

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:-

Quarter 3, 2016 CDI/SAB/SSI data is not published by HPS until early January 2017, therefore there is no update to validated data contained in this report.

Validated HPS/ISD data : Quarter 2 (April - June) 2016			
HEAT Targets	GGC	National	HEAT target
SAB rate per 100,000 AOB	31.4 (110 cases)	31.1	24.0
CDI rate per 100,000 TOB	25.3 (87 cases)	27.1	32.0

Table 1. Progress against National HAI HEAT targets, 01/04/2016 – 30/06/2016

- **110** *Staphylococcus aureus* Bacteraemia (SAB) cases were reported for April to June with a rate of **31.4** cases per 100,000 AOB. NHSGGC is marginally above the national rate of 31.1 cases per 100,000 AOB. Of the 110 cases, 35% (n=39) were of community onset and are less amenable to improvement measures within our Acute hospitals. Local surveillance shows an increase of 6.4%, with 117 patient cases, in the quarter July to September. Analysis of these cases showed an increase in the number of SABs recorded within Regional Services and local action plans have been developed and are ongoing.
- **87** *Clostridium difficile* (CDI) cases were reported for April to June with a rate of **25.3** cases per 100,000 TOB. July – September reported a significant increase in CDI cases with **121** cases reported. Local investigation identified that a large proportion of these cases were not hospital acquired (n= 78; 64%), although many individuals had received recent antimicrobial therapy or Proton Pump Inhibitor medication, which reduces stomach acid production and may be associated with an increased risk of CDI acquisition. Additional review of cases is being undertaken to try and identify any risk factors previously not considered. In addition, IPCT are undertaking enhanced prospective surveillance to capture information on healthcare associated infections to develop additional interventions if possible.
- Local improvement actions within Orthopaedic surgery procedures included in the national SSI programme are ongoing where the number of infections are higher than expected.

- The SSI rate for Caesarean section procedure category for (April – June 2016) was 1.5% however remains below the National SSI rate of 1.7% for the quarter.

Any Patient Safety /Patient Experience Issues: -

Noted increase in the number of SAB cases reported in quarter 3. NHSGGC actively continue to monitor this to ensure corrective actions are implemented to improve performance and reduce avoidable harm to meet HEAT target requirements.

Significant increase of CDI cases in Q3. Daily IPCT surveillance continues and prospective data is shared with antimicrobial pharmacists to enable rapid investigation of antibiotic or other associated medicine prescribing practice.

