Reviewer's report

Title: Sequential introduction of single room isolation and hand hygiene campaign in the control of methicillin-resistant Staphylococcus aureus in intensive care unit

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Reviewer: Jan A. Kluytmans

Reviewer's report:

This paper describes an important issue: the use of single rooms to control the spread of resistant micro-organisms. The findings are impressive. Unfortunately there are several methodological weaknesses that are only partially addressed by the authors.

1) The fact that no admission screening is performed makes the interpretation of the results difficult. Temporal trends outside of the ICU can therefore not be controlled for. This especially important because the epidemiology of both MRSA and ESBL is currently changing. Both used to be hospital associated pathogens but are now increasingly found in individuals with no healthcare history. This limits the value of ESBL as a control group as well. The authors should discuss this more extensively.

2) No typing is performed and therefore it is impossible to judge if the interventions limit the amount of cross-infection. A lower rate is observed but it is impossible to judge the effect on cross-infection. If the isolates have been stored this may be done additionally. If this is not possible it should be discussed critically.

3) A quasi-experimental study (before after design) should be analyzed using segmented regression analysis to control for trends. This is a minimal requirement for these kind of studies and the authors should redo their analysis.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests