NHS Board Meeting
23rd June 2015

Board Medical Director **Board Paper No. 15/22**

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.

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Healthcare Associated Infection Reporting Template (HAIRT)

Section 1– Board Wide Issues

This section of the HAIRT covers Board wide infection prevention and control activity and actions. For reports on individual hospitals, please refer to the 'Healthcare Associated Infection Report Cards' in Section 2.

A report card summarising Board wide statistics can be found at the end of section 1

Key Healthcare Associated Infection Headlines for June 2015

This is the twenty-ninth publication of the 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 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* Bacteraemia (SAB). For the last available reporting quarter (October - December 2014), NHSGGC reported **25.1** SAB cases per 100,000 Acute Occupied Bed Days (AOBDs) and NHS Scotland reported **30.5** per 100,000 AOBDs. The revised National HEAT target requires all Boards in Scotland to achieve a rate of **24** cases per 100,000 AOBDs or lower by 31st March 2016.

- NHSGGC successfully achieved the 2013 *Clostridium difficile* HEAT target of less than 39 cases per 100,000 occupied bed days (OCBDs) in the over 65's age group. The new target for future attainment includes cases in ages 15 & over and this was subsequently revised in September 2013 by the Scottish Government, following a change in the calculation of bed day data and now requires boards to achieve a rate of **32** cases or less per 100,000 OCBDs by the 31st March 2016. For the last available reporting quarter (October - December 2014), NHSGGC reported **33.3** cases per 100,000 OCBDs, combined rate for all ages, which remains below the national average of **35.4** per 100,000 OCBDs.

HAI HEAT Targets October - December 2014	GGC	National	HEAT target
SAB rate per 100,000 AOBD	25.1 (93 cases)	30.5	24.0
CDI rate per 100,000 OCBD	33.3 (114 cases)	35.4	32.0

Table 1. Progress against National HAI HEAT targets, 01/10/2014 – 31/12/2014.

- In the year ending December 2014, NHSGGC had a **statistically significant decrease** in MSSA and total *Staphylococcus aureus* bacteraemias in comparison to the previous year.
(HPS, Commentary on quarterly epidemiological data on *Clostridium difficile* infection (CDI) and *Staphylococcus aureus* bacteraemias (SAB) in Scotland October to December (Q4) 2014. Published 07/04/2015)

- For the last available quarter (October – December 2014), the SSI rates for Caesarean section and knee arthroplasty procedure categories are below the national average, repair of neck of femur procedures match the national average and SSI rates for hip arthroplasty procedures remain above the national average.

- 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 **3247** 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 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 (SAB). 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/haiic/sshaip/publicationsdetail.aspx?id=30248

NHSGGC MRSA Screening Project

In early 2011, the Scottish Government announced new national minimum MRSA screening recommendations. Targeted MRSA screening by specialty (implemented in Jan 2010) has now been replaced by a Clinical Risk Assessment (CRA) followed by a nose and perineal screen (if the patient answers yes to any of the questions within the CRA). NHSGGC met the deadline for implementation of the new programme by March 31st 2012. National Key Performance Indicators (KPIs) have now been implemented with boards required to achieve 90% compliance with CRA completion. CRA compliance for Q4 2014/15 (Jan-Mar) within GGC was **80%.**

***Staphylococcus aureus* Bacteraemia Surveillance**

From 1st October 2014 all NHS Scotland Boards are submitting data to Health Protection Scotland as part of the mandatory Scottish Government Enhanced SAB Surveillance process [CNO letter 24/04/2014]. This includes a standardised data form for all Boards to collect enhanced surveillance data for MSSA and MRSA bacteraemias. This process also involves more scrutiny of invasive procedures that the patient has undergone in the 30 days prior to developing a bacteraemia (e.g. IA/IM/IV/SC medication; venepuncture; biopsies; dental extraction; podiatry/ulcer care etc.). This information should assist in the identification of risk reduction strategies both locally and throughout Scotland in those cases which are amenable to improvement.

Due to the change in definition of origin used in the national programme, it is anticipated that there will be a slight rise in the reported number of "Hospital Acquired" cases within patients who receive regular haemodialysis as an out-patient or day case. Contaminated blood cultures will now also be reported as hospital acquired or healthcare associated. Continued best practice and adherence with aseptic technique must be undertaken by clinicians when obtaining blood specimens for culture in order to minimise the risk of contamination from the environment, clinician or patient's skin flora.

For the last available reporting quarter (October - December 2014), NHSGGC reported **25.1** SAB cases per 100,000 AOBDs and NHS Scotland reported **30.5** per 100,000 AOBDs. The existing National HEAT target which requires all Boards in Scotland to achieve a rate of **24** cases per 100,000 AOBDs or lower has now been extended to 31st March 2015.

In the year ending December 2014, NHSGGC had a **statistically significant decrease** in MSSA and total *Staphylococcus aureus* bacteraemias in comparison to the previous year.

Year	MSSA rate (per 100,000 AOBDs)	SAB rate (per 100,000 AOBDs)
2013	29.1	31.9
2014	**24.0**	**26.1**
Change	↓*17.3%*	↓*18.0%*

Quarter 1 (January – March) local surveillance status

Local SAB surveillance figures for January - March (Quarter 1) 2015 indicate that NHSGGC has had a total of **102** patient cases. Only six of these cases were MRSA.

Local estimation of occupied bed day (OBD) data suggests a rate of approximately **27.5** cases per 100,000 OBDs, however it should be noted that this may vary from the final AOBD rate based on ISD/HPS informatics, which will be published in early July 2015.

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/haiic/sshaip/ssdetail.aspx?id=277

Revisions to the national and board level rates of *Clostridium difficile* were published on 4th September 2013 by Health Protection Scotland (HPS) in response to the detection that the number of bed days used to calculate rates for C. diff infection in patients aged 65 years and over since the outset of the programme in 2006 was previously artificially high. This has now been corrected and as a result, the published C. diff rate for all Health Boards is higher than in previous reports. However, it is important to note that there are no changes to the number of cases identified and reported; reductions in C. diff remain accurate. It is still the case that there have been reductions of over 79% since 2007/08 (from 6,516 cases in 2007/08 down to 1,343 cases in 2012/13).

The target for future attainment includes cases in ages 15 & over and requires boards to achieve a rate of **32** cases or less per 100,000 OCBDs by the 31st March 2016.

For the last available reporting quarter (October – December 2014), NHSGGC reported **33.3** cases per 100,000 occupied bed days (OCBDs), combined rate for all ages, which remains below the national average of **35.4** per 100,000 OCBDs.

Quarter 1 (January – March) local surveillance status

Local CDI surveillance figures for January - March (Quarter 1) 2015 indicate that NHSGGC has had a total of **89** patient cases. Only 44% of these cases are hospital acquired (n=39). Monitoring continues with the intention of exploring GP and community antimicrobial prescribing practice and also analysing recurring CDI (relapse/re-infection cases).

Local estimation of occupied bed day data for Jan-Mar 2015 indicates a rate of approximately 26.0 cases per 100,000 OCBDs, for the last quarter.

***Clostridium difficile*: Comparison of Hospital Acquired (HAI) and Non HAI cases (Out of hospital infections)**

Since 2008, NHSGGC has not only demonstrated a reduction of 84% in the amount of CDI cases in ages 65 & over, but also a reduction in the amount of cases that are hospital acquired.

In 2008, three quarters of reported CDI were HAI cases and in the last 5 years there has been further reduction of HAI cases in patients aged 15 & over (Table 2).

Four hundred and seven CDI cases were reported in 2014. This is an 8.7% decrease upon 2013 cases. It should be noted that almost 60% of all reported CDI cases in 2014 were not acquired within a NHSGGC hospital.

Year	Hospital Acquired CDI	Non HAI *(Out of Hospital infections)*	All Reported CDI#	HAI Proportion
2008	1042	353	1395	74.7%
2009	468	369	837	55.9%
2010	366	295	661	55.4%
2011	223	263	486	45.9%
2012	169	239	408	41.4%
2013	197	249	446	44.2%
2014	169	238	407	41.5%

Table 2. Comparison of Hospital Acquired (HAI) *Clostridium difficile* cases and all CDI cases reported, 01/01/2008 – 31/12/2014.
Validated & published by Health Protection Scotland.
**Please note that CDI totals for October - December (Q4) 2014 are local surveillance figures and have not been validated or published by Health Protection Scotland.Please also note that figures for 2012 and 2014 are identical.*

Local analysis of recurring *Clostridium difficile* infections (relapse/re-infection cases) for January to December 2014 indicates a recurrence of CDI in 16% of patient cases.
Clinical teams are reminded to adhere to the Management of Suspected *Clostridium Difficile* Infection (CDI) in Adults algorithm available on NHSGGC intranet site at:

http://www.staffnet.ggc.scot.nhs.uk/Info%20Centre/PoliciesProcedures/GGCClinicalGuidelines/GGC%20Clinical%20Guidelines%20Electronic%20Resource%20Direct/Suspected%20Clostridium%20Difficile%20Infection%20Management%20in%20Adults.pdf

A combined pharmacy and AMT review of CDI cases over the past 12 months is currently underway to investigate GP prescribing practice of antimicrobials prior to development of a positive faecal isolate of *Clostridium difficile.* An update on this review is awaited and will be provided in future reports.

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 data has been combined for Gartnavel General, Beatson Oncology and Homeopathic Hospital for the Gartnavel General report card and data combined for Southern General, Langlands Unit and the New South Glasgow Hospital for the Southern General Hospital report card.

Healthcare Environment Inspectorate (HEI) Unannounced Inspection

Glasgow Royal Infirmary, 24th – 25th February 2015

This inspection resulted in no requirements and no recommendations.

Healthcare Environment Inspectorate (HEI) Unannounced Inspection

Inverclyde Royal Infirmary, 24th – 25th March 2015

This inspection resulted in no requirements and no recommendations.

All HEI reports for NHS Greater Glasgow and Clyde can be viewed by clicking on the following link:

http://www.healthcareimprovementscotland.org/programmes/inspecting_and_regulating_care/environment_inspectorate_hei/hei_reports.aspx

The Vale of Leven Hospital Inquiry Report

NHSGGC are considering the recommendations included in the report.
The report published on Monday 24th November 2014 can be accessed at:
http://www.valeoflevenhospitalinquiry.org/report.aspx

Outbreaks/Exceptions

Norovirus

Norovirus activity was reported in 6 hospitals with 20 ward closures throughout March and April 2015.

Month	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15
Ward Closures	6	3	2	3	0	1	7	3	2	13	9	14	4	2	6	14
Bed Days Lost	33	50	0	26	0	0	135	43	57	216	135	292	10	10	55	270

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/giz/norovirussurveillance.aspx

Influenza: There was 1 ward closure in GGC during April 2015, as a result of an increased incidence of Influenza B virus.

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. 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.

HPS last available quarter (October – December 2014)

For the last available quarter (October – December 2014), the SSI rates for Caesarean section and knee arthroplasty procedure categories are below the national average, repair of neck of femur procedures match the national average and SSI rates for hip arthroplasty procedures remain above the national average.

Category of procedure	Operations	Infections	NHSGGC SSI rate (%)	NHSGGC 95% CI	National dataset SSI rate (%)	National 95% CI
Caesarean section	1334	18	**1.3**	0.9, 2.1	**1.4**	1.1, 1.8
Hip arthroplasty	398	5	**1.3**	0.5, 2.9	**0.6**	0.3, 1.1
Knee arthroplasty	421	0	**0.0**	0.0, 0.9	**0.1**	0.0, 0.5
Repair of neck of femur	322	3	**0.9**	0.3, 2.7	**0.9**	0.4, 1.7

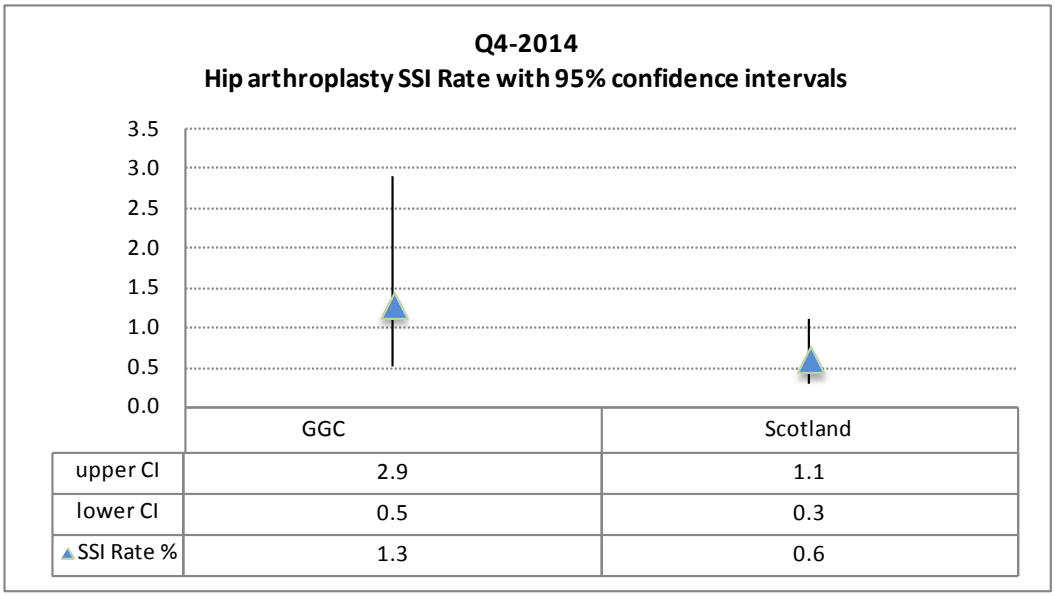
The table above shows the SSI rates for Caesarean section (inpatient and PDS to day 10), Hip arthroplasty (inpatient and readmission to day 30), Knee arthroplasty (inpatient) and Repair of neck of femur (inpatient) procedures within NHS Greater Glasgow & Clyde, 01/10/2014 – 31/12/2014.

Hip arthroplasty Surgical Site Infections

The five hip arthroplasty SSIs were detected in elective primary procedures undertaken in November 2014 across five different hospital sites with different theatre personnel.

This represents an SSI rate of 1.3% and is noted to be above the national SSI rate of 0.6%.

There is no statistical significance as 95% confidence intervals overlap (table below) and HPS have not issued an exception report for Q4 hip arthroplasty procedure SSI rate.



	GGC	Scotland
upper CI	2.9	1.1
lower CI	0.5	0.3
▲SSI Rate %	1.3	0.6

All were detected on re-admission to hospital up to day 30 post op and all SSIs manifested after day 20 post-operatively.

Three patients had superficial SSIs which isolated Meticillin Sensitive *Staphylococcus aureus* and two patients had identified risk factors.

Risk factor analysis for every individual procedure using standardised National Healthcare Safety Network (NHSN) Basic SSI Risk Index.
This comprises

- ASA score ≥3
- Wound Class of Contaminated or Dirty
- Operative procedure time exceeding 2 hours.

A NHSN risk index greater than zero is indicative of increased risk of SSI development.

Operating hospital	Operation date	NHSN Risk Index	Organism	Day of SSI
Southern General	November 2014	1	Coagulase-negative *Staphylococci* (CNS), *Escherichia coli* Deep SSI	22
Inverclyde Royal Hospital	November 2014	0	MSSA Superficial SSI	23
Victoria Infirmary	November 2014	0	SSI Diagnosed by trained HCW Deep SSI	29
Royal Alexandra Hospital	November 2014	2	MSSA Superficial SSI	21
Glasgow Royal Infirmary	November 2014	0	MSSA Superficial SSI	25

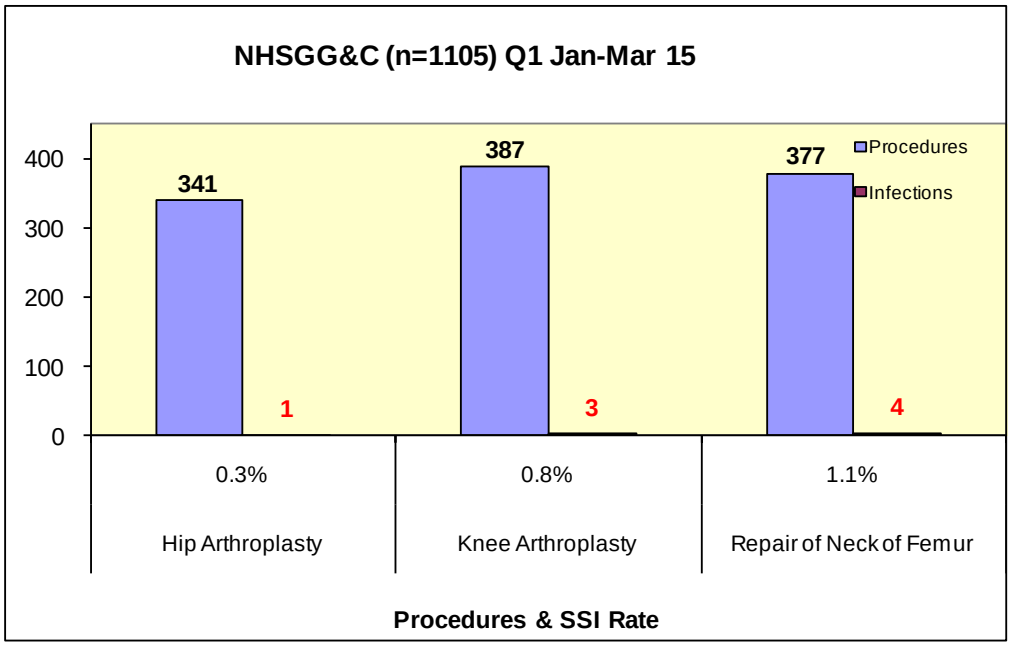
Comment

There does not appear to be any common linkage and only one hip arthroplasty SSI has been reported in 2015 to date.

Quarter 1 (January – March) local SSI surveillance status

Orthopaedic procedures

The graph below shows the local Orthopaedic SSI status for January to March 2015.
It should be noted that there was no identified link to any of the SSIs reported and no hospital reported more than one SSI in each procedure category.



Caesarean Section procedures

There has been a decrease in the amount of SSIs reported in Q1 2015.

1st January– 31st March 2015	Operations	Infections	SSI Rate (%)
Royal Alexandra Hospital	296	3	1.0
Southern General Hospital	456	5	1.0
Princess Royal Maternity	513	4	0.7
NHSGGC Total	1265	12	0.9

Healthcare Associated Infection Reporting Template (HAIRT)

Section 2 – Healthcare Associated Infection Report Cards

The following section is a series of 'Report Cards' that provide information, for each acute hospital and key community hospitals in the Board, on the number of cases of *Staphylococcus aureus* blood stream infections *(*also broken down into MSSA and MRSA) and *Clostridium difficile* infections, as well as hand hygiene and cleaning compliance. In addition, there is a single report card which covers all community hospitals [which do not have individual cards], and a report which covers infections identified as having been contracted from out with hospital. The information in the report cards is provisional local data, and may differ from the national surveillance reports carried out by Health Protection Scotland and Health Facilities Scotland. The national reports are official statistics which undergo rigorous validation, which means final national figures may differ from those reported here. However, these reports aim to provide more detailed and up to date information on HAI activities at local level than is possible to provide through the national statistics.