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 MRSA)**

Staphylococcus aureus Bacteraemia Surveillance and actions

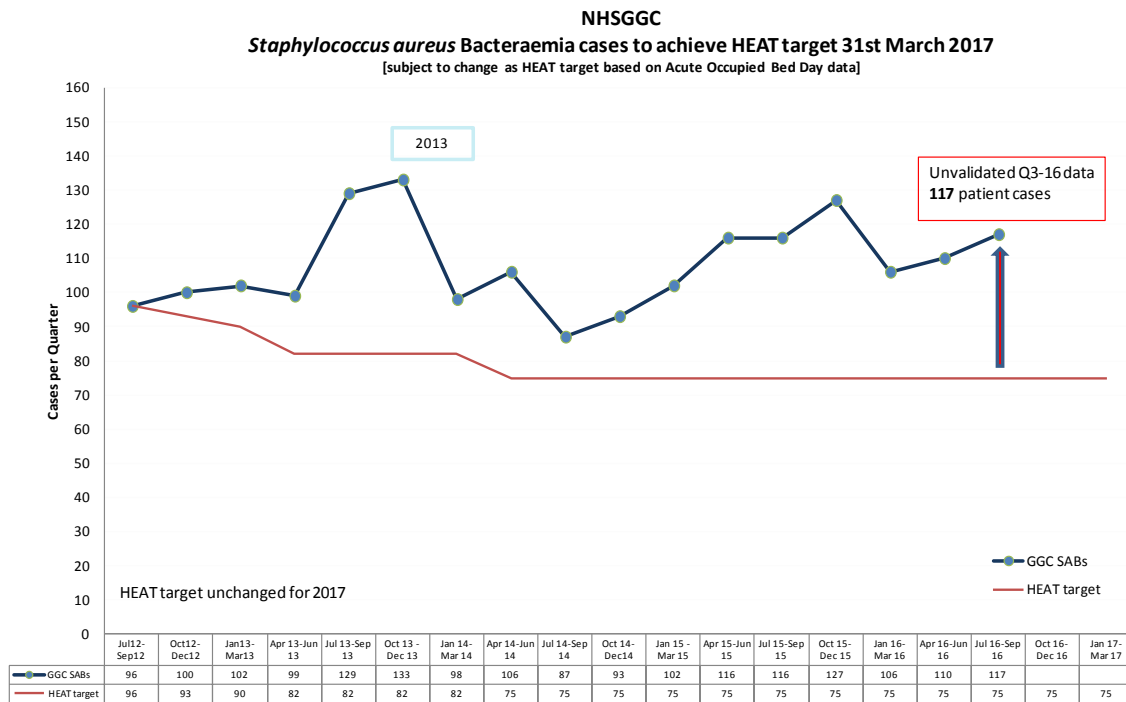


Figure 1. SAB patient cases by quarter.

Figure 1 shows a variation in the number of reported *Staphylococcus aureus* bacteraemia (SAB) cases from 2011 onwards to a peak in the second half of 2013 and again in late 2015. This highlights an upward trend in the total number of SABs in 2016. Work is continuing across all Acute sectors through a series of education and audit initiatives. This is supported by a HAI Quality Improvement Facilitator who is continuing to apply improvement methodology to test and recommend improvements on specific focus points, specifically surrounding one of the most commonly used invasive devices – Peripheral Venous Catheters (PVC).

In addition the lead ICD is currently leading on a project to screen renal patients for *S. aureus* prior to line insertion. If positive, patients will undergo decolonisation in the expectation that this will reduce the ingress of *S. aureus* into the line at the time of insertion. This work is due to commence in December 2016 and results will be included in future reports.

In late 2015 a Board wide SAB reduction action plan was initiated and this continues to be updated each month with progress against actions and is presented at both the Acute and Board Infection Control Committee for review and discussion.

Quarter 2, 2016 (April – June 2016) NHSGGC surveillance

For the last published quarter (April - June 2016), NHSGGC reported **31.4** SAB cases per 100,000 AOBs (**110** patient cases). This is slightly higher than the previous quarter (January – March 2016). The proportion of cases is displayed in Figure 2. 40% of the 110 cases were hospital acquired, however it should be noted that 35% of cases were of community onset.

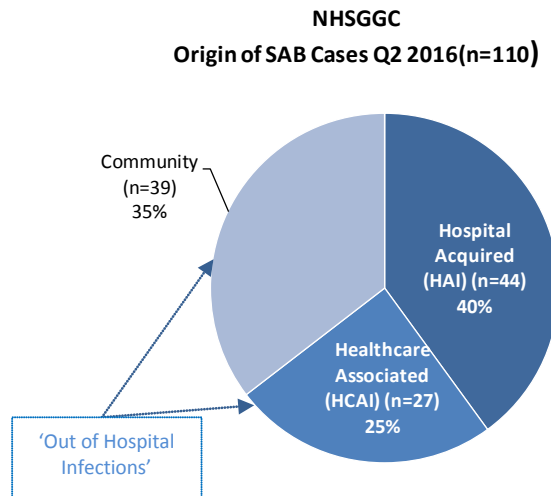


Figure 2 Origin of SAB between 01/04/16 – 30/06/16

Quarter 3, 2016 (July – September 2016) NHSGGC surveillance

National data for this quarter will be reported in early January 2017.

The proportion of hospital acquired cases remains unchanged from Q2 with 39% (n=46) patients developing a SAB after admission to a GGC hospital. 33% (n=38) patients were confirmed to have a healthcare associated infection and the remaining 28% were community acquired cases.

