

**Overview & Scrutiny Committee  
Health Care Associated Infection- Update  
September 2008**

**1. Purpose**

The purpose of this briefing paper is to update the Overview and Scrutiny Committee on the Trusts activities towards the prevention and control of healthcare associated infections.

**2. Progress**

The Trust has an integrated Healthcare Associated Infection (HCAI) Prevention and Control Action Plan, which has been developed based on internal and external review. The plan relates to improvements being made in relation to HCAI's, and sets out identified actions against priorities alongside the associated action, and progress being made.

The following information is a summary of the infection prevention issues that are currently being addressed within the Trust.

**3. Methicillin Resistant Staphylococcus Aureus (MRSA).**

In accordance with the Department of Health's targets for reducing the incidence of MRSA bacteraemia the Trust has to continue to achieve year on year reductions, the trajectory for 2008/09 is 16 cases.

It is pleasing to see progress compared to last years figures. Since April 2008 to August 2008, there have been 7 reported cases of MRSA bacteraemia. However the root cause analysis (RCA) undertaken for each of these incidents provides evidence that in 3 of these cases, the patients already had a bacteraemia prior to admission, the blood specimen having been taken on admission (known as a pre 48hr). In addition, it is worth noting that the post 48 hour bacteraemia in May was due to skin contamination and so not a genuine bacteraemia.

Follow up review meetings continue to be held for any new cases of MRSA, where the team presents an initial summary of the incident, followed up by a weekly review. This process ensures any actions are incorporated into the trusts integrated action plan, and supports communication of findings to wider stakeholders. A ticking clock indicating the number of days since an avoidable bacteraemia, was introduced onto the home page of the Intranet in March of this year.

Aseptic Non Touch Technique (ANTT) has been introduced through cascade training, standardization of skin preparation (Cloraprep) have been some of the many measures introduced.

The trust has trialed two commercial systems, and instigated rapid testing over the last year, this work will be presented to the Greater Manchester Pathology Network group. Whilst this is all clearly an improvement and indications are that the number of cases do continue to fall, it is vital however that we do not become complacent and must continue to sustain and embed improvements that have been based on the analysis of trends

identified through RCA, and this will continue.

#### **4. *Clostridium difficile* (CDT)**

CDT is a healthcare-associated infection that can cause diarrhoea, and sometimes more serious conditions. CDT occurs in 3 ways:-

- a) As an unavoidable complication of appropriate antibiotic treatment.
- b) As an avoidable complication of inappropriate broad spectrum antibiotic use
- c) Cross infection by patients, carers, and staff.

We know that certain groups of patients are particularly at risk of developing an infection with CDT, older frail people and those who have undergone surgery, and people with serious underlying disease, all in association with recent antibiotic use.

There is a mandatory surveillance programme that requires all NHS trusts to report to the Health Protection Agency (HPA) the number of cases of infection caused by CDT diagnosed in patients 65 years of age and older in their trust.

The Trust has agreed a target with the PCT for the calendar year 2008/09 of a reduction on the number of cases on last year's numbers. This equates to a trajectory of 213 for the year 2008/09. In addition the Department of Health set national targets in 2008 which require a 30% reduction in the number of cases by the year 2010/11.

During 2007/08 the Trust saw a 33% reduction in CDT rates following the introduction of a new antibiotic policy. Alongside the fact that the Trust is testing far more samples in comparison with last year, this will make the target for the coming year all the more challenging.

In the period April -July 2007 864 samples were tested compared to April -July 2008 when 1063 samples were tested. Our figures are higher than other local Trusts because we have rigorously applied the Department of Health criteria in relation to testing, and test all samples from patients 2 years and over in line with best practice.

##### **4.1 Targeting improvements in CDT**

The following actions are underway in a multifaceted approach to further reduce incidence of CDT.

##### **4.2.1 Prescribing Improvements**

There has been a specific CDT treatment protocol on the intranet since December 2007 which has been recently amended in line with national guidelines and again this has been widely circulated. Laminated copies are available on all wards. All the clinicians have been asked to be vigilant about other high risk drugs use like proton pump inhibitors.

From September some high risk antibiotics have been removed from the formulary (3rd generation Cephalosporins) and will be restricted for use and will only be prescribed following discussion and agreement with the Consultant Microbiologist.