Understanding the Report Cards – Infection Case Numbers
Clostridium difficile infections (CDI) and *Staphylococcus aureus* bacteraemia *(SAB)* cases are presented for each hospital, broken down by month. Staphylococcus aureus bacteraemia (SAB) cases are further broken down into Meticillin Sensitive Staphylococcus aureus (MSSA) and Meticillin Resistant Staphylococcus aureus (MRSA). More information on these organisms can be found on the HPS website:

Clostridium difficile:
http://www.hps.scot.nhs.uk/haiic/sshaip/clostridiumdifficile.aspx?subjectid=79

Staphylococcus aureus Bacteraemia:
http://www.hps.scot.nhs.uk/haiic/sshaip/mrsabacteraemiasurveillance.aspx?subjectid=D

For each hospital the total number of cases for each month are those which have been reported as positive from a laboratory report on samples taken more than 48 hours after admission. For the purposes of these reports, positive samples taken from patients within 48 hours of admission will be considered to be confirmation that the infection was contracted prior to hospital admission and will be shown in the "out of hospital" report card.

Targets
There are national targets associated with reductions in C.diff and SABs. More information on these can be found on the Scotland Performs website:

http://www.scotland.gov.uk/About/Performance/scotPerforms/partnerstories/NHSScotlandperformance

Understanding the Report Cards – Hand Hygiene Compliance
Hospitals carry out regular audits of how well their staff are complying with hand hygiene. Each hospital report card presents the combined percentage of hand hygiene compliance with both opportunity taken and technique used broken down by staff group.

Understanding the Report Cards – Cleaning Compliance
Hospitals strive to keep the care environment as clean as possible. This is monitored through cleaning and estates compliance audits. More information on how hospitals carry out these audits can be found on the Health Facilities Scotland website:
http://www.hfs.scot.nhs.uk/online-services/publications/hai/

Understanding the Report Cards – *'Out of Hospital Infections'*
Clostridium difficile infections and *Staphylococcus aureus (*including MRSA*) bacteraemia* cases are all associated with being treated in hospitals. However, this is not the only place a patient may contract an infection. This total will also include infection from community sources such as GP surgeries and care homes and. The final Report Card report in this section covers '*Out of Hospital Infections*' and reports on SAB and CDI cases reported to a Health Board which are not attributable to a hospital.

NHS GREATER GLASGOW & CLYDE
REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	3	5	1	0	3	2	1	6	1	2	3	3
MSSA	38	32	28	31	24	25	27	32	31	28	37	33
Total SABS	**41**	**37**	**29**	**31**	**27**	**27**	**28**	**38**	**32**	**30**	**40**	**36**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	7	9	15	8	10	15	12	9	7	12	8	13
Ages 65 plus	28	24	30	26	23	34	22	22	17	14	31	21
Ages 15 plus	**35**	**33**	**45**	**34**	**33**	**49**	**34**	**31**	**24**	**26**	**39**	**34**

Hand Hygiene Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb* 2015	Mar 2015	Apr 2015
AHP	98	98	97	98	99	97	98	97	99	98	99	98
Ancillary	94	93	93	96	96	92	93	92	94	93	93	97
Medical	94	94	95	95	96	94	95	95	96	95	96	97
Nurse	99	99	99	99	99	99	99	99	99	99	99	99
Board Total	**98**	**98**	**98**	**98**	**98**	**98**	**98**	**98**	**98**	**98**	**98**	**98**

Cleaning Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	95.2	95.3	95.0	95.2	95.8	96.1	95.9	96.4	96.1	95.8	96.1	96.3

Estates Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	95.3	96.4	97.4	96.0	97.5	98.3	96.3	97.8	98.1	97.4	98.1	98.4

GLASGOW ROYAL INFIRMARY
REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	0	0	0	0	3	0	0	0	0	0	0	0
MSSA	2	5	2	4	2	1	2	8	3	6	5	2
Total SABS	**2**	**5**	**2**	**4**	**5**	**1**	**2**	**8**	**3**	**6**	**5**	**2**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	2	2	1	0	1	1	2	1	0	1	0	0
Ages 65 plus	4	2	3	2	3	4	3	2	2	1	2	2
Ages 15 plus	**6**	**4**	**4**	**2**	**4**	**5**	**5**	**3**	**2**	**2**	**2**	**2**

Cleaning Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	94.8	94.7	95.1	94.9	95.2	95.4	95.2	95.1	95.3	95.6	95.8	95.6

Estates Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	99.1	98.9	98.7	98.3	98.0	98.0	98.9	98.9	98.8	99.2	98.8	98.9

ROYAL ALEXANDRA HOSPITAL
REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	0	1	0	0	0	0	0	1	0	0	0	0
MSSA	2	4	1	2	1	1	0	2	3	3	1	3
Total SABS	**2**	**5**	**1**	**2**	**1**	**1**	**0**	**3**	**3**	**3**	**1**	**3**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	1	0	1	1	0	4	1	1	0	0	0	0
Ages 65 plus	1	1	0	3	1	2	0	1	0	0	4	1
Ages 15 plus	**2**	**1**	**1**	**4**	**1**	**6**	**1**	**2**	**0**	**0**	**4**	**1**

Cleaning Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	95.6	95.0	95.7	95.7	95.2	95.6	96.4	95.8	96.4	96.5	95.9	96.7

Estates Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	99.8	98.2	99.4	99.2	98.9	98.9	99.2	99.6	99.1	99.3	98.6	98.6

INVERCLYDE ROYAL HOSPITAL
REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	0	0	0	0	0	0	0	0	0	1	0	0
MSSA	1	0	0	0	0	1	0	1	1	1	1	1
Total SABS	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**2**	**1**	**1**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	0	0	0	0	0	0	0	0	0	0	1	1
Ages 65 plus	0	0	1	0	0	0	0	0	1	0	0	0
Ages 15 plus	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**

Cleaning Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	95.8	94.8	95.8	96.0	96.2	95.8	96.1	96.3	96.3	96.1	95.1	96.0

Estates Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	97.2	97.4	97.1	96.5	97.4	96.9	98.6	98.3	98.2	97.9	97.4	97.9

VICTORIA INFIRMARY
REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	0	0	0	0	0	0	0	1	0	0	0	0
MSSA	0	3	0	0	1	1	0	0	0	0	2	1
Total SABS	**0**	**3**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**2**	**1**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	0	0	0	0	0	0	0	0	1	0	0	0
Ages 65 plus	1	0	2	0	0	3	1	0	1	0	1	2
Ages 15 plus	**1**	**0**	**2**	**0**	**0**	**3**	**1**	**0**	**2**	**0**	**1**	**2**

Cleaning Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	94.1	94.7	94.1	94.8	95.4	94.9	95.0	95.4	95.1	95.3	95.8	95.3

Estates Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	99.9	99.9	99.8	99.9	99.9	99.8	99.7	99.8	99.6	99.8	99.9	100

SOUTHERN GENERAL HOSPITAL
REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	0	1	0	0	0	1	0	2	0	0	1	1
MSSA	3	3	4	1	0	0	2	0	1	2	1	6
Total SABS	**3**	**4**	**4**	**1**	**0**	**1**	**2**	**2**	**1**	**2**	**2**	**7**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	0	0	0	2	0	0	0	0	0	0	0	0
Ages 65 plus	2	2	4	2	3	0	1	1	1	1	3	1
Ages 15 plus	**2**	**2**	**4**	**4**	**3**	**0**	**1**	**1**	**1**	**1**	**3**	**1**

Cleaning Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	94.0	94.8	95.5	94.8	95.1	94.9	94.0	94.5	94.1	94.6	95.1	95.1

Estates Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	99.8	99.7	99.8	99.9	99.8	99.8	99.8	99.8	99.9	99.9	100	99.9

WESTERN INFIRMARY
REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	1	0	0	0	0	0	0	0	0	0	0	1
MSSA	6	1	2	2	1	3	2	2	1	0	3	2
Total SABS	**7**	**1**	**2**	**2**	**1**	**3**	**2**	**2**	**1**	**0**	**3**	**3**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	0	1	0	0	0	0	1	1	1	1	1	1
Ages 65 plus	1	2	1	0	1	1	2	4	1	4	2	1
Ages 15 plus	**1**	**3**	**1**	**0**	**1**	**1**	**3**	**5**	**2**	**5**	**3**	**2**

Cleaning Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	95.6	95.7	95.6	96.2	95.3	95.9	95.9	95.7	95.6	95.5	95.9	95.8

Estates Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	99.8	99.3	99.9	99.9	99.4	99.4	99.6	99.5	99.5	99.6	99.4	99.7

GARTNAVEL GENERAL HOSPITAL
REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	1	0	0	0	0	0	0	0	0	0	0	0
MSSA	2	1	2	3	1	1	1	2	2	0	2	1
Total SABS	**3**	**1**	**2**	**3**	**1**	**1**	**1**	**2**	**2**	**0**	**2**	**1**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	0	1	0	1	0	1	0	1	0	0	0	2
Ages 65 plus	3	1	3	1	2	2	1	0	2	0	3	5
Ages 15 plus	**3**	**2**	**3**	**2**	**2**	**3**	**1**	**1**	**2**	**0**	**3**	**7**

Cleaning Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	95.2	96.2	96.3	96.1	96.3	96.8	95.7	96.2	97.0	94.3	95.8	95.5

Estates Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	95.2	97.9	98.0	97.6	97.9	98.9	99.1	98.3	98.7	99.1	98.4	98.6

N.B. Figures combined for Gartnavel General Hospital, The Beatson WoSCC and Homeopathic Hospital.