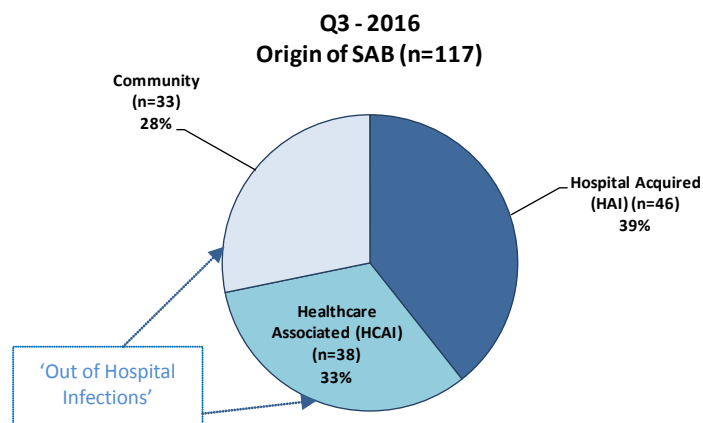


Figure 3: Origin of SAB between 01/06/16 – 30/09/16

Q2-2016	
Source of Bacteraemia (all cases)	Number of patients
No identifiable source of sepsis	37
IV Access Device (PVC or CVC)	34
Skin/soft tissue	13
Respiratory infection	6
Related to IV drug use	6
Discitis/Osteomyelitis	4
Surgical site infection	3
Urinary tract infection	3
Contaminant	2
Chest Drain	1
Infective Endocarditis	1
Post op sepsis	1
Ureteric stent	1
Bursitis	1
GI Infection	1
Cardiac Stent	1
CSF leak	1
Hepatobiliary	1
Total	117

Table 2. Source of SAB between 01/07/16 – 30/09/16

For the quarter July to September 2016 no identifiable source of sepsis is the most common cause of SAB in GGC with 37 cases, followed by IV access device with 34 cases. These cases continue to be investigated thoroughly by the clinical team and the local Infection Prevention & Control Team but despite this as demonstrated above, on many occasions no single causative factor for SAB development can be identified.

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 Q2 (July - September) 2016 in GGC was **89%**. 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 monthly 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.

	2015_16 Q3	2015_16 Q4	2016_17 Q1	2016_17 Q2
Greater Glasgow & Clyde	81%	87%	79%	89%
Scotland	83%	80%	82%	tbc

Table 3. Quarterly screening compliance
National Data Source: HPS MRSA Screening Team August 2016

Clostridium difficile

Surveillance and actions

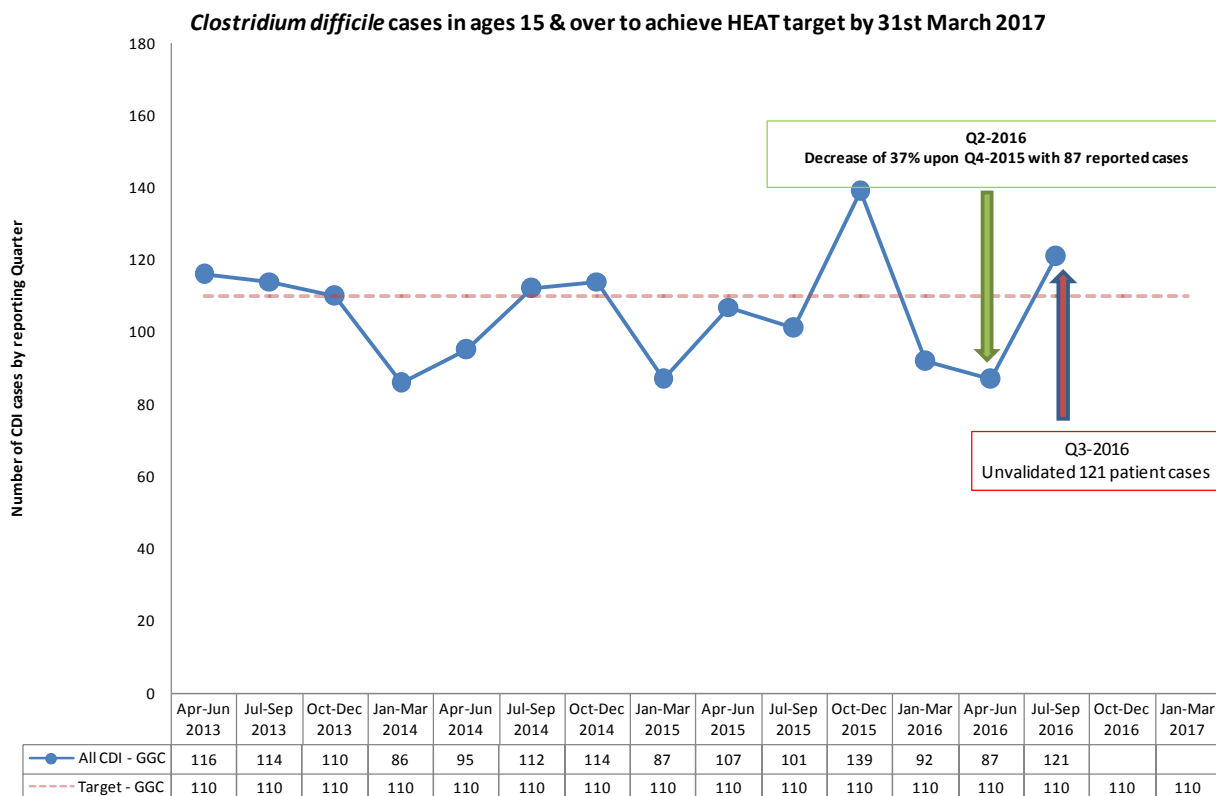


Figure 2: CDI patient cases by quarter

Figure 2 above shows a variable number of CDI cases reported by quarter in ages 15 & over from April 2013 to September 2016.