The Trust has introduced new prescription charts in October, which is an additional measure to stop inappropriate antimicrobial prescribing. Recent improvements have been linked to better compliance.

#### **4.3 Hand Hygiene**

Recent focus has been on, improving hand hygiene as we know that hand hygiene is the simplest most effective action in the prevention of spread of infection. Weekly hand audits are demonstrating consistent compliance with hand hygiene and the bare below the elbow policy.

Global Hand washing day on October 16<sup>th</sup> was used as an opportunity to promote the importance of hand hygiene amongst staff, patients and visitors.

#### **4.4 High Impact Interventions**

Compliance with the High Impact Interventions is now being audited, in particular best practice around insertion and care of invasive devices such as cannulae, urinary catheters, and central lines.

#### **4.4 Root Cause Analysis (RCA)**

From September a new process has been instigated to ensure the learning from RCA is taken more widely. Once a RCA is carried out [completed for every case of CDT], teams from that ward area including clinicians, nursing and pharmacy staff meet with the medical director the following week, to ensure lessons are learnt. The health economy now has a group (Health Economy Action Team) that looks at all cases so feedback can be shared across the health community, so that actions can be taken in response to emergent themes.

#### **4.5 Isolation Policy**

The isolation policy was revised to incorporate an algorithm to support the early isolation of patients who have two episodes of unexplained diarrhoea, as the early isolation of patients is an effective method of rapidly controlling the spread of infection. This will be followed up by guidance for instigation of a Cohort ward, should it be required.

#### **4.6 Environmental Decontamination**

Once there has been a case of CDT, environmental contamination is a key challenge. Therefore, the Trust has set about a 2 month process whereby all beds will be turned and the undercarriage steam cleaned. A budget of £15,000 has been allocated to support this activity. This is in addition to cleaning measures already in place.

### **5 Norovirus**

Noroviruses are part of a group of viruses that are the most common cause of gastroenteritis (stomach bugs) in the UK. The virus is spread through the air, and because of this it is highly infectious. This was previously known as 'winter vomiting disease' but recently cases have been increasing throughout the year.

The hospital has treated a number of patients who have been admitted with vomiting & diarrhoea which subsequently caused ward closures as a precautionary measure to limit the spread of infection. Where we have cases of Norovirus, as a consequence we often see an increase in CDT on non symptomatic patients.

### **6 Other Healthcare Associated Infections**

An enormous amount of effort has focused on MRSA Bacteraemia and CDT however; this has meant the need for vigilance in not losing sight of other infections. Surveillance and

epidemiology of other healthcare associated infections is a standing item on the infection control committee's agenda.

## **7 External Assessments & Assurance**

Since January 2008, the Healthcare commission have been making unannounced visits to Trusts to test compliance with the Health Act, 2006. Part 2 of the Health Bill gives the Secretary of State for Health the power to issue a code of practice on the prevention and control of healthcare associated infections, if Trusts do not meet the standards.

The Trust had an unannounced visit in January 2008, following this a number of actions were taken in response to the findings. The Trust was compliant with the Health Act.

Refurbishment of the Acute Medical Receiving Unit (AMRU) was part of these actions and was completed in June 2008. The Infection Prevention Team were involved in this project to ensure that other wards within the area were protected whilst the refurbishment work was underway. The ward redesign also improved standards required for infection prevention, with increased number of hand washbasins and suitable floor coverings.

## **8 Ongoing Practice Developments**

Checks, to monitor standards of cleanliness, are being carried out by Ward Sisters/Charge Nurses and Matrons. This is also a part of the 'Go and see' rounds carried out by Matrons, Divisional Nurses and Director of Infection Prevention and control (DIPC). The Matrons also provide a cleanliness report to the board on a quarterly basis.

The Trust continues to undertake root cause analysis whenever an MRSA bacteraemia or incidence of CDT occurs and so identify the probable contributory factor(s) and actions required. Teams are currently testing a RCA support tool from the Department of Health.

Saving Lives High Impact Interventions (HII), are a set of guidance based on best evidence of what is required to achieve sustained reductions in HCAI. Wards follow this guidance and audit their practice against them.

