

Borders NHS Board



Meeting Date: 5 March 2020

Approved by:	Nicky Berry, Director of Nursing, Midwifery and Acute Services
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HEALTHCARE ASSOCIATED INFECTION PREVENTION AND CONTROL REPORT January 2020	
Purpose of Report:	
The purpose of this paper is to update Board members on the current status of Healthcare Associated Infections (HAI) and infection control measures in NHS Borders.	
Recommendations:	
The Board is asked to note this report.	
Approval Pathways:	
This report does not require approval.	
Executive Summary:	
<p>This report provides an overview for Borders NHS Board of infection prevention and control with particular reference to the incidence of Healthcare Associated Infections (HAI) against Scottish Government targets for infection control.</p> <p>The report provides updates on:-</p> <ul style="list-style-type: none"> ➤ NHS Borders infection surveillance against Scottish Government targets and in comparison with other Boards. ➤ Results from cleanliness monitoring, hand hygiene audit results as well as an update on the Infection Control compliance monitoring programme ➤ Infection Control Workplan update. ➤ An update on outbreaks of respiratory illnesses, gastrointestinal illnesses and Novel Coronavirus (COVID-19) ➤ Antimicrobial Management Team (AMT) update. 	
Impact of item/issues on:	
Strategic Context	This report is in line with the NHS Scotland HAI Action Plan.
Patient Safety/Clinical Impact	Infection prevention and control is central to patient safety
Staffing/Workforce	This assessment has not identified any staffing implications.
Finance/Resources	This assessment has not identified any resource

	implications.
Risk Implications	All risks are highlighted within the paper.
Equality and Diversity	This is an update paper so a full impact assessment is not required.
Consultation	This is a regular bi-monthly update as required by SGHD. As with all Board papers, this update will be shared with the Area Clinical Forum for information.
Glossary	See Appendix A.

Healthcare Associated Infection Reporting Template (HAIRT)

Section 1– Board Wide Issues

This section of the HAIRT covers Board wide infection prevention and control activity and actions. For reports on individual hospitals, please refer to the 'Healthcare Associated Infection Report Cards' in Section 2.

A report card summarising Board wide statistics can be found at the end of section 1

Key Healthcare Associated Infection Headlines for January 2020

- NHS Borders had 14 *Staphylococcus aureus* Bacteraemia (SAB) cases between April 2019 and January 2020. To achieve the HEAT target rate of 24.0 cases or less per 100,000 acute occupied bed days (AOBD) by March 2020, NHS Borders should have no more than 19 cases per year. NHS Borders is on target to achieve this.
- NHS Borders had 17 *Clostridium difficile* infection (CDI) cases between April 2019 and January 2020. To achieve the CDI HEAT target rate of 32.0 cases or less per 100,000 total occupied bed days (TOBD) for patients aged 15 and over, by March 2020, NHS Borders should have no more than 33 cases per year. NHS Borders is on target to achieve this.
- NHS Borders has plans in place for testing and caring for suspected and confirmed Coronavirus patients.

Staphylococcus aureus Bacteraemia (SAB)

See Appendix A for definition.

Figure 1 below shows that Hospital Acquired Infection accounted for 28.6% of SAB cases between April and January 2020. The definition of hospital acquired infection is where a positive blood culture sample is obtained from a patient who has been in hospital for more than 48 hours or where the organism is considered to be a contaminant when the sample was taken in hospital.

There were 13 cases of Meticillin-sensitive *Staphylococcus aureus* (MSSA) and 1 case of Meticillin-resistant *Staphylococcus aureus* (MRSA).