Quarter 2, 2016 (April – June) NHSGGC surveillance

In the last published reporting quarter (April - June 2016), NHSGGC reported **25.3** CDI cases per 100,000 OBD (87 patient cases). This is a 37% reduction in the number of cases since the last quarter of 2015. This is **below** the NHS Scotland reported national CDI rate of **27.1** per 100,000 OBD and also **below** the 2017 HEAT requirements. The National HEAT target in ages 15 and over is **32** cases per 100,000 TOBDs.

Quarter 3 (July – September 2016) local surveillance status

Local surveillance for Q3-16 is complete and there have been **121** reported cases shown in figure 4 above.

Local investigation has identified that a large proportion of these cases **were not** hospital acquired (n= 78; 64%), although many individuals had received recent antimicrobial therapy or Proton Pump Inhibitor medication, which reduces stomach acid production and may be associated with an increased risk of CDI acquisition. Improvement interventions surrounding prescribing awareness of these findings has been established and further stratification of CDI cases has been put in place (enhanced surveillance) to investigate if recent hospitalisation has played a part in CDI acquisition.

From October the definition IPCT's will apply for CDI patients has 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 patients 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.

Enhanced surveillance for the last quarter of 2016 is ongoing, however local surveillance for the first two months shows there are currently 30 hospital acquired infections recorded within GGC, with a breakdown of other origin highlighted in Table 4. This gives a locally estimated rate of 25.3 cases per 100,000 OBDs. A full update for quarter 4 will be provided in the next report.

CDI Cases (October & November)	
Origin	Number of cases
Hospital Acquired	30
Healthcare associated	9
Indeterminate	4
Community Associated	15
Total	58

Table 4 CDI cases 01/10/2016 – 30/11/2016

Outbreaks/Exceptions

There have been four incidents/outbreaks classified as GREEN/AMBER using the Health Protection Scotland (HPS) Hospital Infection Incident Assessment Tool (HIIAT) during this reporting period.

September 2016, Royal Hospital for Children (NICU), *Serratia Marcescens*

12 babies colonised. Last new case identified on 12.09.16. Last IMT 19.09.16. HIIAT GREEN. . Healthcare Associated Infection Outbreak Reporting Template (HAIORT) updated following last IMT and sent to HPS.

September 2016, Royal Hospital for Children (PICU), *Serratia Marcescens*

6 patients reported with *Serratia marcescens*. HIIAT Green at IMT on 04/10/2016. Typing confirmed all cases were different types.

September 2016, Glasgow Royal Infirmary, CDI Trigger ICU West

2 HAI CDI within a 2 week period in ICU West. HPS CDI Trigger tool implemented. Both specimens sent for typing, and were different ribotypes. HAIIT – Green.

October 2016, Royal Alexandra Hospital, Norovirus

3 wards were closed during October (3, 5 & 7) Control measures implemented in all 3 affected wards. 2 Outbreak meetings held. Confirmed Norovirus in wards 3 and 7. HIIAT AMBER reported to HPS. HAIORT completed and sent to HPS.

Norovirus

Norovirus activity was reported in one hospital with 2 wards closed in September 2016 and in three hospitals with 6 wards closed in October 2016.

Month	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16
Ward Closures	1	3	2	2	2	3	6	13	3	1	3	2	6
Bed Days Lost	0	19	14	16	15	45	155	250	76	6	5	49	169

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/gjz/norovirusurveillance.aspx>

From mid November the number of cases within our NHSGGC hospitals will be reported daily to senior managers and Public Health to provide prospective information on Norovirus activity throughout the winter.

Cleaning and the Healthcare Environment

All areas within NHSGGC scored **green (>90%)** in the most recent report on the National Cleaning Specification. It should be noted that data has been combined for Gartnavel General, Beatson Oncology and Homeopathic Hospital for the rates in the Gartnavel General report card. Phased migration of wards and services from Victoria Infirmary, Western Infirmary, old Southern General Hospital and some Gartnavel General Hospital specialities to the new Queen Elizabeth University Hospital, commenced April 2015. As of May 2015, previous Southern General Hospital areas, including Maternity Unit, Institute of Neurosciences, Langlands Unit and WestMARC will be reported under the new Queen Elizabeth University Hospital.

