



**Library and
Knowledge Services**

Saving you time so you can save lives



Unscheduled care

November 2025

This monthly current awareness bulletin aims to highlight relevant reports and peer-reviewed literature in emergency and unscheduled care. The bulletin focuses on efforts to improve patient flow, reduce waiting times and alternative care models.

If you require specific information, please [contact us via email](#).

References

Balu P.R.S., et al. (2025) '[Efficacy of Different Triage Protocols in Reducing Waiting Times in Emergency Settings: A Randomized Controlled Trial.](#)' *Journal of Pharmacy and Bioallied Sciences* 17, S2353–S2355.

Introduction: Prolonged waiting times in emergency departments (EDs) can result in adverse outcomes for patients. Implementing efficient triage protocols is critical in reducing these delays. This study evaluates the efficacy of different triage protocols in decreasing waiting times in emergency settings.

Method(s): A randomized controlled trial (RCT) was conducted to compare three triage protocols (Manchester Triage System, Nurse-Initiated Triage, and Digital Triage Systems). The primary outcome was the reduction in waiting times.

Secondary outcomes included patient throughput and satisfaction.

Result(s): A statistically significant reduction in waiting times was observed in the Nurse-Initiated Triage group compared to the Manchester Triage system ($P < 0.05$). The Digital Triage System showed the highest patient throughput but lower satisfaction scores.

Conclusion(s): Nurse-Initiated Triage protocols can effectively reduce waiting times in ED settings. Digital Triage Systems while improving efficiency may need to address patient satisfaction concerns.

Copyright © 2025 Journal of Pharmacy and Bioallied Sciences.

Denecke K., and RiveraRomero, O. (2025) '[Exploring the Relevance of Patient Selection Criteria for Hospital at Home Care: Results from an Expert Survey.](#)' *Studies in Health Technology and Informatics* 332, 88–92.

Hospital at home (HaH) models involve treating patients at home for conditions that typically require hospitalisation. This paper reports on an expert survey to validate patient selection criteria from the literature. Feedback from 20 experts led to consensus on four criteria: medical condition, clinical suitability, living conditions and social support. No consensus was reached on the criteria demographics, technological readiness and literacy. Five other characteristics were identified. These criteria emphasise the importance of selecting patients on the basis of clinical need, safety, and ability to receive care at home, while taking into account potential inequalities. Future efforts should focus on improving digital readiness, integrating multidisciplinary perspectives, and ensuring equitable access to HaH services.

Gettel C.J., et al. (2025) '[Ambulatory Care Follow-Up and Fragmentation After Emergency Department Visits among Older Adults.](#)' *Journal of Applied Gerontology : The Official Journal of the Southern Gerontological Society* , 7334648251383345.

ObjectivesThis study aimed to characterize ambulatory care patterns among older adults discharged from the emergency department (ED).**Methods**This retrospective cohort study of 55,391 ED visits from the 2015-2021 Medicare Current Beneficiary Survey examined ambulatory follow-up within 7 and 30 days. Care fragmentation was assessed by identifying visits where patients saw 2+ different providers. Zero-inflated negative binomial models analyzed associations between patient characteristics (e.g., dementia, multiple chronic conditions) and follow-up.**Results**Follow-up occurred in 22.9% and 44.2% of cases within 7 and 30 days, respectively. Care fragmentation occurred in 4.6% and 25.3% of cases. Dementia reduced follow-up odds (OR 0.74; 95% CI 0.66-0.84; $p < 0.001$), while multiple chronic conditions increased them (OR 1.27; 95% CI 1.19-1.36; $p < 0.001$).**Discussion**Most older adults lack timely ED follow-up, and care can be fragmented. These patterns highlight the need for interventions to balance access and fragmentation while improving outcomes.

Hogben S.R., and Marlow, R. (2025) '[How Long Until I Am seen, Doc?" Modelling Paediatric Emergency Department Waiting Times to make Personalised Predictions.](#)' *Emergency Medicine Journal* 42(10), 636–642.

