Borders NHS Board

HEALTHCARE ASSOCIATED INFECTION – PREVENTION AND CONTROL REPORT OCTOBER 2016

Aim

The purpose of this paper is to update Board members of the current status of Healthcare Associated Infections (HAI) and infection control measures in NHS Borders.

Background

The NHS Scotland HAI Action Plan 2008 requires an HAI report to be presented to the Board on a two monthly basis.

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 HEAT targets, together with results from cleanliness monitoring and hand hygiene audit results.

Recommendation

The Board is asked to **note** this report.

Policy/Strategy Implications	This report is in line with the NHS Scotland HAI Action Plan.
Consultation	There is no requirement to consult as this is a bi-monthly update report as required by SGHD.
Consultation with Professional Committees	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.
Risk Assessment	All risks are highlighted within the paper.
Compliance with Board Policy requirements on Equality and Diversity	This is an update paper so a full impact assessment is not required.
Resource/Staffing Implications	This assessment has not identified any resource/staffing implications

Approved by

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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 October 2016

- NHS Borders had 16 *Staphylococcus aureus* Bacteraemias (SAB) between April and October 2016, and is off trajectory to achieve the SAB HEAT rate of 24.0 cases or less per 100,000 acute occupied bed days (AOBD) by March 2017. To achieve the HEAT target NHS Borders should have no more than 19 cases per year which equates to less than 2 per month.

- NHS Borders had 13 *Clostridium difficile* infection (CDI) cases between April and October 2016, and is on trajectory 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 2017. To achieve the HEAT target NHS Borders should have no more than 33 cases per year which equates to less than 3 per month.

Staphylococcus aureus Bacteraemia (SAB)

See Appendix A for definition.

Figure 1 shows SABs by location and cause. The majority of SABs occur in the community.
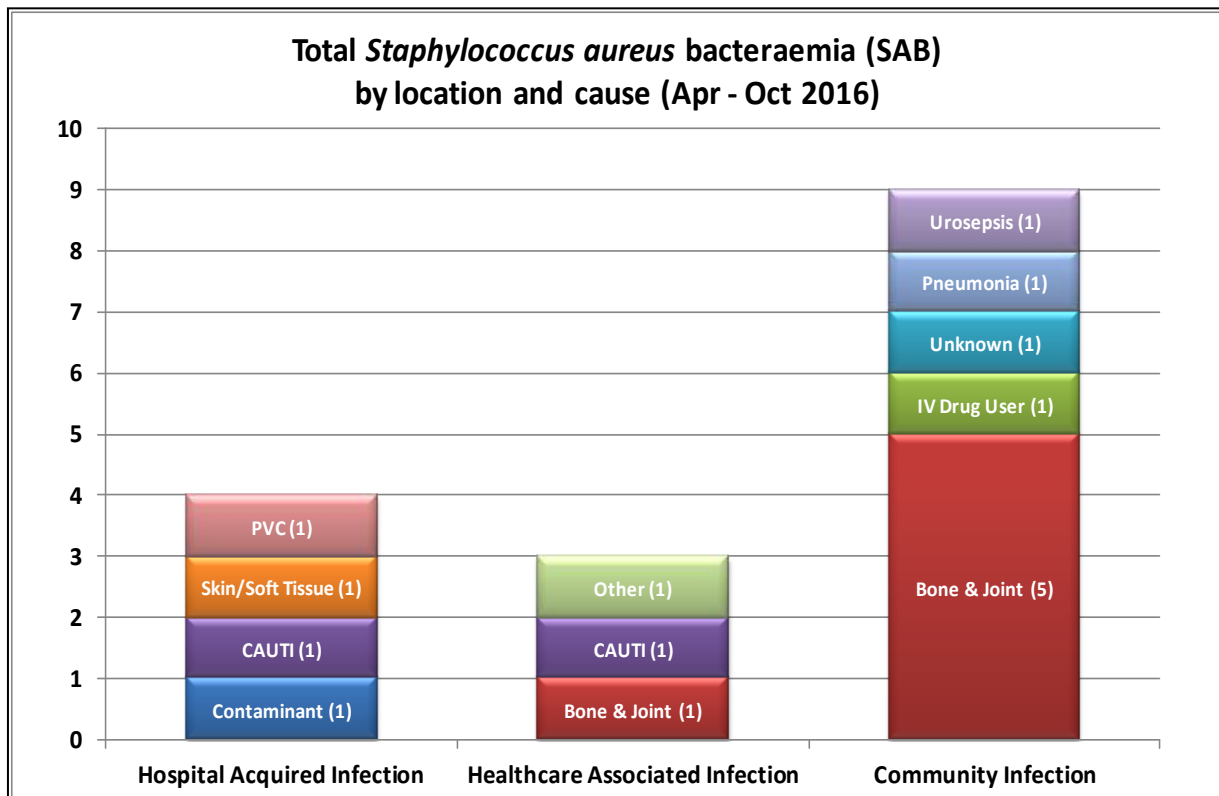

Figure 1: SAB cases by location and cause April – October 2016

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. There have been no statistically significant events since the last Board update.
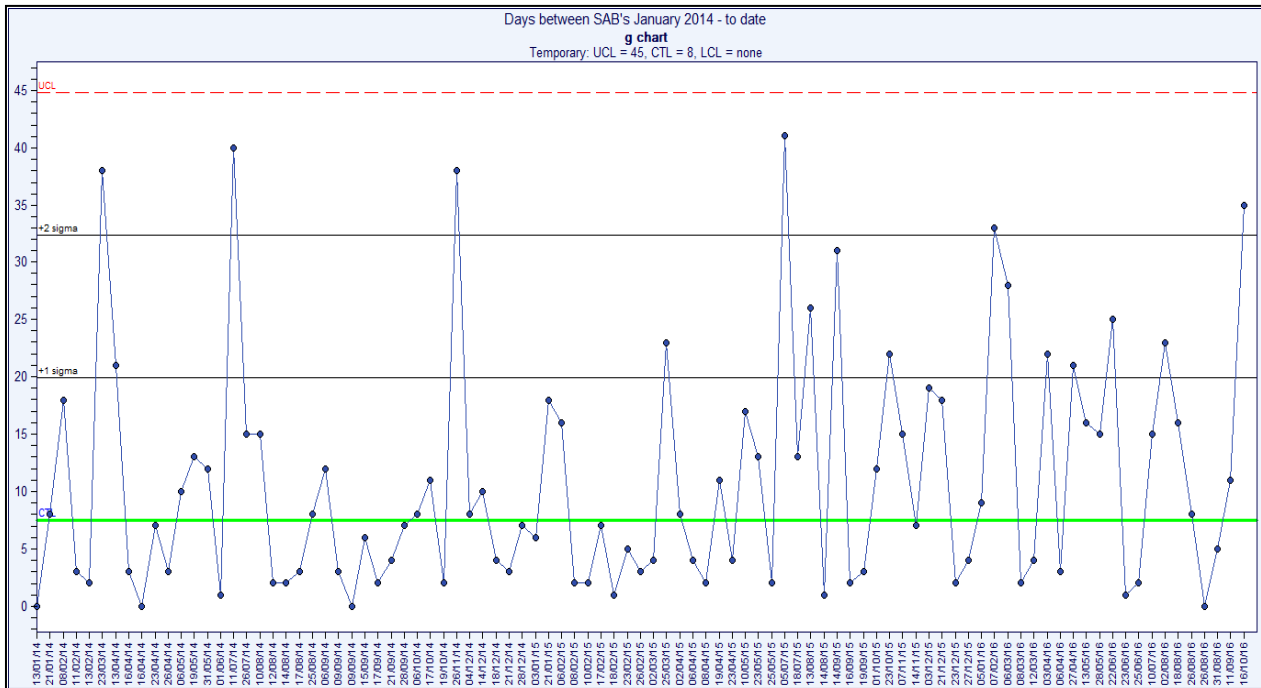

Figure 2: NHS Borders days between SAB cases (January 2014 – October 2016)

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.

Since April 2016 there have been no Meticillin-resistant *Staphylococcus aureus* (MRSA) case. All cases were Meticillin-sensitive *Staphylococcus aureus* (MSSA).

Every SAB case is subject to a rigorous 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.

Clostridium difficile infections (CDI)
See Appendix A for definition.

Figure 3, 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 are 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.

Since April 2016 there have been 13 cases of *Clostridium difficile* infection (CDI).
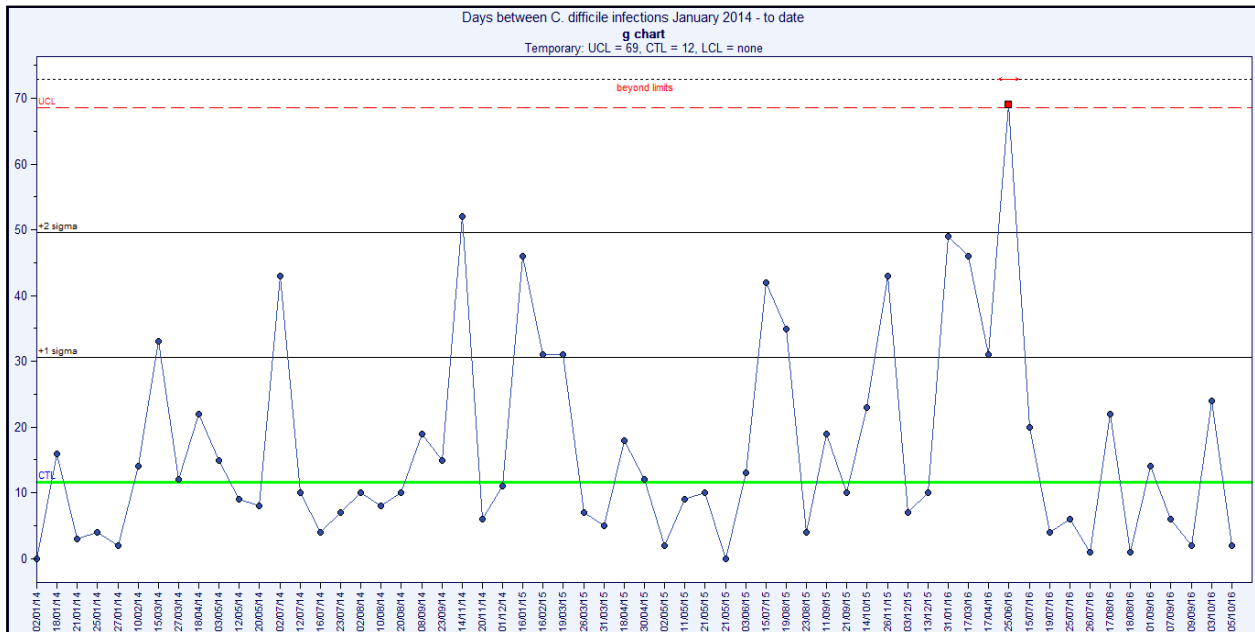

Figure 3: NHS Borders, days between CDI cases against indicative HEAT target (January 2014 – October 2016)

As with SAB cases, every *Clostridium difficile* infection (CDI) case is subject to a rigorous 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.

To date, there has been no evidence of cross transmission of *Clostridium difficile* infection (CDI) in NHS Borders.

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 and Senior Charge Nurses.

To check the validity of audit scores, the Infection Control team has recently undertaken some quality assurance hand hygiene audits to independently assess hand hygiene compliance. Results from these audits were consistent with results from self-audits.

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 tool that was implemented in April 2012.

2016/17 Infection Control Workplan
As at 18th November 2016, 87% of actions due for completion in the 2016/17 Workplan were completed. Due to significant progress already made against the outstanding three actions, the risk to the organisation of the delay in implementation is low.

Norovirus
Since the last Board update paper, one ward (Ward 12) was affected with diarrhoea and vomiting and was closed for 3 days as a precaution.

A Norovirus Preparedness Group was convened in October 2016 to review learning from the 2015/16 Norovirus season and resilience planning for the forthcoming Norovirus season. An action plan was developed and is close to completion.

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 and uses national definitions and methodology which enable comparison with overall NHS Scotland infection rates.

As Figures 4 and 6 show, since January 2016, there have been five Hip and three Colorectal SSI cases. Figure 5 shows the surgical site infections relating to Caesarean Section.

As previously reported, NHS Borders SSI rate is not, and has never been, a statistical outlier from the rest of Scotland.