Healthcare Environment Inspectorate

There were two unannounced HEI/HAI visits during August and September 2016. The following is a summary of the key recommendations/requirements and actions taken by NHSGGC to rectify.

Gartnavel General Hospital

The report for the unannounced HEI / HAI visit to Gartnavel General Hospital on 25 August 2016 was published on 2 November 2016. 2 requirements were listed. The requirements and action taken were as follows;

Requirement 1

NHS Greater Glasgow and Clyde must ensure that all reusable patient equipment in the theatre department, including mattresses and pressure relieving devices, are effectively managed to ensure they are safe and clean. This must include providing all theatre staff with clear guidance on their roles and responsibilities for the management of reusable patient equipment

Action

Daily cleaning checklists have been reviewed and updated to make them more appropriate for the theatre setting. These checklists were adapted to include assessing mattresses and positioning pieces for damage. Instructions on the form direct staff to remove damaged or contaminated items from use and report these to the senior charge nurse for the theatre immediately. The senior charge nurse is then to inform the lead nurse or services manager and note that this action has been taken.

Requirement 2

NHS Greater Glasgow and Clyde must ensure that positioning pieces used within the theatre department are clean and free from damage.

Action

All positioning pieces have been checked and any that were damaged have been replaced. The process described above provides an escalation pathway for reporting and replacing any damaged

equipment in future. Cleaning checklists are in place to ensure that equipment is clean and ready for next patient use.

Royal Hospital for Children

The report for the unannounced HEI / HAI visit to the Royal Hospital for Children on 7 & 8 of September was published on 16 November 2016. 2 requirements were listed. The requirements and action taken were as follows;

Requirement 1

NHS Greater Glasgow and Clyde must provide a safe and clean environment in the accident and emergency department and ensure:

- a) high levels are clean, minimising the risk of cross-infection
- b) department is cleaned and monitored in-line with NHS Scotland Health Facilities Scotland's National Cleaning Services specification and facilities management tool (2009).
- c) senior charge nurses are informed of the domestic monitoring results

Action

Retraining of domestic staff and Supervisors has been undertaken to reinforce standards of cleanliness required. Additional quality monitoring of all areas is in place. Cleaning codes have been amended with a B code specification now operational within all Accident & Emergency Areas. Monitoring of standards is undertaken routinely. A review of Senior Charge Nurse contacts has been undertaken to ensure cleaning scores are shared electronically with the appropriate contacts for every area. Domestic Supervisors are discussing monitoring outcomes and any associated rectifications with Senior Charge Nurses following every audit.

Requirement 2

NHS Greater Glasgow and Clyde must ensure that all used mop heads are appropriately bagged to minimise the risk of cross contamination.

Action

Following the HEI inspection, an interim system of disposable mops for use in isolation areas was introduced. These mops are single use and disposed of via clinical waste streams after use.

What the hospital did well:

- Staff adherence with hand hygiene was good.
- Staff knowledge of standard infection control precautions was good.
- Staff completion of HAI-related education was good.

There was an unannounced HEI/HAI to the Princess Royal Maternity on the 19 & 20th of October. The report for this visit will be published on the 11th January 2016.

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/he_i_reports.aspx

Other HAI Related Activity

Point Prevalence Survey 2016

3835 patients had their case notes reviewed by a member of the IPCT and an antimicrobial pharmacist. All acute sites were surveyed and a proportion of mental Health In patient sites (25%). Local analysis would suggest that overall GGC prevalence of infection amongst in patients has improved from the last published survey in 2011

Statistical Process Control Charts

All Hospital Level Statistical Process Control Charts 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.

Surgical Site Infection (SSI) Surveillance

NHSGGC participates in the Surgical Site Infection (SSI) surveillance programme that is mandatory in all NHS boards in Scotland. All NHS boards are required to undertake surveillance for hip arthroplasty and caesarean section procedures as per the mandatory requirements of HDL (2006) 38 and CEL (11) 2009. Post discharge surveillance (PDS) until day 10 post operation is also carried out for all caesarean sections performed, with the assistance of our Community Midwifery colleagues.

Health Protection Scotland last available quarter (April-June 2016)

Category of procedure	Operations	Infections	NHSGGC SSI rate (%)	NHSGGC 95% CI	National dataset SSI rate (%)	National 95% CI
Caesarean section	1425	22	1.5	(1.0, 2.3)	1.7	(1.3, 2.1)
Hip arthroplasty	426	4	0.9	(0.3, 2.3)	0.7	(0.4, 1.1)

Table 6. SSI rates for Caesarean section (inpatient and PDS to day 10), Hip arthroplasty (inpatient and readmission to day 30) procedures within NHS Greater Glasgow & Clyde, 01/04/2016 – 30/06/2016.

