

INFECTION CONTROL REPORT

Report by Liz McClurg, Interim Infection Control Manager
on behalf of Heidi May, Board Nurse Director & Executive Lead for Infection Control.

The Board is asked to:

- **Note** the contents of the report.

1 Background and Summary

In August 2008 the Scottish Government published the Independent Review of *Clostridium difficile* Associated Diseases at the Vale of Leven Hospital (December 2007 – June 2008). This report raised a number of infection control-related issues which may be applicable to other NHS Boards in Scotland. To ensure a consistent approach was adopted nationally, the Scottish Government Health Directorates issued a 'Healthcare Associated Infection (HAI) General Action Plan'.

Item 1.2 of the Action Plan – *Governance*, required all NHS Boards to implement a nationally agreed reporting template, to be used as the framework to report progress against the Healthcare Associated Infection Agenda to Board meetings on a two-monthly basis. The implementation date for this reporting process was January 2009.

The key purpose of this report is to:

- Ensure visibility of HAI data and issues for Board members, facilitating awareness and action where indicated.
- Assist in creating and populating a routine NHS Board HAI data set to facilitate assurance, awareness and national reporting for various levels within the organisation.
- Place more detailed local information on HAIs in the public domain in the context of an open Board meeting and on the Board website.

2 HAI Reporting Template – NHS Highland Activity

The revised Healthcare Associated Infection Reporting Template (HAIRT) is now used by all Boards. It is in two sections.

- Section 1 covers Board-wide infection prevention and control activity and actions. A report card summarising Board-wide statistics can be found at the end of Section 1.
- Section 2 is a series of "Report Cards" which provide information for each acute hospital in the Board and for the community hospitals within each Community Health Partnership (CHP) 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.

For each hospital the total 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.

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.

3 Executive Summary

<i>Staphylococcus aureus</i> bacteraemia (SAB)	The rate remains below that of the national target of 0.26 cases per 1000 acute occupied bed days at 0.17 for the period April – June 2011.
<i>Clostridium difficile</i>	The rate remains below that of the national target of 0.39 cases per 1000 total occupied bed days at 0.28 for the period April – June 2011.
Hand Hygiene	Compliance with hand hygiene 95% in May and 96% in June 2011.
Cleaning and the Healthcare Environment	Cleaning Compliance 93% in May and 92% in June 2011. The HEI visited the Mackinnon Memorial Hospital, Broadford and Belford Hospital, Fort William in July, awaiting formal report.
Significant HAI incidents / outbreaks, emerging threats	No outbreaks during May and June 2011
Antimicrobial Prescribing	The reduction in the use of antibiotics associated with <i>Clostridium difficile</i> infection (CDI) has been maintained throughout NHS Highland.
Surgical site infections	Low rates of orthopaedic and caesarean section surgical site infections have been maintained.

4 Contribution to Board Objectives

Our key objective is “to reduce to an absolute minimum the chance of acquiring an infection whilst receiving healthcare and ensure our hospitals are clean”. This report presents a comprehensive view of HAI data and activities for scrutiny and feedback from the Board.

5 Governance Implications

5.1 Staff Governance

- As additional information is distributed more widely it will ensure staff are better informed in respect of current issues relating to Infection Control and the management of HAI in our healthcare premises - “HAI is Everybody’s Business”.

5.2 Patient and Public Involvement

- The distribution of regular information to the patient/public sector will increase awareness and facilitate increased participation of patient/public representatives in the Infection Control agenda.

5.3 Clinical Governance

- By improving infection control practices, we will endeavour to provide a healthcare environment for patients that minimises the risk of HAI.

5.4 Financial Impact

- By reducing the incidence of HAI in our healthcare premises, financial savings could be achieved through lower rates of infection.

5.5 Better Health, Better Care, Better Value

- By improving infection control practices, we will endeavour to provide a healthcare environment for patients that minimises the risk of HAI.

6 Risk Assessment

By risk assessing infection control practices, we will endeavour to minimise the risk of HAI.

7 Impact Assessment

As Infection Control policies are updated they are impact-assessed for equality and diversity.

Liz McClurg
Interim Infection Control Manager
Corporate Services

July 2011

**NHS Highland Healthcare Associated Infection Report –
July 2011
Section 1 – NHS Highland Board Wide Issues**

Key Healthcare Associated Infection Headlines

- **Infection Prevention and Control Study day held on 29th June 2011.**

***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>

Current HEAT status

With effect from April 2011, all Boards are expected to achieve a rate of 0.26 *Staphylococcus aureus* bacteraemia (SAB) cases per 1000 acute occupied bed days or lower by year ending March 2013.

NHS Highland's rate is 0.17 (April – June 2011). Of note there have been no MRSA infections during this period, with 11 MSSA infections.

Root cause analysis continues to be used to identify cause; of the 11, there were 3 hospital acquired, 4 healthcare acquired, 3 community acquired and 1 blood culture contamination

Table 1 shows the *Staphylococcus aureus* bacteraemia classifications.

Classification
Hospital acquired A patient whose blood cultures were taken more than 48 hours after admission or within 48 hours of discharge.
Healthcare acquired A patient receiving regular care between the community and hospital, or regular care at an outpatient department, and whose blood cultures were taken less than 48 hours after admission or more than 48 hours after a hospital discharge, or the patient was transferred from another hospital.
Nursing Home acquired A patient who normally resides in a nursing home and had blood cultures taken less than 48 hrs after admission to hospital, and who was not discharged from hospital within the past 48 hours.
Community acquired A patient whose blood cultures were taken less than 48 hrs after admission and who has not within the past month been an in patient in any hospital and was not receiving community healthcare, eg. use of an invasive device or Healthcare Worker dressing a wound.

The main causes of the hospital/healthcare *Staphylococcus aureus* bacteraemias during April – June 2011 were skin and soft tissue infections.

Initiatives to reduce SAB Infections

Catheter Associated Urinary Tract Infections (CAUTI)

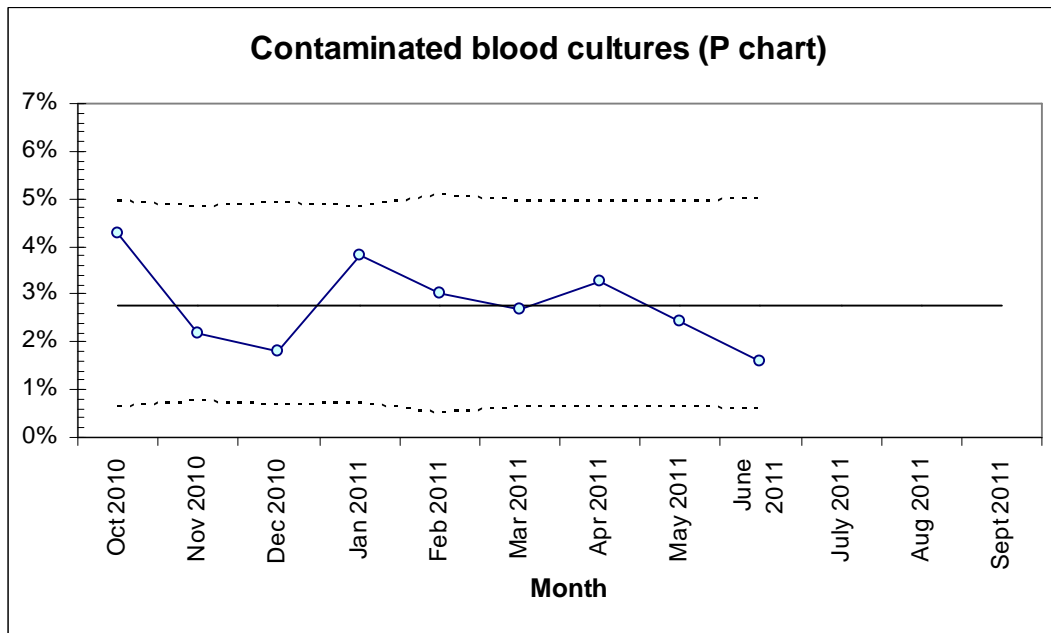
Work is currently ongoing to scope the number of urinary catheter related infections; this will also be included in the National HAI and Antimicrobial Prescribing Prevalence Survey to be carried out in September 2011.

The Urinary Catheter policy has been reviewed and has incorporated the Health Protection Scotland insertion checklist and maintenance bundle.

Blood Culture Contaminants

There have been no SAB blood culture contaminants during May and June. However, of the 1031 samples there was a 2% contamination from other pathogens indicating that technique requires further work.

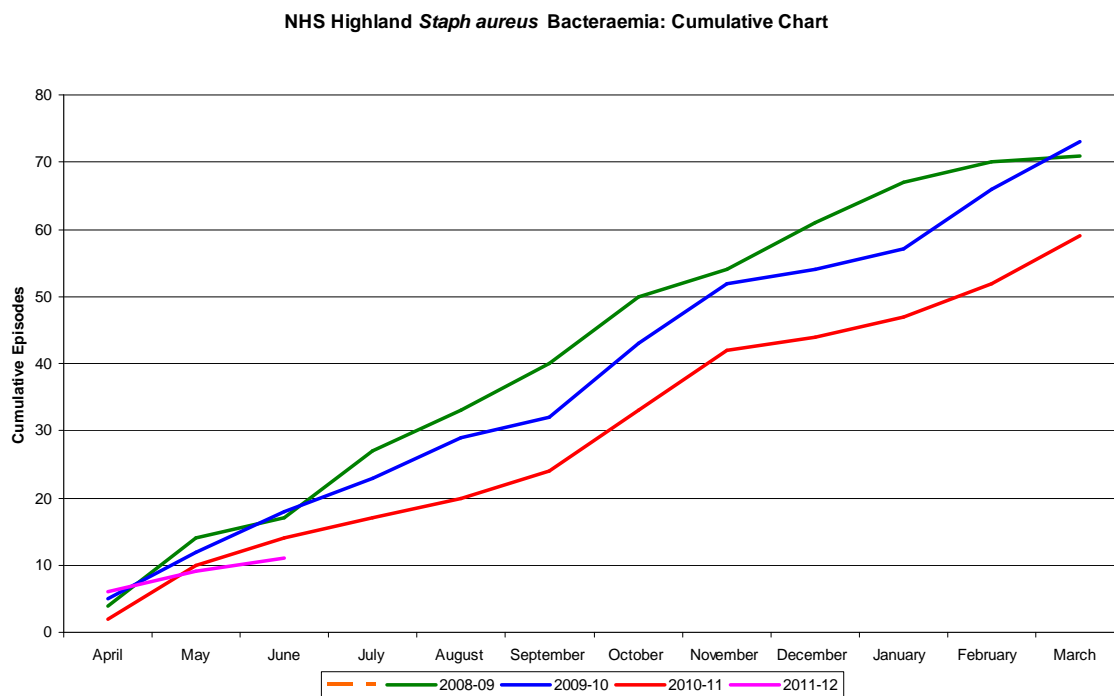
Figure 1 shows the percentage of contaminated blood cultures



Note; Upper and lower control limits vary (dotted lines on graph) due to differing numbers of cultures taken per month.

A new system for taking blood cultures (Vacutainer system), aimed at reducing contamination with the added benefit of being needle safe, will be introduced across Highland at the end of August 2011. Training on the new system will be given to all staff taking blood cultures, following the best practice Standard Operating Procedure for taking blood cultures.

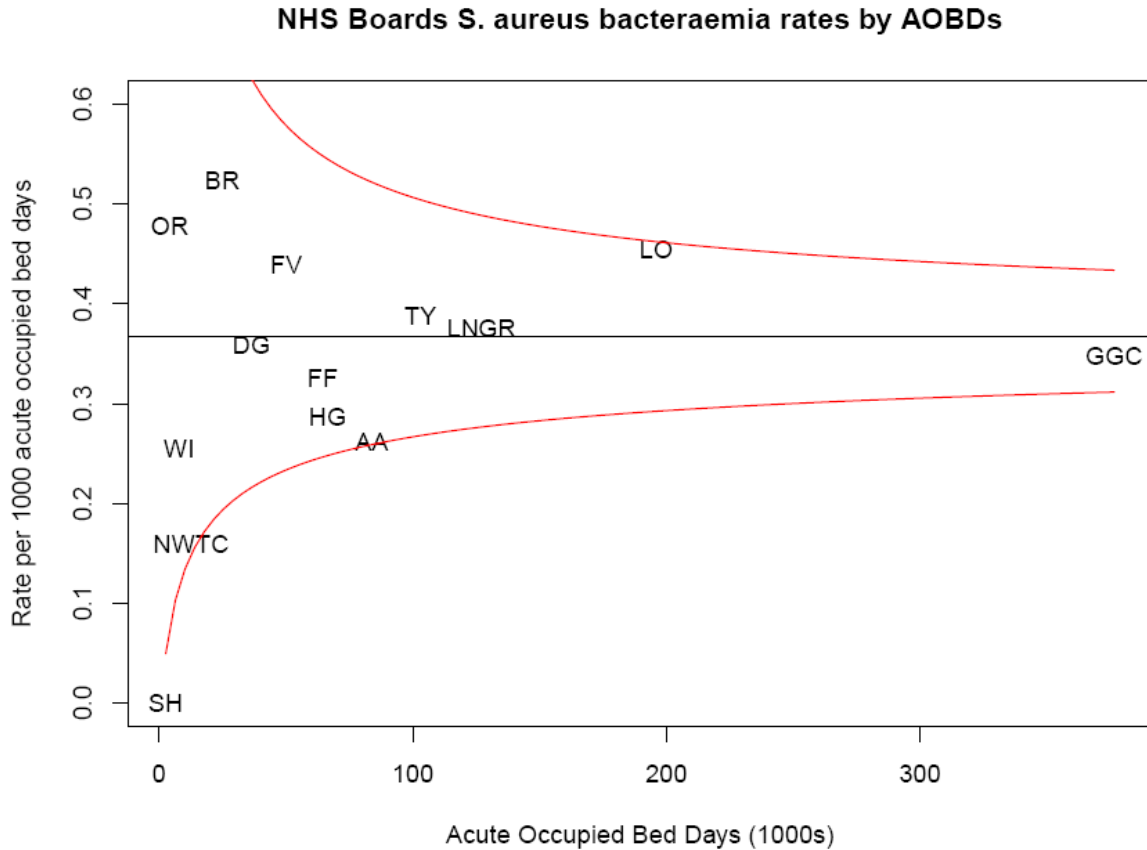
Figure 2 shows year on year Cumulative SAB numbers in NHS Highland



National Context

There were 471 new *Staphylococcus aureus* bacteraemia cases reported to Health Protection Scotland during October – December 2010, a decrease of 2.1% compared with the same quarter in 2009. NHS Scotland *Staphylococcus aureus* bacteraemia rate for this period was 0.368 per 1000 acute occupied bed days (AOBDs). NHS Highland rate was 0.286 per 1000 acute occupied bed days.

Figure 3 NHS Boards *Staphylococcus aureus* bacteraemia rates by AOBDs.



HG = NHS Highland.

MRSA Screening

The June audit of compliance of the roll out of the MRSA screening operating protocol in the Surgical Division, Raigmore, Belford and Caithness General Hospitals demonstrated 96% compliance. The roll-out process across acute hospitals is on schedule to be fully completed by end of September 2011. The Project Lead is working with Senior Nurses to support the Senior Charge Nurses to embed the protocol into working practice.

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 and community hospitals within each CHP in Section 2. Information on the national surveillance programme for *Clostridium difficile* infections can be found at:

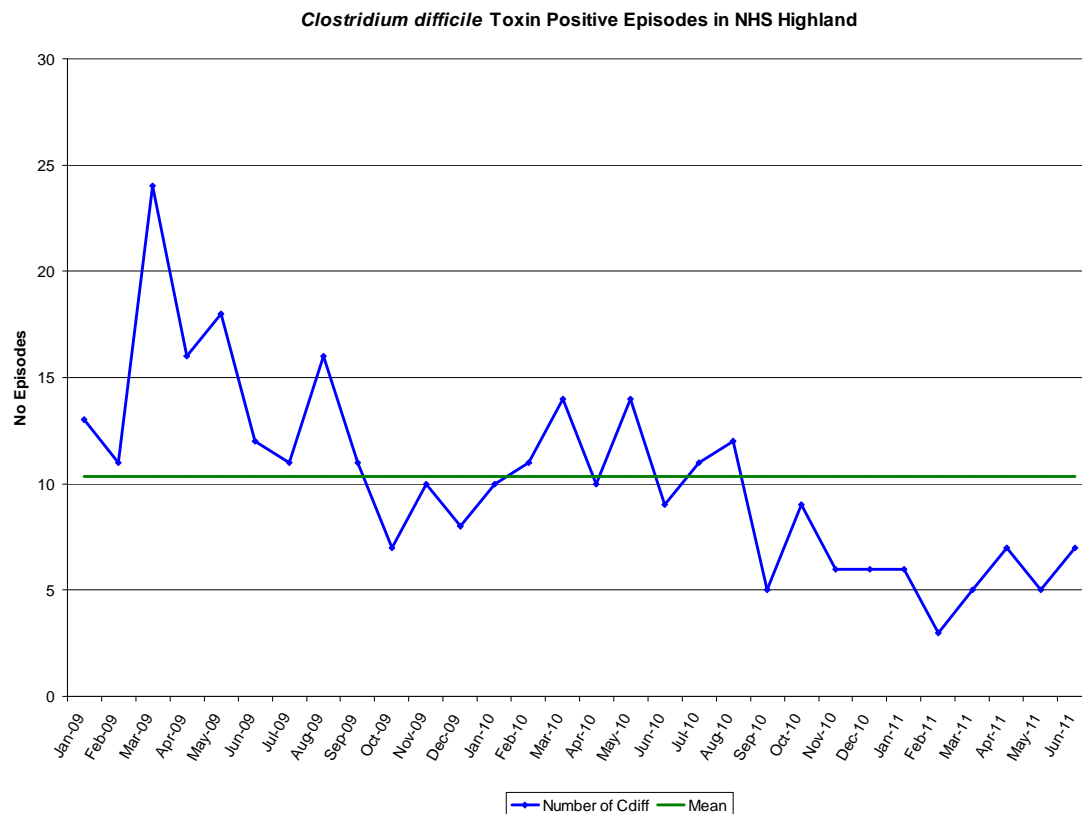
<http://www.hps.scot.nhs.uk/haic/sshaip/ssdetail.aspx?id=277>

Clostridium Difficile Infection (CDI)

With effect from April 2011, all Boards are expected to achieve a rate of 0.39 cases of *Clostridium difficile* per 1000 total occupied bed days (OCBDs) or lower among patients aged 65 and over by year ending March 2013.

NHS Highland *Clostridium difficile* rate is 0.27 (April – June 2011) in patients age 65 and over (14 cases) and 0.34 in patients 15 – 64 years (5 cases).

Figure 4 shows *Clostridium difficile* toxin positive episodes in NHS Highland



Initiatives to reduce CDI Cases

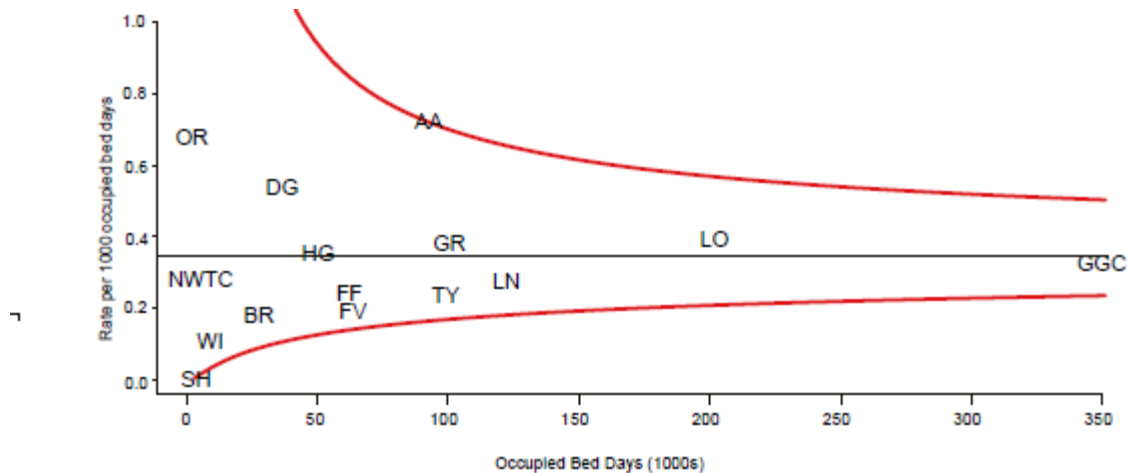
- Continued promotion of good hand hygiene across all staff groups and general public.
- Attention to environmental cleanliness.
- Adherence to the antimicrobial prescribing guidelines.

Enhanced surveillance is carried out on every CDI case with immediate feedback to staff concerned. Surveillance includes 30-day follow up from diagnosis for *Clostridium difficile*. The Infection Prevention & Control team are working with clinical staff to ensure best practice is embedded at every opportunity.

National Context

The overall rate for Scotland during the period October – December 2010 in patients aged 65 and over was 0.34 cases of CDI per 1000 total occupied bed days (OCBDs), which corresponds to a 28% national decrease compared to the previous quarter's rate of 0.47 per 1000 OCBDs. NHS Highland's rate for the same period was 0.35 per 1000 OCBDs.

Figure 5; Funnel plot of rates of CDI for all NHS Boards in Scotland in patients aged 65.



HG = Highland

Letter of thanks from the Chief Nursing Officer

The Chief Nursing Officer has contacted all Boards, extending her thanks to all staff for their contribution to reducing rates of *Clostridium difficile* infection to their lowest levels since surveillance began.

Please see attached letter.

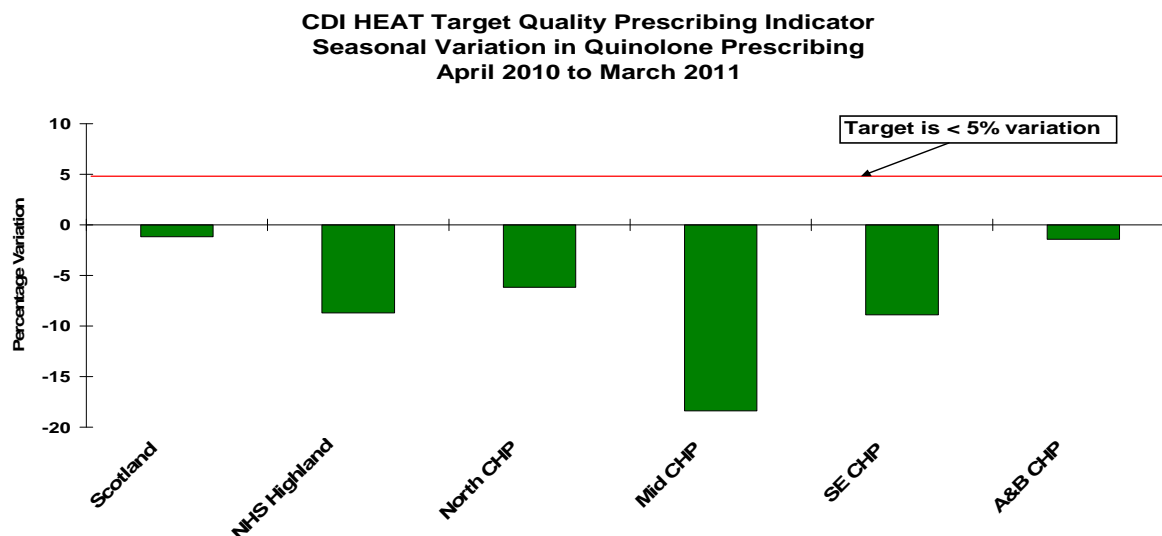
Anti Microbial Prescribing

There are a total of 3 indicators which are monitored nationally. See below for NHS Highland's progress.

Table 2 Indicators for Antimicrobial Prescribing

Antimicrobial Indicator	NHS Highland progress
Hospital-based empirical prescribing Antibiotic prescriptions are compliant with the local antimicrobial policy and the rationale for treatment is recorded in the clinical case note in above 95% of sampled cases.	Compliant. Two areas are monitored, as required, in Raigmore Hospital. The Acute Medical Admissions Unit has achieved and maintained the target of greater than 95% compliance since January 2011. Ward 4A, Surgical Admissions Unit achieved a compliance of 95% in May, 2011 and are working on improving reliability with this target.
Surgical antibiotic prophylaxis Duration of surgical antibiotic prophylaxis is less than 24 hours and compliant with local antimicrobial prescribing policy in above 95% of sampled cases	Compliant Elective colorectal surgery has been audited since February 2011 and has demonstrated compliance with antibiotic choice and duration of prophylaxis above 95% each month.
Primary care empirical prescribing Seasonal variation in quinolone use (summer months vs. winter months) is less than 5%.	Compliant. NHS Highland has exceeded the required target of less than 5% variation, recording a reduction in quinolone use of 9% in the winter months compared to the summer months. Each CHP has also exceeded the target and the national average in Scotland reducing the use of this class of drug by 28% since the baseline year of April 2008. See figure 6.

Figure 6 shows the CDI Heat target Quality Prescribing Indicator Seasonal Variation in Quinolone Prescribing April 2010 – March 2011



Antibiotic Point Prevalence Audits

In addition to the national indicators, audits are undertaken to identify antibiotic prescribing in relation to risk of CDI infection. Audits on antibiotic use have been conducted in community hospitals in South East CHP during May and June 2011. Over 85% of antibiotics prescribed were those associated with a low risk of infection with *Clostridium difficile*, an increase from 69% in January 2010 audit.

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 and community hospitals within each CHP in section 2. Information on national hand hygiene monitoring can be found at:

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

The HPS hand hygiene monitoring protocol, which includes measurement for both opportunity and technique, is being rolled out across Highland, using Scottish Patient Safety methodology, with the aim of full utilisation from September 2011. The aim of the change in monitoring is to ensure the opportunity for the 5 key moments is taken with hand washing and that it is carried out using the correct technique. The national objective is to achieve a minimum of 95% compliance by December 2011.

The 5 key moments are

1. Before touching a patient.
2. Before clean/ aseptic procedure.
3. After body fluid exposure risk.
4. After touching a patient.
5. After touching patient surroundings.

Compliance with hand hygiene was 95% in May and 96% in June 2011.

The Hand Hygiene survey carried out to mark National Hand Hygiene day was completed by 858 staff across NHS Highland, 50% Nursing, 16% Allied Health Professionals, 16% Admin & Clerical / Management, 6% Domestic/Catering and 12% Medical/ Dental. 86% confirmed that they had received hand hygiene training. The data has enabled the Infection Prevention & Control Team to focus on areas that require additional training and support.

NHS Highland is undertaking work with staff to reduce the risk of dermatitis. As part of the ongoing Control of Substances Hazardous to Health (COSHH) compliance work, NHS Highland is in the process of rolling out, on a phased basis, a skin health programme, which involves education/awareness raising and the completion of a skin health surveillance questionnaire for occupational dermatitis. This is due to be completed by October 2011. Raigmore Hospital has commenced the rollout which involves both clinical and non-clinical staff where exposure to “wet work” and/or substances known to damage skin occurs. (Wet work is defined as work that involves hands being wet for significant periods during the working day, more than 2 hours a day or 20-40 hand washes a day.)

The Infection Prevention & Control and Occupational Health teams are working closely together to highlight the importance of good hand hygiene with equally good skin care.

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 and community hospitals within each CHP 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>

Compliance with cleaning across NHS Highland was 93% in May and 92% in June 2011.

More rigour is being applied to improve the accuracy and consistency of environmental cleanliness monitoring across NHS Highland, resulting in a drop in compliance rates in Raigmore Hospital to 82% and in Mid Highland CHP to 89% in June 2011. Action plans to address the issues identified through the monitoring process were put in place. Subsequent monitoring has shown improvement in all areas.

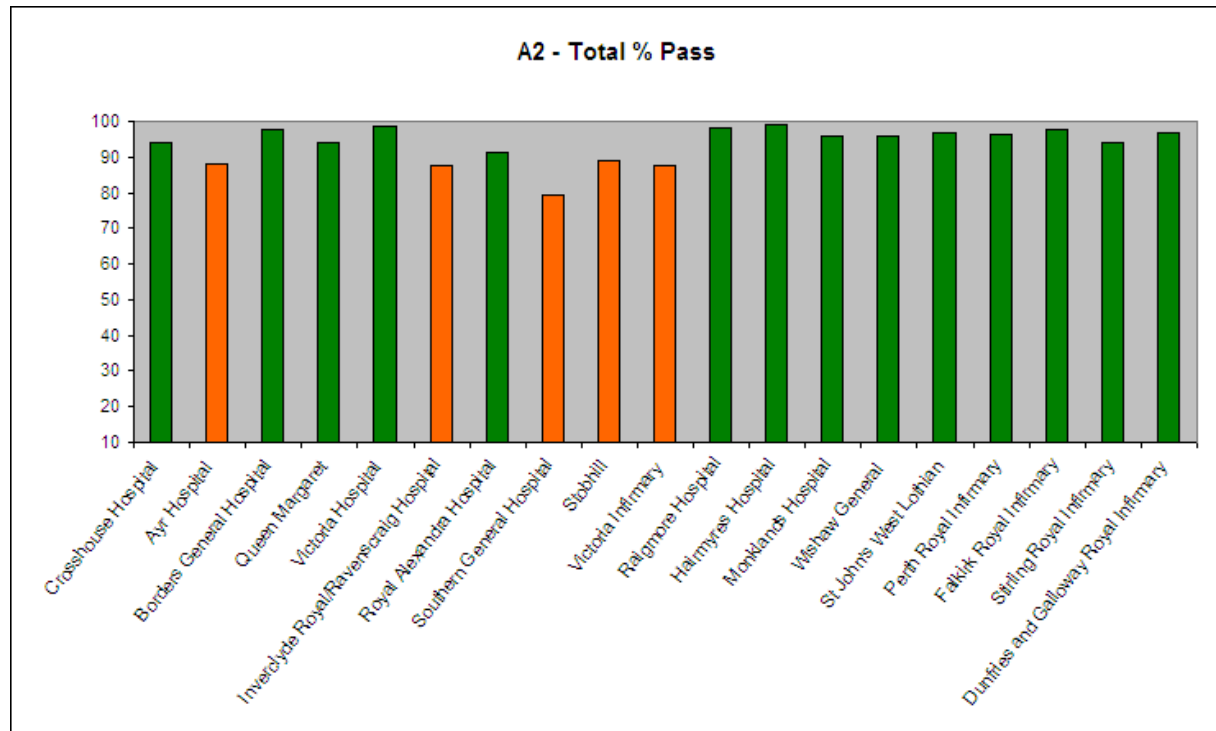
NHS Scotland National Cleaning Services Specification provides guidance on cleanliness and hygiene and sets minimum standards for the healthcare environment. The scope of the cleaning monitoring tool now been extended to cover Estates Services. Estates, in this context, covers issues relating to the fabric of the building e.g. vents, walls, ceiling tiles etc. It does not present information on the whole of the estates function eg. water systems, heating, ventilation etc across all Healthcare facilities.

NHS Scotland National Cleaning Compliance: Domestic and Estates Services report, produced by Health Facilities Scotland (HFS), provides data on compliance with the

requirements set out in the NHS Scotland National Cleaning Services Specification for January – March 2011.

NHS Scotland's, cleaning compliance January 2011 – March 2011 was 95.1%. NHS Highland's compliance was 94.9%.

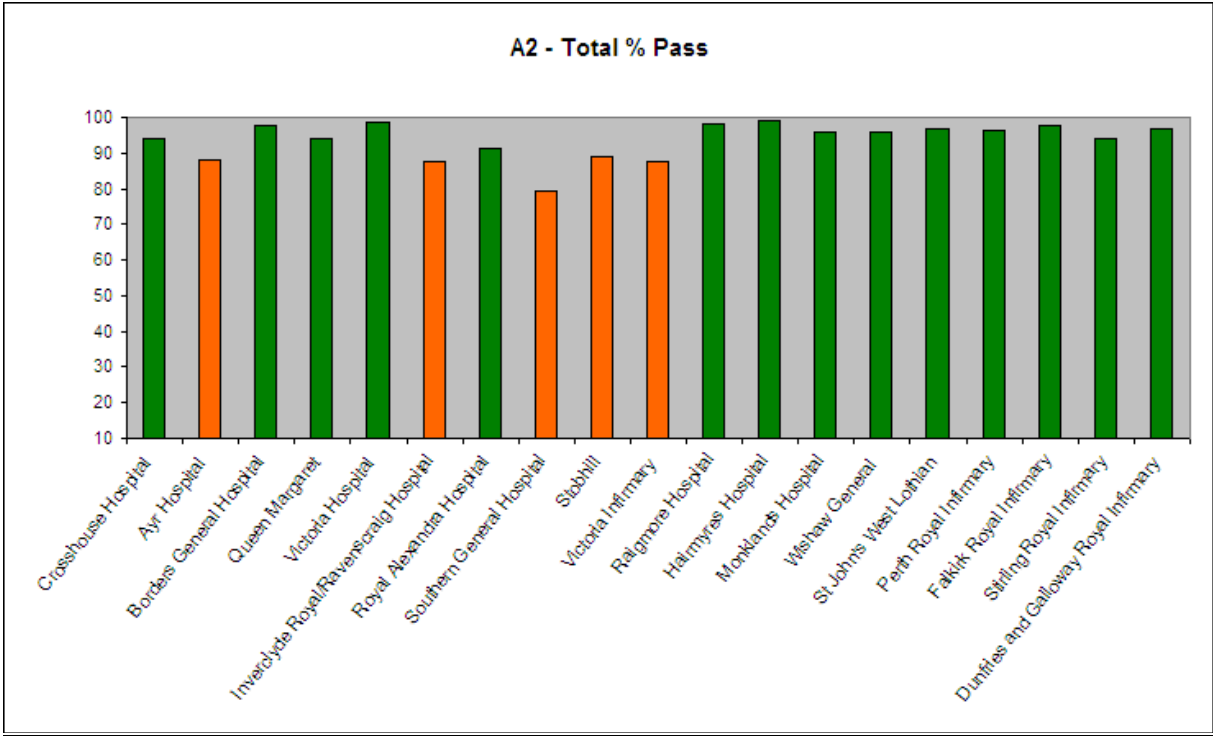
Figure 7 Cleaning Services Monitoring Tool – NHS Board's Performance Health Facilities Scotland report Quarter 4 January 2011 – March 2011.



This is the first Health Facilities Scotland estates monitoring report and it is felt nationally that more work needs to be done to ensure that there is an accurate reflection of the true state of the fabric; therefore the percentage compliance is probably on the high side. NHS Highland, in common with other Boards, is working to ensure the implementation of robust estates auditing, monitoring and reporting processes. Future Board reports will include both cleaning and estates compliance.

NHS Scotland's estates compliance January 2011 – March 2011 was 92.4%. NHS Highland was 94.2%

Figure 8 Estates Monitoring Tool – NHS Boards Performance Health Facilities Scotland report Quarter 4 January 2011 – March 2011



HEI Inspections

Raigmore Hospital improvement action plan following the HEI inspection in March 2011 is being progressed by agreed timelines and will to be audited to ensure ongoing compliance.

The HEI will make an announced visit to Mackinnon Memorial Hospital, Broadford on Tuesday 19th July 2011 and to Belford Hospital, Fort William on Tuesday and Wednesday 19th and 20th July 2011.

Outbreaks/Incidents

There have been no outbreaks during May and June 2011.

Other HAI Related Activity

National HAI and Antimicrobial Prescribing Prevalence Survey

Health Protection Scotland (HPS) has been tasked by Scottish Government HAI Task Force to implement a second national HAI prevalence survey.

The Europe-wide Point Prevalence Survey (EU PPS) of HAI and antimicrobial prescribing is planned for October 2011. The Scottish survey will adopt the EU PPS survey protocol and will contribute to the programme on antimicrobial resistance and HAI reduction.

The aim of the Scottish Survey is to measure the prevalence of HAI at hospital and national level, identify priority areas for interventions and surveillance at local and national level, and measure the prevalence of antimicrobial prescribing at hospital and national level.

The first prevalence survey was carried out by Health Protection Scotland staff. The second prevalence study will be carried out by the Infection Prevention & Control and Antimicrobial Teams across Scotland. To ensure consistency, HPS stipulated that all staff must undertake training, 12 staff in Highland have received a days intensive training. HAI and prescribing data will be collected in all wards in Caithness General, Raigmore, Belford, Lorn & Islands and New Craigs Hospitals plus 4 Community Hospitals during September and October and submitted to HPS for data entry and analysis.

This will place significant pressure on resources during this time as all members of the Infection Prevention & Control and Antimicrobial teams will be involved in the data collection.

Surgical Site Infections (SSI)

Caesarean Section Surgical Site Infections

June 2010 – May 2011, 654 caesarean section procedures were performed in NHS Highland with 22 surgical site infections, an infection rate of 3.4%. (See figures 7 and 8)

It is over 150 days in Raigmore and 60 days in Caithness General Hospital since there was an elective caesarean section surgical site infection. The previous elective surgical site infection in Caithness General was in July 2010. A root cause analysis of the case revealed no change of practice was required.

It is over 100 days since there was an emergency caesarean section surgical site infection in Raigmore and over a year in Caithness General.

Improvement work is ongoing to further reduce the level of postoperative infection.

- Implementation of prophylactic antibiotic change from cord clamp to knife to skin.
- Change of wound dressing.
- Change of skin preparation.

The following figures demonstrate the effect of the changes of practice.

Figure 9 SPC Chart: SSI NHS Highland Elective Caesarean Section.

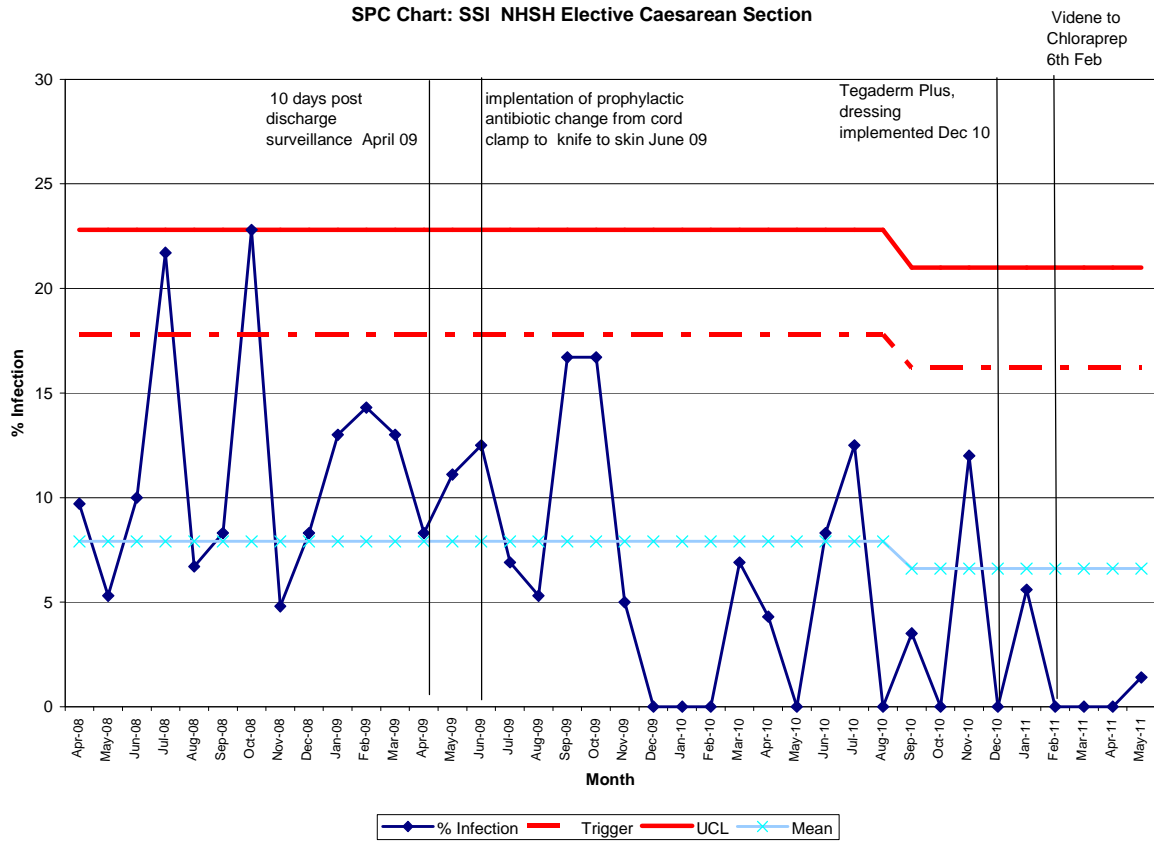
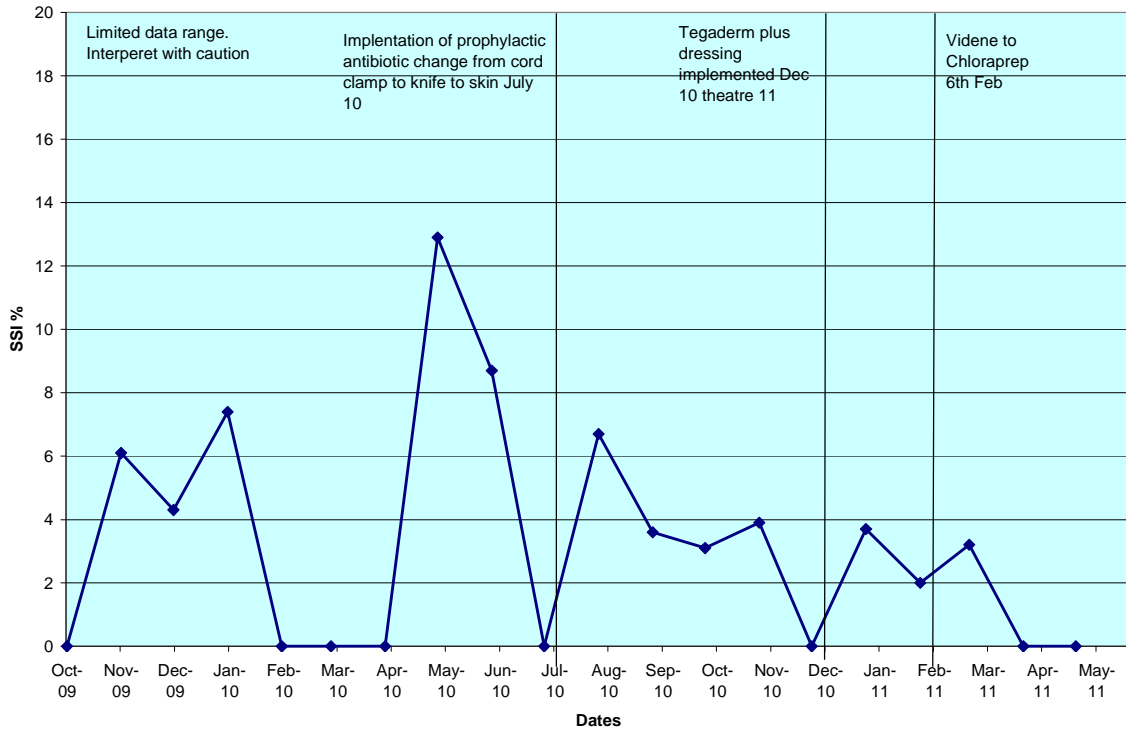


Figure 10 Emergency Caesarean Section SSI NHS Highland

Emergency Caesarean Section SSI NHS Highland October 2009 - May 2011



Orthopaedic Surgical Site Infections

It is over 80 days since the last fractured neck of femur SSI and 140 days since the last total hip replacement surgical site infection.

Staff Training

A study day entitled “Bugs, Drugs and Prevention“was held on 29th June 2011. Topics included MRSA, blood borne viruses, the prevention of hand dermatitis, minimising infection in wound care and the prudent use of antibiotics. It was well attended by nursing staff who gave very positive feedback.

Decontamination

Endoscopy Decontamination

An assessment has been carried out on the endoscopy decontamination facilities in NHS Highland. A paper with recommendations is being written by Anne Cosh, Head of Decontamination and Emma Watson and Andrew Hay, Infection Prevention & Control Doctors, for consideration by the (reconvened) NHS Highland Decontamination Committee which meets in August.

Healthcare Associated Infection Reporting Template (HAIRT) Section 2 – Healthcare Associated Infection Report Cards

The following section is a series of 'Report Cards' which provide information for each acute hospital (Raigmore, Caithness General, Belford and Lorn & Islands), and the community hospitals within each CHP. The information includes the number of cases of *Staphylococcus aureus* blood stream infections (also broken down into MSSA and MRSA) and *Clostridium difficile* infections. Hand hygiene and cleaning compliance completes the report card.

The out-of-hospital infections report card identifies infections as having been contracted from outwith 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 and the community hospitals within each CHP. *Staphylococcus aureus* bacteraemia (SAB) cases are further broken down into Meticillin Sensitive *Staphylococcus aureus* (MSSA) and Meticillin Resistant *Staphylococcus aureus* (MRSA). Data is presented as both a graph and a table giving case numbers. 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 acute hospital and community hospitals in each CHP, the total 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.

Understanding the Report Cards – Hand Hygiene Compliance

Good hand hygiene is crucial for infection prevention and control. More information can be found from the Health Protection Scotland's national hand hygiene campaign website: <http://www.washyourhandsofthem.com/>

Hospitals carry out regular audits of how well their staff are complying with hand hygiene. The first page of each hospital/CHP report card presents the percentage of hand hygiene compliance for all staff in both graph and table form.

Understanding the Report Cards – Cleaning Compliance

Hospitals strive to keep the care environment as clean as possible. This is monitored through cleaning 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/>

The Report Cards show the hospitals' cleaning compliance percentage in both graph and table form.

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, care homes and the community itself. 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. Given the complex variety of sources for these infections it is not possible to break this data down in any more detail.

Abbreviations

HAI	Healthcare Associated Infection
HAIRT	Healthcare Associated Infection Reporting Template
CHP	Community Health Partnership
SAB	Staphylococcus Aureus Bacteraemia
MSSA	Meticillin Sensitive <i>Staphylococcus Aureus</i>
MRSA	Meticillin Resistant <i>Staphylococcus Aureus</i>
CDI	<i>Clostridium difficile</i> Infection
CNO	Chief Nursing Officer
SPC	Statistical Process Chart
HEAT	Health Improvement, Efficiency, Access, Treatment
AMAU	Acute Medical Admissions Unit
SAPG	Scottish Antimicrobial Prescribing Group
JAG	Joint Advisory Group

Chief Nursing Officer, Patients, Public and Health Professions Directorate
Ros Moore, RGN RNT BSc (Hons) Nursing, MA, Chief Nursing Officer



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Chief Executives & Chairs
NHS Boards

Copy to: Nurse Directors
HAI Executive Leads
Infection Control Managers
Senior Charge Nurses

27 July 2011

Dear Colleague

I think it very important to celebrate success and therefore I am writing to thank you for your contribution to reducing rates of *Clostridium difficile* infection to their lowest levels since surveillance began.

As you will know, Health Protection Scotland (HPS) published on 5 July its most recent quarterly report on the Surveillance of *Clostridium difficile* infection (CDI) in Scotland, covering the period January - March 2011. The report can be found at: <http://www.hps.scot.nhs.uk/haic/sshaip/wrdetail.aspx?id=48412>. For CDI in patients aged 65 and over, the report confirms a fall of 44.5% when compared with the same quarter in 2010; and for patients aged 15 to 64 it confirms a reduction of 34.5% over the same period. This the lowest number of cases recorded in both age groups since surveillance began in 2007.

I wrote to Chief Executives in June 2010 informing them that they were expected to deliver a 50% reduction in CDI rates by 31 March 2011. However, I was delighted to learn, on publication of the HPS report, that a massive 71% reduction had been accomplished.

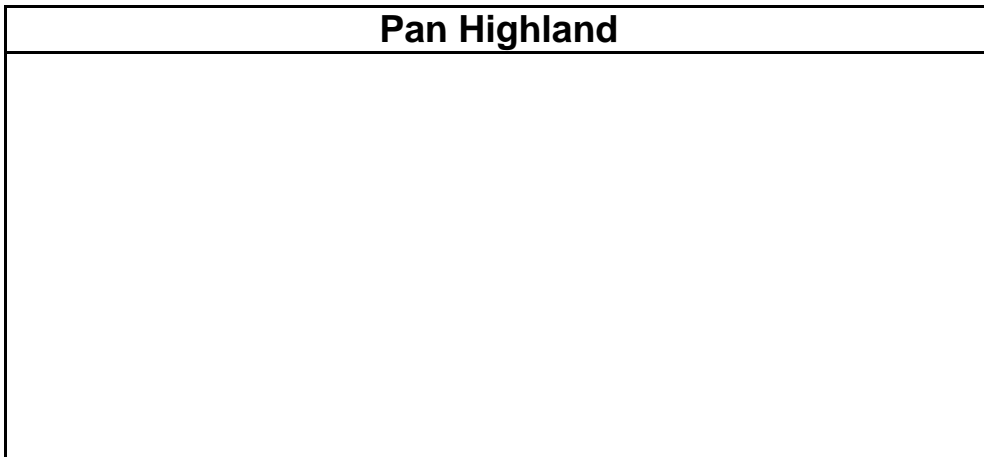
Every Healthcare Associated Infection is of major significance to us all and there is no room for complacency when it comes to the battle against them. However, I very much wanted to take this opportunity to send my personal thanks to each and every one of you for the part you have played in this major achievement to date. I appreciate that it takes the team work of all healthcare workers, including nurses, AHPs, domestic and medical staff to gain such achievements and that the contribution of colleagues in HPS, NHS Education for Scotland and Healthcare Improvement Scotland has played a significant role. Please share this letter with your staff at ward level and beyond.

Well done and thank you. Please keep up the good work.

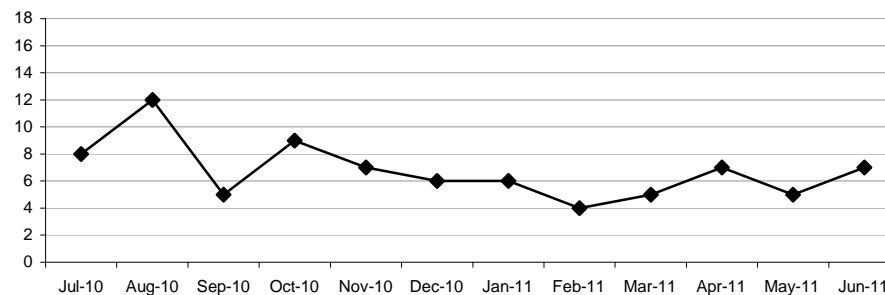
Yours sincerely

ROS MOORE
CHIEF NURSING OFFICER

Pan Highland

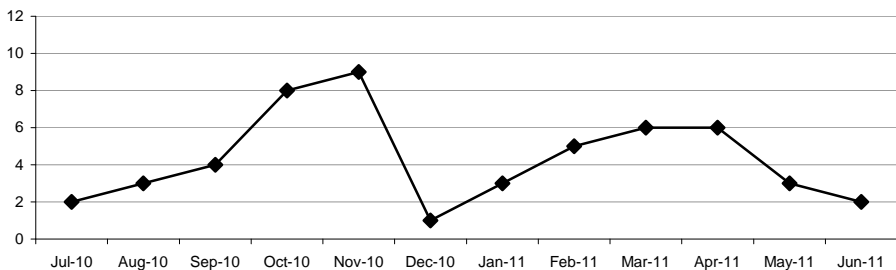


Clostridium difficile Infection Cases



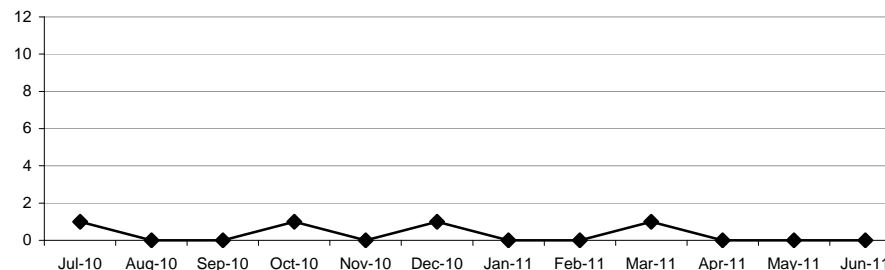
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
8	12	5	9	7	6	6	4	5	7	5	7

MSSA Bacteraemia Cases



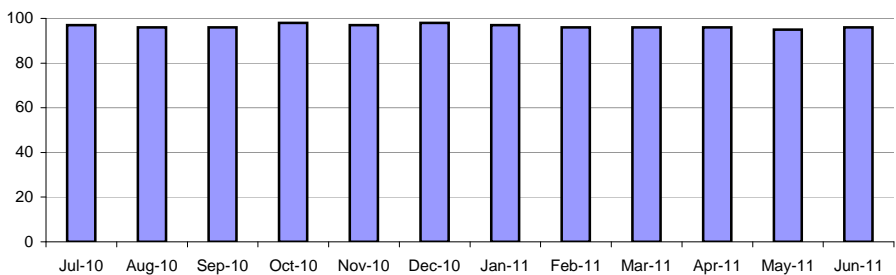
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
2	3	4	8	9	1	3	5	6	6	3	2

MRSA Bacteraemia Cases



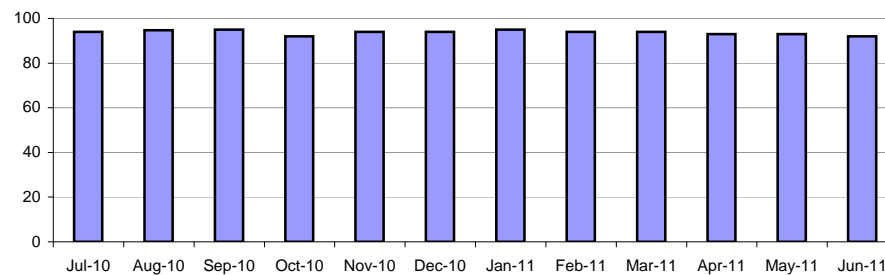
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
1	0	0	1	0	1	0	0	1	0	0	0

Hand Hygiene Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
97	96	96	98	97	98	97	96	96	96	95	96

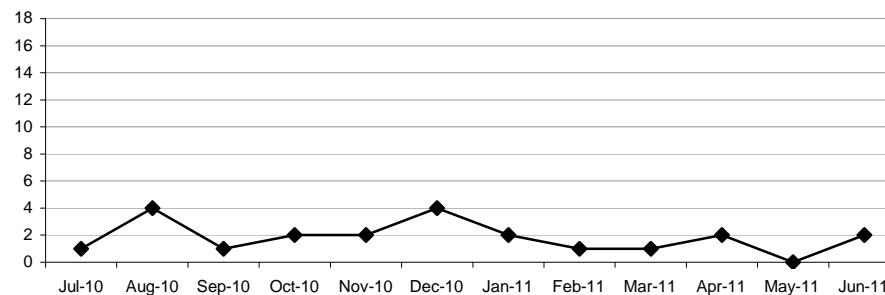
Cleaning Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
94	94.7	95	92	94	94	95	94	94	93	93	92

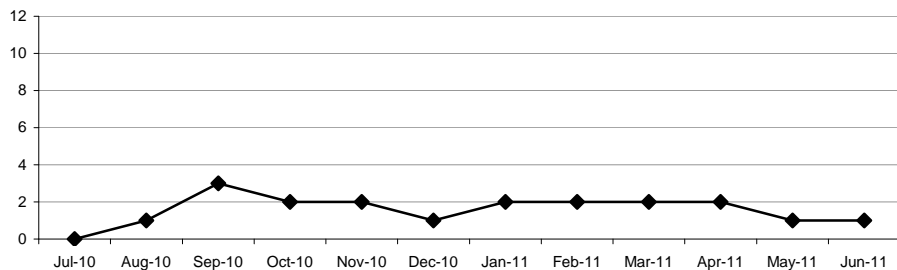
Raigmore Hospital

Clostridium difficile Infection Cases



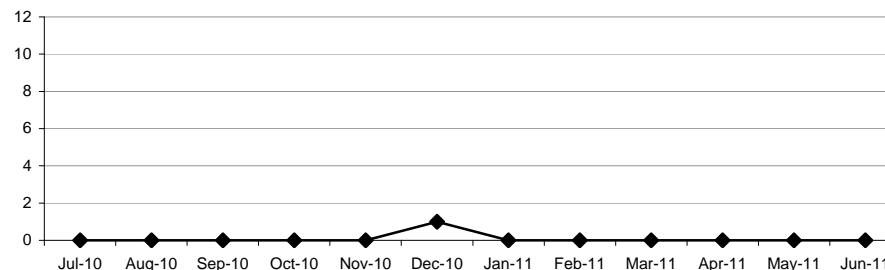
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
1	4	1	2	2	4	2	1	1	2	0	2

