

CADTH RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS

# Management of Patients Presenting with Syncope in the Emergency Department: Guidelines

Service Line: Rapid Response Service  
Version: 1.0  
Publication Date: February 3, 2020  
Report Length: 5 Pages

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**Cite As:** Management of Patients Presenting with Syncope in the Emergency Department: Guidelines. Ottawa: CADTH; 2020 Feb. (CADTH rapid response report: summary of abstracts).

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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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## Research Question

1. What are the evidence-based guidelines for admitting patients presenting with syncope in the emergency department?

## Key Findings

Two evidence-based guidelines for admitting patients presenting with syncope in the emergency department were identified.

## Methods

A limited literature search was conducted by an information specialist on key resources including Medline, the Cochrane Library, the University of York Centre for Reviews and Dissemination (CRD) databases, the websites of Canadian and major international health technology agencies, as well as a focused Internet search. The search strategy was comprised of both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concept was syncope. Search filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, 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, 2015 and January 23, 2020. Internet links were provided, where available.

## Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

**Table 1: Selection Criteria**

<b>Population</b>	Adult and pediatric patients with syncope in the emergency department
<b>Intervention</b>	Emergency department admission for treatment
<b>Comparator</b>	No comparator
<b>Outcomes</b>	Recommendations for admission and discharge (i.e., guidelines for when it is appropriate to admit as an emergency department patient versus discharge to an outpatient setting)
<b>Study Designs</b>	Health technology assessments, systematic reviews and evidence-based guidelines

## Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports and systematic reviews are presented first. These are followed by evidence-based guidelines.

Two evidence-based guidelines<sup>1,2</sup> for admitting patients presenting with syncope in the emergency department were identified. No health technology assessments or systematic reviews were identified.

Additional references of potential interest are provided in the appendix.

## Overall Summary of Findings

Two evidence-based guidelines<sup>1,2</sup> for admitting patients presenting with syncope in the emergency department were identified.

The European Society of Cardiology guideline<sup>1</sup> bases their admission and discharge recommendations on the classification of patients into either a low-risk or high-risk category. The classification of patients is based on the characteristics of their syncopal event, past medical history, physical examination and electrocardiogram test results.<sup>1</sup> The guideline<sup>1</sup> recommends patients with low-risk features (e.g., a history of recurrent syncope episodes, absence of structural heart disease, normal physical examination, syncopal event secondary to standing in crowded or hot places, during or after a meal, or triggered by cough) be discharged from the emergency department. The guideline<sup>1</sup> recommends patients with high-risk features (e.g., structural heart disease, unexplained systolic hypotension, new onset chest discomfort, sudden onset palpitations after syncopal event) receive evaluation in a syncope unit, in an emergency department observation unit or be hospitalized. Lastly, the guideline<sup>1</sup> recommends patients who do not fit the low-risk nor the high-risk criteria be observed in the syncope unit or the emergency department instead of being hospitalized.

The American College of Cardiology, American Heart Association, and the Heart Rhythm Society's collaborative guideline<sup>2</sup> states that patients with presumptive reflex-mediated syncope or suspected cardiac syncope be managed in the outpatient setting. Moreover, the guideline<sup>2</sup> recommends inpatient hospital evaluation and treatment for patients who have a serious medical condition which may be related to the syncopal event.

## References Summarized

### Health Technology Assessments

No literature identified.

### Systematic Reviews and Meta-analyses

No literature identified.

### Guidelines and Recommendations

1. 2018 ESC Guidelines for the diagnosis and management of syncope. *Rev Esp Cardiol.* 2018 10;71(10):837.  
[PubMed: PM30266166](#)
2. Shen WK, Sheldon RS, Benditt DG, et al. 2017 ACC/AHA/HRS guideline for the evaluation and management of patients with syncope: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. *Circulation.* 2017 08 01;136(5):e60-e122.  
[PubMed: PM28280231](#)

## Appendix — Further Information

### Systematic Reviews and Meta-Analyses

#### *Alternative Intervention*

3. Numeroso F, Mossini G, Lippi G, Cervellin G. Role of emergency department observation units in the management of patients with unexplained syncope: a critical review and meta-analysis. *Clin Exp Emerg Med*. 2017 Dec;4(4):201-207.  
[PubMed: PM29306267](#).

### Clinical Practice Guidelines

#### *Alternative Outcome*

4. Sanatani S, Chau V, Fournier A, Dixon A, Blondin R, Sheldon RS. Canadian Cardiovascular Society and Canadian Pediatric Cardiology Association Position Statement on the approach to syncope in the pediatric patient. *Can J Cardiol*. 2017 02;33(2):189-198.  
[PubMed: PM27838109](#)

### Reviews

5. Reed MJ. Approach to syncope in the emergency department. *Emerg Med J*. 2019;36(2):108-116.  
[PubMed: PM30470687](#)

### Additional References

6. Goldberger ZD, Petek BJ, Brignole M, et al. ACC/AHA/HRS versus ESC guidelines for the diagnosis and management of syncope: JACC Guideline Comparison. *J Am Coll Cardiol*. 2019 Nov 12;74(19):2410-2423.  
[PubMed: PM31699282](#)