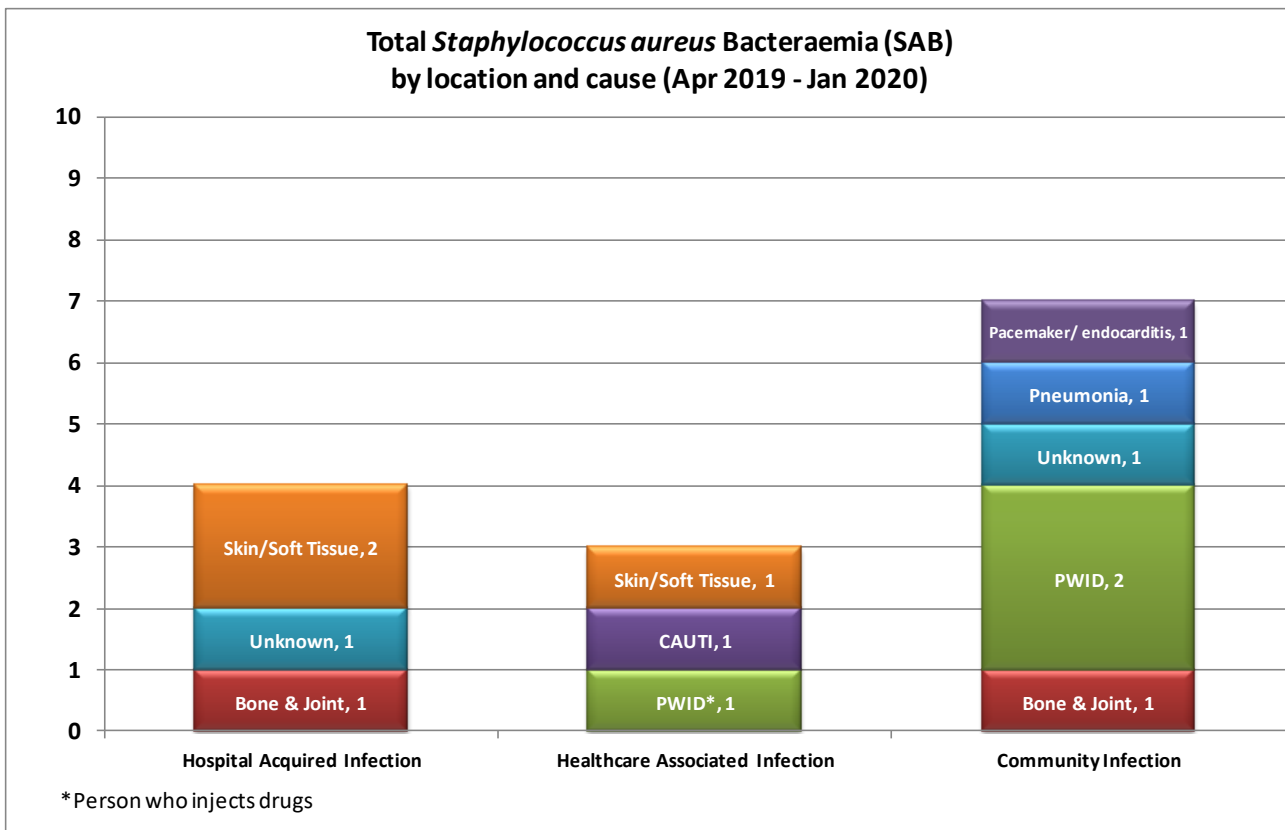


Figure 1: SAB cases by location and cause (April 2019 – January 2020)

Figure 2 shows a Statistical Process Control (SPC) chart showing the number of days between each SAB case. The reason for displaying the data in this type of chart is due to SAB cases being rare events with low numbers each month.

Traditional charts which show the number of cases per month can make it more difficult to spot either improvement or deterioration. These charts highlight any statistically significant events which are not part of the natural variation within our health system.

