

NHS Greater Glasgow & Clyde

NHS Board Meeting



Dr Jennifer L Armstrong
Medical Director

17 April 2018

Paper No: 18/17

Healthcare Associated Infection Reporting Template (HAIRT)

Recommendation: For noting

Purpose of Paper: Update on NHSGGC performance against HEAT and other HAI Targets and performance measures.

Key Issues to be considered:

Validated HPS / ISD data : Quarter 4 (October - December) 2017			
HEAT Targets	GGC	National	HEAT/LDP target
SAB rate per 100,000 AOB	34.5	32.3	24.0
CDI cases in age 15+ rate per 100,000 non acute OBD	29.0	25.1	32.0

Table 1. Progress against National HAI HEAT/LDP targets 01/10/2017 – 31/12/2017

- **116** validated *Staphylococcus aureus* Bacteraemia (SAB) cases were reported for October to December 2017 with a rate of **34.5** cases per 100,000 AOB. This is **above** the national rate. SABs remain a priority and we have re- established our SAB group with clinician input to further develop our action plan.
- **94** validated *Clostridium difficile* (CDI) cases were reported for October to December 2017 (quarter 4) with a rate of **29.0** cases per 100,000 non-acute bed days for ages 15+. This is above the national rate but **below** HEAT/LDP requirements.

Any Patient Safety /Patient Experience Issues:

Local surveillance for Q1 2018 shows that NHSGGC has reported a slightly higher number of SABs with 119 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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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.

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

Staphylococcus aureus Bacteraemia Surveillance and Actions

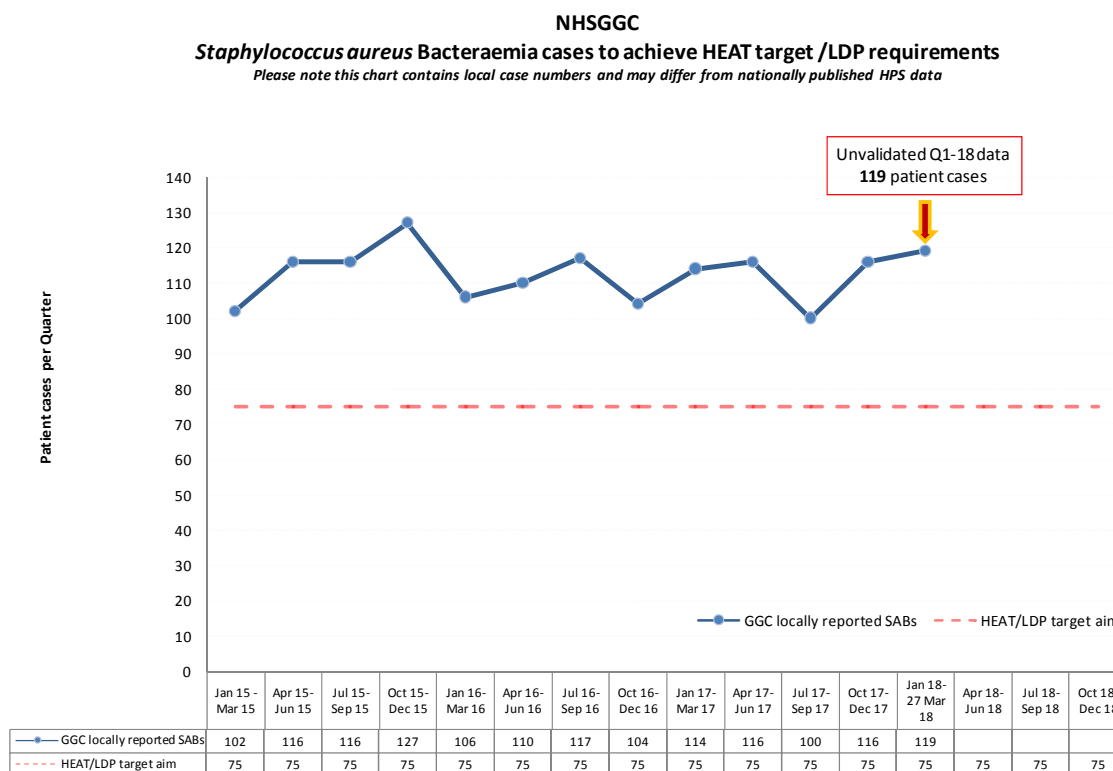


Figure 1: SAB patient cases by quarter

Summary

In Q4 of 2017 (October - December), there were 116 validated cases reported by HPS for NHSGGC.

Local surveillance indicates a rise in SAB cases in Quarter 1, with 119 patient cases reported.

Over the last three years, cases have remained relatively stable with a mean of 112 cases per quarter. MSSA bacteraemia rates in both NHSGGC and Scotland as a whole (to be published by HPS April 2018), have indicated that SAB rates continue to plateau.

