

Healthcare Associated Infection Reporting Template (HAIRT)

Recommendation:

The NHS Board is asked to note the latest 2 monthly report on HAI within NHSGGC

INTRODUCTION

The attached HAI report is the latest of the regular two monthly reports to NHS Board as required by the National HAI Task Force Action Plan. The report presents data on the performance of NHSGGC on a range of key HAI indicators at National and individual hospital site level.

This is a revised template as specified by the Scottish Government.

Author's name **Dr Brian Cowan**
Title **Medical Director**
Contact tel. No. **61303**

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

NHS Greater Glasgow & Clyde

Key Healthcare Associated Infection Headlines for June 2011

This is the fifth publication of the revised reporting template for submission to the NHS Board as required by the national HAI Action Plan.

Appendix 1 contains Statistical Process Control Charts (SPC) for nine of the Acute Hospitals within NHSGGC. These contain data on Hospital Acquired Meticillin Resistant *Staphylococcus Aureus* (MRSA) & *Clostridium difficile* infections at hospital level. An explanatory text on how to interpret SPCs is also included.

- In 2007 the Scottish Government Health Directorates issued a Local Delivery Plan (LDP) HEAT target in relation to *Staphylococcus aureus* Bacteraemias (SABs) in which NHSGGC successfully reduced SABs by 35% by April 2010. This target was extended by an additional 15% reduction to be achieved by the end of March 2011. Local Infection Control Surveillance data indicates that NHSGGC have achieved this reduction, however this is still to be validated by Health Protection Scotland. The revised National HEAT target requires all Boards in Scotland to achieve a rate of 0.26 cases per 1000 acute occupied bed days (AOBDs) or lower by 31st March 2013. For the last available reporting quarter (October-December 2010) NHSGGC reported 0.348 cases per 1000 AOBDs, NHS Scotland reported 0.368 per 1000 AOBDs. The revised target will be a challenging one as analysis of these infections has highlighted that a significant number originate in the community, e.g.nursing homes. Subsequent HAIRT reports will update on our progress towards this challenging target.
- The National Report published April 2011 (October -December 2010) shows the rate of *C. difficile* within NHSGGC as 0.32 per 1000 occupied bed days in over 65s and clearly places the Board below the national mean (0.34 per 1000 OBDs in over 65s) and also below the 0.6 per 1000 OBD updated HEAT target for 2011. HPS validated data is still to be published for the first quarter of this year but local Infection Control Surveillance data indicates that NHSGGC has also met this HEAT target. The revised target, in patients aged 65 & over, to be attained by the 31st March 2013 is 0.39 cases per 1000 total occupied bed days.
- The Surgical Site Infection rates in monitored procedures, for the first quarter of 2011, remain below the national average for all categories.
- Cleanliness Champions Programme - The Cleanliness Champions Programme is part of the Scottish Government's Action Plan to combat Healthcare Associated

Infection (HAI) within NHS Scotland. To date NHSGGC have supported 2273 members of staff who are now registered Cleanliness Champions.

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 Methicillin Sensitive *Staphylococcus Aureus* (MSSA), but the more well known is MRSA (Methicillin 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>

NHSGGC MRSA Screening Project

In 2009, the Scottish Government initiated a national plan to screen all elective patients for MRSA prior to or on admission and all emergency admissions to Vascular, Renal, Dermatology and Care of the Elderly. The aim of the project is to reduce the number of patients being admitted into hospital with colonised with MRSA to prevent further cross patient colonisation or infection. The deadline set for the implementation of targeted screening was the 31st January 2010.

On 23rd February 2011, the Scottish Government announced new National Minimum MRSA Screening recommendations. Targeted MRSA screening by specialty will now be replaced by a universal clinical risk assessment (CRA) followed by a nose and perineal screen (if the patient answers yes to any of the questions within the CRA.) Funding has been agreed in line with NHSGGC previous spend on MRSA screening and the MRSA Project Team are working towards a deadline of May 31st for completion of the project plan. All NHS Boards will be asked to ensure local delivery against the operating protocol by end March 2012.

Enhanced surveillance methodology in relation to MRSA/MSSA bacteraemias has been reviewed and amended and this programme has been re launched in July 2010. This will give NHSGGC vital information with regards to where and why these types of infections are occurring. In addition Pareto charts have been developed for directorates and this provides a visual representation as to where the potential 'hot spots' may be. All this information allows us to target appropriate interventions. Representative from each directorate review this information and plan strategies to prevent avoidable infections locally.

Please note that the data presented in the following report cards are for *Staphylococcus aureus* bacteraemia infections only.

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>

The National Report published April 2011 (October-December 2010) shows the rate of *C. difficile* within NHSGGC as 0.32 per 1000 occupied bed days and clearly places the Board below the national mean (0.34 per 1000 OBDs in over 65s) and also below the 0.6 per 1000 OBD updated HEAT target for 2011.

Infection Control Teams in NHSGGC complete the Health Protection Scotland Trigger Tool if there are two or more linked HAI cases of CDI in any clinical area in a two week period. Part of this process includes the referral to the Antimicrobial Management Team who will review the use of antibiotics within the area.

Hand Hygiene

NHSGGC has demonstrated a steady rise in Hand Hygiene compliance during the National Audit periods from a 62% baseline in February 2007 to achieve the 90% target in September 2008, and a current figure of 93% (Audits by the LHBC).

Compliance audits are carried out on a monthly basis in the majority of wards and departments in NHSGGC. This information is used at local level to tackle issues that may affect staff practice.

Results are fed back through Directorate based reporting mechanisms which allows management to view the progress of individual wards.

Volunteers across NHSGGC will be recruited to engage the public in Glowbox stands. An initial session at RHSC Yorkhill proved successful and will be rolled out across other sites. This will help improve public awareness of their own practice when visiting hospitals and reinforce how staff are expected to maintain compliance levels.

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>

All areas within NHSGGC scored **green (>90%)** in the most recent report on the National Cleaning Specification. It should be noted that no data was available for April 2011 at time of publication.

HEI Unannounced Inspection Report – Royal Hospital for Sick Children 24th February 2011

No requirements and two recommendations are to be actioned from the visit. The full report can be accessed at:

http://www.healthcareimprovementscotland.org/programmes/inspecting_and_regulating_care/hei/hei_reports/rhsc_yorkhill_february_11.aspx

HEI Unannounced Inspection – Glasgow Royal Infirmary 4th May 2011

Details of this visit will be included in the next HAIRT.

Outbreaks

There have been no outbreaks to report for NHSGGC, other than suspected or confirmed Norovirus.

Data on the numbers of wards closed due to confirmed or suspected norovirus is available from HPS on a weekly basis.

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

Other HAI Related Activity

Surgical Site Infection (SSI) Surveillance

NHSGGC participates in the Surgical Site Infection (SSI) surveillance programme that is mandatory in all NHS boards in Scotland. All NHS boards are required to undertake surveillance for hip arthroplasty and caesarean section procedures as per the mandatory requirements of HDL (2006) 38 and CEL (11) 2009.

Readmission surveillance is carried out using prospective readmission data on all 4 Orthopaedic procedure categories under inpatient surveillance up to 30 days post operatively.

Post discharge surveillance until day 10 post operation is also carried out for all caesarean sections performed, with the assistance of our Community Midwifery colleagues.

The aims of the National Surgical Site Infection programme are:

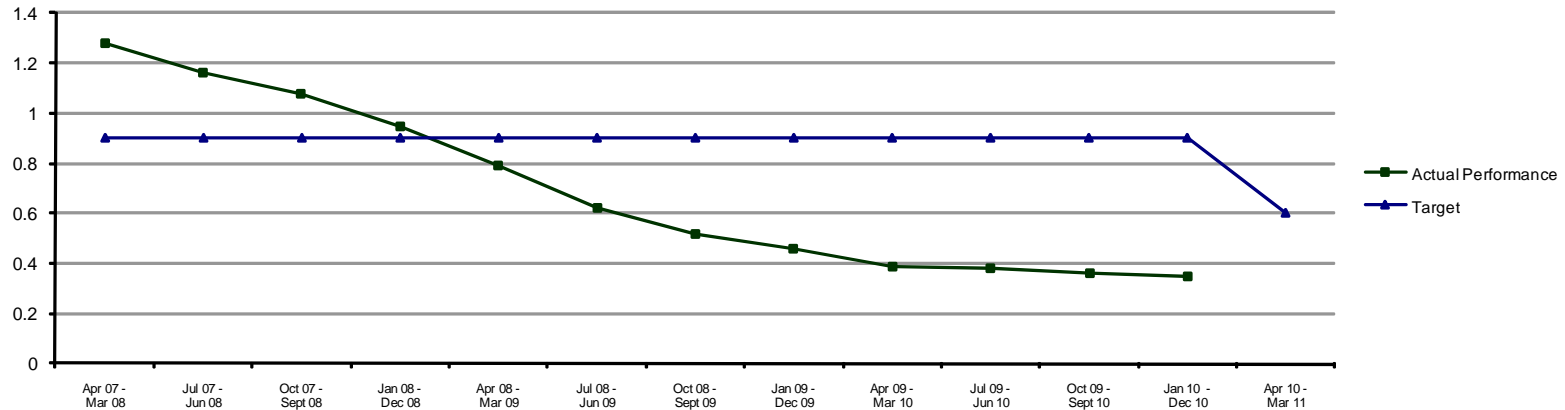
- To collect surveillance data on surgical site infections to allow estimation of the magnitude of surgical site infection risk in hospitalised patients throughout Scotland.
- To analyse and report surgical site infection (SSI) data and describe trends in SSI rates throughout Scotland

Last available quarter (January – March 2011)

SSI Rates for all five procedure categories remain below the national average

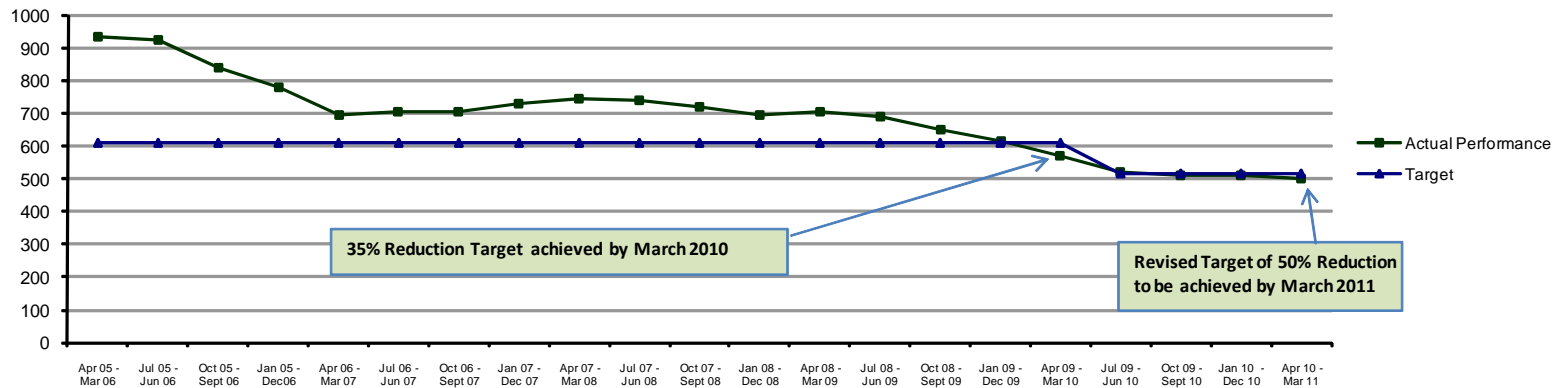
Quarter 1 2011				
Category of procedure	Operations	Infections	NHSGGC SSI rate (%)	National dataset SSI rate (%)
Caesarean section	1128	32	2.84	3.35
Hip arthroplasty	412	1	0.24	1.01
Knee arthroplasty	442	0	0.00	0.31
Reduction of long bone fracture	250	2	0.80	1.12
Repair of neck of femur	197	1	0.51	1.93

Quarterly rolling year Clostridium difficile Infection Cases per 1000 total occupied bed days for HEAT Target Measurement



	Apr 07 - Mar 08	Jul 07 - Jun 08	Oct 07 - Sept 08	Jan 08 - Dec 08	Apr 08 - Mar 09	Jul 08 - Jun 09	Oct 08 - Sept 09	Jan 09 - Dec 09	Apr 09 - Mar 10	Jul 09 - Jun 10	Oct 09 - Sept 10	Jan 10 - Dec 10	Apr 10 - Mar 11
Actual Performance	1.28	1.16	1.08	0.95	0.79	0.62	0.52	0.46	0.39	0.38	0.36	0.35	
Target	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.60

Quarterly rolling year Staphylococcus aureus Bacteraemia Cases for HEAT Target Measurement



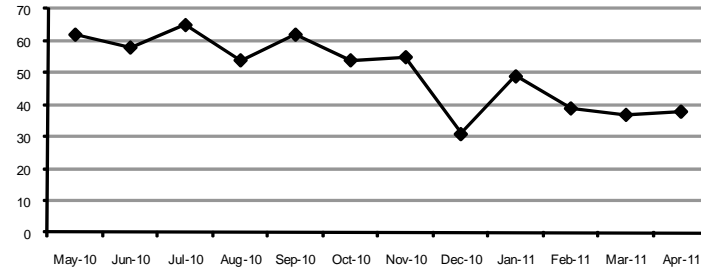
	Apr 05 - Mar 06	Jul 05 - Jun 06	Oct 05 - Sept 06	Jan 05 - Dec 06	Apr 06 - Mar 07	Jul 06 - Jun 07	Oct 06 - Sept 07	Jan 07 - Dec 07	Apr 07 - Mar 08	Jul 07 - Jun 08	Oct 07 - Sept 08	Jan 08 - Dec 08	Apr 08 - Mar 09	Jul 08 - Jun 09	Oct 08 - Sept 09	Jan 09 - Dec 09	Apr 09 - Mar 10	Jul 09 - Jun 10	Oct 09 - Sept 10	Jan 10 - Dec 10	Apr 10 - Mar 11
Actual Performance	935	923	839	778	697	705	707	728	744	738	722	694	704	688	649	618	573	522	511	511	499
Target	609	609	609	609	609	609	609	609	609	609	609	609	609	609	609	609	609	609	609	518	518

Unvalidated data

NHS Greater Glasgow & Clyde

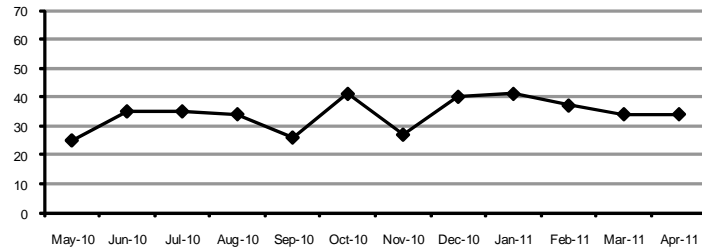
Data presented for *Clostridium difficile* Infection cases in ages 15 & over, Meticillin Sensitive Staphylococcus Aureus(MSSA) Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus(MRSA) Bacteraemia cases. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance - monthly compliance across NHSGGC greater than 94%. Cleaning Compliance - monthly compliance across NHSGGC greater than 94%. It should be noted that data for cleaning compliance for April was unavailable at time of publication.

Clostridium difficile Infection Cases (ages 15 & over)



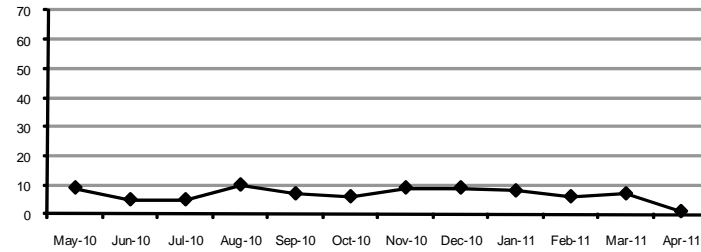
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Cases	62	58	65	54	62	54	55	31	49	39	37	38

MSSA Bacteraemia Cases



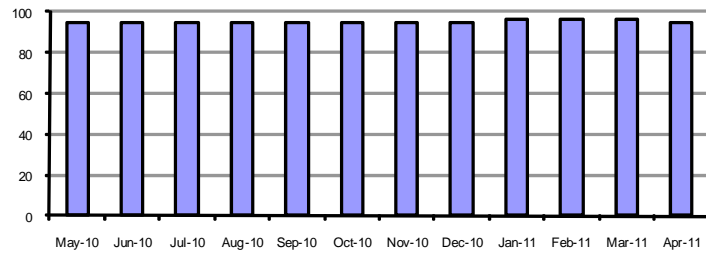
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Cases	25	35	35	34	26	41	27	40	41	37	34	34

MRSA Bacteraemia Cases



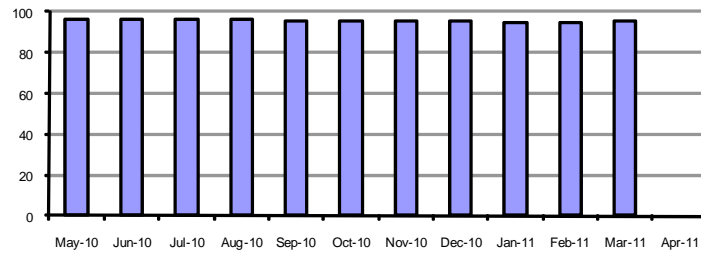
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Cases	9	5	5	10	7	6	9	9	8	6	7	1

Hand Hygiene Compliance



Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Compliance (%)	94.5	95	95.1	95	95	95	95	95	96	96	96	95

Cleaning Compliance



Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Compliance (%)	96.1	96	96.1	96	95.9	95.8	95.6	95.5	95.1	94.9	95.2	N/A

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 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. *Staphylococcus aureus* bacteraemia (SAB) cases are further broken down into Meticillin Sensitive *Staphylococcus aureus* (MSSA) and Meticillin Resistant *Staphylococcus aureus* (MRSA). Data are 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 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.

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 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 first page of each hospital Report Card gives the hospitals cleaning compliance percentage in both graph and table form.

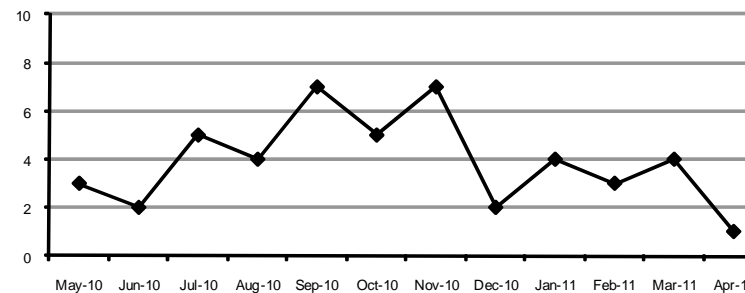
Understanding the Report Cards – 'Out of Hospital Infections'

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 hospices. 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.

Glasgow Royal Infirmary / Princess Royal Maternity

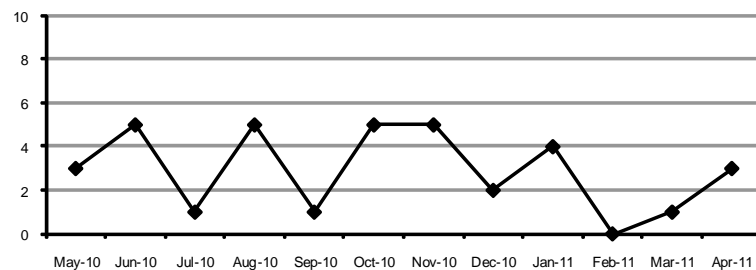
Data presented for *Clostridium difficile* Infection cases in ages 15 & over, Meticillin Sensitive Staphylococcus Aureus Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus Bacteraemia. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance data - monthly compliance in GRI greater than 93%. Cleaning Compliance data - monthly compliance in GRI greater than 92%.

Clostridium difficile Infection Cases (ages 15 & over)



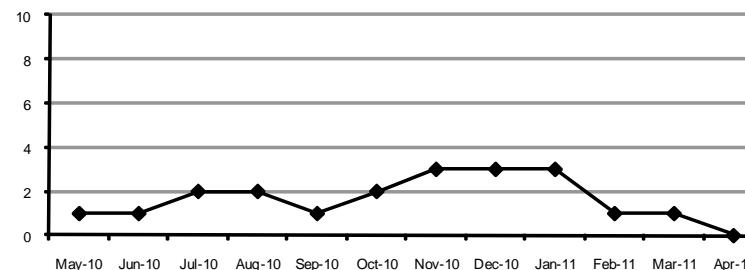
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
3	2	5	4	7	5	7	2	4	3	4	1

MSSA Bacteraemia Cases



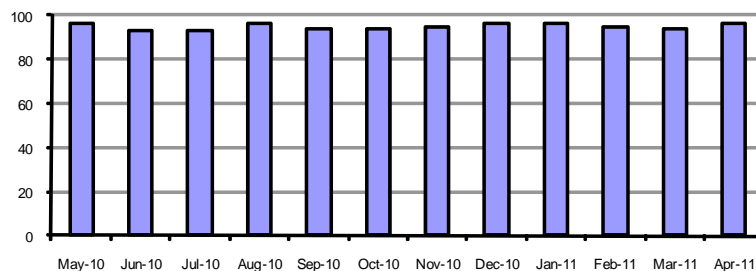
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
3	5	1	5	1	5	5	2	4	0	1	3

MRSA Bacteraemia Cases



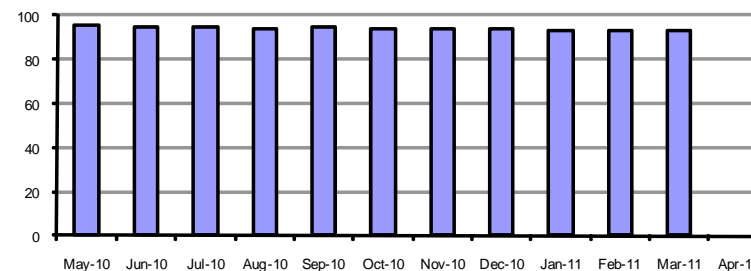
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
1	1	2	2	1	2	3	3	3	1	1	0

Hand Hygiene Compliance



May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
96.5	93	93	96	94	94	95	96	96	95	94	96

Cleaning Compliance

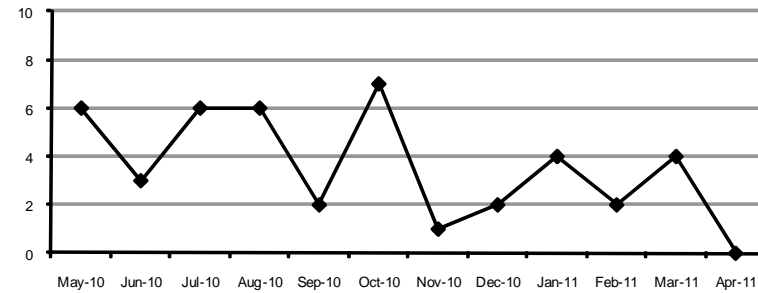


May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
95.5	94.9	94.5	94.2	95	94.3	94.2	93.7	92.8	92.9	92.9	N/A

Stobhill Hospitals

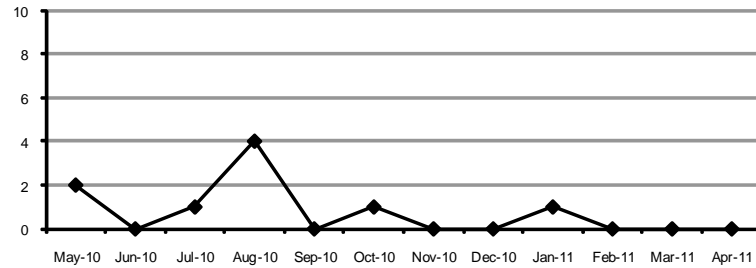
This report card includes data for Stobhill Hospital & Stobhill ACH. As of April 2011 only two in-patient wards remain on the Stobhill campus. Data presented for *Clostridium difficile* Infection cases in ages 15 & over, Meticillin Sensitive Staphylococcus Aureus Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus Bacteraemia. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance data - monthly compliance in Stobhill Hospitals greater than 96%. Cleaning Compliance data - monthly compliance in Stobhill Hospitals greater than 94%.

Clostridium difficile Infection Cases (ages 15 & over)



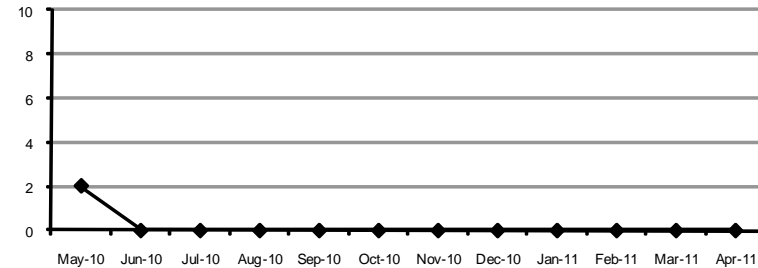
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
6	3	6	6	2	7	1	2	4	2	4	0

MSSA Bacteraemia Cases



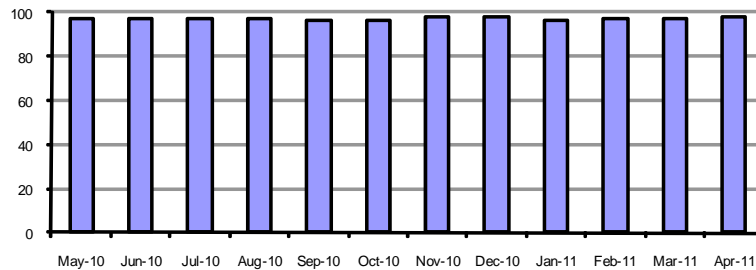
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
2	0	1	4	0	1	0	0	1	0	0	0

MRSA Bacteraemia Cases



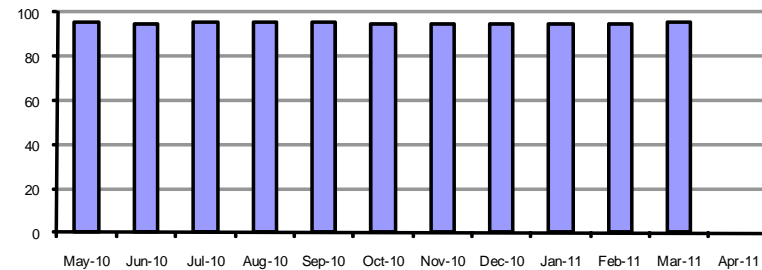
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
2	0	0	0	0	0	0	0	0	0	0	0

Hand Hygiene Compliance



May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
96.8	97	97	97	96	96	98	98	96	97	97	98

Cleaning Compliance

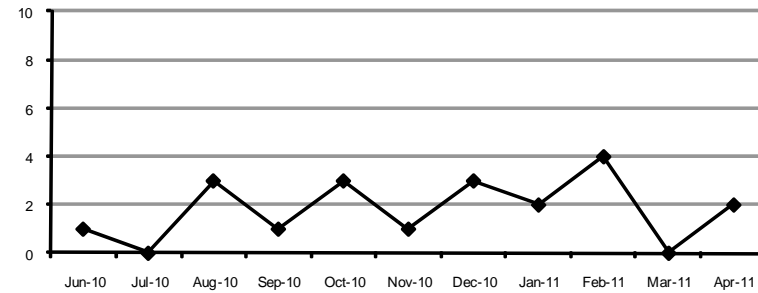


May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
95.5	95.1	95.9	95.2	95.5	94.6	95	94.9	94.6	95	95.2	N/A

Royal Alexandra Hospital

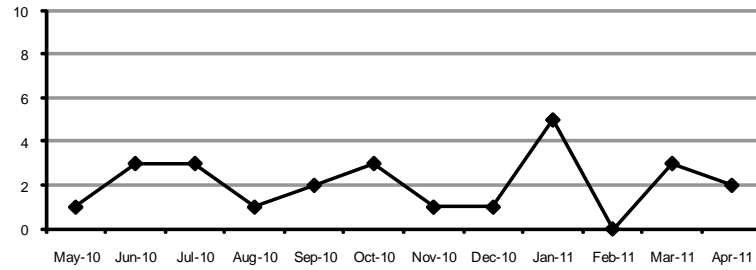
Data presented for *Clostridium difficile* Infection cases in ages 15 & over, Meticillin Sensitive Staphylococcus Aureus Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus Bacteraemia cases. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance data - monthly compliance in RAH greater than 93%. Cleaning Compliance data - monthly compliance in RAH greater than 94%.

Clostridium difficile Infection Cases (ages 15 & over)



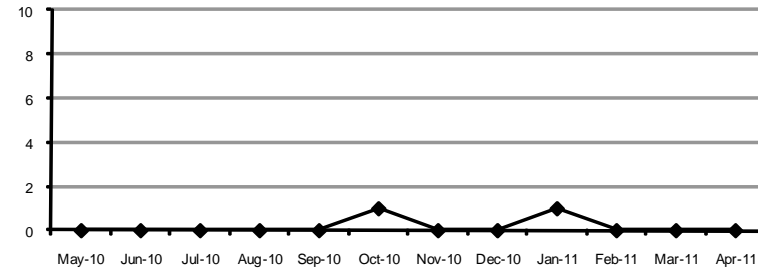
	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
6	1	0	3	1	3	1	3	2	4	0	2

MSSA Bacteraemia Cases



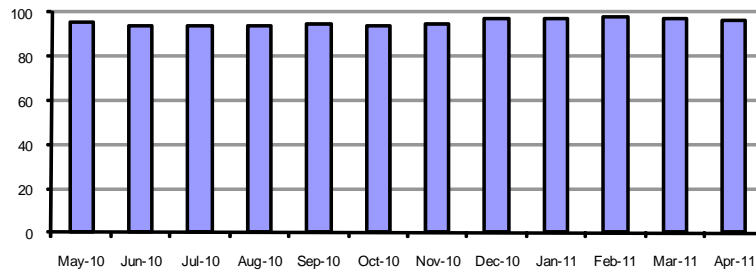
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
1	3	3	1	2	3	1	1	5	0	3	2	

MRSA Bacteraemia Cases



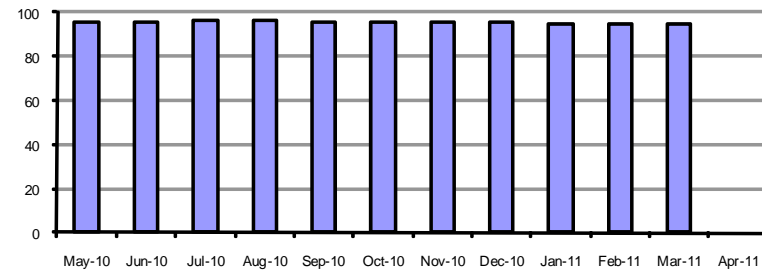
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
0	0	0	0	0	0	1	0	0	1	0	0	0

Hand Hygiene Compliance



Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
95.3	93.7	94	94	95	94	95	97	97	98	97	96	

Cleaning Compliance

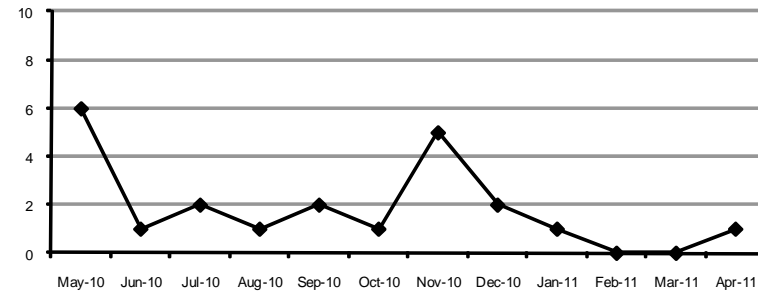


Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
95.8	95.8	96.3	96.4	95.3	95.6	95.5	95.5	95	94.7	95	N/A	

Inverclyde Royal Hospital

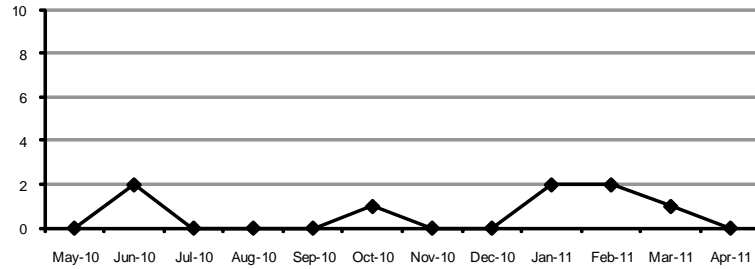
Data presented for *Clostridium difficile* Infection cases in ages 15 & over, Meticillin Sensitive Staphylococcus Aureus Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus Bacteraemia cases. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance data - monthly compliance in IRH greater than 89%. Cleaning Compliance data - monthly compliance in IRH greater than 97%.

Clostridium difficile Infection Cases (ages 15 & over)



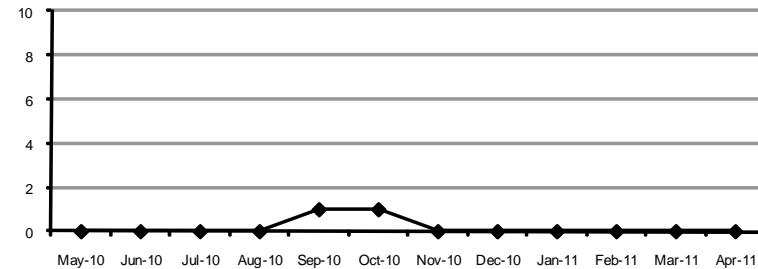
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
6	1	2	1	2	1	5	2	1	0	0	1

MSSA Bacteraemia Cases



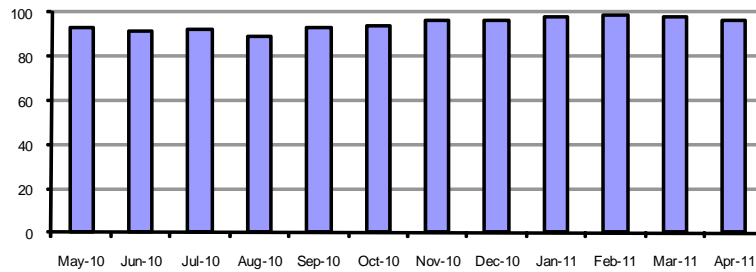
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
0	2	0	0	0	1	0	0	2	2	1	0

MRSA Bacteraemia Cases



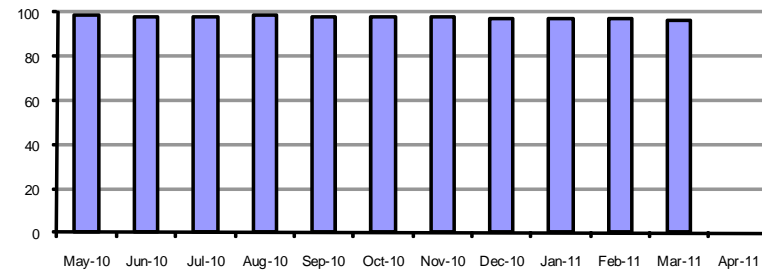
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
0	0	0	0	1	1	0	0	0	0	0	0

Hand Hygiene Compliance



May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
93.3	91.3	92	89	93	94	96	96	98	99	98	96

Cleaning Compliance

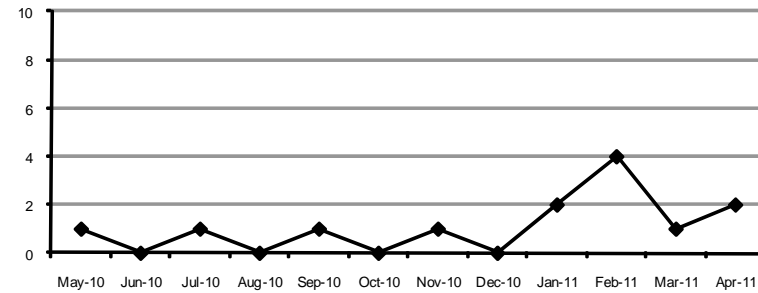


May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
98.5	98.2	98.3	98.4	97.9	97.8	98.2	97.5	97	97.1	96	N/A

Victoria Hospitals

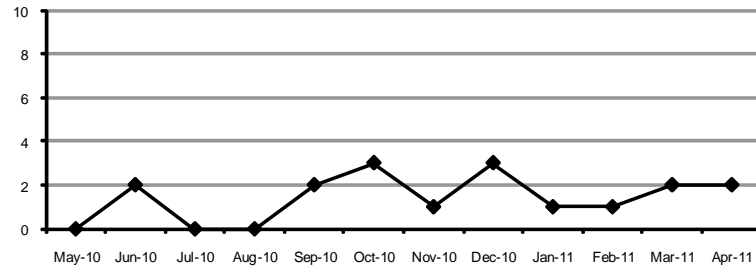
This report card includes data for the Victoria Infirmary, Victoria ACH & the Mansionhouse Unit. Data presented for *Clostridium difficile* Infection cases in ages 15 & over, Meticillin Sensitive Staphylococcus Aureus Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus Bacteraemia cases. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance - monthly compliance in Victoria Hospitals greater than 87%. Cleaning Compliance data - monthly compliance in Victoria Hospitals greater than 96%.

Clostridium difficile Infection Cases (ages 15 & over)



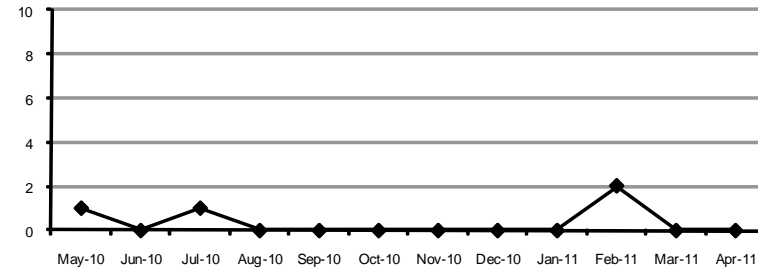
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Cases	1	0	1	0	1	0	1	0	2	4	1	2

MSSA Bacteraemia Cases



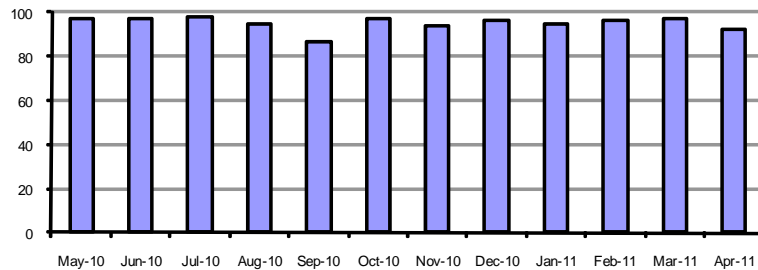
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Cases	0	2	0	0	2	3	1	3	1	1	2	2

MRSA Bacteraemia Cases



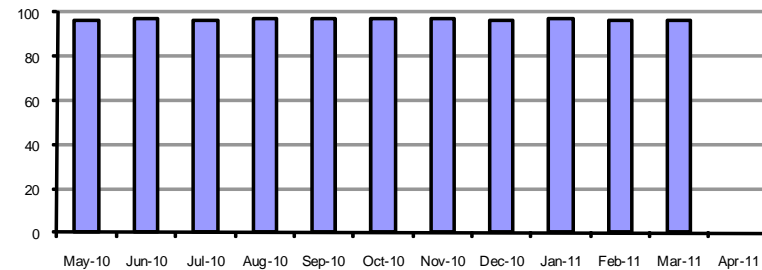
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Cases	1	0	1	0	0	0	0	0	0	2	0	0

Hand Hygiene Compliance



Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Compliance (%)	97.3	97	98	95	87	97	94	96	95	96	97	92

Cleaning Compliance

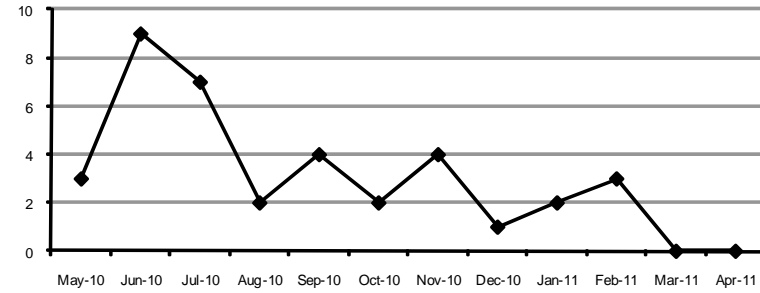


Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Compliance (%)	96.5	96.8	96.3	96.8	97	97.1	97	96.5	97	96.6	96.3	N/A

Southern General Hospital

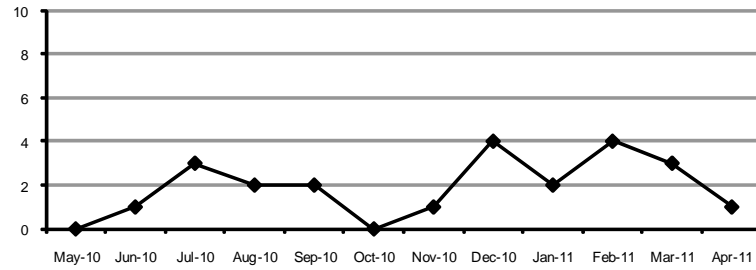
Data presented for *Clostridium difficile* Infection cases in ages 15 & over, Meticillin Sensitive Staphylococcus Aureus Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus Bacteraemia cases. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance data - monthly compliance in SGH greater than 93%. Cleaning Compliance data - monthly compliance in SGH greater than 95%.

Clostridium difficile Infection Cases (ages 15 & over)



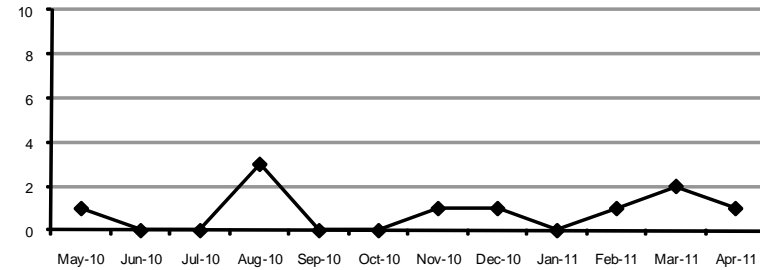
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
3	9	7	2	4	2	4	1	2	3	0	0

MSSA Bacteraemia Cases



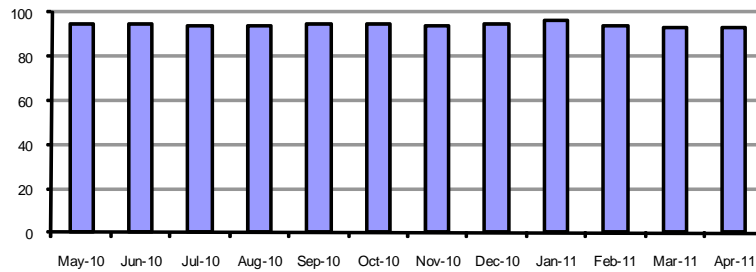
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
0	1	3	2	2	0	1	4	2	4	3	1

MRSA Bacteraemia Cases



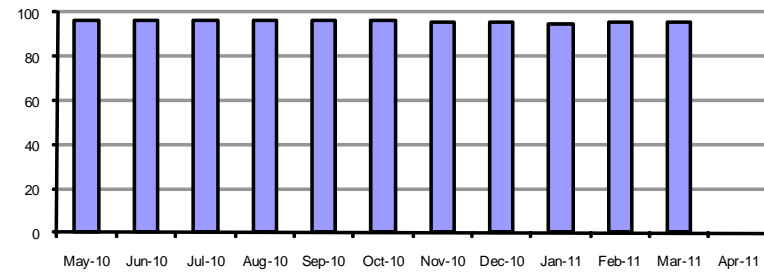
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
1	0	0	3	0	0	1	1	0	1	2	1

Hand Hygiene Compliance



May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
94.4	94.5	94	94	95	95	94	95	96	94	93	93

Cleaning Compliance

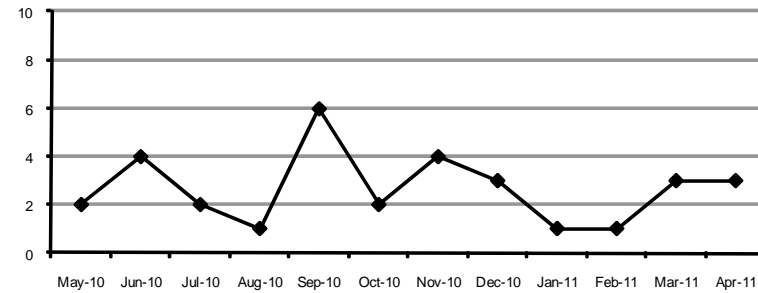


May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
96.4	96.5	96.3	96.2	96.1	96	95.9	95.9	95.1	95.3	95.7	N/A

Western Infirmary

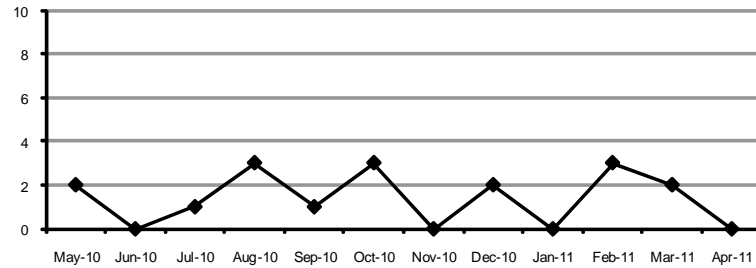
Data presented for *Clostridium difficile* Infection cases in ages 15 & over, Meticillin Sensitive Staphylococcus Aureus Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus Bacteraemia cases. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance data - monthly compliance in WIG greater than 91%. Cleaning Compliance data - monthly compliance in WIG greater than 94%.

Clostridium difficile Infection Cases (ages 15 & over)



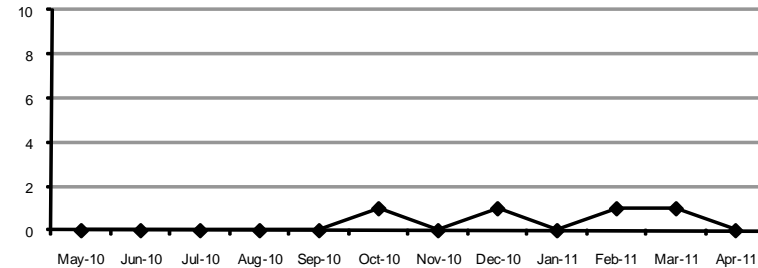
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
2	4	2	1	6	2	4	3	1	1	3	3

MSSA Bacteraemia Cases



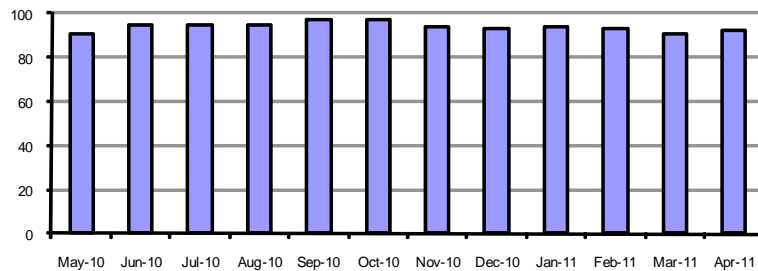
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
2	0	1	3	1	3	0	2	0	3	2	0

MRSA Bacteraemia Cases



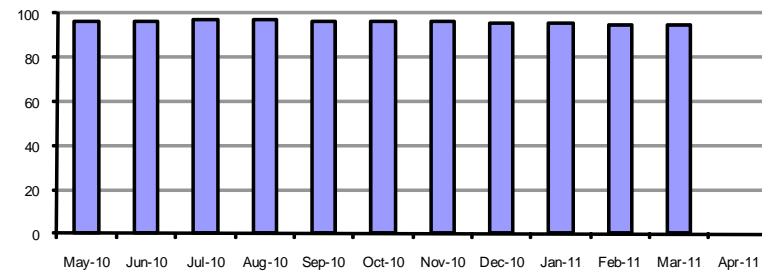
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
0	0	0	0	0	1	0	1	0	1	1	0

Hand Hygiene Compliance



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

Cleaning Compliance

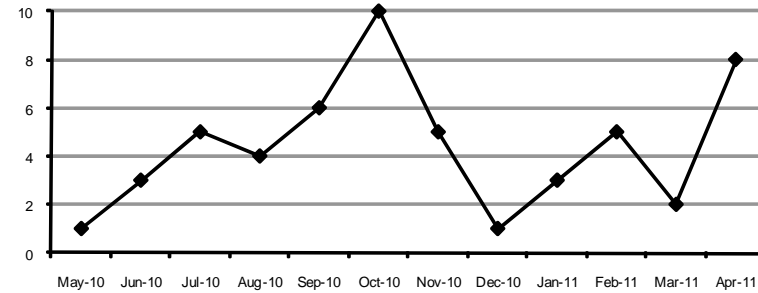


May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
96.4	96.7	96.9	96.8	96.5	96.4	96.3	95.9	95.9	94.8	94.8	N/A

Gartnavel General Hospital

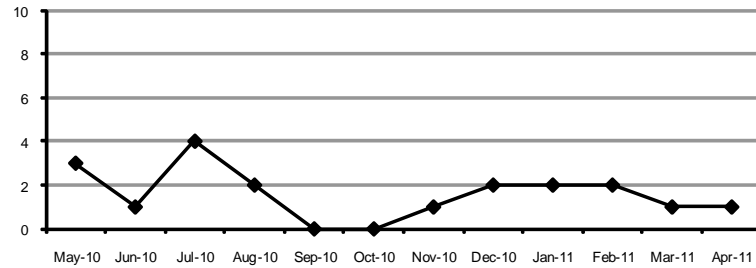
This report card includes data for Gartnavel General Hospital & the Beatson West of Scotland Cancer Centre. Data presented for *Clostridium difficile* Infection cases in ages 15 & over, Meticillin Sensitive Staphylococcus Aureus Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus Bacteraemia cases. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance data - monthly compliance in GGH greater than 88%. Cleaning Compliance data - monthly compliance in GGH greater than 93%.

Clostridium difficile Infection Cases (ages 15 & over)



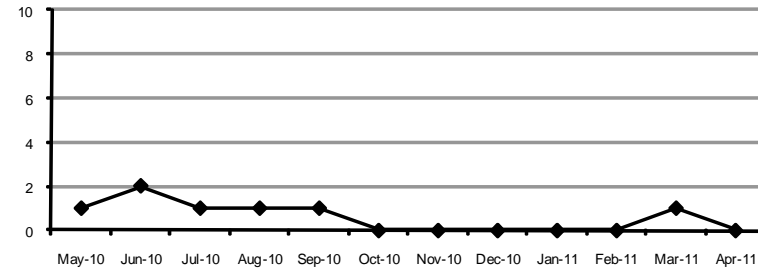
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
1	3	5	4	6	10	5	1	3	5	2	8

MSSA Bacteraemia Cases



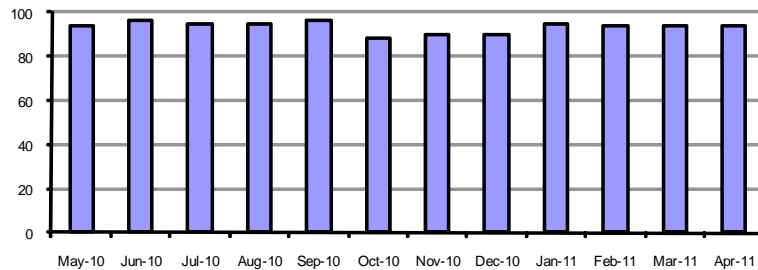
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
3	1	4	2	0	0	1	2	2	2	1	1

MRSA Bacteraemia Cases



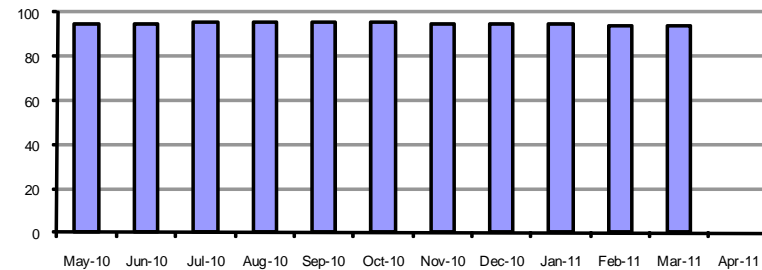
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
1	2	1	1	1	0	0	0	0	0	1	0

Hand Hygiene Compliance



May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
93.8	96.4	95	95	96	88	90	90	95	94	94	94

Cleaning Compliance

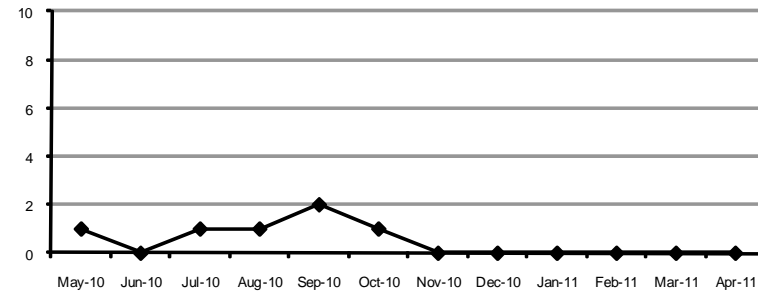


May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
95	95	95.9	95.4	95.2	95.9	94.5	94.5	94.7	93.7	93.8	N/A

Vale of Leven Hospital

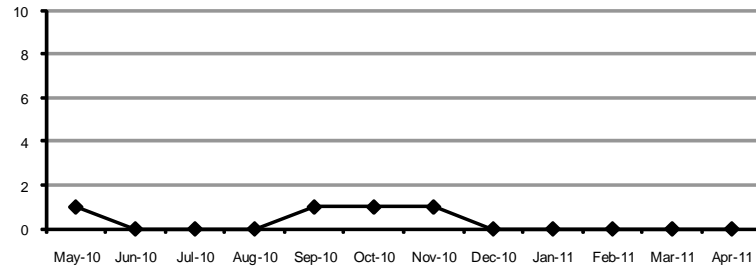
Data presented for *Clostridium difficile* Infection cases in ages 15 & over, Meticillin Sensitive Staphylococcus Aureus Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus Bacteraemia. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance data - overall compliance in VOL greater than 96%. Cleaning Compliance data - monthly compliance in VOL greater than 95%.

Clostridium difficile Infection Cases (ages 15 & over)



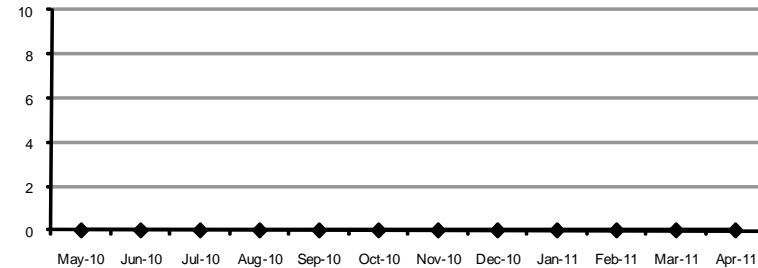
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Cases	1	0	1	1	2	1	0	0	0	0	0	0

MSSA Bacteraemia Cases



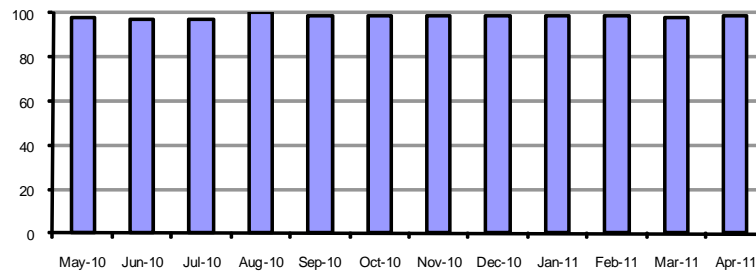
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Cases	1	0	0	0	1	1	1	0	0	0	0	0

MRSA Bacteraemia Cases



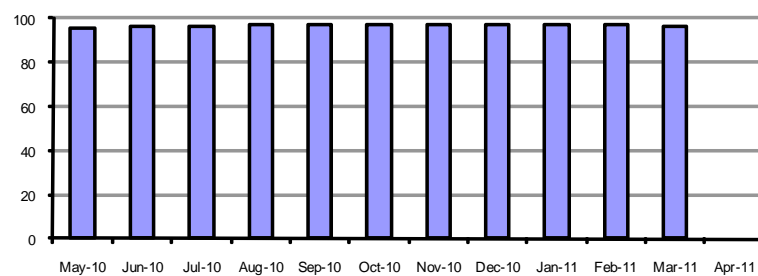
Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Cases	0	0	0	0	0	0	0	0	0	0	0	0

Hand Hygiene Compliance



Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Compliance (%)	97.8	96.8	97	100	99	99	99	99	99	99	98	99

Cleaning Compliance

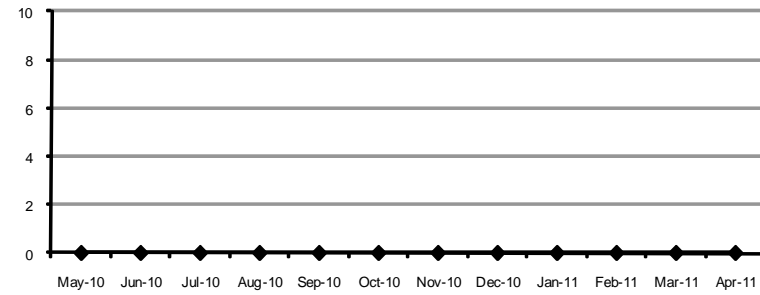


Month	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
Compliance (%)	95.8	96.5	96.3	97.1	97.2	97	97.1	97	96.9	96.9	96.2	N/A

Royal Hospital for Sick Children(Yorkhill)

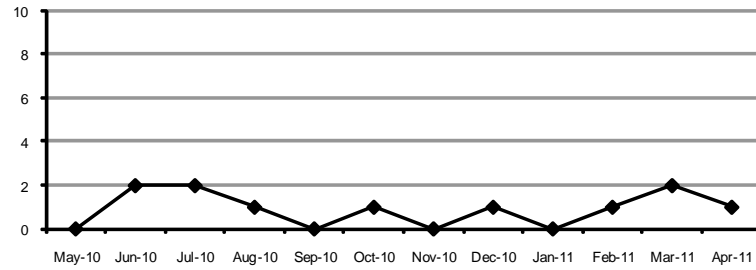
Data for *Clostridium difficile* Infection cases in ages 15 & over, therefore no cases for this site. Data Presented for Meticillin Sensitive Staphylococcus Aureus Bacteraemia cases & Meticillin Resistant Staphylococcus Aureus Bacteraemia cases. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets. Hand Hygiene Compliance data - overall compliance in Yorkhill Hospital greater than 90%. Cleaning Compliance data - monthly compliance in Yorkhill Hospital greater than 95%.

Clostridium difficile Infection Cases (ages 15 & over)



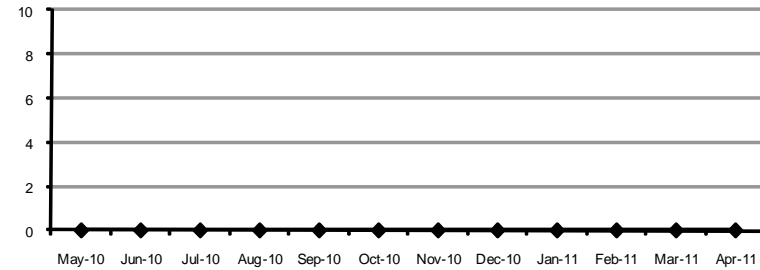
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
0	0	0	0	0	0	0	0	0	0	0	0

MSSA Bacteraemia Cases



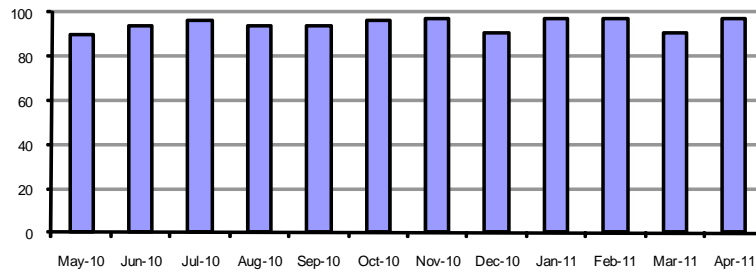
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
0	2	2	1	0	1	0	1	0	1	2	1

MRSA Bacteraemia Cases



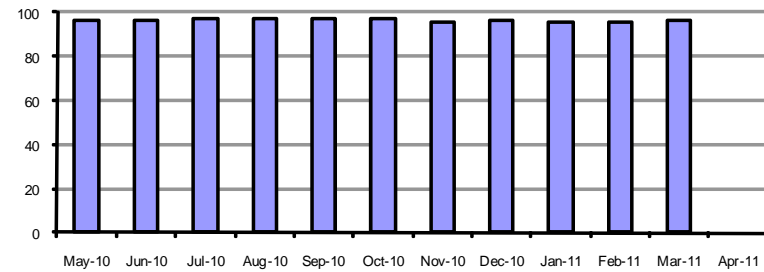
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
0	0	0	0	0	0	0	0	0	0	0	0

Hand Hygiene Compliance



May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
90	94	96	94	94	96	97	91	97	97	91	97

Cleaning Compliance

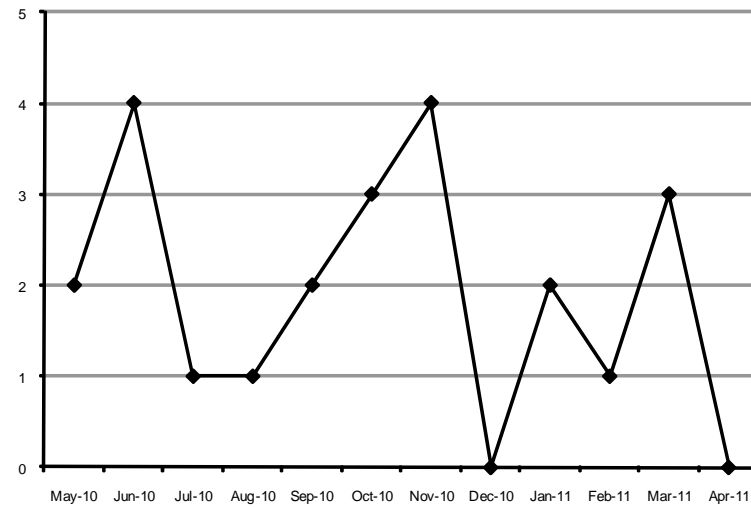


May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
96.6	96.5	97.4	96.9	97.5	96.8	95.4	96.3	95.4	95.8	96	N/A

Community Hospitals [Non Acute & Mental Health Hospitals]

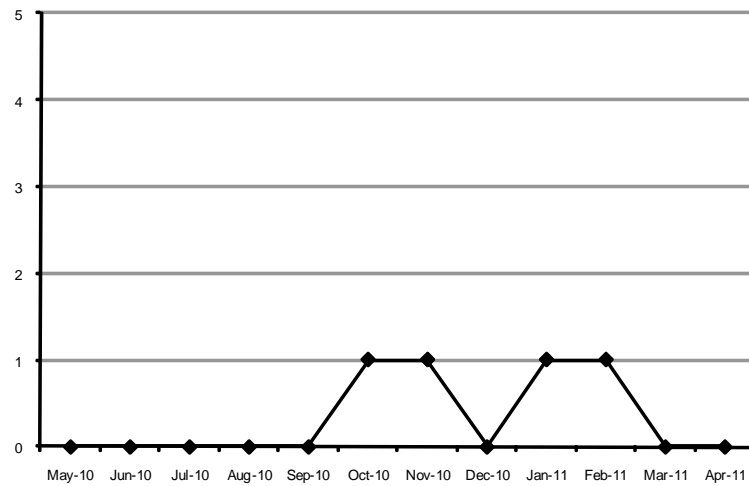
This is an amalgamation of data from the following hospitals:
 Lightburn, Drumchapel, Gartnavel Royal, Parkhead, Ravenscraig,
 Blawarthill, Leverdale, Johnstone, Mearns Kirk & Dykebar Hospitals.
 These hospitals are non acute hospitals & mental health hospitals and have very few cases to report. Data for Clostridium difficile Infection cases in ages 15 & over, Data presented for Metcillin Sensitive Staphylococcus Aureus Bacteraemia cases & Metcillin Resistant Staphylococcus Aureus Bacteraemia cases. Awaiting HPS validation of HEAT target data but local surveillance indicates achievement of 2011 revised targets.

Clostridium difficile Infection Cases (ages 15 & over)



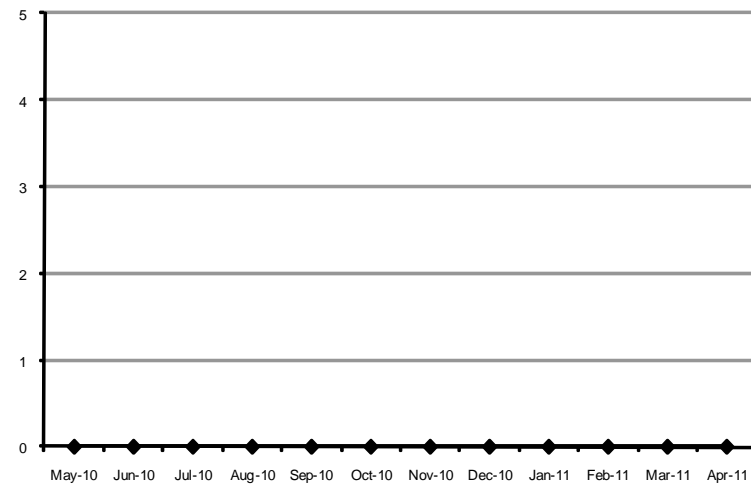
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
2	4	1	1	2	3	4	0	2	1	3	0

MSSA Bacteraemia Cases



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

MRSA Bacteraemia Cases



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

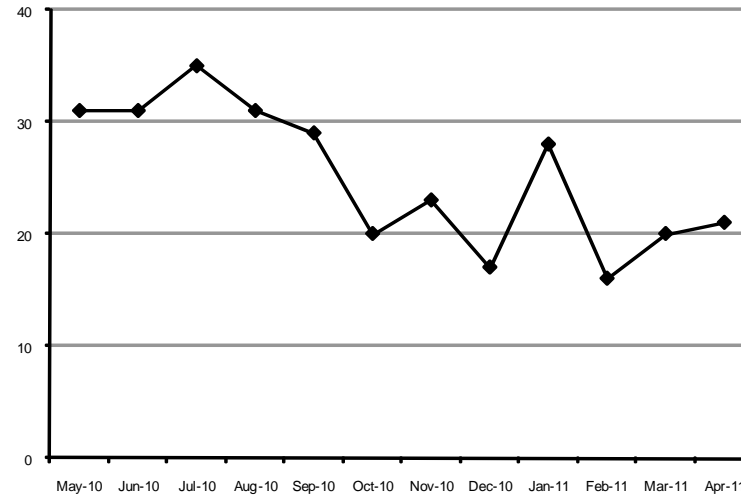
Out of Hospital Infections

Data for Clostridium difficile Infection cases in ages 15 & over:
50% of all CDI cases reported in NHSGGC May 2010 to April 2011 are attributed as Out of Hospital infections.

Out of Hospital MSSA bacteraemias account for **57.9%** of all cases from March 2010 to February 2011. Out of Hospital MRSA bacteraemias make up **37.8%** of all cases for the same timeframe.

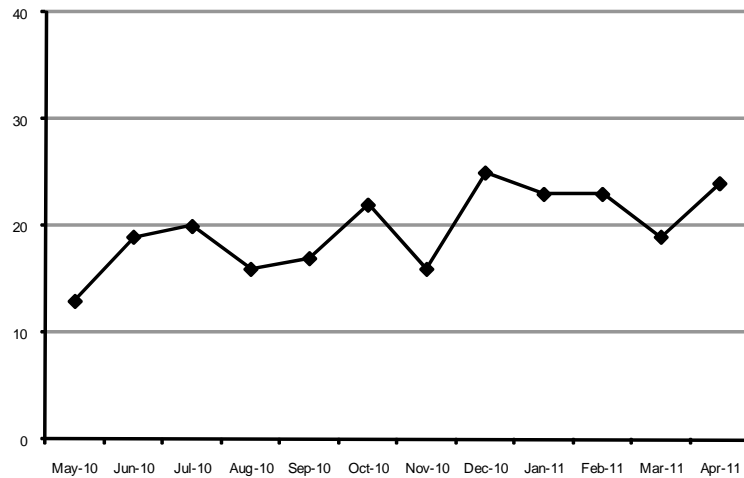
This equates to **54.6%** of all Staphylococcus Aureus Bacteraemia cases being Out of Hospital infections.

Clostridium difficile Infection Cases (ages 15 & over)



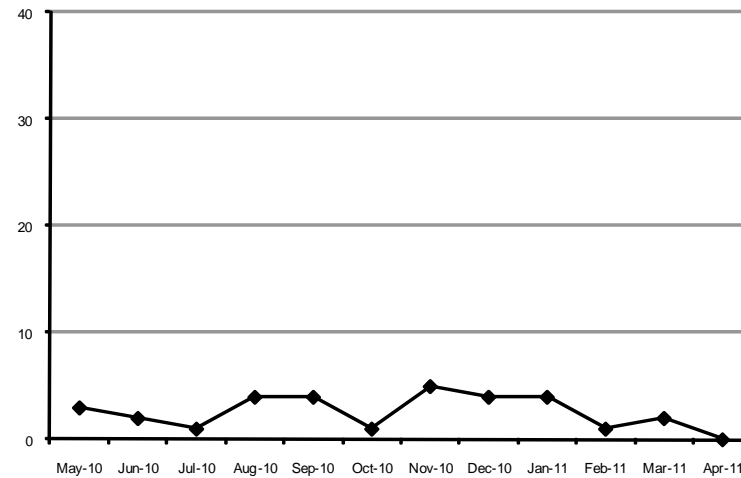
May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
31	31	35	31	29	20	23	17	28	16	20	21

MSSA Bacteraemia Cases



May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
13	19	20	16	17	22	16	25	23	23	19	24

MRSA Bacteraemia Cases



May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11
3	2	1	4	4	1	5	4	4	1	2	0

This section includes Hospital level SPCs for acute sites in NHSGGC

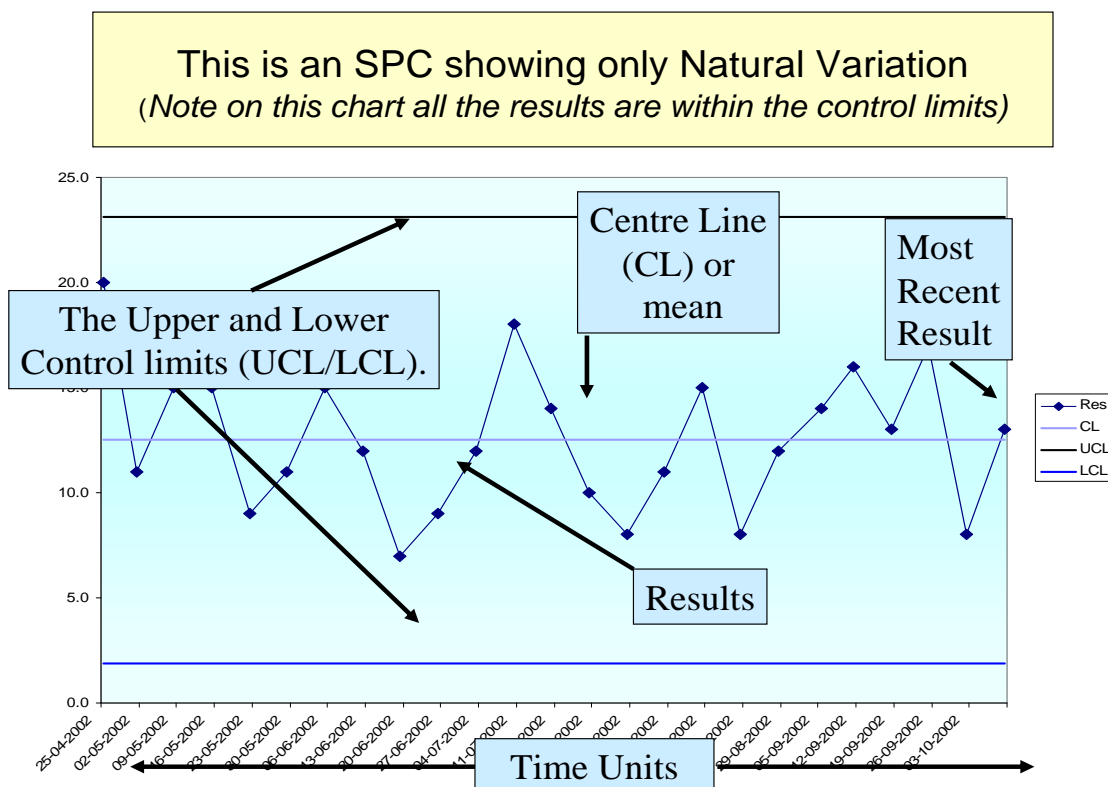
The SPCs include data on

- Hospital Acquired MRSA cases (includes wound swabs, sputum & urine samples etc.)
- Hospital Acquired Clostridium difficile cases

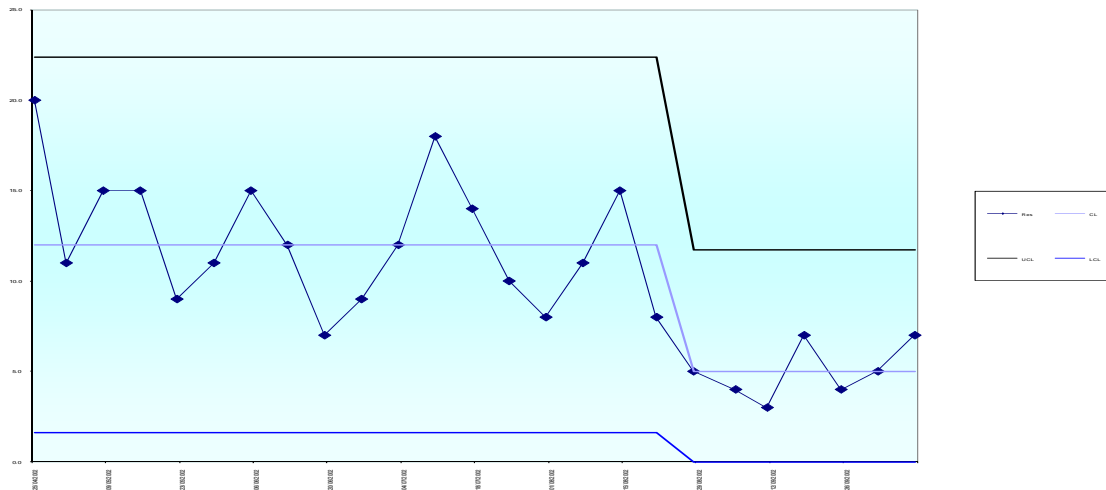
Surveillance data can be used to detect any change in the incidence of disease, which in turn facilitates the early identification outbreaks of infection and leads to prompt initiation of preventive measures. It also allows local infection control teams to focus their interventions in areas where the greatest benefit to patients can be achieved.

Statistical Process Control Charts (SPCs) are the application of statistical theory to Quality Control. They show process data chronologically (per month in most cases). Some examples of where they have been used in healthcare include; queuing analysis of appointment access and delays and forecasting bed needs.

The most common use for SPCs in infection control practice is in relation to healthcare acquired MRSA and *C. difficile* infections. Calculations are made based upon the ward/unit's historical infection rate to produce 3 lines, the upper and lower control limits and the centre line (mean). The setting of the upper control limits allows the local teams to 'trigger' actions promptly in response to any increase in the number of patients identified.



Although SPCs are a method of viewing what is going on at a local level the SPC can also be used to drive improvements in care. This is shown by reducing the mean (centre line) which indicates that fewer patients are acquiring infection in our wards and hospitals.



This chart demonstrates that infection control practice on a ward has improved. This in turn has resulted in fewer cases and the mean for this ward has been reduced to reflect this. Now that SPC's are available across the whole of NHSGGC we will be actively targeting improvements in areas with historically high levels of infection and sustaining improvements in areas with low infection rates.

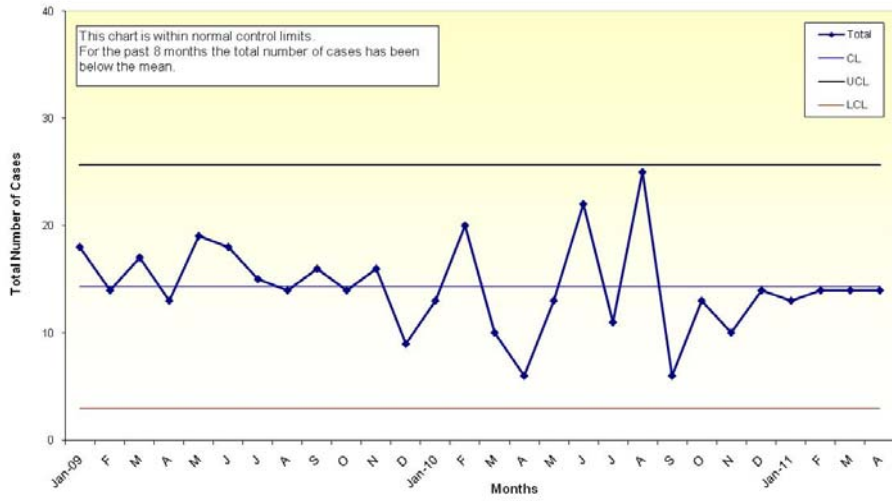
Trigger Events/Charts that Breach the Upper Control Limits

An SPC will only identify that a problem exists – it will not identify what is causing the problem. If a chart is seen to be above the upper control limit the ICT with the local clinical team will review the area to determine the likely cause and develop appropriate action plans.

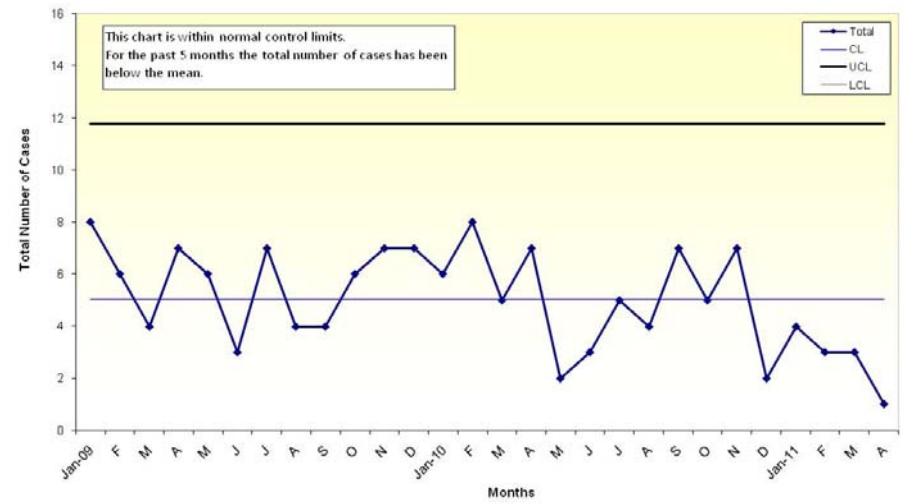
All Hospital Level Statistical Process Control Charts remain within normal control limits.

