RESEARCH QUESTIONS

1. What is the clinical evidence to describe prioritization of patients who may benefit from ECMO during an influenza surge or pandemic situation?

2. What are the policies and procedures for quality assurance and quality improvement for ECMO services?

KEY FINDINGS

One systematic review and one non-randomized study were identified regarding prioritization of patients who may benefit from ECMO during an influenza surge or pandemic situation.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2014, Issue 11), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI (Health Devices Gold), Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 1990 and November 13, 2014. 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>Patients in the ICU</th>
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</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Extracorporeal membrane oxygenation (may also be called extracorporeal life support)</td>
</tr>
<tr>
<td>Comparator</td>
<td>Any</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Evidence for management and prioritization of ECMO patients, policies and procedures for quality assurance and quality improvement</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies</td>
</tr>
</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 non-randomized studies.

One systematic review and one non-randomized study were identified regarding prioritization of patients who may benefit from ECMO during an influenza surge or pandemic situation. No relevant health technology assessments or randomized controlled trials 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
No literature identified.

Non-Randomized Studies


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APPENDIX – FURTHER INFORMATION:

Guidelines and Position Statements


Review Articles