Ashford and St. Peter's Hospitals
NHS Foundation Trust

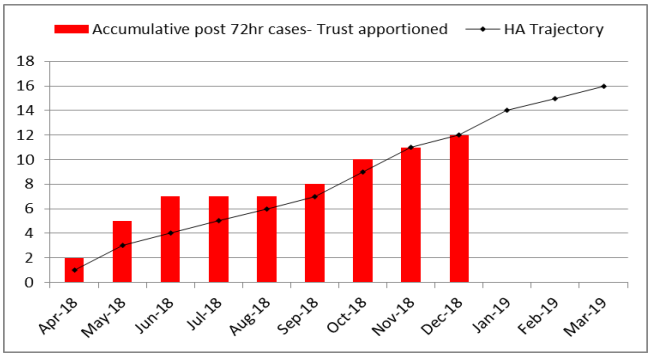
**TRUST BOARD**
**31 January 2019**

| | | |
|---|---|---|
| **AGENDA ITEM** | 16.4 | |
| **TITLE OF PAPER** | Director of Infection Prevention and Control (DIPC) Report April- December 2018 | |
| Confidential | **NO** | |
| Suitable for public access | **YES** | |
| **PLEASE DETAIL BELOW THE OTHER SUB-COMMITTEE(S), MEETINGS THIS PAPER HAS BEEN SUBMITTED** | | |
| Control of Infection Committee | | |
| **STRATEGIC OBJECTIVE(S):** | | |
| **Quality Of Care** | **Y** | |
| **People** | | |
| **Modern Healthcare** | | |
| **Digital** | | |
| **Collaborate** | | |
| **EXECUTIVE SUMMARY** | | |
| | This report provides an overview of infection prevention and control performance from April to December 2018. | |
| **RECOMMENDATION:** | Report for receipt and assurance | |
| **SPECIFIC ISSUES CHECKLIST:** | | |
| Quality and safety | | |
| Patient impact | | |
| Employee | | |
| Other stakeholder | | |
| Equality & diversity | | |
| Finance | | |

| | |
|---|---|
| Legal | |
| Link to Board Assurance Framework Principle Risk | |
| **AUTHOR** | Ann Birler, Nurse Consultant and Deputy DIPC |
| **PRESENTED BY** | David Fluck, Medical Director and DIPC |
| **DATE** | 19 January 2019 |
| **BOARD/TEC ACTION** | Receive |

**1.0 Meticillin Resistant Staphylococcus Aureus (MRSA) Bacteraemias**
The target for 2018/2019 remains at zero. There have been no cases to date.

**2.0 *Clostridium Difficile***
The limit for 2018/2019 is 16 post 72hr cases. There were 12 cases from April to September. The graph demonstrates performance against trajectory.

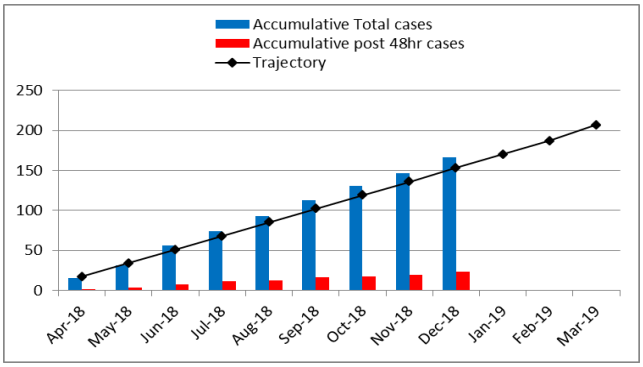



**2.1 *Clostridium Difficile* Cases- Lapses in Care 2018/19**
A root cause analysis (RCA) is undertaken for each Clostridium difficile case and this is then reviewed with the CCG to agree whether a lapse in care has occurred. Of the 12 Trust cases to date, 2 have been deemed to have a lapse in care as tabled below (3 are awaiting review by the CCG).

| Sample | Ward | CCG Review | Lapse in Care |
|---|---|---|---|
| 31.05.18 | May | Inappropriate antibiotic prescribing- prolonged course and no review date | Yes |
| 21.06.18 | Cedar | Inappropriate antibiotic prescribing and delay in patient isolation | Yes |

