Implementing the CPE toolkit in an acute setting, the story so far....

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Introduction

Nationally there has been an increasing incidence of carbapenemase-producing Enterobacteriaceae (CPE) colonisation and infection in the UK; this includes a number of outbreaks in healthcare settings. Based on the learning from these outbreaks a CPE toolkit was developed by Public Health England (PHE) to support staff in acute settings¹. In December 2014, The Newcastle upon Tyne Hospitals NHS Foundation Trust produced a policy, based on the toolkit, advising staff of the correct actions to ensure prompt detection of CPE and appropriate management to prevent transmission. Policy implementation was supported by a range of educational activities and compliance with the guidance was audited in January 2016.

What did we do?

Prior to introduction of the toolkit and Trust policy, patients were not routinely screened for CPE on admission and staff knowledge was very limited.

Promotion of key messages and a range of multi-faceted initiatives were delivered by the Infection Prevention and Control (IPC) Team to improve this and enhance compliance with the guidance.

These educational activities comprised ward-based teaching, presentations at multi-disciplinary safety briefings, articles in newsletters and inclusion of CPE in mandatory e-Learning programmes. A question to identify high-risk cases was also added to the current adult risk assessment document which is completed for all in-patient admissions.

The electronic ordering system was amended to incorporate CPE screening and an alert was created for patients subsequently confirmed as positive.

What did the audit results tell us?

During the audit 93 patient records were reviewed and a total of seven patients were assessed as high-risk of CPE; of these, 87.5% were isolated immediately.

At the time of the audit, following Microbiology request, two additional patients were being screened for CPE. Of these nine cases, 100% had at least one screening sample submitted and 50% had at least three samples submitted as per policy however in 11.1% of the cases, completion of the screening protocol was not possible due to patient discharge.

Two patients were confirmed CPE positive and both had the appropriate alert added to their electronic patient record.

Future Steps...

There is continued education to raise awareness of the CPE Policy in all wards and departments in the Trust. Additionally, the IPC Team provide specific, on-going guidance and support to clinical staff where there are confirmed CPE positive cases. The Trust policy is currently under review to incorporate the community toolkit; this will guide practitioners in non-acute settings on how to manage patients with CPE. Compliance with the policy will be re-audited in 12 months.

References: