

Borders NHS Board



HEALTHCARE ASSOCIATED INFECTION CONTROL AND PREVENTION REPORT – August 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		

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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 August 2013

- NHS Borders did not achieve the *Staphylococcus aureus* Bacteraemia (SAB) and *Clostridium difficile* infection (CDI) HEAT target rates for year ending 31st March 2013.
- Action plans have been developed to address the SAB/CDI HEAT targets. Examples include improvement methodology introduced to BGH this month for the compliance of the Peripheral Vascular Cannulae insertion bundle and formation of a new HAI Strategic Control Group.
- The Scottish Government recognises Meticillin Sensitive *Staphylococcus aureus* (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.
- The Norovirus Preparedness Group (NPG) has now formed in preparation for this forthcoming season.
- The Scottish Government has introduced a new reporting template, most notable in section 2 report cards with the removal of graphs in favour of tables to present all data.

***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/sshap/publicationsdetail.aspx?id=30248>

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.

Significant improvements, however, have been made in relation to SAB numbers. During the HEAT target period 2011/12 - 2012/13 NHS Borders reduced the number of SABs by

46%. This overall improvement is better displayed when comparing full year numbers as shown in Table 1.

Table 1 displays the reduced number of SABs per year alongside the reduced number of acute occupied bed days (AOBD) during this period. These figures are used to calculate the HEAT target performance expressed as 'SAB cases per 1000 AOBD'. A hypothetical scenario is presented in Table 1 to highlight the affect of reduced AOBD on this calculation. Planning and Performance are currently facilitating further inquiry to explore the AOBD data used by Health Protection Scotland to calculate the HEAT target performance and to establish a monitoring system to inform future improvements and performance.

Table 1: No. of SAB cases, AOBD per year (2010/11-2012/3) and SABs by location

Year	No. of SABs	AOBD (source: HPS)	SAB cases per 1000 AOBD	Location of SABs			
				Community	Healthcare	Hospital	Lothian
2010/11	45	105,620	0.42 (local calculation)	9	12	24	0
2011/12	32	96,502	0.33 (local calculation)	9	9	11	3
2012/13	24	82,893	0.29 (HPS calculation)	8	6	6	4
Hypothetical scenario to show impact of AOBD: 2012/13 SABs calculated with 2010/11 AOBD							
-	24	105,620	0.23 (HEAT target 0.26)	-	-	-	-