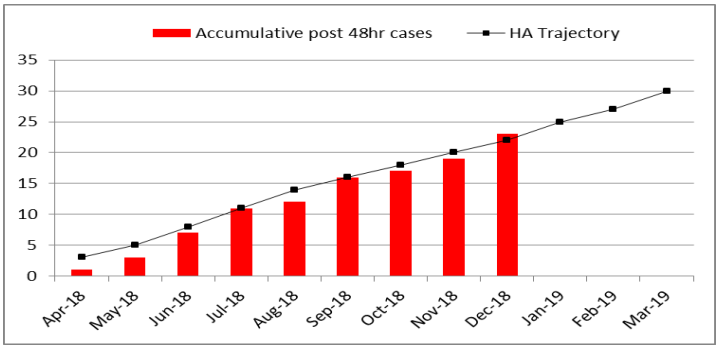
**2.2 Actions to minimise risk of Clostridium Difficile**
- The Bristol stool chart has been redesigned to include an assessment flow diagram to guide staff to take appropriate action in cases of diarrhoea and this is currently being trialled.
- The new antibiotic prescribing chart has now been implemented and it is hoped this will enforce the mandatory stop and review.

**3.0 E.coli Bacteraemias all cases**
The reduction target for 2018/2019 is 207 cases. There have been 115 cases between April and September and we are currently 13 over trajectory. 16 have had a hospital onset.



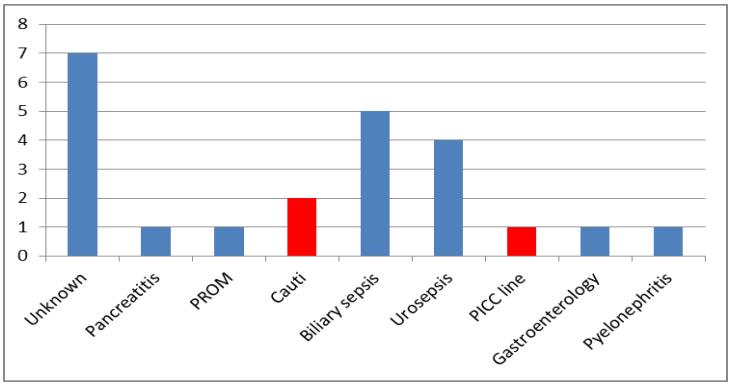

### 3.1 Hospital Onset Bacteraemias

We have a trust target to reduce hospital onset E.coli bactereamisa by 10% (limit is 30). We had 16 cases between April and September and are on trajectory to achieve this target.




### 3.2 Source of Infection for Hospital Onset E.coli Bacteraemias

An enhanced review of the 23 hospital onset cases has identified the source of infection as demonstrated in the below graph. Those deemed preventable are highlighted red.




### 3.3 Actions to minimise risk of E.coli bacteraemias:

- An RCA if the infection was device related (e.g. intravenous device or urinary catheter)
- Development of a new urinary care pathway as part of the National Catheter Program.
- Implanting aseptic non touch technique
- Presenting the case for an IV specialist nurse lead to provide a source of expertise and support IV management across the Trust

**4.0 Meticillin Sensitive Staphylococcus Aureus (MSSA) Bacteraemias**
There is no Trust reduction target for MSSA bacteraemias. There has been a total of 41 MSSA bacteraemias of which 10 have had a hospital onset in 2017/18. Of the 10 hospital onset cases **4 were IV device related infections.**

**5.0 Carbapenemase Producing Enterobacteriaceae (CPE)**
The trust continues to follow the National CPE Toolkit to detect and manage CPE. This entails the isolation and screening (3 screens at 48hr intervals) of at risk individuals who have:

- been in hospital abroad in the last 12 months
- been in a UK hospital in the last 12 months
- a history of CPE

Although this approach does put pressure on side room capacity it has been successful in preventing outbreaks and transmission of CPE. Many hospitals are seeing outbreaks which are a clinical risk to patients and are very difficult to control. Unlike MRSA it is not possible to decolonise patients, and CPE is very transmissible, and infections difficult to treat. There have been 6 confirmed CPE cases since April 2018 and all were from screens. There has been no known transmission of CPE.

**Surgical Site Infection (SSIs) Surveillance**
SSIs account for 16% of all hospital acquired infections. They result in pain, long term morbidity, prolonged length of stay and increased costs. As part of the PHE mandatory national surveillance of hips fracture surgery ASPH was persistently an outlier with an SSI rate above the national average. An improvement group convened to look at guidelines and variations in clinical practice to minimise the SSIs in this cohort of patients. The measures tabled below were introduced.

| Pre-operative | Intra-operative | Post-operative |
|---|---|---|
| Nutrition | Cleaned theatre air filters | Restrictive transfusion policy |
| Patient warming | Control of theatre temperature | Single unit transfusion |
| Skin cleansing | Glycaemic control | Oozy wound protocol |
| | Tranexamic acid | |
| | Reviewed antibiotic policy | |
| | Iodine drapes | |
| | Cemented prostheses | |

This focused work resulted in 257 days without a fractured hip SSI. Ongoing surveillance is required and engagement of other surgical specialities to implement the evidence bundles and minimise infections across other specialties.

