

Director of Infection Prevention and Control Report 6 November 2019

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Agenda Item No: 11.5

Trust Board Report

Meeting Date:	6 th November 2019
Title:	Director of Infection Prevention and Control Report
Executive Summary:	The report gives an overview of healthcare associated infection related data for the first two quarters, with reference to external and internal targets. The Board need to be aware of successes and challenges in healthcare associated infection, with particular reference to the challenge posed by the new method of <i>Clostridium difficile</i> case attribution and the associated increase in Trust-attributed cases. Healthcare associated infection rates are monitored monthly at Infection Prevention and Control Group. This report was received and noted by Trust Management Committee in October 2019.
Action Requested:	Receive and note
For the attention of the Board	<ul style="list-style-type: none"> • No RWT- attributable MRSA bacteraemia in Q1&2 • 27 cases of toxin positive <i>Clostridium difficile</i> (externally attributable) against a target of 20 in Q1&2 • 10 RWT-attributable MSSA bacteraemia against a target of 12 for Q1&2 • 38 MRSA acquisitions in Q1&2, which is higher than at this point in the preceding 6 years. • 21 Device Related Healthcare Associated Bacteraemias in Q1&2, below our internal target (24) • An increase in the number of new CPE positive patients identified is due to the introduction of a more sensitive (molecular) screening method. • Compliance with mandatory training is below 95% for Infection Prevention, Antimicrobial Prescribing and Hand Hygiene competency
Assure	Meeting external MRSA target and meeting internal MSSA, DRHAB, <i>C. difficile</i> targets. New CPE screening method is detecting more patients.
Advise	Above trajectory against external <i>C. difficile</i> target Increase in MRSA acquisition although this situation is improving.
Alert	None
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Links to Trust Strategic Objectives	<ol style="list-style-type: none"> 1. Create a culture of compassion, safety and quality 2. Proactively seek opportunities to develop our services 3. To have an effective and well integrated local health and care system that operates efficiently 5. Maintain financial health – Appropriate investment to patient services 6. Be in the top 25% of all key performance indicators
Resource Implications:	Revenue: Potential fine for not meeting external <i>C difficile</i> target

Report Data Caveats	The previous month's data may be subject to change following scrutiny of RCAs.
CQC Domains	<p>Safe: patients, staff and the public are protected from abuse and avoidable harm.</p> <p>Effective: care, treatment and support achieves good outcomes, helping people maintain quality of life and is based on the best available evidence.</p> <p>Responsive: services are organised so that they meet people's needs.</p> <p>Well-led: the leadership, management and governance of the organisation make sure it's providing high-quality care that's based around individual needs, that it encourages learning and innovation, and that it promotes an open and fair culture.</p>
Equality and Diversity Impact	None
Risks: BAF/ TRR	Trust reputational risk if infections increase, financial consequences of not meeting external targets
Risk: Appetite	No change
Public or Private:	Public
Other formal bodies involved:	TMC, CCG, Public Health contract IP services from RWT
References	The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance (2015)
NHS Constitution:	<p>In determining this matter, the Board should have regard to the Core principles contained in the Constitution of:</p> <ul style="list-style-type: none"> • Equality of treatment and access to services • High standards of excellence and professionalism • Service user preferences • Cross community working • Best Value • Accountability through local influence and scrutiny

Brief/Executive Report Details																																																			
1	<p>Clostridium difficile Infection</p> <p>The annual objective for <i>Clostridium difficile</i> toxin positive cases this year was increased to 40, reflecting a change in the definition of attribution, such that attributable cases are toxin positive cases that have either been diagnosed on day 2 or more after admission, or that are diagnosed within 4 weeks of discharge from the Trust. In Q1&2 there were 27 cases against a trajectory of 20 (see appendix 1). PCR (non-toxin) cases are also monitored as patient outcomes can be just as harmful to patient safety. At the end of Q2 there had been 49 PCR positive cases against our internal annual target of 54 at the end of this period (see appendix 1).</p> <p>MRSA Bacteraemia</p> <p>The national objective for MRSA bacteraemia is zero for all NHS organisations. In Q1&Q2 there was one MRSA bacteraemia, but was this pre-48h and attributable to Wolverhampton CCG. It was not related to care at RWT.</p> <p>Monthly totals and number attributable to RWT</p> <table border="1"> <thead> <tr> <th></th> <th>Apr</th> <th>May</th> <th>Jun</th> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> <th>Jan</th> <th>Feb</th> <th>Mar</th> </tr> </thead> <tbody> <tr> <td>18-19 (RWT)</td> <td>0 (0)</td> <td>1 (1)</td> <td>1 (0)</td> <td>1 (1)</td> <td>0 (0)</td> <td>2 (0)</td> <td>0 (0)</td> <td>0 (0)</td> <td>0 (0)</td> <td>1 (0)</td> <td>0 (0)</td> <td>0 (0)</td> </tr> <tr> <td>19-20 (RWT)</td> <td>0 (0)</td> <td>0 (0)</td> <td>1 (0)</td> <td>0 (0)</td> <td>0 (0)</td> <td>0 (0)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>MSSA bacteraemia</p> <p>MSSA is externally monitored by PHE but targets are set internally. MSSA bacteraemia is</p>													Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	18-19 (RWT)	0 (0)	1 (1)	1 (0)	1 (1)	0 (0)	2 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	19-20 (RWT)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)						
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar																																							
18-19 (RWT)	0 (0)	1 (1)	1 (0)	1 (1)	0 (0)	2 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)																																							
19-20 (RWT)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)																																													

a good proxy for MRSA bacteraemia and may be avoidable therefore a local target is applied and cases investigated. In Q1&2 there were a total of 10 cases against a target of 12.

Monthly totals and number attributable to RWT

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
18-19	5	8	9	12	5	1	4	11	4	3	10	9
(RWT)	(5)	(4)	(4)	(3)	(0)	(0)	(2)	(3)	(1)	(1)	(1)	(5)
19-20	8	4	7	2	14	7						
(RWT)	(1)	(3)	(0)	(1)	(3)	(2)						

MRSA Acquisitions

There were 38 MRSA acquisitions in Q1&2, which is higher than at this point in the preceding 6 years (see Appendix 1). There have been outbreaks on 3 wards (C19, Stroke Unit and C16); C16 is now 8 weeks and Stroke ward is now 7 weeks without an acquisition. C19 is now 3 weeks without an acquisition, having previously gone 7 weeks without an acquisition.

DRHABS

Bacteraemia (any organism) related to a medical device is surveyed and acted upon. So far there have been 21 DRHABS against an internal target of 4 cases/month (48 per year, see Appendix 1); eleven were related to intravenous lines, seven to catheters and 3 to other devices.

Gram negative bacteraemias

Gram negative bacteraemias include a number of organisms and there was a national ambition to reduce *E. coli* bacteraemias by 50% by 2021, which has been revised to 25%. In Q1&2 there were 33 RWT-attributable *E. coli* bacteraemias, two fewer than the same period last year.

Carbapenemase producing Enterobacteriaceae

These multi-antibiotic resistant organisms have caused large outbreaks in UK Trusts, putting patients at risk and causing organisational disruption. In May 2019 a new, more sensitive molecular screening method was introduced. This has resulted in increased detection of new cases, with 26 new cases detected in Q1&2, compared with a total of 20 cases in 2018-19 (see Appendix 1). This improved detection should reduce the risk of spread from undetected cases.

Blood culture contaminants

The blood culture contamination rate remains low with effective use of the phlebotomy service when available. The average rate for Q1&2 was 1.52%, well below the recommended maximum rate of 3%.

Outbreaks and Incidents

C. difficile Periods of Increased Incidence (PIIs)

There have been a number of potential clusters of *C. difficile* infections during Q1&2; wards affected were SEU, A14, Clinical Haematology Unit, C15 and Deanesly. Typing and epidemiological data did not reveal any linkage between cases. Remedial actions have been taken as appropriate.