For the last available reporting quarter (April - June 2016), the Surgical Site Infection rate for hip arthroplasty was marginally above the national average. It should be noted that overall infection numbers are very low and are within local and national confidence intervals. A collaborative local review of these cases has been undertaken and a local improvement action plan has been instigated and is ongoing.

Actions already put in place:

- Review of theatre design and realignment of practices
- Rewritten dress code and signage
- Ring fencing of beds on one elective ward
- Information to patients regarding showering on day of operation
- Process for escalation of ventilation failures
- Antibiotic prophylaxis, monitoring of body temperature and blood sugar control audits in place
- Wound dressing standardised and kept in place for 48 hours
- Standardisation of iodine impregnated drapes as drapes of choice
- Hand hygiene audits and education
- Ward and theatre Standard Infection Control Precautions (SICPS) audits

Further actions identified:

- Review of Antibiotic prophylaxis particularly in high BMI patients
- Implementation of Chlorhexidine 2% in 70% isopropyl alcohol as the skin preparation solution of choice – to be standardised across orthopaedics (HPS recommendation).
- Consideration should be given to screening for Meticillin Sensitive *Staphylococcus aureus* (MSSA) in elective patients

Ongoing communication:

Information on SSIs are reported prospectively to the local clinical teams across NHSGGC and the IPC Surveillance team initiate a review process with the clinical team when two or more SSIs are identified within the same theatre, performed by the same operator, same organism isolated from an aseptically obtained culture or other mitigating factors.

This enables early review of any remedial issues which may have contributed to SSI development and provides a standardized approach to SSI reduction across our Board.

SSI rates for Caesarean section procedure category are below the national average, and remain within national and local confidence intervals.

It should be noted that most SSIs in this procedure category were superficial and were detected by community midwives following the patient's discharge home.

Q3 (Jul - Sept 2016) Local SSI surveillance status

Surveillance is now complete for the quarter, and local surveillance data for July to September 2016 is displayed in table 7.

Surveillance of the following procedures commenced in July 2016

Large Bowel surgery (GGC wide)

Major Vascular surgery (QEUH)

Craniotomy, Craniectomy & 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 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.

Quarter 3 (Jul- Sep 2016) : Local SSI Surveillance status				
	Category of procedure	Operations	Infections	NHSGGC SSI rate (%)
Mandatory	Caesarean section	1378	25	1.8
	Hip arthroplasty	390	5	1.3
Recommended	Knee arthroplasty	441	0*	0.0
	Repair of neck of femur	320	4*	1.3
	Large Bowel Surgery	218	6	2.8
	Major Vascular Surgery	197	4	2.0
Additional INS, QEUH only	Cranial Surgery	169	3	1.8
	Spinal Surgery	205	5	2.4

Table 7. Local SSI Surveillance 01/07/16 – 30/09/16 (* in-patient infections only)

Q4 (October – December) 2016 Local SSI surveillance activity

30 day readmission surveillance is not yet complete for the quarter and updates will be provided in subsequent reports

Surgical Site Infection Surveillance (In-patient and 30 day readmission) is ongoing for the following surgical procedures:

Hip arthroplasty

Knee arthroplasty

Repair of Neck of Femur

Caesarean Section (In-patient & PDS to day 10)

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 out with 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 and Health Facilities Scotland. 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. *Staphylococcus aureus* bacteraemia (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 Health Facilities Scotland website:

<http://www.hfs.scot.nhs.uk/online-services/publications/hai/>

Understanding the Report Cards – 'Out of Hospital Infections'

Clostridium difficile infections and *Staphylococcus aureus* (including MRSA) bacteraemia cases 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 and. 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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
MRSA	1	1	3	2	4	2	6	1	1	2	2	1
MSSA	39	38	32	41	24	46	37	18	33	37	42	33
Total SABS	40	39	35	43	28	48	43	19	34	39	44	34

Clostridium difficile infection monthly case numbers

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Ages 15-64	22	18	11	9	14	13	12	10	16	9	16	10
Ages 65 plus	39	24	11	21	26	22	21	9	28	30	22	19
Total Ages 15 plus	61	42	22	30	40	35	33	19	44	39	38	29