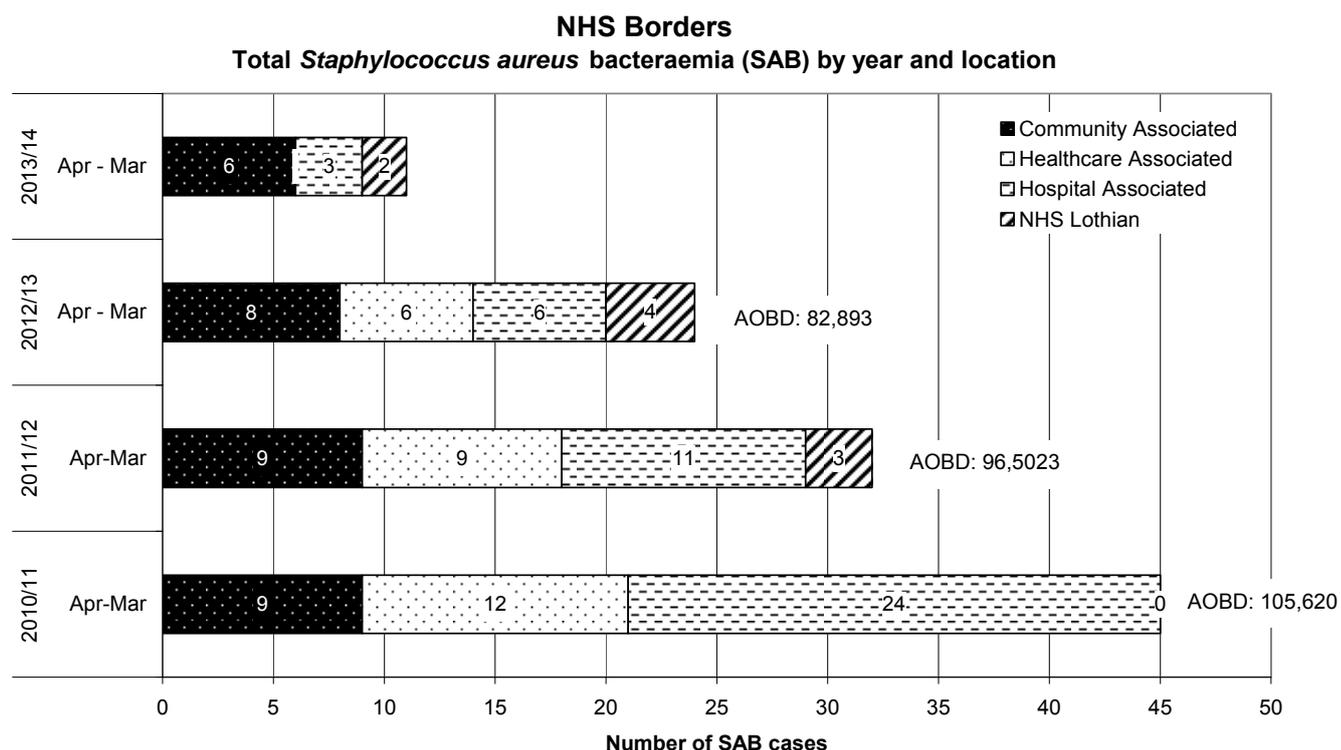
Table 1 further displays the overall reduction in healthcare and hospital associated SABs, whereas community associated cases, which does not include community hospitals, have remained relatively static.

During the most recent year 2012/13, 8 SABs were community associated and 4 SABs were acquired from another area indicating that these acquisitions were not directly related to NHS Borders' interventions. These cases are included within the HEAT target performance. The remaining 12 SABs were, however, classed as either 'Healthcare Associated' or 'Hospital Associated', where further improvements can be made.

The Scottish Government acknowledge 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. As a result, the Scottish Government have offered the opportunity for NHS Boards to write to the Scottish Government with evidence that the denominator rather than the lack of success in reducing SABs has impacted on delivery (CNO (2013) 2). NHS Borders is currently engaging with the Scottish Government on this point.

In addition to data highlighted in Table 1, Figure 1 (p.4) displays SAB cases for the current year beginning April 2013. These cases 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: NHS Borders total staphylococcus aureus bacteraemia (SAB) by year and location.



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.

The Infection Prevention and Control Team (IPCT) have constructed an action plan, which pivots around workstreams developed from the Prevention of SABs Group. This prevention group meets on a monthly basis and continues to work with clinical services. These actions are summarised in Table 2 (p.6).

In addition to the SAB specific actions a new HAI Strategic Control Group is currently in development to provide a combined role of critically reviewing progress against these actions and providing support and guidance to achieve the new HEAT target. This group will be chaired by the HAI Executive Lead (Director of Nursing & Midwifery).

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 12 cases (50%) being attributed to either community (out of hospital) or infection onset following interventions out with NHS Borders.

Furthermore, analysis of NHS Borders SAB cases during the rolling year August 2012 - July 2013 (Section 2 NSHB Board Report Card p.17) demonstrates that 26 SAB cases from a total of 28 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. This includes the need to focus on novel MSSA interventions that will deliver early results to support Boards' HAI HEAT target delivery. Local SAB surveillance data will contribute to this development. The local action

plan will continue to evolve as the understanding of MSSA and out of hospital cases develops.

NHS Borders community hospitals have not experienced SAB cases during the rolling year August 2012 – July 2013 (NHS Community Hospitals Report Card p.19).

Table 2: SAB action plan

Action	Responsible	Start Date	Target Completion/ Review Date
Progression of the <i>Staphylococcus Aureus</i> Bacteraemia (SAB) Group Workstreams:			
PVC Workstream <ul style="list-style-type: none"> Improvement methodology adopted and commenced relating to PVC insertion compliance within BGH Hickman Line Workstream <ul style="list-style-type: none"> Develop Hickman line audit in conjunction with Judith Smith Consultant Nurse Oncology Blood Culture Workstream <ul style="list-style-type: none"> Education for FY1 Doctors and further development of poster Urinary Catheter Workstream <ul style="list-style-type: none"> Joint collaborative Driver Program and Change Package (Catheter Associated Urinary Tract Infection CAUTI) 	Colin Redmond	05/08/13	31/03/14
NHS Borders is currently engaging with the Scottish Government relating to the HEAT Target denominator (CNO (2013) 2).	Dr Ed James	03/06/13	31/08/13
Local SAB surveillance data will contribute to the Scottish Government's development of 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. This includes the need to focus on novel MSSA interventions that will deliver early results to support Boards' HAI HEAT target delivery.	Judith Machell	01/04/13	Ongoing through HEAT Target duration

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>

NHS Borders had a Scottish Government HEAT target to achieve a rate of 0.39 or less cases of *Clostridium difficile* infections (CDI) per 1000 total occupied bed days in patients aged 65 and over by the year ending March 2013. NHS Borders achieved a rate of 0.42 cases per 1000 total occupied bed days.

An increase in cases during July / August 2012 and January 2013 contributed to a rate higher than the CDI HEAT target rate ending in March 2013. Further investigations involving ribotyping of hospital case isolates during July 2012 to January 2013 did not suggest transmission of strains within BGH.

Examination of CDI cases (age ≥ 65 yrs) over the last 3-years is displayed within Table 3 below. Unlike the SAB cases, CDI cases have increased during the HEAT target period April 2011 - March 2013. However, numbers remain significantly lower than the peak of 115 CDI cases recorded during 2008/9 within NHS Borders, as reflected in Figure 2 (p.8).

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.

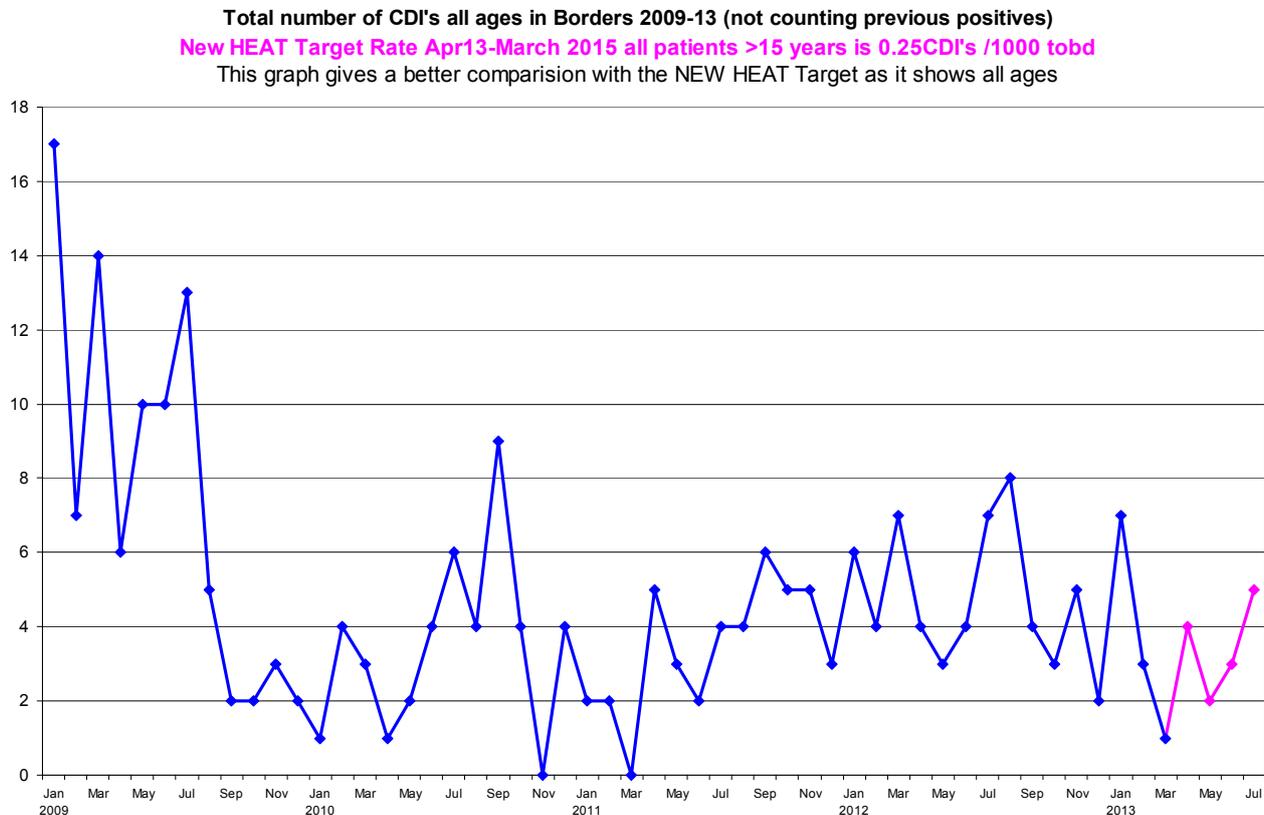
Table 3: No. of CDI cases (age ≥ 65 yrs), TOBD per year (2010/11 to 2012/13) and CDI categories

