

**EXECUTIVE SUMMARY****REPORT TO THE COUNCIL OF GOVERNORS – 6 DECEMBER 2016**

<b>Subject</b>	Infection Prevention and Control (IPC) Update
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<b>Status<sup>1</sup></b>	N

**PURPOSE OF THE REPORT**

This paper provides the Healthcare Governance Committee with:

- 1) The performance against the local Methicillin Resistant Staphylococcus Aureus (MRSA) bacteraemia plan for October 2016.
- 2) The performance against the local Clostridium difficile (*C.diff*) plan for October 2016.
- 3) The performance against the Trust Methicillin Sensitive Staphylococcus Aureus (MSSA) bacteraemia plan for October 2016.
- 4) The performance on E.Coli bacteraemia.
- 5) Strategic issues related to Infection Prevention and Control (IPC).

**KEY POINTS**

- The Trust has had 0 cases of Trust Attributable MRSA bacteraemia during October 2016.
- *C.diff* target performance is off trajectory against both the internal and NHS Improvement *C.diff* plan.
- MSSA performance is off trajectory against the MSSA plan.
- Strategic IPC issues.

**IMPLICATIONS<sup>2</sup>**

<b>AIM OF THE STHFT CORPORATE STRATEGY 2012-2017</b>		<b>TICK AS APPROPRIATE</b>
1	Deliver the Best Clinical Outcomes	✓
2	Provide Patient Centred Services	✓
3	Employ Caring and Cared for Staff	
4	Spend Public Money Wisely	✓
5	Deliver Excellent Research, Education & Innovation	

**RECOMMENDATIONS**

The Healthcare Governance Committee is asked to debate the contents of this report.

**APPROVAL PROCESS**

<b>Meeting</b>	<b>Date</b>	<b>Approved Y/N</b>
Management Board Briefing	18 November 2016	
Healthcare Governance Committee	28 November 2016	

<sup>1</sup> Status: A = Approval  
A\* = Approval & Requiring Board Approval  
N = Note

<sup>2</sup> Against the three pillars (aims) of the STH Corporate Strategy 2008-2012

## 1. **INTRODUCTION**

This report provides the Healthcare Governance Committee with information on the year to date performance against the MRSA bacteraemia plan for 2016/17, the *C.diff* plan for 2016/17 and also the MSSA bacteraemia plan for 2016/17. Information is also included on the number of cases of E.Coli bacteraemia. In addition, attention is drawn to a number of key IPC issues.

## 2. **2016/17 MRSA PERFORMANCE**

### 2.1 **MRSA thresholds for 2016/17**

Bacteraemia are either classified as Trust attributable or community acquired. Each case of MRSA bacteraemia is subject to a Post Infection Review (PIR). The responsibility for conducting the PIR is determined by when the bacteraemia is identified; for any bacteraemia identified on day 0 or day 1, the patient's Clinical Commissioning Group (CCG) organise the PIR, for any case identified after that the Trust organise the PIR.

NHS England adopted a zero tolerance approach to MRSA bacteraemia from 2013/14 and as such the Trust national target remains zero. Any cases attributed to the Trust will be subject to a contractual penalty of £10k.

### 2.2 **MRSA performance for October 2016**

There have been 0 cases of MRSA bacteraemia recorded for the month of October.

The full year performance is 2 cases of MRSA bacteraemia assigned to the Trust.

For 2016/17 the target for MRSA is zero.

### 2.3 **MRSA Screening**

The MRSA screening figures for October were 104%.

The MRSA screening figures are calculated using the number of screens processed by the laboratory for the month divided by the number of admissions for the month. This is used as a proxy measure as the Trust information systems are not able to reconcile individual screens with individual patients. A figure of over 100% may indicate that the volume of screens being undertaken is in line with all patients being screened for MRSA as per Trust policy.

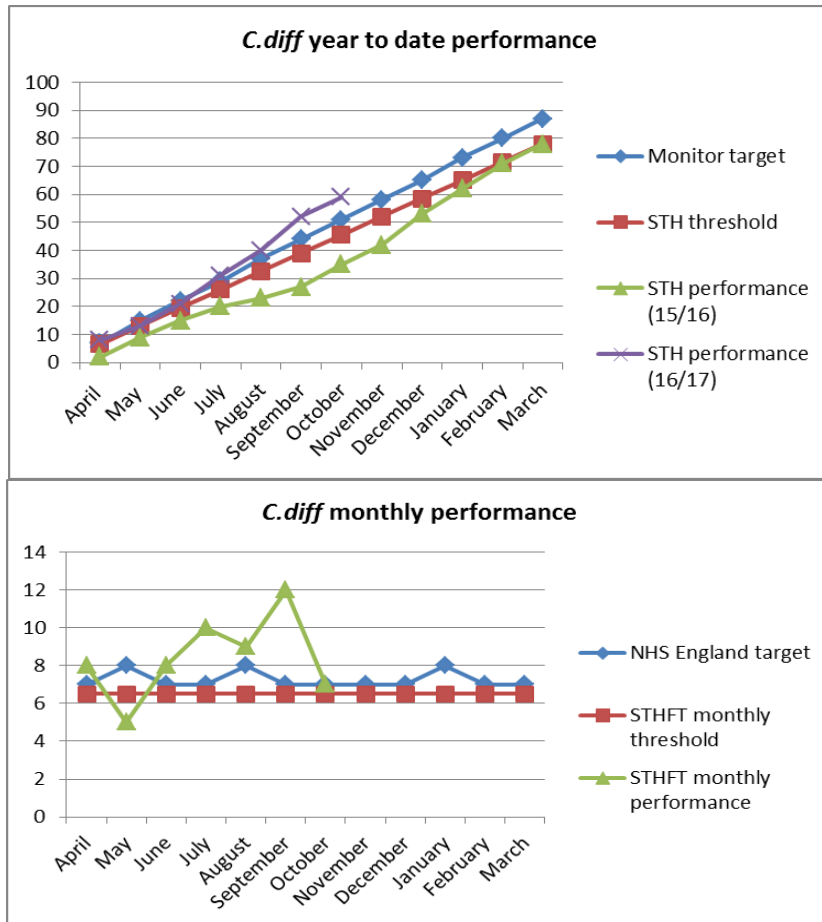
To ensure that MRSA screening protocols are being followed at ward and department level, the Infection Control Programme specifies how the IPC team will undertake MRSA screening compliance audits in each area each year.

## 3. **2016/17 C.DIFF PERFORMANCE**

STHFT has recorded 7 positive samples for October. The full year performance is 59 cases of *C.diff* against an internal threshold of 45.5 and a NHS Improvement threshold of 51.

The Trust has been set a contract threshold of 87 cases, but to ensure that we aim to continue to reduce incidence of *C.diff* in the Trust, an internal target of 78 has been set.

NHS Improvement has indicated that it intends that *C.diff* will be part of the Single Oversight Framework, which it will use to performance manage Trusts.



Discussions with NHS Improvement have highlighted that although they continue to note the total number of cases attributable to the Trust; they are only considering those cases which were associated with a lapse in care against the target of 87.

The types of issues which would result in the infection being considered to be associated with a lapse in care could be any case where there was evidence of transmission of *C.diff* in hospital such as via ribotyping of the infection indicating the same strain is involved, where there were breakdowns in cleaning or hand hygiene, or where there were problems identified with choice, duration, or documentation of antibiotic prescribing. It must be noted that none of these would indicate that the infection was definitely caused by the provider organisation, only that it cannot be stated that best practice was followed at all times.

Of the 21 cases of *C.diff* from quarter 1, 9 cases were and 12 cases were not associated with lapses in care. For quarter 2, of the 31 cases, 7 cases were and 24 cases were not associated with lapses in care. For the year to date, 16 cases out of 52 were associated with lapses in care. This information has been ratified by NHS Sheffield CCG.

The Infection Control Operational Group have discussed the rise in cases of *C.diff* identified by the Trust since April and have considered the findings from the root cause analyses undertaken. As a result, a series of enhanced actions are being undertaken and these are described in appendix 1.