VALE OF LEVEN DISTRICT GENERAL HOSPITAL
REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	0	0	0	0	1	0	0	0	0	0	1
Total SABS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	0	0	0	0	0	0	1	0	0	0	1	0
Ages 15 plus	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**

Cleaning Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	96.5	96.5	95.9	96.0	96.5	96.2	96.0	96.2	96.3	96.2	96.0	96.7

Estates Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	98.4	97.8	97.3	98.1	97.6	97.8	96.6	97.5	98.5	98.9	98.6	98.2

ROYAL HOSPITAL FOR SICK CHILDREN (YORKHILL)
REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	0	0	0	0	0	0	0	0	0	1	0	0
MSSA	3	1	0	1	0	0	0	1	1	2	1	1
Total SABS	**3**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**3**	**1**	**1**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	0	0	0	0	0	0	0	0	0	0	0	0
Ages 65 plus	0	0	0	0	0	0	0	0	0	0	0	0
Ages 15 plus	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Cleaning Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	95.7	95.4	95.7	95.8	95.9	96.5	95.8	95.9	96.0	96.5	96.3	96.5

Estates Monitoring Compliance (%)

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Board Total	98.9	98.2	98.7	99.0	99.2	99.2	99.7	99.5	99.6	99.5	99.4	99.6

NHS GREATER GLASGOW & CLYDE
COMMUNITY HOSPITALS REPORT CARD

The community hospitals covered in this report card include:

- Lightburn Hospital
- Drumchapel Hospital
- Dykebar Hospital
- Gartnavel Royal Hospital
- Leverndale Hospital
- MacKinnon House
- Mearnskirk House
- New Victoria Hospital
- Parkhead Hospital
- Ravenscraig Hospital
- Stobhill Hospital

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	0	0	0	0	0	0	0	0	0	0	0	0
MSSA	0	0	0	0	1	2	0	0	1	1	1	0
Total SABS	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**1**	**1**	**1**	**0**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	0	0	0	0	0	1	0	0	0	0	0	0
Ages 65 plus	0	2	1	0	0	5	2	0	1	0	2	0
Ages 15 plus	**0**	**2**	**1**	**0**	**0**	**6**	**2**	**0**	**1**	**0**	**2**	**0**

NHS GREATER GLASGOW & CLYDE
OUT OF HOSPITAL REPORT CARD

Staphylococcus aureus bacteraemia monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
MRSA	1	3	1	0	0	1	1	2	1	0	2	1
MSSA	19	14	17	18	17	14	20	16	18	13	20	15
Total SABS	**20**	**17**	**18**	**18**	**17**	**15**	**21**	**18**	**19**	**13**	**22**	**16**

Clostridium difficile infection monthly case numbers

	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015
Ages 15-64	4	5	13	4	9	8	8	5	5	10	6	9
Ages 65 plus	16	14	15	18	13	17	11	14	8	8	13	9
Ages 15 plus	**20**	**19**	**28**	**22**	**22**	**25**	**19**	**19**	**13**	**18**	**19**	**18**

Data for *Clostridium difficile* Infection (CDI) cases in ages 15 plus:

58.0% of all CDI cases reported in NHSGGC between May 2014 and April 2015 are attributed as *Out of Hospital* infections.

Data for *Staphylococcus aureus* bacteraemia (SAB) cases:

Out of Hospital MSSA bacteraemia account for **54.9%** of all cases between May 2014 and April 2015. *Out of Hospital* MRSA bacteraemia make up **43.3%** of all cases for the same timeframe.

This equates to **54.0%** of all *Staphylococcus aureus* Bacteraemia cases being *Out of Hospital* infections.

Statistical Process Chart (SPC) Appendix 1

This section includes Hospital level SPCs for acute sites in NHSGGC

The SPCs include data on

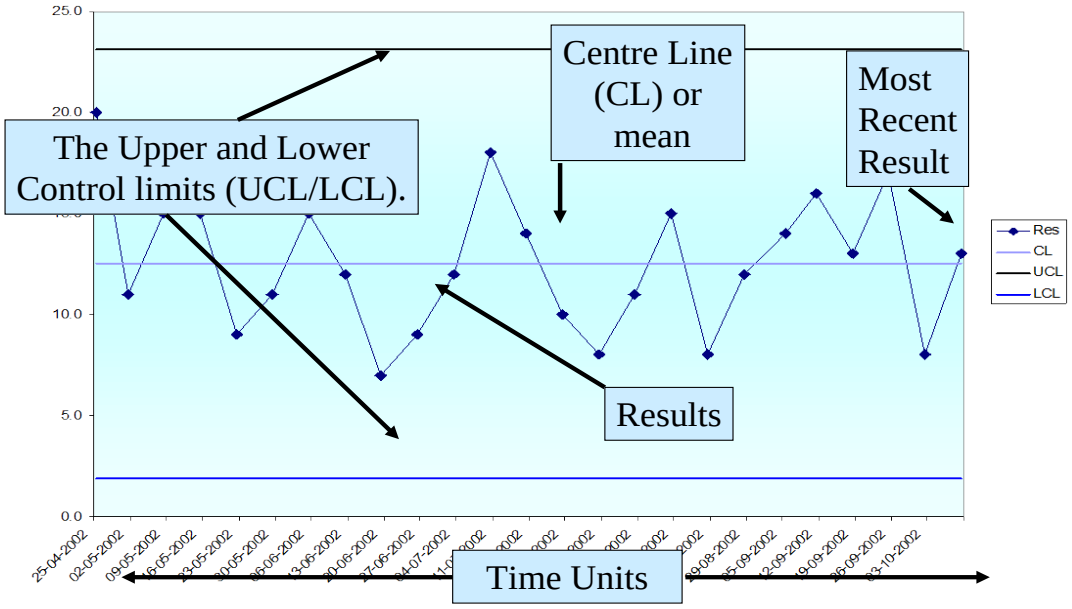
- Hospital Acquired MRSA cases (includes wound swabs, sputum & urine samples etc.)
- Hospital Acquired Clostridium difficile cases

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.

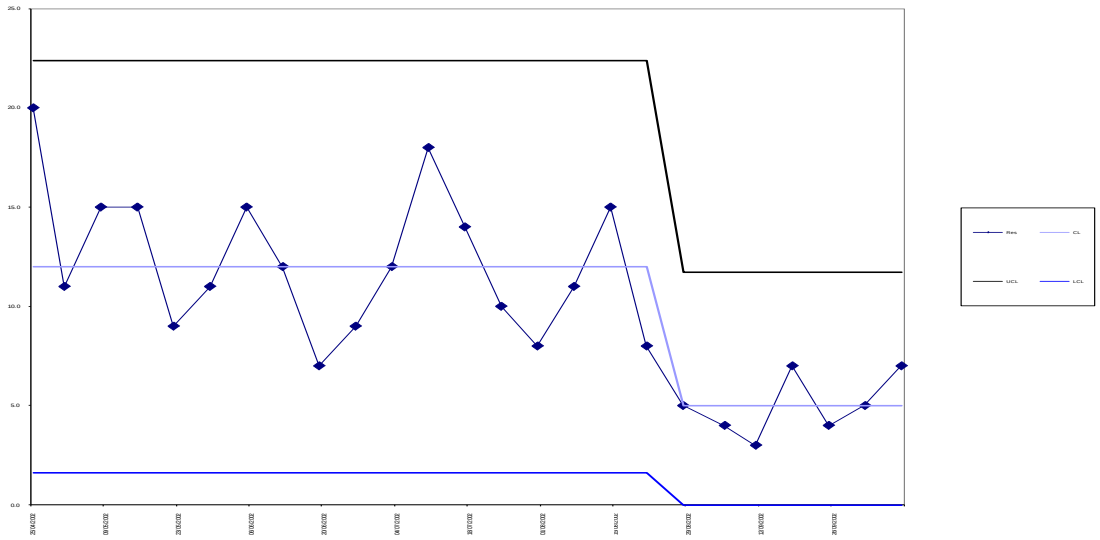
Statistical Process Control Charts (SPCs) are the application of statistical theory to Quality Control. They show process data chronologically (per month in most cases). Some examples of where they have been used in healthcare include; queuing analysis of appointment access and delays and forecasting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

This is an SPC showing only Natural Variation
(*Note on this chart all the results are within the control limits)*



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.



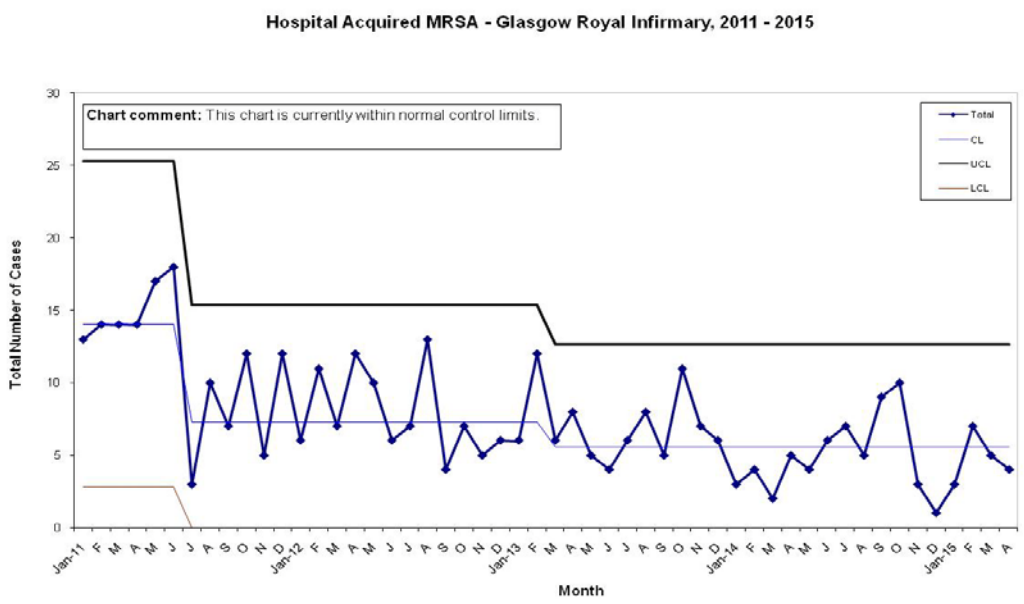
This chart demonstrates that infection control practice on a ward has improved. This in turn has resulted in fewer cases and the mean for this ward has been reduced to reflect this. Now that SPC's are available across the whole of NHSGGC we will be actively targeting improvements in areas with historically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

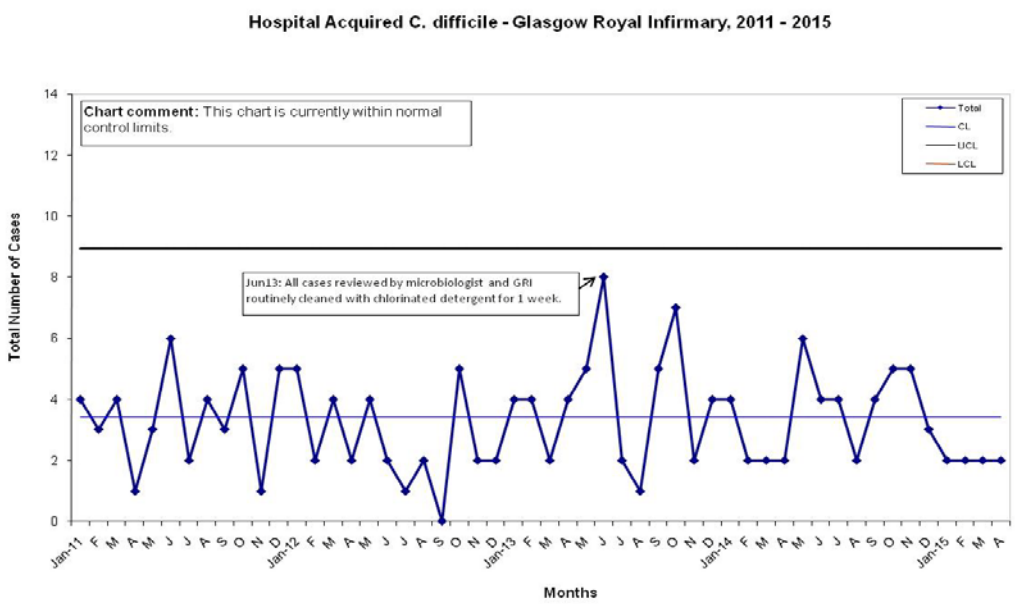
Trigger Events/Charts that Breach the Upper Control Limits

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 (UCL) the ICT with the local clinical team will review the area to determine the likely cause and develop appropriate action plans.

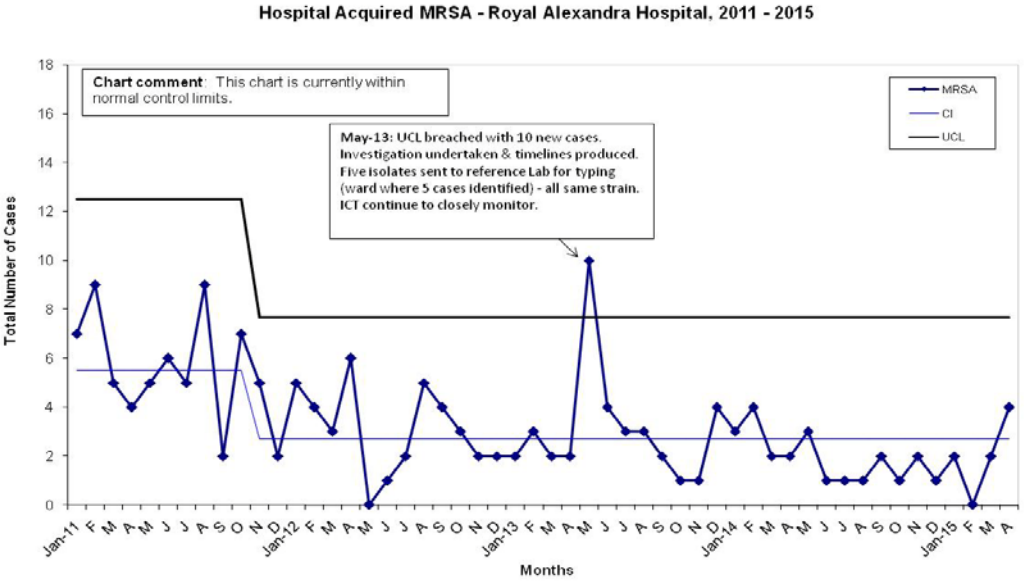
All Hospital Level Statistical Process Control Charts remain within normal control limits with the exception of Gartnavel General Hospital - *C. difficile*.