MSSA Bacteraemia Cases



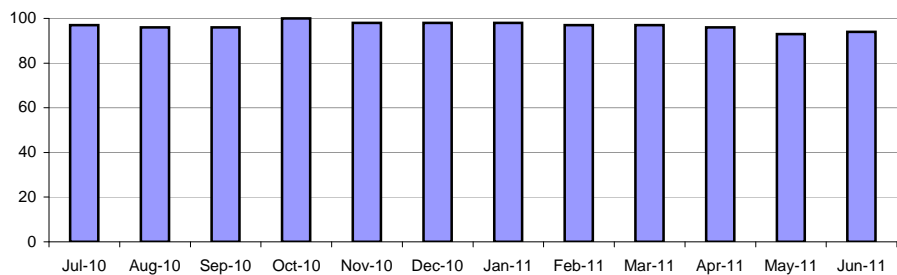
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	1	3	2	2	1	2	2	2	2	1	1

MRSA Bacteraemia Cases



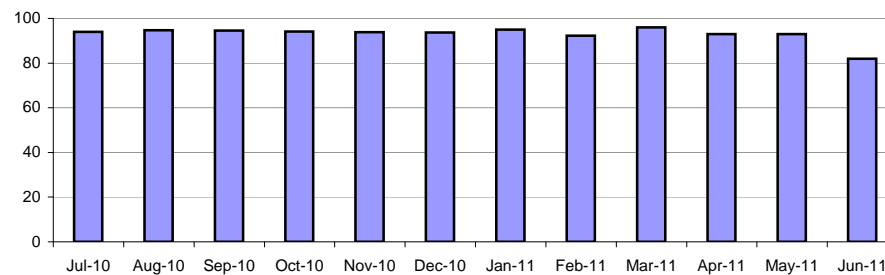
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	1	0	0	0	0	0	0

Hand Hygiene Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
97	96	96	100	98	98	98	97	97	96	93	94

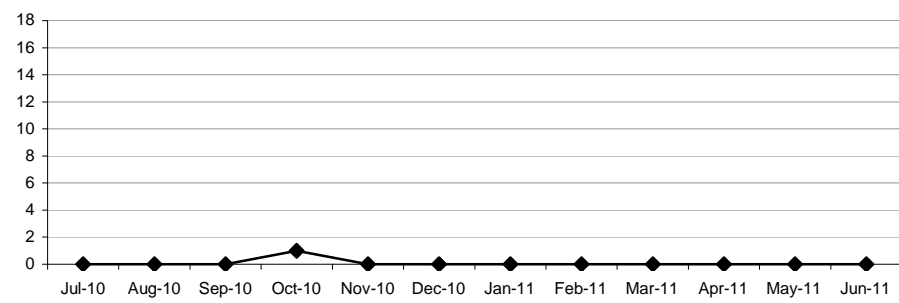
Cleaning Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
94	94.7	94.5	94.1	93.9	93.7	95	92.3	96	93	93	82

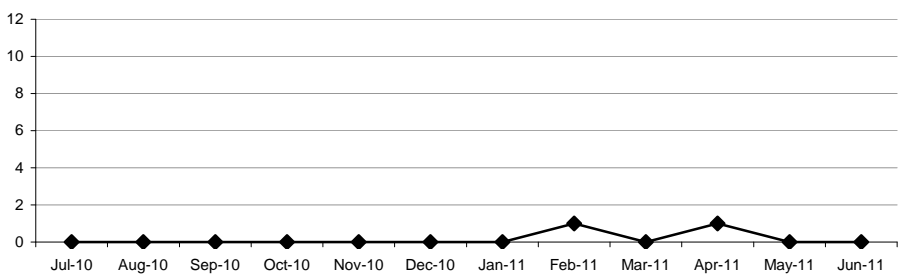
Caithness General Hospital

Clostridium difficile Infection Cases



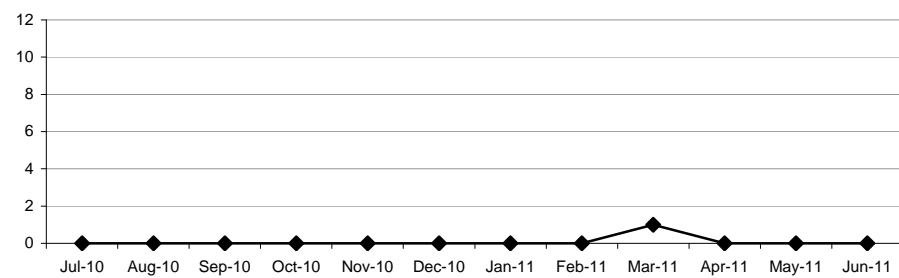
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	1	0	0	0	0	0	0	0	0

MSSA Bacteraemia Cases



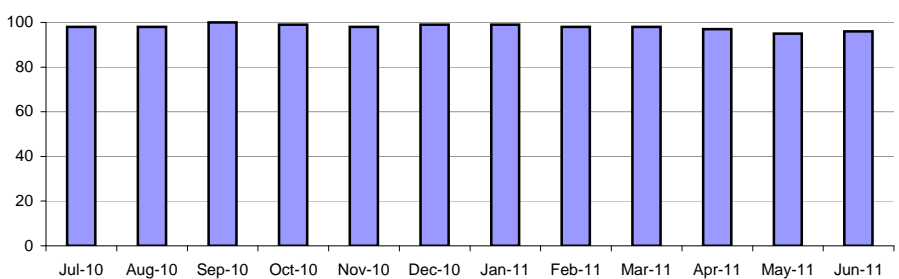
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	1	0	1	0	0

MRSA Bacteraemia Cases



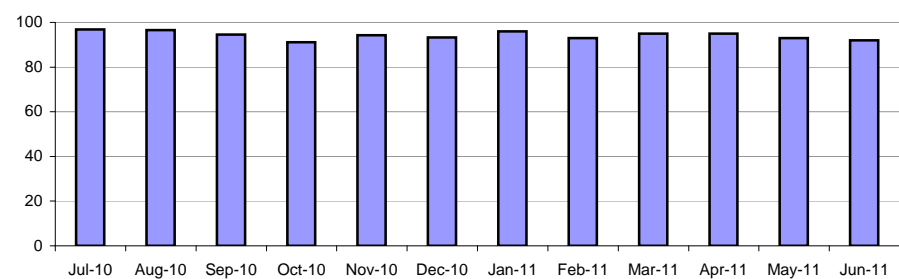
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	1	0	0	0

Hand Hygiene Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
98	98	100	99	98	99	99	98	98	97	95	96

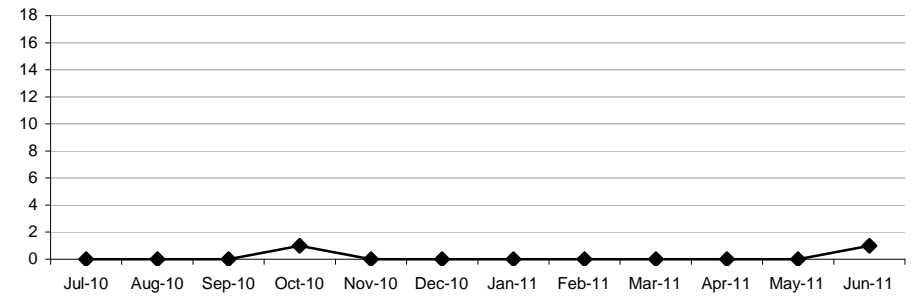
Cleaning Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
96.8	96.5	94.5	91.1	94.3	93.2	96	93	95	95	93	92

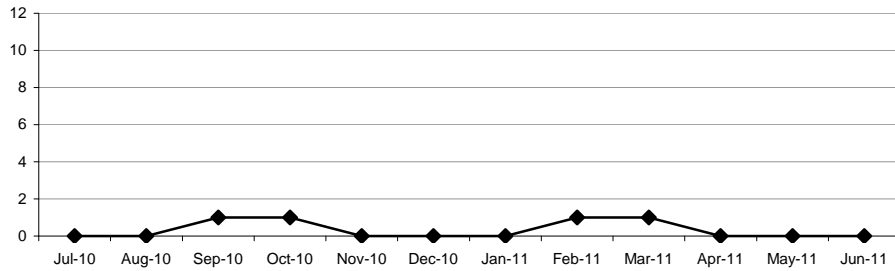
Belford Hospital

Clostridium difficile Infection Cases



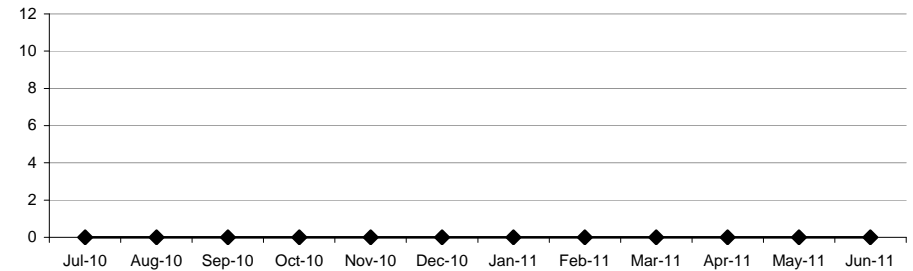
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	1	0	0	0	0	0	0	0	1

MSSA Bacteraemia Cases



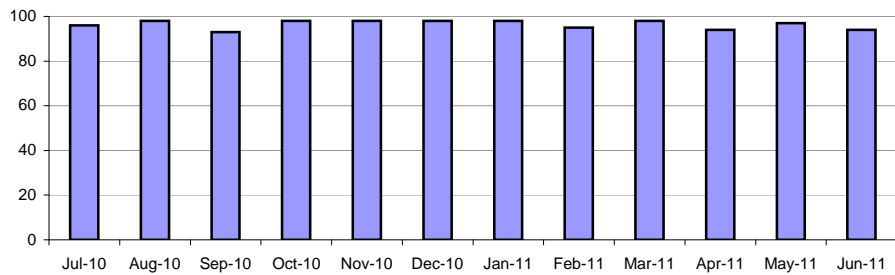
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	1	1	0	0	0	1	1	0	0	0

MRSA Bacteraemia Cases



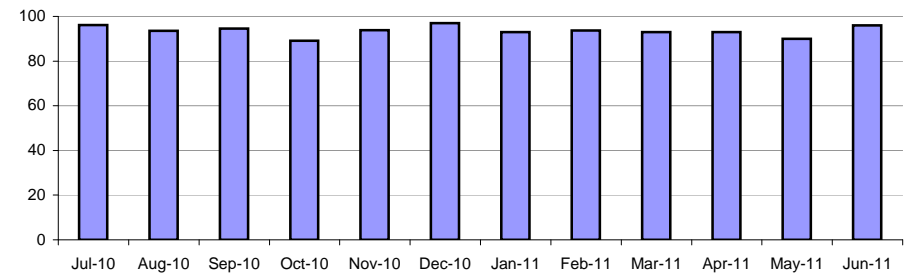
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	0	0	0	0

Hand Hygiene Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
96	98	93	98	98	98	98	95	98	94	97	94

