

NHS Greater Glasgow & Clyde



NHS Board Meeting

16th April 2019

Dr Jennifer L Armstrong
Medical Director

Paper No: 19/20

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 / ISD data : Quarter 4 (October - December) 2018					
		Healthcare Associated Rate per 100 000 bed days		Community Associated Rate per 100 000 population	
		GGC	National	GGC	National
S. aureus Bacteraemia	104 cases	21.1	17.7	5.4	8.3
C. difficile in age 15+	89 cases	16.1	13.8	7.5	7.0

Table 1 NHSGGC and national comparison rates for 01/10/2018 – 31/12/2018.

- **104** validated *Staphylococcus aureus* Bacteraemia (SAB) cases were reported for October to December 2018 with a Healthcare Associated rate of 21.1 cases per 100,000 bed days (n=88). This is above the national rate but within expected confidence intervals. SABs remain a priority and the SAB group continues to meet on a regular basis and implement actions based on emerging evidence and quality improvement initiatives.
- **89** validated *Clostridioides*(formerly *Clostridium*) *difficile* (CDI) cases in ages 15 and over were reported for October to December 2018 with a Healthcare Associated rate of 16.1 cases per 100,000 bed days (n=67). This is a reduction in CDI cases upon the previous reporting quarter, however is above the national rate but within expected confidence intervals. Number of cases continues in a downward trend in Quarter 1 of 2019.

Any Patient Safety /Patient Experience Issues:

Actions taken with regards to four incidents are detailed in the Outbreaks and Incidents Section.

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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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 4: 2018 (October - December) Surveillance

For the last published reporting quarter (October-December 2018) NHS Greater Glasgow & Clyde reported a total of **104** validated SAB cases. These are further classified as healthcare associated (n=88) or community infections (n=16).

88 healthcare associated cases were reported for the quarter equating to a rate of 21.1 per 100,000 occupied bed days (Figure 1). This is above the NHS Scotland rate of 17.7. However the GGC rate remains within expected confidence intervals.

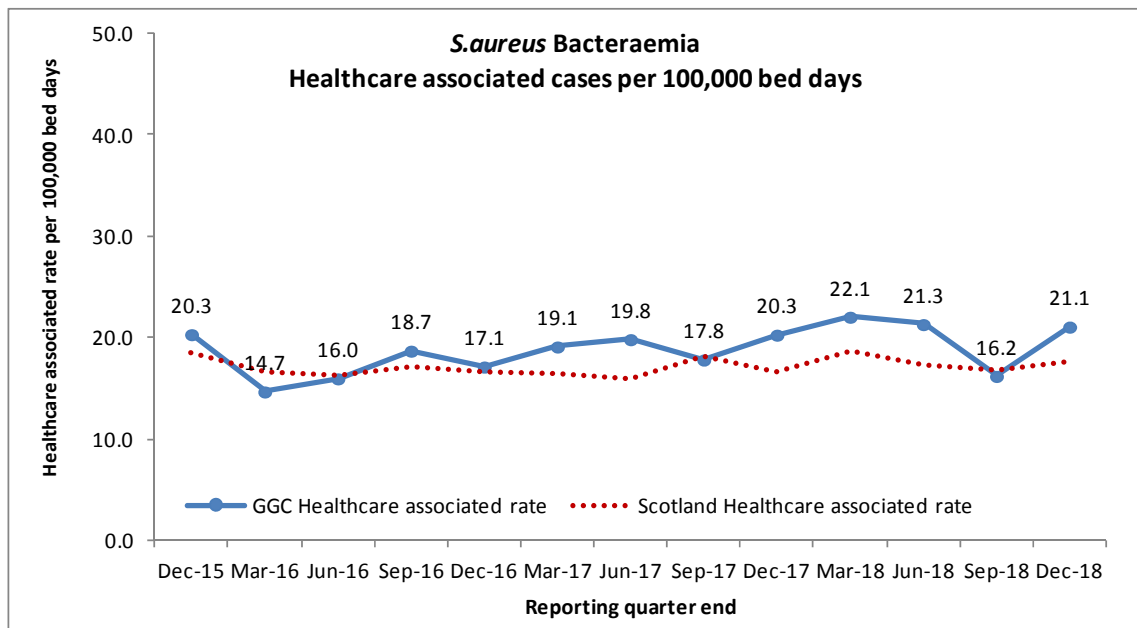


Figure 1 Healthcare associated SAB comparison by quarter for NHSGGC and Scotland.

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 5.4 compared to 8.3 in NHS Scotland.

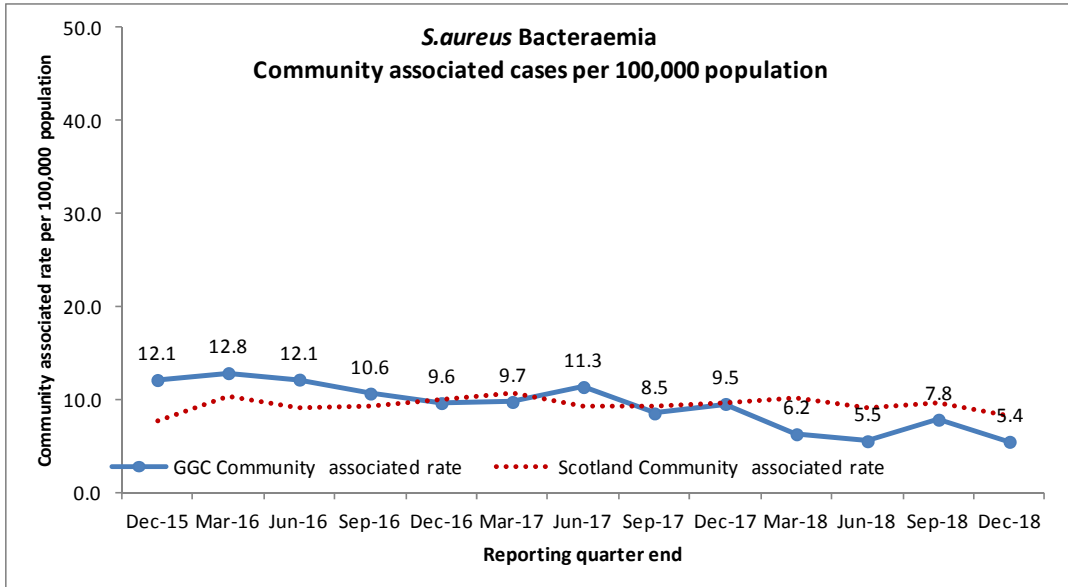


Figure 2 Community associated SAB comparison by quarter for NHSGGC and Scotland

Quarter 1: 2019 (January - March) NHSGGC Surveillance

Local surveillance for the first quarter of 2019 is still underway at time of report collation. We have reported 45 SAB cases in January (31 healthcare associated and 14 community). February noted a slight reduction with 40 cases (24 healthcare associated and 16 community). There was a further reduction in March with 30 cases in total (24 healthcare associated and 6 community). There have been 77 healthcare associated cases in this quarter which is a reduction from the previous quarter (n=88).

20 IV access device related HAI SABs have been reported in the current quarter (Figure 3). The SAB group continue to implement new initiatives to reduce the number of SABs associated with these devices as noted below. IPCT will continue to monitor and return information to clinical sectors and directorates for action.

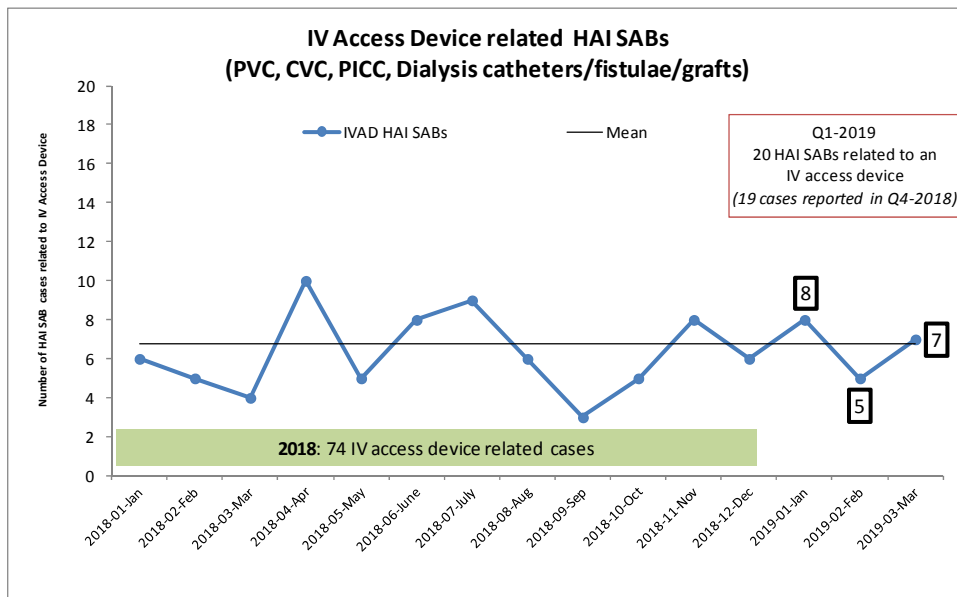


Figure 3 Number of Hospital acquired SABs by month attributed to an IV access device

SAB Actions Update

The GGC SAB group met on 19 March 2019 and work continues to reduce the amount of avoidable harm healthcare associated cases.

PVC Care Plan

The PVC care plan has been approved by Chiefs of Nursing and Medicine and is currently being rolled out throughout NHSGGC. This plan now focuses on the removal of the device as soon as possible, in addition to the maintenance of it, and increases the number of daily checks from once to twice per day. It also promotes the switch from IV to oral antibiotics which is a key message from the Antimicrobial Management Team. The Infection Prevention and Control Team (IPCT) will monitor the impact of this initiative during 2019.

PVC Packs

Initial feedback on a small number of packs was generally positive, however a decision was taken to have a further small pilot in several clinical areas across the QEUH campus; this will take place during April 2019. If the evaluation of this larger pilot is positive, it is possible that this could be available for use by April/May 2019.

PVC poster

A poster has been developed by the clinical team in one of the wards in Glasgow Royal Infirmary (North Glasgow Sector) which is displayed on the medical case note trolley. This acts as a simple and visual aide memoire to remind medical and nursing staff to ensure:

- Unnecessary PVCs are removed promptly.
- Review of IV antibiotics and consider the switch from intravenous to oral medications daily.
- Documentation for all PVCs is present in the clinical notes.

This has been approved, in principle, by the Chief Nurses and will be cascaded for use throughout the Acute Sector.

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

MRSA

Patients in high-risk areas are all routinely screened for MRSA and the CRA is an additional precaution. Mandatory Clinical Risk Assessment (CRA) compliance for GGC in Q4 (January-March 2019) is 69%. Several actions have been taken to improve this rate and are listed in the following paragraphs; this applies to both MRSA and CPE screening. Ward compliance rates

are returned to the Sector / Directorate Senior Management Teams to identify areas that require support/education in relation to improved screening. This information is contained within the Sector / Directorate IPC Monthly Report which is tabled at the Sector / Directorate governance meetings.

The updated My Assessment Record (MAR) is still in the process of being rolled out. In the meantime during their weekly visits, the IPC Nurses (IPCNs) will check three patient admission documents and report any poor compliance with the completion of the assessment to the Nurse in Charge, the Lead and Chief Nurses. Chief Nurses will immediately instruct Lead Nurses to address this with Senior Charge Nurses and determine any actions which will be taken to improve compliance, e.g. safety briefs, education. Compliance rates are also reported to the Acute Services Division Clinical Governance Forum. IPCT will continue to monitor this.

The requirement to complete the MRSA CRA was published as a “Hot Topic” on StaffNet (NHS GGC intranet) on 14 March 2019 and this message has also been conveyed to all Chief Nurses within the Acute Adult Sectors / Directorates.

MRSA screening CRA uptake	2017-18 Q4 (Jan-Mar)	2018-19 Q1 (Apr-Jun)	2018-19 Q2 (Jul-Sep)	2018-19 Q3 (Oct-Dec)	2018-19 Q4 (Jan-Mar)
Greater Glasgow & Clyde	92%	84%	72%	69%	69%
Scotland	83%	83%	84%	83%	TBC

Table 3 Quarterly screening compliance- MRSA National Data Source: MDRO Admission Screening Team January 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 4 below shows the CRA compliance rate since national reporting was implemented. There has been a continued increase in Q4. The IPCT continue to implement strategies to improve compliance. The actions taken are reported in the previous section. Although CPE screening is mandatory, there is no national target set for compliance.

Compliance with CPE CRA was also included in the previously mentioned “Hot Topic” published on StaffNet.

CPE screening - CRA uptake	2018-19 Q1 (Apr-Jun)	2018-19 Q2 (Jul-Sep)	2018-19 Q3 (Oct-Dec)	2018-19 Q4 (Jan-Mar)
Greater Glasgow & Clyde	81%	71%	76%	78%
Scotland	72%	79%	78%	TBC

Table 4 Quarterly screening compliance - CPE National Data Source: MDRO Admission Screening Team January 2019.

NHS GGC are taking part in the National Excellence in Care MDRO screening project. The aim of the project is to improve admission screening for MDRO to support early detection and prevention of spread. The measure will indicate how many patients received a clinical risk assessment using a national MDRO admission screening tool for both MRSA and CPE. We anticipate that learning from this will also assist us in improving compliance.

Clostridioides (formerly Clostridium) difficile

Quarter 4: 2018 (October-December) Surveillance

89 validated cases were reported in the last published quarter (October - December 2018). This is a **decrease** upon the previous quarter. 67 cases were healthcare associated and this provided a rate of 16.1 cases per 100,000 bed days. The rate for NHS Scotland was 13.8 (Figure 4).

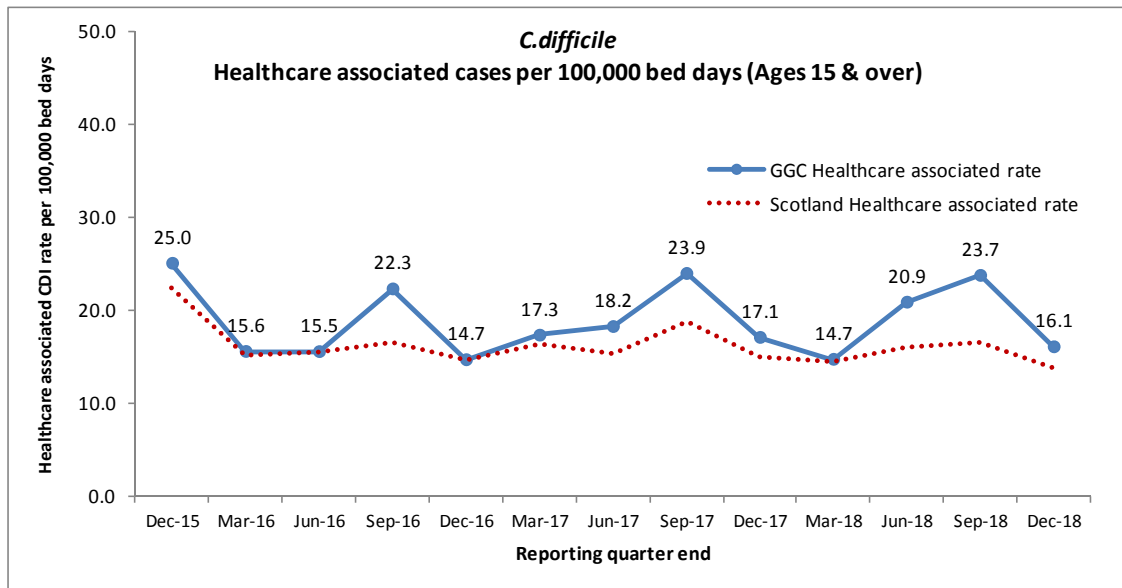


Figure 4 Healthcare associated CDI rates comparison by quarter for NHSGGC and Scotland.

22 community associated CDI cases were reported for the quarter with a rate of 7.5 per 100,000 population (Figure 5). The rate for NHS Scotland was 7.0.

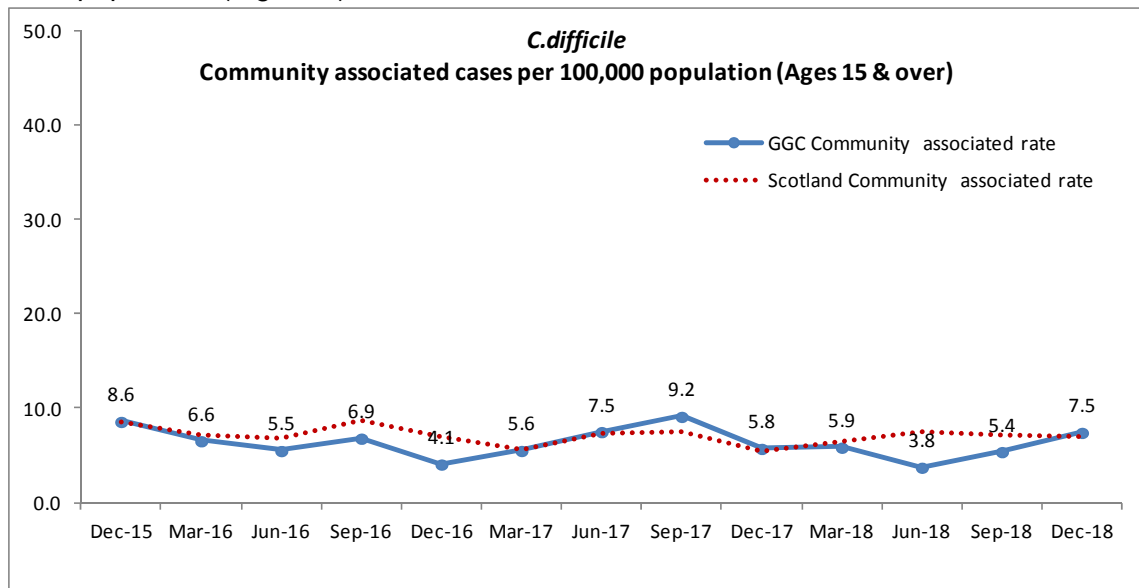


Figure 5 Community associated CDI comparison by quarter for NHSGGC and Scotland.

Quarter 1: 2019 (January-March) NHSGGC Surveillance

Local surveillance for the first quarter of 2019 is still underway at time of report collation. We have reported 30 CDI cases in January (20 healthcare associated and 10 community). February noted a slight reduction with 24 cases (18 healthcare associated and 6 community) and there are 26 cases for March (18 healthcare associated and 8 community).

A letter for GPs containing best practice guidance for the use of antibiotics and PPIs has been drafted in collaboration with the Lead Infection Control Doctor, Lead Physician, Lead Microbiologist and Lead Antimicrobial Pharmacist. This letter will be issued by the IPCT and

sent to the GP of any adult in-patient who has been diagnosed with CDI. This initiative will commence on 1 April 2019.

OUTBREAKS / EXCEPTIONS

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

February 2018 - February 2019

QEUH and RHC – Water& Ventilation System Update - Since February 2019 the incident has been assessed as HIIAT GREEN

Installation of a continuous (low level) chlorine dioxide water treatment system has been completed in the QEUH and RHC. Chlorine dioxide reduces the amount of micro-organisms in potable water. Extensive testing will continue to review the efficacy of this long-term solution to the water issue however results have been extremely encouraging and there have been no cases of bacteraemia associated with water since September 2018.

The Water Technical Group continues to meet to progress implementation and testing of the system on site. Point of use (POU) water filters are in place and may continue to be utilised in high-risk units long-term as an additional precaution. Health Facilities Scotland (HFS), HPS and international water experts continue to advise NHSGGC. Lessons learned from this incident continue to be shared within the Board and externally.

The plan for the upgrading of the ventilation system serving Wards 2A/B continues with an expected completion date for ventilation upgrade estimated to be the end of this calendar year at an estimated cost of 1.5 million pounds.

December 2018 - January 2019

QEUH – *Cryptococcus neoformans* – HIIAT assessed as RED on 20 December 2018 - as of 15 February 2019 assessed as HIIAT GREEN

The report from the short-life Expert Advisory Group which includes representatives from HPS, HFS and a UK expert on ventilation as well as representatives from NHS Greater Glasgow & Clyde is still awaited.

There have been no further cases since December 2018.

Cryptococcus has not been identified in air sampling since the end of January 2019; air sampling is ongoing.

High-risk patients continue on antifungal prophylaxis and work is ongoing to create more HEPA filtered rooms. These are the key infection control measures moving forward.

January 2019 - present day

Princess Royal Maternity (PRM) / Royal Hospital for Children (RHC) / Royal Alexandra Hospital (RAH) Neonatal Intensive Care Units (NICUs) - *Staphylococcus aureus* - HIIAT assessed as RED on 24 January 2019 and is currently AMBER

There have been 13 cases of an unusual strain of *Staphylococcus aureus* bacteraemia (SABs) in very ill extremely premature babies. Four of these babies have had SABs; the other 9 are colonised with the bacteria on skin or in throat. Sadly 3 of the babies with SABs have passed away. 11 of the 13 babies have been confirmed as having the same strain. One case is defined as possible, 1 as probable.

Four babies remain in PRM. All are colonised and none are giving cause for concern due to this bacteria.

The incident was initially detected following 2 SABs in babies in the PRM hospital and Problem Assessment Group (PAG) / Incident Management Team (IMT) meetings were held. A look back exercise to further characterise the epidemiology and aid hypothesis generation was undertaken. This detected 3 babies who had been colonised with the same strain of *S. aureus* preceding the SABs. *S. aureus* colonisation is common in neonates acquired via the birthing process, breast-feeding or skin-to-skin contact. 30-40% of babies will be colonised.

Weekly screening of all babies in all units was undertaken and there has been no new cases in either RAH or RHC since the implementation of control measures. It should be noted that most of the in-patient babies have been nursed in the PRM.

Whole genome sequencing (typing method) has revealed the strain to be highly unusual. In addition the strain produces two toxins; enterotoxin-A which tends to cause diarrhoea and vomiting and toxic shock syndrome toxin 1 (TSST-1) which causes sepsis. In addition the strain carries a gene called QacA which confers resistance to chlorhexidine, a common agent used for skin cleaning.

IMT actions / investigations included:

- Enhanced cleaning of all three units which included hydrogen peroxide vapour (HPV) cleans being undertaken.
- An initial round of microbiological swabbing of the environment was undertaken and was found to be negative. A second round of screening isolated a different type of *S. aureus* in one area. This was dealt with immediately and cleaning of this equipment was reviewed. In excess of 80 screening swabs have been taken at different points in time. In the most recent round of screening (25th March) all swabs were negative.
- Hand Hygiene Audits are ongoing. In the most recent hand hygiene audit which was undertaken in PRM on the 28 March 2019 the scores were as follows; opportunity 100% compliance 100%. There have been 12 hand hygiene education / audit sessions completed in PRM / RHC in March 2019.
- Enhanced supervision has been undertaken by IPCTs.
- Screening of staff for the outbreak strain has been undertaken and exclusion from work and decolonisation of positive staff members where positive.
- All positive babies and their family members have undergone decolonisation.
- Reduction of unnecessary staff traffic through the units.
- Alternatives to chlorhexidine are being explored with the assistance of HPS.

On 29 January 2019 NHSGGC invoked the National Support Framework for NHS Boards and HPS were formally invited to review our actions in relation to this incident. HPS were previously invited and attended IMT meetings. A formal report (SBAR - Situation Background Assessment Recommendation) has been received and an action plan submitted to HPS. The implementation of this action plan will be monitored by the Acute Infection Control Committee (AICC).

February 2019

Stobhill Hospital - four patients with Group A *Streptococcus* (GAS) across two wards; Jura Ward (Adult Mental Health) and Skye House (Child and Adolescent Mental Health) - IMT meeting held 8 February 2019 HIIAT assessed as AMBER - subsequently HIIAT assessed as GREEN as of 15 February 2019

Four patients across 2 wards tested positive for GAS. The following actions were put in place:

- GAS was highlighted at nursing and medical staff briefings. Staff were asked to remain vigilant to any new patients with indication of possible wound infection / sore throat. Any staff with symptoms were to refrain from duty and consult their own GP.
- Any patient with possible wound infection / sore throat were to be isolated with precautions in place until samples obtained and results available to allow further assessment. Any patients with pyrexia were to have blood cultures taken.
- Possible cross-over of staff and services, e.g. Therapet, on-call junior doctor, between Skye House and Jura Ward was investigated.
- Terminal clean of Lewis Wing and communal areas was completed. Cleaning was increased to twice daily.
- Environmental sampling of Lewis Wing in Skye House and communal areas was undertaken. One positive sample which was from an item present in the room of one of the positive patients.
- Samples from confirmed GAS cases to be typed*.

*Typing results subsequently confirmed that these were different types of GAS. GAS is part of the body's normal flora in a significant proportion of the population. Between 20-30% of all cases of pharyngitis (sore throats) in children are due to GAS and 5-15% in adults (CDC USA). Once patients have symptoms it can be transferred easily by direct contact with the skin or via respiratory droplets. On this occasion the results from the typing confirm that these infections occurred in isolation and were not due to cross transmission.

Norovirus

There were 8 wards closed in 3 hospitals due to Norovirus activity January- February 2019

Month	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug -18	Sep-18	Oct-18	Nov-18	Dec-18	Jan -19	Feb -19
Ward Closures	5*	7	9	1	5	0	1	0	2	4	1	7
Bed Days Lost	55	228	334	33	69	0	21	0	93	50	7	42

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/qiz/norovirusurveillance.aspx>

Healthcare Environment Inspectorate (HEI)

Royal Alexandra Hospital: Unannounced Inspection

There was an unannounced HEI / HAI inspection of the RAH 4-6 December 2018. The report has been issued and an action plan developed. There were six requirements for wards, and two requirements and one recommendation for theatres.

An action plan was returned to the inspectors and was published on the HEI website on 19 February 2019. The report noted:

What the hospital did well:

- The positive themes from the report were around staff knowledge, staff education, positive patient feedback and clinical care of patients with an invasive device in-situ.
- The team noted good compliance with mandatory IPC online training modules along with good examples of clear recording of staff education and training.
- They noted a high-level of input to ward and departments from the IPCT including weekly themed education sessions which ward staff were positive about. In addition there was a good range of available IPC leaflets given to patients and carers and clearly displayed IPC audit information and evidence of improvement plans following such audits.
- The team also noted that in all areas they observed staff to be compliant with hand hygiene requirements and use of personal protective equipment (PPE). The inspectors confirmed staff spoken to demonstrated good knowledge of body fluid spillage and needle-stick management.
- Patient placement was good in all areas and staff took appropriate transmission based precautions (TBPs) at all times and spoke knowledgably regarding TBPs.
- The team reviewed 17 peripheral vascular devices and 10 urinary catheter device bundle documentation and carried out physical checks of vascular sites with the patient's permission. The inspectors found bundles to be well completed and the devices appropriately managed clinically. In addition, patients were well informed and satisfied with the level of explanation received regarding devices.
- All domestic staff spoken to had good knowledge of their roles with evidence of completed cleaning schedules including sign-off from nursing staff. The team reported they saw patient equipment was clean, and this included beds, lockers, tables, mattresses, chairs, and all theatre and monitoring equipment.

What the hospital could do better:

- One ward had patient equipment stored in a shower room which was noted to be contaminated; in addition there was a damaged footstool and patient chair.
- The team noted in some ward and theatre environments that there were a significant number of estates issues including damage to wooden surfaces, floors, skirting boards and walls which makes cleaning difficult.
- The inspectors also commented that although within theatres storage, spaces were well-organised they noted that sterile trays were stacked on top of each other increasing the risk of torn packaging.
- Within the Neonatal Unit two storage fridges for breast milk were found to be above the acceptable temperature range when the inspectors visited.
- Outside the Emergency Department (ED) clinical waste from three separate departments awaiting uplift from porters is stored within a large lockable storage bin which is removed and replaced throughout the day. The team noted that on the day of the visit the bin in situ was unlocked and badly damaged.
- Within ED and one ward the team found several issues with environmental cleanliness.
- Within some areas the team saw bladeless fans in use.

QEUH Campus (Institute of Neurological Sciences (INS), RHC Maternity Unit, QEUH Langlands Building) - Unannounced Inspection

On 29 January to 1 February 2019 the HEI conducted an unannounced visit to QEUH and RHC at the request of the Cabinet Secretary for Health and Sport. The report has been issued with fourteen requirements and one recommendation.

An action plan was submitted to the inspectors and the report was published on the HEI website on 8 March 2019. The report noted:

What the hospital did well:

- NHSGGC adheres to national reporting mechanisms.
- Evidence of IPC governance structures with clear IPC work plan with well-defined responsibilities from point of care to board.
- Information from the Board's Authorised Person for Ventilation provided the inspectors with assurance that all current systems are being managed in line with national standards.
- The National IPC Manual (NIPCM) was adopted and staff were reported to be familiar with its content. Evidence that the monitoring of compliance with this was presented.
- Good staff compliance with IPC precautions and good hand hygiene compliance amongst staff was noted.
- 96% of patient survey respondents stated that the standard of cleanliness was good and 100% stated that equipment was clean.
- Domestic staff cleaned rooms thoroughly and the rooms were clean and dust free.
- Ward staff indicated good relationships with the Domestic Team.

What the hospital could do better:

- Higher than average levels of domestic staff absence and vacancies.
- Some aspects of governance in Estates and Facilities and IPCT require to be strengthened.
- Negative pressure isolation rooms should be available.
- Water flushing roles were unclear and record keeping not consistent.
- Bladeless fans were in situ in some high-risk areas.
- IPC audit process may not highlight all issues.
- Cleaning in the ED could have been better. **NB** high levels of activity in ED in January 2019 with 10% more patients in GGC than last January (2018).

All HEI reports for NHSGGC can be viewed by following the link:

http://www.healthcareimprovementscotland.org/our_work/inspecting_and_regulating_care/nhs_hospitals_and_services/hei_inspections/all_hey_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 and CEL (11) 2009.

Quarter 4: 2018 (October-December)

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

There has also been a sustained reduction in the number of hip arthroplasty SSIs this quarter, with three cases reported in total. The SSI rate of 0.8% is marginally higher than the national rate however remains within national confidence intervals (CI).

Category of Procedure	Operations	Infections	NHSGGC SSI rate (%)	NHSGGC 95% CI	National Dataset SSI rate (%)	National 95% CI
Caesarean section	1365	16	1.2	0.7-1.9	1.4	1.1-1.7
Hip arthroplasty	378	3	0.8	0.3-2.3	0.6	0.4-1.0

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

Surveillance is ongoing and SSI rates have decreased for the current reporting quarter across all the sites. Work is continuing with orthopaedic colleagues to implement an MSSA eradication programme which is a specific recommendation for orthopaedic surgery in the World Health Organisation Surgical Site Infection Prevention Guidelines 2016, available at: <http://apps.who.int/iris/bitstream/handle/10665/250680/9789241549882-eng.pdf?sequence=8>

Quarter 1: 2019 (January-March) NHSGGC Surveillance

Local surveillance for the first quarter of 2019 is ongoing and provisional results for January and February procedures are displayed in Table 7.

Quarter 1 -19 (January – February*) : Local SSI Surveillance Status				
	Category of Procedure	Operations	Infections	NHSGGC SSI Rate (%)
Mandatory (reported to HPS)	Caesarean section	859	2	0.2%
	Hip arthroplasty	253	0	0.0%
	Large Bowel Surgery	154	5	3.2%
	Major Vascular Surgery #	141	7	5.0%
Voluntary*	Knee arthroplasty	259	2	0.8%
	Repair of neck of femur	235	3	0.9%
Additional INS,QEUEH only*	Cranial Surgery	112	1	0.9%
	Spinal Surgery	122	2	1.6%

Table 7 Local SSI Surveillance. Procedures undertaken 01/01/19 - *28/02/19 (In-patient and 30 day readmission; C-section in-patient and PDS to day 10)

Major Vascular Surgery: Six SSI were detected in January procedures. This was considered to be an increased incidence for this procedure group. An IMT was held on 19 February 2019. HIIAT GREEN reported. Actions included:

- Review of antimicrobial prophylaxis.
- Hand hygiene training for Wards 11A and 11D, although reported as good.
- Post op wound dressings should not be removed for 48 hours unless absolutely necessary.
- Surveillance nurses will attend morbidity and mortality review and provide feedback on any SSI detected.

One SSI detected for February 2019 procedures to date and surveillance process continues.

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*:**

<http://www.hps.scot.nhs.uk/haic/sshaip/clostridiumdifficile.aspx?subjectid=79>

***Staphylococcus aureus* Bacteraemia**

<http://www.hps.scot.nhs.uk/haic/sshaip/mrsabacteraemiasurveillance.aspx?subjectid=D>

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/online-services/publications/hai/>

NHS GREATER GLASGOW & CLYDE

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Healthcare Associated	35	34	24	31	24	21	22	28	29	31	31	24
Community Associated	9	10	5	6	11	9	4	4	6	5	14	16
Total	44	44	29	37	35	30	26	32	35	36	45	40

Clostridioides difficile infection monthly case numbers

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Healthcare Associated	16	24	27	28	26	40	28	17	18	27	20	18
Community Associated	7	5	10	7	6	10	6	13	10	9	10	6
Total	23	29	37	35	32	50	34	30	28	36	30	24

Hand Hygiene Monitoring Compliance (%)

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

Cleaning Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	95.5	95.0	95.5	95.4	95.2	95.6	95.4	95.1	95.3	95.5	95.1	94.8

Estates Monitoring Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	99.0	99.0	99.1	99.0	99.2	98.9	99.1	98.9	99.0	99.0	98.7	97.9