Year	No. of CDIs (age ≥ 65 yrs)	TOBD (source: HPS)	CDI cases per 1000 TOBD	CDI categories		
				Out of hospital (<48 hours)	Community Hospitals	>48 -hrs BGH admission
2010/11	27	110,283	0.25 (local calculation)	17	1	9
2011/12	39	105,452	0.37 (local calculation)	18	6	15
2012/13	44	105,555	0.42 (HPS calculation)	21	3	20
Hypothetical scenario to show impact of TOBD: 2012/13 CDIs calculated with 2010/11 TOBD						
	44	110,283	0.40 (HEAT target .39)			

During 2012/13, 21 cases were associated with out of hospital onset (samples collected in the community). These cases are included within the HEAT target performance. NHS Borders community hospitals have not experienced CDI cases within the last rolling year from August 2012 (NHSB Community Hospitals Report Card p.19).

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



A new Scottish Government HEAT target for CDIs has been set to achieve a rate of 0.25 CDI cases or less per 1000 total occupied bed days. This has been reduced from 0.39 per 1000 total occupied bed days and now includes all patients' aged 15 years and over. The previous HEAT target was based on patients aged 65 years and over. This change presents a significant challenge to NHS Borders over the next two years.

Similar to the SABs, a CDI action plan (Table 4 p.9) has been developed that pivots around the recently established Prevention of CDI Group. Progress against actions will be monitored and supported through the new HAI Strategic Control Group agenda.

The Infection Prevention and Control Team continue to liaise with 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.

Action	Responsible	Start Date	Target Completion/ Review Date
Development of CDI specific nursing documentation for Infection Control Nurses	Adam Wood	05/08/13	30/09/13
Adoption of CDI Severe Case Investigation documentation	Dr Ed James	26/02/13	Complete
Review how monthly hand hygiene audit compliance are actioned on by ward staff	Colin Redmond	05/08/13	30/09/13
Establish a Strategic Control Group to oversee respective Prevention Groups	Colin Redmond/ Lynsey Forsyth	08/08/13	04/09/2013
Ascertain which other boards have performed well against their HEAT targets for both SAB and CDI. Identify from these Boards any additional or different approaches to the prevention and management of both SAB and CDI not used in NHSB and consider adaptation and implementation within NHSB	Adam Wood	01/05/2013	30/09/2013

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.17) are generated from wards conducting self-audits.

NHS Borders also continues to participate in national hand hygiene audits which are conducted every other month. The most recent published report is July 2013. During the audit period (20th - 31st May 2013) NHS Borders achieved an overall compliance rate of 99%. The national average was 96%.

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.17) 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.

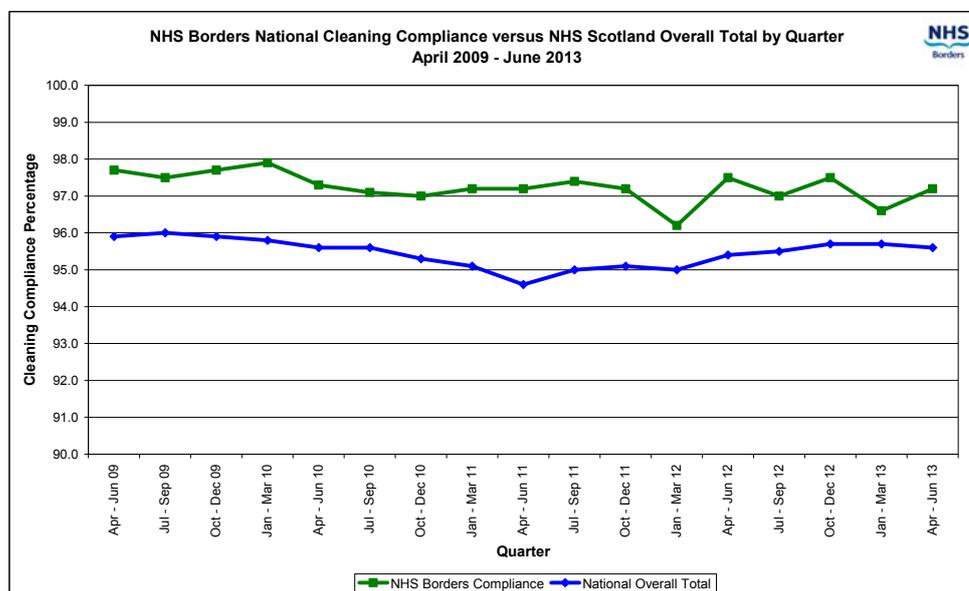


Figure 3: NHS Borders national cleaning compliance versus NHS Scotland's overall performance

Outbreaks

Infection Incidents Resulting in Ward/Bay Closures

Table 5 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. There has been no bay or ward closures since these incidents in June. The Norovirus Preparedness Group (NPG) has now formed. This group exists 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 3						Qtr 4						Qtr 1					
	Oct		Nov		Dec		Jan		Feb		Mar		Apr		May		Jun	
	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards	Bays	Wards
Ward 4			1		2													
Total days			3 days		5 days													
Ward 5			2		1													
Total days			5 days		2 days													
Ward 6			2		1	1	3	1	2		3	1			1	1		
Total days			16 days		3 days	1 day	2 days	1 day	5 days		4 days	4 days			2 days	2 days		
Ward 7			1				1		1									
Total days			1 day						1 day									
Ward 8																		
Total days																		
Ward 9					2				1									
Total days									2 days									
DME			2	1	1	1					2	1	2	1				
Total days			9 days	5 days	4 days	3 days					4 days	6 days	8 days	2 days				
Stroke Unit																		
Total days																		
Ward 12			2	1	2	1	1						2	1	1			
Total days			3 days	13 days	8 days	5 days	7 days						5 days	3 days	3 days			
Ward 14			2		2	1	2											
Total days			14 days		8 days	7 days	2 days											
Ward 15																		
Total days																		
Ward 16			1															
Total days			3 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	0	0	13	2	11	4	7	1	5	0	5	2	4	2	2	2	0	2
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 5: NHS Borders infection control closure summary due to GI illness

Other Healthcare Associated Infections (HAI) Related Activity

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 6 (p.15) shows the results of the surgical site infection (SSI) surveillance data for each procedure since surveillance started.