Hand Hygiene Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
AHP	97	98	98	97	97	97	97	97	99	98	98	99
Ancillary	94	95	94	94	93	93	92	94	91	95	92	92
Medical	95	96	95	94	96	96	95	96	95	95	96	96
Nurse	99	99	99	99	99	99	98	98	99	99	99	99
Board Total	98	98	98	97	98	98	97	97	98	98	98	98

Cleaning Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	95.9	95.9	95.6	96.2	95.8	95.6	95.8	95.8	95.7	95.9	95.9	96.1

Estates Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	96.0	97.4	95.6	96.1	97.7	97.5	97.1	97.6	98.4	98.5	98.4	99.0

GLASGOW ROYAL INFIRMARY / PRINCESS ROYAL MATERNITY

REPORT CARD

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
MRSA	0	0	0	0	1	0	0	0	0	0	0	0
MSSA	6	6	3	6	2	6	6	2	2	2	3	2
Total SABS	6	6	3	6	3	6	6	2	2	2	3	2

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Ages 15-64	2	5	3	0	2	1	2	1	3	0	5	1
Ages 65 plus	5	2	4	4	6	6	2	0	3	3	2	2
Ages 15 plus	7	7	7	4	8	7	4	1	6	3	7	3

Cleaning Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	96.1	95.9	95.7	96.0	96.0	95.9	96.0	95.9	95.6	95.8	95.5	95.7

Estates Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	98.9	99.4	98.9	99.5	99.6	99.5	99.5	99.6	99.7	99.6	99.6	99.7

**ROYAL ALEXANDRA HOSPITAL
REPORT CARD**

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
MRSA	0	0	0	0	1	0	0	0	1	0	0	0
MSSA	2	2	1	3	1	2	0	0	2	1	3	2
Total SABS	2	2	1	3	2	2	0	0	3	1	3	2

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Ages 15-64	1	0	0	0	0	0	1	0	0	0	1	1
Ages 65 plus	3	5	0	0	2	1	0	3	3	0	1	2
Ages 15 plus	4	5	0	0	2	1	1	3	3	0	2	3

Cleaning Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	96.5	96.7	96.5	96.8	96.2	96.5	96.7	96.0	96.8	96.6	95.9	96.3

Estates Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	99.3	98.5	98.9	99.0	98.5	99.2	98.9	97.7	98.9	97.3	98.7	98.1

**INVERCLYDE ROYAL HOSPITAL
REPORT CARD**

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	1	0	1	1	1	0	1	0	1	0	0	0
Total SABS	1	0	1	1	1	0	1	0	1	0	0	0

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Ages 15-64	0	0	0	2	0	0	0	1	0	0	0	0
Ages 65 plus	0	0	1	0	2	1	0	0	0	0	3	0
Ages 15 plus	0	0	1	2	2	1	0	1	0	0	3	0

Cleaning Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	96.3	95.3	95.6	97.2	95.2	96.0	96.7	95.4	95.8	95.9	95.5	95.8

Estates Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	98.6	96.6	97.7	98.5	97.3	97.3	98.4	96.6	97.1	97.5	97.2	97.2

**VALE OF LEVEN HOSPITAL
REPORT CARD**

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	1	0	0	1	0	0	0	1	0	0	0
Total SABS	0	1	0	0	1	0	0	0	1	0	0	0

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	2	0	0	0	0	0	1	0	1	0	0	2
Ages 15 plus	2	0	0	0	0	0	1	0	1	0	0	2

Cleaning Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	97.0	96.8	96.5	96.9	97.0	97.2	97.0	97.0	97.3	97.0	97.4	97.4

Estates Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	99.7	99.4	99.3	99.4	99.3	99.6	99.3	99.2	99.1	99.5	99.5	99.5

**GARTNAVEL GENERAL HOSPITAL
REPORT CARD**

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

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
MRSA	0	0	0	1	0	0	0	0	0	0	0	0
MSSA	0	2	0	1	0	3	0	1	2	0	1	2
Total SABS	0	2	0	2	0	3	0	1	2	0	1	2

Clostridium difficile infection monthly case numbers

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Ages 15-64	0	0	0	0	1	0	0	1	0	0	1	0
Ages 65 plus	2	1	1	2	1	1	2	0	3	0	0	1
Ages 15 plus	2	1	1	2	2	1	2	1	3	0	1	1

Cleaning Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	97.2	97.1	97.0	96.8	96.6	96.3	96.1	96.6	97.3	97.0	96.7	96.5

Estates Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	98.1	98.4	98.6	99.1	98.2	99.0	98.6	99.0	98.7	99.1	99.2	99.0