Glasgow Royal Infirmary

Hospital Acquired MRSA - Glasgow Royal Infirmary, 2009 - 2011

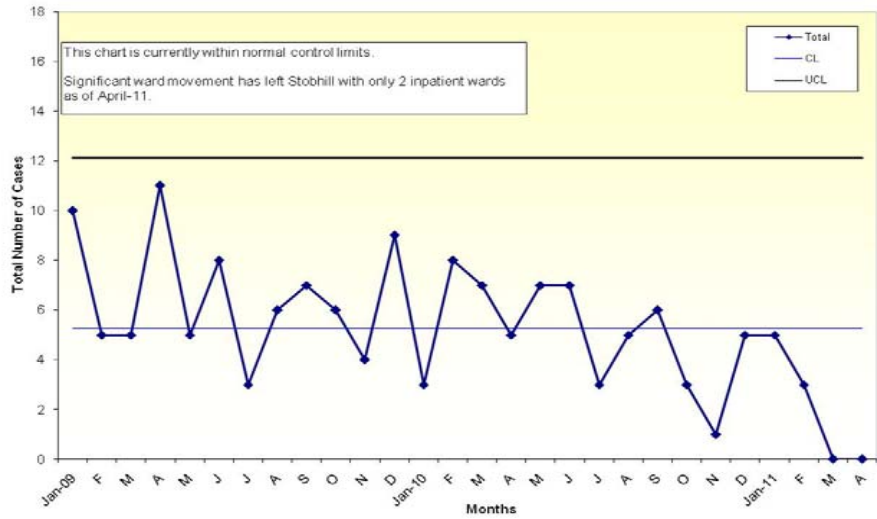


Hospital Acquired C. difficile - Glasgow Royal Infirmary, 2009 - 2011

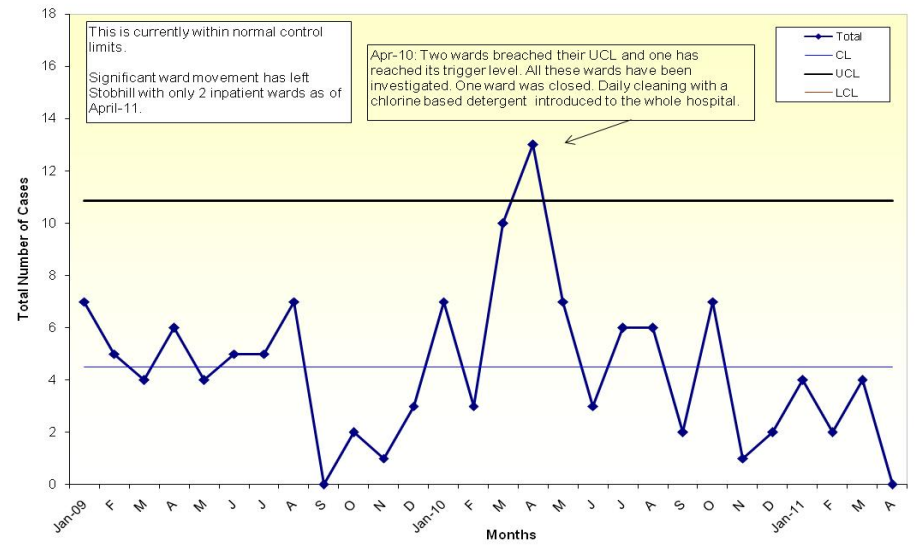


Stobhill Hospital

Hospital Acquired MRSA - Stobhill, 2009-2011

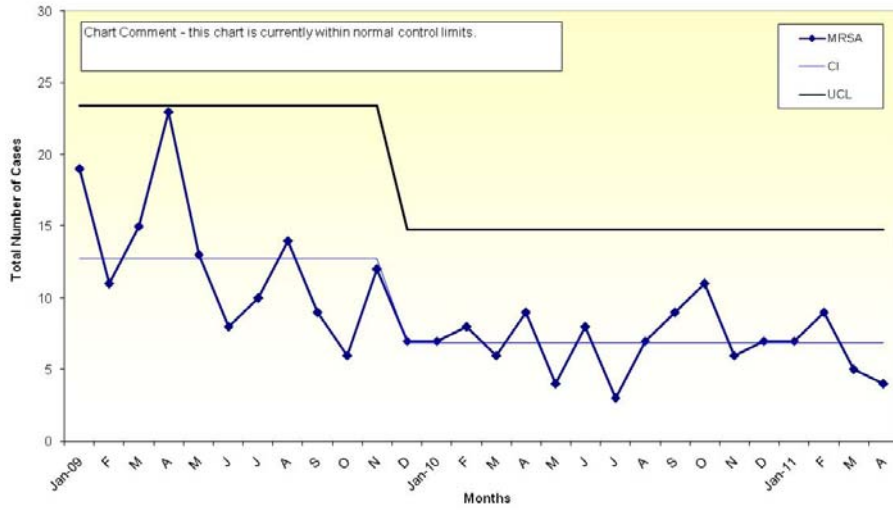


Hospital Acquired C.difficile - Stobhill, 2009-2011

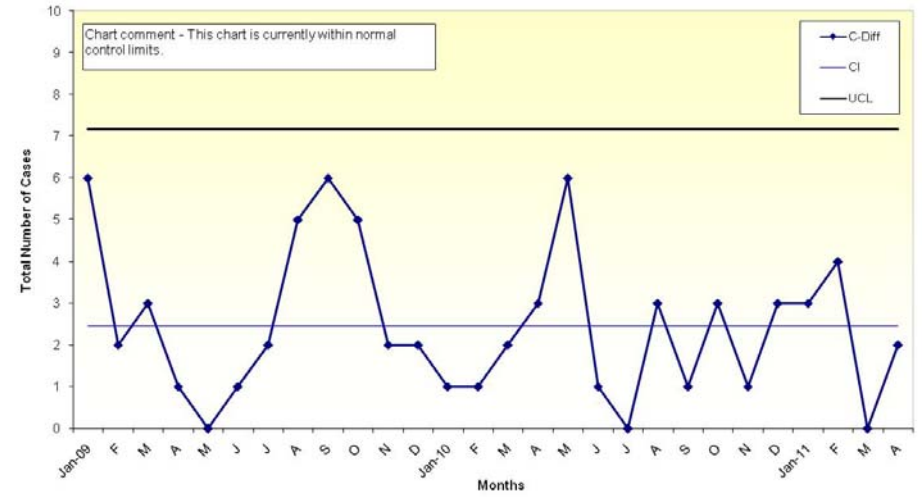


Royal Alexandra Hospital

Hospital Acquired MRSA - Royal Alexandra Hospital, 2009 - 2011

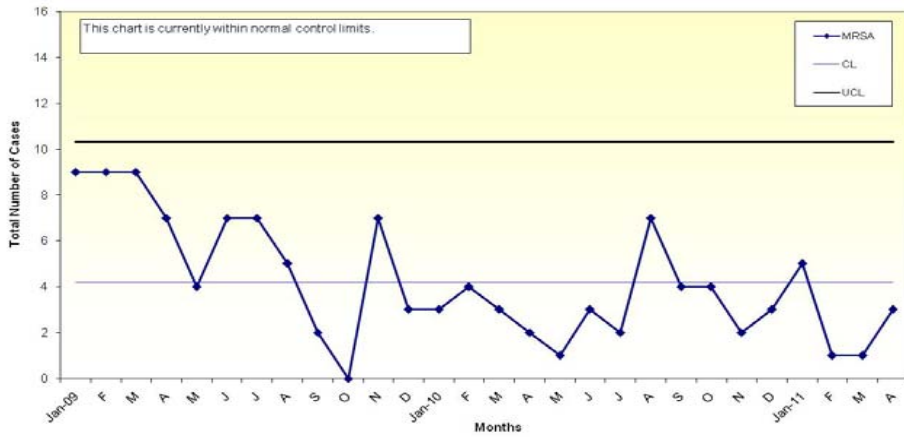


Hospital Acquired C. difficile - Royal Alexandra Hospital, 2009 - 2011

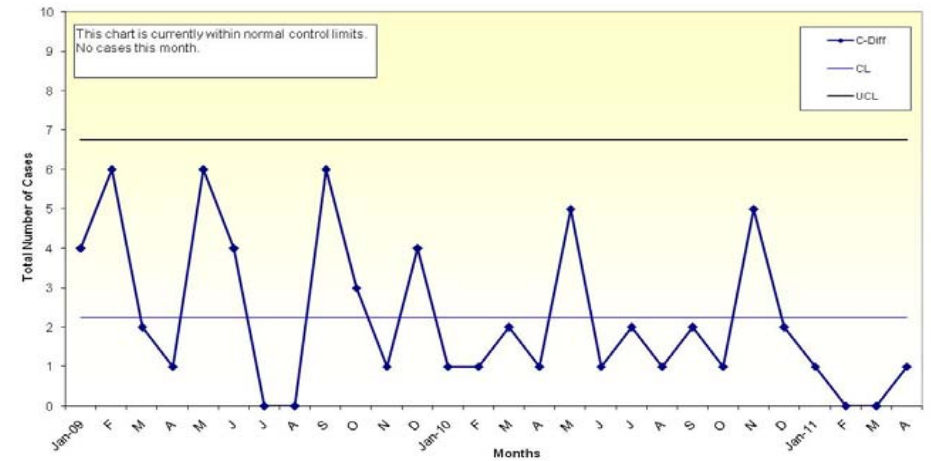


Inverclyde Royal Hospital

Hospital Acquired MRSA - Inverclyde Royal Hospital, 2009 - 2011

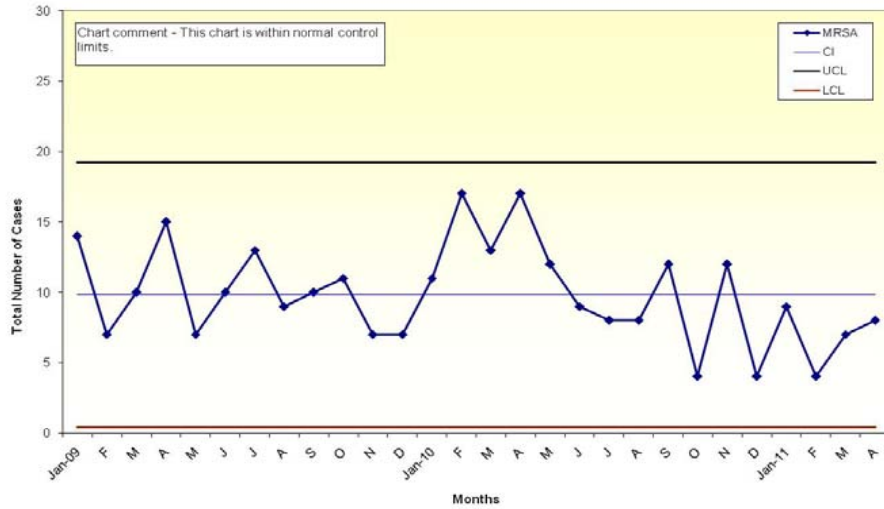


Hospital Acquired C. difficile - Inverclyde Royal Hospital, 2009 - 2011

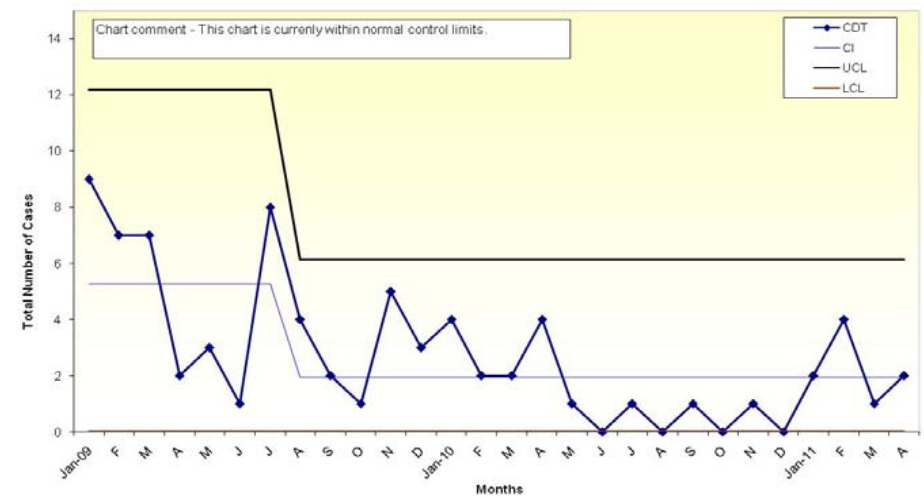


Victoria Infirmary

Hospital Acquired MRSA - Victoria Infirmary, All Directorates Total 2009-2011

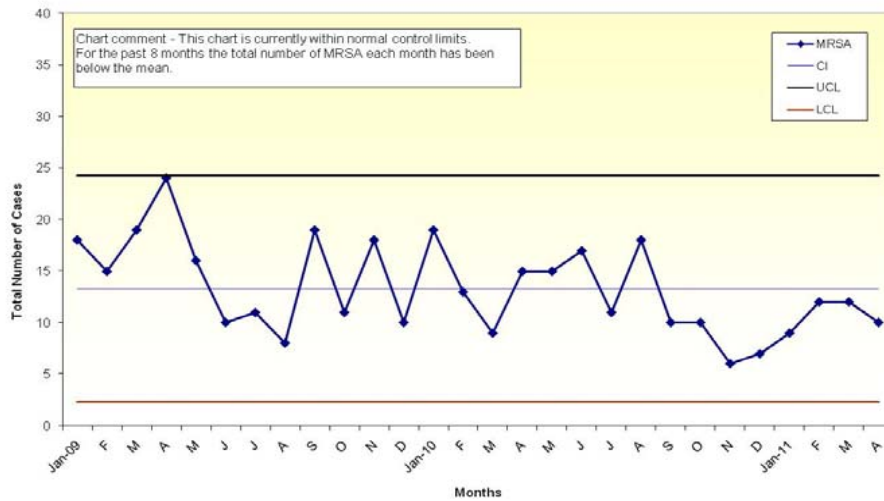


Hospital Acquired C. difficile - Victoria Infirmary, All Directorates, 2009-2011

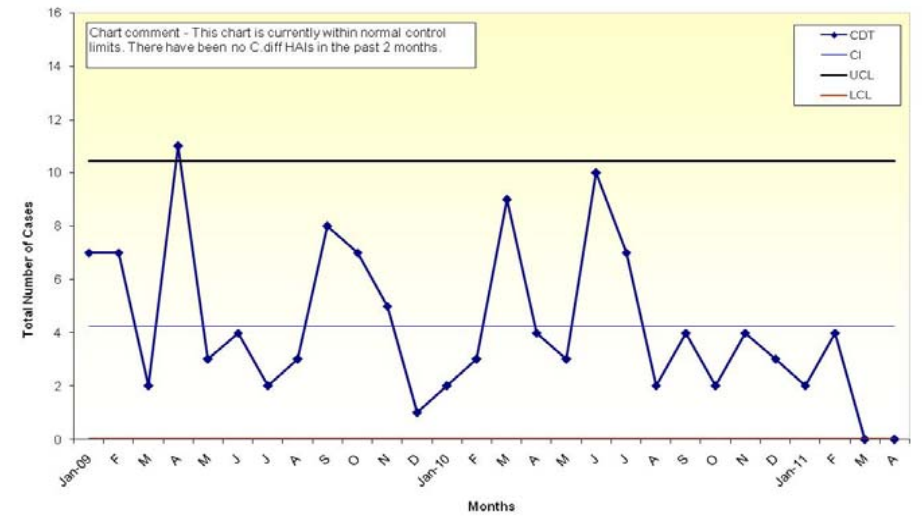


Southern General Hospital

Hospital Acquired MRSA - Southern General Hospital, All Directorates Total, 2009 - 2011

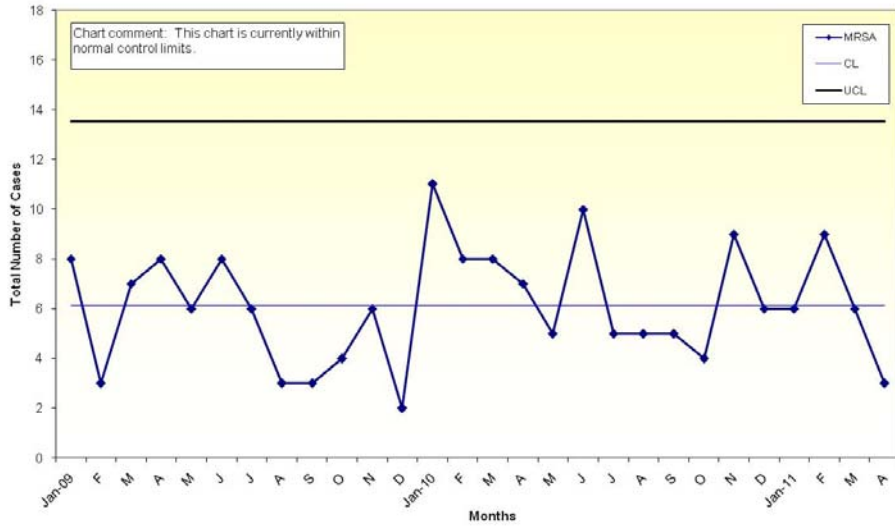


Hospital Acquired C. difficile - Southern General Hospital, All Directorates, 2009-2011

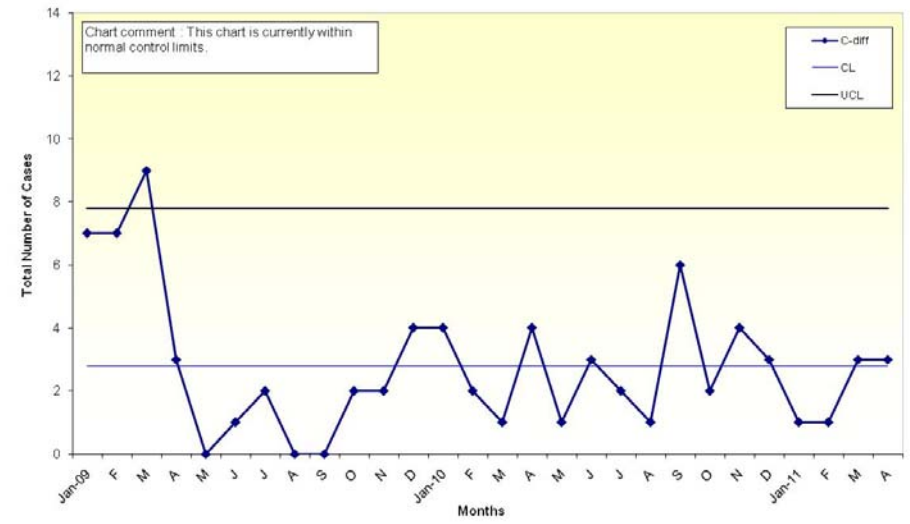


Western Infirmary

Hospital Acquired MRSA - WIG Total, 2009 - 2011

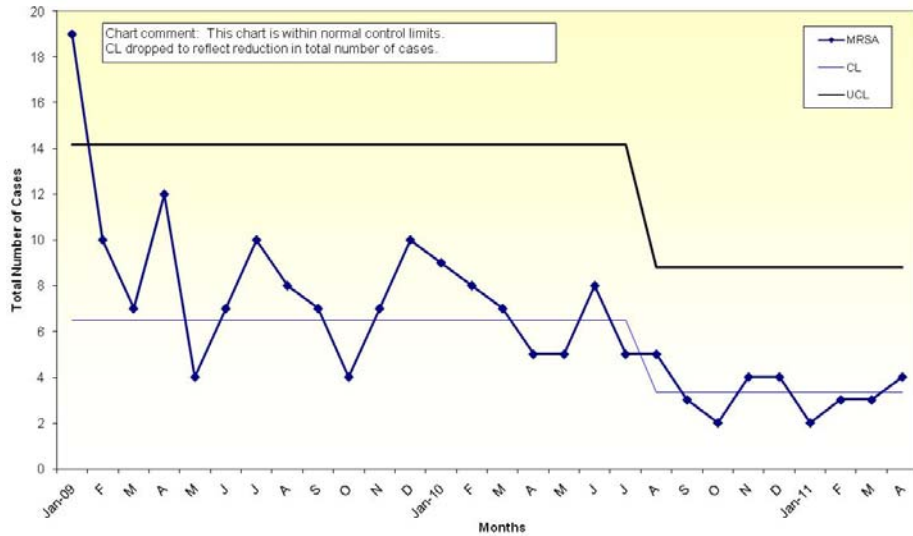


Hospital Acquired C.difficile- WIG Total, 2009 - 2011

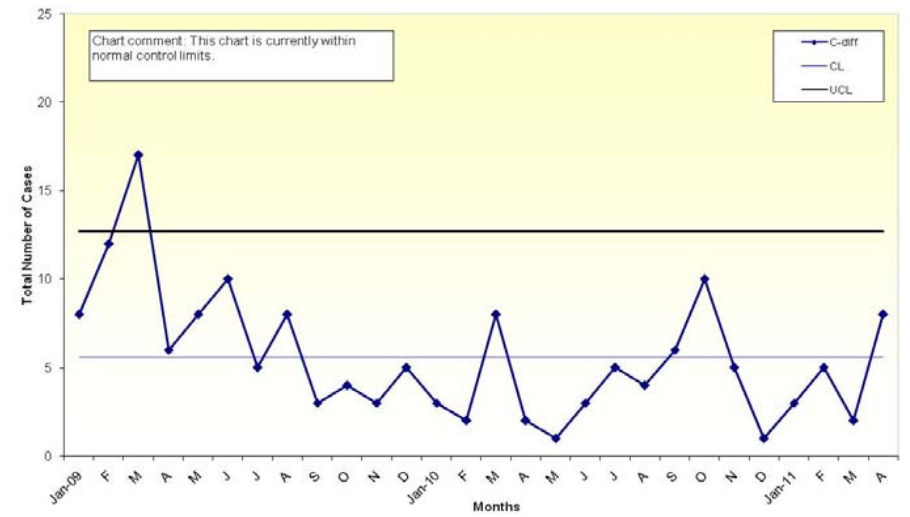


Gartnavel General Hospital

Hospital Acquired MRSA - GGH Total, 2009 - 2011

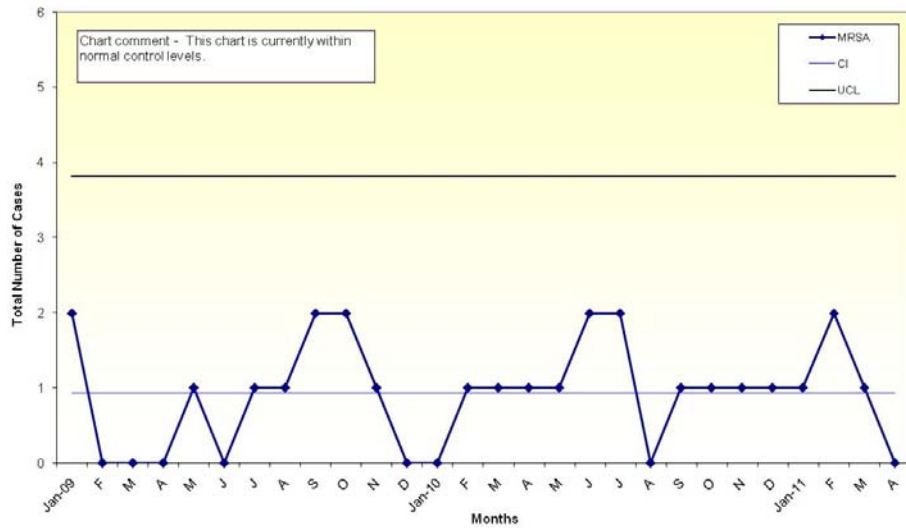


Hospital Acquired C. difficile- GGH Total, 2009 - 2011



Vale of Leven Hospital

Hospital Acquired MRSA, VOL Total, 2009 - 2011



Hospital Acquired C. difficile - VOL Total, 2009 - 2011

