

<b>Meeting / committee:</b>	Board of Directors	<b>Meeting date:</b>	25 November 2014
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<b>Title:</b>	Healthcare-associated infection report for October 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 October 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 October 2014, with a total of 3 trust-assigned cases for the first 7 months of 2014/15.</li> <li>• There is no official MSSA bacteraemia target for 2014/15. There has been 1 trust-apportioned cases in October 2014, with a total of 15 trust-apportioned cases for the first 7 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 6 trust-apportioned cases in October 2014, with a total of 30 trust-apportioned cases in the first 7 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 OCTOBER 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	Total 2014/15 to date	Target for 2014/15
Total cases	8	0	1	0	1	3	0	0	1	1	0	2	0	4	NA
Not trust assigned	4	0	1	0	1	1	0	0	0	0	0	1	0	1	NA
Trust assigned	4	0	0	0	0	2	0	0	1	1	0	1	0	3	NA

There have been 0 cases of MRSA bacteraemia in October 2014. We are awaiting the final version of the MRSA review report, although we have already identified a number of priorities and the following actions have been implemented including routine incident reporting for all cases of MSSA and E.coli bacteraemia, change of terminology from 'eradication' treatment to 'decolonisation' treatment. Further developments such as the identification of nominated non-executive lead for IPC on the Trust board and investigation of MRSA infections of sterile sites are being considered as part of an action plan.

## 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	Total 2014/15 to date	Target for 2014/15
Total cases	92	6	3	9	16	8	6	16	11	8	9	14	8	72	NA
Not trust apportioned	64	5	1	7	13	5	5	12	8	7	8	10	7	57	NA
Trust apportioned	28	1	2	2	3	3	1	4	3	1	1	4	1	15	NA

There have been 8 cases of MSSA bacteraemia in October 2014; 1 of which was 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. One area highlighted has been the management of Hickman lines which has led to the development of a Trust wide database and staff competencies is being explored.

