

Lanarkshire NHS Board
24 June 2009

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SUBJECT: HAI UPDATE

PURPOSE

This report provides a monthly update of performance in relation to health care associated infection using the national reporting template. Key issues covered include:-

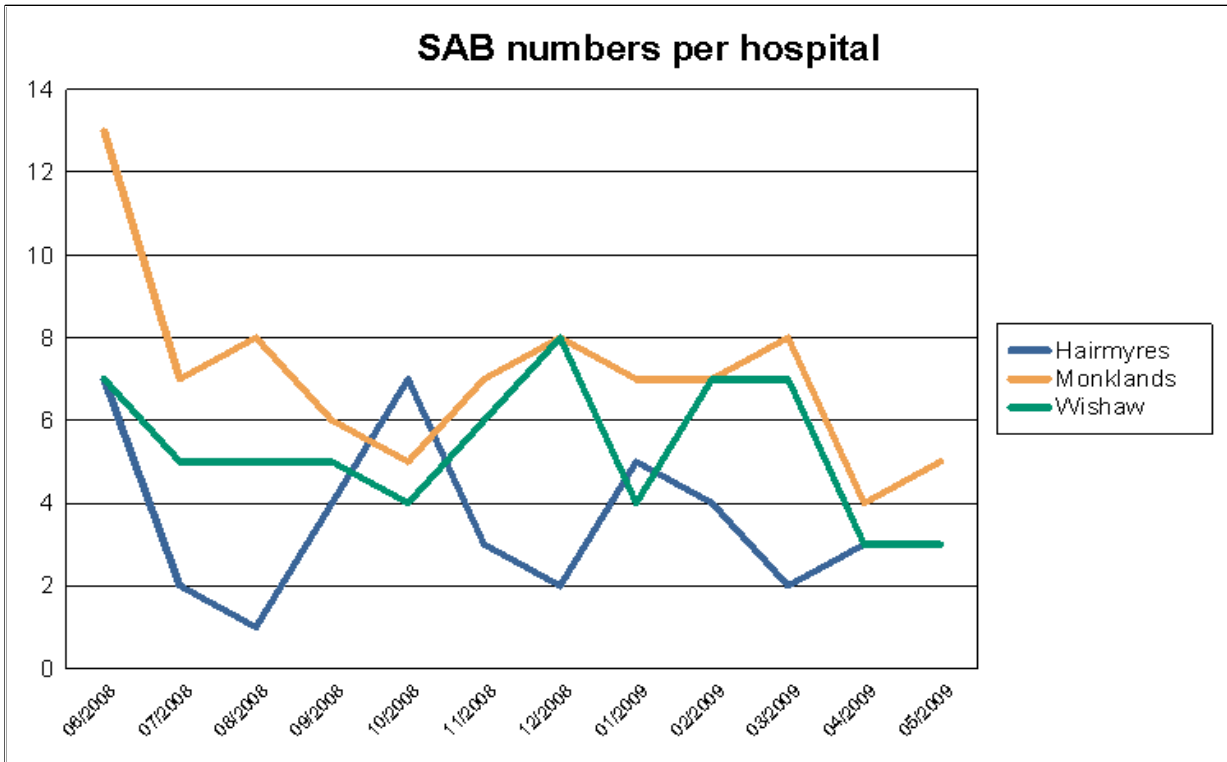
- Performance against Health Efficiency Access Targets
- Infection prevalence rates
- Cleanliness of clinical facilities
- Progress against national Clostridium Difficile action plan
- Progress against key issues within the HAI Task Force 3 year delivery plan
- Surgical Site Infection Surveillance
- Antimicrobial prescribing.

