

# South Tees Hospitals

NHS Foundation Trust

<b>Meeting / committee:</b>	Board of directors	<b>Meeting date:</b>	18 December 2014
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<b>Title:</b>	Healthcare-associated infection report for November 2014
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<b>Purpose:</b>	To provide performance information on healthcare-associated infections.
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<b>Key issues / items for consideration in the report:</b>	<p>This report summarises surveillance information on MRSA and MSSA bacteraemia, <i>Clostridium difficile</i>-associated diarrhoea, bacteraemia due to glycopeptide-resistant enterococci, ESBL-producing coliform infections and other important healthcare-associated infections for the month of November 2014.</p> <ul style="list-style-type: none"> <li>• There is no official MRSA bacteraemia target for 2014/15. There have been 0 trust-assigned cases in November 2014, with a total of 3 trust-assigned cases for the first 8 months of 2014/15.</li> <li>• There is no official MSSA bacteraemia target for 2014/15. There have been 3 trust-apportioned cases in November 2014, with a total of 18 trust-apportioned cases for the first 8 months of 2014/15.</li> <li>• The <i>C. difficile</i>-associated diarrhoea target for 2014/15 is to have no more than 49 Trust-apportioned cases of <i>C. difficile</i> among patients aged over 2 years. There have been 7 trust-apportioned cases in November 2014, with a total of 37 trust-apportioned cases in the first 8 months of 2014/2015.</li> </ul>
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<b>Prepared by:</b>	Alison Peevor assistant director of nursing (deputy DIPC) Ruth Holt Director of nursing and quality assurance (DIPC)	<b>Presented by:</b>	Ruth Holt Director of nursing and quality assurance (DIPC)
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<b>Recommendation:</b>	All the centres must continue to support and engage completely with all measures to reduce healthcare-associated infections.
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<b>Implications (please mark an X)</b>	Legal	Financial	Safety & Quality	Strategic	Risk & Assurance
	X	X	X	X	X

**HEALTHCARE ASSOCIATED INFECTION REPORT (DATA TO END OF NOVEMBER 2014)****1. SURVEILLANCE DATA****1.1 MRSA bacteraemia**

MRSA	Annual total 13/14	Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	June 14	July 14	Aug 14	Sep 14	Oct 14	Nov 14	Total 14/15 to date	Target for 14/15
Total cases	8	0	1	0	1	3	0	0	1	1	0	2	0	2	6	NA
Not trust assigned	4	0	1	0	1	1	0	0	0	0	0	1	0	2	3	NA
Trust assigned	4	0	0	0	0	2	0	0	1	1	0	1	0	0	3	NA

There have been 2 cases of MRSA bacteraemia in November 2014. These are both provisionally classed as not Trust-assigned. One case was due to a Hickman line infection. The second case is currently under investigation. No factors have been identified by which Trust staff could have prevented these cases.

**1.2 MSSA bacteraemia**

MSSA	Annual total 13/14	Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	June 14	July 14	Aug 14	Sep 14	Oct 14	Nov 14	Total 14/15 to date	Target for 14/15
Total cases	92	6	3	9	16	8	6	16	11	8	9	14	8	8	80	NA
Not trust apportioned	64	5	1	7	13	5	5	12	8	7	8	10	7	5	62	NA
Trust apportioned	28	1	2	2	3	3	1	4	3	1	1	4	1	3	18	NA

There have been 8 cases of MSSA bacteraemia in November 2014; 3 of which were classed as trust-apportioned. Root cause analyses have been requested from the clinical teams concerned and any lessons learnt to be discussed at directorate and centre meetings.