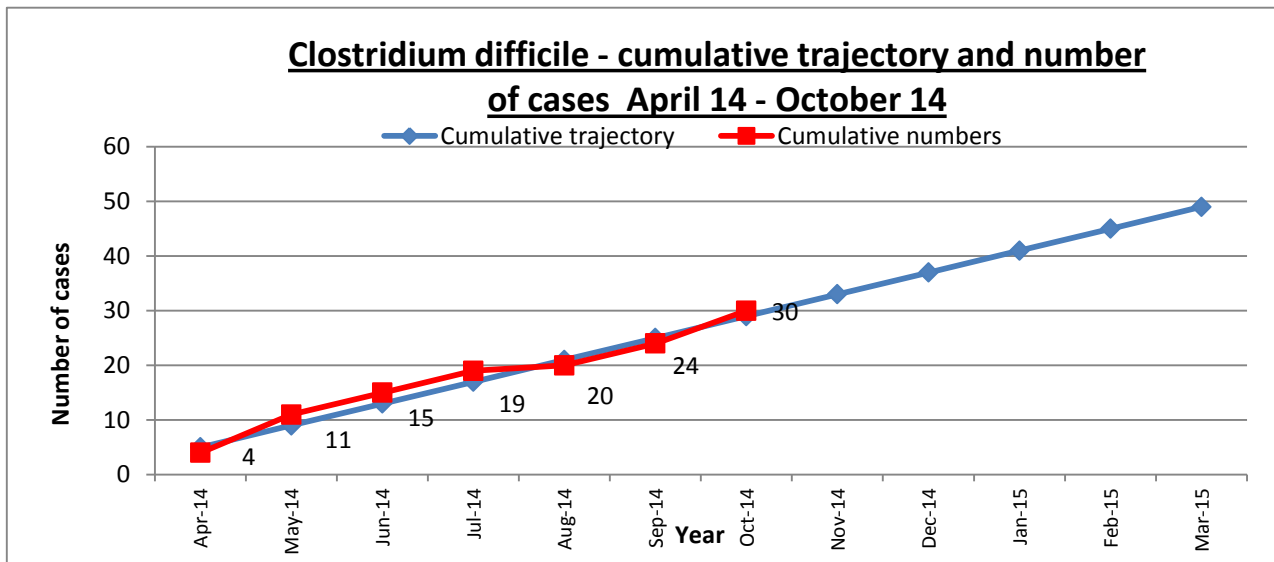
1.3 *Clostridium difficile*

<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	Total 2014/15 to date	Target for 2014/15
Total cases	114	6	16	9	7	10	11	15	11	10	9	13	18	87	NA
Not trust apportioned	57	2	6	7	2	7	7	8	7	6	8	9	12	57	NA
Trust apportioned	57	4	10	2	5	3	4	7	4	4	1	4	6	30	<b>49</b>
- JCUH	46	4	10	2	4	2	2	5	4	2	1	3	6	23	
-FHN	3	0	0	0	0	0	2	1	0	2	0	1	0	6	
-Carters	2	0	0	0	1	0	0	1	0	0	0	0	0	1	
-Redcar PCH	2	0	0	0	0	1	0	0	0	0	0	0	0	0	
-East Cleveland	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	
-Rutson	3	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	
-Lambert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

There have been 18 cases of *C.difficile* infection in October 2014, 6 of which are classified as **aged patients** apportioned. The annual target is to have no more than 49 trust-apportioned cases. At the end of October 2014 we were one case above trajectory. There has been a cluster of three *C.difficile* toxin

detected cases and one case of *C.difficile* toxin not detected on ward 3, JCUH in October 2014. A potential cluster meeting was held on 31<sup>st</sup> October 2104 and a number of routine actions were implemented. A further meeting was held on 12<sup>th</sup> November 2014. We are currently awaiting ribotyping results but no further cases have been identified. Deaths within 30 days after *C.difficile* diagnosis: for September 2014, 0/13 patients died during this period. Since April 2009, 204/1007 (20%) have died during the 30 day follow-up period.

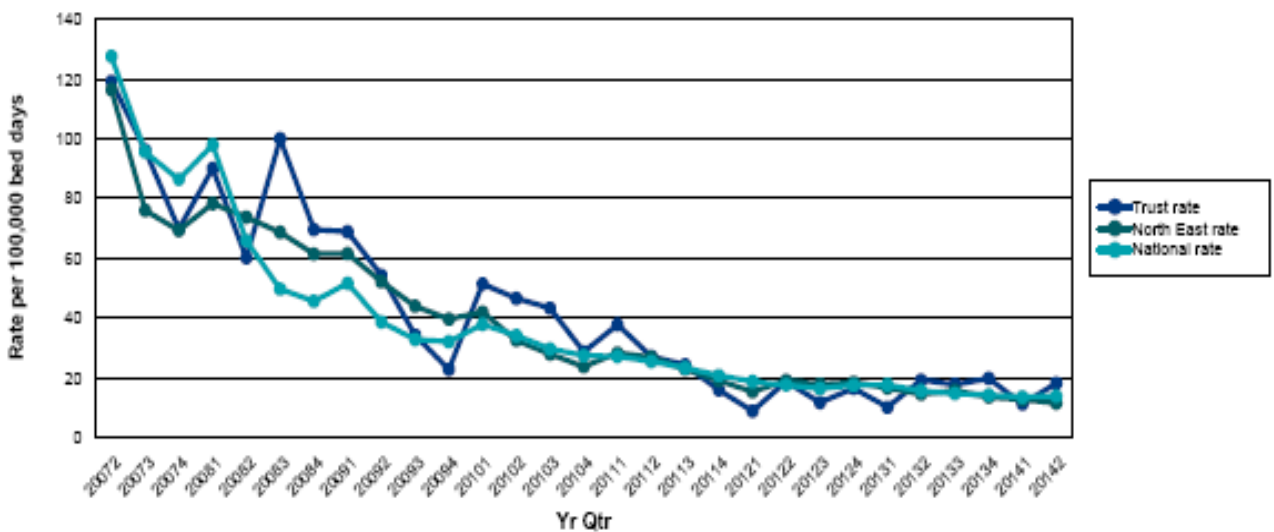
**Graph 1: Cumulative trajectory and number of cases 1<sup>st</sup> April to 30<sup>th</sup> September 2014.**



