

Borders NHS Board

HEALTHCARE ASSOCIATED INFECTION CONTROL AND PREVENTION REPORT – October 2013

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

In line with the NHS Scotland HAI Action Plan 2008, there is a requirement for a 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	Not applicable
Consultation with Professional Committees	Not applicable
Risk Assessment	Not applicable
Compliance with Board Policy requirements on Equality and Diversity	Yes
Resource/Staffing Implications	None identified

Approved by

Name	Designation	Name	Designation
Evelyn Fleck	Director of Nursing and Midwifery		

Author(s)

Name	Designation	Name	Designation
Colin Redmond	Infection Control Manager	Judith Machell	Surveillance Coordinator

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 2013

- NHS Borders did not achieve the *Staphylococcus aureus* Bacteraemia (SAB) HEAT target rates for year ending 31st March 2013. The new Healthcare Associated Infection Strategic Oversight Group has had its second meeting to critically review progress to reduce infection and improve performance against the new HEAT targets.
- NHS Borders did retrospectively achieve the *Clostridium difficile* infection (CDI) HEAT target rate for year ending 31st March 2013.
- Local improvements will be informed through findings from enhanced surveillance data and recently conducted integrated case reviews of all SAB and CDI cases recorded during the period April – September 2013.
- Borders General Hospital has experienced its first episode of norovirus activity of the autumn period. Lessons learned from previous seasons and work co-ordinated through the Norovirus Preparedness Group ensured optimal control measures were implemented without delay.
- NHS Borders has volunteered to participate in an *E.Coli* bacteraemia enhanced surveillance pilot project co-ordinated by Health Protection Scotland.

***Staphylococcus aureus* (including MRSA)**

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 bacteraemias. These are a serious form of infection and there is a national target to reduce them. The number of patients with MSSA and MRSA bacteraemias 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* bacteraemias can be found at:

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

Staphylococcus aureus Bacteraemia 2012/13

A Scottish Government HEAT target was set to achieve a rate of 0.26 *Staphylococcus aureus* Bacteraemia (SAB) cases or less per 1000 acute occupied bed days by March 2013. NHS Borders achieved a rate of 0.29 SAB cases per 1000 acute occupied bed days.

However, as previously reported (HAIRT, August 2013) significant improvements were made in relation to SAB numbers throughout the HEAT target period 2011/12 - 2012/13 with NHS Borders reducing the number of SABs by 46%. This report also identified a significant challenge to achieving the SAB HEAT target ending March 2013 due to the reduced number of acute occupied bed days (AOBD) recorded during the HEAT target period. AOBD is used as the 'denominator' to calculate the HEAT target performance.

The Scottish Government acknowledged that some Boards may have a concern that the denominator chosen for HEAT targets may not be appropriate at a local level, thus making it unduly difficult to achieve the target (CNO (2013) 2). As a result, NHS Borders accepted the Scottish Government's offer for NHS Boards to write with evidence that the denominator, rather than the lack of success in reducing SABs, has impacted on delivery. NHS Borders has received acknowledgement of receipt of this report and awaits a formal response from the Scottish Government.