The Board Medical Director has initiated a meeting with senior clinical staff and IPCT to discuss any new initiatives from the published literature which we would be able to adopt to reduce the number of SABs. The output from this will be included in the SAB action plan which is reviewed by the Acute Infection Control Committee. This meeting will take place in April 2018.

Quarter 4: 2017 (October - December) Surveillance

NHSGGC reported **34.5** SAB cases per 100,000 AOBs (**116** validated cases).

As reported previous reports, Health Protection Scotland published a change to the presentation format of the data in the Q2-17 report across three metrics (SAB, CDI and *E.coli* Bacteraemia). This separated cases into 'Healthcare Associated' and 'Community Associated' and used different denominators to previously published data contained within the HAIRT. NHSGGC and other NHS Boards will continue to report both SAB and CDI in the established format required by the SGHD until the national reports are harmonised along with HAI Standards. This is anticipated to be mid 2018.

Table 2 below includes SAB rates per 100,000 AOBs across different health boards in Scotland however given the diversity in the size of the other health boards this data should be viewed with caution.

Health Board	Q4-17: SAB rate (per 100,000 AOBs)
Ayrshire & Arran	20.2
Forth Valley	34.9
Grampian	33.8
Greater Glasgow & Clyde	34.5
Lanarkshire	36.4
Lothian	30.9
Tayside	52.3
Scotland	32.3

Table 2: nationally published SAB rates (01/10/17 – 31/12/17)

From our validated data less than half (n=51) patients developed a SAB after admission to an NHSGGC hospital; 31% patients were confirmed to have a healthcare associated infection (HCAI) and the remaining 25% were community acquired cases (Figure 2.)

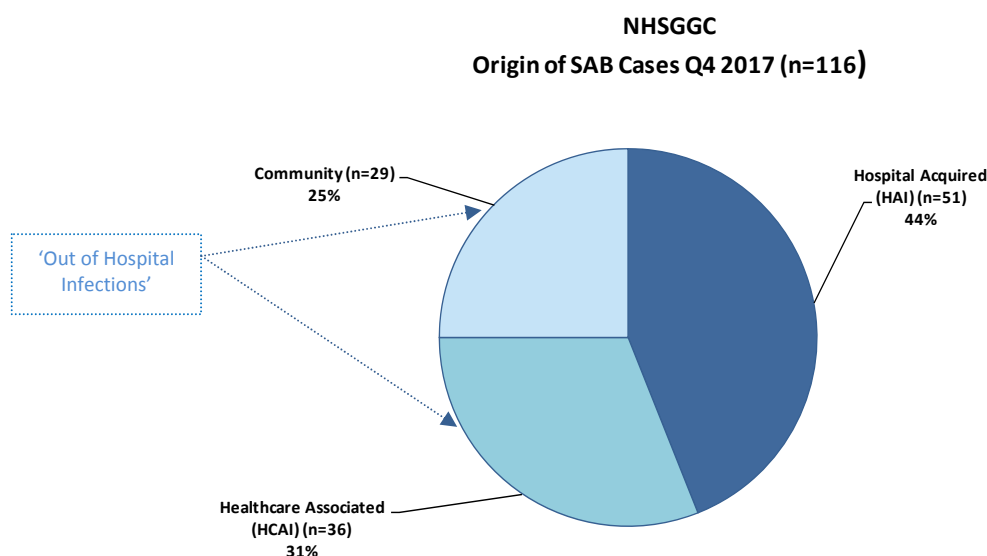


Figure 2 Origin of local SAB cases between 01/10/17 – 31/12/17

Quarter 1: 2018 (January – March) NHSGGC Surveillance

Figure 1 highlighted the locally reported figures known at the time of reporting (119 cases). Validated data will be published by HPS in July 2018 and there may be a variation to the final total of reported cases due to the change in HPS reporting processes.

Review of all cases for this quarter to date shows a drop in the proportion of hospital acquired cases, however a slight increase in the proportion of healthcare associated cases