**6.0 Influenza**

**6.1 Flu Preparedness Group**
Meetings have been commenced to consider the trust plan for managing influenza- including vaccination, infection control, staffing, supplies, vaccine and anti-viral treatment availability.

**6.2 Peer Vaccinators**
The trust achieved its target to vaccinate 70% of front line staff last winter. The target for this year is 75% and peer vaccinators are currently being trained. At the time of this report 59% of staff have received the vaccine.

**6.3 FFP3 Respirator Fit Testing**
FFP3 respirators are required to undertake any aerosol generation procedure on a patient with suspected/confirmed influenza. These must be fit tested by a trained individual. Training is planned as part of the wider flu preparedness work to ensure wards/departments can fit test within their own areas.

**7.0 Aseptic Non Touch Technique**

The trust is committed to the implementation of ANTT to minimise risk of infection from aseptic procedures by standardising practices and having assessment and competencies for staff who undertake these procedures. The Infection Control Nurses delivered ANTT workshops throughout the summer to train and assess 65 trainers. Implementation will now be led locally within the divisions to ensure compliance.

**8.0 Antibiotic Stewardship**

There has been a significant period without a Microbiologist Antibiotic Lead and a Lead Antibiotic Pharmacist however both posts have new replacements from September to lead on antibiotic stewardship across the trust.

The six monthly antibiotic audit was undertaken in June and shows ongoing poor compliance with stop/review date completion on the drug chart and also poor compliance with indication for the antibiotic. The new drug charts have been implemented since this audit and it is hoped this will achieve improved compliance.

l

| Criteria | January 18 | June 18 |
|---|---|---|
| Allergy box completed on the drug chart | 97% | 99.2% |
| Antibiotics prescribed in line with empiric guidelines | 95% | 93.3% |
| Indication box filled out on drug chart | 91% | 84.4% |
| Start date filled out on the drug chart | 99% | 97.6% |
| Stop/review date stated on drug chart | 72% | 59.8% |
| Antibiotic pre-op prophylaxis with correct antibiotics | 100% | 100% |
| Antibiotics post prophylaxis if indicated with correct antibiotic | 100% | 100% |

**9.0 Outbreaks of Infection**

**9.1 Diarrhoea on Birch ward.**

Bays have been closed on 7 wards since April as tabled below due to reported D&V. Norovirus was the causative organism for most areas and this coincided with norovirus in the community and other hospitals.

| Ward | Closed | Patients affected | Staff affected | Cause | Reopened | No. days closed |
|---|---|---|---|---|---|---|
| Birch | 02.05.18 Bay C | 2 | 0 | - | 10.05.18 | 8 |
| Birch | 03.05.18 Bay D | 2 | 0 | - | 06.05.18 | 3 |
| Maple | 17.12.18 Bay 2 | 6 | 0 | NV | 19.12.18 | 2 |
| Maple | 17.12.18 Bay 3 | 6 | 0 | NV | 20.12.18 | 3 |
| Maple | 17.12.18 Bay 4 | 6 | 0 | NV | 19.12.18 | 2 |
| Swift | 19.12.18 Bay 4 | 2 | 1 | NV | 24.12.18 | 5 |
| Cedar | 19.12.18 Bay 3 | 4 | 0 | NV | 24.12.18 | 5 |
| Swift | 20.12.18 Bay 2 | 1 | 0 | NV | 22.12.18 | 2 |
| Maple | 27.12.18 Bay 1 | 3 | 0 | - | 27.12.18 | 1 |
| May | 02.01.19 Bay 1 | 3 | 1 | NV | Ongoing | |

**9.2 RSV on NICU**

During November there were 4 babies with confirmed RSV on NICU and 2 rooms were closed to new admissions and transfers for 7 days to minimise transmission and risk of further cases. All babies recovered well.

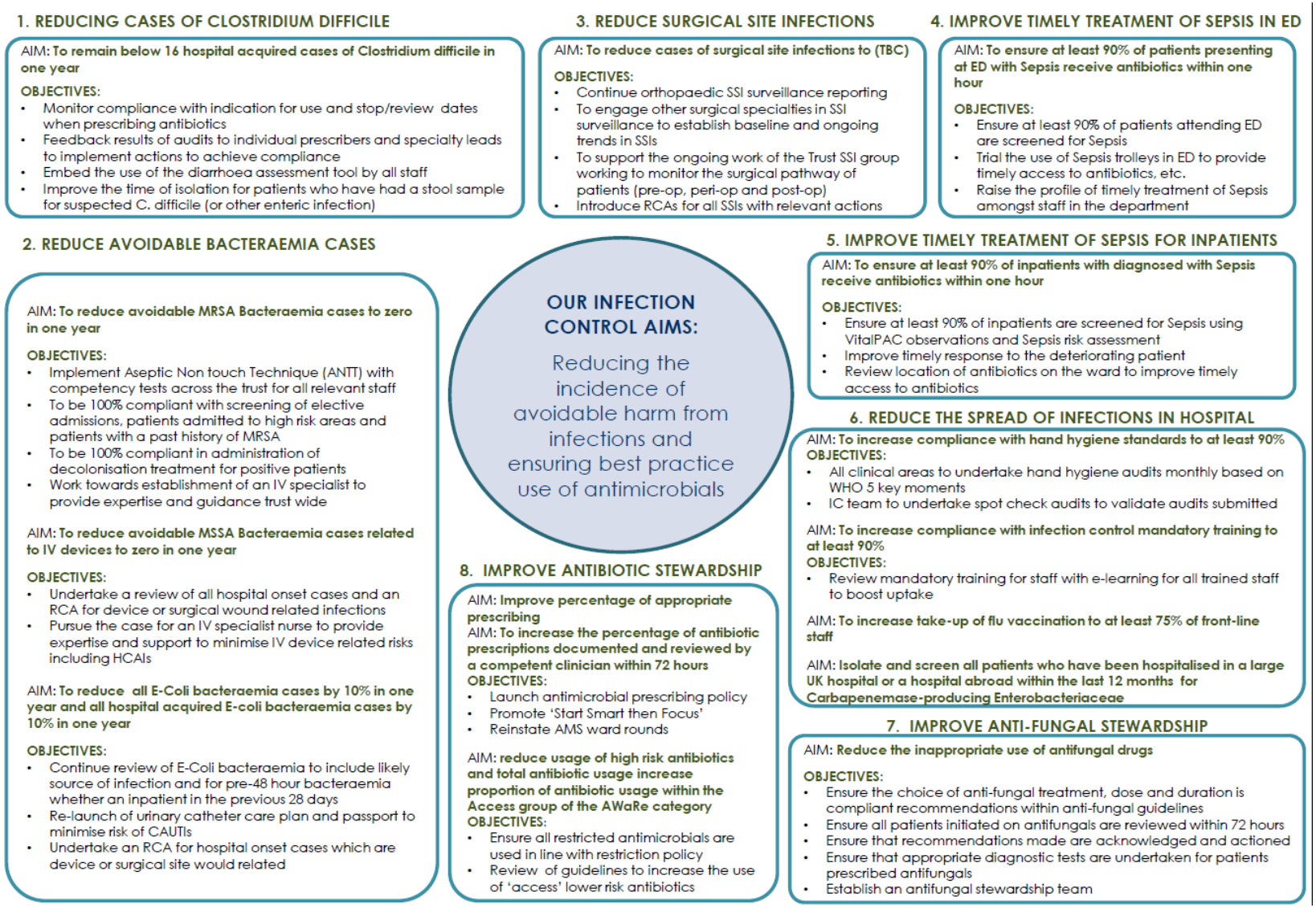
| Ward | Closed | Babies affected | Cause | Reopened | No. days closed |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| NICU | 18.11.18 RM 2 & 3 | 4 | RSV | 24.11.18 | 7 |

**10.0 Infection Control Strategy**

An overarching infection control strategy has been formulated based on the annual infection control programme (see Appendix 1). There are outcome and process measures to help drive the strategy and a working group is to convene quarterly to review progress.