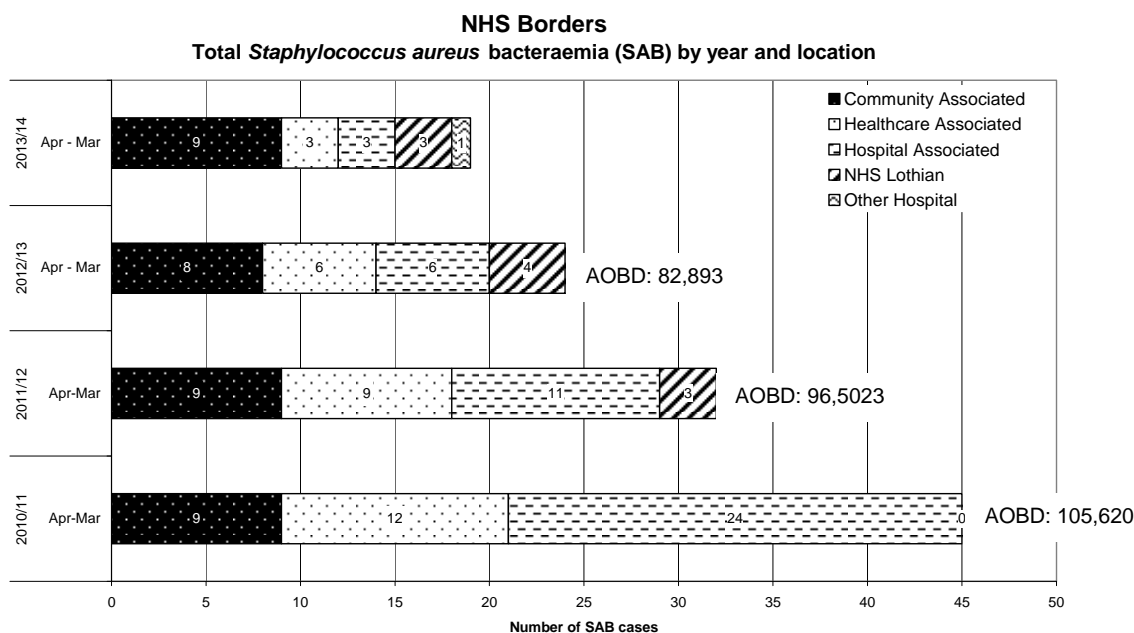
In addition, members of the IPCT recently engaged in discussion with representatives from Health Protection Scotland (HPS) and the Healthcare Associated Infection (HAI) Policy Unit (Scottish Government) through the national infection control network to further understand the rationale behind using Acute Occupied Bed Days as the choice of denominator versus alternatives, such as 'per 100,000 population'. This question is significant as a substantial proportion of recorded SAB cases are associated with community (not hospital) origin. Whilst it was acknowledged by HPS that the choice of denominator is a complex situation, particularly relative to the distribution of SAB cases, the HAI Policy Unit confirmed that the current status of using AOBD denominator for the HEAT target period 2014/2015 would remain unchanged. However, alternative denominators would be considered for the target period beyond March 2015.

Staphylococcus aureus Bacteraemia 2014/15

A new Scottish Government HEAT target has been set to further reduce healthcare associated infections (HAI) so that by March 2015 NHS Boards' SAB cases are 0.24 or less per 1000 acute occupied bed days.

SAB numbers recorded since April 2013 highlight a similar presentation to 2012/13 with a greater number of cases being attributed to community associated or other outside area compared with NHS Borders healthcare or hospital associated cases (Figure 1).

Figure 1: NHS Borders total staphylococcus aureus bacteraemia (SAB) by year, location, and AOBD per year.



The most recent Health Protection Scotland quarterly report (April-June 2013) on surveillance of *Staphylococcus aureus* Bacteraemia (SAB) in Scotland indicates that NHS Borders had a rate higher than the same quarter 2012. This equates to 9 cases in total compared with 7 cases during April-June 2012. Local surveillance has recorded a further 10 cases for quarter July – September 2013. As a result, the Infection Prevention & Control Team conducted an integrated review of all cases from April – September 2013 (n=19).

Main review findings:

- Typing of all isolates did not indicate any evidence of an outbreak.
- **Community (not hospital):** 9 cases have originated from the community. Two of these cases relate to the same patient resulting from intravenous drug abuse. Other examples being discitis (x3), diabetic ulcer in foot, and eczema.
- **Healthcare:** 6 cases have been receiving healthcare interventions, 4 of which were cases related to other health board surgery and renal dialysis; and 2 related to urinary catheter care.
- **Hospital:** 4 cases were hospital associated. These consisted of 1 transferred directly to Intensive Therapy Unit from an Austrian hospital; 1 case of severe eczema - associated with high risk of contamination from blood culture procedure; 1 endocarditis; and 1 Peripheral Vascular Cannula site infection.
- All, except 2, cases were Meticillin *Sensitive Staphylococcus aureus* (MSSA).
 - The Scottish Government has identified MSSA as a challenge in the drive to reduce SAB cases with the need to develop a programme of interventions under the Healthcare Associated Infections Chief Nursing Officer Support Framework to help reduce SAB infections in order to support health boards deliver improvements for patients.

The case investigations indicate that opportunities to prevent the above incidents are limited; however, improvements can be made through compliance of the PVC bundles and optimal urinary catheter care.

NHS Borders community hospitals have not experienced SAB cases during the rolling year October 2012 – September 2013 (NHS Community Hospitals Report Card p.16).