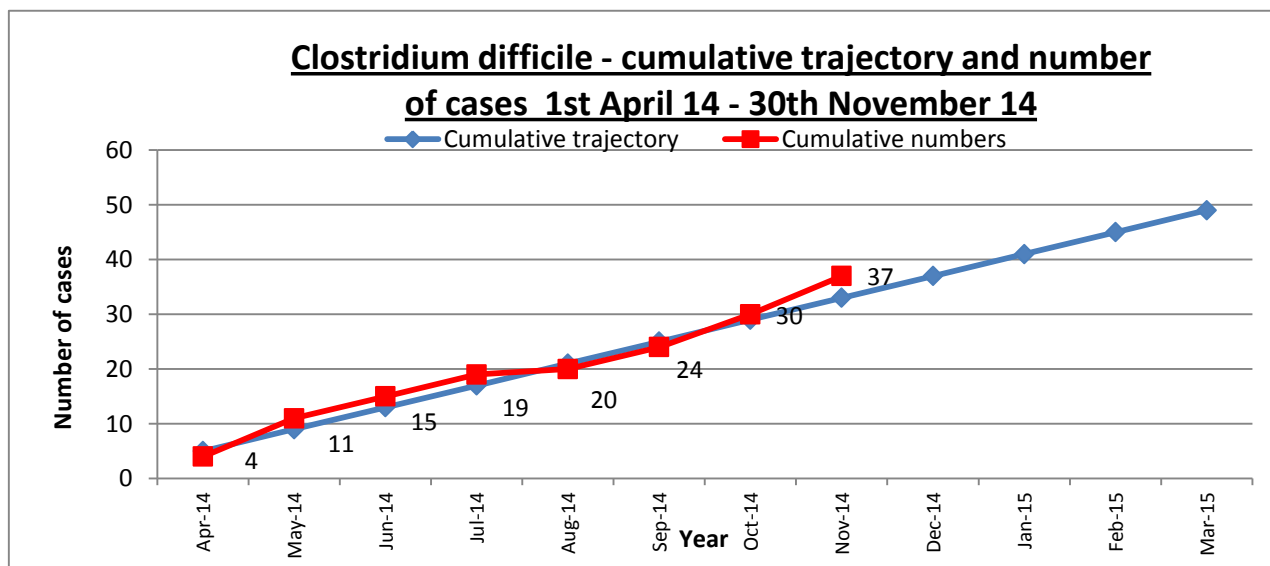
**1.3 Clostridium difficile**

<i>C.difficile</i>	Annual total 13/14	Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	June 14	July 14	Aug 14	Sep 14	Oct 14	Nov 14	Total 14/15 to date	Target for 14/15
Total cases	114	6	16	9	7	10	11	15	11	10	9	13	18	14	101	NA
Not trust apportioned	57	2	6	7	2	7	7	8	7	6	8	9	12	7	64	NA
Trust apportioned	57	4	10	2	5	3	4	7	4	4	1	4	6	7	37	<b>49</b>
- JCUH	46	4	10	2	4	2	2	5	4	2	1	3	6	5	28	
-FHN	3	0	0	0	0	0	2	1	0	2	0	1	0	1	7	
-Carters	2	0	0	0	1	0	0	1	0	0	0	0	0	1	2	
-Redcar PCH	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
-East Cleveland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
-Guisborough	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
-Rutson	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
-Friary	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
-Lambert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

There have been 14 cases of *C.difficile* infection in November 2014, 7 of which are classed as trust-apportioned. The annual target is to have no more than 49 trust-apportioned cases. At the end of November 2014 we were 4 cases above trajectory. Deaths within 30 days after *C.difficile* diagnosis: for October 2014, 3/18 patients died during this period. Since April 2009, 207/1025 (20%) have died during

the 30 day follow-up period. Seven cases are subject to appeal (six to South Tees CCG and one to Hambleton, Richmondshire and Whitby CCG)

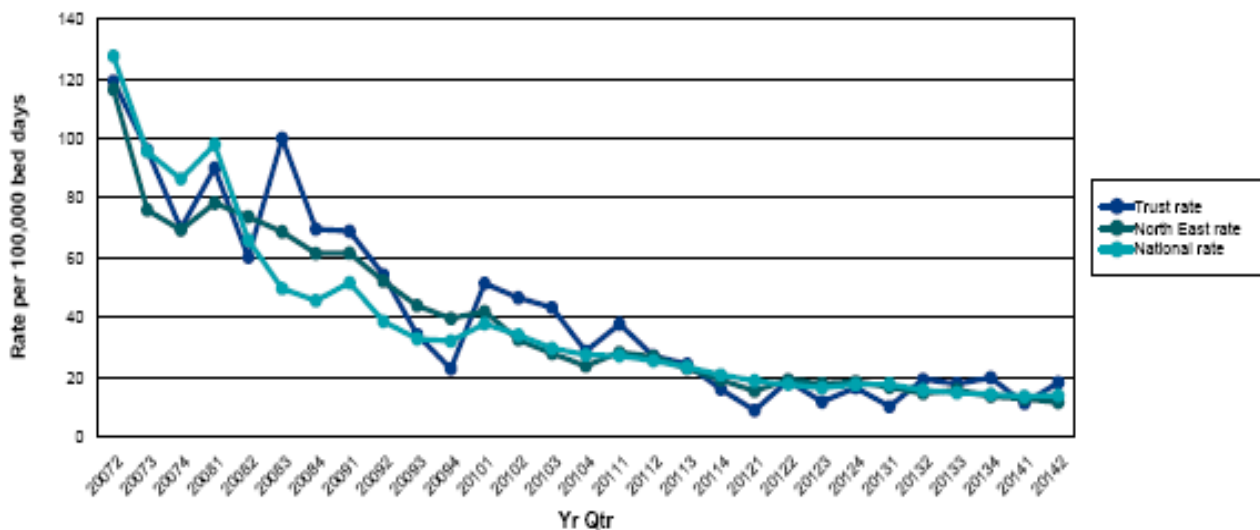
Graph 1: Cumulative trajectory and number of cases 1<sup>st</sup> April to 30<sup>th</sup> November 2014.



