

NHS Greater Glasgow & Clyde

NHS Board Meeting



Medical Director

27 June 2017

Paper No: 17/28

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) 2016			
HEAT Targets	GGC	National	HEAT target
SAB rate per 100,000 AOB	30.1 (104 cases)	32.9	24.0
CDI rate per 100,000 AOB	23.8 (78 cases)	26.6	32.0

Table 1. Progress against National HAI HEAT targets 01/10/2016 – 31/12/2016

- **104** *Staphylococcus aureus* Bacteraemia (SAB) cases were reported for October to December 2016 with a rate of **30.1** cases per 100,000 AOB. NHSGGC is below the national rate of 32.9 cases per 100,000 AOB. Of our reported cases, one third (n=34) were of community onset and are less amenable to improvement measures within our acute hospitals. For the last completed quarter (January – March) we have 114 unvalidated patient cases which is a slight increase upon the previous quarter.
- **78** *Clostridium difficile* (CDI) cases were reported for October to December 2016 with a rate of **23.8** cases per 100,000 AOB. 42% (n=33) of these were not hospital acquired infections (HAI). We reported 93 patient cases between January to March and we anticipate this will remain under HEAT target requirements when validated data is published in early July.
- The results from the national HAI and Antimicrobial Prescribing Point Prevalence Survey 2016 have indicated an overall HAI rate of **3.1%** for NHSGGC acute hospitals which is a **reduction** from the 2011 rates and **below** the 2016 national rate of 4.6%. **All** hospitals in NHSGGC were below the national prevalence rate.
- The published SSI rate for hip arthroplasty for October to December was 0.4%. This is below the national SSI rate of 0.7%. These rates are low and are well within the national 95% confidence intervals (0.4 - 1.1%). The local SSI rate was 0.8% for January - March 2017 which is an increase from the previous quarter.
- The published SSI rate for Caesarean sections for October to December 2016 was 1.1%. This is below the national SSI rate of 1.2%. These rates are low and are well within the national 95% confidence intervals (0.9 - 1.5%). The local SSI rate was 1.5% for January - March 2017 which is also an increase from the previous quarter.

- **Any Patient Safety /Patient Experience Issues:**

Local surveillance shows that NHSGGC are still above the National SAB HEAT target of 75 patient cases for Q1 2017. NHSGGC are continuing to monitor this to ensure remedial actions are implemented to improve performance and reduce avoidable SAB cases and meet HEAT target requirements.

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: 27/06/2017

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

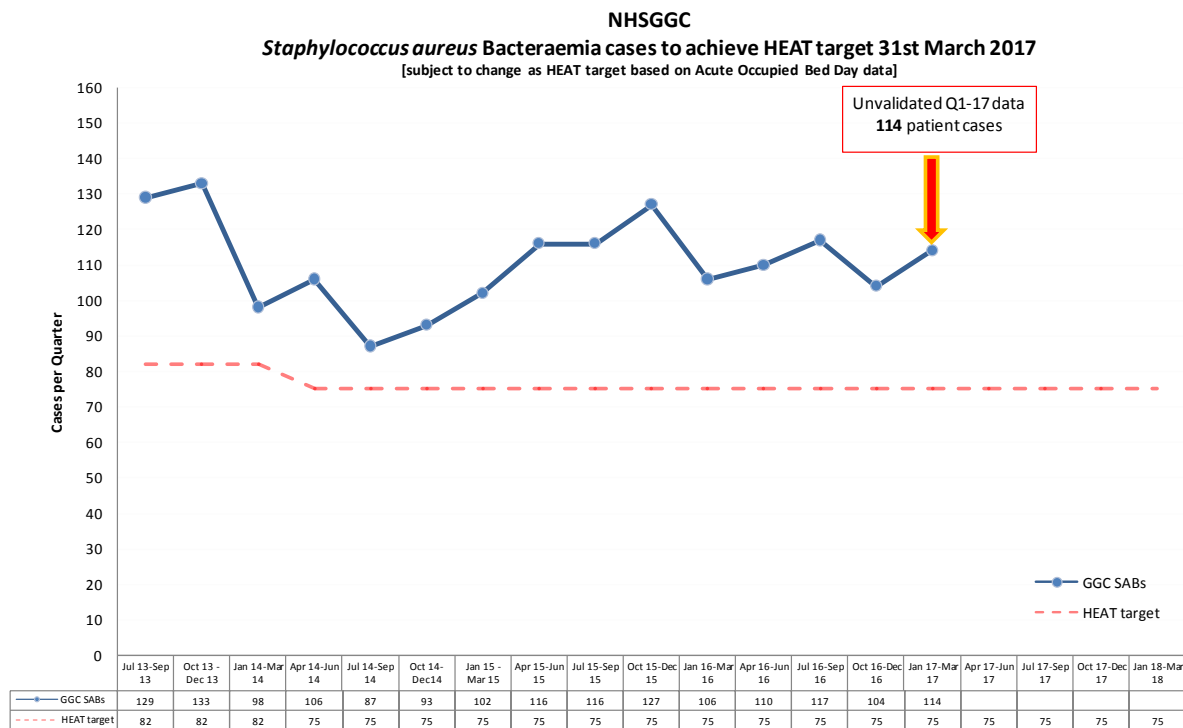


Figure 1: SAB patient cases by quarter

Figure 1 shows a variation in the number of reported *Staphylococcus aureus* bacteraemia (SAB) cases from July 2013 onwards to a peak in Quarter 4 of 2013 and again in Quarter 4 in 2015. The figure above highlights an upward trend in the total number of SABs from January to September 2016 however the number of cases **decreased** in Quarter 4 (Oct-Dec) of 2016. Work is continuing in 2017 across all acute sectors through a series of education and audit initiatives. For the first quarter of 2017 we have reported 114 cases locally, which is an increase of 8.8%.

One of the most common invasive devices used within healthcare is a **peripheral venous catheter** (PVC) and in 2016 almost **20%** of all **hospital acquired SABs** were attributed to this device.

A revised PVC care plan has been piloted at Glasgow Royal Infirmary and is now available for use throughout NHSGGC. Review of the existing NHSGGC Vascular Access Policy, including the incorporation of Standard Operating Procedures (SOP) for PVCs and CVCs is currently underway and will incorporate the revised care plan.

MRSA bacteraemia rates have remained low in recent years following the introduction of a screening and eradication programme. This approach did not identify carriage of Meticillin sensitive *Staphylococcus aureus* (MSSA) which are the cause of the majority of NHSGGC

SABs. MSSA bacteraemia rates have continued with little change and the most recent data published by HPS in April 2017 has indicated that SAB rates in Scotland continue to plateau.

At least one third of the general population carry MSSA in their nose; the percentage is even higher in hospitalised patients. The Lead Infection Control Doctor (ICD) is currently leading on a project to screen high-risk Renal Replacement Therapy (RRT) patients for *S. aureus* nasal carriage prior to line insertion. If positive, patients will undergo decolonisation in the expectation that this will reduce the burden of *S. aureus* at the time of insertion of venous access devices used for RRT. MSSA is difficult to eradicate completely hence the approach to reduce the burden in the nose at the most critical time, i.e. line insertion. This project has commenced on several sites.

In May 2017 communication was issued to chief medical staff throughout the Acute sector highlighting the nationally approved guidance from Scottish Antimicrobial Prescribing Group reinforcing the necessity for clinicians caring for patients with SAB to:

1. Identify and remove the source (e.g. vascular device)
2. Undergo a Trans Thoracic Echo to exclude endocarditis and have a low threshold for investigating for spinal/para-spinal infection
3. Receive a minimum of two weeks appropriate intravenous antimicrobial therapy
4. Discuss management with an infection specialist

Two new developments to improve/facilitate SAB management were also introduced:

1. In those patients with SAB who are clinically improving with source control, completion of IV antibiotic therapy through OPAT may be possible
2. The infection prevention control team will also now routinely place a SAB sticker in the patient's case notes to provide a prompt for appropriate management and to highlight guidance. This should be completed and dated by medical staff during treatment of the SAB.

In late 2015 a Board-wide SAB Reduction Action Plan was initiated and further review is ongoing to re-evaluate any areas for targeted improvement measures. This is presented at both the Acute and Board Infection Control Committees for review and discussion.

Quarter 4: 2016 (October-December 2016) NHSGGC Surveillance

For the last published quarter (October – December 2016) NHSGGC reported 30.1 SAB cases per 100,000 AOBs (104 cases).

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 for benchmarking purposes.

Health Board	Q4: SAB rate (per 100,000 AOBs)	95% CI
Ayrshire & Arran	21.5	(13.3, 32.8)
Forth Valley	50.4	(32.9, 73.8)
Grampian	33.3	(23.6, 45.5)
Greater Glasgow & Clyde	30.1	(24.5, 36.4)
Lanarkshire	38.8	(28,52.2)
Lothian	30.1	(22.8,38.7)
Tayside	47.6	(33.6,65.3)

Table 2: SAB rates (01/10/16 – 31/12/16)

The proportion of hospital acquired SAB cases remains similar to Q3 with 38% (n=40) patients developing a SAB after admission to an NHSGGC hospital; 29% (n=30) patients were confirmed to have a healthcare associated infection (HCAI) and the remaining 33% were community acquired cases.

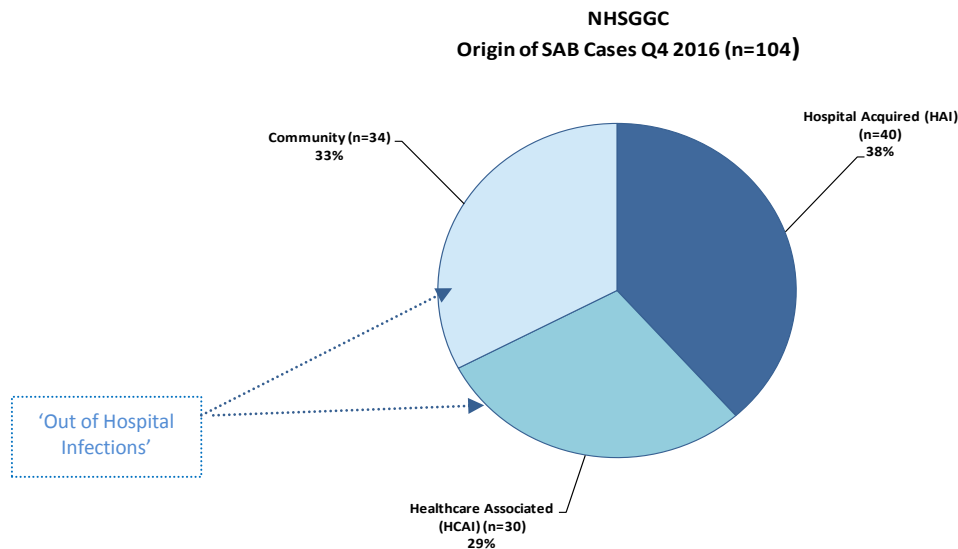


Figure 3 Origin of SAB between 01/10/16 – 31/12/16

Intravenous (IV) access devices remain a significant cause of SAB with 21 cases (20% of all SABs) and many of these should be considered to be an avoidable harm. A change to the clinical review of such cases was implemented in December 2016 and any 'preventable' cases are assigned to Datix to enable rapid local review.

All Significant Clinical Incidents identified by Datix are reviewed at the Board's Clinical Governance Forum thus ensuring that shared organisational learning is not lost due to the changes in this process.

Quarter 1: 2017 (January - March 2017) NHSGGC Surveillance

Local surveillance for January – March 2017 is now complete. Figure 4 shows the locally reported figures known at the time of reporting.

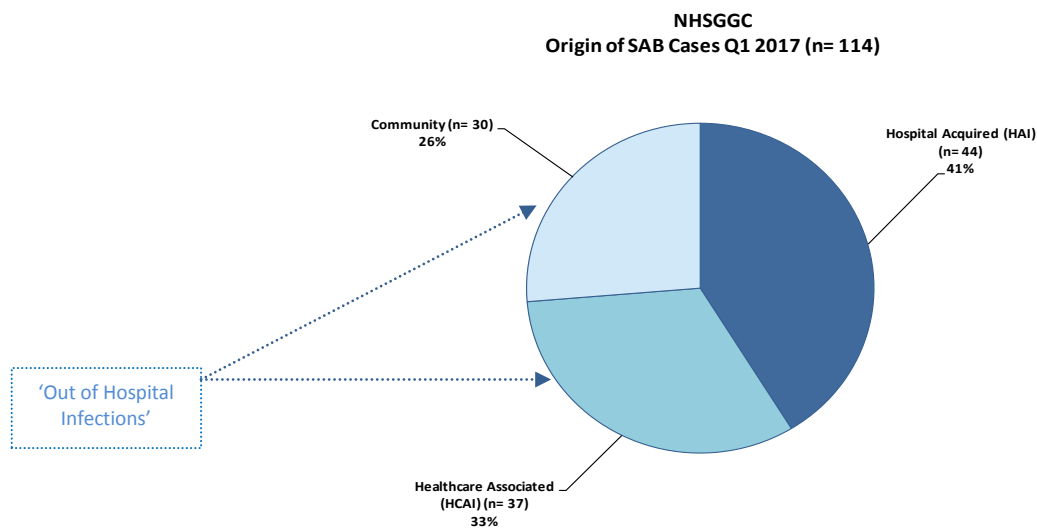


Figure 4 Origin of SAB between 01/01/17 – 31/03/17

The number of confirmed SAB cases has increased by 8.8% upon the previous quarter. Similarly to Q4 -16, IV access devices continue to remain a significant cause of SABs with 26 confirmed cases.

41% of cases reported to date are hospital acquired infections which is a slight increase upon the previous quarter.

Quarter 2 (status at end of May 2017)

Surveillance for the quarter is not complete; however there have been 72 cases reported for April and May.

NHSGGC MRSA Screening Project

The Scottish Government announced new national minimum MRSA screening recommendations in 2011. National Key Performance Indicators (KPIs) have been implemented within all NHS Boards required to achieve 90% compliance with Clinical Risk Assessment (CRA) of patients to identify MRSA colonisation.

CRA compliance for Q4 (January - March) 2017 in GGC was **81%**. NHSGGC IPCT continues to encourage clinical areas to complete the CRA and education for clinical teams on how to screen and why this is required is available. Results on specific ward compliance rates are now returned to the Sector / Directorate Senior Management Teams in order to identify areas that require support / education in relation to this screening initiative.

A comparison is provided in **Table 3** which shows a variable CRA compliance rate over the past four quarters.

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

	2016-17 Q1 (Apr-Jun)	2016-17 Q2 (Jul-Sep)	2016-17 Q3 (Oct-Dec)	2016-17 Q4 (Jan-Mar)
Greater Glasgow & Clyde	79%	89%	88%	81%
Scotland	82%	84%	82%	tbc

Table 3. Quarterly screening compliance
National Data Source: HPS MRSA Screening Team March 2017

Clostridium difficile

Surveillance and Actions

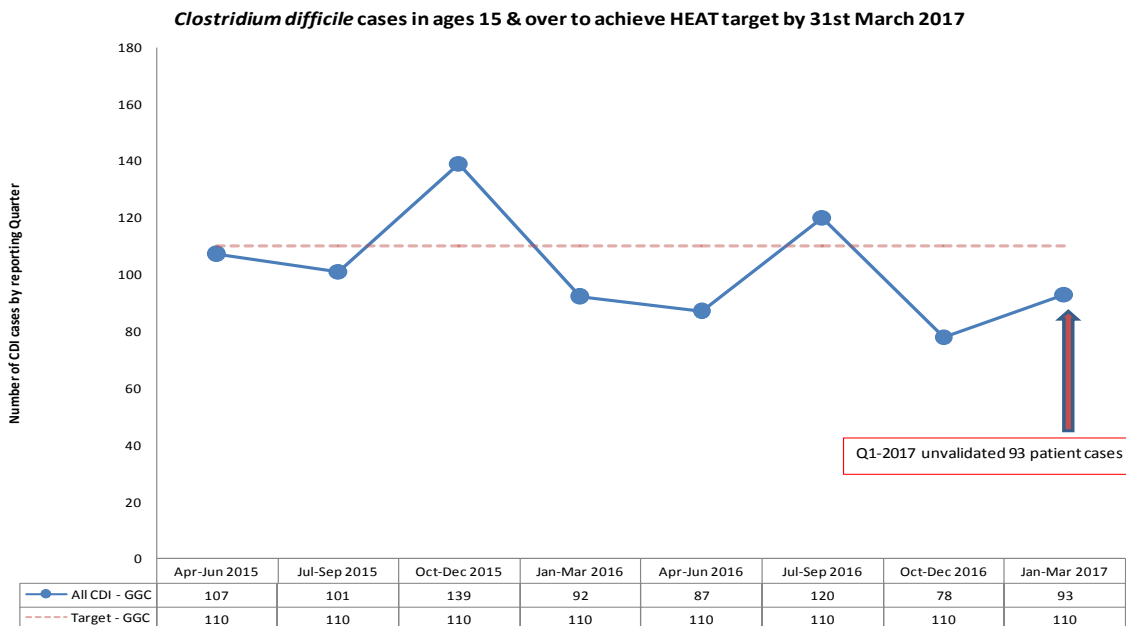


Figure 5: CDI patient cases by quarter

Figure 5 above shows a variable number of CDI cases reported by quarter in ages 15 and over from April 2015 to March 2017.

Quarter 4: 2016 (October - December) NHSGGC Surveillance

In the last published reporting Quarter (October - December 2016) NHSGGC reported **23.8** CDI cases per 100,000 AOB (78 patient cases). This is **below** the NHS Scotland reported national CDI rate of **26.6** per 100,000 AOB and also **below** the 2017 HEAT requirements. The National HEAT target in ages 15 and over is **32** cases per 100,000 TOBDs.

Table 4 below includes CDI 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 for benchmarking purposes.

Health Board	Q4: CDI rate (per 100,000 AOBs)	95% CI
Ayrshire & Arran	23.0	(14.4, 34.8)
Forth Valley	17.7	(8.8, 31.6)
Grampian	40.1	(29.1, 53.8)
Greater Glasgow & Clyde	23.8	(18.8, 29.7)
Lanarkshire	31.1	(22.0, 42.4)
Lothian	21.8	(15.6, 29.6)
Tayside	22.7	(14.3, 34.0)

Table 4: CDI rates (01/10/16 – 31/12/16)

Quarter 1: 2017 (January - March) Local Surveillance Status

Local surveillance for Q1 2017 has reported there was an increase upon the previous quarter in the total number CDI cases with **93** reported cases (**Figure 5**).

Local investigation has identified that 63% of these cases **were not** hospital acquired (n=59), see **Table 5** below. The proportion of hospital acquired CDI cases remains similar to Q4-16 with 37% (n=34) patients developing a CDI after admission to an NHSGGC hospital; 28% (n=26) patients were confirmed to have a healthcare associated infection (HCAI), 27% were community acquired cases and the remaining 8% were indeterminate.

Twelve cases reported were from GP specimens and of the remaining 81 cases from patients within NHSGGC hospitals, 62% (n=50) had received Proton Pump Inhibitor (PPI) medication which reduces stomach acid production and may be associated with an increased risk of CDI acquisition. 73% cases (n=59) had also received antimicrobial therapy in the previous four weeks to positive stool specimen.

Improvement interventions surrounding prescribing awareness of these findings have been established. High PPI usage is being reviewed with gastroenterology and pharmacy colleagues. Further stratification of CDI cases has been put in place (enhanced surveillance) to investigate if recent hospitalisation has played a part in CDI acquisition. Half of the cases (n=47) who developed CDI this quarter had been in hospital in the 28 days preceding their positive specimen.

CDI Cases (Q1 January- March) Origin	Number of Cases
Hospital Acquired	34
Healthcare Associated	26
Indeterminate	8
Community Associated	25
Total	93

Table 5. Origin of CDI

From October 2016 the definition applied by the IPCT for CDI patients changed to the following:

Local Enhanced CDI Surveillance in NHSGGC: Definition of Origin

Hospital acquired CDI is defined as when a CDI patient has had onset of symptoms at least 48 hours following admission to a hospital.

Healthcare associated CDI is defined as when a CDI patient has had onset of symptoms up to four weeks after discharge from a hospital.

Indeterminate cases of CDI is defined as a CDI patient who was discharged from a hospital 4-12 weeks before the onset of symptoms.

Community associated CDI is defined as a CDI patient with onset of symptoms while outside a hospital and without discharge from a hospital within the previous 12 weeks; or with onset of symptoms within 48 hours following admission to a hospital without stay in a hospital within the previous 12 weeks.

Quarter 2 (status at end of May 2017)

Surveillance for the quarter is not complete; however there have been 69 cases reported for April and May.

OUTBREAKS / EXCEPTIONS

There have been ten incidents / outbreaks classified as AMBER or RED using the Health Protection Scotland (HPS) Hospital Infection Incident Assessment Tool (HIIAT) between January 2017 and April 2017. Six of these outbreaks were Influenza at GRI. This likely reflects the nightingale style wards and reduced capacity to isolate symptomatic patients. Rapid diagnostics will be explored ahead of next winter which would enable cohorting of positive patients.

January 2017: B4 Oncology - Two cases of HAI RSV identified on 06/01/17. OCT held and all patients on the ward were screened. One additional case identified via screening. On 06/01/17 HIIAT assessed as RED due to impact on services. Update 11/01/17: No new cases since 09/01/17. Ward was cleaned and reopened on the 11/01/17. HIIAT was GREEN as of 12/01/17.

January 2017: Glasgow Royal Infirmary – Influenza A

Ward 3 Medical - Five confirmed HAI Influenza A cases reported on the 16/01/17 .Ward closed 16/01/17 HIIAT assessed as AMBER on 19/01/17 due to impact on services. HAIORT completed and returned to HPS. Total number of 5 confirmed cases as of 23/01/17. Ward was reopened on 24/01/17.

February 2017: Glasgow Royal Infirmary – Influenza A

Ward 9 Medical - Four cases of HAI influenza-A. Ward closed. HIIAT assessed and reported to HPS as AMBER. One patient gave cause for concern. Ward was reviewed daily and reopened on 12/02/17.

February 2017: Glasgow Royal Infirmary – Influenza A

Ward 2 Medical - Three cases of HAI influenza-A. Ward closed 10/02/17. HIIAT assessed and reported to HPS as RED. One patient transferred to critical care but did not require ventilation. Critical care patient recovered quickly and HIIAT was assessed as AMBER on 14/02/17 then GREEN 15/02/17.

February 2017: Glasgow Royal Infirmary – Influenza A

Ward 11 Medical - Five confirmed cases of HAI influenza-A. Ward closed 17/02/17. HIIAT assessed and reported to HPS as AMBER on 20/02/17 then GREEN on 22/02/17. Ward reopened to admissions on 22/02/17.

February 2017: Gartnavel General Hospital - Endophthalmitis

Ophthalmology - Four cases of HAI endophthalmitis since the end of December 2016 associated with ocular injections. **NB** incidence of endophthalmitis is very low and is continually monitored. Three cases across 4 weeks is considered significant. Meeting held in January when 4 cases were identified. On review one case was excluded. GREEN at this time. A new case was identified on 10/02/17. OCT 14/02/17 action plan reviewed and progressed. Procedures diverted to theatre as a temporary measure. HIIAT assessed as RED by clinicians. HAIORT sent to HPS. No new cases since 12/02/17. Upgrade to clean room facility has been undertaken and procedure SOP has been reviewed and updated.

March 2017: Glasgow Royal Infirmary – Influenza A

Ward 15/28 - Closed 01/03/2017 .5 positive influenza A - 1 of which was community acquired. One patient died Influenza A Part 1 b on death certificate. HAIIT assessed at RED, HIIORT updated. HIIAT reassessed and GREEN. Ward reopened 06/03/17.