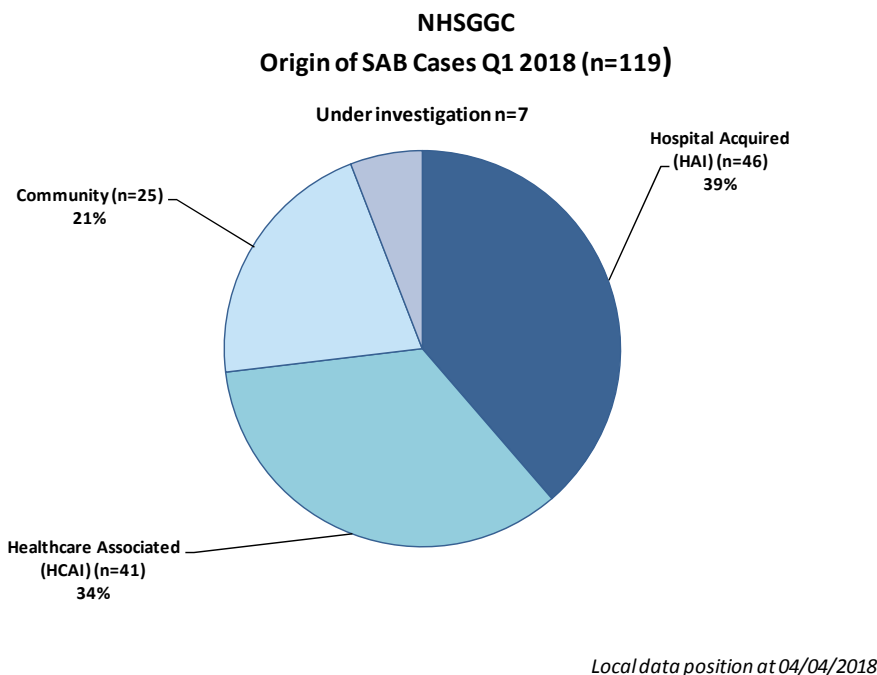


Figure 3 Origin of SAB between 01/01/18 – 31/03/18

NHSGGC MRSA Screening Project

CRA compliance for GGC in Q4 (January – March 2018) increased to 92%. Ward compliance rates are returned to the Sector / Directorate Senior Management Teams to identify areas that require support / education in relation to improved screening.

Table 3 shows the CRA compliance rate over the past four quarters.

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

	2017-18 Q1 (Apr-Jun)	2017-18 Q2 (Jul-Sep)	2017-18 Q3 (Oct-Dec)	2017-18 Q4 (Jan-Mar)
Greater Glasgow & Clyde	92%	89%	89%	92%
Scotland	85%	90%	88%	n/r

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

Clostridium difficile

Surveillance and Actions

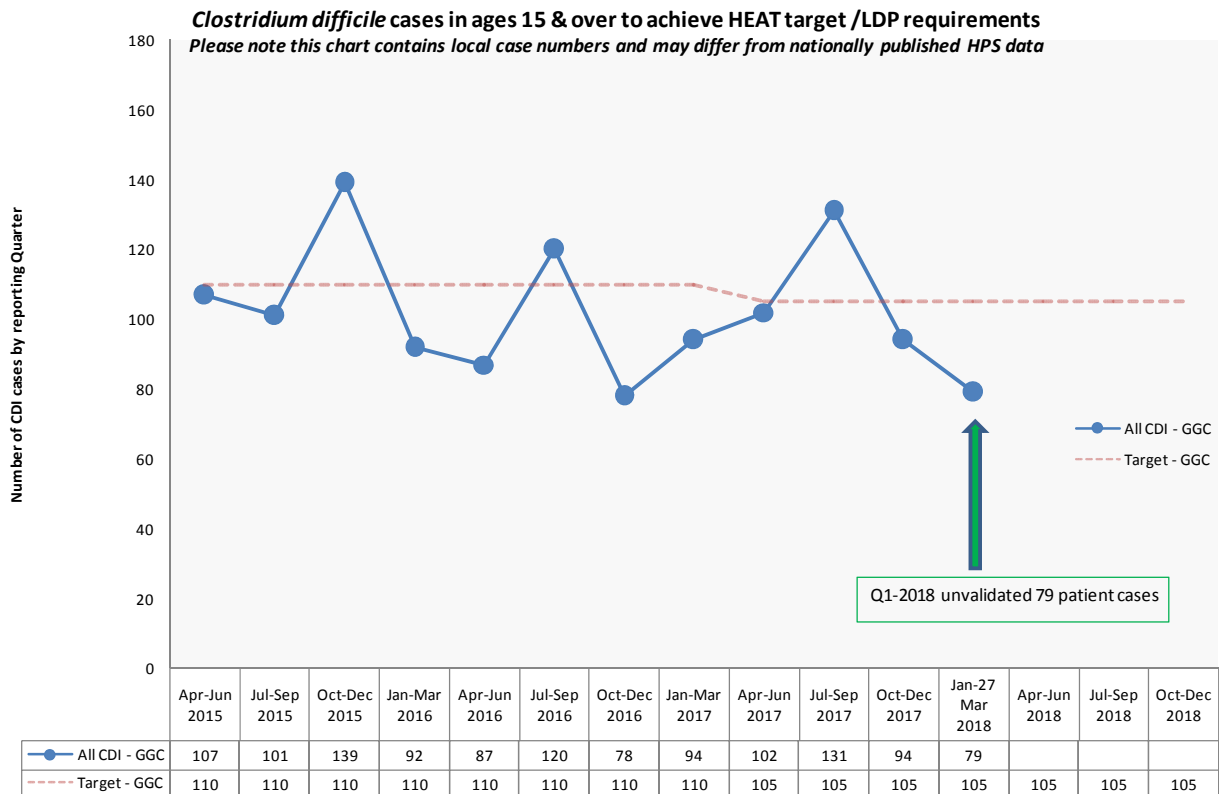


Figure 4: CDI patient cases by quarter

Summary

Figure 4 above shows quarterly variation of all locally reported CDI cases from April 2015 to March 2018.