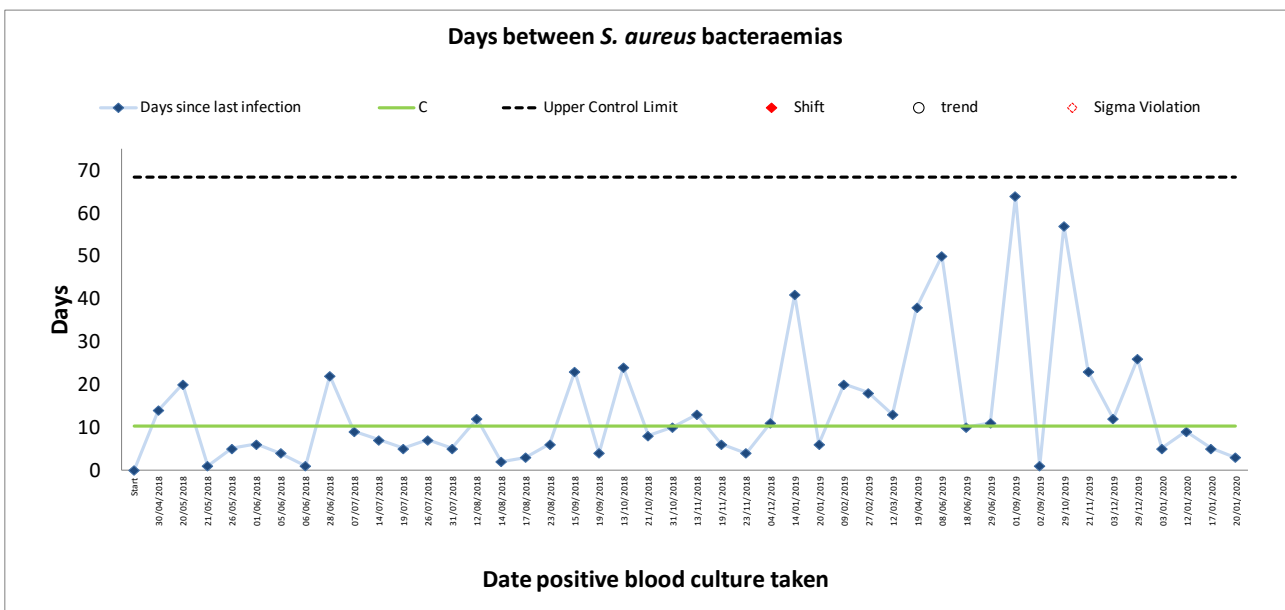


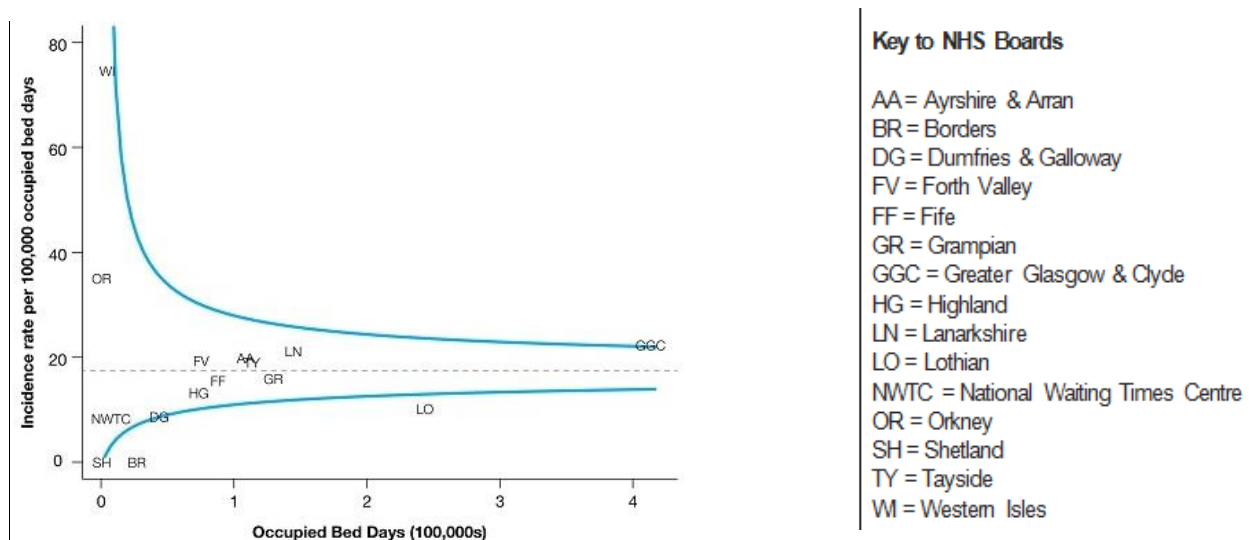
Figure 2: NHS Borders days between SAB cases (April 2018 – January 2020)

In interpreting Figure 2, it is important to remember that as this graph plots the number of days between infections, we are trying to achieve performance above the green average line.

Every SAB case is subject to a review which includes a feedback process to the clinicians caring for the patient. Any learning is translated into specific actions which are added to the Infection Control Work Plan with progress critically reviewed by the Infection Control Committee.

Health Protection Scotland produces quarterly reports showing infection rates for all Scottish Boards. Figure 3 below shows the most recently published data as a funnel plot of healthcare associated SAB cases as rates per 100,000 Total Occupied Bed Days (TOBDs) for all NHS boards in Scotland in Quarter 3 (Jul-Sep 2019).

During this period, NHS Borders (BR) had a rate of 0.0 which was below the Scottish average rate of 17.5.



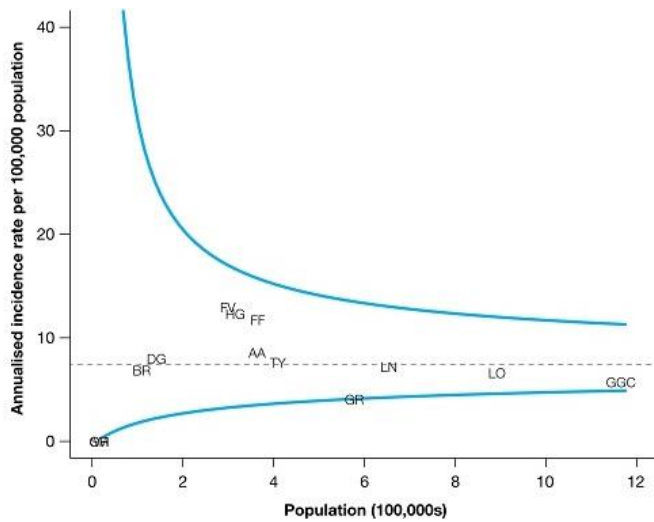
1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.

1. NHS Ayrshire & Arran and NHS Tayside overlap.

Figure 3: Funnel plot of SAB incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS Boards in Scotland in Q3 2019

A funnel plot chart is designed to distinguish natural variation from statistically significant outliers. The funnel narrows on the right of the graph as the larger health Boards will have less fluctuation in their rates due to greater Total Occupied Bed Days. Figure 3 shows that NHS Borders was below the blue funnel because there were no cases in Q3 2019, therefore we are a statistical outlier along with NHS Shetland. If we were within the blue funnel we would not be a statistical outlier.

Figure 4 below shows a funnel plot of community associated SAB cases as rates per 100,000 population for all NHS boards in Scotland in Q3 2019.



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.

1. NHS Orkney, NHS Shetland and NHS Western Isles overlap.

Figure 4: Funnel plot of SAB incidence rates (per 100,000 population) in community associated infection cases for all NHS Boards in Scotland in Q3 2019

During this period NHS Borders (BR) had a rate of 6.9 which was below the Scottish average rate of 7.4.

Clostridium difficile infections (CDI)

See Appendix A for definition.

Figure 5 below shows a Statistical Process Control (SPC) chart showing the number of days between each CDI case. As with SAB cases, the reason for displaying the data in this type of chart is due to CDI cases being rare events with low numbers each month.