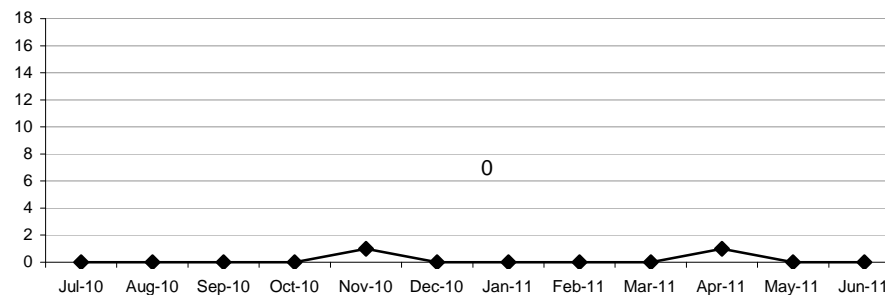
Cleaning Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
96.2	93.5	94.6	89.1	93.8	97	93	93.7	93	93	90	96

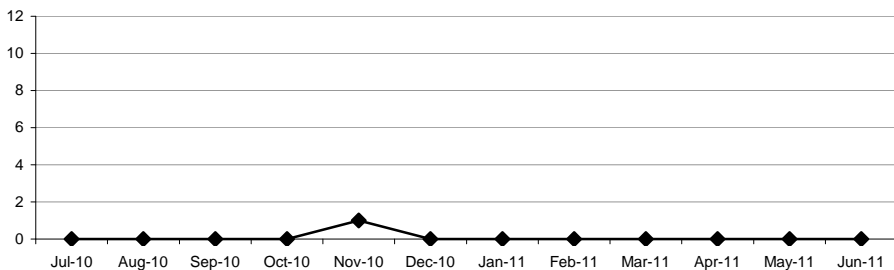
Lorn & Islands Hospital

Clostridium difficile Infection Cases



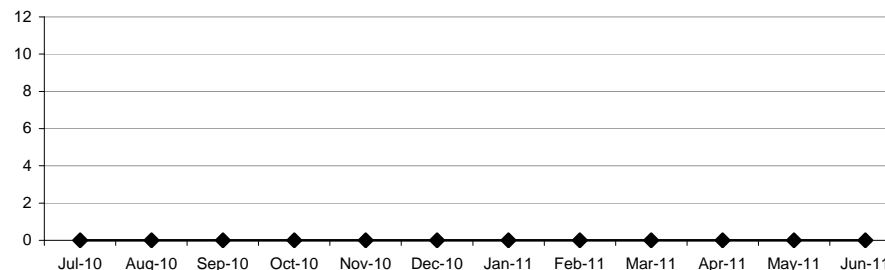
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	1	0	0	0	0	1	0	0

MSSA Bacteraemia Cases



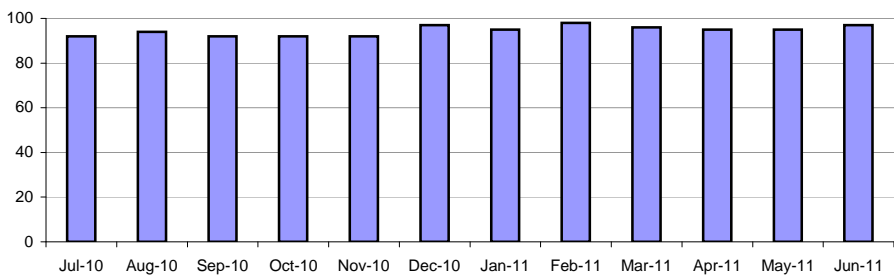
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	1	0	0	0	0	0	0	0

MRSA Bacteraemia Cases



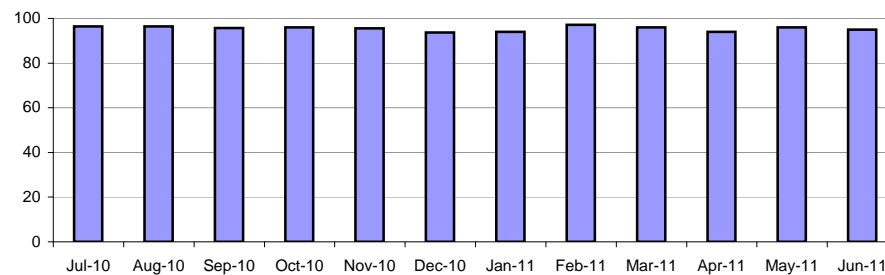
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	0	0	0	0

Hand Hygiene Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
92	94	92	92	92	97	95	98	96	95	95	97

Cleaning Compliance

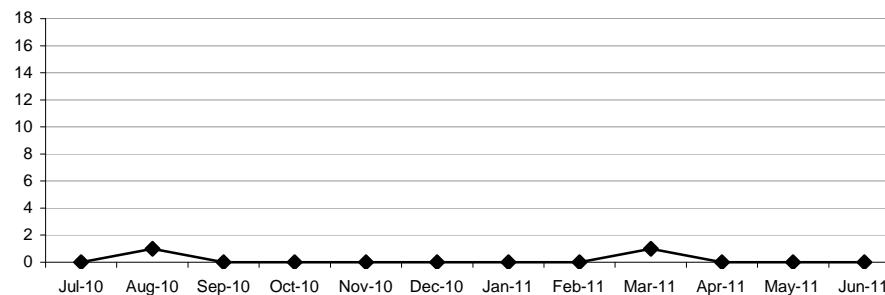


Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
96.4	96.4	95.7	96	95.6	93.7	94	97.2	96	94	96	95

Mid CHP Community Hospitals

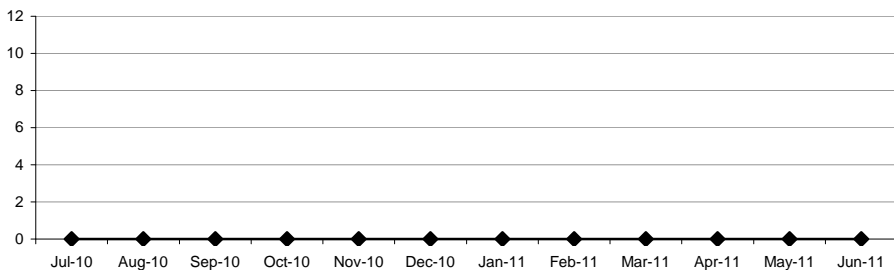
Mid CHP Community Hospitals include Ross Memorial Hospital Dingwall, County Community Hospital Invergordon, MacKinnon memorial Hospital, Broadford & Portree Hospital Isle of Skye.

Clostridium difficile Infection Cases



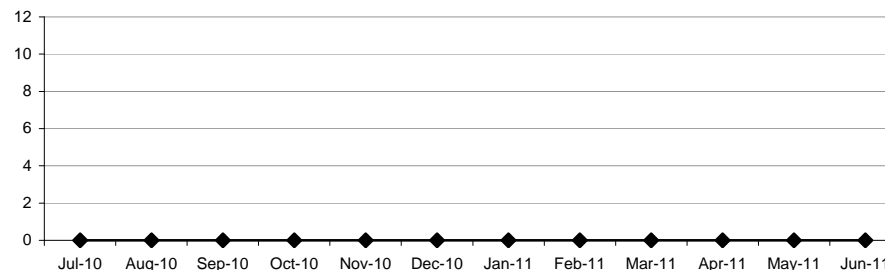
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	1	0	0	0	0	0	0	1	0	0	0

MSSA Bacteraemia Cases



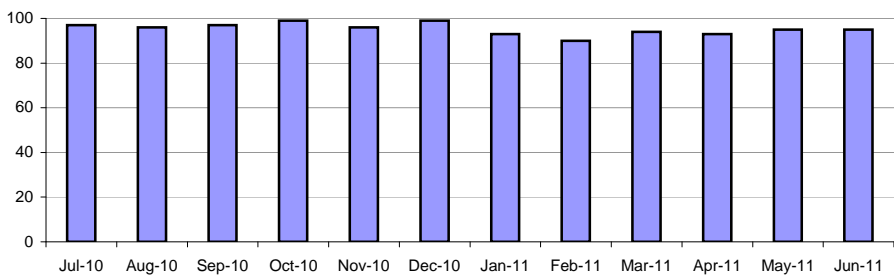
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	0	0	0	0

MRSA Bacteraemia Cases



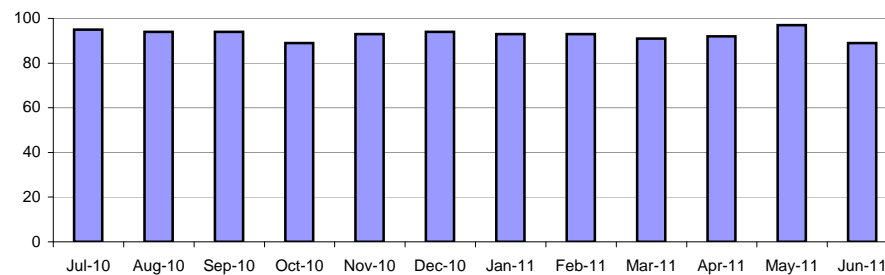
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	0	0	0	0

Hand Hygiene Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
97	96	97	99	96	99	93	90	94	93	95	95

Cleaning Compliance

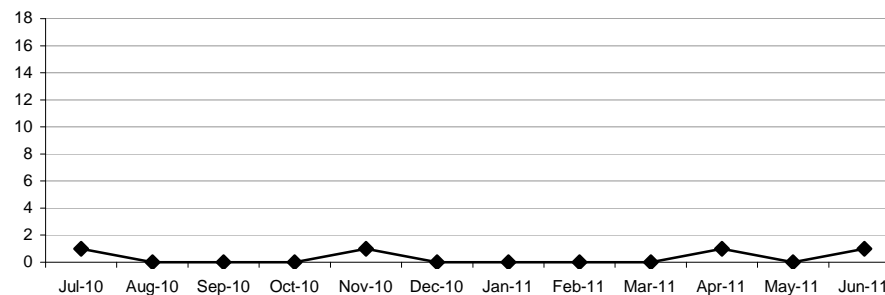


Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
95	94	94	89	93	94	93	93	91	92	97	89

South East CHP Community Hospitals

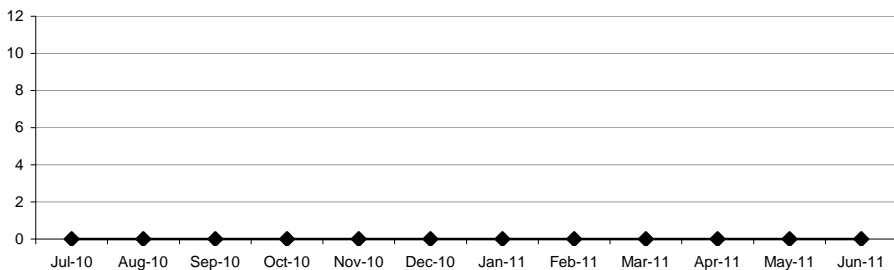
For the purposes of monitoring New Craigs Psychiatric Hospital is included in this report card. Other hospitals included are RNI Community Hospital Inverness, Town & County Hospital Nairn, Ian Charles Community Hospital Grantown on Spey, St. Vincents Hospital Kingussie.

Clostridium difficile Infection Cases



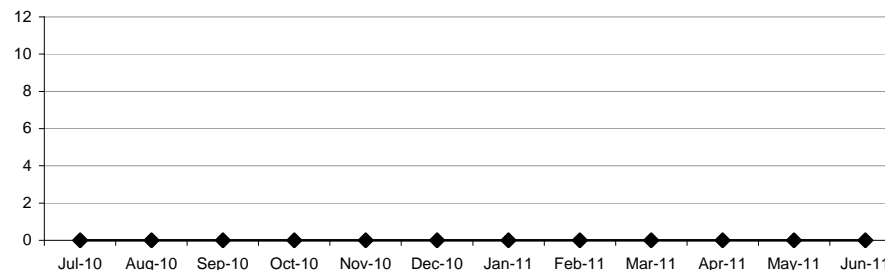
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
1	0	0	0	1	0	0	0	0	1	0	1

MSSA Bacteraemia Cases



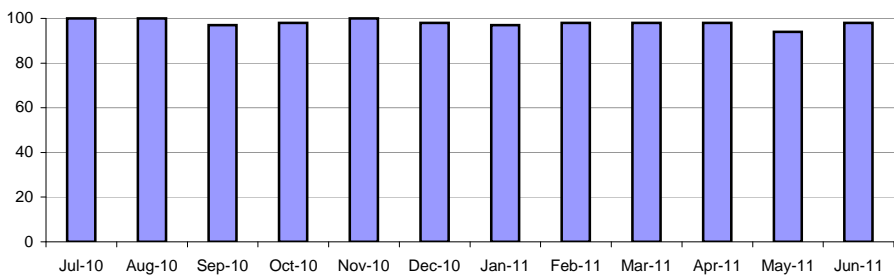
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	0	0	0	0

MRSA Bacteraemia Cases



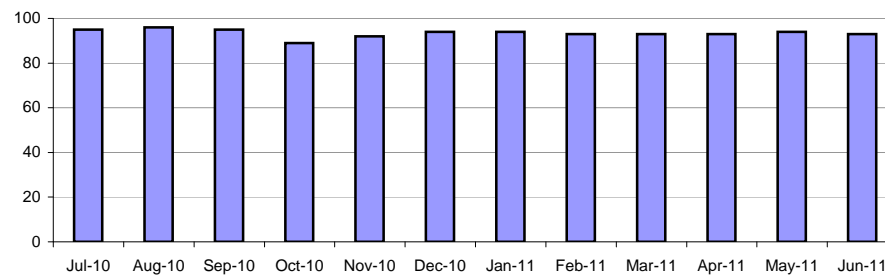
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	0	0	0	0

Hand Hygiene Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
100	100	97	98	100	98	97	98	98	98	94	98

Cleaning Compliance

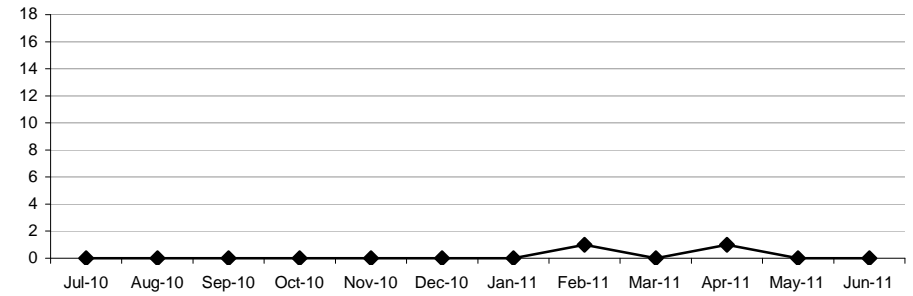


Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
95	96	95	89	92	94	94	93	93	93	94	93

Argyll & Bute CHP Community Hospitals

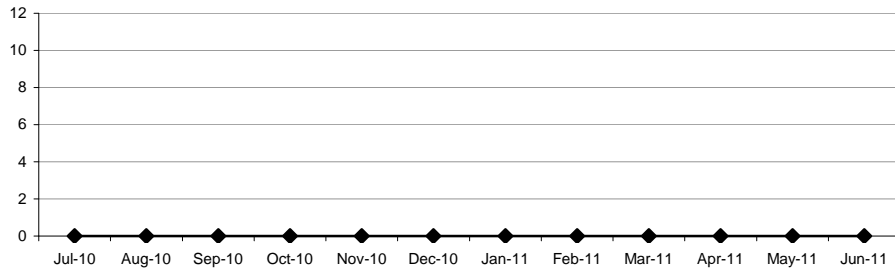
Argyll & Bute Community Hospitals include Argyll & Bute Hospital, Lochgilphead, Campbeltown Hospital, Cowal Community Hospital Dunoon, Dunaros Community Hospital, Isle of Mull, Islay Hospital, Mid Argyll Community Hospital & Integrated Care Centre Lochgilphead, Victoria Hospital & Annex Rothesay

Clostridium difficile Infection Cases



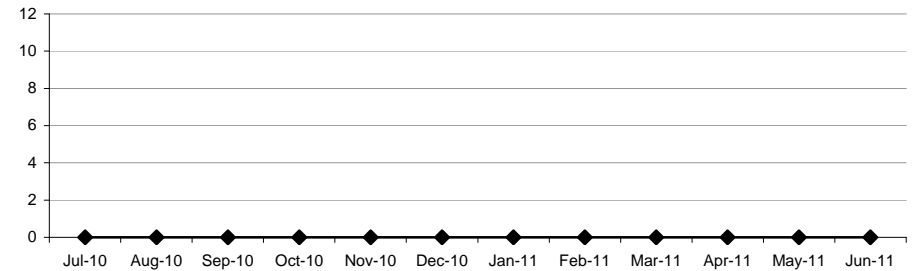
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	1	0	1	0	0

MSSA Bacteraemia Cases



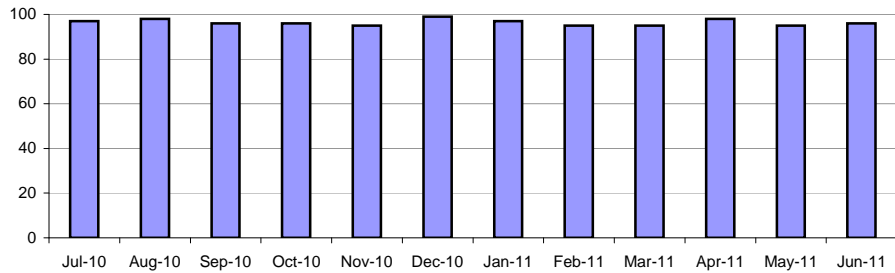
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	0	0	0	0

MRSA Bacteraemia Cases



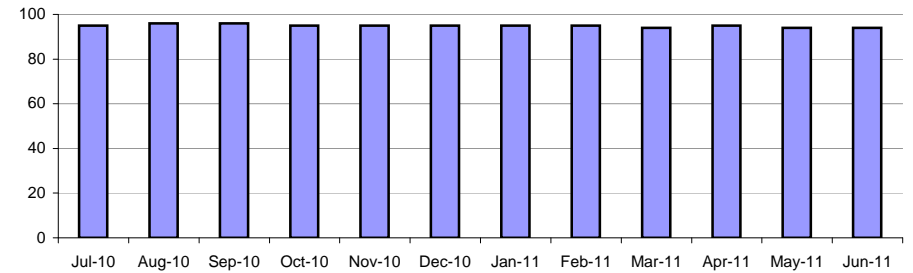
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	0	0	0	0

Hand Hygiene Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
97	98	96	96	95	99	97	95	95	98	95	96

Cleaning Compliance

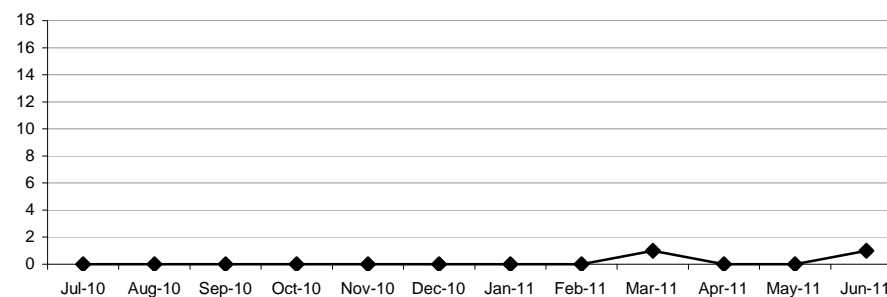


Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
95	96	96	95	95	95	95	95	94	95	94	94

North CHP

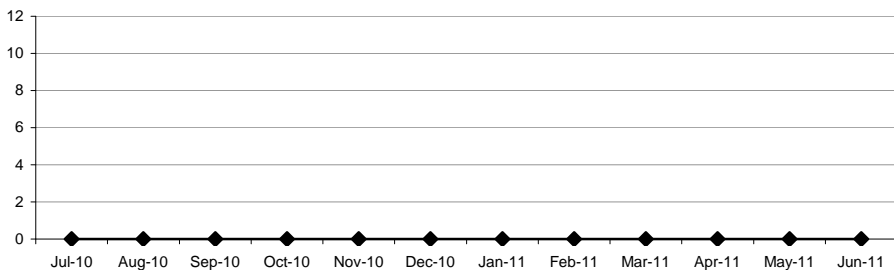
North CHP Community Hospitals include Dunbar Hospital, Thurso; Town & County Wick; Lawson Memorial Hospital, Golspie; Migdale Hospital, Bonar Bridge.

Clostridium difficile Infection Cases



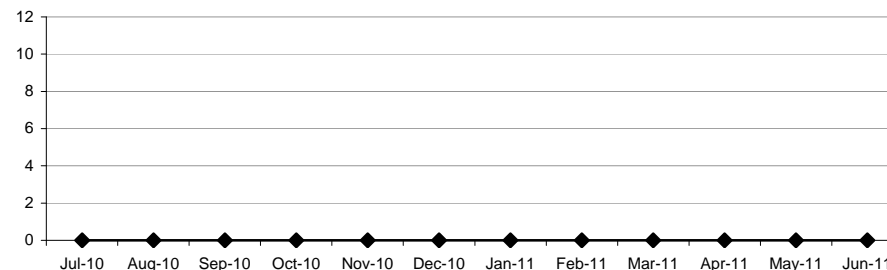
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	1	0	0	1

MSSA Bacteraemia Cases



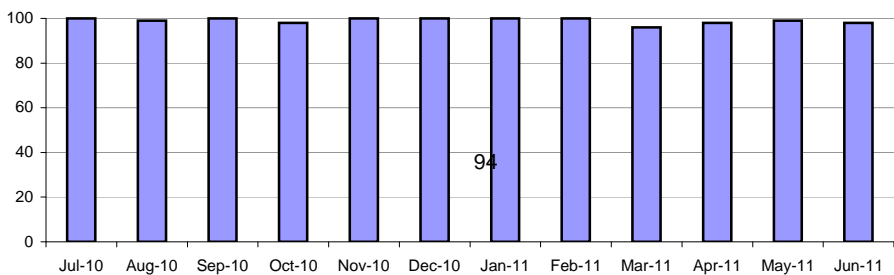
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	0	0	0	0

MRSA Bacteraemia Cases



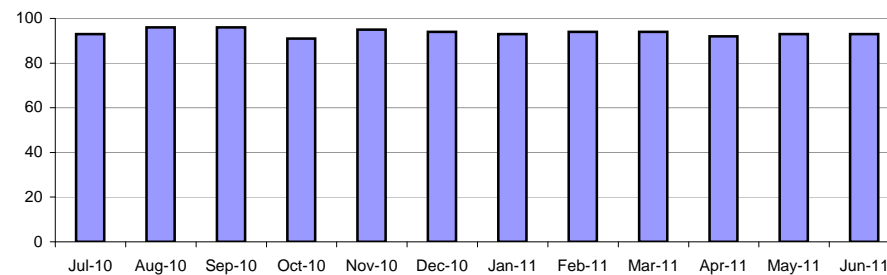
Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
0	0	0	0	0	0	0	0	0	0	0	0

Hand Hygiene Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
100	99	100	98	100	100	100	100	96	98	99	98

Cleaning Compliance



Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11
93	96	96	91	95	94	93	94	94	92	93	93