The Infection Prevention and Control Team (IPCT) have constructed an action plan, which pivots around workstreams developed from the Prevention of SAB Group. This prevention group meets on a monthly basis and continues to work with clinical services. Outwith the integrated case review process outlined above, every SAB case is subject to a rigorous review which includes a feedback process to the clinicians caring for the patient. However, this remains a significant challenge, as highlighted earlier, with a large proportion of cases being attributed to either community (out of hospital) or infection onset following interventions received in other NHS board areas.

Progress against the SAB action plan is critically reviewed by the recently formed Healthcare Associated Infection Strategic Control Group (HAI SOG). In addition, this group, chaired by the HAI Executive Lead (Director of Nursing & Midwifery), will provide support and guidance to instil a Borders wide collaborative approach to achieve the new HEAT target.

Clostridium difficile

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/haic/sshaip/ssdetail.aspx?id=277>

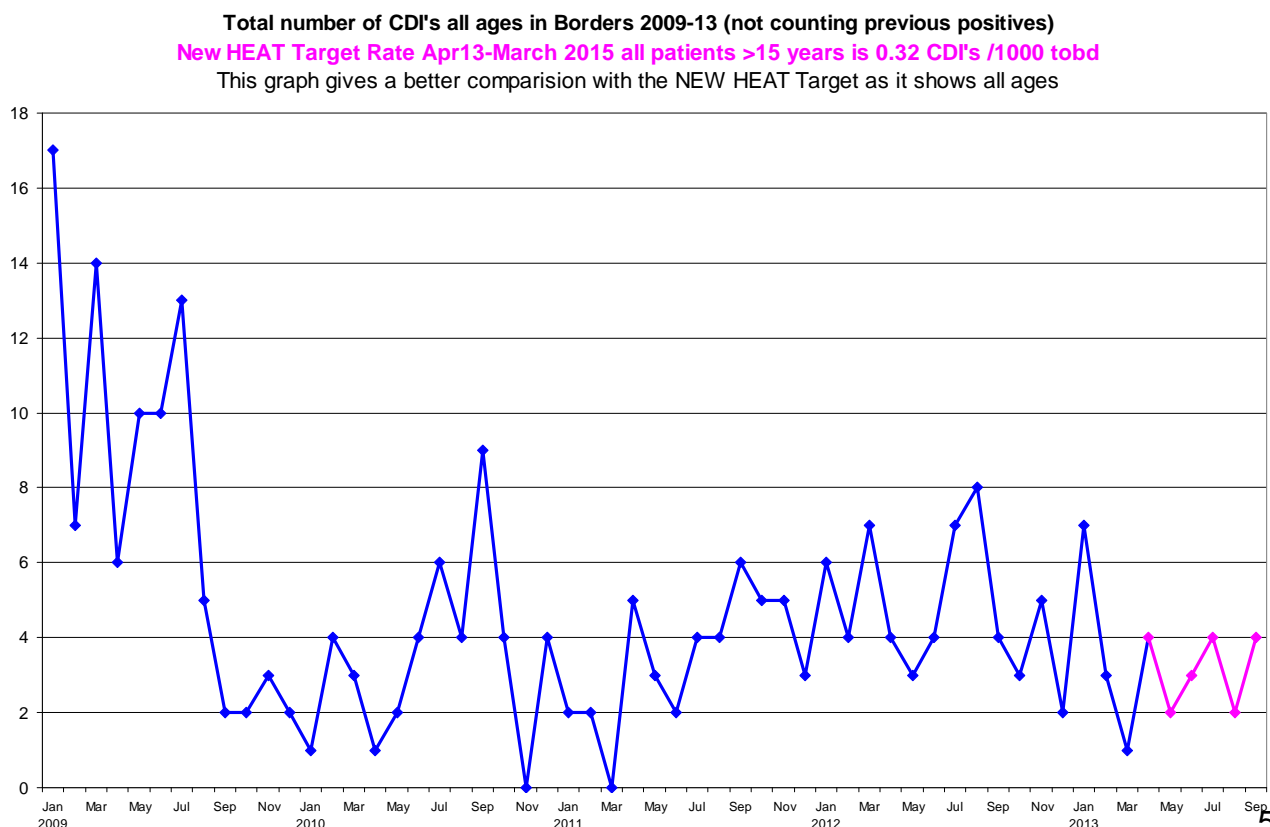
Clostridium difficile infections 2012/13

The National *Clostridium difficile* infections (CDI) rates were revised retrospectively in September 2013 which meant that the CDI HEAT rate for year ending March 2013 was adjusted to 0.51 or less cases of per 1000 total occupied bed days in patients aged 65 and over by the year ending March 2013. With this revision NHS Borders has now met the HEAT target as the revised rate achieved was 0.49 per 1000 total occupied bed days.

