



TITLE: Telemedicine for Patients with Heart Failure: Clinical and Cost-Effectiveness

DATE: 17 August 2015

RESEARCH QUESTIONS

1. What is the clinical effectiveness of telemedicine interventions for patients with heart failure?
2. What is the cost-effectiveness of telemedicine interventions for patients with heart failure?

KEY FINDINGS

Two health technology assessments, 22 systematic reviews, and seven economic evaluations were identified regarding the clinical and cost-effectiveness of telemedicine interventions for patients with heart failure.

METHODS

A focused search (with main concepts appearing in title or major 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. No filters were applied to the main focused search to limit the retrieval by study type. A second broader search (with main concepts appearing in the title, abstract or subject heading) was also included, however methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, and economic studies. Where possible, retrieval was limited to the human population. The search was also limited to English-language documents published between January 1, 2010 and August 12, 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.

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Table 1: Selection Criteria

Population	Patients with heart failure
Intervention	Telemedicine interventions, including: <ul style="list-style-type: none"> • Video conferencing • Home health monitoring • Telehealth phone lines
Comparator	Usual care without telemedicine
Outcomes	Q1: Clinical benefits (improved health outcomes, improved access to care, patients experience, travel time) Q2: Cost-effectiveness outcomes
Study Designs	Health technology assessments, systematic reviews, meta-analyses, economic evaluations

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 economic evaluations. Due to the volume of relevant literature identified, randomized controlled trials and non-randomized studies were not included in this report.

Two health technology assessments, 22 systematic reviews and seven economic evaluations were identified regarding the clinical and cost-effectiveness of telemedicine interventions for patients with heart failure.

Additional references of potential interest are provided in the appendix.

Health Technology Assessments

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Systematic Reviews and Meta-analyses

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Systematic Review of Systematic Reviews

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Sub-Analyses of Systematic Reviews and Meta-Analyses

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