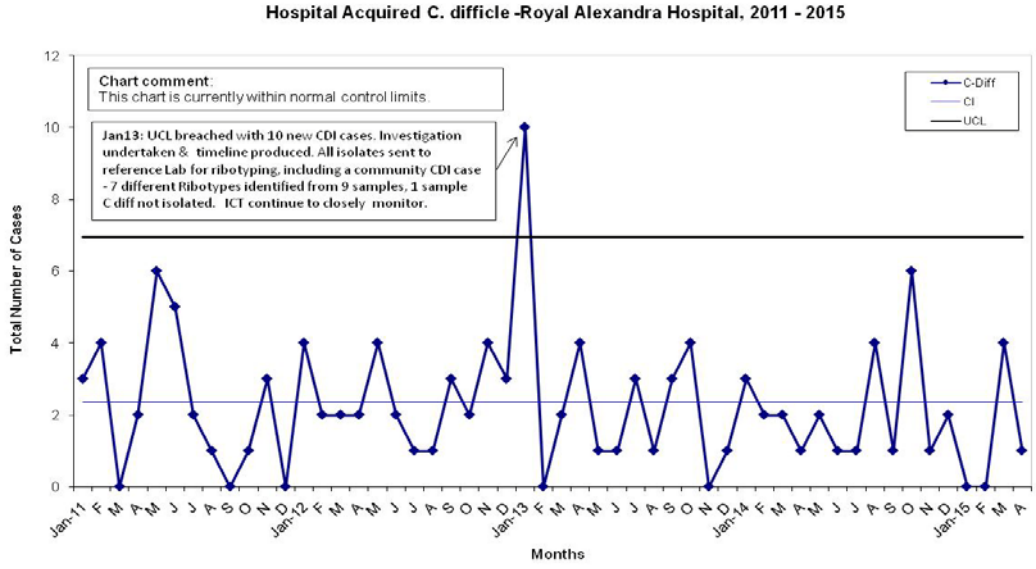
Glasgow Royal Infirmary



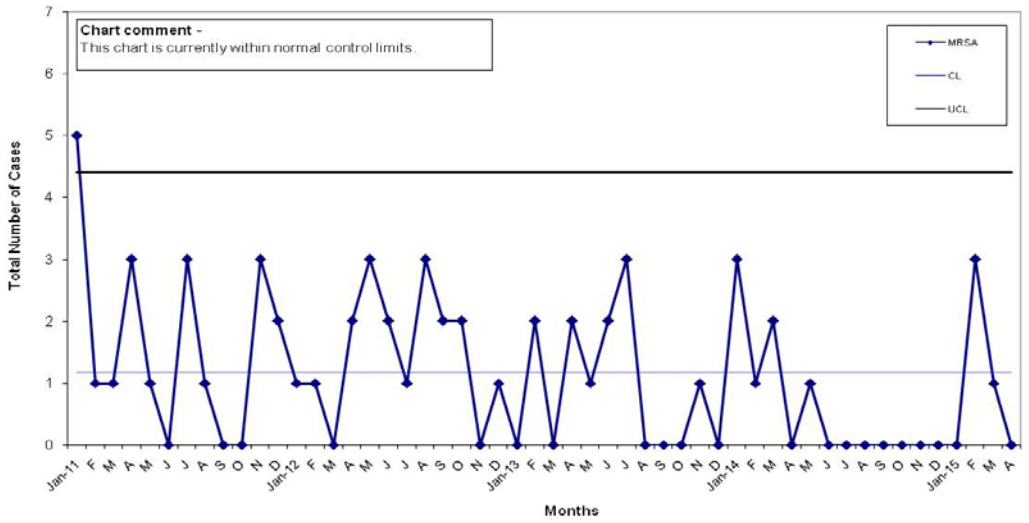


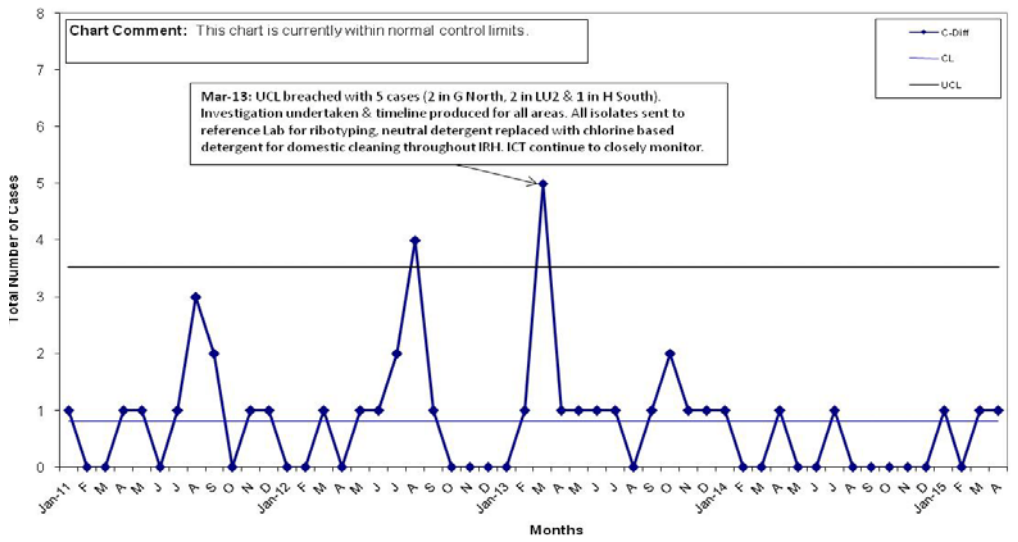
Royal Alexandra Hospital



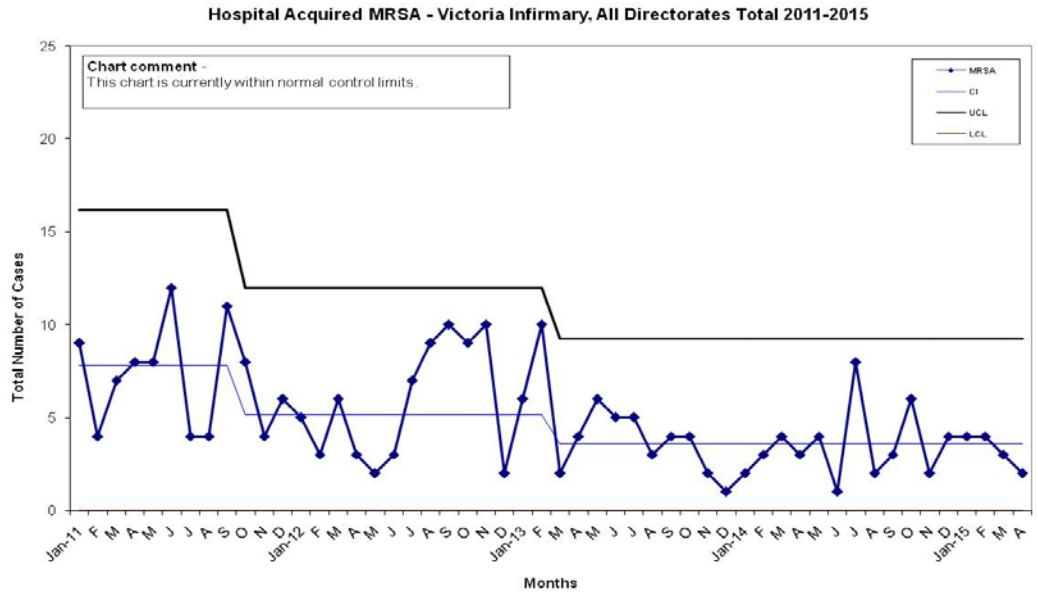


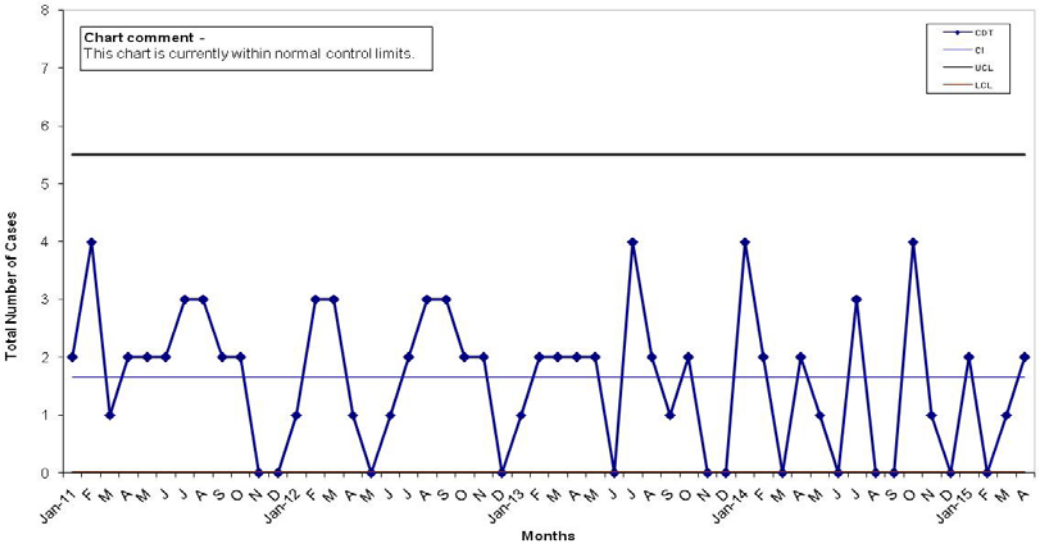
Inverclyde Royal Hospital



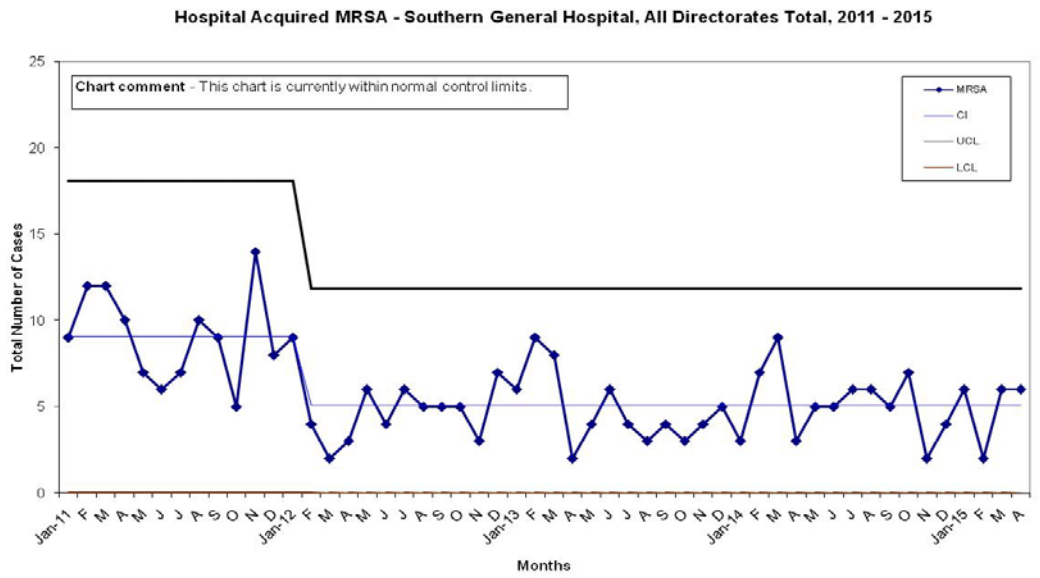


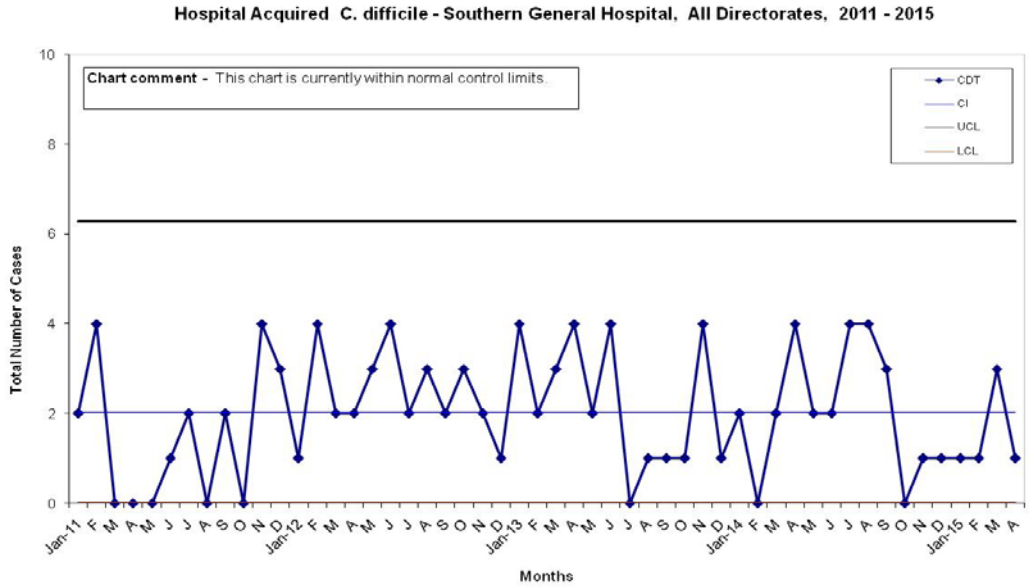
Victoria Infirmary



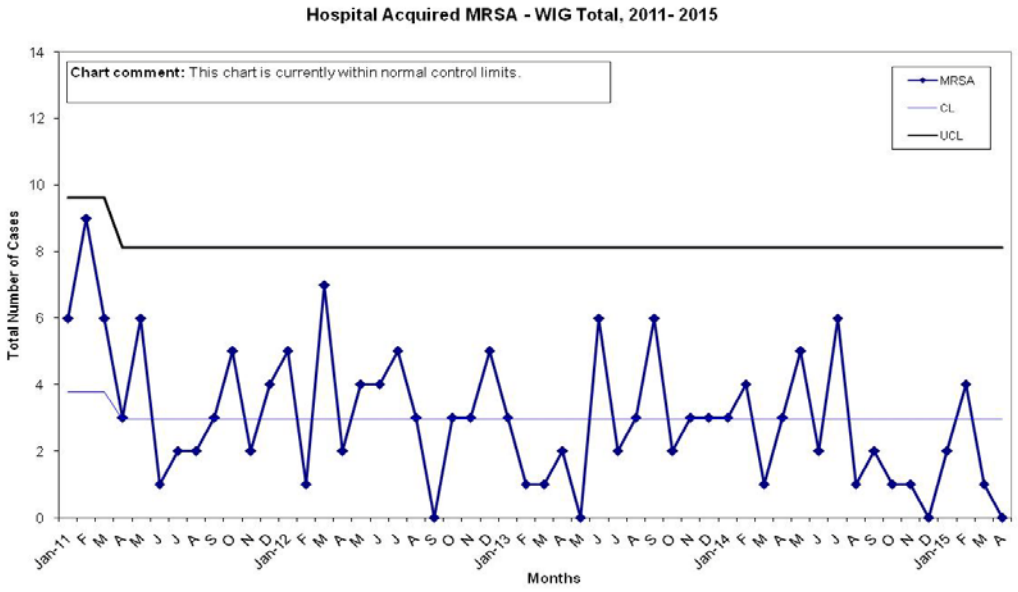


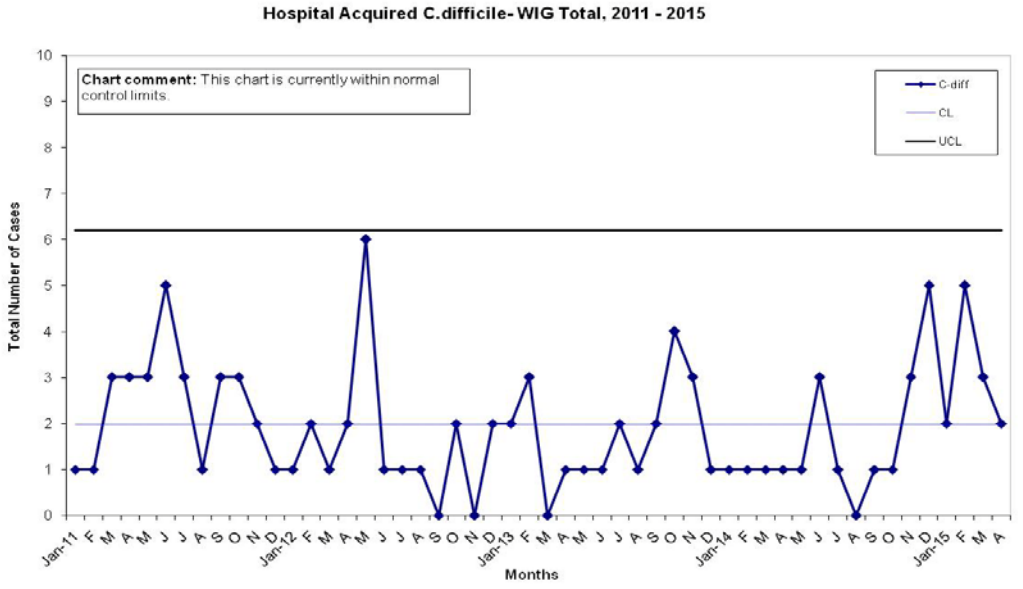
Southern General Hospital



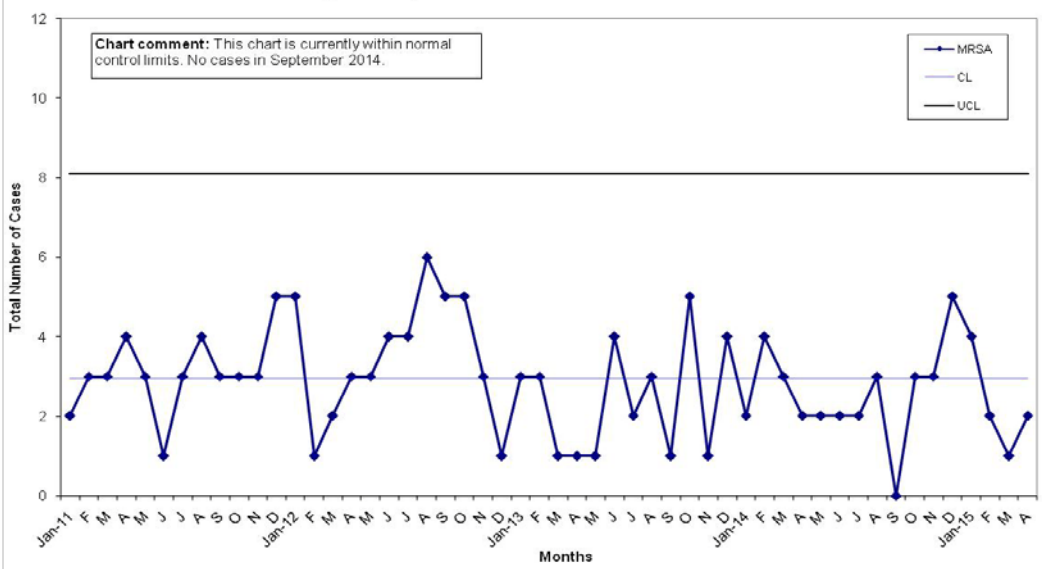


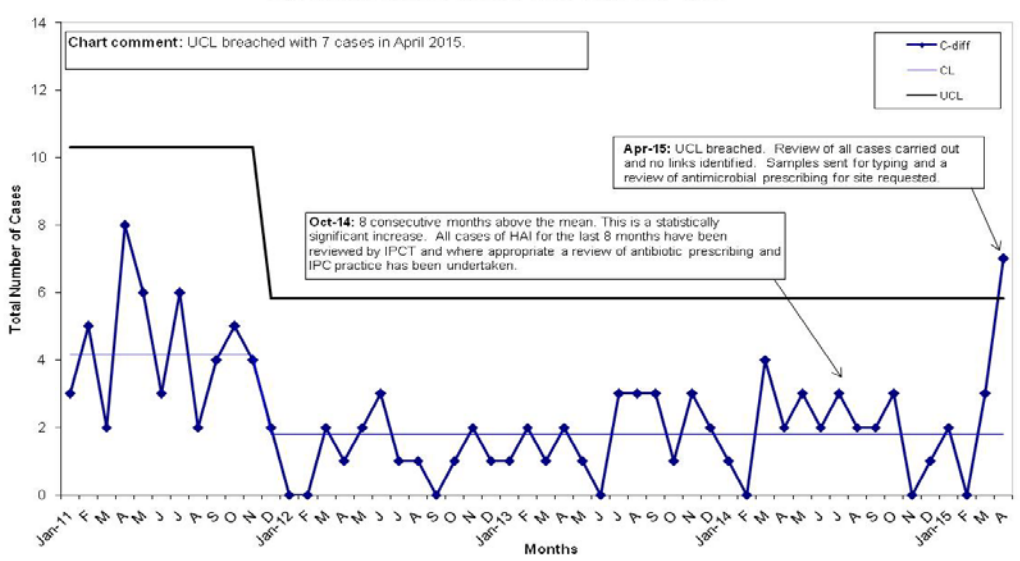
Western Infirmary



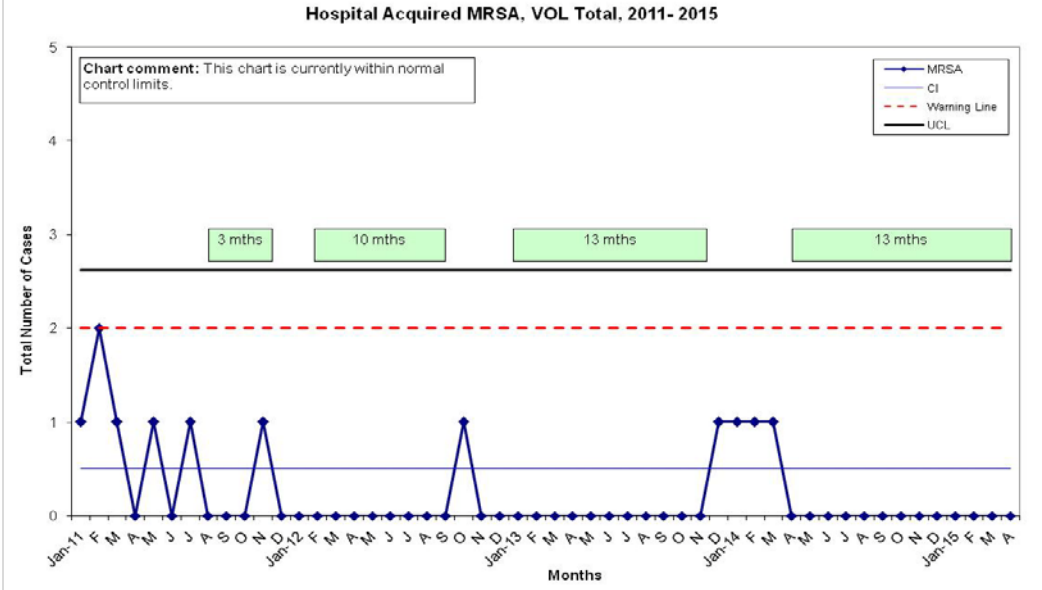


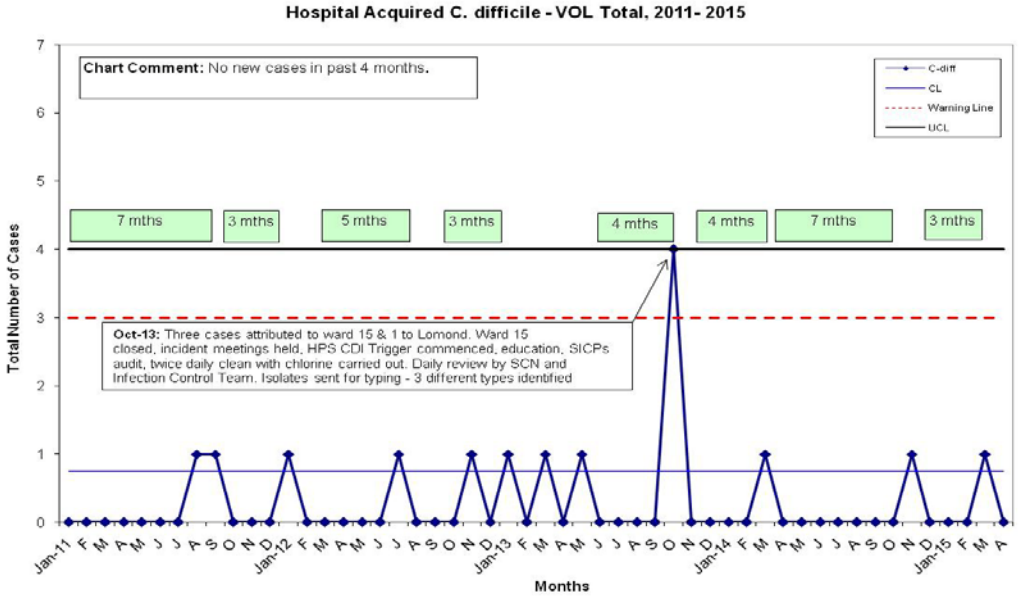
Gartnavel General Hospital



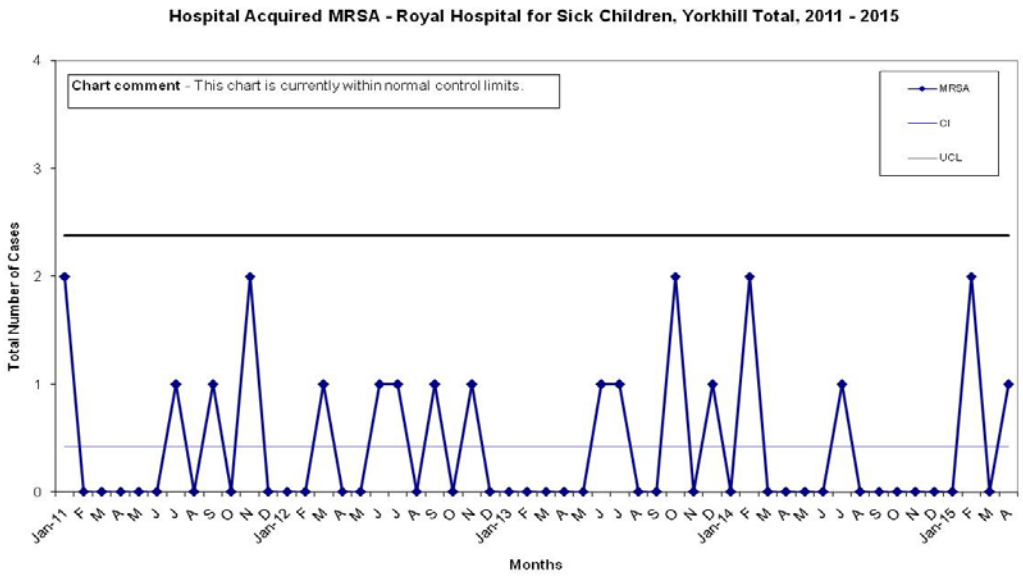


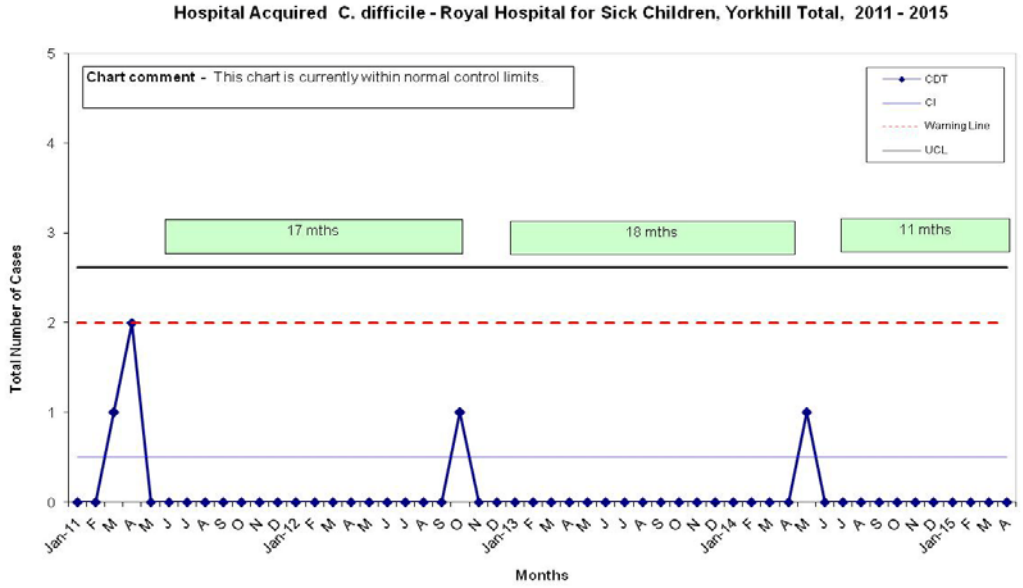
Vale of Leven Hospital





Yorkhill Royal Hospital for Sick Children





GLOSSARY

ACDP	**Advisory Committee on Dangerous Pathogens**
AMT	**Antimicrobial Management Team**
AOD	**Acute Operating Division**
Alert organism alert condition	Any of a number of organisms or infections that could indicate, or cause, outbreaks of infection in the hospital or community.
Bacteraemia	Infection in the blood. Also known as Blood Stream Infection (BSI).
BICC	**Board Infection Control Committee**
CDAD	***Clostridium difficile*** Associated Disease
CDI	***Clostridium difficile*** Infection
CEL	**Chief Executive Letter** issued by Scottish Government Health Directorates (SGHD)
CMO	**Chief Medical Officer**