QUEEN ELIZABETH UNIVERSITY HOSPITAL

REPORT CARD

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
MRSA	0	1	0	0	0	0	1	0	0	0	0	1
MSSA	1	6	4	2	2	7	2	4	4	7	11	4
Total SABS	1	7	4	2	2	7	3	4	4	7	11	5

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Ages 15-64	2	2	0	1	0	2	2	3	2	2	1	1
Ages 65 plus	7	1	0	1	3	3	6	1	2	3	3	5
Ages 15 plus	9	3	0	2	3	5	8	4	4	5	4	6

Cleaning Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	94.8	95.2	93.9	94.3	95.0	94.0	95.0	95.3	95.5	95.9	95.1	95.9

Estates Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	99.9	99.9	99.8	99.5	99.9	99.8	99.9	99.8	99.9	99.8	99.8	99.7

ROYAL HOSPITAL FOR CHILDREN

REPORT CARD

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	1	2	1	2	0	3	2	1	1	0	1	0
Total SABS	1	2	1	2	0	3	2	1	1	0	1	0

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Ages 15-64	0	0	0	0	0	0	0	0	0	0	1	0
Ages 15 plus	0	0	0	0	0	0	0	0	0	0	1	0

Cleaning Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	96.8	96.2	96.4	96.6	95.8	96.5	96.8	96.0	96.9	96.5	95.8	97.0

Estates Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Board Total	99.6	99.8	99.8	99.8	99.7	99.6	99.7	99.3	99.8	99.5	99.6	99.8

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

The community hospitals covered in this report card include:

- Lightburn Hospital
- Drumchapel 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**

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
MRSA	0	0	0	0	1	0	0	0	0	0	0	0
MSSA	2	0	1	2	1	1	2	0	0	2	1	1
Total SABS	2	0	1	2	2	1	2	0	0	2	1	1

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	0	0	0	1	1	0	1	0	0	0	0	0
Ages 15 plus	0	0	0	1	1	0	1	0	0	0	0	0

**NHS GREATER GLASGOW & CLYDE
OUT OF HOSPITAL REPORT CARD**

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
MRSA	1	0	3	1	1	2	5	1	0	2	2	0
MSSA	26	19	21	24	16	24	24	10	20	25	22	22
Total SABS	27	19	24	25	17	26	29	11	20	27	24	22

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Ages 15-64	17	11	8	6	11	10	7	4	11	7	7	7
Ages 65 plus	20	15	5	13	11	10	9	5	16	24	13	7
Ages 15 plus (Total)	37	26	13	19	22	20	16	9	27	31	20	14

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

59% of all CDI cases reported in NHSGGC between November 2015 and October 2016 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 November 2015 and October 2016 are attributed as *Out of Hospital* infections.

GLOSSARY

ACDP	Advisory Committee on Dangerous Pathogens
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).
BICC	Board Infection Control Committee
CDI	<i>Clostridium difficile</i> Infection
CEL	Chief Executive Letter issued by Scottish Government Health Directorates (SGHD)
CMO	Chief Medical Officer
CVC	Central Vascular Catheter
<i>C. difficile</i>	<i>Clostridium difficile</i> also referred to as <i>C. diff</i> is a Gram-positive spore-forming anaerobic bacteria. <i>C. difficile</i> is the commonest 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.
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
HAI SCRIBE & HBN 30	Scottish Health Facilities Note 30: version 3. Infection Control in Built Environment: Design and Planning.
HCW	Healthcare Worker
HDL	Health Department Letter
HEAT Target	Health Efficiency and Access to Treatment. Targets set by the Scottish Government.
HH	Hand Hygiene
HIS	Health Improvement Scotland
HPS	Health Protection Scotland
ICN/T/O/D/M	Infection Control Nurse / Team / Officer / Doctor / Manager
ICP	Infection Control Programme
KPI	Key Performance Indicator
LHBC	Local Health Board Co-ordinator (Hand Hygiene)
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>
NCIC	Nurse Consultant Infection Control
PCAT	Primary Care Audit Tool
PDS	Post Discharge Surveillance (Caesarean Section procedures only)
PFPI	Public Focus Patient Involvement
PHPU	Public Health Protection Unit
PPI	Public Partners Involvement
PVC	Peripheral Vascular Catheter
SAB	<i>Staphylococcus aureus</i> Bacteraemia
SIRN	Scottish Infection Research Network
SOP	Standard Operating Procedure
SPC	Statistical Process Control (Charts)
SPSP	Scottish Patient Safety Programme
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.