Although NHS Scotland has recorded significant improvements in the prevention and control of *C. difficile* infections since 2008, recent surveillance has been showing a levelling of the previous downward trend in CDI (Chief Nursing Officer letter 21 December 2012). Local surveillance reflects this national trend.

Figure 2 displays a run chart of CDI cases highlighting the overall improvements made since 2009. Data from the end of March 2013 now includes the new HEAT target age group (patients aged 15 years and over).

Figure 2: Run Chart of CDI in NHS Borders 2008 – 2013



Similar to the SAB response, a CDI action plan has been developed that pivots around the Prevention of CDI Group established earlier this year. Progress against actions will be monitored and supported through the new HAI Strategic Control Group agenda. An example of work developed following formation of this new group was an integrated case review conducted of all 14 CDI cases recorded within NHS Borders since April 2013. This integrated review was performed by a collaborative medical, nursing, management and infection control sub-review group that convened on 12th September 2013.

The purpose of the integrated case review/report was to ensure that patients are:

- being treated appropriately;
- identify any preventative action which can be taken to reduce the number of CDI cases across NHS Borders; and
- review the laboratory CDI testing algorithms for NHS Borders and Health Protection Scotland (HPS).

Main Review findings:

a. Laboratory testing

The group noted variances across NHS Scotland laboratories as to how CDI tests are conducted. In 2012, Health Protection Scotland (HPS) circulated an algorithm which was recommended for use across Scotland. The HPS algorithm differs for the current process in place within NHS Borders. Following this review NHS Borders has now adapted their laboratory processes to align with the HPS algorithm and contribute to reducing variance in testing across NHS Scotland.

b. Designation of source of infection

Community: 5 cases

Healthcare associated: 6 cases

Hospital associated: 3 cases

Out of the cases sent for ribotyping, the results indicate there was no cross infection.

NHS Borders community hospitals have not experienced CDI cases during the rolling year October 2012 – September 2013 (NHS Community Hospitals Report Card p.16).

The Infection Prevention and Control Team have liaised with three other health boards as a sharing practice exercise to assist with further improvements. In addition, the outcomes and actions of all CDI severe case investigations will be monitored through the Prevention of CDI Group and used to inform the progression of work-streams to support improvement. The Antimicrobial Management Team continues to monitor antimicrobial prescribing rates in both acute and community Clinical Boards, and includes a renewed focus on dental antimicrobial prescribing.

Hand Hygiene

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/>

NHS Boards monitor hand hygiene and ensure a zero tolerance approach to non compliance. The hand hygiene compliance score for the Board can be found at the end of section 1 and for each hospital in section 2. Information on national hand hygiene monitoring can be found at:

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

The hand hygiene data tables contained within the NHS Borders Report Card (Section 2 p.14) are generated from wards conducting self-audits.

NHS Borders has consistently participated in the national hand hygiene audits which were conducted every other month. The most recent and final national audit report was September 2013. During the audit period (22nd - 2nd August 2013) NHS Borders achieved an overall compliance rate of 98%. The national average was 96%. Hand hygiene compliance monitoring will remain for local reporting. The IPCT is currently reviewing local governance and quality assurance processes, which should be reported to the Scottish Government by December 2013

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>

High levels of cleanliness continue to be recorded through the monitoring process across NHS Borders estate. The data presented within the NHS Borders Report Card (Section 2 p.14) is an average figure across the sites using the new national cleaning and estates monitoring tool that was implemented in April 2012. Figure 3 below, highlights NHS Borders cleaning compliance has been consistently higher than the national average over recent years.