Background ED patient wait times have been progressively increasing leading to patient dissatisfaction in ED. Managing patient expectations towards wait times in ED may be more effective at decreasing dissatisfaction than shortening actual wait times. Models for predicting wait times have been made for general EDs but not for solely paediatric departments. We aimed to create a model that could predict the personalised wait time of a child presenting to paediatric ED after triage. **Methods** This was a single-centre retrospective study analysing all ED attendances to the

Bristol Royal Hospital for Children between 1 January 2022 and 31 December 2022. From anonymised routinely collected administrative data, we created a multiple linear regression model to predict wait times. We developed the model by randomly assigning 80% of the data to a training set and used the remaining 20% as a validation set to assess the accuracy of our model. CIs were calculated using 500 bootstrap iterations sampled from the validation set. Understanding that patients are satisfied being seen sooner than their predicted wait time, we considered the result to be unsuccessful if their actual wait time was 30min over their predicted wait time. Results From 40 828 ED presentations, the median patient wait time was 65min (IQR 34-122). Our model was able to predict wait times for 84.2% (95% CI 83.42% to 84.91%) of attendances successfully. Triage category, number of patients waiting, number of patients in the department, time of presentation, length of wait of last patient and day of week all had a significant impact on prediction of wait times (all $p < 0.001$). Conclusion Tailored models created using routine data can be used to give individualised predictions for wait times in paediatric ED, which could be given to patients with the aim of managing expectations and improving patient satisfaction. Copyright © Author(s) (or their employer(s)) 2025. No commercial re-use. See rights and permissions. Published by BMJ Group.

Levaggi R., et al. (2025) '[Emergency Department Crowding: How Valuable is GPs Information?](#)' *Social Science and Medicine* 385(pagination), Article Number: 118600. Date of Publication: 01 Nov 2025.

Can GPs referral reduce the inappropriate use of Emergency Departments (ED)? Our paper allows us to shed some light on this policy relevant issue by exploiting a unique dataset of 38,572 admission records from the province of Trento in 2018. The dataset contains, among other things, specific information on how the decision to visit the ED (i.e., was it the patient's own decision or was the visit based on the advice of their GP) was made. In our data, 10.5 % of the accesses are inappropriate but we find that GP referrals reduce the probability of inappropriate access by 6.5 percentage points on average; the results are robust to changes in parameters and estimation models. From a policy perspective, the analysis suggests that GPs could play a crucial role in reducing overcrowding in EDs and provides quantitative support for the use of fast-tracking GP referrals as a possible management strategy. Copyright © 2025 The Authors

Liu T.L., et al. (2025) '[Collaborative Development of a Rules-Based Electronic Health Record Algorithm for Hospital-at-Home Eligibility.](#)' *Journal of Hospital Medicine* 20(10), 1140–1144.

Identifying appropriate patients for hospital at Home (HaH) is challenged by the extensive inpatient population, the dynamic nature of hospitalizations, and the eligibility window for entry into the care model. This study presents the development of a rules-based algorithm (RBA) leveraging electronic health record (EHR) data to improve HaH patient identification, which is crucial for efficient HaH operations. RBA

adjustments incorporated clinician feedback to align analytics resources and enhance clinical workflows. Our study highlights the importance of interdisciplinary collaboration and the potential for analytics to optimize efficiency for emerging care models.

Copyright © 2025 Society of Hospital Medicine.

Rao K.A., et al. (2025) '[Challenges and Perceived Impacts of Ambulance Diversions during Emergency Department Overcrowding: A Multi-Stakeholder Study.](#)' *Prehospital Emergency Care* 29(7), 993–1007.

OBJECTIVES: Ambulance diversion has emerged as a strategy to address Emergency Department (ED) overcrowding, but the question of when or whether diversion should be triggered is widely debated. Although the positive and adverse impacts of diversion have been primarily studied using quantitative data, little is known about the experience and perceptions of key stakeholders involved in diversions. Our study aims to explore the challenges and impacts of ambulance diversion as experienced by key stakeholders and their suggestions for improving the diversion process.

METHOD(S): We conducted semi-structured interviews with key stakeholders including physicians, nurses and paramedics across two EDs and four fire stations. All interviews were audio-recorded following consent and transcribed verbatim. The transcripts were subjected to thematic analysis to identify key themes and sub-themes. Coding discrepancies were resolved through iterative discussions until no new themes were identified.

RESULT(S): A total of 33 stakeholders were interviewed. The primary reasons for ambulance diversions were perceived to be resource constraints in EDs, overcrowding and bed block situations. Challenges during diversions included communication breakdowns, operational delays, lack of clarity in diversion criteria and emotional stress for both Emergency Medical Services (EMS) and hospital staff. Participants felt diversions impacted patient safety, staff morale, system efficiency and could generate inter-institutional conflict. Suggestions on improvements focused on use of alternative care pathways, improving hospital's flow issues, better information sharing, and optimizing the diversion process through strategizing the timing and duration of diversions. Reworking the hierarchical approach of dissemination of information to ground staff was also suggested.

