	96.9	96.9	94.2

VALE OF LEVEN HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

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

Clostridioides difficile infection monthly case numbers

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

Hand Hygiene Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	99	99	99	99	99	98	100	99	100	99	99	98

Cleaning Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	97.5	97.9	97.7	97.7	97.6	97.9	97.3	97.2	97.2	97.5	97.4	97.4

Estates Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	99.8	99.7	99.6	99.7	99.6	99.3	98.5	98.7	99.1	99.3	99.2	99.1

GARTNAVEL GENERAL HOSPITAL**REPORT CARD**

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

***Staphylococcus aureus* bacteraemia monthly case numbers**

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

***Clostridioides difficile* infection monthly case numbers**

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

Hand Hygiene Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	96	96	97	97	96	97	95	99	97	97	96	98

Cleaning Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	96.6	96.1	96.0	96.7	96.1	96.1	96.7	96.1	95.4	95.6	95.4	95.6

Estates Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	99.8	99.3	99.2	99.7	99.5	99.1	99.1	99.0	98.6	98.5	98.5	98.4

QUEEN ELIZABETH UNIVERSITY HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Healthcare Associated	10	15	11	14	13	8	10	5	10	6	17	10
Community Associated	1	1	2	2	1	5	4	3	1	1	2	2
Total	11	16	13	16	14	13	14	8	11	7	19	12

Clostridioides difficile infection monthly case numbers

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

Hand Hygiene Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	97	97	97	97	96	96	96	97	96	96	96	96

Cleaning Compliance (%) QEUH only

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	94.3	94.5	94.5	94.4	94.3	93.1	93.7	92.9	93.2	93.2	93.2	93.5

Cleaning Compliance (%) Langlands building only

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	93.1	92.2	91.8	92.6	88.7	88.7	N/A	N/A	85.5	90.7	93.1	77.7

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.

Estates Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	99.9	99.9	99.9	99.8	99.3	97.7	97.9	93.8	94.8	96.3	96.2	96.1

ROYAL HOSPITAL FOR CHILDREN

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

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

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

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

Hand Hygiene Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	99	99	98	95	96	95	98	98	96	97	98	98

Cleaning Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	93.9	94.6	95.0	94.9	94.5	94.1	93.7	95.2	93.8	94.5	94.2	93.8

Estates Monitoring Compliance (%)

	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019
Board Total	99.4	98.9	99.1	99.7	97.8	97.3	98.5	95.1	94.4	95.2	94.6	95.4

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
- Mearnskirck House (Closed 03 March 2019)
- New Victoria Hospital
- Orchard View (Inverclyde Royal Hospital campus)
- Stobhill Hospital

***Staphylococcus aureus* bacteraemia monthly case numbers**

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

***Clostridioides difficile* infection monthly case numbers**

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

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

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

GLOSSARY (updated August 2019)

Alert organism alert condition	Any of a number of organisms or infections that could indicate, or cause, outbreaks of infection in the hospital or community.
Bacteraemia	Infection in the blood. Also known as Blood Stream Infection (BSI).
CDI	<i>Clostridioides difficile</i> Infection. Also referred to as <i>C. diff</i> is a Gram-positive spore-forming anaerobic bacterium. <i>C.difficile</i> 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 resistant to antibiotics.
CRA	Clinical Risk Assessment
CVC	Central Venous Catheter . This also includes those that are peripherally inserted i.e. PICC
Code of Practice	Code of Practice - The NHS Scotland Code of Practice for the Local Management of Hygiene and Healthcare 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 <i>S.aureus</i> 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 satisfy certain levels of efficiency.
HFS	Health Facilities Scotland
HH	Hand Hygiene
HIAT	Hospital Infection Incident Assessment Tool
HIORT	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 <i>Staphylococcus aureus</i> . A <i>Staphylococcus aureus</i> resistant to first line antibiotics; most commonly known as a hospital acquired organism.
MSSA	Meticillin Sensitive <i>Staphylococcus aureus</i>
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)
PHPU	Public Health Protection Unit
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	<i>Staphylococcus aureus</i> 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 (<i>Charts</i>)
SSI	Surgical Site Infection
VRE	Vancomycin resistant enterococcus - an alert organism. A common organism that can be inherently resistant to Vancomycin but can also acquire (and transfer resistance) to other organisms. Has caused outbreaks reported in the literature in a variety of high-risk settings, e.g. renal or bone marrow transplant units.

Enhanced *S. aureus* Bacteraemia Surveillance Definitions

Hospital Acquired Infection

Positive blood culture obtained from a patient who has been hospitalised for >48 hours. The patient was discharged from hospital in the 48 hours prior to the positive blood culture being taken. If the patient was a neonate/baby who has never left hospital since being born.

OR

a patient who receives regular haemodialysis as an outpatient.

OR

contaminant if blood aspirated from hospital

Healthcare Associated Infection

Positive blood culture obtained from a patient within 48 hours of admission to hospital and fulfils one or more of the following criteria:


1. Was hospitalised overnight in the 30 days prior to the positive blood culture being taken
OR
2. Resides in a nursing home
OR
3. IV, or intraarticular medication in the 30 days prior to the positive blood culture being taken, but excluding illicit drug use
OR
4. Regular user of a registered medical device
OR
5. Underwent a medical procedure which broke mucous or skin barrier in the 30 days prior to the positive blood cultures being taken
OR
6. Underwent care for a medical condition by a healthcare worker in the community which involved contact with non-intact skin, mucous membranes or the use of an invasive device 30 days prior to the positive blood culture being taken

Community Acquired Infection

Positive blood culture obtained from a patient within 48 hours of admission to hospital who does not fulfil any criteria for healthcare associated bloodstream infection.

HPS Protocol

April 2016, Version 1.0

Infection Prevention & Control and Antimicrobial Management Team <i>Clostridioides difficile (C. difficile)</i>	
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Dear Doctor,

Re: Above Patient

This patient was recently diagnosed with *Clostridioides difficile (C. difficile)*. We would be grateful if you could consider the following in order to reduce the risk of relapse or future episodes:

1. If the patient is prescribed a proton pump inhibitor – please review. PPIs are associated with increased risk of *C. difficile*. See the following for guidance on duration of PPI prescribing:
<http://www.staffnet.ggc.scot.nhs.uk/Info%20Centre/PoliciesProcedures/GGCClinicalGuidelines/GGC%20Clinical%20Guidelines%20Electronic%20Resource%20Direct/Proton%20Pump%20Inhibitors%20Prescribing%20on%20Discharge%20from%20Hospital.pdf> (review Date May 2019)
2. Please consider the need for antibiotic therapy, and follow the primary care guidelines for future suspected bacterial infection episodes ensuring avoidance of those antibiotics most associated with *C. difficile* i.e. quinolones, co-amoxiclav, cephalosporins and clindamycin.
3. Please try to ensure that any future antibiotic **course duration** does not exceed that recommended within GGC guidance.

With many thanks for your cooperation.

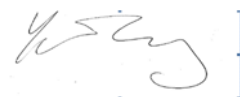
On behalf of GG&C IPC and AMT teams



Dr Andrew Seaton, Lead Physician, GG&C Antimicrobial Management Team



Dr Brian Jones, Lead Microbiologist, GG&C Antimicrobial Management Team



Ysobel Gourlay, Lead Antimicrobial Pharmacist, GG&C Antimicrobial Management Team