The last knee Surgical Site Infection meeting HPS definitions was in August 2014.
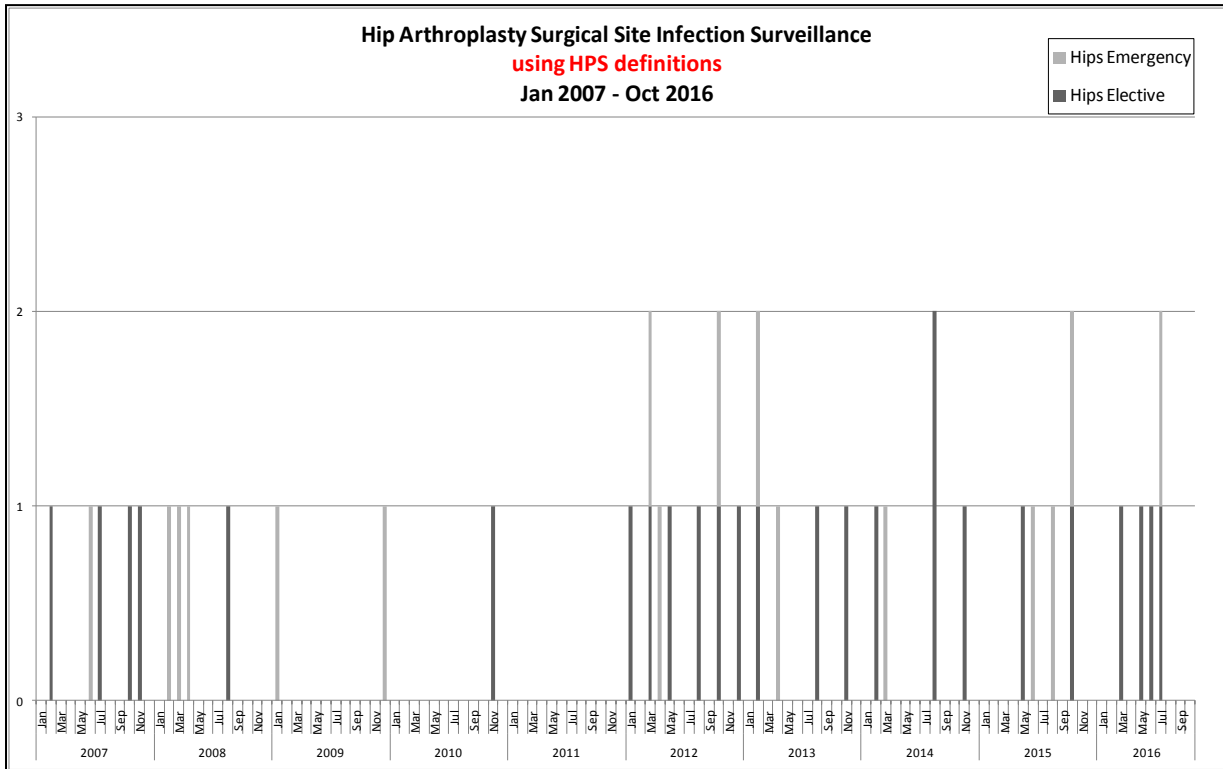
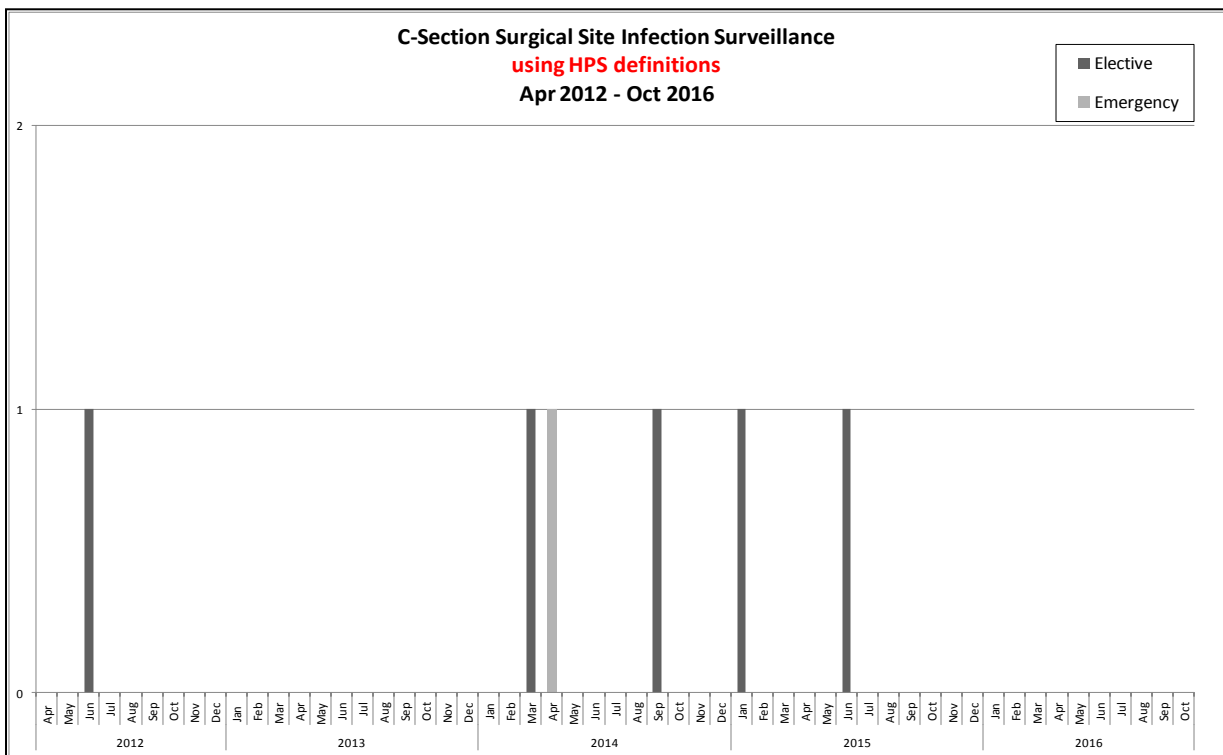Figure 4: SSI for Hip Arthroplasty April 2012 – October 2016

