Remote Monitoring Medical Devices for COVID-19: Clinical Utility and Cost-Effectiveness

This report was published on July 16, 2020.

To produce this report, CADTH used a modified approach to the selection, appraisal, and synthesis of the evidence to meet decision-making needs during the COVID-19 pandemic. Care has been taken to ensure the information is accurate and complete, but it should be noted that international scientific evidence about COVID-19 is changing and growing rapidly.
Research Questions

1. What is the clinical utility of remote monitoring medical devices for coronavirus disease 2019 (COVID-19)?

2. What is the cost-effectiveness of remote monitoring medical devices for COVID-19?

Key Findings

No literature was identified regarding the clinical utility of remote monitoring medical devices for coronavirus disease 2019. In addition, no relevant economic evaluations were identified regarding the cost-effectiveness of remote monitoring medical devices for coronavirus disease 2019.

Methods

A limited literature search was conducted by an information specialist on key resources including Medline via OVID, PubMed, the Cochrane Library, the University of York Centre for Reviews and Dissemination (CRD) databases, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy was comprised of both controlled vocabulary, such as the National Library of Medicine’s MeSH (Medical Subject Headings), and keywords. The main search concepts were remote monitoring and COVID-19. 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, 2018 and July 10, 2020. 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>
<thead>
<tr>
<th>Table 1: Selection Criteria</th>
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<td><strong>Population</strong></td>
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<td><strong>Intervention</strong></td>
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<td><strong>Comparator</strong></td>
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<td><strong>Outcomes</strong></td>
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<td><strong>Study Designs</strong></td>
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Results

No relevant health technology assessments, systematic reviews, randomized controlled trials, or non-randomized studies were identified regarding the clinical utility of remote monitoring medical devices for COVID-19. In addition, no relevant economic evaluations were identified regarding the cost-effectiveness of remote monitoring medical devices for COVID-19.

References of potential interest that did not meet the inclusion criteria 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

No literature identified.

Economic Evaluations

No literature identified.
Appendix — Further Information

Previous CADTH Reports


Additional References


See: Monitoring strategies during a pandemic: Here to stay, Outpatient, page 3