Borders NHS Board

Meeting Date: 1 April 2021

Approved by:	Sarah Horan, Interim Deputy Director of Nursing, Midwifery and AHPs
Author(s):	Natalie Mallin, HAI Surveillance Lead Sam Whiting, Infection Control Manager

HEALTHCARE ASSOCIATED INFECTION PREVENTION AND CONTROL REPORT February 2021

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:

The format of this report is in accordance with Scottish Government requirements for reporting HAI to NHS Boards. This report has not been submitted to any prior groups or committees but much of the content will be presented to the Clinical Governance Committee.

Executive Summary:

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.

The report provides updates on:-

- NHS Borders infection surveillance against Scottish Government targets including *S.aureus* bacteraemia, *C.difficile* infections and *E.coli* bacteraemia
- Cleanliness monitoring, hand hygiene and the Infection Control compliance monitoring programme
- Infection Control work plan
- Incidents and outbreaks

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	Infection Control staffing issues are detailed in this report.

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

1.0 Key Healthcare Associated Infection Headlines for February 2021

- 1.1 NHS Borders had a total of 28 *Staphylococcus aureus* Bacteraemia (SAB) cases between April 2020 and February 2021, 17 cases were **healthcare associated** infections.

1.2 The target set by the Scottish Government is for each Board to achieve a 10% reduction in the healthcare associated SAB rate per 100,000 Total Occupied Bed Days (TOBDs) by 2021/22 (using 2018/19 as the baseline).

1.3 To achieve this target, NHS Borders should have no more than 19 **healthcare associated** SAB cases per year.

- 1.4 NHS Borders had a total of 12 *C.difficile* Infection (CDI) cases between April and February 2021, 9 of which were healthcare associated infections.

1.5 The Scottish Government has set a target for each Board to achieve a 10% reduction in the healthcare associated CDI rate per 100,000 bed days by 2021/22 (using 2018/19 as the baseline). Healthcare associated in this context includes hospital acquired infections and healthcare associated infections.

1.6 To achieve this target, NHS Borders should have no more than 11 **healthcare associated** cases per year.

- 1.7 NHS Borders had a total of 70 *E. coli* Bacteraemia cases between April and February 2021, 43 of which were **healthcare associated**. A new target has been published for each Board to achieve a 25% reduction in the **healthcare associated** *E. coli* Bacteraemia rate per 100,000 bed days by 2021/22 with a total reduction of 50% by 2023/24 (using 2018/19 as the baseline).

1.8 To achieve this target, NHS Borders should have no more than 32 healthcare associated cases per year by 2021/22 and no more than 21 healthcare associated cases per year by 2023/24. NHS Borders has not achieved this target. Future improvement work associated with Catheter Associated Urinary Tract Infections (CAUTI) will be a key focus in support of this target.

2.0 *Staphylococcus aureus* Bacteraemia (SAB)

See Appendix A for definition.

2.1 Between April and February 2021, there have been 27 cases of Meticillin-sensitive *Staphylococcus aureus* (MSSA) bacteraemia and 1 case of Meticillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia.

2.2. Figure 1 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.

2.3 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.

