

TRUST BOARD
29th November 2012

TITLE	Half Yearly Infection Control update (April to September 2012)
EXECUTIVE SUMMARY	There has been one Trust-apportioned MRSA bacteraemia which equals the target for 2012-13. C.difficile levels continue to be within target with 9 cases in the first 6 months, (annual target 20).
BOARD ASSURANCE (RISK)/ IMPLICATIONS	Assurances are provided by the infection control audits reported on. There is a risk that the MRSA and C difficile targets may not be reached as they are so demanding this year.
STAKEHOLDER/ PATIENT IMPACT AND VIEWS	There is a patient representative on the Control of Infection Committee
EQUALITY AND DIVERSITY ISSUES	N/A
LEGAL ISSUES	N/A
The Trust Board is asked to:	Discuss and note the information.
Submitted by:	Dr Angela Shaw, Director of Infection Prevention and Control
Date:	20 th November 2012
Decision:	For Discussion

**Trust Board
29th November 2012
Half Yearly Infection Control update (April to September 2012)**

Infection Control Statement

Infection Control is the responsibility of all healthcare workers. The Trust has a zero tolerance approach to healthcare associated infections.

Infection Control Arrangements

The nurses in the Infection Control Team consist of a Consultant Nurse in Infection Prevention and Control, a senior Specialist in Infection Prevention and Control and a Specialist Nurse in Infection Prevention and Control (development role).

The Control of Infection Committee has met in June and September 2012 and the Infection Control Team has met fortnightly on average.

Mandatory Reporting

There is mandatory reporting to the Health Protection Agency of the following: MRSA bacteraemias (blood stream infections), Clostridium difficile infections in patients over 2 years of age, glycopeptide resistant enterococcus bacteraemias, MSSA bacteraemias (since January 2011) and Escherichia coli bacteraemias (since June 2011). There are targets for the first two of these.

MRSA bacteraemias

There was one MRSA bacteraemia after 48 hours in the Trust in the first half of 2012-13, in April. However as the blood culture was taken in A/E after transfer back from Ashford Hospital to St Peter's Hospital this has not been officially assigned to the Trust but will be reported to Monitor.

A root cause analysis was performed. The patient had a respiratory tract infection and it was not thought to be avoidable.

Two patients were admitted with MRSA bacteraemia in April and September, the first secondary to a catheter associated UTI (from out of Surrey) and the second case secondary to a diabetic foot infection.

Unfortunately the second patient was found to have MRSA in a blood culture taken in October, 18 days after the first, so this will be apportioned to the Trust. A root cause analysis showed that it was not avoidable. It was due to extension of his foot infection.

There have been no MRSA's in blood cultures which were thought to be contaminants.

The rates of contaminants in blood cultures as measured by coagulase negative Staphylococci continues to remain low at an average of 2.2% including paediatric cases (approximately 1.2% excluding paediatrics). Paediatric cases may be significant and their blood cultures are not taken by phlebotomists.

Root cause analysis of MRSA in blood cultures since April 2010.

<i>Likely source</i>	<i>2011-12</i>		<i>2012-13 (April-Sept)</i>	
	<i>HA</i>	<i>CA</i>	<i>HA</i>	<i>CA</i>
<i>IV line</i>	0	1	0	0
<i>Surgical site</i>	0	0	0	0
<i>Chest</i>	1	3	(1)	1
<i>Urine</i>	0	0	0	0
<i>Skin/soft tissue</i>	1	2	0	1
<i>Contaminants</i>	0	0	0	0
<i>Total</i>	8		3	

MSSA (Methicillin-sensitive *Staphylococcus aureus*) bacteraemias

There is a mandatory requirement to report MSSA bacteraemias since January 2011. In April to September there were a total of 25 cases, 8 hospital-acquired (taken >48 hours after admission). This compares with 19 cases, 4 hospital-acquired in April to September 2011. Many of the "hospital-acquired" cases were really long term infections which the patients were probably admitted with, such as abscesses and cellulitis. The number of cases on NICU has fallen since last year, with 2 to date (there were 8 in 2011-12)

Glycopeptide-resistant enterococcus bacteraemias

There were 2 cases in April to September 2012.

Clostridium difficile

There were 9 hospital-acquired cases in April to September 2012 (total 19). This compares with 12 (total 35) in the same period in 2011. There has been a 10th case in October.

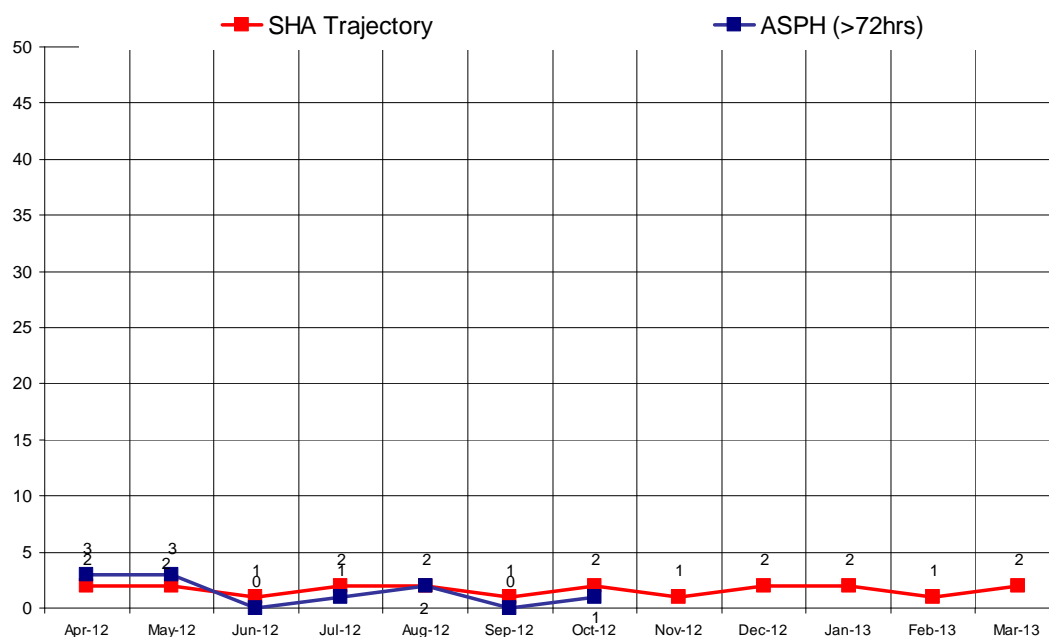
Our target for hospital-acquired cases this year is 20, with a target of 10 for the first 6 months so we are within target.

No patients died with *C difficile* on their death certificate in April to September 2012.

One died in October who had *C difficile* in August, which was entered on part 1b of her death certificate, despite the cause on part 1a being sepsis secondary to a pressure sore. It is not likely to have been a direct cause of her death.

The commonest possible causative factor was antibiotic use, particularly the use of Tazocin and co-amoxiclav, but in most cases the use of these antibiotics has been justified.

ASPH Monthly Performance of Clostridium difficile acquired in ASPH - April 12 - March 13



E coli bacteraemias

These have been reportable since June 2011.

There have been 113 cases between April and September 2012 (Compared with 86 cases between April and September 2011). 14 of these were taken at least 48 hours after admission compared with 20 in April to September 2011.

21 cases (18.5%) were ESBL (extended spectrum beta-lactamase) producers, which are highly resistant strains, compared with 9 (10.4%) in April to September 2011. 6 of these were hospital-acquired.

Antibiotic prescribing

The last audit was performed in March 2012, with another about to be done in October 2012.

Most compliance with indicators is now >80% (4 out of 7 >90%) so improvement has slowed. The use of post-op surgical prophylaxis is to be addressed again.

There is always a dip in compliance when the new junior doctors start despite much teaching on the subject.

