

CADTH Reference List

Vital Sign Monitoring in Long-Term Care: A 2021 Update

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Funding: CADTH receives funding from Canada's federal, provincial, and territorial governments, with the exception of Quebec.

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Key Messages

- No evidence-based guidelines were identified regarding the optimal frequency for the monitoring of vital signs for residents in long-term care facilities.
- No evidence-based guidelines were identified regarding the optimal practice for the monitoring of vital signs of residents in long-term care facilities.

Research Questions

1. What are the evidence-based guidelines regarding the optimal frequency for the monitoring of vital signs for residents in long-term care facilities?
2. What are the evidence-based guidelines regarding optimal practice for the monitoring of vital signs of residents in long-term care facilities?

Methods

Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including MEDLINE, the Cochrane Database of Systematic Reviews, the international HTA database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were vital signs and long-term care. CADTH-developed search filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, or network meta-analyses and guidelines. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2016, and November 10, 2021. Internet links were provided, where available.

Selection Criteria and Summary Methods

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Full texts of study publications were not reviewed. The Overall Summary of Findings was based on information available in the abstracts of selected publications. Open access full-text versions of evidence-based guidelines were reviewed when abstracts were not available, and relevant recommendations were summarized.

Results

No relevant evidence-based guidelines were found regarding the optimal frequency or optimal practice for the monitoring of vital signs for residents in long-term care facilities.

Table 1: Selection Criteria

Criteria	Description
Population	Stable, predictable residents in long-term care facilities
Intervention	Vital sign monitoring (e.g., blood pressure, temperature, pulse, respiration plus add-ons, such as pulse oximetry and weight)
Comparator	Q1: No vital sign monitoring or different vital sign monitoring frequencies compared Q2: Not applicable
Outcomes	Q1: Evidence-based recommendations about the necessity and frequency of vital sign monitoring for optimal health and care of residents in long-term care facilities Q2: Evidence-based recommendations regarding how vital sign parameters are measured or interpreted (e.g., timing of measurements, interpretation of temperature reading for the elderly, and appropriateness of blood pressure cuffs directly on skin vs. oversleeves)
Study designs	Evidence-based guidelines

References of potential interest that did not meet the inclusion criteria are provided in Appendix 1.

Overall Summary of Findings

No relevant evidence-based guidelines were found regarding the optimal frequency or optimal practice for the monitoring of vital signs for residents in long-term care facilities; therefore, no summary can be provided.

References

Guidelines and Recommendations

No literature identified.

Appendix 1: References of Potential Interest

Previous CADTH Reports

1. Vital sign monitoring for residents in long-term care facilities: guidelines. (*CADTH rapid response report: summary of abstracts*). Ottawa (ON): CADTH; 2016: <https://www.cadth.ca/sites/default/files/pdf/htis/jan-2016/RB0955%20Monitoring%20of%20Vital%20Signs%20Final.pdf>. Accessed 2021 Nov 16.