Multi-drug resistant bacteria – An Invisible Threat

On any day, 6% of hospital inpatients have at least one HealthCare Associated Infection (HCAI) (Public Health England, 2011). It is estimated that at least a third are still preventable. HCAI therefore is a significant and potentially avoidable risk to the safety of our patients.

Recently we have had several incidents across the trust where multi-drug resistant bacteria have been transmitted between patients. These include:

- Carbapenemase resistant enterobacteriaceae (CRE) (York and Scarborough)
- MRSA – SCBU, York
- Vancomycin resistant enterococci (VRE) Chestnut ward, Scarborough

These organisms, along with other multi-drug resistant bacteria, can be very difficult to treat when they cause infections, but can also be carried silently and transfer from patient to patient. As we cannot always predict who will be carrying resistant organisms, the only way we can reduce spread is by applying standard hygiene precautions while caring for all of our patients.

While we know that most of the time we pay a lot of care and attention to these measures, unfortunately we have had some recent hand hygiene audits with poor results, including one with only 10% compliance. We have also had observations of extremely poor compliance with Aseptic non touch technique (ANTT) which puts patients at risk of device related infection, particularly in the presence of difficult to treat organisms. Hand hygiene and ANTT are evidence based interventions to reduce harm to our patients.

Please protect patients and be a role model for best practice with respect to:

- Hand hygiene (remember the 5 moments - http://www.who.int/gpsc/tools/5momentsHandHygiene_A3.pdf?ua=1)
- Isolation practice – ask the ward manager or see the flip chart on every ward if you have any concerns
- ANTT – mandatory e-learning and practical sign off, your ward manager should be able to direct you to an assessor.

Dr Katrina Blackmore, Consultant Microbiologist

MERS Coronavirus (MERS Co-V) Consider the diagnosis, protect yourself!

We occasionally admit patients who have a recent travel history, and present with symptoms and signs that would be consistent with MERS Co-V (or another emerging respiratory virus). While there are usually more likely diagnoses, the risks of failing to identify and isolate a case are high. In South Korea, from a single imported case of MERS Co-V, there were 186 secondary cases and 36 deaths – predominantly healthcare workers, patients and their families.

When you review a patient who has been outside Europe in the last 30 days with:

- Fever >38°C
- Cough, or clinical or radiological evidence of lung parenchymal change

Take the following actions:

- Move patient into a side room
- Wear full respiratory PPE including gown, gloves and FFP3 mask (you must have been fit tested) the Infection Prevention team will be able to advise.
Gentamicin prescribing

The Trust has paid out over £1million in claims recently, due to gentamicin prescribing errors.

1. A patient was administered gentamicin and developed ototoxicity and bilateral vestibular failure. He would normally have been treated with penicillin but was documented as being allergic to this. However, it transpired that he got headaches with penicillin.
   It was determined that:
   o Failure to assess the allergy status appropriately resulted in inappropriate use of gentamicin.
   The patient was no longer able to carry out his work and was awarded £825,000.

2. A patient with endocarditis was treated with penicillin and gentamicin and developed vestibulotoxicity.
   Blood tests showed that penicillin alone would have been sufficient but the gentamicin was continued.
   It was determined that there had been :-
   o Failure to stop gentamicin when it was no longer required
   o Failure to monitor gentamicin levels twice a week
   o Failure to stop gentamicin when the patient complained of dizziness.
   This led to declining health and the patient was awarded £32,500.

3. A patient with peritonitis was given Amoxicillin, Metronidazole and Gentamicin on two separate occasions and developed vestibular failure.
   It was determined that there had been :-
   o Inadequate monitoring of Gentamicin levels
   o Continuing gentamicin when the renal function was reduced.
   This led to balance problems and vestibular failure.
   The patient was awarded £150,000.

It is important to be aware of the implications and real life consequences of gentamicin prescribing as well as the potential financial burden.

Remember….

Ensure you have completed the pre gentamicin checks, and that the patient does not have any hearing or balance problems prior to prescribing gentamicin.

Ensure the patient has been given the leaflet about hearing and balance problems and **document on the chart that this has been done**.

Ensure gentamicin levels and renal function are monitored at least twice weekly.

**If you are undure contact the Pharmacy Team for advice.**
Patient Safety Matters
August 2016

Foundations in Patient Safety and Quality for junior doctors

This training programme is designed to support and develop awareness of and engagement in patient safety and quality improvement. It is aimed at junior doctors and our goal is to develop leaders of improvement as well as foster a culture of patient safety and quality.

This will be a practical and interactive programme. We will provide a mixture of didactic teaching, discussion and mentorship. Trainees will be rewarded for different levels of achievement.

Programme Structure

This programme will run for 12 months starting in September 2016. As part of the programme, we are offering six tutorials as well as the opportunity to get involved with the patient safety related activities as listed below. We will support you to engage with the specific activities and we are also available to provide guidance and coaching.

Tutorials:
- Introduction to Patient Safety, including incident reporting and investigation
- Quality Improvement methodology
- Infection prevention and control
- Human factors /Ergonomics science
- Reducing medication errors
- Being open and patient engagement.

Patient Safety Activities:
- Lead a small Quality Improvement activity
  - Presentation and publication
- Attend Trust senior management and executive level meetings
- Complete an incident report
- Participate in the analysis of an adverse event
- Participate in a Patient Safety Walk Round
- Observe clinical practice from a patient’s perspective.

Completion and Certification

You will be awarded level 1, 2 or 3 certificate in patient safety from York Teaching Hospital depending on your level of achievement. The table below shows the requirements for each level:

<table>
<thead>
<tr>
<th>Certification</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>Tutorials – attend six.</td>
</tr>
<tr>
<td></td>
<td>Incident report/investigation</td>
</tr>
<tr>
<td></td>
<td>o complete an incident report or participate in a Root Cause Analysis investigation meeting.</td>
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<tr>
<td>Level 2</td>
<td>QI Project</td>
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<tr>
<td></td>
<td>o complete a project and write a short summary report.</td>
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<tr>
<td></td>
<td>Trust level meeting</td>
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<tr>
<td></td>
<td>o attend a Trust level meeting and write a reflective account.</td>
</tr>
<tr>
<td>Level 3</td>
<td>Participate in a Patient Safety Walk Round or Observation in Clinical Practice exercise and write a reflective account.</td>
</tr>
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How to enrol

In order to enrol for this programme, you must attend one of the ‘Introduction to Patient Safety’ sessions. Available dates for the ‘Introduction to Patient Safety’ tutorial are as follows:

York
Date: 5th September 2016 12:30 – 13:30 Room: Classroom 3, Post Grad
Date: 15th September 2016 12:00 – 13:00 Room: Ward 37 Seminar Room

Scarborough
Date: 7th September 2016 12:30 – 13:30 Room: S29 Training Room, Post Grad
Date: 12th September 2016 12:30 – 13:30 Room: S33 Training Room, Post Grad

For more information contact: William Lea, Clinical Leadership Fellow, William.Lea@york.nhs.uk
Many of you will be aware that NICE Guidance 51 was recently published. [https://www.nice.org.uk/guidance/ng51](https://www.nice.org.uk/guidance/ng51). This has several recommendations about the identification and management of sepsis in primary and secondary care. One of the most important messages is to think ‘Could this be Sepsis?’

If we took the symptoms and signs of sepsis as seriously as chest pain, we would intervene earlier and patients would benefit, lives would be saved.

For those interested the Sepsis Trust has provided some resources including podcasts, e-learning and patient stories. [http://sepsistrust.org/professional/educational-tools/](http://sepsistrust.org/professional/educational-tools/)

**Regional Conference:**

**Palliative Care: a practical update for doctors**

Keynote speaker: Professor Miriam Johnson

Topics to include:
- Clinically assisted hydration
- Delirium and agitation
- Identifying palliative care patients
- Communicating with the dying patient/family

**Registration Free** (If no show, £50 will be charged)

To book, please email: liz.lawson@hey.nhs.uk

Places are on a first come

**GROUP REPRESENTATION**

We are working to **empower** and **support** junior doctors to attend and **contribute** to Trust level meetings. Junior doctors and groups will benefit! The following groups are looking for junior representation:

- DNACPR
- EPMA (Electronic Prescribing)
- HIPCG (Infection Prevention)
- Point of Care Testing Committee
- Patient Experience Steering Group
- Admission Proforma Group
- Deteriorating Patient Group
- Serious Incident Group
- Mortality Steering Group

Contact PatientSafetyMatters@york.nhs.uk for more information or if you want to get involved.

**EDITORIAL TEAM**

William Lea (Improvement Fellow), Diane Palmer (Patient Safety), Helen Holdsworth (Pharmacy), Donald Richardson (Quality Improvement), Liz Jackson (Patient Safety), Elaine Vinter (Media & Communications)

Follow us on Twitter @PtSafetyMatters

Email PatientSafetyMatters@york.nhs.uk if you have any comments or would like to contribute.

Check out [www.yorkhospitals.nhs.uk/patientsafetymatters/](http://www.yorkhospitals.nhs.uk/patientsafetymatters/) for more information