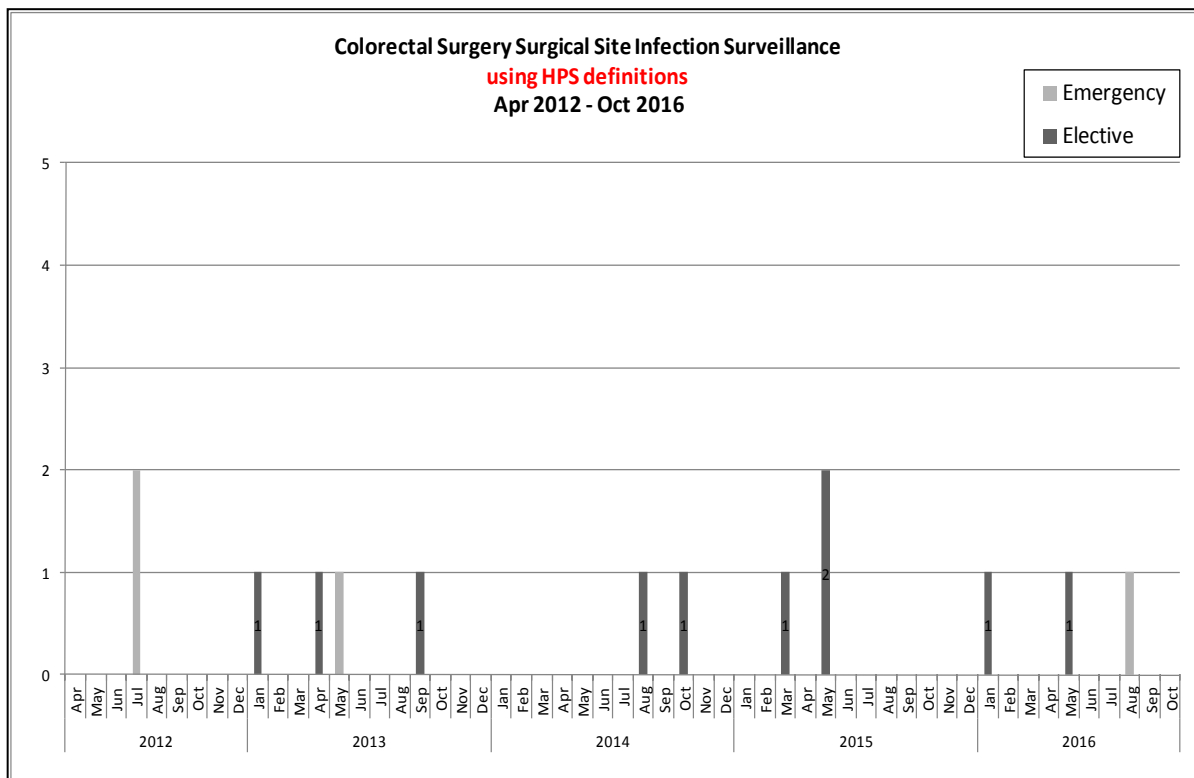Figure 5: SSI for C-Sections April 2012 – October 2016