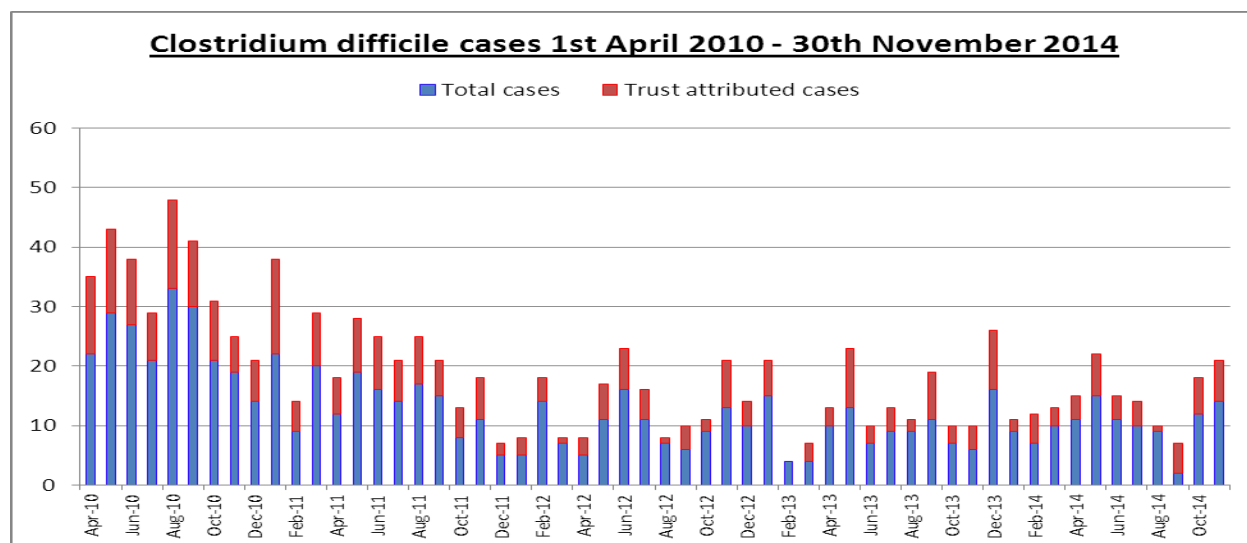
The graph below provides the most up-to-date data from Public Health England comparing the incidence of trust-apportioned *C. difficile* cases with the regional and national average incidence to the end of June 2014.

Graph 2: Trust, regional and national comparison data for *C. difficile* cases

Rate of Trust apportioned CDI per 100,000 bed days - National, Regional and Trust Comparison



Rate based on trust apportioned cases only.  
Calculated using KH03 data

Graph 3: Total number of C.difficile cases by month from 1<sup>st</sup> April 2010 to 30th November 2014.

### **C.difficile action plan**

The following actions were completed in November 2014:

#### Cleaning

- Full implementation of the three additional HP fogging machines.
- Deep cleaned two out of the four designated high risk wards.

#### Communication

- HCAI media campaign posters and banners have been cascaded throughout all hospital sites. The campaign is aimed at patients and visitors and is displayed in patient & public areas. These echo the 'focus on five' themes of antibiotics, cleaning, communication, hand hygiene and isolation and include key points on how patients and public can help reduce infections.

#### Antimicrobial prescribing

- The following table provides the latest average antibiotic prescribing 'A RED' audit results within each centre for November 2014. The number of red RAG rated results has slightly reduced from 18 to 17. 13 red RAG results have demonstrated improved compliance. Three out of six centres demonstrated an improvement in compliance with 'end date' entry following the recent implementation of the revised drug sheet.

Centre	No. Pts in Centre	% Audited	% of Audited Pts on Antibiotics	No. Antibiotics	% Oral	% Enteral	% Parenteral	A		R		E		Agenda Item: 9		
								No. Pts with Antibiotic ALLERGIES	% where antibiotic OK for ALLERGY	% antibiotic courses with REASON on chart	% antibiotic courses with REASON in notes	% antibiotic courses with END DATE (or review date) on chart	% antibiotic courses with END DATE (or review date) in notes	% of antibiotic pts with DAILY REVIEW	No. Antibiotic Courses Reported to JCUH Antibiotic Ward Round	% Antibiotic Courses Deemed Acceptable by JCUH Antibiotic Ward Round Audit
Integrated Medical Care	429	94.6	34	167	53.9	0	46.1	27	88.9	67.7	90.9	65.9	38.8	72.7	159	98.7
Speciality Medicines	93	91.4	41.2	39	25.6	0	74.4	3	100	69.2	94.9	56.4	53.8	80	46	100
Surgical Services	140	89.3	40	58	43.1	0	56.9	7	71.4	44.8	60.3	44.8	39.7	42.6	47	100
Tertiary Services	159	98.1	21.2	39	48.7	0	51.3	4	100	61.5	51.4	43.6	43.2	74.1	48	100
Trauma, Orthopaedics, Theatres & Anaesthetics	133	97.7	26.2	47	48.9	0	51.1	6	66.7	44.7	87.2	51.1	27.7	52.9	42	95.2
Women & Children	14	100	50	8	87.5	0	12.5	1	100	87.5	50	75	12.5	42.9	21	100

## The following actions are planned for December 2014

### Cleaning

- Completion of the last two wards in the deep cleaning programme.

### Communication

- Complete a patient /visitor survey of the HCAI media campaign.

### Performance monitoring

- The *C.difficile* assurance framework has been updated (see appendix 1).
- Continue to secure an agreement in relation to an appeals process with South Tees CCG (agreed process within Hambleton, Richmondshire and Whitby CCG).

## 1.4 Surveillance for other healthcare-associated infections

	Total for 13/14	November 2014	Total 14/15
Bacteraemia due to glycopeptide-resistant enterococci	6	0	2
Bacteraemia due to <i>E. coli</i>	334	39	290
ESBL producing coliform infections	960	83	711
• sample taken in community	591	56	466
• sample taken in our trust	369	27	245
• bacteraemias	17	2	17
Other alert organisms	1	0	0

## 2. OUTBREAKS

Diarrhoea & vomiting outbreaks	Annual total 13/14	Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	July 14	Aug 14	Sep 14	Oct 14	Nov 14	Total 14/15 to date
Total number	2	0	1	1	0	0	0	0	0	0	1	1	0	0	2
Total number of patients affected	43	0	29	14	0	0	0	0	0	0	8	5	0	0	13
Total number of staff affected	8	0	0	3	5	0	0	0	0	0	4	3	0	0	7

### 3. HAND HYGEINE

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The following table provides the first and second month's data using the revised data collection tool and includes the centres overall return rate (although some wards /departments did not complete the mandatory 10 observations) and the average compliance data. Wards and departments will have their individual compliance data.

Centre	Overall return %		Average % compliance	
	Oct 14	Nov 14	Oct 14	Nov 14
Women & Children	20%	57%↑	46%	77%↑
Surgery	57%	57%=	70%	79%↑
Clinical & Diagnostics	18%	20%↑	80%	75%↓
Trauma & Anaesthetics	40%	60%↑	82%	81%↓
Specialty Medicine	43%	50%↑	84%	84%=
Tertiary Services	47%	60%↑	74%	80%↑
Integrated Medicine	72%	65%↓	89%	86%↓

Hand hygiene competency assessments were introduced in 2013. The following table provides the latest centre compliance data up to 30<sup>th</sup> November 2014. The designated infection prevention and control link practitioners is responsible for the completing hand hygiene competencies – it is important that each clinical area has an identified practitioner who has the agreed 7.5 per month to complete these assessments.

Centre	Number of clinical staff	Number of clinical staff completed hand hygiene competency	% of clinical staff completed hand hygiene competency	
		Nov 14	Oct 14	Nov 14
Clinical & Diagnostic	606	84	7%	14%↑
Integrated Medical Care	1015	262	25%	26%↑
Specialty Medicines	399	38	5%	10%↑
Surgery	364	64	14%	18%↑
Tertiary Services	504	176	32%	35%↑
Trauma & Anaesthetics	611	113	9%	18%↑
Women And Children	706	66	0.3%	9%↑
<b>Overall Trust total</b>	<b>4,205</b>	<b>803</b>	<b>14%</b>	<b>19%↑</b>

Please note there have been 120 staff who have submitted their names but have failed to inform the IPC team of their ward or centre and role. These are currently being followed up with the clinical matrons and a monthly reminder is sent to ensure accurate data is submitted. This increases the overall trust total to 22%. In addition, 118 student nurses have also completed hand hygiene competency.

