



Prehospital Emergency Services
Current Awareness Update
Issue 87, December 2020

The aim of this Current Awareness Update is to provide a digest of information supporting evidence based practice in prehospital emergency services.

This is an edited version of
the update for SWASFT staff

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Prehospital Emergency Services Current Awareness Update – Issue 87, December 2020

With thanks to Matt Holland, LKS ASE Librarian (on behalf of the National Ambulance Research Steering Group).
This Current Awareness Update was commissioned by the National Ambulance Research Steering Group comprising of research leads from ambulance trusts in England, Scotland and Wales and other experts and groups supporting prehospital research. The aim of the group is to support the strategic development of ambulance and prehospital research whether leading, collaborating in or using research.

The research papers have been arranged by the topic headings below:

[Prehospital Practitioners – Professional Development](#)

[Prehospital Research – Methods and Discussion](#)

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[On-Scene Interventions](#)

[Airway Management, Resuscitation & CPR](#)

[Further Research Needed](#)

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****SWASFT author ***** Bedson, A. (2021). Integrating research and evidence-based guidance into prescribing practice. *Journal of Paramedic Practice*.

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Helicopter Emergency Medical Services

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Airway Management, Resuscitation & CPR

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Further Research Needed

Blodgett, J.M., et al. (2021). Alternatives to direct emergency department conveyance of ambulance patients: a scoping review of the evidence. *Scandinavian journal of trauma, resuscitation and emergency medicine*, 29(1).
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CONCLUSIONS: This broad summary offers initial support for alternate routes of care for intermediate, non-urgent patients. Even so, most studies lacked methodologically rigorous evidence and failed to evaluate safe patient outcomes. Some remedies appear to be available such as formal triage pathways, targeted training and organisational support, however there is an **urgent need for more research and dissemination in this area.**

Chowdhury, S. Z., et al. (2021). Effect of Pre-Hospital Workflow Optimization on Treatment Delays and Clinical Outcomes in Acute Ischemic Stroke: A Systematic Review and Meta-Analysis. *Academic Emergency Medicine*.
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Conclusions: This systematic review and meta-analysis found that PSWO significantly improves several time metrics related to stroke treatment leading to improvement in IVT reperfusion rates. Thus, the implementation of these measures in stroke networks is a promising avenue to improve an often-neglected aspect of the stroke response. However, the limited available data suggest functional outcomes and mortality are not significantly improved by PSWO, hence **further studies and improvement strategies vis a vis PSWOs are warranted.**

van Woerden, H., et al. (2020). Factors influencing hospital conveyance following ambulance attendance for people with diabetes: A retrospective observational study. *Diabetic medicine : a journal of the British Diabetic Association*.

Click [here](#) to access fulltext (open access as of 02/02/2021)

CONCLUSION: A higher rate of conveyance associated with hyperglycaemic cases indicates a need for more resources, education and training in this area. Higher conveyance rates were also associated with no paramedic being present and no treatment being administered. This suggests that paramedic attendance may be crucial in reducing avoidable admissions. **Developing and validating protocols for pre-hospital services and treatment may help to reduce hospital conveyance rates.**

Hawkrige, K., et al. (2020). Evidence for the use of spinal collars in stabilising spinal injuries in the pre-hospital setting in trauma patients: a systematic review. *European journal of trauma and emergency surgery : official publication of the European Trauma Society*.

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Conclusion: Our study shows a disparity between current guidelines and the published literature and warrants **further direct research to obtain a more comprehensive view of the use of spinal collars in a pre-hospital setting.**

Valeriano, A. (2021). Crowdsourcing to save lives: A scoping review of bystander alert technologies for out-of-hospital cardiac arrest - Resuscitation. *Resuscitation*.

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Conclusion: Our review provides a comprehensive overview of crowdsourcing technologies for bystander intervention in out-of-hospital cardiac arrest. Future work should focus on clinical outcomes and methods of addressing barriers to implementation.

New Ebooks and other resources

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- [Communication in nursing and healthcare : a guide for compassionate practice](#)
- [An Introduction to Qualitative Research](#)
- [The SAGE Handbook of Coaching](#)
- [Tortora's principles of anatomy and physiology](#)

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