1. STAPHYLOCOCCUS AUREUS BACTERAEMIAS (SAB)

1.1 Short/Medium/Long Term Trends in SAB, plus Meticillin Resistant Staphylococcus Aureus (MRSA), MSSA Bacteraemias

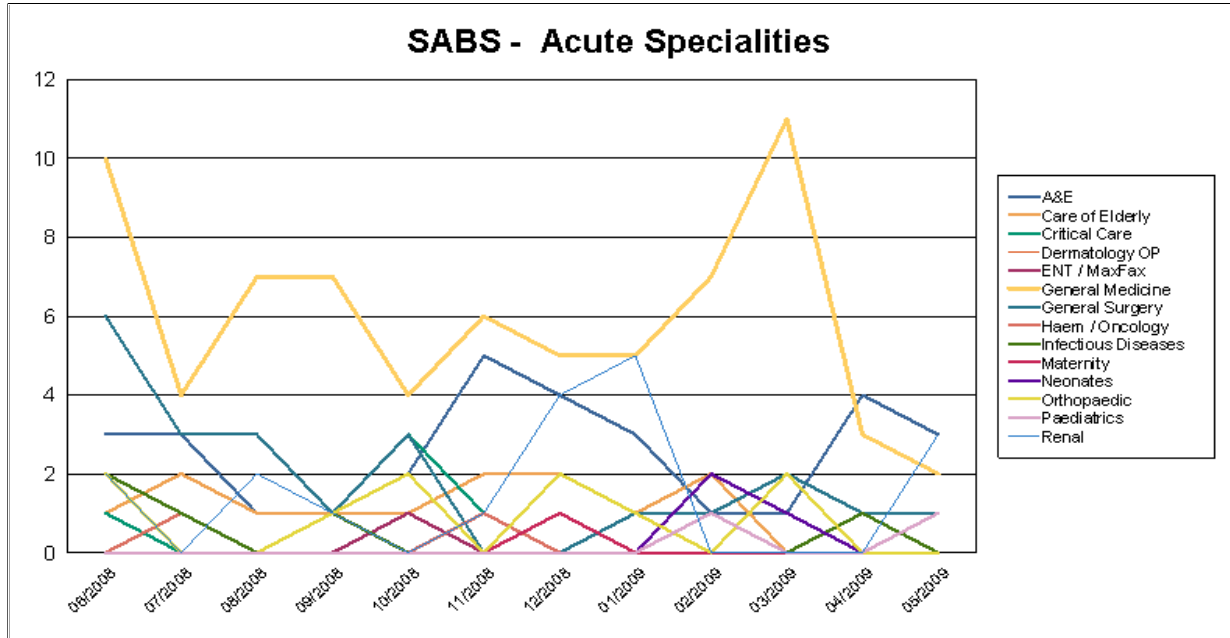
Tables 1 and 2 shows that the trend and the clinical areas with relatively high numbers of Staphylococcus Aureus Bacteraemias continue to be General Medicine, Accident and Emergency, General Surgery and Renal. This is in line with previous reports and the national picture.

Table 1: Staphylococcus Aureus Bacteraemias (SAB) Numbers Showing Hospital Totals (June 2008 – May 2009)



	Hairmyres	Monklands	Wishaw	Total
06/2008	7	13	7	27
07/2008	2	7	5	14
08/2008	1	8	5	14
09/2008	4	6	5	15
10/2008	7	5	4	16
11/2008	3	7	6	16
12/2008	2	8	8	18
01/2009	5	7	4	16
02/2009	4	7	7	18
03/2009	2	8	7	17
04/2009	3	4	3	10
05/2009	3	5	3	11
Total	43	85	64	192

Table 2: Staphylococcus Aureus Bacteraemias (SAB) Numbers Showing Acute Specialties (June 2008 – May 2009)



	A&E	Care of Elderly	Critical Care	Dermatology OP	ENT / MaxFax	General Medicine	General Surgery	Haem / Oncology	Infectious Diseases	Maternity	Neonates	Orthopaedic	Paediatrics	Renal	Total
Jun-08	3	1	1	0	0	10	6	0	2	0	0	2	0	2	27
Jul-08	3	2	0	0	0	4	3	1	1	0	0	0	0	0	14
Aug-08	1	1	0	0	0	7	3	0	0	0	0	0	0	2	14
Sep-08	1	1	1	0	0	7	1	1	1	0	0	1	0	1	15
Oct-08	2	1	3	0	1	4	3	0	0	0	0	2	0	0	16
Nov-08	5	2	1	0	0	6	0	1	0	0	0	0	0	1	16
Dec-08	4	2	0	0	0	5	0	0	0	1	0	2	0	4	18
Jan-09	3	1	0	0	0	5	1	0	0	0	0	1	0	5	16
Feb-09	1	2	1	1	0	7	1	1	1	0	2	0	1	0	18
Mar-09	1	0	0	0	0	11	2	0	0	0	1	2	0	0	17
Apr-09	4	1	0	0	0	3	1	0	1	0	0	0	0	0	10
May-09	3	1	0	0	0	2	1	0	0	0	0	0	1	3	11
Total	31	15	7	1	1	71	22	4	6	1	3	10	2	18	192

1.2 Current Health Efficiency Access Treatment Targets (HEAT) Status and National Context

To reduce all Staphylococcus Aureus Bacteraemia (including MRSA) by 30% by 2010; to introduce and comply with local antimicrobial policies by 2010;

The next National Quarterly report will be published in July 2009.