Figure 6: SSI for Colorectal Surgery April 2012 – October 2016

Monitoring that Systems and Processes are Operating as Intended

A programme of Infection Control spot checks is maintained to confirm that systems and processes are operating as intended. Detailed monthly reports of compliance by location are circulated to all Senior Charge Nurses, operational managers and senior managers as well as non-executive Directors.

The Infection Prevention and Control Team also undertake a programme of audits to monitor compliance with infection control policy.

Between April and October 2016, 22 areas were audited. Immediate verbal feedback is given to each area at the time of the audit. An Action Plan is sent to the Senior Charge Nurse of each ward who is required to return the completed plan within 28 days.

All infection control audits are conducted as follows:

1) Every prioritised area is subject to one full audit per year
2) A follow-up audit of all non-compliant issues is conducted within 3 months of the initial full audit. Any remaining issues that have not been addressed are escalated to the Infection Control Manager (ICM).

Table 1 below shows the audit results and updates by location.

The implementation of an alternative cleaning solution is helping to address a key recurring theme of non-compliance in recent audits which was poor knowledge on managing blood and body fluids.

	Ward	Date of Audit	Score	No. Of Issues	Action Plan	Follow-Up Audit Date	Outstanding Issues	Further Action
UNSCHEDULED CARE	DME	14-Jan-16	80%	16	Received	09-Mar-16	11	ICM reviewed outstanding issues with SCN on 17/05/16. SCN confirmed all actions now complete. No further action.
	Ward 5	01-Mar-16	98%	2	Received	16-May-16	1	Outstanding action relates to building space and facilities which has already been escalated. No further action required by the ward.
	Ward 12	**08-Mar-16**	**82%**	**14**	**Received**	**16-Jun-16**	**9**	**ICM reviewed outstanding issues with SCN on 11/08/16 and confirmed 6 issues remain outstanding. An improvement plan is in place and a further meeting has been scheduled.**
	BSU	25-Mar-16	100%	0	-	-	-	-
	MAU	**31-Mar-16**	**88%**	**10**	**Received**	**07-Jul-16**	**7**	**Outstanding issues escalated to Infection Control Manager (12/07/16). ICM reviewed outstanding issues with SCN on 30/8/16. 5 of the 7 actions remain outstanding. An improvement plan is in place and a further meeting has been scheduled.**
	ED	01-Apr-16	100%	0	-	-	-	-
	Renal	29-Apr-16	97%	3	Received	03-Aug-16	0	No further action.
	Ward 4	27-Jun-16	96%	3	Received	15-Sep-16	2	Outstanding action relates to building space and facilities which has already been escalated. No further action required by the ward.
	MKU	01-Jul-16	95%	4	Received	04-Oct-16	2	Outstanding issues escalated to Infection Control Manager (20/10/16).
	DME	16-Sep-16	88%	14	Due 10-Dec-16	Due by 31-Dec-16		ICM reviewed outstanding issues with SCN on 17/05/16. SCN confirmed all actions now complete. No further action.
PLANNED CARE	Ward 9	02-Feb-16	84%	13	Received	24-Apr-16	4	ICM reviewed outstanding issues with SCN on 17/05/16. SCN confirmed all actions now complete. No further action.
	ASDU	01-Apr-16	93%	4	Received	07-Jul-16	2	Both outstanding issues relate to required refurbishment work. To minimise disruption, work is planned to coincide with timescales for theatre refurbishments later this year. Quotes for works and the capital plan are ready for final review. The associated risks are being placed on the risk register until works and replacments are complete.
	ITU	21-Apr-16	96%	2	Received	27-Jun-16	1	Outstanding action relates to building space and facilities which has already been escalated. No further action required by the ward.
	Ward 7	25-Apr-16	94%	5	Received	22-Jul-16	0	No further action.
	DPU	27-May-16	97%	2	Received	27-Aug-16	1	Outstanding issues escalated to Infection Control Manager (18/08/16). ICM reviewed outstanding actions with SCN on 20/10/16. All actions confirmed complete.
	Endoscopy	21-Jun-16	94%	4	Received	**29-Sep-16**	0	No further action.
	PSAU	01-Jul-16	99%	1	Due 01-Aug-16	04-Oct-16	1	**Outstanding issues escalated to Infection Control Manager (20/10/16).**
	Theatres	06-Oct-16	93%	14	Due 14-Nov-16	Due by 31-Dec-16		
WOMEN & CHILDREN SERVICES	Ward 16	01-Jul-16	89%	8	Received	21-Sep-16	2	**Outstanding issues escalated to Infection Control Manager (20/10/16).**
	Labour Suite	29-Jul-16	97%	2	Received	01-Nov-16	1	Outstanding action relates to building space and facilities which has already been escalated. No further action required by the ward.
	SCBU	29-Sep-16	100%	0	-	-	-	-
	Ward 17	26-Aug-16	99%	1	-			Outstanding action relates to building space and facilities which has already been escalated. No further action required by the ward.
	Ward 15	22-Sep-16	96%	3	Due 24-Oct-16	Due by 21-Dec-16		
COMMUNITY HOSPITALS	Hawick (2015 Audits)	05-Jan-16	90%	9	Received	09-May-16	0	No further action.
	Hawick (2016 Audits)	09-Nov-16	83%	12	Due 07-Dec-16	Due by 09-Feb-17		
	Knoll	01-Jul-16	94%	5	Received	20-Sep-16	1	**Outstanding issues escalated to Infection Control Manager (17/11/16).**
	Kelso CH	04-Aug-16	84%	12	Received	02-Nov-16	6	**Outstanding issues escalated to Infection Control Manager (17/11/16).**
	Haylodge	21-Sep-16	81%	15	Due 24-Oct-16	Due by 22-Dec-16		
MENTAL HEALTH HOSPITALS	Cauldshiels	01-Mar-16	83%	14	Received	16-May-16	10	ICM reviewed outstanding issues with SCN on 23/05/16. SCN confirmed 5 of the 10 actions remain outstanding. Further meeting on 13/06/16 SCN confirmed two actions remain outstanding. ICM reviewed outstanding issues with SCN on 30/8/16 , Estates chased and timescale for completion confirmed by 02/09/16. ICM reviewed outstanding actions with SCN on 08/09/16. All actions confirmed complete.
	Huntlyburn	03-Mar-16	88%	9	Received	16-Jun-16	0	No further action.
	Melburn Lodge	**12-Apr-16**	**85%**	**12**	**Received**	**12-Jul-16**	**9**	**Outstanding issues escalated to Infection Control Manager (12/07/16). ICM reviewed outstanding issues with SCN on 14/09/16. SCN confirmed all 9 issues remain outstanding. Issues escalated as appropriate, a further review meeting will be scheduled.**
	Lindean	**31-May-16**	**88%**	**9**	**Received**	**01-Sep-16**	**7**	**Outstanding issues escalated to Infection Control Manager (02/09/16).**
	East Brigg	30-Jun-16	77%	23	Received	04-Oct-16		**Results from Follow-up audit currently being collated.**

Table 1: Summary of infection control audits and follow-up outcomes

Antimicrobial Stewardship
NHS Borders Antimicrobial Management Team (AMT) will be promoting European Antibiotic Awareness Day again on 18th November this year through various activities.

The AMT Work Plan has been reviewed for 2016/17 and was approved by NHS Borders Area Drug and Therapeutics Committee. All actions are on target for completion by the specified timescale.