The dress code and uniform Policy (which is part of the revised uniform policy) is now out for consultation. The main principle of the code states that staff, when having direct patient contact, should be 'Bare Below The Elbow'. Any member of staff who is non-compliant will be given his/her own copy of the code and advised to read and act upon it.

The Winning Ways Groups ensures activity is focused based on key findings and evidence. The group produces a quarterly report that summarises the range of activity across the Trust (Appendix 1).

Hand hygiene compliance has improved across the Trust and a regular audit programme is in place. Each division has their own action plan, this demonstrates an operational focus. Our root cause analysis (RCA) has improved and the actions and learning now embedded in the governance processes within the divisions. The key area for improvement remains the management of invasive lines and ensuring regular audit.

## **5. Developments Within The Infection Prevention Team**

An audit facilitator and secretary have been appointed as a joint post with the PCT, for a 12 month period. The audit facilitator will support targeted audit activity.

### **8.1 Microbiologist support**

A second Consultant Microbiologist has been appointed and will start in November 2008. The Trust is pleased to have appointed an existing Consultant from Chester Foundation NHS Trust with experience in the successful management of HCAI's

The vacant Nurse Consultant Post is now out to advert.

**BOLTON ROYAL HOSPITALS NHS TRUST**  
**QUARTERLY CORPORATE REVIEW FOR WINNING WAYS COMMITTEE**

**CORPORATE REVIEW**      **QUARTER: April 08 –June 08**

**PERSON COMPLETING REPORT: Maria Sinfield**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Key objectives of last quarter:</b> <ul style="list-style-type: none"> <li>• Hand hygiene- target surveillance and improved compliance with completion of audits.</li> <li>• Implementation of Peripheral Line High Impact Interventions (HII's) 2a and 2b.</li> <li>• Improve recording of VIP.</li> <li>• Improved compliance with screening criteria.</li> <li>• Trust wide consistency with skin prep for cannulation/blood cultures etc.</li> </ul> | <b>Progress/improvements/good practice</b> <ul style="list-style-type: none"> <li>• Mandatory training day for all band 7's</li> <li>• Introduction and roll out of Aseptic Non Touch Technique (ANTT)</li> <li>• Cascade training of PGD for instigation of colonisation therapy.</li> <li>• Matron 6s programme –focus on environment and de cluttering programme.</li> <li>• Colour coding extended to trolleys to provide assurance that all trolleys are thoroughly cleaned on weekly basis.</li> <li>• Policies updated</li> </ul> |
| <b>Issues/Themes:</b> <ul style="list-style-type: none"> <li>• Analysis of outbreak management required and learning from experiences</li> <li>• Utilisation and wider access of data that is available through ICNet. Data valuable in providing clear understanding of themes as they emerge, would also better support outbreak management</li> <li>• Mandatory training to be updated</li> </ul>                                                        | <b>Key Deliverables over next quarter:</b> <ul style="list-style-type: none"> <li>• Focused attention on antibiotic stewardship</li> <li>• Completion of schedule to turn and steam clean all beds across the Trust.</li> <li>• Setting Standards for Deep clean and Terminal Clean</li> <li>• Agree pathway for management of patients with unexplained diarrhoea</li> <li>• Agree criteria to instigate Cohort/isolation ward</li> </ul>                                                                                               |

**Performance:**

|                           |            |                |            |
|---------------------------|------------|----------------|------------|
| <b>: MRSA Bacteraemia</b> | <b>Apr</b> | <b>May</b>     | <b>Jun</b> |
| <b>Pre 48</b>             |            | <b>2</b>       | <b>1</b>   |
| <b>Post 48</b>            | <b>2</b>   | <b>1 (con)</b> |            |
| <b>TOTAL</b>              | <b>2</b>   | <b>3</b>       | <b>1</b>   |

|                    |            |            |            |              |
|--------------------|------------|------------|------------|--------------|
| <b>C.Difficile</b> | <b>Apr</b> | <b>May</b> | <b>Jun</b> | <b>TOTAL</b> |
| <b>2007</b>        | <b>42</b>  | <b>27</b>  | <b>25</b>  | <b>94</b>    |
| <b>2008</b>        | <b>22</b>  | <b>24</b>  | <b>28</b>  | <b>74</b>    |