MRSA Acquisition Periods of Increased Incidence (PIIs)

As described above, there have been PIIs on C16, C19 (both classed as SI) and Stroke unit. Typing demonstrated evidence of spread between patients. Actions taken include enhanced screening and cleaning, education of staff on hand hygiene, and review of equipment cleaning.

Objectives for 2019/20

CDI - 40 cases (+ 6 cases but new definition of external attribution introduced this year)

CDI WCCG - 48 cases (- 22 cases but new definition of external attribution introduced this year)

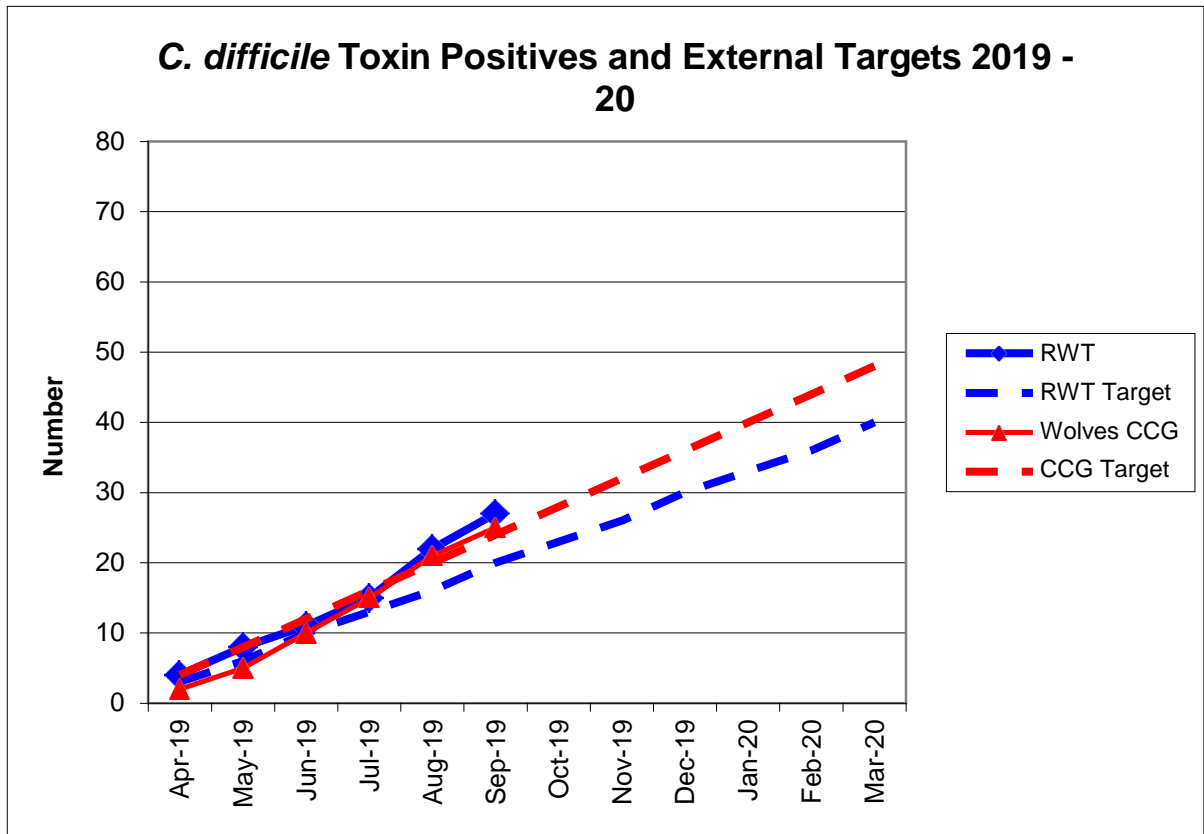
MRSA bacteraemia - 0

Flu vaccination - 80% by 28th Feb 2020

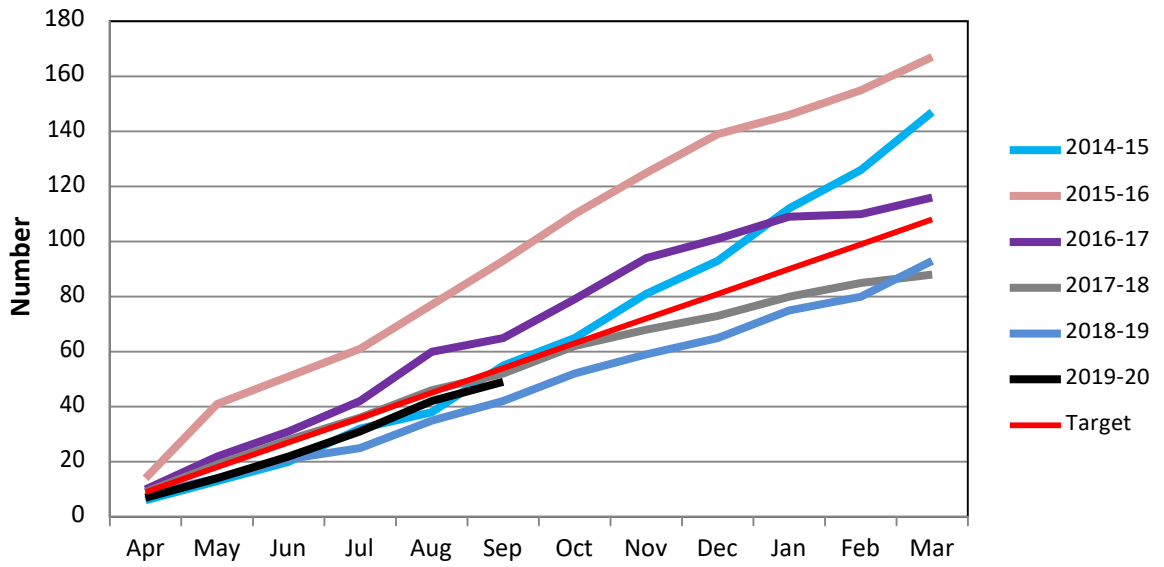
E. coli bacteraemia – no target has been advised, national ambition to reduce Gram negative bacteraemias by 25% by 2021.

Appendices

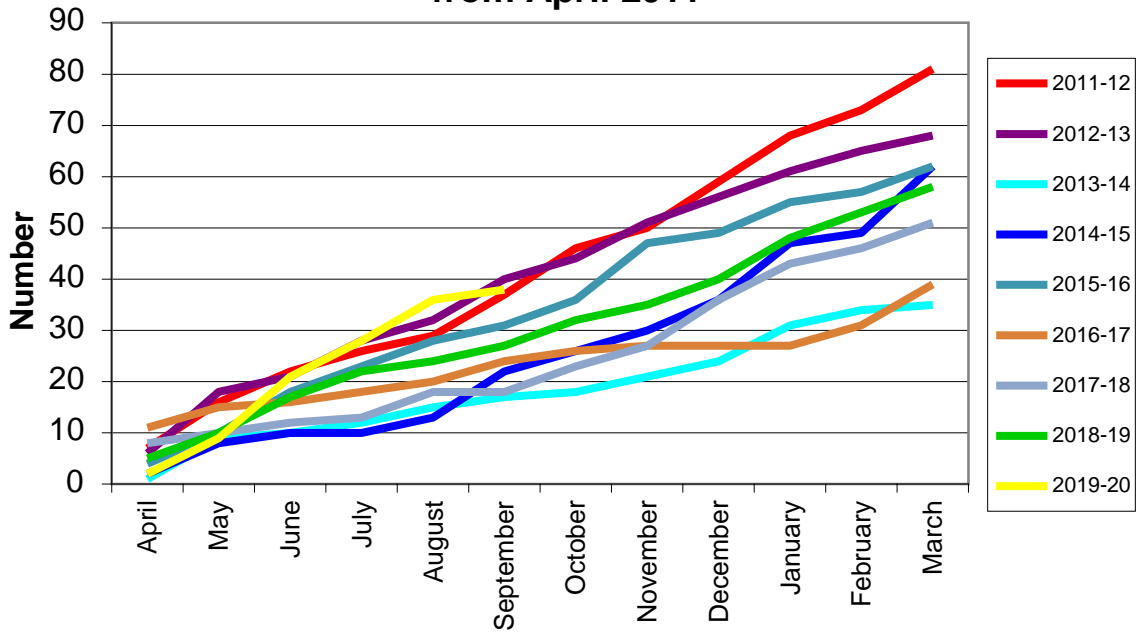
1 Appendix 1 – Illustrative charts of Infection data

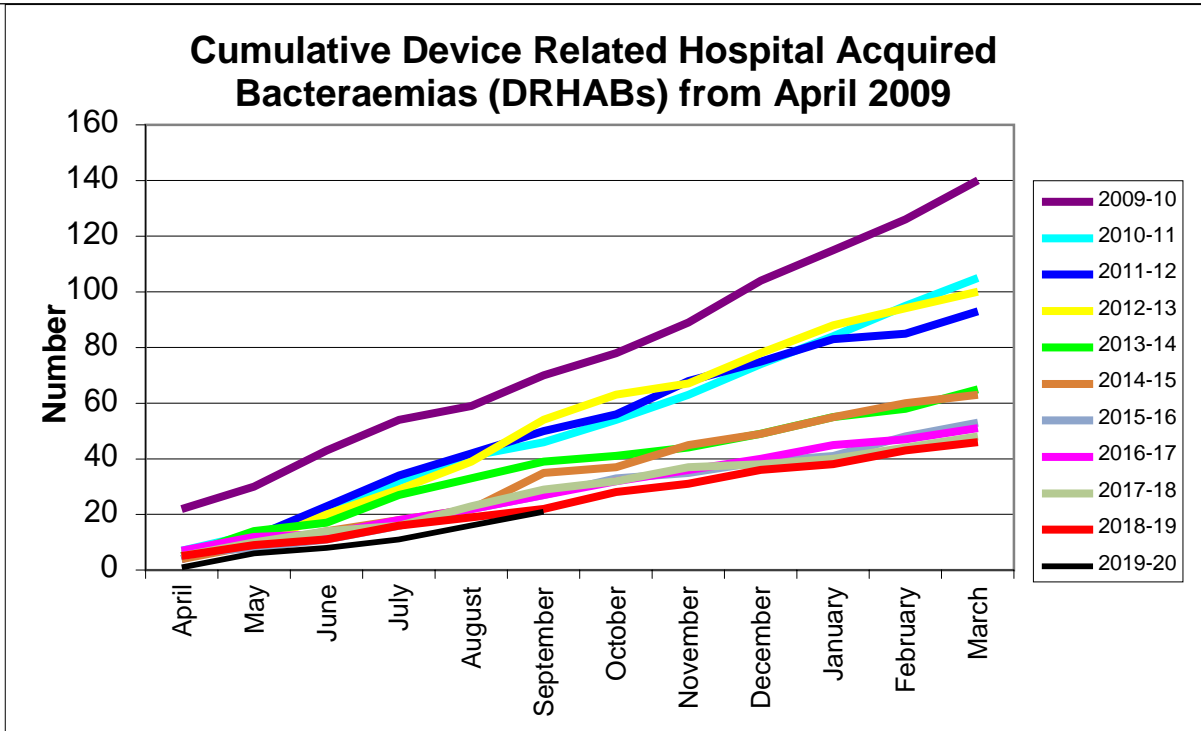


Cumulative C. difficile Positives All Methods RWT Internal Definition of Attribution from 2014-15



Cumulative RWT-Attributable MRSA Acquisitions from April 2011





Number of new patients colonised with CPE identified. The three most common types of CPE are New Delhi Metallo-beta-lactamase (NDM), OXA-48, and Klebsiella pneumoniae carbapenemase (KPC).

	NDM	OXA-48	KPC	Others	Total
2012-13	2	0	0	0	2
2013-14	5	1	2	0	8
2014-15	2	0	6	0	8
2015-16	4	1	7	0	12
2016-17	6	2	9	1	18
2017-18	19	6	9	2	34
2018-19	15	3	2	0	20
2019-20	11	14	2	2	26