CONCLUSION(S): This study highlights that while diversions may offer temporary relief for overwhelmed hospitals, they also pose challenges and negative impacts on receiving hospitals and EMS operations. Our findings underscore the need for systemic improvements to address the root causes of ED overcrowding and enhance understanding among stakeholders involved in diversions.

Silberlust J., et al. (2025) '[Telemedicine Urgent Care for Older Adults: Insights from a Large EHR Aggregated Dataset.](#)' *Journal of the American Geriatrics Society* 73(9), 2931–2934.

Timm N., et al. (2025) '[Development and Implementation of the Modified Pediatric Emergency Department Overcrowding Scale in Two Large Academic Pediatric Centers.](#)' *Journal of Emergency Nursing* (pagination), Date of Publication: 2025.

Emergency department crowding is a chronic problem within health care systems. The consequences of crowding are well documented with negative impacts on patient outcomes, patient/family satisfaction, staff stress, and medical errors. This study describes the implementation of the Pediatric Emergency Department Overcrowding Scale in 2 emergency departments, a 45-bed and a 22-bed, within a large pediatric academic medical center. Initial work revealed the scale worked well at a 45-bed emergency department but significantly underreported crowding at the 22-bed emergency department. A bed capacity correction factor was developed and incorporated in the Pediatric Emergency Department Overcrowding Scale formula, thus standardizing the view of crowding in each emergency department. The modified Pediatric Emergency Department Overcrowding Scale provided real-time visualization of crowding in both emergency departments and health care system capacity management systems. The modified Pediatric Emergency Department Overcrowding Scale was shared with a pediatric emergency department within another large academic pediatric medical center. Implementation of the bed capacity correction factor into their system resulted in a similarly improved demonstration of emergency department crowding through the Pediatric Emergency Department Overcrowding Scale.

Copyright © 2025 Emergency Nurses Association

Umana E., et al. (2025) '[Application of Step-by-Step and Paediatric Emergency Care Applied Research Network \(PECARN\) Clinical Decision Aids in the Management of Young Febrile Infants in a UK Cohort.](#)' *Emergency Medicine Journal : EMJ* (pagination), Date of Publication: 06 Oct 2025.

BACKGROUND: Young febrile infants are at high risk of invasive bacterial infections (IBIs). Clinical Decision Aids (CDA) such as the Step-by-Step and Paediatric Emergency Care Applied Research Network (PECARN) use Procalcitonin (PCT), limiting their application in settings without PCT access. This study aimed to test the performance of these CDAs in a UK cohort.

METHOD(S): This was a planned analysis of the Febrile Infant Diagnostic Assessment and Outcome Study, a large, prospective multicentre observational study conducted across over 30 sites in the UK. Febrile infants (0-90 days of age) with complete biomarker data, who also underwent PCT testing, were included. Two CDAs, PECARN and Step-by-Step, were applied to the cohort, using their recommended low-risk criteria. The diagnostic performance of the CDAs was analysed.

RESULT(S): Of the 1527 infants who completed biomarker testing in the main study, 442 had PCT testing and were included, 22 (5%) were diagnosed with an IBI.

PECARN and Step-by-Step CDAs demonstrated sensitivities of 1.00 (95% CI: 0.85 to 1.00) and 0.96 (95% CI: 0.77 to 1.00) respectively. The PECARN CDA performed with a specificity of 0.14 (95% CI: 0.11 to 0.18) identifying 14% of the participants as low-risk and did not misclassify any infants. The Step-by-Step CDA performed with a specificity of 0.15 (95% CI: 0.12 to 0.19) identifying 14% of the participants as low-risk and misclassifying one participant with IBI as low-risk.

CONCLUSION(S): Both PECARN and Step-by-Step CDAs demonstrated high sensitivity for detecting IBI in our cohort. While specificity was relatively low, these tools could potentially identify a subset of low-risk infants suitable for less intensive management.

Copyright © Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY. Published by BMJ Group.

Waligora G., et al. (2025) 'Can Application of Artificial Intelligence Improve Emergency Department Triage Performance?.' *Journal of Emergency Medicine* 78, 351–370.