During 2012 there was an increase in SSIs 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, 3 new SSI cases in February - April 2013 following hip arthroplasty and 2 SSI cases following knee arthroplasty. The SLWG has since reviewed its action trackers with renewed impetus and focus on collaborative working with Ward 9, Theatres and the Infection Prevention and Control Team to expedite a resolution to this current issue.

An action tracker is in place for Ward 9 and Theatres. Examples of new actions being undertaken by the SLWG are audits utilising Infection Prevention Quality Improvement Tools to observe the patient journey through theatres whilst undergoing hip and knee surgical procedures. This will include pre-and post operative care. In addition, enhanced surveillance is underway, which involves more detailed recording of patient related data to help identify any other factors. SSI 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 in Hawick and Knoll Community Hospitals, which included a presentation and discussion led by the Consultant Microbiologist / Infection Control Dr before the e-

learning session was facilitated by a member of the Training Dept. Training will extend to BGH on completion of the remaining community hospital locations.

Infection Control Audits

- 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.

The Infection Prevention and Control Team (IPCT) supported the BGH Hospital Executive Team to review the PVC audit data for detailed extraction of information to allow a targeted intervention for service improvement. This identified the insertion bundle and medical staff as areas for potential improvement. PVC insertion is predominantly a medical procedure. The IPCT made several recommendations with actions allocated to individuals and collaborated with medical staff, procurement dept. and the training dept. to deliver these actions.

Initial interventions alongside more regular re-audits showed a promising increase in compliance with the insertion bundle. This initial improvement was, unfortunately, followed by a reduction. As a result, a more systematic approach incorporating principles of improvement methodology has been introduced by the IPCT to BGH at the beginning of this month (August 2013). This action is outlined in the SAB action plan (Table 2 p.5) and will be supported by the HAI Strategic Control Group.

This work 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. This plan will contribute to efforts to reduce SAB cases and to improve the HEAT target performance ending March 2015.

2012/13 Infection Control Work Plan

- The Infection Prevention and Control Team 2013/14 work plan has been implemented.

Healthcare Environment Inspectorate

- NHS Borders submitted their HAI Self Assessment for 1st July 2013 as requested by Health Improvement Scotland.
- HEI consulted with NHS Boards on proposals and recommendations for inspections of non-acute/community hospitals. These inspections will be undertaken as part of the current cycle of inspections commencing in autumn 2013. The first inspection will be announced, which will promote the learning and development process that was experienced during the early acute hospital inspections. Community hospitals are included within Borders Executive Team inspections to help prepare for the HEI inspection process and to help ensure these locations meet HEI standards similar to those achieved within BGH.

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	138	0	0.00	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	196	3	1.53	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	117	2	1.71	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	65	4	6.51	1.1 to 28.3	16.1	9.0 to 27.2	Large Bowel
	2013	4	0	0.00	0 to 79.3	66.7	20.8 to 93.9	Small Bowel - no national data available

Table 6: 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

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

Clostridium difficile infection monthly case numbers

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

Hand Hygiene Monitoring Compliance (%)

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

Cleaning Compliance (%)

	Aug 2012	Sep 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013
Board Total	98.0	96.7	96.1	96.4	97.8	96.9	97.1	97.8	98.0	96.9	97.0	96.4

Estates Monitoring Compliance (%)

	Aug 2012	Sep 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013
Board Total	98.4	97.5	98.5	96.4	98.3	98.3	98.5	98.5	98.2	98.1	97.9	98.5

BORDERS GENERAL HOSPITAL REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

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

Clostridium difficile infection monthly case numbers

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

Cleaning Compliance (%)

	Aug 2012	Sep 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013
Board Total	98.0	97.2	97.2	97.0	98.2	96.8	97.7	97.8	97.8	97.1	97.3	96.9

Estates Monitoring Compliance (%)

	Aug 2012	Sep 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Mar 2013	Apr 2013	May 2013	Jun 2013	Jul 2013
Board Total	98.5	98.3	98.4	98.0	98.7	98.3	98.4	98.5	98.7	98.7	98.3	98.5

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

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

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

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

Clostridium difficile infection monthly case numbers

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