

CADTH RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS

Point of Care Ultrasound for Assessment of Patients in Emergency Departments: Guidelines

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Research Question

What are the evidence-based guidelines regarding the use of point of care ultrasound in the emergency department?

Key Findings

No relevant evidence-based guidelines were identified regarding the use of point of care ultrasound in the emergency department.

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 concepts were Point of care ultrasound (POCUS) and Emergency Department. A search filter was applied to limit retrieval to guidelines. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 01, 2014 and August 8, 2019.

Selection Criteria

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

Table 1: Selection Criteria

Population	Adult patients presenting to emergency departments with trauma, deep vein thrombosis, patients chronic heart failure including pericardial effusion, or obstetric issues including ectopic pregnancy
Intervention	Point of care ultrasound (POCUS) in the emergency department
Comparator	Not applicable
Outcomes	Evidence-based guidelines
Study Designs	Evidence-based guidelines

Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Normally, health technology assessment reports, systematic reviews, and meta-analyses are presented first; however, in reports where guidelines are primarily sought, the aforementioned evidence types are presented in the appendix.

No relevant evidence-based guidelines were identified regarding the use of point of care ultrasound in the emergency department.

References of potential interest are provided in the appendix.

Overall Summary of Findings

No relevant literature was found regarding the use of point of care ultrasound in the emergency department, therefore no summary can be provided.

References Summarized

Guidelines and Recommendations

No literature identified.

Appendix — Further Information

Previous CADTH Reports

1. Point-of-care testing: Summary of evidence – January 2019 update. Ottawa (ON): CADTH; 2019: <https://www.cadth.ca/tools/point-care-testing-summary-evidence-january-2019-update>. Accessed 2019 Aug 15.
2. Point of care testing. Ottawa (ON): CADTH; 2017: https://www.cadth.ca/sites/default/files/pdf/es0308_point_of_care_testing.pdf. Accessed 2019 Aug 15
3. Portable ultrasound devices use by non-radiologists: Clinical evidence and guidelines. Ottawa (ON): CADTH; 2016: <https://www.cadth.ca/portable-ultrasound-devices-use-non-radiologists-clinical-evidence-and-guidelines>. Accessed 2019 Aug 15
4. Portable ultrasound devices for the assessment of trauma in rural or remote settings: Clinical effectiveness. Ottawa (ON): CADTH; 2014: <https://www.cadth.ca/portable-ultrasound-devices-assessment-trauma-rural-or-remote-settings-clinical-effectiveness>. Accessed 2019 Aug 15

Systematic Reviews and Meta-analyses – Diagnostic Accuracy

5. Barbic D, Chenkin J, Cho DD, Jelic T, Scheuermeyer FX. In patients presenting to the emergency department with skin and soft tissue infections what is the diagnostic accuracy of point-of-care ultrasonography for the diagnosis of abscess compared to the current standard of care? A systematic review and meta-analysis. *BMJ Open*. 2017;7(1):e013688. [PubMed: PM28073795](https://pubmed.ncbi.nlm.nih.gov/28073795/)

Guidelines and Recommendations

Alternative Intervention – Subgroup of POCUS

6. Via G, Hussain A, Wells M, et al. International evidence-based recommendations for focused cardiac ultrasound. *J Am Soc Echocardiogr*. 2014;27(7):683.e681-683.e633. [PubMed: PM24951446](https://pubmed.ncbi.nlm.nih.gov/24951446/)

Methodology Not Specified

7. Guidelines for point of care ultrasound utilization in clinical practice. San Antonio (TX): Society of the use of point of care ultrasound (SPOCUS); 2017: <https://spocus.org/Practice-Guidelines>. Accessed 2019 Aug 15

Policy and Position Statements

8. Soni NJ, Schnobrich D, Mathews, BK, et al. Point-of-care ultrasound for hospitalists: A position statement of the Society of Hospital Medicine. *J of Hosp Medicine*. 2019; 14(8).<https://www.journalofhospitalmedicine.com/jhospm/article/191453/hospital-medicine/point-care-ultrasound-hospitalists-position-statement>. Accessed 2019 Aug 15

9. Ultrasound guidelines: Emergency, point-of-care and clinical ultrasound guidelines in medicine [Policy Statement]. Dallas (TX): American College of Emergency Physicians; 2016:
<https://edus.ucsf.edu/sites/edus.ucsf.edu/files/ACEP%20Ultrasound%20Guidelines.pdf>
 Accessed 2019 Aug 15

Consensus Statements

10. Shefrin AE, Warkentine F, Constantine E, et al. Consensus Core Point-of-care Ultrasound Applications for Pediatric Emergency Medicine Training. *Aem Education & Training*. 2019;3(3):251-258.
[PubMed: PM31360818](#)
11. Atkinson P, Bowra J, Milne J, et al. International Federation for Emergency Medicine Consensus Statement: Sonography in hypotension and cardiac arrest (SHoC): An international consensus on the use of point of care ultrasound for undifferentiated hypotension and during cardiac arrest. *CJEM Canadian Journal of Emergency Medical Care*. 2017;19(6):459-470.
[PubMed: PM27998322](#)

Additional References

12. Guarner J, Jenkins KM, Franks NM. Successful and unsuccessful point-of-care testing in the emergency room. *American Journal of Clinical Pathology*. 2018; 150 (3): 190–192. <https://academic.oup.com/ajcp/article/150/3/190/5060079> Accessed 2019 Aug 15