



TITLE: Frequency of Vital Sign Monitoring in the Emergency Department: Guidelines

DATE: 21 September 2016

RESEARCH QUESTION

What are the evidence-based guidelines regarding the recommended frequency of vital sign monitoring in the emergency department?

KEY FINDINGS

No health technology assessments, systematic reviews and meta-analyses, or evidence-based guidelines were identified regarding the frequency of vital sign monitoring in the emergency department.

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, 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, 2006 and September 15, 2016. 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 being treated in the emergency department
Intervention	Monitoring of vital signs (e.g., temperature, pulse, blood pressure, oxygen saturation, respiration)
Comparator	None required, different time intervals
Outcomes	Evidence-based guidelines and best practice regarding the frequency of monitoring
Study Designs	Health technology assessments, systematic reviews, meta-analyses, evidence-based guidelines

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 evidence-based guidelines.

No relevant health technology assessments, systematic reviews and meta-analyses, or evidence-based guidelines were identified regarding the frequency of vital sign monitoring in the emergency department.

References of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

No relevant literature was found regarding the frequency of vital sign monitoring in the emergency department; therefore, no summary can be provided.

REFERENCES SUMMARIZED

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-Analyses

No literature identified.

Guidelines and Recommendations

No literature identified.

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APPENDIX – FURTHER INFORMATION:

Previous CADTH Reports

1. Canadian Agency for Drugs and Technologies in Health. Monitoring of vital signs in adult patients.[Internet]. Ottawa: CADTH; 2011 Jan 6. (Rapid response report: summary of abstracts). [cited 2016 Sep 21]. Available from: <https://www.cadth.ca/monitoring-vital-signs-adult-patients>

Systematic Reviews and Meta-Analyses

Alternate Setting

2. Moola S, Xue Y, Lockwood C, Schultz T. Systematic review protocol: Vital signs to monitor hospital patients: a systematic review. JBI Library of Systematic Reviews [Internet]. 2008 [cited 2016 Sep 21];6(4):1-11. Available from: http://journals.lww.com/jbisrir/Fulltext/2008/06041/Vital_signs_to_monitor_hospital_patient_s_a.3.aspx

Unclear Intervention and Alternate Setting

3. Evans D, Hodgkinson B, Berry J. Vital signs in hospital patients: a systematic review. Int J Nurs Stud. 2001 Dec;38(6):643-50.
[PubMed: PM11602268](#)
4. Storm-Versloot MN, Verweij L, Lucas C, Ludikhuizen J, Goslings JC, Legemate DA, et al. Clinical relevance of routinely measured vital signs in hospitalized patients: a systematic review. Journal of Nursing Scholarship.2014;46(1):39-49.

Non-Randomized Studies

5. Johnson KD, Winkelman C, Burant CJ, Dolansky M, Totten V. The factors that affect the frequency of vital sign monitoring in the emergency department. J Emerg Nurs. 2014 Jan;40(1):27-35.
[PubMed: PM23099016](#)

Clinical Practice Guidelines – Methodology Not Specified

6. Royal Prince Alfred Hospital: Patient observation (vital signs) policy – adult [Internet]. Sydney (AUS): Sydney South West Area Health Service, NSW Health. 2010 [cited 2016 Sep 21]. Available from: <http://www.safetyandquality.gov.au/wp-content/uploads/2012/02/RPA-observations-policy-directive.pdf>