March 2017: Glasgow Royal Infirmary – Influenza B

Ward 9 - OCT held on 20/03/17. HIIAT Amber. Further OCT held 22/03/17 - HIIAT Green. 4 patients confirmed Influenza B. Ward reopened 22/3/17

April 2017: Royal Hospital for Children – Rotavirus/Astrovirus outbreak

Ward 2A - Outbreak consisted of 9 patients in total over a 19 day period. This is a haemato-oncology ward and therefore a high risk patient group who tend to have prolonged and more severe symptoms. 1 patient was admitted to PICU with an aspiration pneumonia following an episode of vomiting resulting from Astrovirus. Due to the disruption to services during closure and the severity of illness in this patient case the HIIAT was scored as Red. The ward re-opened on Tuesday 25/4/2017

April 2017: Royal Hospital for Children – 3 cases of *Aspergillus fumigatus*

Ward 2A - Between June 2016 and April 2017 there were 3 probable and 1 possible case(s) of Invasive Aspergillosis. Patients required treatment with antifungals and chemotherapy was delayed as a result. Two patients had considerable morbidity as a result of the infection. A Patient Assessment Group (PAG) held 07/03/2017 scored the incident as Red using the HIIAT. Water leak occurred in ceiling void and not all the affected tiles were removed which served as an ongoing source. Ceiling voids within 2A inspected and all affected tiles replaced. Patient cases now making good progress and have resumed chemotherapy. As a result this incident has been downgraded to a green HIIAT and closed. IPCT and estates colleagues are working on a water damage policy to ensure water leaks are dealt with promptly and damaged materials are removed.

Norovirus

Norovirus activity was reported in 2 hospitals with 4 wards closed in March 2017 and in 4 hospitals with 5 wards closed in April 2017.

Month	Apr -16	May-16	Jun-16	Jul -16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan -17	Feb -17	Mar-17	Apr-17
Ward Closures	6	13	3	1	3	2	6	5	11	3	6	4	5
Bed Days Lost	155	250	76	6	5	49	179	115	136	38	61	160	121

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

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 one unannounced HEI / HAI inspection since the last published HAIRT. Glasgow Royal Infirmary & Stobhill Hospital was inspected on the 21-23rd March 2017. The report from this inspection was published on the 31st May 2017. This inspection resulted in six requirements and no recommendations.

Requirement 1

NHS Greater Glasgow and Clyde must ensure a reliable system is put in place to monitor compliance with mandatory infection prevention and control training. This will ensure staff who are not meeting the mandatory requirements can be identified, and unmet infection prevention and control education needs can be addressed

Action

Roles and responsibilities for detailing accurate training records have been reinforced to all staff via line managers (memo issued to all staff). LN will assess compliance in training records as part of assurance reviews this will also be reviewed as part of the IPCT audit (IPCAT)

Requirement 2

NHS Greater Glasgow and Clyde must ensure staff in both Stobhill Hospital and Glasgow Royal Infirmary comply with the guidance in Health Protection Scotland's National Infection Prevention and Control Manual on hand hygiene and the management of patient care equipment to ensure monitoring equipment is decontaminated between each patient use

This to be discussed at Divisional SMT and cascaded via relevant governance structures. Memo to all staff regarding responsibilities of all staff relating to hand hygiene and decontamination of patient equipment to be sent by Chief Nurse / Chief AHP and Chief of Medicine. Hand Hygiene training planned as IPCT training theme of week. Hand Hygiene coordinator to do scheduled but unannounced ward audits. Domestic and catering staff receive hand hygiene training at induction and as a minimum on an annual basis thereafter. Further training is provided if identified as a requirement.

Requirement 3

NHS Greater Glasgow and Clyde must ensure staff in the minor injuries unit at Stobhill Hospital and the accident and emergency department at Glasgow Royal Infirmary are informed of audit results and know what actions must be taken to improve practices. This will ensure learning from the audit process drives improvement in practice by all staff.

LN for MIU / ED will ensure that information regarding all audits undertaken, audit results and improvement actions are shared with all staff. This information is made available to staff in a number of formats and ways including within ED on the performance board and on Notice board in MIU and highlighted at department huddles. The Action plan with improvement actions from IPCAT audits and SICPS audit will be displayed in duty room /and staff room for observation by all staff.

Requirement 4

NHS Greater Glasgow and Clyde must provide equipment and an environment in wards 62, 63 and the ambulance entrance of accident and emergency of Glasgow Royal Infirmary that is safe and clean.

An SBAR document with feedback from HEI visit was shared with LN for dissemination to all staff. This included information on cleaning checklists and the decontamination of near patient equipment. Education session was delivered to staff with regards to undertaking risk assessment. Mattress Champions are not in place. SOPs for decontamination of near patient equipment have been reinforced. Process and importance of cleaning near patient equipment has been discussed by the Chief Nurse at the LN meeting on 6th April 2017. Lead Nurse for

area has increased surveillance within the wards to provide support and assurance. Training completed.

Requirement 5

NHS Greater Glasgow and Clyde must carry out a formal risk assessment with the infection prevention and control team for the continued use of any chipped and damaged equipment that is difficult to clean and cannot be replaced.

SCN / LN will carry out a detailed audit of each clinical area within their remit and detail status of equipment. Results to be collated and following this, a risk assessment to be undertaken in conjunction with IPCT and Estates team. Ongoing assessment of patient equipment as part of LN assurance checks. Directorate SMT will include observation of equipment as part of leadership walk rounds.

Requirement 6

NHS Greater Glasgow and Clyde must ensure estates and maintenance issues are acted on within a reasonable timescale in Glasgow Royal Infirmary and ward staff are informed of progress and timescales for completion.

Ward 30 & 50/51

Through review and discussion with staff, planned works now commenced to rectify ongoing issue of damaged walls in shower areas.

Review being currently undertaken of FM First /Helpdesk. Revised training documentation will be issued to clinical staff in June 17. Estates personnel attending “huddle” meetings with clinical staff to re-iterate that Estates Managers to be contacted if no response regards timescales to complete job lines.