NHS SCOTLAND Rate per Acute Occupied Bed Day

The next national update for these figures will be published in July 2009.

1.3 Current and New Initiatives to Reduce Staphylococcus Aureus Bacteraemia (SAB) Cases

The measures and systems currently in place or under development include;

- The development of a peripheral venous cannula (PVC) checklist by Health Protection Scotland for review by the NHSL SAB compliance group
- Development of a SAB database, with Infection Control Teams and Clinical effectiveness now entering data and testing database systems and reports.
- Continued Implementation of the Scottish Management of Antimicrobial Resistance Action Plan (SCOTMARAP).
- Trial of sterile PVC packs in high risk areas
- Audit of number and area specific contaminated blood culture specimens planned for June/July

1.4 Pan-Board, Hospital Or Specialty Specific Problems Identified

No new specialty problems have been identified.

1.4.1 Actions Required

- Implementation of Health Protection Scotland Peripheral Venous Cannula Care Bundles to continue in all high risk areas.
- Share information generated from SAB data base with clinical staff
- Local review of data and practice via the SAB Compliance group to continue.
- Development of corrective action plan from audit findings

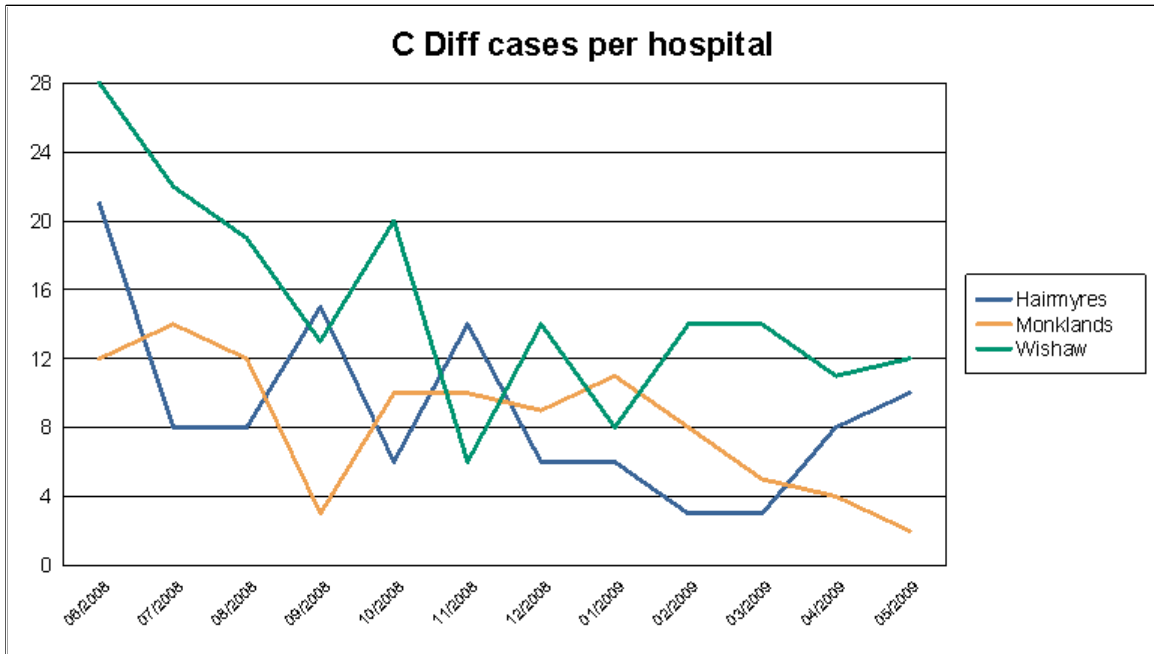
2. CLOSTRIDIUM DIFFICILE ASSOCIATED DISEASE (CDAD)

2.1 Short/Medium/Long Term Trends in CDAD – Number/Graphical Presentation,

Cases of Clostridium Difficile Associated Disease in all 3 District General Hospitals as outlined in Table 7 continues to fall. Whilst there is a slight increase at Hairmyres Hospital for the reporting period of May 2009 this is based on natural variation and is still within the lower third of the range below the mean. Table 8 continues to highlight General Medicine, Care Of the Elderly and General Surgery with the most cases of Clostridium Difficile. This is in line with national findings.

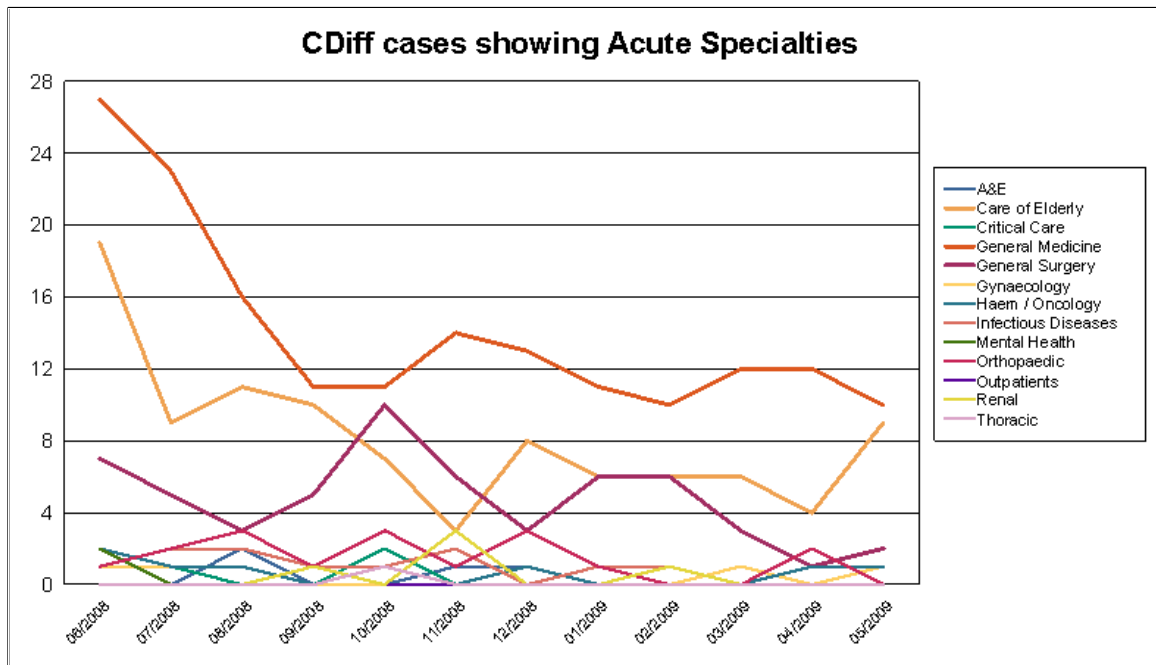
There are weeks where zero values have been reported. This significant deviation from the mean indicates a move towards sustained improvement.

Table 7: Clostridium Difficile Associated Disease (CDAD) Per Hospital



	Hairmyres	Monklands	Wishaw	Total
06/2008	21	12	28	61
07/2008	8	14	22	44
08/2008	8	12	19	39
09/2008	15	3	13	31
10/2008	6	10	20	36
11/2008	14	10	6	30
12/2008	6	9	14	29
01/2009	6	11	8	25
02/2009	3	8	14	25
03/2009	3	5	14	22
04/2009	8	4	11	23
05/2009	10	2	12	24
Total	108	100	181	389

Table 8: Clostridium Difficile Associated Disease Rates per Acute Specialities



	A&E	Care of Elderly	Critical Care	General Medicine	General Surgery	Gynaecology	Haem / Oncology	Infectious Diseases	Mental Health	Orthopaedic	Outpatients	Renal	Thoracic	Total
Jun-08	0	19	1	27	7	1	2	1	2	1	0	0	0	61
Jul-08	0	9	1	23	5	1	1	2	0	2	0	0	0	44
Aug-08	2	11	0	16	3	1	1	2	0	3	0	0	0	39
Sep-08	0	10	0	11	5	0	0	1	1	1	1	1	0	31
Oct-08	0	7	2	11	10	0	1	1	0	3	0	0	1	36
Nov-08	1	3	0	14	6	0	0	2	0	1	0	3	0	30
Dec-08	1	8	0	13	3	0	1	0	0	3	0	0	0	29
Jan-09	0	6	0	11	6	0	0	1	0	1	0	0	0	25
Feb-09	1	6	0	10	6	0	0	1	0	0	0	1	0	25
Mar-09	0	6	0	12	3	1	0	0	0	0	0	0	0	22
Apr-09	1	4	2	12	1	0	1	0	0	2	0	0	0	23
May-09	1	9	0	10	2	1	1	0	0	0	0	0	0	24
Total	7	98	6	170	57	5	8	11	3	17	1	5	1	389

2.2 Current HEAT Status And National Context

To reduce rate of Clostridium Difficile infection in Hospitals by at least 30% by 2011

The next National Quarterly report will be due in July.

2.2.1 Pan-Board, Hospital or Specialty Specific Problems Identified

No specific problems identified. This is in keeping with NHS Lanarkshire information reported in the previous section suggesting sustainable change has been achieved during this period.

2.3 Current New Initiatives To Reduce Cases

- Antimicrobial Pharmacists implementing the Scottish Management of Antimicrobial Resistance Action Plan (SCOTMARAP) ongoing
- Development of Enhanced surveillance of Clostridium difficile to Primary Care Hospitals. ongoing
- Action plan being developed to correct non compliance of hand washing facilities at Monklands and out lying hospitals.
- *Clostridium difficile* Study Day planned for September 2009.

2.4 Pan-Board, Hospital Or Specialty Specific Problems Identified

No specialty problems identified at present.

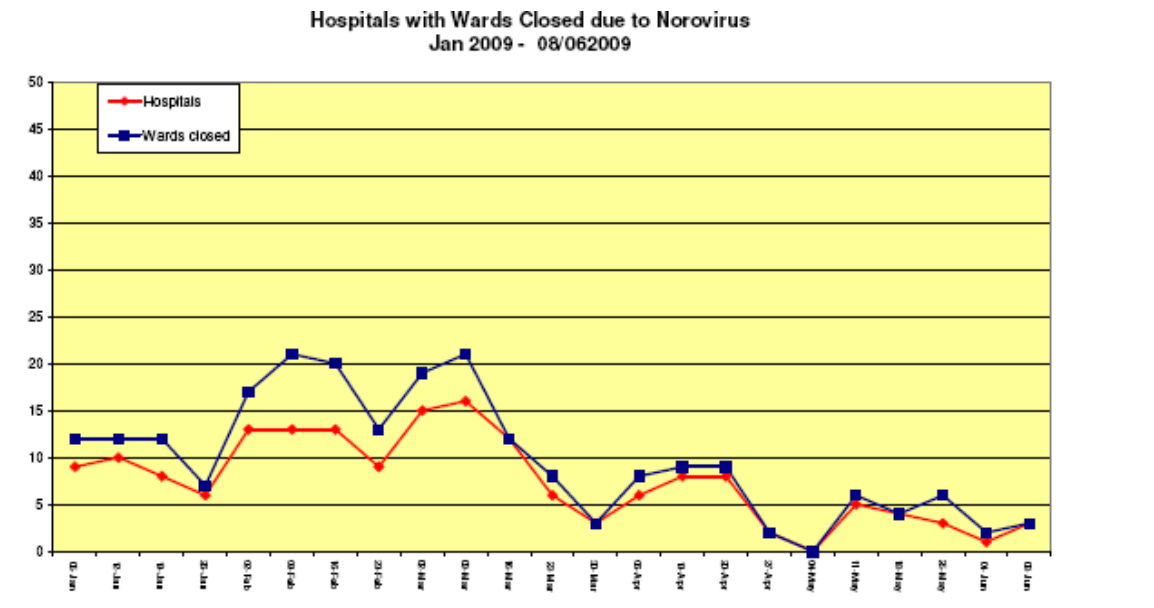
2.4.1 Actions Required

- Continued weekly and monthly monitoring reports identifying trends and areas of high risk.
- Monitoring of Hand Hygiene Zero Tolerance, Dress/Uniform and Healthcare Associated Infection Hand Hygiene Policies.
- Development of phase 2 of Zero Tolerance for visitors and general public underway

2.5 Norovirus

A national report identifies the prevalence of Norovirus on a weekly basis in Scotland. It includes the number of Wards closed with confirmed or presumed Norovirus Infection for the period January 2008 to June 2009 as outlined in the table below.

**Table 12: Hospitals with Wards Closed Due To Norovirus across NHS Scotland
Jan 2009 – 8th June 2009**



Currently **2** NHS Boards are reporting Norovirus activity in NHS Scotland. Lanarkshire have no reported closures for this period.

In the first report on 7/1/2008: 29 hospitals were affected and 47 wards closed; this has fallen to 2 hospitals with 3 wards affected.

3. HAND HYGIENE (HH) PROGRAMME

3.1 NHS Lanarkshire Trends In Compliance

NHS Lanarkshire trend will be available in the July Board Report to allow comparison with the national figures

National Context

The next national Audit figures are due for publication in July 2009

Current and New Initiatives in Promoting Hand Hygiene

These include:

- Direct involvement of Hand Hygiene Team with Scottish Patient Safety Programme Hand Hygiene spread is underway. The audit tool is firmly embedded in Monklands, will be complete by July/Aug 09 at WGH, 2 wards are at stage 2 of the protocol.