**Appendix 1**


1. REDUCING CASES OF CLOSTRIDIUM DIFFICILE
AIM: To remain below 16 hospital acquired cases of Clostridium difficile in one year
OBJECTIVES:
• Monitor compliance with indication for use and stop/review dates when prescribing antibiotics
• Feedback results of audits to individual prescribers and specialty leads to implement actions to achieve compliance
• Embed the use of the diarrhoea assessment tool by all staff
• Improve the time of isolation for patients who have had a stool sample for suspected C. difficile (or other enteric infection)
3. REDUCE SURGICAL SITE INFECTIONS
AIM: To reduce cases of surgical site infections to (TBC)
OBJECTIVES:
• Continue orthopaedic SSI surveillance reporting
• To engage other surgical specialties in SSI surveillance to establish baseline and ongoing trends in SSIs
• To support the ongoing work of the Trust SSI group working to monitor the surgical pathway of patients (pre-op, peri-op and post-op)
• Introduce RCAs for all SSIs with relevant actions
4. IMPROVE TIMELY TREATMENT OF SEPSIS IN ED
AIM: To ensure at least 90% of patients presenting at ED with Sepsis receive antibiotics within one hour
OBJECTIVES:
• Ensure at least 90% of patients attending ED are screened for Sepsis
• Trial the use of Sepsis trolleys in ED to provide timely access to antibiotics, etc.
• Raise the profile of timely treatment of Sepsis amongst staff in the department
2. REDUCE AVOIDABLE BACTERAEMIA CASES
AIM: To reduce avoidable MRSA Bacteraemia cases to zero in one year
OBJECTIVES:
• Implement Aseptic Non touch Technique (ANTT) with competency tests across the trust for all relevant staff
• To be 100% compliant with screening of elective admissions, patients admitted to high risk areas and patients with a past history of MRSA
• To be 100% compliant in administration of decolonisation treatment for positive patients
• Work towards establishment of an IV specialist to provide expertise and guidance trust wide
AIM: To reduce avoidable MSSA Bacteraemia cases related to IV devices to zero in one year
OBJECTIVES:
• Undertake a review of all hospital onset cases and an RCA for device or surgical wound related infections
• Pursue the case for an IV specialist nurse to provide expertise and support to minimise IV device related risks including HCAIs
AIM: To reduce all E-Coli bacteraemia cases by 10% in one year and all hospital acquired E-coli bacteraemia cases by 10% in one year
OBJECTIVES:
• Continue review of E-Coli bacteraemia to include likely source of infection and for pre-48 hour bacteraemia whether an inpatient in the previous 28 days
• Re-launch of urinary catheter care plan and passport to minimise risk of CAUTIs
• Undertake an RCA for hospital onset cases which are device or surgical site would related
OUR INFECTION CONTROL AIMS:
Reducing the incidence of avoidable harm from infections and ensuring best practice use of antimicrobials
5. IMPROVE TIMELY TREATMENT OF SEPSIS FOR INPATIENTS
AIM: To ensure at least 90% of inpatients with diagnosed with Sepsis receive antibiotics within one hour
OBJECTIVES:
• Ensure at least 90% of inpatients are screened for Sepsis using VitalPAC observations and Sepsis risk assessment
• Improve timely response to the deteriorating patient
• Review location of antibiotics on the ward to improve timely access to antibiotics
6. REDUCE THE SPREAD OF INFECTIONS IN HOSPITAL
AIM: To increase compliance with hand hygiene standards to at least 90%
OBJECTIVES:
• All clinical areas to undertake hand hygiene audits monthly based on WHO 5 key moments
• IC team to undertake spot check audits to validate audits submitted
AIM: To increase compliance with infection control mandatory training to at least 90%
OBJECTIVES:
• Review mandatory training for staff with e-learning for all trained staff to boost uptake
AIM: To increase take-up of flu vaccination to at least 75% of front-line staff
AIM: Isolate and screen all patients who have been hospitalised in a large UK hospital or a hospital abroad within the last 12 months for Carbapenemase-producing Enterobacteriaceae
8. IMPROVE ANTIBIOTIC STEWARDSHIP
AIM: Improve percentage of appropriate prescribing
AIM: To increase the percentage of antibiotic prescriptions documented and reviewed by a competent clinician within 72 hours
OBJECTIVES:
• Launch antimicrobial prescribing policy
• Promote 'Start Smart then Focus'
• Reinstate AMS ward rounds
AIM: reduce usage of high risk antibiotics and total antibiotic usage increase proportion of antibiotic usage within the Access group of the AWaRe category
OBJECTIVES:
• Ensure all restricted antimicrobials are used in line with restriction policy
• Review of guidelines to increase the use of 'access' lower risk antibiotics
7. IMPROVE ANTI-FUNGAL STEWARDSHIP
AIM: Reduce the inappropriate use of antifungal drugs
OBJECTIVES:
• Ensure the choice of anti-fungal treatment, dose and duration is compliant recommendations within anti-fungal guidelines
• Ensure all patients initiated on antifungals are reviewed within 72 hours
• Ensure that recommendations made are acknowledged and actioned
• Ensure that appropriate diagnostic tests are undertaken for patients prescribed antifungals
• Establish an antifungal stewardship team