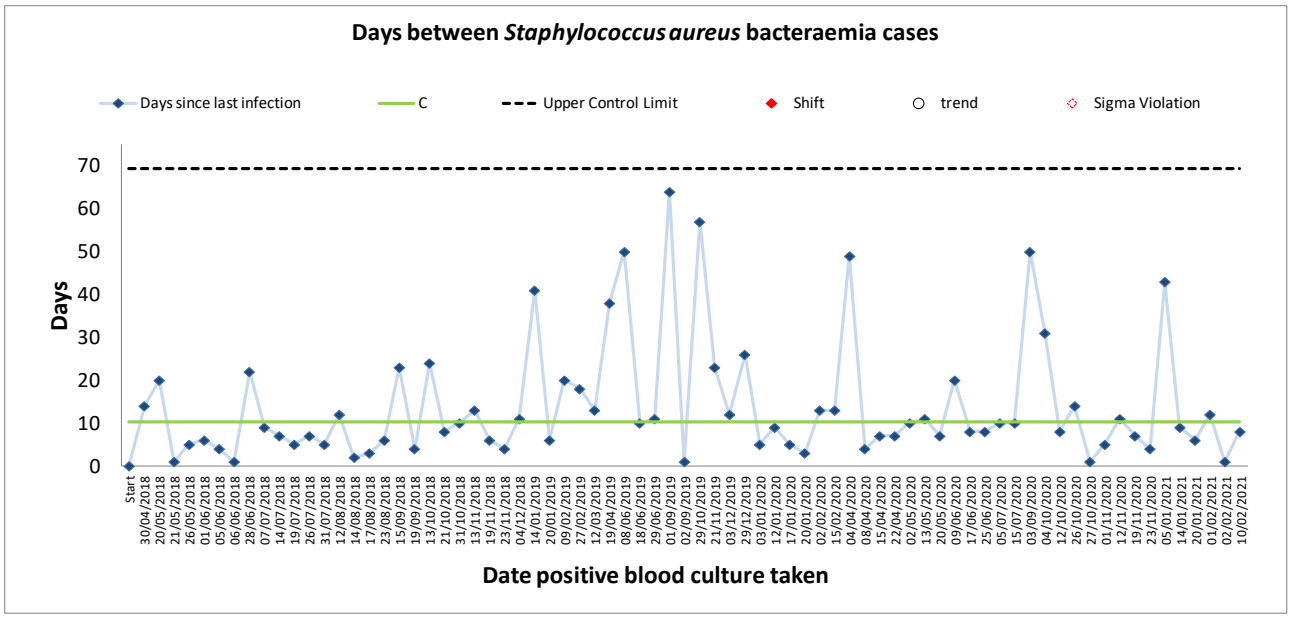


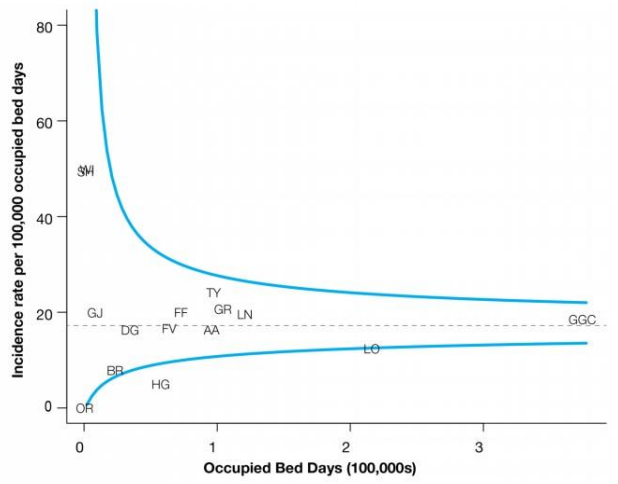
Figure 1: NHS Borders days between SAB cases (April 2018 –February 2021)

2.4 In interpreting Figure 1, 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.

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

2.6 Health Protection Scotland produces quarterly reports showing infection rates for all Scottish Boards. Figure 2 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-Sept 2020).

2.7 During this period, NHS Borders (BR) had a rate of 7.9 which was below the Scottish average rate of 17.3.



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
2. NHS Shetland and NHS Western Isles overlap.

