



TITLE: Emergency Telehealth for Urgent Conditions in Long-Term Care Facilities: Clinical Effectiveness, Cost-Effectiveness, and Guidelines

DATE: 26 May 2015

RESEARCH QUESTIONS

1. What is the clinical effectiveness of the use of telehealth to facilitate the delivery of emergency services to residents in long-term care facilities?
2. What is the cost-effectiveness of the use of telehealth to facilitate the delivery of emergency services to residents in long-term care facilities?
3. What are the evidence-based guidelines regarding the use of telehealth to facilitate the delivery of emergency services to residents in long-term care facilities?

KEY FINDINGS

No relevant literature was identified regarding the use of telehealth to facilitate the delivery of emergency services to residents in long-term care facilities.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, 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 April 14, 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 in long-term care facilities who require emergency care
Intervention	Telehealth (with a videoconferencing component)
Comparator	No comparator; Usual care (which would be transfer to the hospital by ambulance)
Outcomes	Q1: adequate treatment of emergent conditions (whether that is to be able to treat on-site or if that results in transfer), safety, harms Q2: cost-effectiveness of telehealth versus usual care. Q3: optimal use of emergency telehealth, guidelines for use
Study Designs	Health technology assessment reports, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations, and evidence-based guidelines

RESULTS

No relevant health technology assessment reports, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations, or evidence-based guidelines were identified regarding the use of telehealth to facilitate the delivery of emergency services to residents in long-term care facilities.

References of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

No relevant literature was found regarding the use of telehealth to facilitate the delivery of emergency services to residents in long-term care facilities; 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.

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APPENDIX – FURTHER INFORMATION:

Systematic Reviews – Emergency Not Mentioned in Abstract

1. Edirippulige S, Martin-Khan M, Beattie E, Smith AC, Gray LC. A systematic review of telemedicine services for residents in long term care facilities. *J Telemed Telecare*. 2013 Apr 23.
[PubMed: PM23612520](#)

Non-Randomized Studies – Alternate Outcomes

2. Shah MN, Gillespie SM, Wood N, Wasserman EB, Nelson DL, Dozier A, et al. High-intensity telemedicine-enhanced acute care for older adults: an innovative healthcare delivery model. *J Am Geriatr Soc*. 2013 Nov;61(11):2000-7.
[PubMed: PM24164485](#)
3. Shah MN, McDermott R, Gillespie SM, Philbrick EB, Nelson D. Potential of telemedicine to provide acute medical care for adults in senior living communities. *Acad Emerg Med*. 2013 Feb;20(2):162-8.
[PubMed: PM23406075](#)
4. Gray LC, Edirippulige S, Smith AC, Beattie E, Theodoros D, Russell T, et al. Telehealth for nursing homes: the utilization of specialist services for residential care. *J Telemed Telecare*. 2012 Apr;18(3):142-6.
[PubMed: PM22362837](#)
5. Wang F. Economic evaluations of the effects of longevity on telemedicine and conventional healthcare provision. *Telemed J E Health*. 2011 Jul-Aug;17(6):431-4.
[PubMed: PM21631383](#)

Additional References

6. Grabowski DC, O'Malley AJ. Use of telemedicine can reduce hospitalizations of nursing home residents and generate savings for medicare. *Health Aff (Millwood)*. 2014 Feb;33(2):244-50.
[PubMed: PM24493767](#)
7. Hwang U, Shah MN, Han JH, Carpenter CR, Siu AL, Adams JG. Transforming emergency care for older adults. *Health Aff (Millwood)* [Internet]. 2013 Dec [cited 2015 May 25];32(12):2116-21. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4070367>
[PubMed: PM24301394](#)