Quarter 4: 2017 (October – December) Surveillance

There was a **28% reduction** in CDI cases in the last quarter of 2017.

94 validated *Clostridium difficile* (CDI) cases were reported with a rate of **29.0** cases per 100,000 non-acute bed days for ages 15+. This is below HEAT/LDP requirements, but slightly above the national rate.

Quarter 1: 2018 (January - March) Local Surveillance Status

Local surveillance has identified a further reduction in case numbers at the start of 2018 and at time of report compilation we are reporting **79** patient cases (Table 4).

CDI Cases (Q1-18 January - March) Origin	Number of Cases
Hospital acquired (HAI)	36
Healthcare associated (HCAI)	19
Community associated	22
Indeterminate	2
Total	79

Table 4. Origin of CDI (note: some GP specimens may be healthcare associated or indeterminate)

OUTBREAKS / EXCEPTIONS

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

January 2018

PICU RHC – *Pseudomonas aeruginosa* – HIIAT AMBER

Pseudomonas aeruginosa: two cases linked in time and place with another two cases on the unit (long-term cases at opposite ends of ward). All isolates sent for typing. Typing results received in February and confirmed that they were different, therefore no evidence of cross transmission. Water testing carried out was negative. Environmental sampling also carried out did not grow *Pseudomonas*. IPC Audit completed - 91% GOLD. Review cleaning of sink drains. HIIAT assessed as AMBER on 19/01/18. Repeat HIIAT after action put in place was GREEN on 24/01/18.

February/March 2018

QEUH and RHC – Bacteria in Water System – HIIAT RED

Following routine investigation of a case of a rare bacteria that was found in a blood culture in January 2018, several Problem Assessment Group (PAGs) meetings were held in February to try and identify the source. Initially, it was thought to be in a single area within RHC (previously positive from outlets in this area in 2016) however, this area's water supply tested negative for the bacteria and the investigation was expanded to include sampling the water outlets in ward 2a in the Royal Hospital for Children. These outlets were subsequently found to be positive for this organism and other environmental bacteria. An Incident Management Team (IMT) meeting was convened on the 2/03/18; part of this meeting required the incident to be assessed using the national Healthcare Infection Incident Assessment Tool (HIIAT). On this occasion and throughout March the incident scored RED. Once the water had been identified as a possible source the immediate actions included:

- Heath Protection Scotland (HPS) water checklist carried out (this checklist identified other potential sources of contamination with water)
- Rooms identified as having contaminated outlets (hand hygiene sinks) were removed from use.
- All showers out of use and patient hygiene wipes were procured for the unit as an alternative. Staff and parents were given advice at this time.
- Patients requiring line insertion were bed bathed in theatre.
- All staff and patients were advised to use alcohol based hand rub after washing hands
- The unit was advised to use bottled water for tooth brushing and drinking (sterile water was advised for Bone Marrow Transplant (BMT) patients, this is standard practice but should be noted).
- Enhanced ongoing surveillance by ICT to identify other cases
- Tanks were sampled and found to be negative.
- Facilities dosed the water supply with silver hydrogen peroxide (biocide) and provided the ward with portable hand hygiene stations (water supplied externally and not from mains supply)
- Enhanced support from IPCT put in place to support staff with above actions.

IMT met throughout March and additional actions included:

- Microbiological testing was extended to areas within RHC, QEUH, Maternity unit and the Institute for Neurological Sciences.
- Flow straighteners on the taps tested in 2a were positive for environmental bacteria and these were replaced.
- Disposable showerheads were purchased and installed.

- Routine water sampling increased from 6 monthly to monthly.
- A program of tap exchange, thermal disinfection and replacement of flow straighteners was ongoing in ward 2a. A further chemical disinfection was carried out when this was complete.
- Tap filters were placed on all sinks in high risk units throughout RHC, QEUH and the neonatal intensive care unit (in maternity building). Quality assurance checks regarding the fitting of the filters was carried out by facilities.
- Public Health and Health Protection Scotland are providing epidemiological support.
- Antibiotic prophylaxis was given to immunocompromised patients in RHC.

NB The above lists of actions is not exhaustive.