Antibiotic audits compliance rates					
	Sept 10 %	Feb 11 %	June 11 %	Oct 11 %	March 12 %
Allergy box filed in	90	95	93	95	94
Antibiotics prescribed in line with guidelines	95	97	94	95	92
Addition instruction box filled with indication	90	90	94	94	93
Start date filled in	99	99	99	99	99
Stop/review date filled in or number of days	75	77	83	90	86
Surgical & orthopaedic patients: 1 pre-dose	93	100	100	100	100
Surgical & orthopaedic patients: Nil post dose	80	92	79	82	80

Junior doctors regularly perform other antibiotic related audits. Recently completed audits include an A/E antibiotic compliance re-audit (looking at compliance with guidelines), audit of review of the review date on prescriptions; height/weight documentation on drug chart and IV to oral switch documentation audit.

Other audits:

High Impact Interventions:

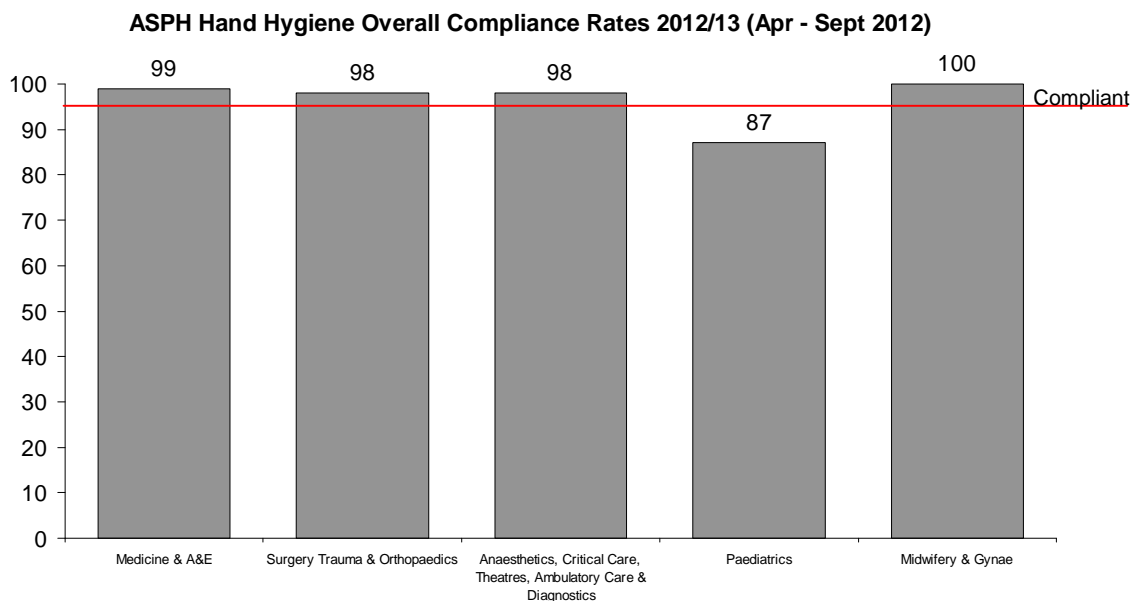
There continues to be improvements in most care bundles. The averages are the best to date with none under 95%.

High Impact Intervention Scores (average % per month of all providing data)

	HII 1 insertion CVC	HII 1 continuing care CVC	HII 2 insertion Periph	HII 2 continuing care Periph	HII 5 Vent	HII 6 insertion Catheter	HII 6 continuing care Catheter	HII 7 C. diff
Apr-12	100%	99%	95%	98%	100%	100%	100%	100%
May-12	100%	95%	97%	99%	100%	100%	100%	100%
Jun-12	100%	98%	97%	99%	100%	95%	100%	100%
Jul-12	100%	99%	98%	99%	100%	100%	100%	100%
Aug-12	100%	98%	96%	97%	100%	100%	100%	N/A
Sep-12	100%	99%	99%	99%	100%	100%	100%	100%

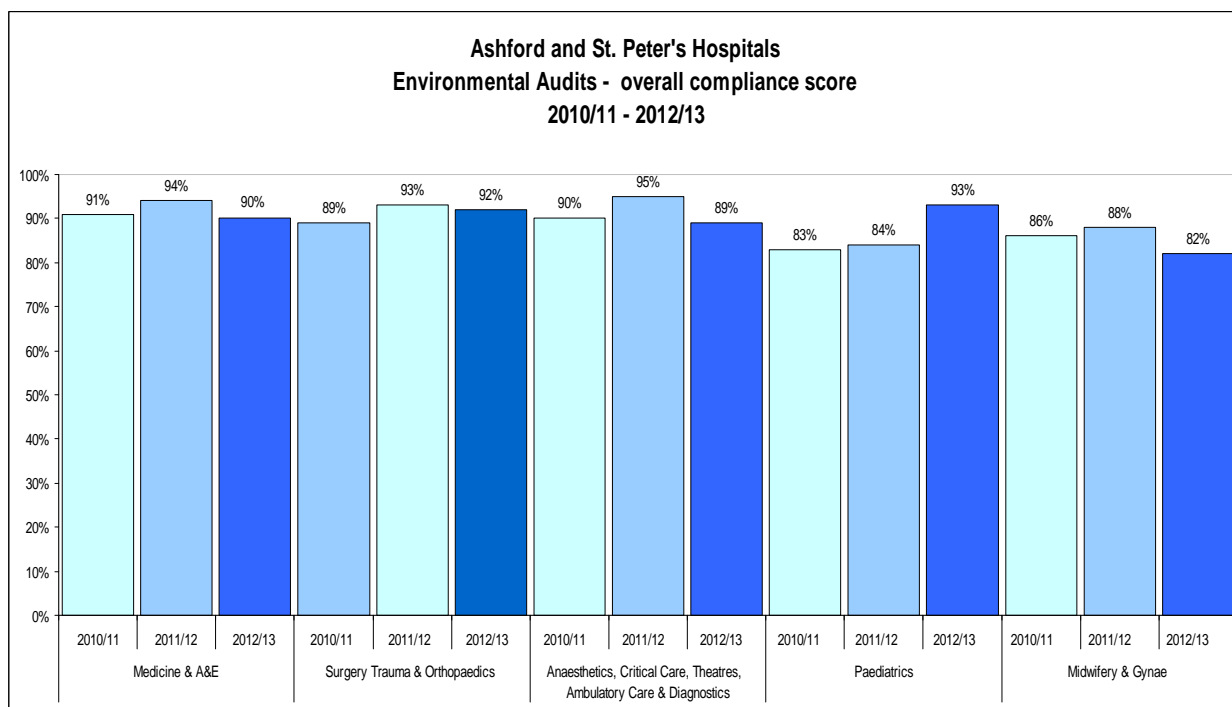
Hand Hygiene

The results of the hand hygiene audits in April to September 2012 are shown below: Paediatrics has the lowest rate as in the previous 6 months, but the other areas have improved.



Environmental audits

The graph below shows the average rates for the 6 months to date compared with the averages for 2010-11 and 2011-12. Rates are similar to previous years.



Peripheral cannula audits

All patients in the Trust with peripheral cannulas in situ were audited in July 2012. Results were for 161 patients.

The table shows 4 key indicators in comparison with the last 4 audits. The figures are similar to those in February 2012 but a lot better than in previous years.

Peripheral Cannula Prevalence Audits					
	Sept. 09	April 10	Aug. 11	Feb. 12	July 12
Cannula pack used	40%	74%	69%	71%	69%
Care plan used	33%	58%	43%	90%	92%
Site checked & documented each shift	44%	49%	58%	85%	85%
Cannula not in >72 hours	88%	77%	90%	90%	94%

Surgical site infections:

A survey of repair of neck of femur was performed at St Peter's Hospital in April to June 2012. There were 3 infections out of 101 operations (3%). The national average was 1.9%.

The re-survey of colo-rectal surgery is taking place in October to December 2012

Point Prevalence Survey

The results of the point prevalence survey performed in October 2011 were published in May 2012. The overall healthcare associated infection (HCAI) rate for ASPH was 9.1%. The breakdown of type of infection was as follows:

HAI	%
Pneumonia/LRI	42.60%
Urinary Tract infections	27.70%
Surgical Site infections	10.60%
Bloodstream infections	6.40%
Gastrointestinal Tract infections	4.30%
Skin and Soft Tissue infections	4.30%
Other	4.30%

The order of frequency of HCAs was the same as nationally (pneumonia 22.8%, UTIs 17.2% and surgical site infections 15.7%). Nationally the percentage of patients in NHS hospitals with a HCAI was 6.5%.

The last time a PPS was performed was in 2006, at which time our overall rate of infection was 8%. At that time the highest rate of infection at ASPH was in urine (34% of total HCAs), followed by gastrointestinal infections (29%). Only 5% were pneumonias / lower respiratory tract infection. The large increase in pneumonias is probably due to changes in the definition of pneumonia in the survey methodology (for example the requirement for chest X ray findings in 2006).

Catheter-related Urinary Tract Infections (CAUTIS)

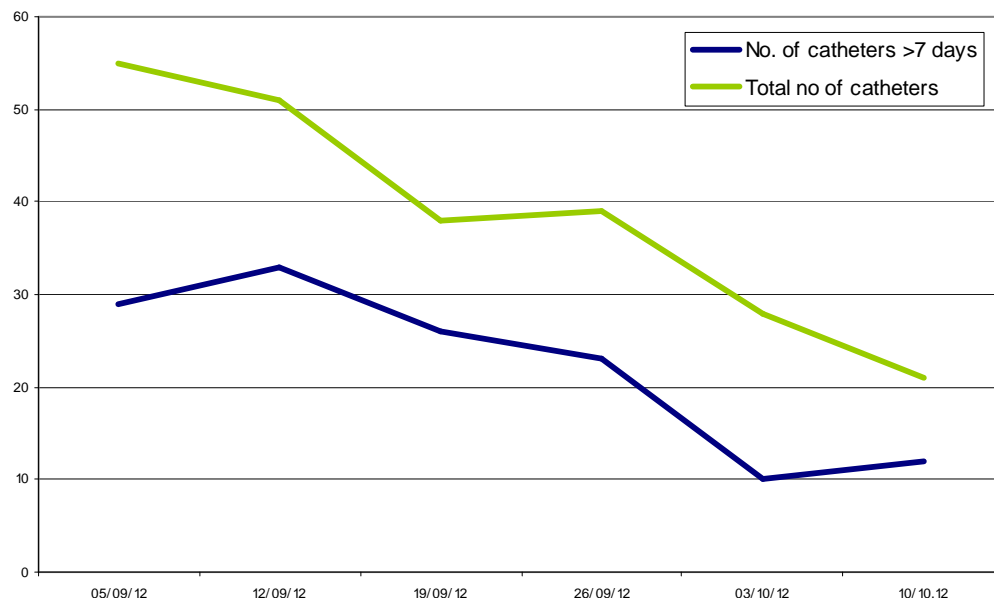
There is a national push on reducing the risk of catheter associated UTIs. The main way of reducing the risk is by minimising the use of urinary catheters. Since April 2012 wards have been performing monthly snap shots of numbers of patients with urinary catheters in place as part of the PCT's Safety Thermometer (See graph below for April to July 2012)

The percentage of patients with a catheter in situ had been high at an average of 19% up to July 2012. However there is a huge variation between wards and the data may not be accurate.

Safety Thermometer: Proportion of patients with a catheter
 All Organisations; All Wards and Teams; All Settings; All Services; All Ages; All Sexes



The Infection Control Nurses have been doing weekly monitoring on the Medical Wards and the numbers have decreased since then (See below). The nurses now use a Catheter Surveillance form developed by Infection Control.



Submitted by: Dr Angela Shaw

Date: November 2012