



**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**

<b>Population</b>	Patients being treated in the emergency department
<b>Intervention</b>	Monitoring of vital signs (e.g., temperature, pulse, blood pressure, oxygen saturation, respiration)
<b>Comparator</b>	None required, different time intervals
<b>Outcomes</b>	Evidence-based guidelines and best practice regarding the frequency of monitoring
<b>Study Designs</b>	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](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>