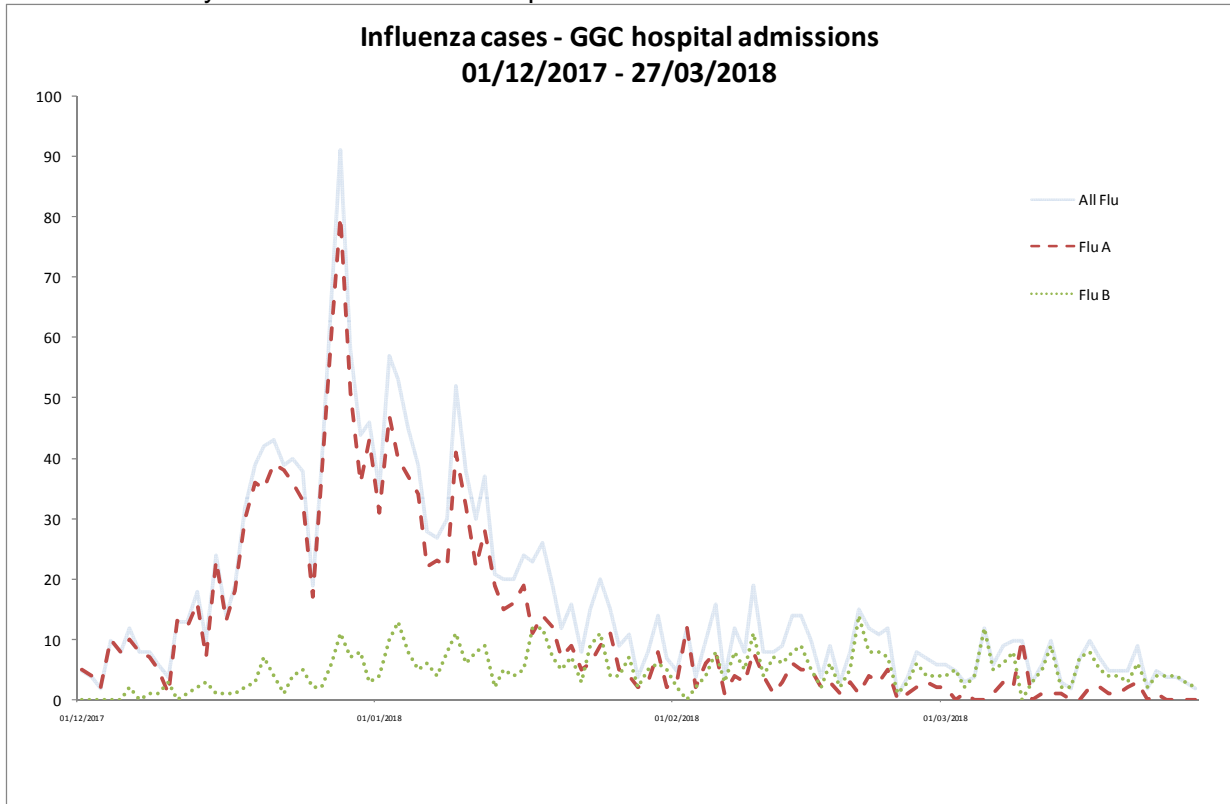
Support from Health Protection Scotland (HPS) and Health Facilities Scotland (HFS) was sought at the outset of the incident and both attended IMTs. The National Support Framework* was implemented by the CNO on the 22/03/18. A report will now be prepared by HPS for submission to the Scottish Parliament in due course. A total of five children in the Royal Hospital for children have been treated for bacterial infections in their bloodstream which may be linked to water borne bacteria. (This number includes a further case which was identified on 6th April 2018, this case had visited the hospital for day treatments in early March.) There have been no further cases since the control measures were implemented. Samples of the bacteria from the patients and the water have been sent to the national reference laboratory and results are awaited. All of the children have responded well to treatment. Water testing revealed evidence of bacterial contamination in other wards in the RHC and QEUH and appropriate infection control measures applied there also. We continue to work with experts both internally and externally to implement long term preventative measures.

*The National Support Framework is a structure that sets out the roles and responsibilities of organisations in the event that a healthcare infection outbreak/incident, data exceedance** or Healthcare Environment Inspectorate (HEI) report deems additional support to a NHS Board is required. The National Support Framework may be invoked by the Scottish Government HAI /AMR Policy Unit or by a NHS Board to optimise patient safety during or following: any healthcare incident/outbreak(s)/data exceedance or HEI inspectorate visit/report. On this occasion it was invoked by the CNO Scotland.

**Data exceedance is “A greater than expected rate of infection compared with the usual background rate for that healthcare location”. National IPC Manual

Influenza : UPDATE

Influenza activity has now decreased as per the chart below.



Norovirus

There was no Norovirus activity in January but there was Norovirus activity during February in 1 hospital where 1 ward was closed.

Month	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug -17	Sep-17	Oct-17	Nov-17	Dec-17	Jan -18	Feb -18
Ward Closures	4	5	2	2*	0	0	2	2	4**	6	0	1
Bed Days Lost	160	121	53	39	0	0	10	49	34	210	0	7

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

*Both wards closed in May and remained closed in to the start of June

**One ward closed in November and remained closed in to the start of December

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

Healthcare Environment Inspectorate (HEI)

There has been no unannounced 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 4 (October - December 2017)

Category of Procedure	Operations	Infections	NHSGGC SSI rate (%)	NHSGGC 95% CI	National Dataset SSI rate (%)	National 95% CI
Caesarean section	1311	16	1.2	(0.7 ,1.9)	1.5	(1.2 ,1.9)
Hip arthroplasty	397	6	1.5	(0.6 ,3.2)	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), NHS GG&C

The SSI rate for hip arthroplasty procedures was higher than the national dataset SSI rate, however HPS have confirmed that NHSGGC were not above the 95% confidence interval upper limit this quarter in the funnel plot analysis for hip procedures. (Figure 5). We continue to work with orthopaedic surgery colleagues on a range of quality improvement measures.

It should also be noted that no NHS boards were above normal variation this quarter for caesarean section and hip arthroplasty when analysing trends over the past three years.

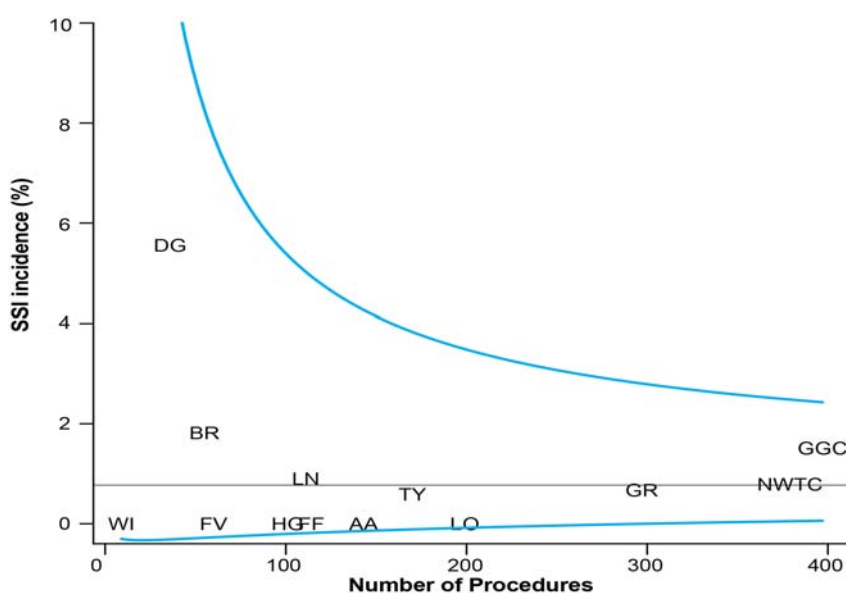


Figure 5: Funnel plot of hip arthroplasty SSI incidence (per 100 procedures) in inpatients and on readmission to day 30 for all NHS boards in Scotland in Q4 2017

Q1 (January – March 2018) Local SSI Surveillance Status

Surveillance to 30 day post operatively is still ongoing at time of report compilation for the quarter and local data, at time of publication, for January – March 2018 is displayed in **Table 7** below.

Surveillance of the following procedures commenced in July 2016 (in-patient and 30-day re-admission)

- Large Bowel surgery (GGC wide)
- Major Vascular surgery (QEUH)
- Craniotomy, Craniectomy and Cranioplasty (Institute of Neurological Sciences, QEUH campus)
- Spinal surgery (Institute of Neurological Sciences)

It should be noted that the above surgical procedures will not be included in the national reporting figures or published by Health Protection Scotland therefore **caution should be exercised** when interpreting local SSI rates in future publications to enable local baseline data to be established.

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 are below those in the published literature.

Quarter 1-18 (January – 27th March) : Local SSI Surveillance Status (correct at time of reporting)				
	Category of Procedure	Operations	Infections	NHSGGC SSI Rate (%)
Mandatory (reported to HPS)	Caesarean section	1179	8	0.7%
	Hip arthroplasty	314	2	0.6%
	Large Bowel Surgery	203	3	1.5%
	Major Vascular Surgery	180	3	1.7%
Voluntary	Knee arthroplasty	281	3	1.1%
	Repair of neck of femur	413	5	1.2%
Additional INS, QEUH only	Cranial Surgery	165	3	1.8%
	Spinal Surgery	160	1	0.6%

Table 7. Local SSI Surveillance 01/01/18 - 27/03/18(In-patient and 30 day readmission; C-section in-patient and PDS to day 10)

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 community hospitals in the Board, on the number of cases of *Staphylococcus aureus* blood stream infections (also broken down into MSSA and MRSA) and *Clostridium difficile* infections, as well as hand hygiene and cleaning compliance. In addition there is a single report card which covers all community hospitals [which do not have individual cards] and a report which covers infections identified as having been contracted from outwith hospital. 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 HAI 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. SAB cases are further broken down into Meticillin Sensitive *Staphylococcus aureus* (MSSA) and Meticillin Resistant *Staphylococcus aureus* (MRSA). More information on these organisms can be found on the HPS website:

Clostridium difficile: <http://www.hps.scot.nhs.uk/haic/sshap/clostridiumdifficile.aspx?subjectid=79>
Staphylococcus aureus Bacteraemia: <http://www.hps.scot.nhs.uk/haic/sshap/mrsabacteraemiasurveillance.aspx?subjectid=D>

For each hospital the total number of cases for each month are those which have been reported as positive from a laboratory report on samples taken more than 48 hours after admission. For the purposes of these reports positive samples taken from patients within 48 hours of admission will be considered to be confirmation that the infection was contracted prior to hospital admission and will be shown in the “out of hospital” report card.

Targets

There are national targets associated with reductions in *C. diff* and SABs. More information on these can be found on the Scotland Performs website:

<http://www.scotland.gov.uk/About/Performance/scotPerforms/partnerstories/NHSScotlandperformance>

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/haic/>

Understanding the Report Cards – ‘Out of Hospital Infections’

CDI and SAB cases (including MRSA) are all associated with being treated in hospitals however this is not the only place a patient may contract an infection. This total will also include infection from community sources such as GP surgeries and care homes. The final Report Card report in this section covers ‘Out of Hospital Infections’ and reports on SAB and CDI cases reported to a Health Board which are not attributable to a hospital.

NHS GREATER GLASGOW & CLYDE

REPORT CARD

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
MRSA	3	1	2	1	0	1	1	3	1	3	1	1
MSSA	45	42	27	43	32	31	35	36	32	41	42	31
Total SABS	48	43	29	44	32	32	36	39	33	44	43	32

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Ages 15-64	18	12	13	10	18	16	15	15	13	9	9	3
Ages 65 plus	11	16	28	24	27	25	30	17	23	18	29	16
Total Ages 15 plus	29	28	41	34	45	41	45	32	36	27	38	19

Hand Hygiene Monitoring Compliance (%)

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

Cleaning Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	95.7	95.5	95.6	95.4	95.2	95.2	95.3	95.2	95.4	95.8	95.5	95.5

Estates Monitoring Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	99.0	99.0	99.1	99.3	99.0	99.2	98.9	98.9	99.1	99.5	98.9	99.0

GLASGOW ROYAL INFIRMARY / PRINCESS ROYAL MATERNITY

REPORT CARD

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
MRSA	0	1	1	0	0	0	0	0	0	0	0	0
MSSA	9	2	8	4	1	2	9	2	3	3	2	7
Total SABS	9	3	9	4	1	2	9	2	3	3	2	7

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Ages 15-64	0	2	5	1	2	1	0	1	2	0	0	2
Ages 65 plus	0	5	2	5	3	5	3	4	3	5	4	2
Ages 15 plus	0	7	7	6	5	6	3	5	5	5	4	4

Cleaning Compliance (%)

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

Estates Monitoring Compliance (%)

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

ROYAL ALEXANDRA HOSPITAL

REPORT CARD

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
MRSA	1	0	1	0	0	0	0	0	0	0	0	0
MSSA	2	0	0	2	2	1	2	4	0	2	1	1
Total SABS	3	0	1	2	2	1	2	4	0	2	1	1

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Ages 15-64	1	0	0	2	0	0	0	0	0	0	0	0
Ages 65 plus	1	1	0	1	4	3	1	0	0	4	2	4
Ages 15 plus	2	1	0	3	4	3	1	0	0	4	2	4

Cleaning Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	95.3	96.2	96.2	95.1	96.2	96.2	95.4	95.9	95.8	95.5	95.9	95.4

Estates Monitoring Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	97.4	98.2	99.1	98.5	99.0	98.5	96.7	98.4	98.3	99.1	99.3	98.2

INVERCLYDE ROYAL HOSPITAL

REPORT CARD

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	1	0	0	2	0	2	1	1	2	1	1	1
Total SABS	1	0	0	2	0	2	1	1	2	1	1	1

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	0	0	2	1	0	2	0	0	0	1	0	0
Ages 15 plus	0	0	2	1	0	2	0	0	0	1	0	0

Cleaning Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	95.4	95.0	94.5	95.8	95.2	96.3	94.7	95.6	95.8	95.0	94.1	95.5

Estates Monitoring Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	97.4	96.7	95.8	97.5	99.0	98.3	97.8	97.8	98.4	98.5	97.5	96.4

VALE OF LEVEN HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	1	0	0	0	0	0	0	0	1	0	0
Total SABS	0	1	0	0	0	0	0	0	0	1	0	0

Clostridium difficile infection monthly case numbers

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	0	0	0	0	0	0	0	0	0	0	0	0
Ages 15 plus	0	0	0	0	0	0	0	0	0	0	0	0

Cleaning Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	97.2	97.6	97.6	97.3	97.5	97.5	97.7	97.7	97.8	97.7	97.7	97.6

Estates Monitoring Compliance (%)

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

GARTNAVEL GENERAL HOSPITAL

REPORT CARD

Figures combined for

Gartnavel General Hospital, Beatson WoSCC and Homeopathic Hospital

Staphylococcus aureus bacteraemia monthly case numbers

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	0	0	3	2	0	0	0	1	3	1	1
Total SABS	0	0	0	3	2	0	0	0	1	3	1	1

Clostridium difficile infection monthly case numbers

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Ages 15-64	0	2	0	0	3	0	1	1	0	1	2	1
Ages 65 plus	1	1	2	2	2	0	1	0	0	0	1	1
Ages 15 plus	1	3	2	2	5	0	2	1	0	1	3	2

Cleaning Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	97.1	96.5	96.9	96.9	96.2	96.4	97.1	96.2	96.3	96.9	96.2	97.6

Estates Monitoring Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	99.5	99.2	99.4	99.5	99.0	99.6	99.4	99.6	99.6	99.7	99.4	99.7

QUEEN ELIZABETH UNIVERSITY HOSPITAL

REPORT CARD

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
MRSA	0	0	0	0	0	1	1	1	1	0	0	0
MSSA	6	6	2	6	6	3	10	4	6	8	6	3
Total SABS	6	6	2	6	6	4	11	5	7	8	6	3

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Ages 15-64	4	0	1	0	1	2	1	1	1	0	1	0
Ages 65 plus	2	2	6	1	2	1	3	3	2	0	4	3
Ages 15 plus	6	2	7	1	3	3	4	4	3	0	5	3

Cleaning Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	94.7	93.2	93.8	91.8	92.0	91.1	93.3	91.4	92.1	94.4	93.0	93.3

Estates Monitoring Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	99.9	99.7	99.2	99.9	99.0	99.6	99.7	99.5	99.7	99.9	99.8	99.1

ROYAL HOSPITAL FOR CHILDREN

REPORT CARD

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
MRSA	0	0	0	0	0	0	0	0	0	1	0	0
MSSA	1	3	0	4	1	1	4	0	2	0	3	2
Total SABS	1	3	0	4	1	1	4	0	2	1	3	2

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Ages 15 plus	0	0	0	0	0	0	0	0	0	0	0	0

Cleaning Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	94.4	94.9	93.6	94.3	93.9	95.2	93.3	94.1	92.1	94.4	95.0	95.2

Estates Monitoring Compliance (%)

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Board Total	99.5	99.5	99.7	98.8	99.0	99.5	99.5	99.1	99.7	99.9	99.8	99.4

**NHS GREATER GLASGOW & CLYDE
COMMUNITY HOSPITALS REPORT CARD**

The community 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
- Orchard View (Inverclyde Royal Hospital campus)
- Stobhill Hospital

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
MRSA	0	0	0	0	0	0	0	0	0	0	0	1
MSSA	0	2	0	1	1	1	1	3	1	1	0	1
Total SABS	0	2	0	1	1	1	1	3	1	1	0	2

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Ages 15-64	0	0	0	0	0	0	0	0	0	0	1	0
Ages 65 plus	1	0	1	1	0	0	1	0	2	1	0	0
Ages 15 plus	1	0	1	1	0	0	1	0	2	1	1	0

NHS GREATER GLASGOW & CLYDE

OUT OF HOSPITAL REPORT CARD

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
MRSA	2	0	0	1	0	0	0	2	0	2	1	0
MSSA	26	28	17	21	19	21	8	22	17	22	28	15
Total SABS	28	28	17	22	19	21	8	24	17	24	29	15

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

	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
Ages 15-64	13	8	7	7	12	13	13	12	10	8	5	0
Ages 65 plus	6	7	15	13	16	14	21	10	16	7	18	6
Ages 15 plus (Total)	19	15	22	20	28	27	34	22	26	15	23	6

Data for *Staphylococcus aureus* bacteraemia (SAB) cases:

55% of all *Staphylococcus aureus* Bacteraemia cases reported in NHSGGC between March 2017 and February 2018 are attributed as *Out of Hospital* infections.

Data for *Clostridium difficile* Infection (CDI) cases in ages 15 plus:

62% of all CDI cases reported in NHSGGC between March 2017 and February 2018 are attributed as *Out of Hospital* infections.

GLOSSARY

AMT	Antimicrobial Management Team
AOBD	Acute Occupied Bed Days
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
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
ICN / T / D / M	Infection 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.
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>
OPAT	Outpatient Parenteral Antibiotic Therapy
PDS	Post Discharge Surveillance (Caesarean Section procedures only)
PFPI	Public Focus Patient Involvement
PHPU	Public Health Protection Unit
PPI	Proton Pump Inhibitors . A group of medications used to decrease gastric acid production.
PVC	Peripheral Vascular Catheter
QIF	Quality Improvement Facilitator
RRT	Renal Replacement Therapy
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
TOBD	Total Occupied Bed Days
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