

NHS Greater Glasgow & Clyde

NHS Board Meeting

21 August 2018



Dr Jennifer L Armstrong
Medical Director

Paper No: 18/38

Healthcare Associated Infection Reporting Template (HAIRT)

Recommendation: For noting

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

Key Issues to be considered:

Validated HPS / ISD data : Quarter 1 (January - March) 2018					
		Healthcare Associated Rate per 100 000 bed days		Community Associated Rate per 100 000 population	
		GGC	National	GGC	National
<i>S.aureus</i> Bacteraemia	114 cases	22.1	18.7	6.2	10.1
<i>Clostridium difficile</i> in age 15+	80 cases	13.1	13.7	8.0	7.3

Table 1. NHSGGC and national comparison rates for 01/01/2018 – 31/03/2018

- **114** validated *Staphylococcus aureus* Bacteraemia (SAB) cases were reported for January to March 2018 with a Healthcare Associated rate of 22.1 cases per 100,000 bed days (n=96). This is **above** the national rate. SABs remain a priority and IPC have re-established the GGC SAB group with clinician input to further develop the GGC action plan. IPCT have also participated in a SAB summit with other health boards.
- **80** validated *Clostridium difficile* (CDI) cases **in ages 15 and over** were reported for January to March 2018 with a Healthcare Associated rate of **13.1** cases per 100,000 bed days (n=57). This is below the national rate.

Any Patient Safety /Patient Experience Issues:

Local surveillance for April-June (Q2) 2018 shows that NHSGGC has reported a slightly lower number of SABs with 110 cases.

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: Improving quality, efficiency and effectiveness.

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Date: 21/08/18

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 new national definitions of Healthcare Associated and Community Infections. Below is a short summary of the changes which have been applied to the presented data.

Definitions/Denominators

Reports from this time onwards will have rates split into two:

- Healthcare Associated Infections i.e. *any infections associated with Healthcare (hospital or GP)*. Rates will be worked out by number of infections over total occupied bed days (OBDs).
- Community Associated Infections. Rates will be worked out by number of infections per population.

***Staphylococcus aureus* (including Meticillin resistant *Staphylococcus aureus* (MRSA))**

Staphylococcus aureus Bacteraemia (SAB) Surveillance and Actions

Quarter 1: 2018 (January-March) Surveillance

For the last published reporting quarter (January-March 2018) NHS Greater Glasgow & Clyde reported a total of **114** validated SAB cases. These are further classified as healthcare associated (n=96) or community infections (n=18).

96 healthcare associated cases were reported for the quarter equating to a rate of 22.1 per 100,000 occupied bed days (Figure 1). This is above the NHS Scotland rate of 18.7.

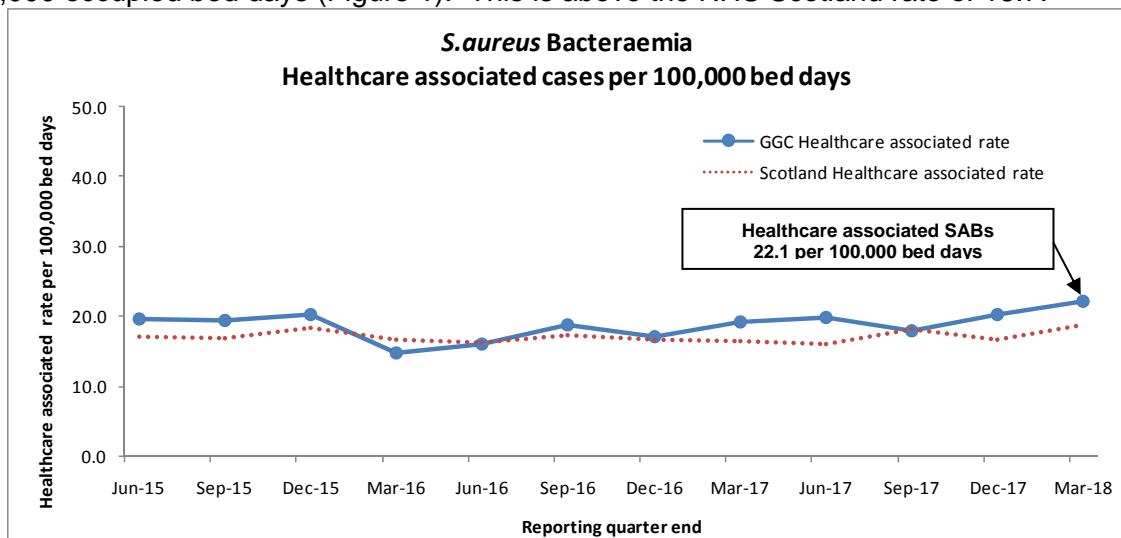


Figure1. Healthcare associated SAB comparison by quarter for NHS GGC and Scotland.