### 4. CLEANING

Within the last 12 months there has been a number of cleaning related activity and developments:

#### **The James Cook University Hospital**

Audit North have recently undertaken a cleanliness audit at The James Cook University Hospital site. Although the final report has not yet been received, the draft report was issued on 21 October 2014 which initially referenced 6 recommendations. After a review meeting had taken place with Audit North and the Trust, the 6 recommendations were reviewed in detail with only 1 remaining as a valid observation. As a result of these findings Audit North acknowledged that there were a number of inaccuracies within their report.

In seeking to add further assurance to the Trust regarding cleanliness standards at JCUH, the Board agreed to undertake an additional audit on the Concessionaires Service Providers staff cleaning training records, the findings from this audit are yet to be formally published.

As the Board will be aware we have recently introduced the use of Hydrogen Peroxide Fogging following terminal cleaning for decontamination of the environment exposed to either confirmed *Clostridium difficile* or suspected infected diarrhoea. By introducing this method of decontamination it is anticipated that we will be able to enhance the effective removal of environmental contamination of *Clostridium difficile* spores and/or other spores that may be present in suspected infected diarrhoea which could potentially lead to a reduction in the incidents of Trust apportioned cases in South Tees Hospitals NHS Foundation Trust.

The cleaning audit results for the JCUH site published by the Concessionaire (Endeavour) each month indicate that overall hospital site cleanliness standard is attaining an audit score of 93% year to date. There is however, a degree of perception that the cleanliness standards within the hospital do not always reflect that such a high standard is being achieved.

To gain formal assurance that the levels of cleanliness are satisfactory, the Trust has developed an integrated cleaning audit programme that incorporates those audits being undertaken by the Concessionaire, it's Service Provider and the Trust. The parties will be utilising the same cleaning services monitoring tool with regular schedule audits each month in High, Medium and Low risk areas.

Unannounced Trust cleaning audits will also be undertaken based upon any negative feedback from the ward based cleaning monitoring pro-formas which are signed off on a daily basis at ward level.

As referenced above, a ward based cleaning pro-forma has been developed which allows each ward area to comment if the standards of cleanliness are not acceptable on a daily and weekly basis and whilst this has been successful in some areas further communication is required to reinforce the importance of Trust staff not signing off ward based cleaning pro-forma's if the standards of cleanliness are not acceptable.

In relation to terminal cleans there has been a significant increase in the number of requests to the Concessionaires helpdesk and a series of meetings have taken place with Trust representatives, the Concessionaire and its Service Provider in order to discuss the issues. One of the outcomes was a re-allocation of resources around the pressure times. This has been successful in the main; however, a further member of staff is in the process of being appointed to the terminal clean team which will further assist as we move into our winter pressures season.

Concerns have been raised around the cleaning of en-suites following a patient discharge and whilst options are being considered it has been agreed that going forward any en-suites requiring cleaning following patient discharge will require a call to the Concessionaires Helpdesk to place an Ad Hoc service request with a Priority A Response which will ensure that the en-suite is cleaned within one hour. A risk alert detailing this has been issued.

### **The Friarage Hospital**

At the Friarage Hospital cleaning continues to perform well and October audit results stood at 96.13%. The use of Hydrogen Peroxide was introduced in 2011 and continues to be used in line with the guidance issued by the Trust's IPC team.

With regard to training initiatives, a programme was developed with the Vocational Training Department in 2013 and a number of domestic and housekeeping staff have already attained NVQ Level 2 in Support Services with further staff currently undergoing training

## **5. EBOLA/ VIRAL HAEMORRHAGIC FEVER PREPAREDNESS**

The Ebola steering group met four times in November 2014 and there is now a weekly operational meeting to support the development of our plans:

- 196 staff have completed observation or donning of personal protective equipment training.

- A draft Ebola response plan has been completed.
- Ordered and received high specification personal protective equipment.

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It is important to recognise the amount of staff time and cost associated with the Ebola preparation.

## **6. RECOMMENDATIONS**

All centres to continue to support and engage completely with all measures to reduce healthcare-associated infections.

**RUTH HOLT**  
**DIRECTOR OF NURSING & QUALITY ASSURANCE (DIPC)**

**December 2014**

**Appendix 1 – C.difficile assurance framework attached**



Clostridium difficile  
assurance framework