Reviewer's report

Title: Epidemic spread of ST1-MRSA-IVa in a neonatal intensive care unit, Italy

Version: 4 Date: 13 April 2012

Reviewer: Jonathan Otter

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The paper could be shorter. Perhaps in the form of a concise paper?

1. The premise for the study is not clear from the abstract. Did an outbreak prompt the introduction of active surveillance cultures? What other outbreak interventions were performed? Did these make an impact?

2. The conclusion 'Active surveillance with the support of molecular typing is necessary to implement timely and effective control interventions.' is not supported by the data. This is not a controlled study so this conclusion is too strong - the author's don't know what would have happened if they didn't use active screening. And other interventions could have made an impact.

3. It seems odd that all the neonates were colonised on admission. Was there a common admission source?

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4. Intro para 1. Puzzling to Questioning.

5. USA300 is not the 'prototypic' strain. USA400 probably pre-dates USA300 and there were other clones elsewhere. Revise.

6. 'Moreover, the light IV and V SCCmec types have been proved to be peculiar also of some epidemic HA-MRSA clones, such as ST22-MRSA-IV (EMRSA-15) and PVL-negative CA-MRSA strains have been proved to be able to cause not only community infections, but also healthcare outbreaks.' This doesn't make much sense. Revise for clarity. If you're suggesting that EMRSA-15 causes community outbreaks, then that's incorrect.

7. 'Fine-tuned' is rather colloquial.