

Prehospital Emergency Services Current Awareness Update  
Issue 106, March / April 2024



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## **Research and Best Practice**

The following research papers have been published in the last couple of months. The papers have been arranged by the topic headings below: (Ctrl & Click on the heading to go straight to that section)

[Prehospital Practitioners – Professional Development](#)

[Prehospital Research – Methods and Discussion](#)

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## Prehospital Research – Methods and Discussion

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## Helicopter Emergency Medical Services (HEMS) and Air Medical

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## Diagnosis and Triage

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## Patient Profile

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## Children and Young People

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### **Patients with Lower Back Pain**

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### **Patients using Drugs**

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## **On-Scene Interventions**



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**Bath., MF., et al.,** (2024). Trends in pre-hospital volume resuscitation of blunt trauma patients: a 15-year analysis of the British (TARN) and German (TraumaRegister DGU®) National Registries. *Critical care (London, England)*, 28(1). <https://doi.org/10.1186/s13054-024-04854-x>

**CONCLUSION:** Considerable variability exists in pre-hospital fluid resuscitation strategies for blunt trauma patients. Our data suggest a trend towards reduced pre-hospital fluid administration over time. This trend appears to be associated with improved coagulation function and decreased mortality rates. However, we acknowledge that these outcomes are influenced by multiple factors, including other improvements in pre-hospital care over time. **Future research should aim to identify which trauma populations may benefit, be harmed, or remain unaffected by different pre-hospital fluid resuscitation strategies.**

**Goodacre., S., et al.** (2024). Prehospital early warning scores for adults with suspected sepsis: the PHEWS observational cohort and decision-analytic modelling study. *Health technology assessment (Winchester, England)*, 28(16). <https://doi.org/10.3310/NDTY2403>

**CONCLUSIONS:** No strategy is ideal but using NEWS2, in patients with a paramedic diagnostic impression of infection or sepsis could identify one-third to half of sepsis cases without prioritising unmanageable numbers. No other score provided clearly superior accuracy to NEWS2. **Research is needed to develop better definition, diagnosis and treatments for sepsis.**

**Holmes., E., et al.** (2024). Developing an alternative care pathway for emergency ambulance responses for adults with epilepsy: A Discrete Choice Experiment to understand which configuration service users prefer. Part of the COLLABORATE project. *Seizure*, 118. <https://doi.org/10.1016/j.seizure.2024.04.008>

**DISCUSSION:** Preferences differ to current practice but have minimal variation by seizure type or stakeholder. **Further work on feasibility of these pathways in England, and potentially beyond, is required.**

**Webb., CT., et al.,** (2024). Validation of Air Medical Prehospital Triage Score in Determining Resource Utilization at Level 1 Trauma Centers. *Air medical journal*, 43(2). <https://doi.org/10.1016/j.amj.2023.10.001>

**CONCLUSION:** The AMPT score reduced the number of patients who were inappropriately transported to a trauma center. However, this appeared to be at the expense of undertriage. **Future studies should focus on developing a refined air medical-specific triage tool that has both low overtriage rates as well as lower undertriage rates.**

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