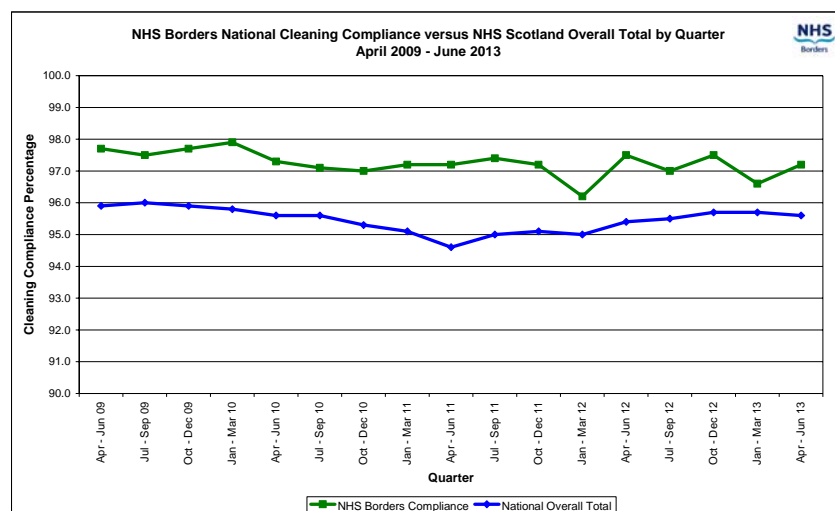


Figure 3: NHS Borders national cleaning compliance versus NHS Scotland's overall performance

Outbreaks

Infection Incidents Resulting in Ward/Bay Closures

Table 1 presents a quarterly closure summary of wards and bays due to infection control activity within NHS Borders. The sole cause of closure during the period of display was viral gastroenteritis. The norovirus season officially ended in early June 2013; however, sporadic outbreaks of viral gastroenteritis continued throughout NHS Scotland, including NHS Borders where both Hawick and Kelso Community Hospitals were affected. At the time of preparing this report BGH has experienced its first case of norovirus during the autumn period resulting in the closure of one ward. This will be reported in the next HAIRT. Lessons learned from previous seasons and early preparations co-ordinated through the Norovirus Preparedness Group (NPG) have ensured optimal control measures were implemented without delay. This group continues to meet to ensure NHS Borders systems and key staff are optimally prepared to identify and manage norovirus outbreaks.

Infection Control Closure Summary - Viral Gastroenteritis																		
	2012/2013						2013/2014											
	Qtr 4						Qtr 1						Qtr 2					
	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep	
	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards
Ward 4																		
Total days																		
Ward 5																		
Total days																		
Ward 6	3	1	2		3	1			1	1								
Total days	2 days	1 day	5 days		4 days	4 days			2 days	2 days								
Ward 7	1		1															
Total days			1 day															
Ward 8																		
Total days																		
Ward 9			1															
Total days			2 days															
DME					2	1	2	1										
Total days					4 days	6 days	8 days	2 days										
Stroke Unit																		
Total days																		
Ward 12	1						2	1	1									
Total days	7 days						5 days	3 days	3 days									
Ward 14	2																	
Total days	2 days																	
Ward 15																		
Total days																		
Ward 16																		
Total days																		
Ward 17																		
Total days																		
Kelso												1						
Total days												4 days						
Haylodge			1															
Total days			5 days															
Hawick									1		1							
Total days									2 days		7 days							
Knoll																		
Total days																		
TOTAL	7	1	5	0	5	2	4	2	2	2	0	2	0	0	0	0	0	0
The number of bay closures indicated in a month is the maximum bay closures for that period																		
When ward has been closed during a month, the bay closures indicated during this period have either preceded or followed the ward closure																		
Ward/ bay closures running over consecutive months are part of one episode																		

Table 1: NHS Borders infection control closure summary due to GI illness

Other Healthcare Associated Infections (HAI) Related Activity

New *E.coli* sentinel surveillance pilot

- NHS Borders has volunteered to participate in an *E.coli* bacteraemia enhanced surveillance pilot project co-ordinated by Health Protection Scotland. This project was established as the number of *E. coli* bacteraemias reported to HPS has increased continuously since 2009, resulting in a 10% overall increase from 2009 (3486 cases) to 2011 (3839 cases).

HPS summarise the overarching aim of the programme is to monitor the burden of *E. coli* bacteraemias and to better understand the implications this will have on Scotland's health service.

