

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Analysis of the challenges in implementing guidelines to prevent the spread of multidrug-resistant Gram-negatives in Europe
<b>AUTHORS</b>	Tacconelli, Evelina; Buhl, Michael; Humphreys, Hilary; Malek, Veronika; Presterl, Elisabeth; Rodriguez-Baño, Jesús; Vos, Margreet; Zingg, Walter; Mutters, Nico

### VERSION 1 - REVIEW

<b>REVIEWER</b>	Nuntra Suwantararat, MD, D(ABMM) Chulabhorn International College of Medicine, Thammasat University, Thailand
<b>REVIEW RETURNED</b>	08-Dec-2018

<b>GENERAL COMMENTS</b>	This is an interesting study about major differences among European countries in implementing IPC measures to reduce the spread of MDR-GN. Although the study design in this article is a simple survey. The research methodology, data collection and population of this study are well structured. The results showed major problem as low compliance with IPC measures. It will help support the right solution for MDR-GN control in the region.
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<b>REVIEWER</b>	Peter Wilson Microbiology, University College London Hospitals, London, UK
<b>REVIEW RETURNED</b>	29-Dec-2018

<b>GENERAL COMMENTS</b>	<p>The comparison with national guidelines commonly reveals poor compliance but the recommendations themselves are not compared. Some data to demonstrate the sample is representative are required. The results are said to be representative of Europe with 77% coverage. In the background it is stated there is no consensus on the most effective measures to control spread yet many countries have guidelines and the basic message of contact precautions in each is similar.</p> <p>This was a self-administered questionnaire among the working group some national representatives and at a conference rather than a planned sample. Reasons for non-compliance did not seem to take account of areas where these organisms are either low or high frequency. Why did 4% not use contact precautions? Screening is likely to depend on perceived population prevalence and should not be an issue of non-compliance. As recommended actions vary by country presumably the number of potential non-</p>
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	<p>compliances also vary. Physical differences e.g. lack of single rooms could make compliance difficult and need to be given to allow results to be compared. Compliance with screening will depend on local prevalence of these organisms and will not be used where not cost effective. Hence it is cost and prevalence not whether screening was perceived to be important.</p> <p>The authors note the self-selected sample may not be representative. For example the UK MDR GNR guidelines are not mentioned. There are 18 respondents from Ireland but only 5 from UK. Romania provided 197 of 482 replies. The elements for compliance in figure 1 are not necessarily advised in all countries. Following country guidelines which differ from the questionnaire would still be regarded as non-compliance.</p>
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### VERSION 1 – AUTHOR RESPONSE

Reviewers' Comments to Author:

Reviewer: 1

Reviewer Name: Nuntra Suwantararat, MD, D(ABMM)

Institution and Country: Chulabhorn International College of Medicine, Thammasat University, Thailand

Please state any competing interests or state 'None declared': None Declared

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☐ We thank you for your positive review.

Reviewer: 2

Reviewer Name: Peter Wilson

Institution and Country: Microbiology, University College London Hospitals, London, UK

Please state any competing interests or state 'None declared': None declared

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□ We thank Prof. Wilson for his valuable comments. We have revised the appropriate sections accordingly and have integrated his comments here to provide more information and clarification to the reader. We have also included a section about the sample size and its representativeness and have stated the country-effect for Romania as a limitation of our study.

The 4% that did not use contact precautions provided no additional information as to why they did not use it, thus we cannot provide an answer here. We included clarifications about the screening implications and the high and low endemicity settings and discussed the points raised by Prof. Wilson. Data on physical differences such as number of single rooms would indeed be very interesting to have, but this was beyond the scope of our survey. In addition, there is no international consensus as to how many single rooms per ward and specialty are sufficient or needed. Indeed, we did not mention the UK MDR GNR guideline in the text, however, we did not really mention any other national guideline either. Although the comparison of all national guidelines would have been very interesting, this was not the scope of our study. We did, however, encourage participants to upload their national guidelines in case they had one. The analysis of those would be very interesting indeed. We have included a comment about Figure 1 because of Prof. Wilson's valid and correct observation. We have included this limitation in our discussion.

## VERSION 2 – REVIEW

<b>REVIEWER</b>	Peter Wilson University College London Hospitals
<b>REVIEW RETURNED</b>	18-Feb-2019

<b>GENERAL COMMENTS</b>	The authors have answered the referee queries. The over representation of some countries is a weakness and may bias results although it is addressed in the discussion. However the collection of data across so many countries is useful and should be published.
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