Community associated infections are now 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 therefore less amenable to reduction measures within GGC Acute hospitals. The rate of community associated infections in NHS GGC was 6.2 compared to 10.1 in NHS Scotland.

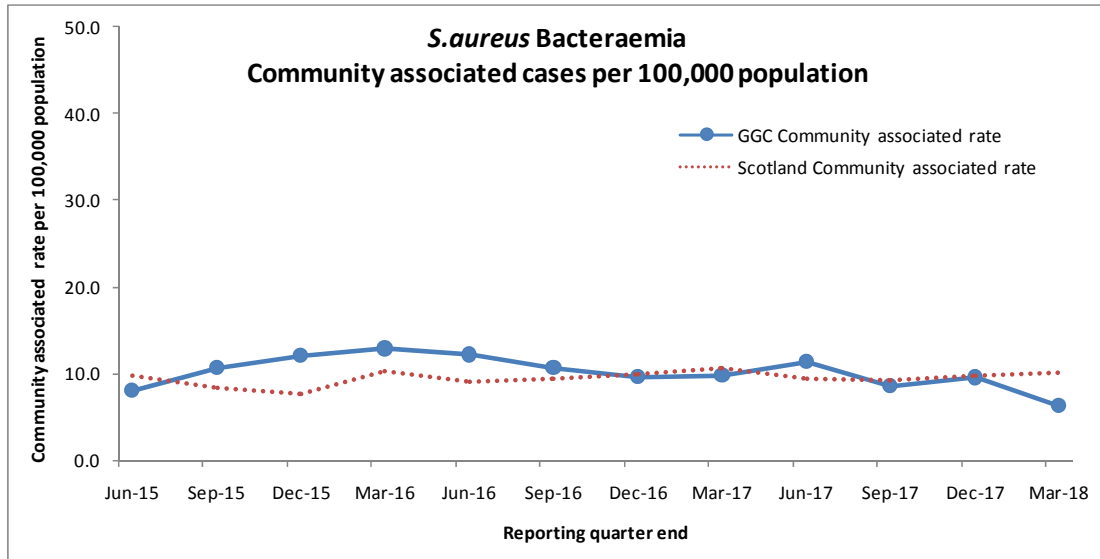


Figure 2. Community associated SAB comparison by quarter for NHSGGC and Scotland.

Quarter 2: 2018 (April-June) NHSGGC Surveillance

Local surveillance reports 110 SAB cases. This is a slight decrease from the previous quarter. 89 cases were categorised as Healthcare Associated/Hospital Acquired as shown in Table 2:

HPS reporting category	Origin of SAB	Number of patient cases (Unvalidated and subject to change)
Healthcare Associated	Hospital acquired	60
	Healthcare associated	29
Community	Community	21
	Total	110

Table 2. Origin of SAB – local surveillance data for Q2-18

All SABs are reviewed by the Infection Prevention and Control Team (IPCT) to try to determine the source of the infection. Of the hospital acquired cases (60/110), 38% (n=23) were attributed to an intravenous access device (IVAD). Identified sources are displayed in Figure 3.

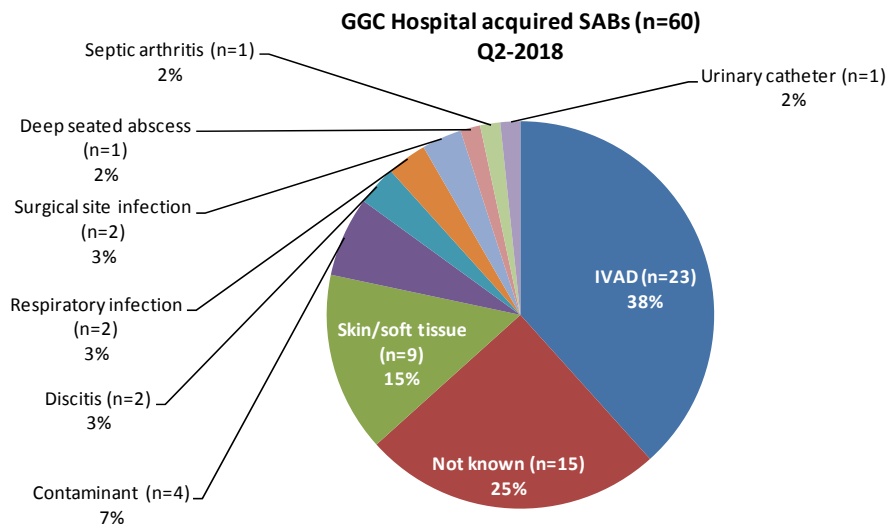


Figure 3. Source of hospital acquired cases

NB:

Not Known Source

On many occasions patients present with many potential sources of infection which means that determining a single source is extremely difficult and in many cases impossible, e.g. patient with a community acquired pneumonia with a pressure ulcer and a CVC in situ; there

are multiple ways bacteria could get into this patient's blood stream and often the IPCT are unable to determine a single source.

The national protocol requires that when the IPCT are unable to determine a single source, the cases are categorised as 'unknown', but these cases are reviewed (normally more intensely) than those when the source is more obvious.

Figure 4 below displays the number of hospital acquired IVAD device related *S.aureus* bacteraemia from January 2016. There continues to be some variation in IVAD related cases each month and the IPCT are working closely with the local clinical teams in order to see a sustained reduction in avoidable cases.

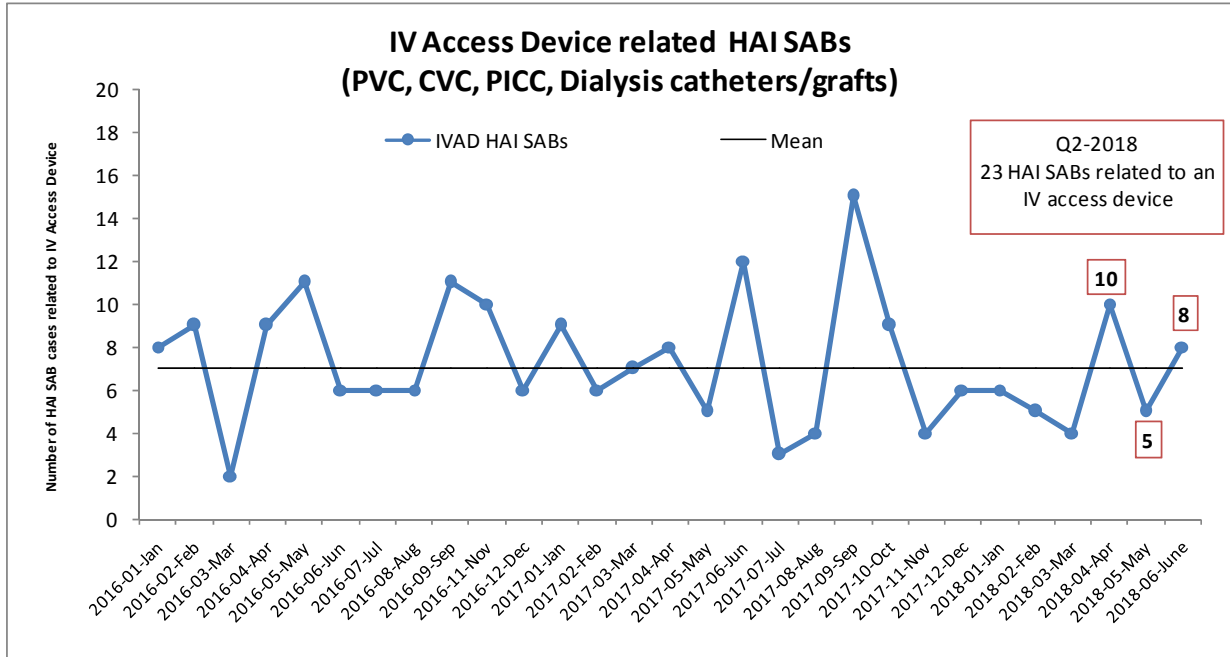


Figure 4. Number of SABs by month attributed to an IV access device

SAB Actions Update – SAB Summit June 2018

To ensure we are exploring and considering every option to reduce the rates of SABs, NHSGGC recently hosted a “SAB Summit”. Colleagues from two NHS Boards (NHS Ayrshire and Arran and NHS Lothian) with recent success in reducing their rates were invited to review the NHSGGC approach and to share their local experience, interventions and actions. Listed below are some additional actions currently being undertaken by the NHSGGC SAB Steering Group as a result of the meeting:

- A proposal that all device-related SABs are logged onto Datix and a formal 4/5 review with clinical staff from the ward in which the SAB was acquired is undertaken.
- The PVC care plan has been reviewed and updated and is currently being tested by clinical staff in QEUH. Ayrshire and Arran stated that the emphasis of their care plan was focused on the removal of the device and not the maintenance of it and we have updated the GGC care plan to reflect this. The Antimicrobial Management Team requested that the IVOST flow chart be included in the plan and this has been done. Once testing is complete it will be rolled out throughout GGC.
- Exploring the feasibility of Infection Control Doctors (ICDs) conducting SAB ward rounds. This would be a real time review of the patient with the clinical team to review antimicrobial therapy and to determine if there are any actions that might have prevented the SAB occurring.

NHSGGC MRSA Screening Project

Clinical Risk Assessment (CRA) compliance for GGC in Q4 (April-June 2018) was 84%. 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 table below shows the CRA compliance rate over the past four quarters.

Please Note HPS reporting quarters for this project are different to those used for CDI, SAB and SSI

	2017-18 Q2 (Jul-Sep)	2017-18 Q3 (Oct-Dec)	2017-18 Q4 (Jan-Mar)	2018-19 Q1 (Apr-Jun)
Greater Glasgow & Clyde	89%	89%	92%	84%
Scotland	90%	88%	83%	84%

*Table 3. Quarterly screening compliance
National Data Source: HPS MRSA Screening Team July 2018*

Clostridium difficile

Quarter 1: 2018 (January-March) Surveillance

80 validated cases were reported in the last published quarter (January-March 2018). 57 cases were healthcare associated and this provided a rate of 13.1 cases per 100,000 bed days. The rate for NHS Scotland was 13.7 (Figure 5).

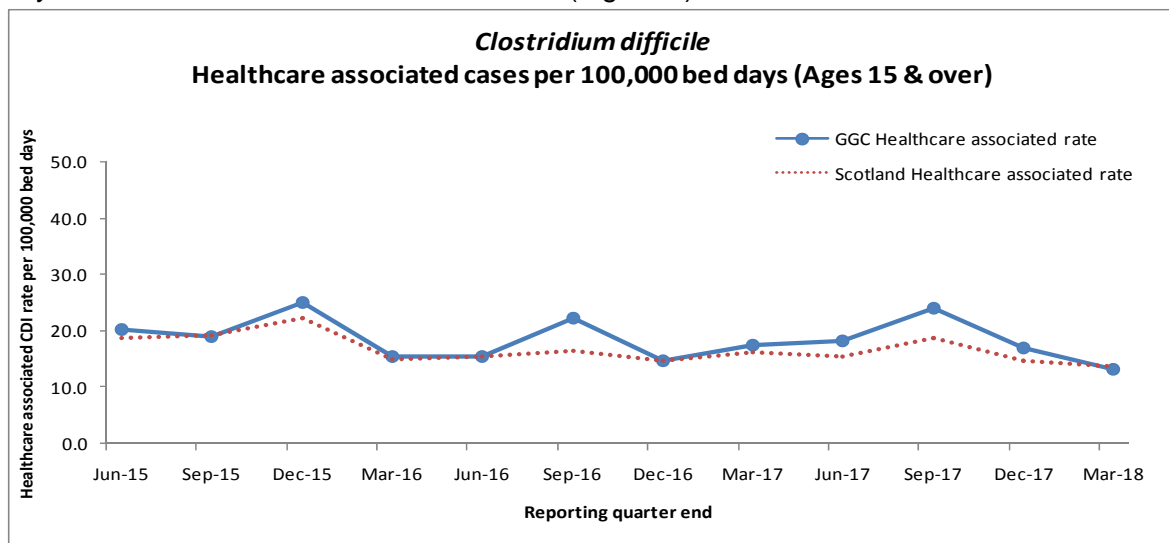


Figure 5. Healthcare associated CDI rates comparison by quarter for NHSGGC and Scotland.

23 community associated CDI cases were reported for the quarter with a rate of 8.0 per 100,000 population (Figure 6). The rate for NHS Scotland was 7.3.

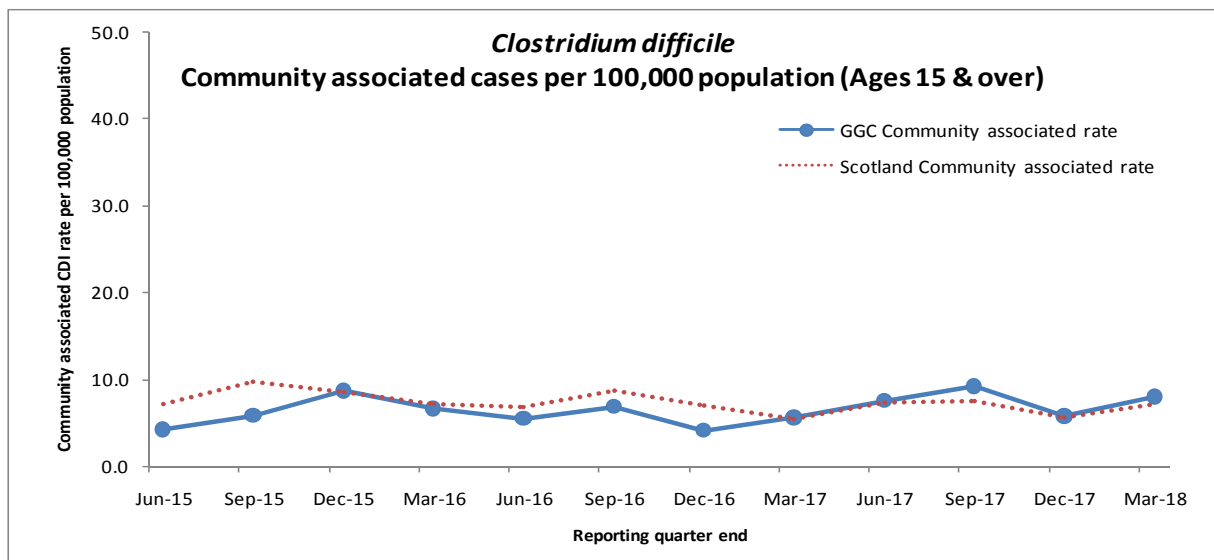


Figure 6. Community associated CDI comparison by quarter for NHSGGC and Scotland.

Quarter 2: 2018 (April-June) NHSGGC Surveillance

Local surveillance has shown a slight increase in CDI cases for Q2 2018 with 101 cases reported in total (Table 4). 79 cases met the case definition for healthcare associated (total of every category except community).

HPS reporting category	Origin of CDI	Number of patient cases (Unvalidated and subject to change)
Healthcare associated	Hospital acquired (HAI)	38
	Healthcare associated (HCAI)	29
	Indeterminate	12
Community associated	Community associated	22
Total		101

Table 4. Origin of CDI – local surveillance data for Q2 2018

OUTBREAKS / EXCEPTIONS

(Reported are those that are assessed as AMBER or RED using the HPS HIIAT tool)

February-June 2018

QEUH and RHC – Bacteria in Water System – HIIAT RED – GREEN as of 21st June 2018

NHS Greater Glasgow and Clyde (NHSGGC) have in recent months been investigating possible linked cases of bloodstream infections associated with ward 2A Royal Hospital for Children with the assistance of Health Protection Scotland and Health Facilities Scotland. Early on it was proposed that this could be linked to a contaminated water system. On 20th March 2018 the Scottish Government invoked the national support framework which includes commissioning HPS to lead an investigation into this incident. NHS Greater Glasgow and Clyde await the outcome of this review. The following actions have been put in place to mitigate the current risk, this list is not exhaustive:

- Point of use (POU) filters have been installed across all areas within QEUH and RHC where there are likely to be immunocompromised patients or in higher risk areas.
- All drains were decontaminated using chlorine dioxide.
- All blood cultures are reviewed by an Infection Control Doctor to assess if they could potentially be linked to water.
- The ward is reviewed daily by a member of the Infection Prevention and Control Team.

- Ward 2A was cleaned twice using hydrogen peroxide vapour which is a novel technology and was in addition to normal cleaning regimes.
- All aluminium spigots in wash hand basins were all replaced with plastic spigots.
- Patients and parents were updated continuously.

The NHSGGC water group continues to meet on a weekly basis and plans to implement a chlorine dioxide continuous dosing system are nearing completion. We continue to liaise closely with colleagues in HPS and HFS in addition to water experts.

There have been no new patient cases since the 11th June 2018. This has now been assessed as HIIAT GREEN

June 2018

QEUH – Spinal Unit – Carbapenemase-producing Enterobacteriaceae (CPE) HIIAT AMBER, GREEN as of 5 July 2018.

The IPCT were alerted to a patient who had tested positive for a CPE Klebsiella from a urine and blood culture in June 2018. CPE is an emerging resistant pathogen and patients who have had healthcare in hospitals abroad are routinely tested for this type of organism. In this instance the first patient identified had not had any healthcare abroad but subsequent screening of other patients who were deemed contacts of the first case identified a patient who had been in hospital abroad but had initially tested negative.

In all probability this patient was the index case. All contacts of all patients were tested and six cases were identified in total including the index case. All but the first case were colonised and did not have signs of infection. The first patient was treated with antibiotics so this incident scored AMBER using the HIIAT scoring tool on 20 June 2018. The incident was subsequently assessed as GREEN on 5 July 2018 however contact screening for patients who were discharged to other health board areas is ongoing. No cases have been identified since control measures were put in place.

June/July 2018

GRI – Orthopaedics – Increase in Surgical Site Infections (SSI) – HIIAT RED 27th July then GREEN on 3rd August.

Six patients developed surgical site infections following orthopaedic surgery in June 2018 in GRI. Four were hip replacements 2 were knee replacements. 3 were revision procedures which are associated with a higher risk of infection. Two developed a SAB as a consequence of their SSI. All cases were reviewed by the orthopaedic surgeons, who were content that no single factor could have caused this increase. Typing confirmed that the bacteria causing the infections were different. An Incident Management Team (IMT) meeting was held on the 27th of July and the incident was assessed as HIIAT red as all the patients required treatment for infection. Actions were agreed and are currently being put in place. No new cases have been reported since the IMT on 27th July.

Norovirus

There were 10 wards closed in 4 hospitals due to Norovirus activity in May and June 2018.

Month	Jul-17	Aug -17	Sep-17	Oct-17	Nov-17	Dec-17	Jan -18	Feb -18	Mar-18	Apr-18	May-18	Jun-18
Ward Closures	0	0	2	2	4*	6	0	1	5**	7	9	1
Bed Days Lost	0	0	10	49	34	210	0	7	55	228	334	33

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

* One ward closed in November and remained closed until the start of December 2017.

** One ward closed in March and remained closed until the start of April 2018.

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/norovirus-surveillance.aspx>

Healthcare Environment Inspectorate (HEI)

There has been no HEI / HAI inspection since the last published HAIRT.

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 1 (January-March 2018)

Category of Procedure	Operations	Infections	NHSGGC SSI rate (%)	NHSGGC 95% CI	National Dataset SSI rate (%)	National 95% CI
Caesarean section	1255	10	0.8	0.4-1.4	1.6	1.2-1.9
Hip arthroplasty	338	2	0.6	0.1-2.1	0.8	0.4-1.2

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

For the last published reporting quarter the SSI rates for caesarean section and hip arthroplasty procedures were **lower** than the national dataset SSI rate.

Quarter 2: 2018 (April-June) NHSGGC Surveillance

Surveillance of 30-day post operative is still ongoing at time of report compilation. The quarter and local data at time of publication April-June 2018 is displayed in Table 7 below

Large bowel and major vascular surgery became a mandatory requirement for SSI surveillance in April 2017, and as these are new categories of surveillance, comparative data is awaited. However NHSGGC rates below are those in the published literature.

It should be noted that results from the *voluntary surgical procedure surveillance are not included in the national reporting figures or published by HPS therefore **caution should be exercised** when reviewing local SSI rates as there are no available comparators.

Quarter 2 -18 (April - June) : Local SSI Surveillance Status				
	Category of Procedure	Operations	Infections	NHSGGC SSI Rate (%)
Mandatory (reported to HPS)	Caesarean section	1259	15	1.2
	Hip arthroplasty	383	11	2.9
	Large Bowel Surgery	187	5	2.7
	Major Vascular Surgery	167	2	1.2
Voluntary*	Knee arthroplasty	334	2	0.6
	Repair of neck of femur	378	3	0.8
Additional INS,QEUH only	Cranial Surgery	167	1	0.6
	Spinal Surgery	194	5	2.6

Table 7. Local SSI Surveillance. Procedures undertaken 01/04/18 - 30/06/18 (In-patient and 30 day readmission; C-section in-patient and PDS to day 10)

There has been an increase in the number of hip arthroplasty surgical site infections with 11 reported for the quarter to date. Four of these procedures were undertaken at the same

hospital in the same month. An Incident Management meeting will be held on 27 July 2018 to review these cases and formulate an improvement plan (please refer to page 8).

Surveillance for procedures undertaken in July and August 2018 is ongoing at time of report publication.

Statistical Process Control Charts

All Hospital Level Statistical Process Control Charts (SPCs) continue to remain within normal control limits.

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 *Clostridium difficile* infections, as well as hand hygiene and cleaning compliance. In addition there is a single report card which covers all non acute hospitals [which do not have individual cards] and a report card which covers *Clostridium 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 Health Protection Scotland (HPS) and Health Facilities Scotland (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

Clostridium 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 are 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 *Clostridium 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:

Clostridium difficile:

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

Staphylococcus aureus Bacteraemia

<http://www.hps.scot.nhs.uk/haiic/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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	26	21	29	31	25	31	31	29	35	34	24	31
Community Associated	6	11	7	8	8	13	12	3	9	10	5	6
Total	32	32	36	39	33	44	43	32	44	44	29	37

Clostridium difficile infection monthly case numbers

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	39	25	32	24	29	16	26	16	16	24	27	28
Community Associated	6	16	13	8	7	10	12	4	7	5	10	7
Total	45	41	45	32	36	26	38	20	23	29	37	35

Hand Hygiene Monitoring Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	97	97	97	97	98	98	97	97	97	97	97	97

Cleaning Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	95.2	95.2	95.3	95.2	95.4	95.8	95.5	95.5	95.5	95.0	95.5	95.4

Estates Monitoring Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	99.0	99.2	98.9	98.9	99.1	99.5	98.9	99.0	99.0	99.0	99.1	99.0

GLASGOW ROYAL INFIRMARY / PRINCESS ROYAL MATERNITY

REPORT CARD

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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	4	3	9	6	4	7	6	13	9	11	6	11
Community Associated	1	6	3	4	2	3	3	1	4	3	1	2
Total	5	9	12	10	6	10	9	14	13	14	7	13

***Clostridium difficile* infection monthly case numbers**

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	12	8	10	12	10	6	9	6	5	4	8	8
Community Associated	2	5	2	1	1	3	1	2	2	1	5	1
Total	14	13	12	13	11	9	10	8	7	5	13	9

Cleaning Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	95.9	95.6	95.6	95.8	95.9	96.0	95.8	95.7	95.7	95.2	95.5	95.5

Estates Monitoring Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	99.0	99.7	99.5	99.6	99.7	99.9	99.9	99.8	99.7	99.7	99.7	99.7

ROYAL ALEXANDRA HOSPITAL

REPORT CARD

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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	4	3	3	6	-	3	6	5	4	5	3	2
Community Associated	2	-	-	1	1	3	5	-	1	2	-	1
Total	6	3	3	7	1	6	11	5	5	7	3	3

***Clostridium difficile* infection monthly case numbers**

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	8	4	3	3	2	4	2	4	-	5	3	4
Community Associated	-	1	1	2	-	2	3	-	1	1	1	1
Total	8	5	4	5	2	6	5	4	1	5	4	5

Cleaning Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	96.2	96.2	95.4	95.9	95.8	95.5	95.9	95.4	95.4	95.7	96.3	94.7

Estates Monitoring Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	99.0	98.5	96.7	98.4	98.3	99.1	99.3	98.2	98.4	99.1	98.3	97.5

INVERCLYDE ROYAL HOSPITAL

REPORT CARD

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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	-	2	1	1	3	1	1	2	3	2	-	2
Community Associated	2	-	-	-	-	1	2	-	-	-	-	-
Total	2	2	1	1	3	2	3	2	3	2	0	2

***Clostridium difficile* infection monthly case numbers**

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	1	2	1	1	1	1	2	1	1	-	1	2
Community Associated	-	-	2	1	-	2	2	-	-	-	2	-
Total	1	2	3	2	1	3	4	1	1	0	3	2

Cleaning Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	95.2	96.3	94.7	95.6	95.8	95.0	94.1	95.5	94.3	94.5	95.8	95.1

Estates Monitoring Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	99.0	98.3	97.8	97.8	98.4	98.5	97.5	96.4	96.9	95.3	97.5	96.8

VALE OF LEVEN HOSPITAL

REPORT CARD

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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	-	-	-	-	-	1	-	-	1	1	-	1
Community Associated	-	-	-	-	-	-	-	-	-	-	1	-
Total	0	0	0	0	0	1	0	0	1	1	1	1

***Clostridium difficile* infection monthly case numbers**

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	-	-	-	-	-	-	-	-	1	2	-	2
Community Associated	-	-	-	1	-	-	1	-	-	-	-	1
Total	0	0	0	1	0	0	1	0	1	2	0	3

Cleaning Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	97.5	97.5	97.7	97.7	97.8	97.7	97.7	97.6	97.3	97.5	97.8	97.6

Estates Monitoring Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	99.0	99.7	99.8	99.5	99.7	99.7	99.6	99.7	99.6	99.7	99.7	99.6

GARTNAVEL GENERAL HOSPITAL**REPORT CARD**

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

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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	5	1	-	2	1	4	5	1	6	4	2	1
Community Associated	-	-	-	-	-	-	-	-	-	-	-	-
Total	5	1	0	2	1	4	5	1	6	4	2	1

***Clostridium difficile* infection monthly case numbers**

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	7	1	4	1	-	1	4	2	4	1	3	2
Community Associated	-	1	1	-	-	-	-	-	-	-	-	-
Total	7	2	5	1	0	1	4	2	4	1	3	2

Cleaning Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	96.2	96.4	97.1	96.2	96.3	96.9	96.2	97.6	96.8	96.0	96.3	96.7

Estates Monitoring Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	99.0	99.6	99.4	99.6	99.6	99.7	99.4	99.7	99.7	99.5	99.6	99.7

QUEEN ELIZABETH UNIVERSITY HOSPITAL

REPORT CARD

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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	11	10	11	13	14	13	9	4	10	9	10	12
Community Associated	-	4	4	2	4	6	2	2	4	4	2	3
Total	11	14	15	15	18	19	11	6	14	13	12	15

***Clostridium difficile* infection monthly case numbers**

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	7	5	9	6	5	-	5	3	3	7	7	4
Community Associated	1	2	3	2	2	-	3	2	2	3	-	3
Total	8	7	12	8	7	0	8	5	5	10	7	7

Cleaning Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	92.0	91.1	93.3	91.4	92.1	94.4	93.0	93.3	92.7	90.6	93.2	93.2

Estates Monitoring Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	99.0	99.6	99.7	99.5	99.7	99.9	99.8	99.1	99.9	99.9	99.8	99.9

ROYAL HOSPITAL FOR CHILDREN

REPORT CARD

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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	1	1	4		2	1	3	2	1	2	2	1
Community Associated	1	1	-	1	1	-	-	-	-	1	1	-
Total	2	2	4	1	3	1	3	2	1	3	3	1

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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	-	-	-	-	-	-	-	-	-	-	-	-
Community Associated	-	-	-	-	-	-	-	-	-	-	-	-
Total	0	0	0	0	0	0	0	0	0	0	0	0

Cleaning Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	93.9	95.2	93.3	94.1	92.1	94.4	95.0	95.2	94.6	94.9	94.8	94.6

Estates Monitoring Compliance (%)

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Board Total	99.0	99.5	99.5	99.1	99.7	99.9	99.8	99.4	99.5	99.4	99.5	99.5

NHS GREATER GLASGOW & CLYDE
NON-ACUTE HOSPITALS REPORT CARD

The hospitals covered in this report card include:

- Lightburn Hospital
- Dykebar Hospital
- Gartnavel Royal Hospital
- Leverndale Hospital
- MacKinnon House
- Mearnskirk House
- New Victoria Hospital
- Parkhead Hospital (closed 28 March 2018)
- Orchard View (Inverclyde Royal Hospital campus)
- Stobhill Hospital

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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	1	1	1	3	1	1	1	2	1	-	1	1
Community Associated	-	-	-	-	-	-	-	-	-	-	-	-
Total	1	1	1	3	1	1	1	2	1	0	1	1

***Clostridium difficile* infection monthly case numbers**

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	-	-	1	-	3	1	1	-	1	-	-	1
Community Associated	-	-	-	-	-	-	-	-	-	-	-	-
Total	0	0	1	0	3	1	1	0	1	0	0	1

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

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Healthcare Associated	4	5	4	1	8	3	3	-	1	5	5	5
Community Associated	3	7	4	1	4	3	2	-	2	-	2	1
Total	7	12	8	2	12	6	5	0	3	5	7	6

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>Clostridium 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)
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
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.

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**