What the hospitals did well:

- Across both sites, environmental cleanliness in the majority of areas was generally good.
- Staff felt supported by the IPCT and Lead Nurses.
- SCNs in Stobhill Hospital could demonstrate good levels of staff compliance with HAI education.
- A systematic programme of IPC audits is in place.

All HEI Reports for NHS Greater Glasgow and Clyde can be viewed by clicking on the following link:

http://www.healthcareimprovementscotland.org/programmes/inspecting_and_regulating_care/environment_inspectorate_hei/hei_reports.aspx

Other HAI Related Activity

Surgical Site Infection (SSI) Surveillance

NHSGGC participates in the Surgical Site Infection Surveillance Programme that is mandatory in all NHS Boards in Scotland. All NHS Boards are required to undertake in-patient and 30-day re-admission surveillance for hip arthroplasty, and in-patient and post discharge surveillance to day 10 for Caesarean section procedures as per the mandatory requirements of HDL (2006) 38 and CEL (11) 2009. Post discharge surveillance until day-10 post operation is undertaken with the assistance of our Community Midwifery colleagues.

Health Protection Scotland last available quarter (October - December 2016)

Category of Procedure	Operations	Infections	NHSGGC SSI rate (%)	NHSGGC 95% CI	National Dataset SSI rate (%)	National 95% CI
Caesarean section	1269	14	1.1	(0.6, 1.8)	1.2	(0.9, 1.5)
Hip arthroplasty	456	2	0.4	(0.1, 1.5)	0.7	(0.4, 1.1)

Table 6. SSI rates for Caesarean section (in-patient and PDS to day 10), Hip arthroplasty (in-patient and re-admission to day-30) procedures within NHS Greater Glasgow & Clyde, 01/10/2016 - 31/12/2016.

For the last available reporting quarter (October - December 2016) the SSI rate (0.4%) for hip arthroplasty which was **lower** than the national average SSI rate (0.7%) and was well within the confidence intervals for this category (0.1-1.5). It should be noted that overall infection numbers are very low.

Caesarean section procedures also had a **lower** SSI rate than the national average.

Continued improvement actions included in previous reports are ongoing and focus on Health Protection Scotland's 'Prevention of SSI' measures.

This set of measures form a 'bundle' which when used together can improve patient safety outcomes and include actions to be implemented pre, peri and post-operatively. These evidence based best practice measures should be undertaken for every surgical procedure and not just those that are captured in the SSI Surveillance Programme. These can be accessed at: <http://www.hps.scot.nhs.uk/resourcedocument.aspx?id=2803>

Q1 (January – March 2017) Local SSI Surveillance Status

Surveillance to 30 day post operatively is now complete for the quarter and local data for January - March 2017 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 (QEUEH)
- Craniotomy, Craniectomy and Cranioplasty (Institute of Neurological Sciences, QEUEH 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 taken** when interpreting local SSI rates in future publications to enable local baseline data to be established.

These are new categories of surveillance therefore comparative data is awaited however NHSGGC rates are below those in the published literature.

Quarter 1 (Jan - Mar) : Local SSI Surveillance Status (correct at time of reporting)				
	Category of Procedure	Operations	Infections	NHSGGC SSI Rate (%)
Mandatory	Caesarean section	1349	20	1.5
	Hip arthroplasty	382	3	0.8
Voluntary	Knee arthroplasty	405	4	1.0
	Repair of neck of femur	441	8	1.8
	Large Bowel Surgery	231	8	3.5
	Major Vascular Surgery	199	3	1.5
Additional INS, QEUH only	Cranial Surgery	168	3	1.8
	Spinal Surgery	176	1	0.6

Table 7. Local SSI Surveillance 01/01/17 - 31/03/17

Changes to National SSI Surveillance process in April 2017

A revised SSI Surveillance Protocol was issued by HPS in April 2017 and now includes 4 mandatory procedure categories. The addition of large bowel and major vascular surgery was included following identification of a higher incidence of SSI in these surgeries in the 2011 national HAI Point Prevalence Survey

- caesarean section
- hip arthroplasty
- large bowel surgery - (elective presentation to theatre only)
- vascular surgery - (elective presentation to theatre only)

Caesarean Section

Mandatory surveillance of Caesarean section procedures has been undertaken since 2006. This includes all elective and emergency procedures undertaken at the Princess Royal Maternity, Royal Alexandra Hospital and Queen Elizabeth University Hospital. Surveillance is undertaken as in-patient and to day 10 post discharge.

April 2017 protocol changes: no changes to mandatory requirement, however we have commenced voluntary 30 day readmission surveillance on procedures undertaken 01/04/2017 onwards. This will enable a longer timeframe for surveillance, in line with other procedure categories, and also capture serious SSIs (deep or organ space) which require readmission to any GGC hospital within 30 days of surgery.

Orthopaedic Surgery

Surveillance of hip arthroplasty has been mandatory since 2006 including in-patient and readmission to day 30 post operatively.

We have also undertaken voluntary surveillance, using the same process, of knee arthroplasty and repair of fractured neck of femur over the same period.

Data is collected on all applicable procedures undertaken across the four main acute hospitals.

April 2017 protocol changes: Hip arthroplasty remains mandatory however is now extended to 90 days readmission due to implant *in situ*.

We will also undertake 90 day readmission surveillance on both voluntary procedure categories included in the GGC SSI surveillance programme.

Large Bowel Surgery and Major Vascular Surgery

In preparation for the proposed mandatory requirement for these additional procedure categories, we commenced standard in-patient and 30 day readmission surveillance in July 2016.

Surveillance for major Vascular is undertaken at QEUH and Large Bowel at the four main acute hospitals

April 2017 protocol changes: Mandatory surveillance requirement for all Boards. For procedures with an implant *in situ* this is extended to 90 days readmission.

National Healthcare Associated Infection and Antimicrobial Prescribing Point Prevalence Survey 2016

The survey was undertaken by NHSGGC Infection Prevention Control staff and Antimicrobial Pharmacists between September and November 2016. The national report was published on 23rd May 2017

Early local analysis of NHSGGC data captured in the point prevalence data was very positive and showed a **decrease** in the HAI rate within all surveyed hospitals from the survey undertaken five years previously. Local analysis allowed timely feedback to clinical services and enabled local review of measures to be considered for further reduction of avoidable HAI within our hospitals.

