RESEARCH QUESTIONS

1. What is the clinical evidence regarding troponin testing for inpatients or patients presenting at the emergency department without evidence of cardiac involvement?

2. What is the cost-effectiveness of troponin testing for inpatients or patients presenting at the emergency department without evidence of cardiac involvement?

3. What are the evidence-based guidelines regarding troponin testing for inpatients or patients presenting at the emergency department without evidence of cardiac involvement?

KEY FINDINGS

One non-randomized study was identified regarding routine troponin testing for inpatients or patients presenting at the emergency department without evidence of cardiac involvement.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2015, Issue 1), University of York Centre for Reviews and Dissemination (CRD) databases, 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, 2010 and January 4, 2015. 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>Inpatients or patients presenting in the emergency department without evidence of cardiac ischemia (e.g. no chest pain, normal ECG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Troponin testing (any), including as part of a standing order</td>
</tr>
<tr>
<td>Comparator</td>
<td>No troponin testing</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Clinical effectiveness (e.g. improved patient outcomes)  \  Harms (e.g. unnecessary follow-up testing, unnecessary interventions)  \  Cost-effectiveness (including costs associated with routine troponin testing)  \  Evidence-based guideline</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations, evidence-based guidelines</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, non-randomized studies, economic evaluations, and evidence-based guidelines.

One non-randomized study was identified regarding routine troponin testing for inpatients or patients presenting at the emergency department without evidence of cardiac involvement. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, economic evaluations, or evidence-based guidelines were identified.

Additional references of potential interest are provided in the appendix.

**Health Technology Assessments**

No literature identified.

**Systematic Reviews and Meta-analyses**

No literature identified.

**Randomized Controlled Trials**

No literature identified.

**Non-Randomized Studies**


**Economic Evaluations**

No literature identified.

**Guidelines and Recommendations**

No literature identified.
APPENDIX – FURTHER INFORMATION:

Systematic Reviews and Meta-analyses – Prognostic Value of Testing


Non-Randomized Studies

Staff Intervention/Uncertain Patient Population


Other or No Comparator