### 3.1 Surveillance

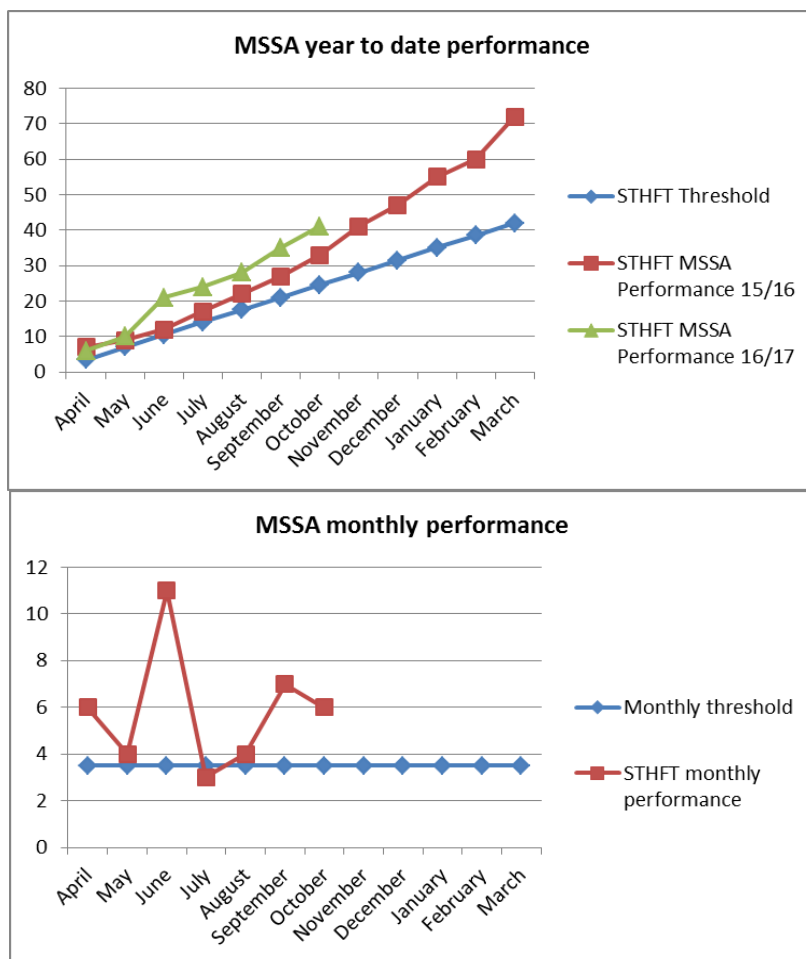
It is good practice to consider carefully any areas which experience more than 1 episode of *C.diff* within a 28 day period. The positive samples are tested to see if they are the same ribotype which may indicate that cross infection has taken place. A series of audits are undertaken by the IPC team to check performance on essential infection control standards such as commode cleanliness and hand hygiene regardless of whether the episodes of *C.diff* are thought to be linked or not.

Ward 2 and 3 and Weston Park Day Case Unit at Weston Park Hospital are currently under surveillance for *C.diff* having had at least 2 episodes of *C.diff* within a 28 day period.

### 4. MSSA

The Trust continues to return data on the number of cases of MSSA bacteraemia to Public Health England. Cases are labelled as either Trust attributable or community acquired. For October, 6 Trust attributable cases of MSSA bacteraemia were recorded; this is worse than the monthly trajectory that the Trust has set itself.

MSSA performance for the year to date is 35 cases against an internal threshold of 21 cases. There is no external threshold set for MSSA bacteraemia in 2016/17 however, alongside the MSSA improvement plan; the Trust set itself a target of having 42 or less cases for 2016/17.



The Trust performance on rates of MSSA bacteraemia continues to be discussed by the Infection Control Team at the Infection Control Operational Group. The group is currently exploring whether patients in some clinical areas should undergo decolonisation similar to the arrangements for MRSA. Members of the group have arranged to visit Leicester to see how they decolonise patients with a view to introducing this at STHFT.

## 5. E.COLI

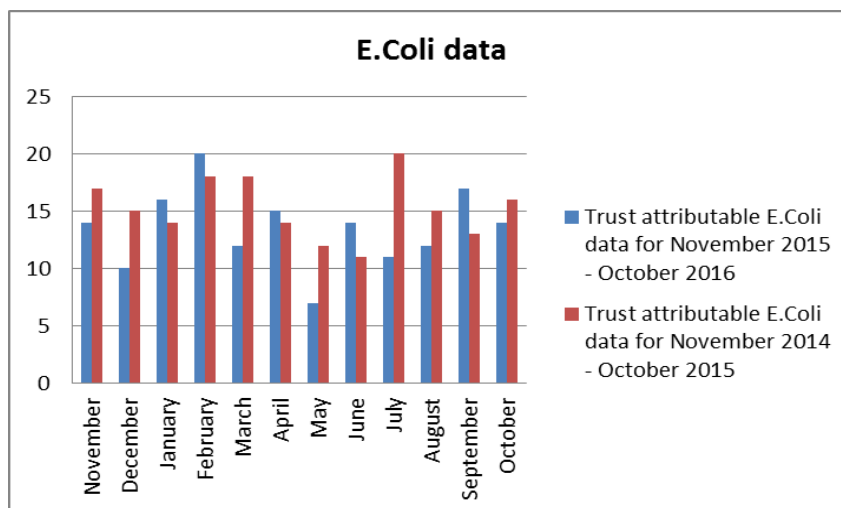
The Trust commenced returning data on the number of cases of E.Coli bacteraemia to Public Health England in June 2011. Cases are labelled as either Trust attributable or community acquired. For October, 14 Trust attributable cases of E.Coli bacteraemia were recorded.

Previously the Trust had not been set a reduction target for E.Coli bacteraemia, as E.Coli bacteraemia is often not directly associated with healthcare. The recently published Government response to the Review on Antimicrobial Resistance (2016)<sup>1</sup> states that the government is aiming to reduce healthcare associated Gram-negative bloodstream infections (this includes E.Coli) in England by 50% by 2020. They intend to do this by publishing guidance on preventing Gram negative infections and publishing locally comparable data on key infections. This guidance and improved data will give the Infection Prevention and Control team the opportunity to review and refresh the strategy for how it addresses E.Coli bacteraemia.

For the last 12 months (November 2015 – October 2016) the total Trust attributable cases of E.Coli bacteraemia stands at 162 cases.

For the previous 12 months (November 2014 – October 2015) the total Trust attributable cases of E.Coli bacteraemia stood at 183 cases.

There are currently no national benchmarks available to allow the Trust to compare its performance with that of other Trusts.



## 6. CARBAPENEMASE – PRODUCING ENTEROBACTERIACEAE (CPE)

Carbapenemases are enzymes produced by bacteria that destroy carbapenem antibiotics. Carbapenem antibiotics are amongst the limited number of antibiotics effective against more resistant strains of bacteria. Enterobacteriaceae are a large family of bacteria; a proportion of

<sup>1</sup> Department of Health (2016) Government response to the Review on Antimicrobial Resistance. London.

Enterobacteriaceae have acquired a carbapenemase enzyme that destroys carbapenem antibiotics and are designated carbapenemase-producing Enterobacteriaceae (CPE).

It is important to prevent and control the spread of CPE. At present, rates of CPE in Sheffield are low but there is a higher prevalence of CPE in North West England and London. In order to monitor this issue closely, it has been agreed to report quarterly the number of cases of CPE which are thought to have been Trust acquired.

For quarter 2, there has been 2 cases of Trust acquired CPE. The total for the year is 3 cases.

## **7. INFECTION PREVENTION AND CONTROL**

### **7.1 Quarterly Infection Prevention and Control Feedback from Groups / Directorates to the Board of Directors 2016/17**

Feedback from Groups/Directorates for quarter 2 of 2016/17 to the Board of Directors includes:

- The Cardiac Directorate report on a recent cluster of deep sternal wound infections on post-operative cardiac surgical patients on Chesterman 4. A working party has been formed and a review of pre-operative skin decolonisation is in progress with a plan to decolonise patients at home for 3 days prior to admission.
- Both the Integrated Community Care and the Musculo-Skeletal Directorates report that work has taken place at Firth Park Clinic which has addressed some of the concerns previously raised about the environment in this facility.
- The Integrated Geriatric and Stroke Medicine Directorate have reported that both Brearley 5 and Brearley 6 have been decanted to Huntsman 1 whilst the wards have been refurbished.
- The Acute and Emergency Care Directorate highlight that re-accreditation for the Emergency Department is due in November 2016. This is being closely monitored by the Nurse Director for the Care Group.
- The Specialised Medicine and Rehabilitation Care Group report that wards 2 and 3 at Weston Park Hospital continue to be refurbished. During the refurbishment programme, there are a smaller number of bathrooms and side rooms available on each ward but once the refurbishment is completed, there will be an increased number of bathrooms and side rooms available for patients.
- The Musculo-Skeletal Directorate report that Huntsman 4 (elective orthopaedics) will relocate to Robert Hadfield 6 to improve infection prevention and control for this cohort of patients. This will include the provision of a separate clinic room to undertake dressing procedures and maintain infection control standards for patients who have undergone a surgical procedure.
- The Musculo-Skeletal Directorate also report that they are exploring the option of decolonising patients appropriately to prevent surgical site infections.

### **7.2 Norovirus**

The Trust has continued to experience an increased number of cases of norovirus during October affecting four or five wards concurrently which has resulted at times in up to 15 beds being closed and consequential disruption to patient flow in the Trust.

## **8. CONCLUSION**

The Healthcare Governance Committee is asked to debate the contents of this report.

**Enhanced Clostridium Difficile Action Plan 2016/17**

Enhanced actions identified to reduce the increase rate of *Clostridium Difficile* (*C.diff*) which has been experienced since April 2016 at Sheffield Teaching Hospitals NHS Foundation Trust

Number	Action	Key Milestones	Person Responsible	Comments
1	Ensure that there is optimal cleaning, infection control practice and management of diarrhoea on the Acute Medical Unit	Infection Control Team to meet Senior Sisters / Charge Nurses from AMU and other assessment units to discuss further by 30 <sup>th</sup> November 2016	Lead Infection Control Nurse	
2	Deep clean ward Firth 2	31 <sup>st</sup> October 2016	Lead Infection Control Nurse	Achieved
3	Deep clean Robert Hadfield 6	31 <sup>st</sup> October 2016	Lead Infection Control Nurse	Achieved
4	Deep clean of Huntsman 1	31 <sup>st</sup> October 2016	Lead Infection Control Nurse	Achieved
5	Deep clean Firth 9	30 <sup>th</sup> November 2016		
6	Deep clean Firth 8	31 <sup>st</sup> December 2016		
7	Deep clean Firth 4	31 <sup>st</sup> December 2016		
8	Deep clean Huntsman 4	31 <sup>st</sup> December 2016		
9	Produce a standard operating procedure regarding the cleaning of commodes and distribute to wards and departments	31 <sup>st</sup> December 2016	Lead Infection Control Nurse	
10	Explore the production of an educational film on the standardised cleaning of commodes using the simulation suite	31 <sup>st</sup> December 2016	Lead Infection Control Nurse	
11	Promote optimum antibiotic use, particularly the three day review by changing the format of the prescription and administration of medication charts	30 <sup>th</sup> September 2016	Antibiotic Pharmacist	Achieved
12	Implement an electronic prescribing (IPPMA) through Lorenzo	Pilots to commence 31 <sup>st</sup> January 2017		
13	Ensure the optimal management of patients with diarrhoea through early isolation to side rooms – Consultant Microbiologist to design a sticker to trial with patients who are detected as having diarrhoea	31 <sup>st</sup> January 2017	Consultant Microbiologist (GI)	
14	Optimal management of diarrhoea through the timely screening of patients with diarrhoea – to be included in the sticker identified in number 13 above	31 <sup>st</sup> January 2017	Consultant Microbiologist (GI)	
15	Ensuring that the Root Cause Analysis of patients with <i>C.diff</i> includes consideration of whether the patient had been on a Proton Pump Inhibitor	30 <sup>th</sup> September 2016	Consultant Microbiologist (DP)	Achieved
16	For patients experiencing <i>C.diff</i> in Weston Park Hospital to be treated with Fidaxomicin	30 <sup>th</sup> September 2016	Consultant Microbiologist (DP)	Achieved