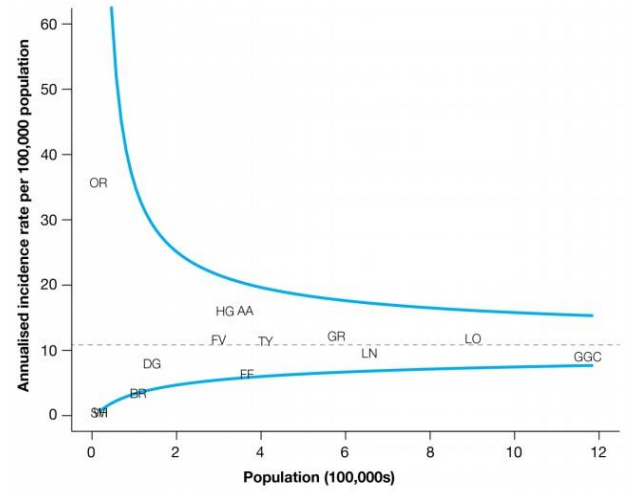
Key to NHS Boards

AA = Ayrshire & Arran
BR = Borders
DG = Dumfries & Galloway
FV = Forth Valley
FF = Fife
GR = Grampian
GGC = Greater Glasgow & Clyde
HG = Highland
LN = Lanarkshire
LO = Lothian
NWTC = National Waiting Times Centre
OR = Orkney
SH = Shetland
TY = Tayside
WI = Western Isles

Figure 2: Funnel plot of SAB incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS Boards in Scotland in Q3 2020

2.8 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 2 shows that NHS Borders was within the blue funnel, which means that we are not a statistical outlier but we are below the Scottish average rate due to natural variation.

2.9 Figure 3 below shows a funnel plot of community associated SAB cases as rates per 100,000 population for all NHS boards in Scotland in Q3 2020. During this period NHS Borders (BR) had a rate of 3.4 which was below the Scottish average rate of 10.8.



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

Figure 3: Funnel plot of SAB incidence rates (per 100,000 population) in community associated infection cases for all NHS Boards in Scotland in Q3 2020

3.0 *Clostridium difficile* infections (CDI)

See Appendix A for definition.

3.1 Figure 4 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.

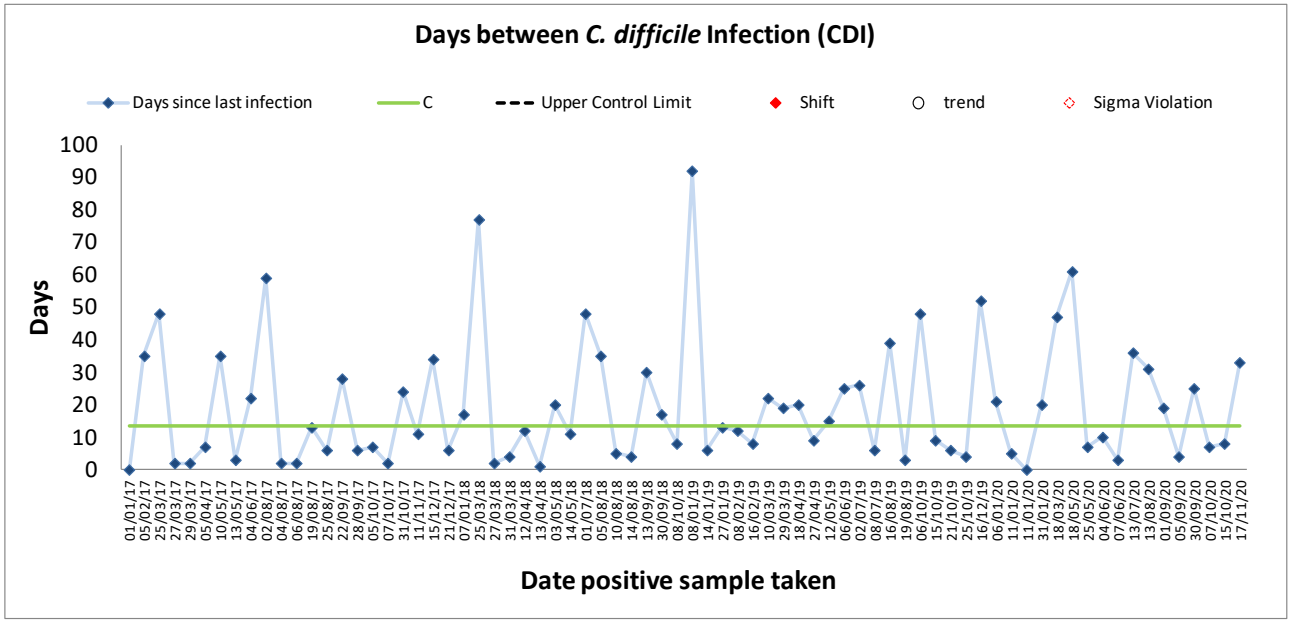
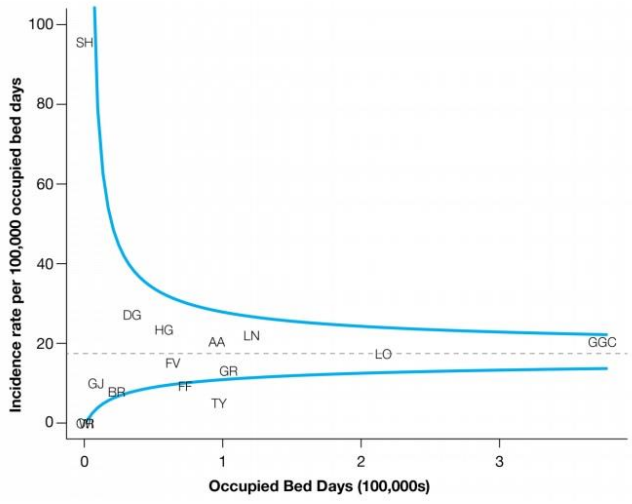


Figure 4: NHS Borders days between CDI cases (January 2017–February 2021)

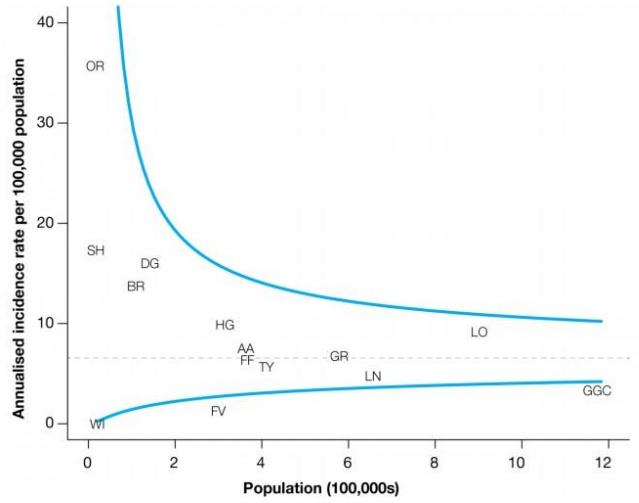
3.2 Health Protection Scotland produces quarterly reports showing infection rates for all Scottish Boards. Figure 5 below shows a funnel plot of CDI incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS Boards in Scotland in Q3 2020. The graph shows that NHS Borders (BR) had a rate of 7.9 which is below the Scottish average rate of 17.4.



1. Source of data is Electronic Communication of Surveillance in Scotland (ECOSS) & Total occupied bed days: Information Services Division ISD(S)1.
2. NHS Orkney and NHS Western Isles overlap.

Figure 5: Funnel plot of CDI incidence rates (per 100,000 TOBD) in healthcare associated infection cases for all NHS Boards in Scotland in Q3 2020

3.3 Figure 6 below shows a funnel plot of CDI incidence rates (per 100,000 population) in community associated infection cases for all NHS Boards in Scotland in Q3 2020. The graph shows that NHS Borders (BR) had a rate of 13.8 which is above the Scottish average rate of 6.6; however, we are not a statistical outlier from the rest of Scotland.



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

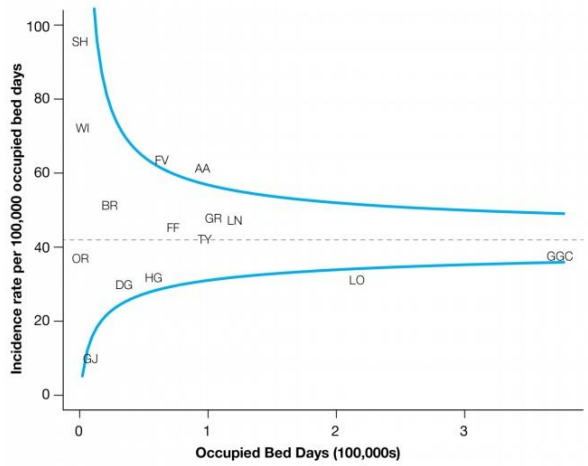
Figure 6: Funnel plot of CDI incidence rates (per 100,000 population) in community associated infection cases for all NHS Boards in Scotland in Q3 2020