The graph shows that there have been no statistically significant events since the last Board update.

As with SAB cases, every *Clostridium difficile* infection (CDI) case is subject to a review which includes a feedback process to the clinicians caring for the patient. Any learning is translated into specific actions which are added to the Infection Control Work Plan.

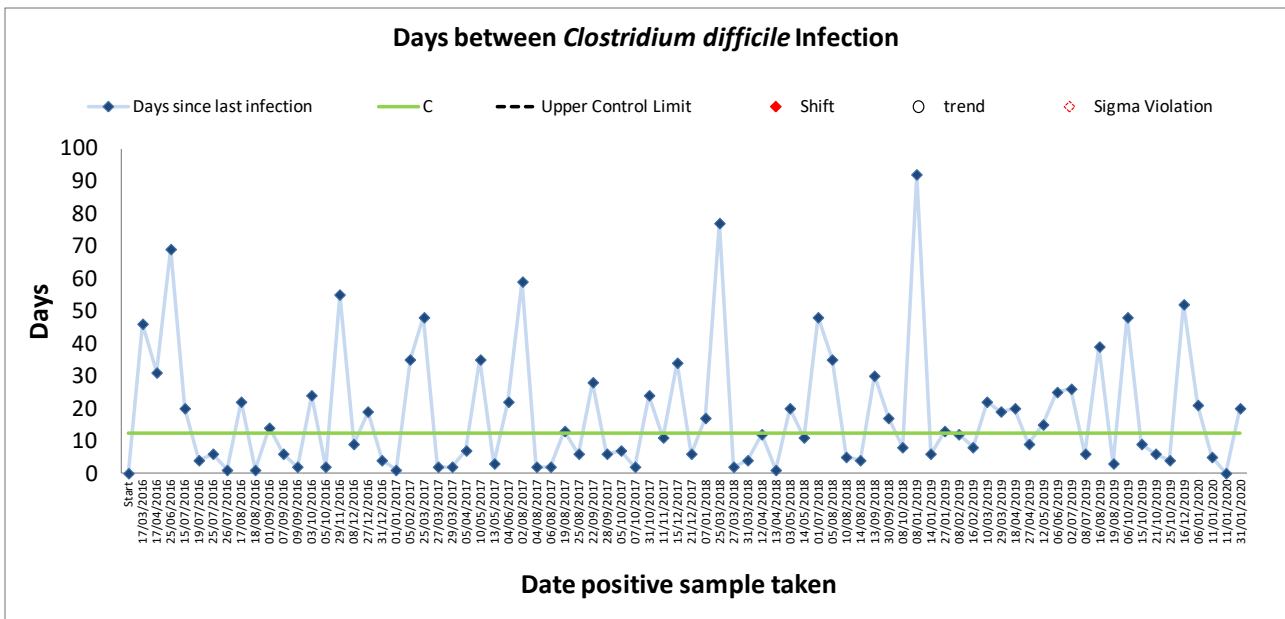
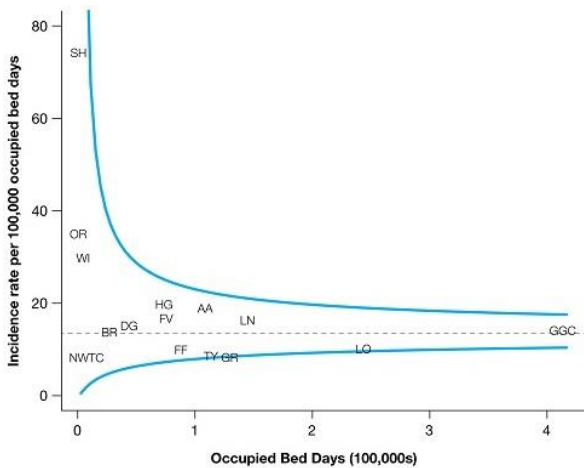


Figure 5: NHS Borders days between CDI cases (March 2016 – January 2020)

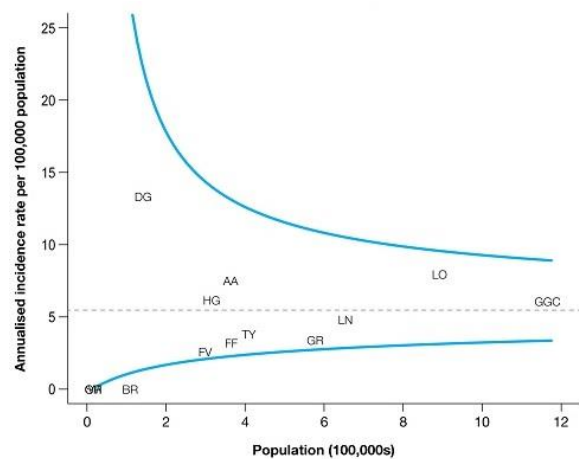
Figure 6 below shows a funnel plot of CDI incidence rates (per 100,000 TOBD) of healthcare associated infection cases for all NHS Boards in Scotland in Q3 2019. The graph shows that NHS Borders (BR) had a rate of 13.8 which is above the Scottish average rate of 13.5. However, NHS Borders is not a statistical outlier from the rest of Scotland.

Figure 7 below shows a funnel plot of CDI incidence rates (per 100,000 population) of community associated infection cases for all NHS Boards in Scotland in Q3 2019. The graph shows that NHS Borders (BR) had a rate of 0.0 which is below the Scottish average rate of 5.5.



• Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days. In formation Services Division ISD(S)1.

Figure 6: Funnel plot of CDI incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS Boards in Scotland in Q3 2019



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.
1. NHS Orkney, NHS Shetland and NHS Western Isles overlap.

Figure 7: Funnel plot of CDI incidence rates (per 100,000 population) in community associated infection cases for all NHS Boards in Scotland in Q3 2019

Hand Hygiene

For supplementary information see Appendix A

The hand hygiene data tables contained within the NHS Borders Report Card (Section 2 p.12) are generated from wards conducting self-audits.

Hand hygiene continues to be monitored by each clinical area. The Infection Prevention and Control Team follow up with any area which either fail to submit audit results or which fall below 90% for two consecutive months. This information is reported in the Infection Control monthly report which is distributed to management, governance groups, Senior Charge Nurses and Clinical Directors.

Infection Prevention and Control Compliance Monitoring Programme

The Infection Prevention and Control Team (IPCT) undertake a programme of Standard Infection Control Precautions (SICPs) audits to monitor compliance with the National Infection Prevention and Control Manual; each area is audited approximately every 18 months.

The IPCT also maintain a programme of monthly spot checks to monitor that systems and processes are operating as intended in the interim period between full SICPs audits.

NHS Borders is undertaking a number of actions to improve the recent increase in the number of issues identified during the monthly spot checks. This includes supporting the Senior Charge Nurse and Clinical Nurse Manager with any improvement work and additional education sessions are being provided by the Infection Prevention and Control Team.

Cleaning and the Healthcare Environment

For supplementary information see Appendix A.

The data presented within the NHS Borders Report Card (Section 2 p.12) is an average figure across the sites using the national cleaning and estates monitoring.

As reported at the last Board meeting, validation audits of cleanliness and estates monitoring scores have been undertaken jointly by an Estates Manager, Domestic Manager, and Infection Control. Five clinical areas in BGH were audited in October and the outcome provided assurance that routine cleanliness scores are genuinely representative. However, the validation study identified that estates issues do not seem to be adequately reflected in estates monitoring scores resulting in false assurance.

The team agreed to continue with the validation audits throughout December and January to monitor effectiveness as well as identifying improvement work which includes streamlining the audit process and reducing duplication.

2019/20 Infection Control Workplan

As of 31st January 2020, 82% are completed with 0% overdue.

Outbreaks

- **Gastrointestinal illness**

- Borders General Hospital

- There have been 6 reported outbreaks of gastrointestinal illness in the BGH since the last board update.
 - None of these outbreaks were confirmed Norovirus.
 - Each outbreak resulted in the closure of 1 bay.

- Community Hospitals

- There have been 3 reported outbreaks of gastrointestinal illness in Community Hospitals since the last board update.
 - 2 of these outbreaks were confirmed Norovirus.

- **Respiratory Illness**

- Borders General Hospital

- There have been 2 reported outbreaks of respiratory illness in the BGH since the last board update.
 - Both outbreaks were confirmed Influenza A.
 - Both outbreaks resulted in the closure of 1 bay.

- Community Hospitals

- There has been 1 reported outbreak of respiratory illness in Community Hospitals since the last board update
 - The outbreak was confirmed Influenza A
 - The outbreak resulted in the closure of 1 bay.

- **Novel Coronavirus (COVID-19)**

In late December 2019, the People's Republic of China reported an outbreak of pneumonia due to unknown cause in Wuhan City, Hubei Province.

In early January 2020, the cause of the outbreak was identified as a new coronavirus, named novel coronavirus (COVID-19). While early cases were likely infected by an animal source in a 'wet market' in Wuhan, ongoing human-to-human transmission is now occurring.

There are a number of coronaviruses that are transmitted from human-to-human which are not of public health concern. However COVID-19 can cause respiratory illness of varying severity. Currently, there is no vaccine and no specific treatment for infection with the virus.

On the 30 January 2020 the World Health Organization declared that the outbreak of COVID-19 constitutes a Public Health Emergency of International Concern.

The infection Prevention and Control team and Occupational Health Team are working together to ensure key frontline staff have full PPE and training in the event of caring for potential and confirmed cases.

Work is progressing to develop pathways across primary, community and secondary care involving all key stakeholders aligning with Health protection guidance on the safe management of patient groups.

NHS Borders Surgical Site Infection (SSI) Surveillance

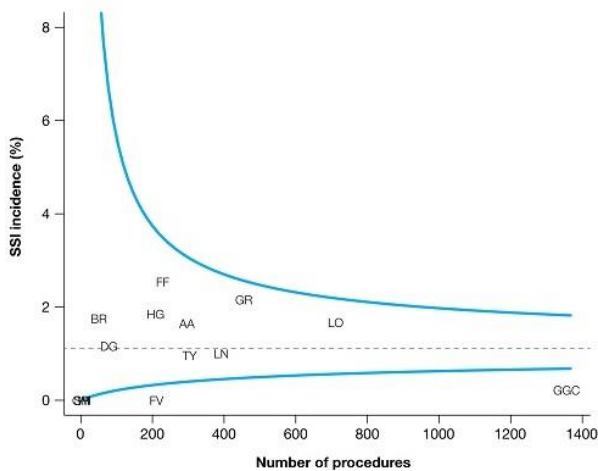
NHS Borders participates in a national infection surveillance programme relating to specific surgical procedures. This is coordinated by Health Protection Scotland (HPS) and uses national definitions and methodology which enable comparison with overall NHS Scotland infection rates.

In the period January 2019 – December 2019, there have been 2 SSIs following colorectal surgery, 6 SSIs following hip arthroplasty, 2 SSIs following knee arthroplasty, 4 SSIs following breast surgery and one SSI following C-Section.

Each SSI case is subject to a full review to identify any learning.

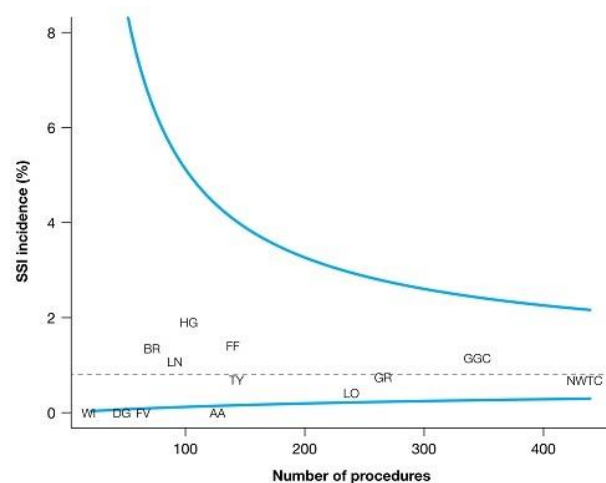
Health Protection Scotland produces quarterly reports showing infection rates for all Scottish Boards. Figure 8 below shows a funnel plot of caesarean section SSI incidence per 100 procedures in Q3 2019. The graph shows that NHS Borders (BR) had a rate of 1.8 which is above the Scottish average rate of 1.1. NHS Borders is not a statistical outlier from the rest of Scotland.

Figure 9 below shows a funnel plot of hip arthroplasty SSI incidence per 100 procedures in Q3 2019. The graph shows that NHS Borders (BR) had a rate of 1.4 which is above the Scottish average rate of 0.8; again NHS Borders is not a statistical outlier from the rest of Scotland.



1. Source of data is Surgical Site Infection Reporting System (SSIRS).
2. NHS Orkney, NHS Shetland and NHS Western Isles overlap.

Figure 8: Funnel plot of caesarean section SSI incidence (per 100 procedures) in inpatients and Post Discharge Surveillance (PDS) to day 10 for all NHS Boards in Scotland in Q3 2019



1. Source of data is Surgical Site Infection Reporting System (SSIRS).

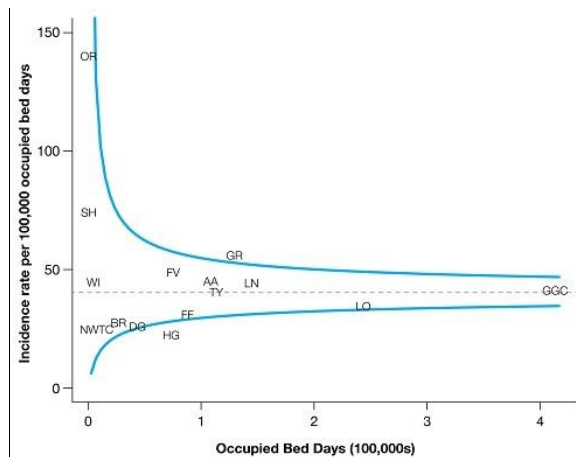
Figure 9: Funnel plot of hip arthroplasty SSI incidence (per 100 procedures) in inpatients and on readmission to day 30 for all NHS Boards in Scotland in Q3 2019

Escherichia coli (E. coli) Bacteraemia (ECB)

Health Protection Scotland produces quarterly reports showing infection rates for all Scottish Boards. Figure 10 below shows a funnel plot of ECB incidence rates (per

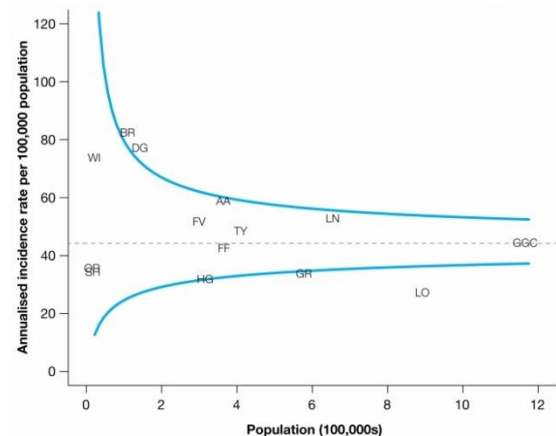
100,000 TOBD) for healthcare associated infection cases in all NHS Boards in Scotland in Q3 2019. NHS Borders (BR) had a rate of 27.6 for healthcare associated infection cases which is below the Scottish average rate of 40.3.