Background: Emergency department (ED) overcrowding and resulting delayed patient care is a rapidly growing worldwide problem leading to increased mortality and morbidity. Current ED triage systems have a suboptimal ability to differentiate critically ill patients due to subtle signs or symptoms often being difficult to recognize. In recent years, there is growing evidence to suggest that artificial intelligence-based ED-triage systems might enhance an ED clinician's ability to identify patients most in need of intensive ED resources. A systematic review was performed using the American Academy of Academic Medicine Clinical Practice Committee Statement on Protocols for the literature search/grading process to identify articles that could answer the following question: "Can the application of artificial intelligence improve Emergency Department triage performance?" Method: A structured review was performed of the literature using PubMed. Inclusion criteria were limited to reports from the last 5 years involving human subjects, written in English, and containing the following keywords: Artificial Intelligence, Emergency Department, Triage.

Result(s): The search yielded 211 results in total, and after the first review, 62 articles were selected to be potentially relevant to our review. The abstract of each article was assessed independently by authors, with 38 selected as responsive for this position statement and reviewed in full.

Conclusion(s): Based on multiple retrospective and few prospective studies, there is emerging evidence suggesting that Artificial Intelligence-based ED triage systems demonstrate cohort-specific superior performance in predicting adult and pediatric patients who are more likely to need critical care, operative procedures, and hospital admission.

Copyright © 2025 Elsevier Inc.

Wedekind L., et al. (2025) 'Rehospitalizations for Ambulatory Care Sensitive Conditions in Sepsis Survivors- a Nationwide Cohort Study using Health

Claims Data 2016-2019.' *Infection* 53(5), 2227–2233.

Purpose: Sepsis survivors suffer from frequent rehospitalizations, of which a certain proportion is considered preventable by timely and adequate management in the outpatient setting (= ambulatory care sensitive conditions, ACSC). We aimed to assess the frequency of and risk factors for ACSC and infection-associated ACSC rehospitalization among sepsis survivors.

Method(s): Population-based, retrospective cohort study among using nationwide health claims data of the "AOK- die Gesundheitskasse". Sepsis patients with inpatient treatment in 2016-2019 were identified using ICD-codes. Among sepsis hospital survivors, ACSC and infection-related ACSC were identified. Patient-related risk factors for ACSC were assessed by a multiple logistic regression analysis.

Result(s): We included 347,826 sepsis patients and 234,874 sepsis hospital survivors. A total of 53.2% and 21.3% of sepsis survivors had at least one ACSC and infection-related ACSC rehospitalizations in the 12-months post-discharge, respectively. ACSC rehospitalizations often occurred closely after discharge and more frequently affected older, male, care dependent patients as well as those living in rural areas.

Conclusion(s): ACSC are common among sepsis survivors. This underlines to need for structured aftercare programs and interventions in these patients, particularly for ACSC risk groups which comprise older, male, care dependent patients in rural areas.

Copyright © The Author(s) 2025.

Zou M., et al. (2025) 'Facilitators and Barriers to Triage Efficiency in Adult Emergency Departments: An Integrative Literature Review.' *Australasian Emergency Care* (pagination), Date of Publication: 2025.

Purpose: Triage is a critical process for patient prioritisation in emergency departments (EDs) that aims to rapidly allocate patients to the appropriate level of emergency care commensurate with clinical urgency. Triage completion is expected within two to five minutes while ensuring patient safety. The purpose of this review is to identify the facilitators and barriers to triage efficiency in EDs and provide an overview of how these factors impact the triage process. Procedures: An integrative literature review was conducted with a structured search across six databases, including CINAHL, Embase, Medline, Scopus, ProQuest, and PubMed. Twenty studies met the inclusion criteria and were narratively synthesised.

Finding(s): Factors affecting triage efficiency were grouped under four themes. Process-related factors such as workflow designs, electronic triage support decision tools, "quick look" triage approaches, and system inefficiencies; nurse-related factors like experience, educational attainment, cognitive approach, and fatigue; environmental and system-related pressures such as interruptions, high patient volume, overcrowding, and availability of adequate triage spaces and equipment; and patient factors, including patient complexity, all shaped triage efficiency.

Conclusion(s): Triage efficiency is a dynamic and context-sensitive outcome shaped by multiple factors. Some factors are modifiable, and further studies are needed to explore targeted interventions and their impact on triage efficiency in emergency care.

End of Document