NHS borders has a Microsite (http://intranet/microsites/index.asp?siteid=434&uid=7) which includes details on antimicrobial usage and resistance. Regular secondary and primary update reports are also produced and circulated to clinicians.

Healthcare Environment Inspectorate
The Healthcare Environment Inspectorate (HEI) conducted an unannounced inspection in the Borders General Hospital on the 16th and 17th November 2016.

All inspections provide learning opportunities for us, and this inspection will undoubtedly reflect areas of good practice as well as highlighting where there is opportunity for continuous improvement in our services to enhance experience for our patients and their families. All inspections provide a snapshot of a point in time, and provide learning opportunities for us all.

In their post inspection debrief, the Inspectors expressed their thanks and appreciation for the positive engagement that they had with staff and patients, and remarked that they have been made to feel most welcome.

The Inspector's report is due to be published at the beginning of February 2017 and will be shared across our organisation.

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&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 <u>each hospital</u> the total number of cases for each month are those which have been reported as positive from a laboratory report on samples taken <u>more than</u> 48 hours after admission. For the purposes of these reports, positive samples taken from patients <u>within</u> 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 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 BORDERS BOARD REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
MRSA	0	0	1	0	0	0	0	0	0	0	0	0
MSSA	2	4	0	1	3	3	2	3	1	5	1	1
Total SABS	2	4	1	1	3	3	2	3	1	5	1	1

Clostridium difficile infection monthly case numbers

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Ages 15-64	0	0	0	0	0	0	0	0	2	0	1	0
Ages 65 plus	1	2	1	0	1	1	0	1	2	2	2	2
Ages 15 plus	1	2	1	0	1	1	0	1	4	2	3	2

Hand Hygiene Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
AHP	98	99	97	100	100	100	98	100	98	100	98	89
Ancillary	94	97	99	96	93	96	97	99	94	97	100	87
Medical	94	98	97	94	97	98	97	100	99	98	97	96
Nurse	100	97	99	99	97	99	99	100	100	99	99	98
Board Total	98	98	99	97	98	99	99	100	99	99	99	96

Cleaning Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Board Total	91.5	97.4	95.6	94.6	95.3	94.5	93.6	95.9	95.3	93.9	95.1	92.3

Estates Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Board Total	95.7	99.1	97.9	97.3	98.3	97.1	96.2	98.5	96.8	99.2	97.7	97.7

BORDERS GENERAL HOSPITAL REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	0	0	0	2	1	0	0	0	2	0	0
Total SABS	0	0	0	0	2	1	0	0	0	2	0	0

Clostridium difficile infection monthly case numbers

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Ages 15-64	0	0	0	0	0	0	0	0	1	0	1	0
Ages 65 plus	0	0	1	0	1	1	0	1	1	2	2	1
Ages 15 plus	0	0	1	0	1	1	0	1	2	2	3	1

Cleaning Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Board Total	96.0	96.1	96.0	96.5	95.8	96.8	96.6	96.4	96.6	95.8	95.8	96.3

Estates Monitoring Compliance (%)

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Board Total	99.3	99.6	99.7	99.5	99.7	99.5	99.3	99.8	99.5	99.8	99.9	99.9

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

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
MRSA	0	0	1	0	0	0	0	0	0	0	0	0
MSSA	0	0	0	0	0	1	0	0	0	0	0	1
Total SABS	0	0	1	0	0	1	0	0	0	0	0	1

Clostridium difficile infection monthly case numbers

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	0	1	0	0	0	0	0	0	1	0	0	0
Ages 15 plus	0	1	0	0	0	0	0	0	1	0	0	0

NHS 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	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	2	4	0	1	1	1	2	3	1	3	1	0
Total SABS	2	4	0	1	1	1	2	3	1	3	1	0

Clostridium difficile infection monthly case numbers

	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016	July 2016	Aug 2016	Sept 2016	Oct 2016
Ages 15-64	0	0	0	0	0	0	0	0	1	0	0	0
Ages 65 plus	1	1	0	0	0	0	0	0	0	0	0	1
Ages 15 plus	1	1	0	0	0	0	0	0	1	0	0	1

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

Clostridium difficile infections (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

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