Decolonization for the Treatment of Methicillin-Resistant Staphylococcus Aureus: Clinical Effectiveness and Guidelines
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About CADTH: CADTH is an independent, not-for-profit organization responsible for providing Canada’s health care decision-makers with objective evidence to help make informed decisions about the optimal use of drugs, medical devices, diagnostics, and procedures in our health care system.

Funding: CADTH receives funding from Canada’s federal, provincial, and territorial governments, with the exception of Quebec.
Research Question

What is the clinical effectiveness of decolonization for Methicillin-Resistant Staphylococcus Aureus (MRSA) in patients known to be carrying MRSA?

Key Findings

Six systematic reviews (two with meta-analyses) and six randomized controlled trials were identified regarding the clinical effectiveness of decolonization for Methicillin-Resistant Staphylococcus Aureus (MRSA) in patients known to be carrying MRSA.

Methods

A focused literature search (with main concepts appearing in the title or subject heading) was conducted on key resources including PubMed, the Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2012 and January 17, 2019. Internet links were provided, where available.

Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

Table 1: Selection Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>Adult and pediatric oncology, hemodialysis, surgical patients, and “healthy” patients known to be carrying methicillin-resistant Staphylococcus aureus (MRSA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Decolonization</td>
</tr>
<tr>
<td>Comparators</td>
<td>Usual care; Any comparator; No comparator</td>
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<tr>
<td>Outcomes</td>
<td>Negative MRSA test results for the patient; decrease in transmission</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials</td>
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</tbody>
</table>
Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials and evidence-based guidelines.

Six systematic reviews (two with meta-analyses) and six randomized controlled trials were identified regarding the clinical effectiveness of decolonization for Methicillin-Resistant Staphylococcus Aureus (MRSA) in patients known to be carrying MRSA. No relevant health technology assessments were identified.

Additional references of potential interest are provided in the appendix.

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses


**Randomized Controlled Trials**


Appendix — Further Information

Previous CADTH Reports


Non-Randomized Studies


Guidelines and Recommendations


Additional References