The validated results have indicated an overall HAI rate of **3.1%** for NHSGGC acute hospitals which is a **reduction** from the 2011 rates and **below** the 2016 national rate of 4.6%. Ten NHSGGC hospitals, including 2 non-acute, were visited and 3834 patients were included in the survey. 113 patients had one or more HAI at time of survey.

The national summary points are:

- HAI remains a significant burden in Scotland at 4.5% in acute hospitals.
- The population and the risks in healthcare have changed. The patient population is older and sicker in comparison to five years ago and the most common HAI (urinary tract infection (UTI) and pneumonia) reflect this population at risk.
- There is a continuing risk of infection associated with the **high** prevalence of invasive devices. A quarter of bloodstream Infections were associated with a vascular catheter and half of UTI occurred in patients who had been catheterised.
- Despite focused quality improvement work, the use of PVCs was **higher** in 2016 and there had been no change in the prevalence of urinary catheterisation since 2011.
- Antimicrobial resistance (AMR) remains a threat; antimicrobial prescribing was high and the types of HAI reported are commonly associated with Gram negative organisms where the greatest threat of AMR currently lies. *E. coli*, for the first time, was the most commonly reported causative organism.
- Whilst the use of very broad spectrum antimicrobials was unchanged from 2011 in adults, there was potentially inappropriate prescribing of these antimicrobials as highlighted by those that were not in line with local policy

Details of all surveyed hospitals in NHSGGC are displayed in **Table 8** below.

Hospital	Number of patients surveyed	Number of patients with HAI	Prevalence (%)	95% CI	Adjusted prevalence (%)
Gartnavel General	318	8	2.5	1.3 – 4.9	2.3
Gartnavel Royal Hospital (non-acute)	148	0	0.0	0.0 - 2.5	0.0
Glasgow Royal Infirmary	713	18	2.5	1.6 – 4.0	2.5
Inverclyde Royal Hospital	314	9	2.9	1.5 – 5.4	3.2
Mearnskirk House (non-acute)	69	1	1.4	0.3 - 7.8	1.3
Princess Royal Maternity Unit	117	2	1.7	0.5 – 6.0	4.3
Queen Elizabeth University Hospital	1336	46	3.4	2.6 – 4.6	3.2
Royal Alexandra Hospital	572	22	3.8	2.6 – 5.8	4.2
Royal Hospital for Children	166	6	3.6	1.7 – 7.7	3.6
Vale of Leven General Hospital	81	1	1.2	0.2 – 6.7	1.7

NHS Greater Glasgow & Clyde compares favourably with other NHS Scotland Boards as displayed in table 9 below.

Acute hospitals including paediatric	Number of patients surveyed	Number of patients with HAI	Unadjusted Prevalence (%)
NHS Shetland	30	0	0.0%
NHS Dumfries & Galloway	288	4	1.4%
NHS Ayrshire and Arran	836	22	2.6%
NHS Lanarkshire	1287	33	2.6%
NHS Greater Glasgow & Clyde	3617	112	3.1%
NHS Forth Valley	608	20	3.3%
NHS Western Isles	76	3	3.9%
NHS Tayside	846	40	4.7%
NHS National Waiting Times Centre	110	6	5.5%
NHS Highland	435	26	6.0%
NHS Borders	239	16	6.7%
NHS Orkney	30	2	6.7%
NHS Lothian	1759	128	7.3%
NHS Fife	433	33	7.6%
NHS Grampian	912	72	7.9%
NHS Scotland	11506	517	4.5%

Table 9. Surveyed NHS Scotland Boards (extrapolated from national report)

The national point prevalence survey report is available at:
<http://www.hps.scot.nhs.uk/resourcedocument.aspx?id=5964>

Statistical Process Control Charts

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

Charts for Queen Elizabeth University Hospital and Royal Hospital for Children are not statistically significant due to having less than 25 data points.

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/sshaip/clostridiumdifficile.aspx?subjectid=79>

Staphylococcus aureus Bacteraemia:

<http://www.hps.scot.nhs.uk/haic/sshaip/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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
MRSA	6	1	1	2	2	1	1	0	3	0	3	1
MSSA	37	18	33	37	42	33	39	30	33	30	45	42
Total SABS	43	19	34	39	44	34	40	30	36	30	48	43

Clostridium difficile infection monthly case numbers

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Ages 15-64	12	10	16	9	16	10	6	5	7	11	18	13
Ages 65 plus	21	9	28	29	22	19	23	15	20	26	11	16
Total Ages 15 plus	33	19	44	38	38	29	29	20	27	37	29	29

Hand Hygiene Monitoring Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017*	Feb 2017*	Mar 2017*	Apr 2017*
AHP	97	97	99	98	98	99	99	98	-	-	-	-
Ancillary	92	94	91	95	92	92	93	92	-	-	-	-
Medical	95	96	95	95	96	96	96	97	-	-	-	-
Nurse	98	98	99	99	99	99	98	99	-	-	-	-
Board Total	97	97	98	98	98	98	98	98	98	98	97	97

*Staff group breakdown data is unavailable for 2017

Cleaning Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	95.8	95.8	95.7	95.9	95.9	96.1	95.7	96.0	95.4	95.5	95.7	95.5

Estates Monitoring Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	97.1	97.6	98.4	98.5	98.4	99.0	98.8	98.9	99.3	99.2	99.0	99.0

GLASGOW ROYAL INFIRMARY / PRINCESS ROYAL MATERNITY

REPORT CARD

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
MRSA	0	0	0	0	0	0	0	0	0	0	0	1
MSSA	6	2	2	2	3	2	5	1	5	3	9	2
Total SABS	6	2	2	2	3	2	5	1	5	3	9	3

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Ages 15-64	2	1	3	0	5	1	1	0	0	2	0	2
Ages 65 plus	2	0	3	3	2	2	3	4	3	0	0	5
Ages 15 plus	4	1	6	3	7	3	4	4	3	2	0	7