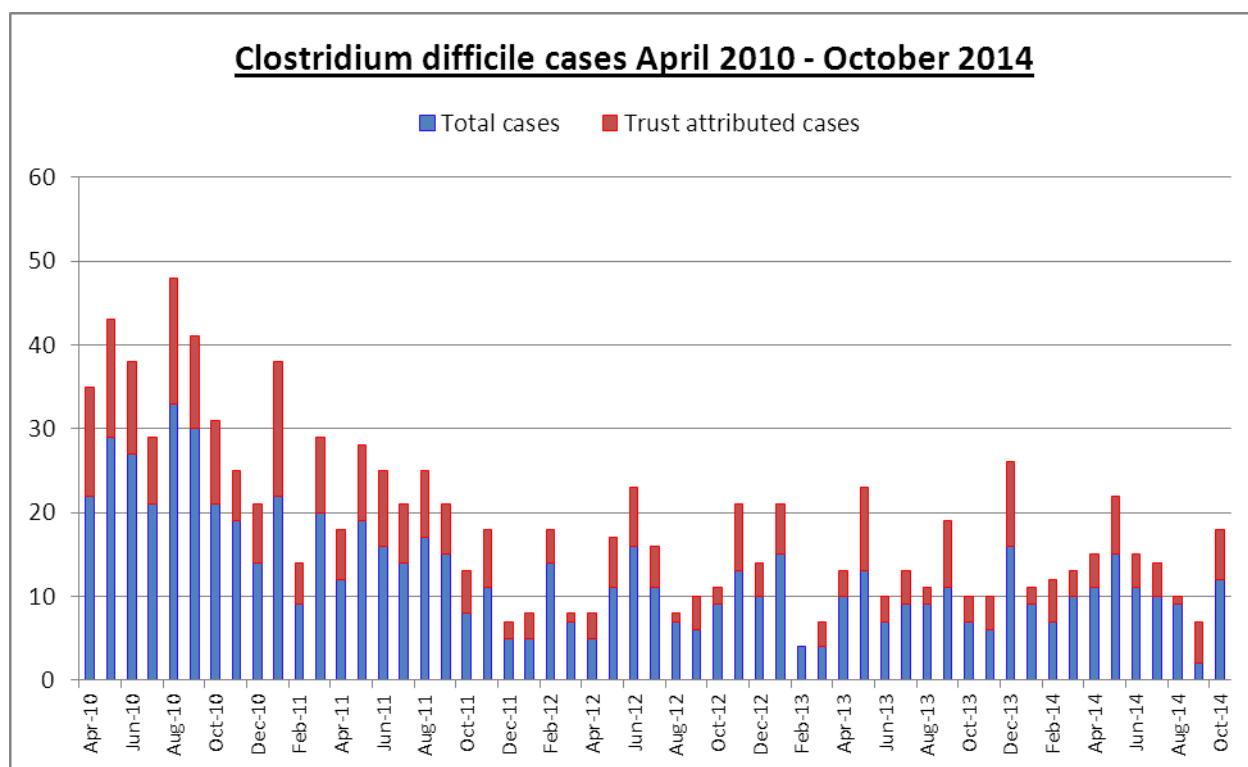
The graph below provides the most up-to-date data from Public Health England comparing the incidence of trust-apportioned *C difficile* cases with the regional and national average incidence to the end of June 2014.

**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 April 2010 to September 2014.

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

The following actions were completed in October 2014:

#### Cleaning

- Procurement of the three additional HP fogging machines was completed.

#### Communication

- The ideas and actions from the joint HCAI collaborative and infection prevention action group workshop have been prioritised and have been included in the updated *C.difficile* action plan.
- Finalised the HCAI public awareness campaign material, including poster's and banners which include key messages related to the focus on five - antibiotics, cleaning, communication, hand hygiene and isolation and awaiting delivery.
- The visit to the University Hospitals of Coventry and Warwickshire on 23<sup>rd</sup> October 2104 identified a number of possible lessons learnt including IPC team focus on project working, focussed IPC related campaigns, use of social media and celebrating *C.difficile* free days within ward/departments. These will be further explored and added to the *C.difficile* action plan.

#### Performance monitoring

- Following clinical incident review panels the trust has identified five cases to appeal as there was no evidence of breaches in practice. The process for appeals is currently being agreed with the CCG's.
- Trust wide implementation of the revised hand hygiene compliance audit tool was completed from 1<sup>st</sup> October 2014. The revised tool will specifically include at least five observations of 'point of care' activity which should result in more meaningful hand hygiene compliance data.

- IPC team have commenced a number of snapshot audits related to the *C.difficile* action plan assurance. This has included staff knowledge of isolation cleaning solutions, awareness of correct STOP sign and SPARED and ERA campaign.

Antimicrobial prescribing

- The following table provides the average antibiotic prescribing ‘A RED’ audit results within each centre for October 2014. Although there are still a number of red RAG rated results the compliance is improving and more detailed improvement data will be provided in next month’s report. Is it expected a continued improvement in compliance with ‘end date’ entry will occur due to 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		D		
								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 ICUH Antibiotic Ward Round	% Antibiotic Courses Deemed Acceptable by ICUH Antibiotic Ward Round Audit
IMCC	434	97.9	34.1	180	46.7	0.6	52.7	22	100	59.4	88.9	59.4	42.8	72.7	201	99
Speciality Medicines	94	96.8	37.4	41	48.8	0	51.2	5	80	75.6	95.1	78	68.3	93.9	44	97.7
Surgical Services	128	92.2	41.5	48	37.5	0	62.5	6	100	35.4	56.3	47.9	27.1	45.9	89	97.8
Tertiary Services	108	93.5	18.8	21	52.4	0	47.6	5	100	61.9	71.4	52.4	52.4	63.2	58	100
Trauma and Anaes.	126	94.4	41.2	68	52.9	0	47.1	10	70	41.2	88.2	32.4	41.2	76.6	50	96
Women & Children	15	100	13.3	3	66.7	0	33.3	1	100	0	0	0	0	0	19	100

- The trust has received a draft Audit North ‘Antibiotic Stewardship audit’ report.

**The following actions are planned for November 2014**

Cleaning

- Full implementation of the additional HP fogging machines commenced 10<sup>th</sup> November 2014 and the borrowed HP fogging machine was returned to FHN site. This finally concludes the work to deliver our business case on HP fogging and allow us to fog all rooms following discharge of patients who have had potential or actual, infective diarrhoea. Compliance monitoring will be completed and shared at cleaning services review group.
- Following the potential *C.difficile* cluster on ward 3 a deep clean / HP fogging programme is to be completed onwards 1, 2, 3 and 15 utilising ward 11 as a decant facility. This will result in a delay to opening the winter pressure ward.
- Cleaning continues to be an area of concern and a more detailed report will be provided in next month’s report.

Communication

- HCAI media campaign posters and banners, which is aimed at patients and visitors will be displayed in patient and public areas all hospital sites and the Trusts internet. 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.

- The *C.difficile* assurance framework has been updated (see appendix 1).
- Agree appeals process with South Tees and Hambleton, Richmondshire and Whitby CCG's.

#### 1.4 Surveillance for other healthcare-associated infections

	Total for 13/14	October 2014	Total 14/15
Bacteraemia due to glycopeptide-resistant enterococci	6	0	2
Bacteraemia due to <i>E. coli</i>	334	41	251
ESBL producing coliform infections	960	98	628
• sample taken in community	591	62	410
• sample taken in our trust	369	36	218
• bacteraemias	17	3	15
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 2014	Sep 2014	Oct 14	Total 14/15 to date
Total number	2	0	1	1	0	0	0	0	0	0	1	1	0	2
Total number of patients affected	43	0	29	14	0	0	0	0	0	0	8	5	0	13
Total number of staff affected	8	0	0	3	5	0	0	0	0	0	4	3	0	7

## 3. HAND HYGEINE

The following table provides the first 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
Women & Children	20%	46%
Surgery	57%	70%
Clinical & Diagnostics	18%	80%
Trauma, Anaesthetics	40%	82%
Specialty Medicine	43%	84%
Tertiary Services	47%	74%
Integrated Medicine	72%	89%

From the beginning of October the Hand hygiene competencies have been collated centrally. These were originally introduced in 2013. The following table provides the latest centre compliance data up to 31st October 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 has the agreed 7.5 hours per month to complete these assessments. The competency rates are being addressed through clinical governance meetings and weekly clinical matron check lists.

Centre	Number of clinical staff	Number of clinical staff completed hand hygiene competency	% of clinical staff completed hand hygiene competency
Clinical & Diagnostic Services	606	45	7%
Integrated Medical Care	1015	253	25%
Specialty Medicines	399	18	5%
Surgery	364	51	14%
Tertiary Services	504	160	32%
Trauma, Theatres & Anaesthetics	611	52	9%
Women And Children	706	2	0.3%
<b>Overall Trust total</b>	<b>4,205</b>	<b>581</b>	<b>14%</b>

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

The Ebola planning committee met twice in October 2014 and there is now a weekly meeting to develop our plans.

#### **5. NEW INFECTION PREVENTION & CONTROL NURSING ARRANGEMENTS**

As part of an overall IPC nursing review, a number of initiatives are to be implemented over the next few weeks including focus on specific HCAI projects, increase in intensive IPC support programmes and controlled reduction in routine patient surveillance which will be closely monitored and formally reviewed.

#### **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)**

**November 2014**

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