TITLE: Disposable Blood Pressure Cuffs for Adult Patients: Clinical Effectiveness, Cost-Effectiveness, and Guidelines

DATE: 31 October 2016

RESEARCH QUESTIONS

1. What is the comparative clinical effectiveness of single-use blood pressure cuffs compared to conventional blood pressure cuffs?

2. What is the cost-effectiveness of single-use blood pressure cuffs?

3. What are the evidence-based guidelines regarding infection prevention and control practices related to blood pressure cuffs?

KEY FINDINGS

No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations, or evidence-based guidelines regarding the use of disposable blood pressure cuffs were identified. References of potential interest are provided in the appendix.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) CINAHL, Canadian and major international health technology agencies, as well as a focused Internet search. No methodological filters were applied to limit retrieval. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2006 and October 18, 2016. Internet links were provided, where available.
SELECT CRITERIA

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

<table>
<thead>
<tr>
<th>Table 1: Selection Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
</tr>
<tr>
<td><strong>Intervention</strong></td>
</tr>
<tr>
<td><strong>Comparator</strong></td>
</tr>
</tbody>
</table>
| **Outcomes** | Q1: clinical effectiveness, benefits (e.g., reduced infections, improved patient safety), accuracy and harms (e.g., incorrect measurement of blood pressure)  
Q2: cost-effectiveness (e.g., cost per QALY)  
Q3: guidelines and recommendations (e.g., staff education related to cleaning conventional blood pressure cuffs, recommendations regarding disposable cuffs, how best to implement disposable cuffs) |
| **Study Designs** | Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations and evidence-based guidelines |

RESULTS

No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations, or evidence-based guidelines regarding the use of disposable blood pressure cuffs were identified. References of potential interest, including several guidelines of uncertain methodology, are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

No relevant literature was found regarding the use of disposable blood pressure cuffs was identified, therefore no summary can be provided.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies
No literature identified.

Economic Evaluations
No literature identified.

Guidelines and Recommendations
No literature identified.

PREPARED BY:
Canadian Agency for Drugs and Technologies in Health
Tel: 1-866-898-8439
www.cadth.ca
APPENDIX – FURTHER INFORMATION:

Previous CADTH Reports


Non-Randomized Studies – Laboratory Findings


Guidelines and Recommendations – Methodology not Reported


8. Infectious diseases [Internet]. Ottawa: Public Health Agency of Canada; 2015. Infection prevention and control expert working group: Advice on infection prevention and control
http://www.phac-aspc.gc.ca/id-mi/vhf-fvh/ebola-ipc-pci-eng.php#cont
See: Reprocessing (Cleaning, Disinfection and Sterilization of Medical Equipment)

See: Appendix B: Reprocessing Decision Chart

See: 12. Cleaning and Disinfection of Non-critical Resident Equipment

11. Infectious Diseases [Internet]. Ottawa: Public Health Agency of Canada; Routine practices and additional precautions for preventing the transmission of infection in healthcare settings. 2013 [cited 2016 Oct 27] Available from:
See: IV. Recommendations for Additional Precautions in All Healthcare Settings and Modifications for Precautions in Specific Healthcare Settings

See: Section 2. Cleaning and Low-Level Disinfection

Cost Reporting