Cleaning Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	96.0	95.9	95.6	95.8	95.5	95.7	95.7	95.8	95.8	96.0	96.0	96.0

Estates Monitoring Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	99.5	99.6	99.7	99.6	99.6	99.7	99.7	99.8	99.7	99.7	99.6	99.8

ROYAL ALEXANDRA HOSPITAL

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
MRSA	0	0	1	0	0	0	0	0	0	0	1	0
MSSA	0	0	2	1	3	2	0	2	3	0	1	1
Total SABS	0	0	3	1	3	2	0	2	3	0	2	1

Clostridium difficile infection monthly case numbers

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Ages 15-64	1	0	0	0	1	1	1	1	0	0	1	0
Ages 65 plus	0	3	3	0	1	2	3	2	3	1	1	1
Ages 15 plus	1	3	3	0	2	3	4	3	3	1	2	1

Cleaning Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	96.7	96.0	96.8	96.6	95.9	96.3	96.4	96.2	96.3	96.5	95.3	96.2

Estates Monitoring Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	98.9	97.7	98.9	97.3	98.7	98.1	97.8	96.4	98.3	99.0	97.4	98.2

INVERCLYDE ROYAL HOSPITAL

REPORT CARD

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	1	0	1	0	0	0	1	1	2	1	1	0
Total SABS	1	0	1	0	0	0	1	1	2	1	1	0

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Ages 15-64	0	1	0	0	0	0	0	0	0	1	0	0
Ages 65 plus	0	0	0	0	3	0	2	2	1	1	0	0
Ages 15 plus	0	1	0	0	3	0	2	2	1	2	0	0

Cleaning Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	96.7	95.4	95.8	95.9	95.5	95.8	96.5	95.6	94.9	95.3	95.4	95.0

Estates Monitoring Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	98.4	96.6	97.1	97.5	97.2	97.2	97.9	96.8	97.1	96.5	97.4	96.7

VALE OF LEVEN HOSPITAL

REPORT CARD

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	0	1	0	0	0	0	0	0	0	0	1
Total SABS	0	0	1	0	0	0	0	0	0	0	0	1

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	1	0	1	0	0	2	0	1	0	0	0	0
Ages 15 plus	1	0	1	0	0	2	0	1	0	0	0	0

Cleaning Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	97.0	97.0	97.3	97.0	97.4	97.4	97.5	97.7	97.2	97.4	97.2	97.6

Estates Monitoring Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	99.3	99.2	99.1	99.5	99.5	99.5	99.5	99.8	99.6	99.4	99.7	99.6

GARTNAVEL GENERAL HOSPITAL

REPORT CARD

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

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	1	2	0	1	2	1	0	1	0	0	0
Total SABS	0	1	2	0	1	2	1	0	1	0	0	0

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Ages 15-64	0	1	0	0	1	0	0	0	1	0	0	2
Ages 65 plus	2	0	3	0	0	1	0	1	1	2	1	1
Ages 15 plus	2	1	3	0	1	1	0	1	2	2	1	3

Cleaning Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	96.1	96.6	97.3	97.0	96.7	96.5	95.9	96.7	96.1	96.9	97.1	96.5

Estates Monitoring Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	98.6	99.0	98.7	99.1	99.2	99.0	99.2	99.5	99.5	99.6	99.5	99.2

QUEEN ELIZABETH UNIVERSITY HOSPITAL

REPORT CARD

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
MRSA	1	0	0	0	0	1	0	0	0	0	0	0
MSSA	2	4	4	7	11	4	6	6	4	4	6	6
Total SABS	3	4	4	7	11	5	6	6	4	4	6	6

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Ages 15-64	2	3	2	2	1	1	1	1	1	0	4	0
Ages 65 plus	6	1	2	3	3	5	4	2	2	4	2	2
Ages 15 plus	8	4	4	5	4	6	5	3	3	4	6	2

Cleaning Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	95.0	95.3	95.5	95.9	95.1	95.9	94.5	95.3	94.0	92.9	94.7	93.2

Estates Monitoring Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	99.9	99.8	99.9	99.8	99.8	99.7	99.2	99.6	99.9	99.8	99.9	99.7

ROYAL HOSPITAL FOR CHILDREN

REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	2	1	1	0	1	0	2	1	0	1	1	3
Total SABS	2	1	1	0	1	0	2	1	0	1	1	3

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Ages 15 plus	0	0	0	0	1	0	0	0	0	0	0	0

Cleaning Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	96.8	96.0	96.9	96.5	95.8	97.0	96.3	96.0	95.1	96.5	94.4	94.9

Estates Monitoring Compliance (%)

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Board Total	99.7	99.3	99.8	99.5	99.6	99.8	99.9	99.4	99.5	99.0	99.5	99.5

**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
- Mearnskirk House
- New Victoria Hospital
- Parkhead Hospital
- Ravenscraig Hospital
- Stobhill Hospital

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	2	0	0	2	1	1	2	0	3	0	0	2
Total SABS	2	0	0	2	1	1	2	0	3	0	0	2

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	1	0	0	0	0	0	0	1	0	1	1	0
Ages 15 plus	1	0	0	0	0	0	0	1	0	1	1	0

NHS GREATER GLASGOW & CLYDE

OUT OF HOSPITAL REPORT CARD

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
MRSA	5	1	0	2	2	0	1	0	3	0	2	0
MSSA	24	10	20	25	22	22	22	19	15	21	26	28
Total SABS	29	11	20	27	24	22	23	19	18	21	28	28

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

	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Ages 15-64	7	4	11	7	7	7	3	3	5	8	13	9
Ages 65 plus	9	5	16	23	13	7	11	2	10	17	6	7
Ages 15 plus (Total)	16	9	27	30	20	14	14	5	15	25	19	16

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

56% of all CDI cases reported in NHSGGC between May 2016 and April 2017 are attributed as *Out of Hospital* infections.

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

61% of all *Staphylococcus aureus* Bacteraemia cases reported in NHSGGC between May 2016 and April 2017 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
HIIAT	Hospital Infection Incident Assessment Tool
HIIORT	Healthcare Infection Incident and Outbreak Reporting Template
HIS	Health Improvement Scotland
HPS	Health Protection Scotland
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.