- Implementation of new Hand Hygiene products now complete at Wishaw General Hospital. Monklands Hospital is scheduled for completion June 09. Site survey at Hairmyres has been undertaken
- Additional glo-boxes are now disseminated at the Hairmyres site and will be sent to other sites to support SPSA.
- Second wave of National Hand Hygiene Campaign Materials materials currently in design phase for primary care

3.2 Pan-Board, Hospital or Staff Group Specific Problems Identified

No specific problems identified for this reporting period

4. CLEANING SERVICES SPECIFICATION COMPLIANCE

4.1 Short/Medium/Long Term Trends in Compliance – Number/Graphical Presentation

Month to month performance fluctuates, but within a reasonably tight band. Tables 17 and 18 identify that compliance levels have been met with the exception of Monklands Hospital which has remained consistent at 92.7%. Airdrie and Coatbridge localities have increased to 93% compliance within the most recent reporting quarter and this has been due to increased supervision and regular monitoring.

Table 17: Cleaning Services Specification Compliance per District General Hospital June 2009

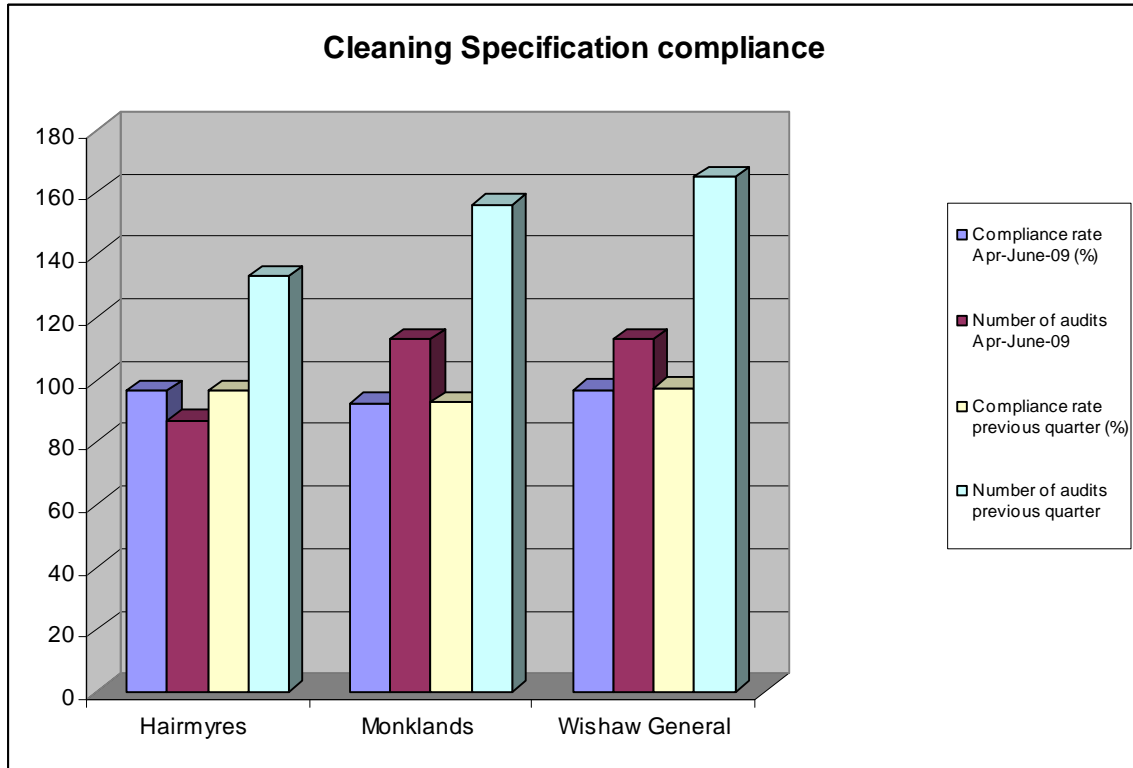
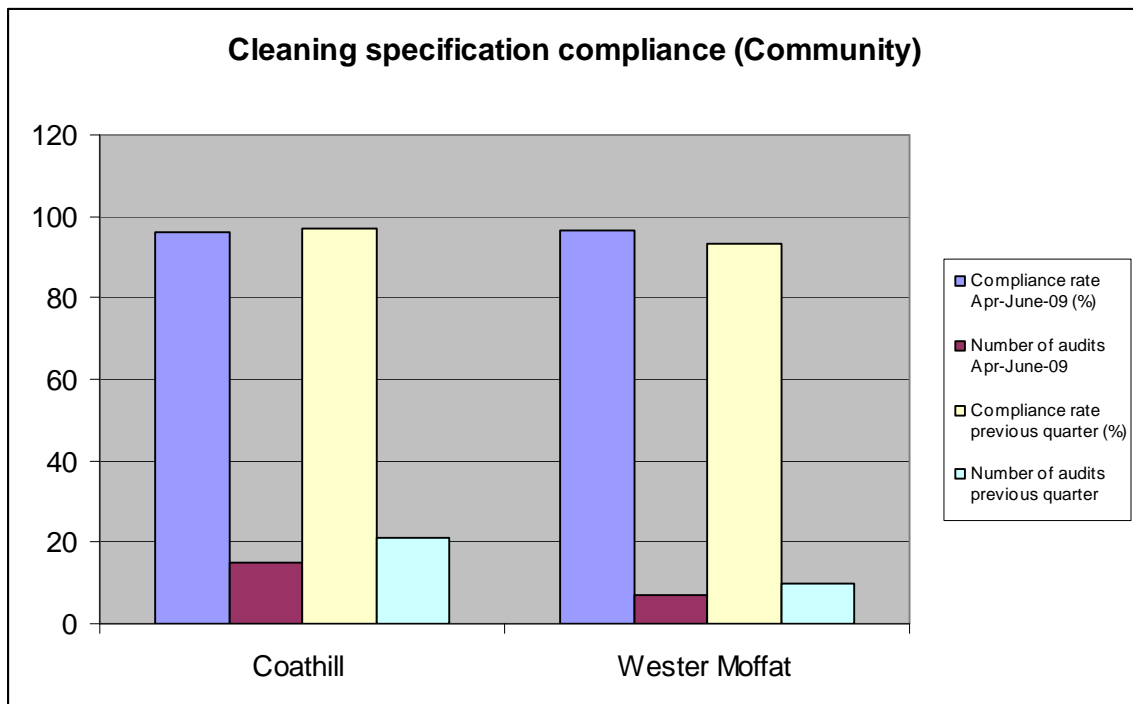


Table 18: Cleaning Services Specification Compliance, Community: June 2009



4.2 Current and New Initiatives In Improving Cleaning

- Visits to areas with lower performance by the Head of Planning and General Manager PSSD together with representatives from the PFI Consortia and Hotel Services Management Team continue.
- Steam Cleaner demonstration / training session from Osprey on Steam Cleaners took place on the 26th/27th May and was well attended. A further programme of training and distribution of the allocated steam cleaners will follow, co-ordinated by the HAI Team.
- Public and peer reviews of cleaning standards continue

4.3 National Context – Most Recent Health Facilities Scotland Quarterly National Report

Next National report due July 2009

4.4 Current New Initiatives In Improving Cleaning

- Increased supervision and monitoring of locations where scores fell below 90% compliance to ensure standards maintained.
- Review of National Cleaning Services Specification minimum inputs against current staffing levels is continuing. Staff rosters continue to be reviewed to ensure that the cleaning service is being undertaken at a time that compliments the clinical services.
- Poor performance issues of staff continues to be managed and monitored, identifying individuals and the circumstances contributing towards problems. A number of individuals have being taken through this formal process.
- Monthly meetings continue to monitor & review management actions taken in terms of sickness absence in line with NHS Lanarkshire's Management of Sickness Absence Policy.
- Introduction of cleaning schedules for clinical staff to enhance cleaning of clinical equipment currently nearing implementation
- Domestic Staff PDP's, which have identified specific training needs for individuals are being actioned.

4.5 Pan-Board, Hospital or Specialty Specific Problems Identified

Clarification required about the use of terminology for 'deep clean' and 'terminal clean' to ensure no confusion about requirement for areas that need to be cleaned to a higher level

4.5.1 Actions Required [Timescales]

- Vacancies continue to be managed in line with recruitment policy.
- Review of all staff rosters ongoing
- Production of monthly report detailing sickness absence details, management action taken across all Hotel Services Disciplines [Ongoing].
- HAI team in conjunction with PSSD to ensure appropriate policy in place that defines the process of a deep clean versus a terminal clean

5 SIGNIFICANT HEALTHCARE ASSOCIATED INFECTION INCIDENTS/OUTBREAKS/EMERGING THREATS.

The Infection control team were notified on the 7th may 2005 of an increased incidence of surgical site infection in elective and trauma patients within Wards 7 & 8 Hairmyres Hospital. A problem assessment group was convened and a plan of remedial action was formulated to address potential identified areas of risk. This plan of action included

- Deep clean and curtain change in Wards 7 & 8
- Deep clean of theatres 2 &7
- Early maintenance inspection of Laminar Flow and ducting in Theatres 2 & 7
- Environmental Audit of theatres
- Hand hygiene Audit of theatres
- Education re new wound dressings
- Ward 1 now used for elective surgery only
- Review of sterile service provision

The problem assessment group continue to meet fortnightly in the event any new cases should arise following the above action, however to date there has been no issues of concern out with the original cohort.