CVC	**Central Vascular Catheter**
C. difficile	***Clostridium difficile*** also referred to as ***C. diff*** (or ***C-diff***) is a Gram-positive spore-forming anaerobic bacteria. C. *difficile* is the commonest cause of gastro-intestinal infection in hospitals. It causes two conditions; antibiotic associated diarrhoea and the more severe and occasionally life-threatening pseudomembranous colitis. Control of the organism can be problematic due to the formation of spores and difficulty in removing them. Patients who have had antibiotics within the last eight weeks are most at risk of acquisition of the organism.
Cleanliness Champion	**Cleanliness Champion** A Ministerial led initiative to offer a specific education programme to HCWs. http://www.scotland.gov.uk/Topics/Health/NHS-Scotland/19529/19322
Code of Practice	**Code of Practice** The NHS Scotland Code of Practice for the Local Management of Hygiene and Healthcare Associated Infection issued 2004 contains the components that must be complied with by all NHS HCWs in Scotland. http://www.scotland.gov.uk/Publications/2004/05/19315/36624
GRO	**General Registers Office**
HAI	Originally used to mean hospital acquired infection, the official 'Scottish Government' term is now **Healthcare Associated Infection**. These are considered to be infections that were not incubating prior to contact with a healthcare facility or undergoing a healthcare intervention. It must be noted that HAI infection is not always an avoidable infection.
HAI SCRIBE &HBN 30	Scottish Health Facilities Note 30: version 3. Infection Control in Built Environment: Design and Planning.
HCW	**Healthcare Worker**
HDL	**Health Department Letter**
HEAT Target	**Health Efficiency and Access to Treatment**. Targets set by the Scottish Government.
HH	**Hand Hygiene**
HPS	**Health Protection Scotland**
ICN/T/O/D/M	**Infection Control Nurse / Team / Officer / Doctor / Manager**
ICP	**Infection Control Programme**
KPI	**Key Performance Indicator**
LHBC	**Local Health Board Co-ordinator** (Hand Hygiene)
MRSA	**Meticillin resistant *Staphylococcus aureus.*** A *Staphylococcus aureus* resistant to first line antibiotics; most commonly known as a hospital acquired organism.
MSSA	**Meticillin Sensitive *Staphylococcus aureus***
NCIC	**Nurse Consultant Infection Control**
PCAT	**Primary Care Audit Tool**
PFPI	**Public Focus Patient Involvement**
PHPU	**Public Health Protection Unit**
PPI	**Public Partners Involvement**
PVC	**Peripheral Vascular Catheter**
QIS	**Quality Improvement Scotland**
SIRN	**Scottish Infection Research Network**
SOP	**Standard Operating Procedure**
SPC	**Statistical Process Control Charts**
SPSP	**Scottish Patient Safety Programme**
SSI	**Surgical Site Infection**
VRE	**Vancomycin resistant enterococcus** - an alert organism A common organism that can be inherently resistant to Vancomycin but can also acquire (and transfer resistance) to other organisms. Has caused outbreaks reported in the literature in a variety of high-risk settings, e.g. renal or bone marrow transplant units.