To deliver this aim the pilot study will help to identify ways:

1. To measure and monitor the burden of *E.coli* bacteraemia in a range of different settings
2. To understand the epidemiology of *E.coli* bacteraemia in Scotland
3. To understand what interventions will be most effective in reducing the primary infections that cause *E.coli* bacteraemia
4. To optimise the antimicrobial management of *E.coli* bacteraemia and the primary infections which cause ECB (including the avoidance of inefficacious treatment regimens, i.e. 'medical prophylaxis' [sic])
5. To be able to demonstrate and quantify the effectiveness of any programme interventions in different care settings

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

The Surgical Site Infection (SSI) surveillance is conducted on the following range of procedures:-

- Caesarean section
- Hip Arthroplasty
- Knee Arthroplasty
- Colorectal Surgery

Table 2 (p.12) displays the results of the surgical site infection (SSI) surveillance data for each procedure since surveillance started.

During 2012 there was an increase in SSI following hip arthroplasty operations. A multi disciplinary short life working group (SLWG) was formed to investigate aspects of the patient pathway with respect to identifying potential sources of increased environmental infection load, or decrease in patient immuno-competence. A review did not identify any common factors that could have been indicative of an outbreak. The infections are from a range of organisms in both elective and emergency cases, undertaken by different surgeons.

Following a period of no SSIs (November 2012 – January 2013) there were, however, 4 new SSI cases during February - September 2013 following hip arthroplasty and 3 SSI cases following knee arthroplasty.

An action tracker is in place for Ward 9 and Theatres. A thorough environmental audit has been conducted of the Theatres environment by the IPCT and reported to the senior management team responsible for Theatres. A separate Theatres SLWG has been formed to address the issues identified from this environmental audit report. These actions, alongside additional initiatives, such as observing the patient journey through theatres whilst undergoing hip and knee surgical procedures and findings from enhanced surveillance to help identify any other factors will be included in the new HAI Strategic Control Group agenda.

Staff training

- Funding of circa £29,000 has been secured from NHS Education for Scotland (NES) for education on the Aseptic Technique e-learning module. The Infection Prevention and Control Team are working in collaboration with the Training Dept. to progress a learning and development programme on this module. Training has taken place within the community hospitals and dates have been set to include BGH based staff.

Infection Control Audits

- As previously reported (HAIRT August 2013) in January 2013 wards in Borders General Hospital (BGH) were audited for compliance with the best practice 'care bundle' relating to the use of peripheral venous cannulae (PVCs). Compliance with best practice is important as these devices are commonly used and are a risk factor for patients developing a *staphylococcus aureus* infection. Overall compliance had dropped since a previous audit in September 2012 and further evidence indicates that subsequent improvements have not achieved sustained high levels of compliance.

As a result, a more systematic approach incorporating principles of improvement methodology was introduced by the IPCT during August 2013 and continues to expand within BGH. Five ward areas are now included within phase of work. This work, which is supported by the HAI Strategic Control Group, aims to have all relevant clinical areas included by the end of December 2013 and to reach a phase of sustained improvement during the 1st quarter 2014.

2012/13 Infection Control Work Plan

- The Infection Prevention and Control Team 2013/14 work plan has been implemented and continues to progress as planned.

Healthcare Environment Inspectorate

- HEI have commenced with their plans for inspections of non-acute/community hospitals within NHS Scotland. NHS Borders has not been contacted to date. The first inspection will be announced, which will promote the learning and development process that was experienced during the early acute hospital inspections. The IPCT continue to roll-out their environmental audit programme to the community hospitals, which alongside the Borders Executive Team inspections will help prepare for the HEI inspection process.

Surgical Site Infection (SSI) Data Table

	Year	NHS Borders				NHS Scotland		Comments
		Number of Procedures	Number of Surgical Site Infections (SSIs)	SSI Rate %	95% Confidence Interval	National SSI Rate %	95% Confidence Interval	
C-Section	2009	222	1	0.50	0.1 to 2.5	2.6	2.3 to 2.8	
	2010	257	3	1.20	0.4 to 3.4	2.6	2.4 to 2.9	
	2011	222	1	0.00	0 to 3.3	1.4	1.1 to 1.8	
	2012	244	1	0.40	0.1 to 2.5	2.0	1.8 to 2.3	
	2013	187	1	0.53	0.0 to 5.7	1.3	0.9 to 1.8	
Hip Arthroplasty	2009	230	2	0.90	0.2 to 3.1	1.2	1.0 to 1.4	
	2010	239	0	0.00	0 to 1.8	0.8	0.7 to 1.1	
	2011	222	0	0.00	0 to 3.3	1.4	1.1 to 1.8	
	2012	281	8	2.80	1.4 to 5.5	0.7	0.6 to 0.9	
	2013	236	4	1.69	0.6 to 7.7	1.0	0.6 to 1.7	
Knee Arthroplasty	2011	154	1	0.68	0 to 2.4	0.2	0.1 to 0.5	Please note the small number of infections and procedures which impacts on the overall SSI rate.
	2012	136	0	0.00	0 to 2.7	0.2	0.1 to 0.3	
	2013	153	3	1.96	0.0 to 8.4	0.1	0.0 to 0.7	
Colorectal Surgery	2012	80	2	2.50	0.7 to 8.7	14.8	11.4 to 19.5	Large Bowel
	2012	4	0	0.00	0 to 49.0	0.0	0 to 49.0	Small Bowel - no national data available
	2013	85	5	5.88	1.1 to 28.3	16.1	9.0 to 27.2	Large Bowel
	2013	7	0	0.00	0 to 79.3	66.7	20.8 to 93.9	Small Bowel - no national data available

Table 2: Surgical Site Infection Data Table

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 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

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
MRSA	1	0	0	0	0	0	0	0	0	0	0	2
MSSA	2	1	1	3	4	1	3	3	3	2	2	3
Total SABS	3	1	1	3	4	1	3	3	3	2	2	5

Clostridium difficile infection monthly case numbers

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
Ages 15-64	0	1	0	0	0	0	3	0	0	1	2	2
Ages 65 plus	3	4	2	7	3	1	1	2	2	4	1	2
Ages 15 plus	3	5	2	7	3	1	4	2	2	5	1	4

Hand Hygiene Monitoring Compliance (%)

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
AHP	100	96.7	100	98.6	100	100	98.8	98.5	100	100	94.8	96.9
Ancillary	98.0	100	95.7	97.3	94.3	98.4	95.5	97.8	99.0	97.0	94.5	98.4
Medical	100	95.3	94.3	98.6	99.2	98.1	96.9	95.7	95.0	98.0	93.3	96.2
Nurse	99.5	98.8	99.8	99.8	99.3	99.7	99.7	99.8	99.3	99.0	98.6	98.7
Board Total	99.6	97.9	98.3	99.2	98.8	99.4	98.6	98.8	98.7	98.7	96.7	98.1

Cleaning Compliance (%)

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
Board Total	96.1	96.4	97.8	96.9	97.1	97.8	98.0	96.9	97.0	96.4	96.6	97.3

Estates Monitoring Compliance (%)

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
Board Total	98.5	96.4	98.3	98.3	98.5	98.5	98.2	98.1	97.9	98.5	98.9	98.6

BORDERS GENERAL HOSPITAL REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
MRSA	1	0	0	0	0	0	0	0	0	0	0	0
MSSA	1	0	0	1	1	0	0	0	1	0	0	0
Total SABS	2	0	0	1	1	0	0	0	1	0	0	0

Clostridium difficile infection monthly case numbers

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	2	3	0	4	1	0	0	0	0	2	0	2
Ages 15 plus	2	3	0	4	1	0	0	0	0	2	0	2

Cleaning Compliance (%)

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
Board Total	97.2	97.0	98.2	96.8	97.7	97.8	97.8	97.1	97.3	96.9	96.2	97.3

Estates Monitoring Compliance (%)

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
Board Total	97.2	97.0	98.2	96.8	97.7	97.8	97.8	97.1	97.3	96.9	96.2	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

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
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

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	0	0	0	0	0	0	0	0	0	0	0	0
Ages 15 plus	0	0	0	0	0	0	0	0	0	0	0	0

NHS OUT OF HOSPITAL REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
MRSA	0	0	0	0	0	0	0	0	0	0	0	2
MSSA	1	1	1	2	3	1	3	3	2	2	2	3
Total SABS	1	1	1	2	3	1	3	3	2	2	2	5

Clostridium difficile infection monthly case numbers

	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013	Aug 2013	Sept 2013
Ages 15-64	0	1	0	0	0	0	3	0	0	1	2	2
Ages 65 plus	1	1	2	3	2	1	1	2	2	2	1	0
Ages 15 plus	1	2	2	3	2	1	4	2	2	3	1	2