6 PROGRESS ON COMPLIANCE WITH NATIONAL HEALTHCARE ASSOCIATED INFECTION PROGRAMME

6.1 Red Amber Green System (RAGS) Status on Healthcare Associated Infection Action Plan

Progress against the Scottish Government Health Department Healthcare Associated Infection Action Plan was provided at the last meeting of the Board.

	Actions
PURPLE (complete)	18
GREEN (on track to complete by the deadline)	2
AMBER (substantially complete but either awaiting national materials or with some possibility of slippage beyond the deadline)	1
RED (unable to complete by the deadline)	0

One area remains in amber. This is;

- Implementation of HAI SCRIBE (Healthcare Associated Infection System for Controlling Risk in the Built Environment) sections 3 &4 to be applied to all existing buildings to ensure fabric of healthcare facilities maintained to minimise risk of infection. **National Guidance is still awaited from Health Facilities Scotland regarding this.**

7.1 **Compliance With Healthcare Associated Infection Task Force Programme – Outstanding Issues**

The organisation remains on track to deliver against the Task Force programme.

7.2 **Actions Required And Timescales For Implementation**

NHS Quality Improvement Scotland Healthcare Associated Infection Self assessment Tool is to be completed and submitted to the Scottish Government by 22nd June, this is being co-ordinated between the HAI services and Clinical Effectiveness and information will inform the unannounced inspections.

7.3 **Surgical Site Surveillance**

The aims of the Surgical Site Infection programme are:

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

7.4.1 **Orthopaedic Surveillance**

SSI Surveillance of elective and trauma hip arthroplasties for the period 1 April -30 April 2009 has shown 4 incidences of infections.

Elective Orthopaedic Presentation

A total of 64 operations, 4 infections which gave an SSI rate 6.25%. 40 were elective and 3 of those had infections which is an SSI rate of 7.50%.

Emergency Orthopaedic Presentation

A total of 24 operations and 1 of those had infections which gives an SSI rate of 4.17%.

Orthopaedic Infection Types

There were 4 deep infections, an SSI rate of 6.25%.

7.4.2 Caesarean Section

SSI Surveillance of elective and emergency caesarean sections for the period from 1 April - 30 April 2009 has shown.

Elective Caesarean Presentation

A total of 120 operations, 4 infections which give an SSI rate 3.33%. 47 were elective and 2 of those had infections which is an SSI rate of 4.26%.

Emergency Caesarean Presentation

A total of 73 operations, and 2 of those had infections which gives an SSI rate of 2.74%

Caesarean Infection Types

There were 4 superficial infections, an SSI rate of 3.33%.

7.4.3 SSHAIP Surgical Site Infection Surveillance Quarterly Exceptions Report

Nil exceptions this reporting period.

7.4.4 Pan-Board, Hospital or Specialty Specific Problems Identified

There has been an increase of surgical site infection at Hairmyres Hospital within the Orthopaedic specialty. A Problem Assessment Group has been convened and the Consultant Surgeon is working closely with the microbiologist, surveillance and Infection Control team to review environmental factors. It is expected that this will contribute to an exception report in the next SSI reporting period. Health Protection Scotland have been informed.

Actions Required and Timescales for Implementation

Knee joint replacement and fractured neck of femur to be considered as voluntary SSI surveillance procedures at Acute Operating Division Infection Control Subgroup meeting (June 2009).

8 ANTIMICROBIAL PRESCRIBING

Update regarding Antimicrobial prescribing will be presented on a quarterly basis and will be part of the July Board Report.

9 Horizon Scanning

- The stakeholder event will take place 22 June to inform NHSL about the National MRSA screening programme implementation and ensure key issues in relation to patient pathways are considered
- The Infection Control in the Community guidance document has been circulated for comments by Health Protection Scotland and the final version will be launched in the near future

10 Conclusion

Good progress continues, though significant work is still required to ensure compliance with the national Healthcare Associated Infection agenda over then next 3 years. The NHS Lanarkshire Board is therefore asked to:-

- Note the report.
- Continue to receive a monthly progress report.

11 FURTHER INFORMATION

For further information or clarification of any issues in this paper please contact: Dr Alison Graham, Medical Director, 14 Beckford Street, Hamilton, 01698 206385.