4.0 *Escherichia coli (E. coli)* Bacteraemia (ECB)

4.1 The biggest risk factor for patients in relation to *E. coli* Bacteraemia is Catheter Associated Urinary Tract Infection (CAUTI). COVID activity has been prioritised by the Infection Prevention and Control Team over the last year and this continues to impact on capacity for improvement activity associated with CAUTI. The Prevention of CAUTI group met for the first time for over a year on 23rd February 2021. The governance arrangements for this group are being strengthened with development of Terms of Reference and formal reporting to the Infection Control Committee. The previous work plan has been reviewed and refocused with the next meeting scheduled for 20th April 2021.

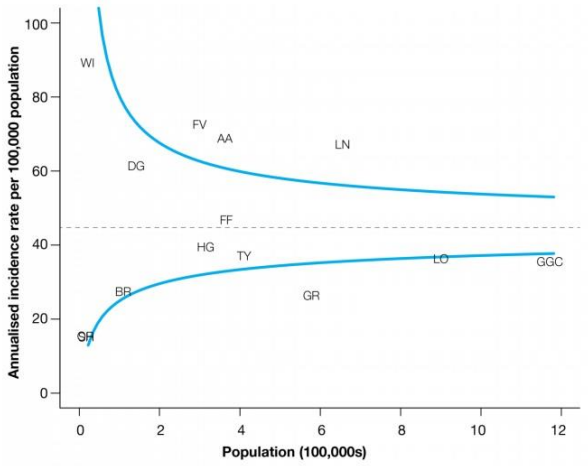
4.2 Health Protection Scotland produces quarterly reports showing infection rates for all Scottish Boards. Figure 7 below shows a funnel plot of healthcare associated ECB infection rates (per 100,000 TOBD) for all NHS Boards in Scotland in Q3 2020. NHS Borders (BR) had a rate of 51.4 for healthcare associated infection cases which is above the Scottish average rate of 42.0 but we are not a statistical outlier from the rest of Scotland.

4.3 Figure 8 below shows a funnel plot of community associated ECB infection rates (per 100,000 population) for all NHS Boards in Scotland in Q3 2020. NHS Borders (BR) had a rate of 27.6 for community associated infection cases which is below the Scottish average rate of 44.7 It is worth noting that community acquired ECB cases had no healthcare intervention prior to the positive blood culture being taken.



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

Figure 7: Funnel plot of healthcare associated ECB infection rates (per 100,000 TOBD) for all NHS Boards in Scotland in Q3 2020



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 8: Funnel plot of community associated ECB infection rates (per 100,000 population) for all NHS Boards in Scotland in Q3 2020

5.0 NHS Borders Surgical Site Infection (SSI) Surveillance

5.1 The Scottish Government updated the requirements for HAI surveillance on the 25th of March 2020. In light of the prioritisation of COVID-19 surveillance, all mandatory and voluntary surgical site infection surveillance has been paused from this date. Mandatory surveillance of *E.coli* bacteraemia, *Staphylococcus aureus* bacteraemia and *C. difficile* Infections has continued but as light surveillance only.

6.0 Hand Hygiene

6.1 Non-submission of self-audit hand hygiene data has been an issue since recommencing the audits in June 2020. We are continuing to encourage ward staff to submit their monthly data and reminders are sent to the Senior Charge Nurses and Clinical Nurse Managers of each area every month; a revised escalation process was implemented in November 2020. This has helped improve compliance in some locations but not all areas so this continues to be an area of focus. In January 2021 seven areas did not submit hand hygiene audit data. In February 2021, this reduced to two areas. The importance of strict hand hygiene continues to be promoted as part of the COVID-19 precautions aimed at patients, staff and members of the public.