Figure 11 below shows a funnel plot of ECB incidence rates (per 100,000 population) for community associated infection cases in all NHS Boards in Scotland in Q3 2019. NHS Borders (BR) had a rate of 82.6 for community associated infection cases which is above the Scottish average rate of 44.2. Community cases had no prior healthcare intervention in the preceding 30 days so the cause of this high rate is not known.



Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.

Figure 10: Funnel plot of ECB incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS Boards in Scotland in Q3 2019



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & NRS mid-year population estimates.
2. NHS Orkney and NHS Shetland overlap

Figure 11: Funnel plot of ECB incidence rates (per 100,000 population) in community associated infection cases for all NHS Boards in Scotland in Q3 2019

Antimicrobial Management Team (AMT) Update

The AMT is responsible for maintaining an antimicrobial stewardship programme across NHS Borders.

Antibiotic Use Indicators

New antibiotic use indicators were approved by Scottish Government in October 2019 (CNO Letter, 10th October 2019, Standards on Healthcare Associated Infections and Indicators on Antibiotic Use). They consist of:

1. *A 10% reduction of antibiotic use in Primary Care by 2022*

If the current trajectory continues, NHS Borders is on course to meet this indicator.

2. *Use of intravenous antibiotics in secondary care defined as DDD / 1000 population / day will be no higher in 2022 than it was in 2018.*

If the current trajectory continues, NHS Borders is on course to meet this indicator.

3. *Use of World Health Organisation (WHO) Access antibiotics (NHSE list) $\geq 60\%$ of total antibiotic use in Acute hospitals by 2022*

WHO have categorized Antibiotics to emphasize the importance of their optimal uses and potential for antimicrobial resistance. Antibiotics classified on the “Access” list have activity against a wide range of commonly encountered susceptible pathogens while also showing lower resistance potential than antibiotics in the other groups.

NHS Borders does not meet this indicator currently. Access antibiotics comprised 48.5% of total antibiotic use in acute NHS Borders hospitals during Jul-Sep 2019 (most recent data available). NHS Borders AMT will investigate the reasons behind this and how it should be addressed.

Antimicrobial Stewardship

NHS Borders had the highest number of “Antimicrobial Guardians” <https://antibioticguardian.com/> per population, in Scotland (latest data for 2018). The Antibiotic Guardian campaign asks individuals to choose one simple pledge about how they’ll make better use of antibiotics and help save these vital medicines from becoming obsolete. NHS Borders AMT encourages participation in this campaign and it was again highlighted locally during World Antibiotic Awareness Week in November 2019.

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 NHS24 website:

Clostridium difficile :http://www.nhs24.com/content/default.asp?page=s5_4&articleID=2139§ionID=1

Staphylococcus aureus :http://www.nhs24.com/content/default.asp?page=s5_4&articleID=346

MRSA:http://www.nhs24.com/content/default.asp?page=s5_4&articleID=252§ionID=1

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. Each hospital 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 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 BORDERS BOARD REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020
MRSA	0	0	0	0	0	0	0	0	0	1	0	0
MSSA	2	1	1	0	3	0	0	2	1	0	2	4
Total SABS	2	1	1	0	3	0	0	2	1	1	2	4

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

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020
Ages 15-64	0	0	1	0	0	0	1	0	1	0	0	2
Ages 65 plus	2	2	1	1	1	2	1	0	3	0	1	2
Ages 15 plus	2	2	2	1	1	2	2	0	4	0	1	4

Hand Hygiene Monitoring Compliance (%)

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019*	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2019**
AHP	100	99	100	100	98	95	100	96	100	100	98	-
Ancillary	99	94	97	97	96	96	96	97	94	100	100	-
Medical	99	99	99	99	98	100	99	97	98	95	100	-
Nurse	100	100	95	98	98	98	99	98	99	98	99	-
Board Total	100	98	98	99	98	97	99	97	98	98	99	-

*LANQIP reporting system issues, not all areas were able to submit data within the timescale.

** LANQIP reporting system unavailable, no report available.

Cleaning Compliance (%)

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019*	Nov 2019	Dec 2019	Jan 2020
Board Total	96.1	95.9	97.4	96.7	95.9	96.1	97.1	94.5	97.8	94.1	95.8	94.7

*BGH only; Community, Mental Health and Non-clinical areas not audited in October 2019

Estates Monitoring Compliance (%)

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019*	Nov 2018	Dec 2018	Jan 2019
Board Total	100	99	98.4	97.1	99.8	98.5	99.4	98.6	98.6	97.2	98.7	97.8

*BGH only; Community, Mental Health and Non-clinical areas not audited in October 2019

BORDERS GENERAL HOSPITAL REPORT CARD***Staphylococcus aureus* bacteraemia monthly case numbers**

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	1	0	0	0	2	0	0	0	0	0	0	2
Total SABS	1	0	0	0	2	0	0	0	0	0	0	2

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

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	2	1	0	1	1	2	1	0	2	0	0	1
Ages 15 plus	2	1	0	1	1	2	1	0	2	0	0	1

Cleaning Compliance (%)

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020
Board Total	96.8	96.9	97.5	97.3	97.6	97.7	97.5	97.2	97.8	96.1	95.8	96.8

Estates Monitoring Compliance (%)

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020
Board Total	99.9	99.3	99.6	99.8	99.8	99.9	99.9	99.6	98.6	98.7	97.9	98.6

NHS COMMUNITY HOSPITALS REPORT CARD

The community hospitals covered in this report card include:

- Haylodge Community Hospital
- Hawick Community Hospital
- Kelso Community Hospital
- Knoll Community Hospital
- Melburn Lodge

Staphylococcus aureus bacteraemia monthly case numbers

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	0	0	0	0	0	0	0	0	0	0	0
Total SABS	0	0	0	0	0	0	0	0	0	0	0	0

Clostridium difficile infection monthly case numbers

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	0	0	1	0	0	0	0	0	0	0	0	0
Ages 15 plus	0	0	1	0	0	0	0	0	0	0	0	0

NHS OUT OF HOSPITAL REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020
MRSA	0	0	0	0	0	0	0	0	0	1	0	0
MSSA	1	1	1	0	1	0	0	0	1	0	2	2
Total SABS	1	1	1	0	1	0	0	0	1	1	2	2

Clostridium difficile infection monthly case numbers

	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020
Ages 15-64	0	0	1	0	0	0	1	0	1	0	0	2
Ages 65 plus	0	1	0	0	0	0	0	0	1	0	1	1
Ages 15 plus	0	1	1	0	0	0	1	0	2	0	1	3

Definitions and Supplementary Information

Staphylococcus aureus Bacteraemia (SAB)

Staphylococcus aureus is an organism which is responsible for a large number of healthcare associated infections, although it can also cause infections in people who have not had any recent contact with the healthcare system. The most common form of this is Meticillin Sensitive *Staphylococcus Aureus* (MSSA), but the more well known is MRSA (Meticillin Resistant *Staphylococcus Aureus*), which is a specific type of the organism which is resistant to certain antibiotics and is therefore more difficult to treat. More information on these organisms can be found at:

Staphylococcus aureus : http://www.nhs24.com/content/default.asp?page=s5_4&articleID=346

MRSA: http://www.nhs24.com/content/default.asp?page=s5_4&articleID=252

NHS Boards carry out surveillance of *Staphylococcus aureus* blood stream infections, known as bacteraemia. These are a serious form of infection and there is a national target to reduce them. The number of patients with MSSA and MRSA bacteraemia for the Board can be found at the end of section 1 and for each hospital in section 2. Information on the national surveillance programme for *Staphylococcus aureus* bacteraemia can be found at:

<http://www.hps.scot.nhs.uk/haiic/sshaip/publicationsdetail.aspx?id=30248>

Clostridium difficile infection (CDI)

Clostridium difficile is an organism which is responsible for a large number of healthcare associated infections, although it can also cause infections in people who have not had any recent contact with the healthcare system. More information can be found at:

<http://www.nhs.uk/conditions/Clostridium-difficile/Pages/Introduction.aspx>

NHS Boards carry out surveillance of *Clostridium difficile* infections (CDI), and there is a national target to reduce these. The number of patients with CDI for the Board can be found at the end of section 1 and for each hospital in section 2. Information on the national surveillance programme for *Clostridium difficile* infections can be found at:

<http://www.hps.scot.nhs.uk/haiic/sshaip/ssdetail.aspx?id=277>

Escherichia coli bacteraemia (ECB)

Escherichia coli (*E. coli*) is a bacterium that forms part of the normal gut flora that helps human digestion. Although most types of *E. coli* live harmlessly in your gut, some types can make you unwell. When it gets into your blood stream, *E. coli* can cause a bacteraemia. Further information is available here:

<https://www.gov.uk/government/collections/escherichia-coli-e-coli-guidance-data-and-analysis>

NHS Borders participate in the HPS mandatory surveillance programme for ECB. This surveillance supports local and national improvement strategies to reduce these infections and improve the outcomes for those affected. Further information on the surveillance programme can be found here:

<https://www.hps.scot.nhs.uk/a-to-z-of-topics/escherichia-coli-bacteraemia-surveillance/>

Hand Hygiene

Information on national hand hygiene monitoring can be found at:

<http://www.hps.scot.nhs.uk/haiic/ic/nationalhandhygienecampaign.aspx>

Good hand hygiene by staff, patients and visitors is a key way to prevent the spread of infections. More information on the importance of good hand hygiene can be found at:

<http://www.washyourhandsofthem.com/>

Cleaning and the Healthcare Environment

Keeping the healthcare environment clean is essential to prevent the spread of infections. NHS Boards monitor the cleanliness of hospitals and there is a national target to maintain compliance with standards above 90%. The cleaning compliance score for the Board can be found at the end of section 1 and for each hospital in section 2. Information on national cleanliness compliance monitoring can be found at:

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

Healthcare environment standards are also independently inspected by the Healthcare Environment Inspectorate. More details can be found at:

<http://www.nhshealthquality.org/nhsqis/6710.140.1366.html>