GLASGOW ROYAL INFIRMARY / PRINCESS ROYAL MATERNITY

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Healthcare Associated	9	11	6	11	10	4	4	6	8	9	9	7
Community Associated	4	3	1	2	4	2	1	1	3	1	6	5
Total	13	14	7	13	14	6	5	7	11	10	15	12

Clostridioides difficile infection monthly case numbers

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

Cleaning Compliance (%)

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

Estates Monitoring Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	99.7	99.7	99.7	99.7	99.6	99.7	99.6	99.7	99.5	99.6	99.5	99.2

ROYAL ALEXANDRA HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

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

Clostridioides difficile infection monthly case numbers

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

Cleaning Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	95.4	95.7	96.3	94.7	95.9	96.3	95.8	95.8	95.9	95.2	95.7	94.7

Estates Monitoring Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	98.4	99.1	98.3	97.5	97.0	96.1	96.8	96.0	96.5	95.0	96.2	93.4

INVERCLYDE ROYAL HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

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

Clostridioides difficile infection monthly case numbers

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

Cleaning Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	94.3	94.5	95.8	95.1	94.0	95.4	94.5	94.4	96.0	95.2	95.6	94.7

Estates Monitoring Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	96.9	95.3	97.5	96.8	97.3	97.7	96.8	96.2	97.3	97.4	96.6	95.4

VALE OF LEVEN HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

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

Clostridioides difficile infection monthly case numbers

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

Cleaning Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	97.3	97.5	97.8	97.6	97.7	97.7	97.5	97.9	97.7	97.7	97.6	97.9

Estates Monitoring Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	99.6	99.7	99.7	99.6	99.9	99.7	99.8	99.7	99.6	99.7	99.6	99.3

GARTNAVEL GENERAL HOSPITAL**REPORT CARD**

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

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

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

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

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

Cleaning Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	96.8	96.0	96.3	96.7	96.4	96.3	96.6	96.1	96.0	96.7	96.1	96.1

Estates Monitoring Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	99.7	99.5	99.6	99.7	99.8	99.5	99.8	99.3	99.2	99.7	99.5	99.1

QUEEN ELIZABETH UNIVERSITY HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Healthcare Associated	10	9	10	12	9	8	10	15	11	14	13	8
Community Associated	4	4	2	3	3	1	1	1	2	2	1	5
Total	14	13	12	15	12	9	11	16	13	16	14	13

Clostridioides difficile infection monthly case numbers

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Healthcare Associated	3	7	7	4	9	11	10	9	4	7	4	4
Community Associated	2	3	-	3	-	4	3	4	2	1	2	-
Total	5	10	7	7	9	15	13	13	6	8	6	4

Cleaning Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	92.7	90.6	93.2	93.2	91.2	93.6	93.7	93.4	93.1	93.5	91.5	90.9

Estates Monitoring Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	99.9	99.9	99.8	99.9	99.8	99.8	99.9	99.9	99.9	99.8	99.3	97.7

ROYAL HOSPITAL FOR CHILDREN

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

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

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

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

Cleaning Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	94.6	94.9	94.8	94.6	94.8	95.1	93.9	94.6	95.0	94.9	94.5	94.1

Estates Monitoring Compliance (%)

	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
Board Total	99.5	99.4	99.5	99.5	99.5	99.3	99.4	98.9	99.1	99.7	97.8	97.3

**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
- New Victoria Hospital
- Parkhead Hospital (closed 28 March 2018)
- Orchard View (Inverclyde Royal Hospital campus)
- Stobhill Hospital

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

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

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

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

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

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

GLOSSARY

AMT	Antimicrobial Management Team
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 C. diff 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)
CRA	Clinical Risk Assessment
CVC	Central Vascular 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
GRO	General Registers Office
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 http://www.documents.hps.scot.nhs.uk/hai/sshaip/guidelines/s-aureus/esab-protocol-v2-2014-11.pdf
HCAI	Healthcare Associated Infection (for CDI and SAB classification)
HCW	Healthcare Worker
HDL	Health Department Letter
HDU	High Dependency Unit
HEAT Target	Health Efficiency and Access to Treatment. Targets set by the Scottish Government.
HFS	Health Facilities Scotland
HH	Hand Hygiene
HIAT	Hospital Infection Incident Assessment Tool
HIORT	Healthcare Infection Incident and Outbreak Reporting Template
HIS	Health Improvement Scotland
HPS	Health Protection Scotland
HSCP	Health & Social Care Partnerships
IPCN /T/D/M	Infection Prevention & Control Nurse / Team / Doctor / Manager
ICP	Infection Control Programme
ICU	Intensive Care Unit
ISD	Information Services Division A division of National Services Scotland, part of NHS Scotland. ISD provides health information, health intelligence, statistical services and advice that support the NHS in progressing quality improvement in health and care, and facilitates robust planning and decision making.
IVAD	Intravenous Vascular 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
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>
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 Vascular Catheter
RSV	Respiratory Syncytial Virus. A contagious respiratory infection.
SAB	<i>Staphylococcus aureus</i> Bacteraemia
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 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.

OFFICIAL SENSITIVE

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