Reviewer’s report

Title: Empiric antibiotic therapy in urinary tract infection in patients with risk factors for antibiotic resistance in a German emergency department.

Version: 0 Date: 21 Aug 2017

Reviewer: Kyle Richards

Reviewer’s report:

The authors perform a retrospective study to examine potential risk factors for MDR UTI in patients presenting to the ER. This is a topic of interest as resistant infections are increasing and becoming more problematic. A few comments that need to be addressed:

1. The authors mention a distinction between upper and lower tract UTI which is a clinically important distinction. However, this is not clearly defined in the methods section.

2. 400+ patients were diagnosed with a "UTI" by the ER during the study period yet a majority of the patients did not have a positive urine culture or even had a culture obtained. How was the cohort of UTI patients identified by the research team and how did the ER define "UTI" at your institution?

3. Other important risk factors for MDR that were not addressed included patients that are also health care workers and patients with exposure to livestock or farming. This should be acknowledged as a limitation of the study.

4. While the results of this study are likely valid in your institution, resistance patterns are highly variable limiting the external validity of these data which should also be acknowledged. Readers should be encouraged to perform similar QI studies in their institutions as well as consult with their local antibiograms.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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