7.0 Infection Prevention and Control Compliance Monitoring Programme

7.1 Clinical infection control capacity reduced at the beginning of December 2020 at the same time as an increase in COVID-19 related clinical activity which has impacted on the ability to deliver the planned programme of audits. It was agreed at the Infection Control Committee on the 17th of February 2021 that the full infection control audit programme will be paused again in order to prioritise spot checks. This decision will be reviewed again in 3 months to evaluate whether there is capacity to restart the audits.

7.2 In certain circumstances, these full audits will still be undertaken. The Infection Prevention and Control Team will endeavour to undertake audits following an

external inspection report and in response to specific concerns or outbreaks. The most recent audit to be completed was at Hay Lodge Community Hospital following the publication of the external inspection report.

7.3 The previous programme of spot checking every prioritised location every month has also been paused due to insufficient capacity. In recent weeks, there has been capacity to resume some spot checks with locations prioritised on a risk assessed basis. Some short-term additional capacity to support spot checks has also been provided by a Quality Improvement Facilitator in the Clinical Governance Team.

8.0 Healthcare Environment Inspectorate

8.1 On 2nd March 2021, Healthcare Improvement Scotland published the inspection report relating to the unannounced inspection of Hay Lodge Community Hospital on the 8th and 9th December 2020 (Appendix B).

8.2 The report highlighted areas of good practice as well as areas for improvement and included eight specific requirements to be addressed. Along with the report, NHS Borders action plan to address the identified areas for improvement was also published (Appendix B).

9.0 Cleaning and the Healthcare Environment

For supplementary information see Appendix A.

9.1 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 tool that was implemented in April 2012. All areas met the Health Facilities Scotland national target of 90%.

10.0 2020/21 Infection Control Workplan

10.1 As at 31/01/2021 66% of actions in the Infection Control Work Plan have been completed with 19 actions outstanding. The Infection Prevention and Control Team continue to progress actions from the 2020-21 workplan; however, due to the prioritisation of COVID-19 management, it has been recognised by the Infection Control Committee that full completion of the workplan by March 2021 is not achievable. An SBAR assessing the risk associated with a delay in implementing the workplan actions is presented to each meeting of the Infection Control Committee.

11.0 Outbreaks/ Incidents

11.1 Since the last Board update, there have been 2 COVID-19 related outbreaks/incidents:

11.2 **Huntlyburn Ward**
On 5th January 2021, an Incident Management Team (IMT) was convened following a confirmed COVID-19 positive result. The outbreak was officially declared over on the 26th of January.

11.3 **CV1**

On 28th January 2021, an Incident Management Team (IMT) was convened following a confirmed COVID-19 positive result. The incident was declared over on the 12th February 2021.

11.4 **Learning Review**

A meeting has been scheduled for the 17th March to review all COVID-19 outbreaks and identify learning.

11.5 **Hospital acquired bacteraemia associated with intravenous infusion of drugs**

A study was completed in October 2020 by Dr Edward James Consultant Microbiologist to investigate an increase in hospital acquired bacteraemia. The study show a significant association between hospital acquired *Serratia* species bacteraemia and patients receiving drugs by IV infusion. The full SBAR (Situation, Background, Assessment, Recommendation) report was noted by the Infection Control Committee on the 26th November 2020 and has recently been submitted to the IV Therapy Group for further discussion and suggestions for improvement.

12.0 Infection Prevention and Control Team Capacity

12.1 Infection Control nursing capacity continues to be at a critical level following two unsuccessful attempts to fill the 2.0wte Infection Control Nurse vacancies.

12.2 There is a national shortage of trained and experienced infection control nurses with a number of Boards including NHS Borders having some success 'growing our own'. However, this not an attractive specialist role - partly due to the combination of the pay band and the requirement for a post graduate level qualification.

12.3 The Infection Control Manager and Deputy Director of Nursing are currently reviewing the role, remit and banding of the vacant posts prior to re-advertising.

12.4 The Board Executive Team has recently approved advertising a permanent Band 7 Infection Control Nurse post whilst work has also commenced to undertake a service review of the infection control team to quantify the required resources.

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:

Clostridioides difficile :**http://www.nhs24.com/content/default.asp?page=s5_4&articleID=2139&sectionID=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&sectionID=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 infectionsand *Staphylococcus aureus (*including MRSA*)* bacteraemiacases 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

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
MRSA	0	0	0	1	0	0	0	0	0	0	0	0
MSSA	0	4	3	2	2	0	1	4	4	0	4	3
Total SABS	0	4	3	3	2	0	1	4	4	0	4	3

Clostridioides difficile infection monthly case numbers

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
Ages 15-64	0	0	0	0	1	0	1	0	0	0	0	0
Ages 65 plus	1	0	2	2	0	1	2	2	1	0	0	0
Ages 15 plus	1	0	2	2	1	1	3	2	1	0	0	0

Hand Hygiene Monitoring Compliance (%)

	Mar 2020*	Apr 2020*	May 2020*	June 2020*	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
AHP	-	-	-	-	100	100	100	100	100	98.1	100.0	98.0
Ancillary	-	-	-	-	100	100	96	100	100	91.9	94.9	96.7
Medical	-	-	-	-	98.8	98.6	100	100	100.0	100.0	92.3	95.0
Nurse	-	-	-	-	99.4	99.4	99.5	100	98.7	99.6	99.6	98.5
Board Total	**-**	**-**	**-**	**-**	**99.5**	**99.5**	**98.8**	**100.0**	**99.7**	**97.4**	**96.7**	**97.1**

*Self audit hygiene data reporting paused due to prioritisation of COVID-19 related work

Cleaning Compliance (%)

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
Board Total	95.3	93.5	95.5	95.8	96.6	97.0	93.3	96.3	96.3	96.2	97.4	95.3

Estates Monitoring Compliance (%)

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
Board Total	98.5	99.7	97.9	99.2	98.7	99.8	98.8	98.1	98.2	98.0	98.2	99.6

BORDERS GENERAL HOSPITAL REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	2	1	0	1	0	0	2	2	0	2	2
Total SABS	0	2	1	0	1	0	0	2	2	0	2	2

Clostridioides difficile infection monthly case numbers

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
Ages 15-64	0	0	0	0	0	0	1	0	0	0	0	0
Ages 65 plus	0	0	0	0	0	0	0	1	1	0	0	0
Ages 15 plus	0	0	0	0	0	0	1	1	1	0	0	0

Cleaning Compliance (%)

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
Board Total	96.4	97.4	97.4	97.3	97.1	96.4	96.1	95.5	96.3	95.4	96.5	96.0

Estates Monitoring Compliance (%)

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
Board Total	99.5	99.4	99.6	99.3	99.8	99.6	99.4	99.0	99.1	98.1	99.1	98.8

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**

Staphylococcus aureus bacteraemia monthly case numbers

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	0	0	0	0	0	0	0	1	0	0	0
Total SABS	0	0	0	0	0	0	0	0	1	0	0	0

Clostridium difficile infection monthly case numbers

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	0	0	0	1	0	0	0	0	0	0	0	0
Ages 15 plus	0	0	0	1	0	0	0	0	0	0	0	0

NHS OUT OF HOSPITAL REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
MRSA	0	0	0	1	0	0	0	0	0	0	0	0
MSSA	0	2	2	2	1	0	1	2	1	0	2	1
Total SABS	0	2	2	3	1	0	1	2	1	0	2	1

Clostridioides difficile infection monthly case numbers

	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021
Ages 15-64	0	0	0	0	1	0	0	0	0	0	0	0
Ages 65 plus	1	0	2	1	0	1	2	1	0	0	0	0
Ages 15 plus	1	0	2	1	1	1	2	1	0	0	0	0

Appendix A

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

Clostridioides difficile infection (CDI)

Clostridiodes 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 *Clostridioides 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 *Clostridioides 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

Appendix B

Healthcare Improvement Scotland – Hay Lodge Community Hospital inspection report and NHS Borders action plan

http://www.healthcareimprovementscotland.org/our_work/inspecting_and_regulating_care/hosp_nhs_borders/hay_lodge_mar_21.aspx