Emergency Medicine Update

January 2026

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Contents

1. Understanding corridor and escalation area care in 165 UK emergency departments: a multicentre cross-sectional snapshot study

Item Type: Journal Article

Publication Date: 2026

Journal: Emergency Medicine Journal : EMJ 43(2), pp. 72–80

Abstract: Introduction: Emergency department (ED) crowding is an international concern. It results in care being delivered in non-standard treatment spaces including corridors, termed escalation areas in the UK. Limited data suggest their use is widespread. This study aimed to establish the prevalence of UK escalation area use at a national level.; **Methods:** A prospective cross-sectional point prevalence study was carried out in 165 UK EDs over five snapshots in March 2025 selected to represent a range of expected ED activity. The primary outcome was the proportion of patients receiving care in escalation areas. Secondary outcomes were the number of patients awaiting an inpatient bed, ED occupancy and resuscitation capacity. The presence of paediatric patients and those with mental health presentations in escalation areas is also reported.; **Results:** Across the five snapshots, 17.7% (n=10 042) of ED patients were receiving care in escalation areas. At each snapshot there were more patients awaiting an inpatient bed than patients in escalation areas. The percentage of escalation area patients in non-clinical areas such as corridors ranged from 54.5% to 61.1%. ED occupancy (patients per cubicle space) ranged from 1.0 (IQR 0.7-1.4) to 2.4 (IQR 1.8-3.1). There was no available

resuscitation cubicle at 10.5% (n=17/162) to 26.2% (n=43/164) of sites. Paediatric and mental health patients were receiving care in escalation areas across all time points.; **Conclusion:** Almost one in five ED patients was experiencing escalation area care during the five snapshots. National guidance states escalation area use is not acceptable; this research demonstrates it is routine. This study supports the hypothesis that, to address ED escalation area care, the focus should be on facilitating the flow of patients who require an inpatient bed out of the ED. Further research should consider the effect of escalation area care on patient level outcomes and the effectiveness of interventions to reduce ED crowding.

Access or request full text: https://libkey.io/10.1136/emermed-2025-215301

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41365687&profid=ehost

2. Emergency physicians' perspectives on integrating physiotherapists into emergency departments: a national survey from France

Item Type: Journal Article

Authors: Malcuit, Justine;Lesieur, Emilie;Ghazali, Daniel Aiham and Sarhan, François-Régis

Publication Date: 2026

Journal: Emergency Medicine Journal : EMJ 43(2), pp. 107–115

Abstract: Background: Emergency departments (EDs) worldwide are facing increasing patient volumes and thus crowding, prolonged waiting times and rising healthcare costs. In France, ED visits rose from 8.5 to 16 million between 2014 and 2024. To address these challenges, several countries (including Australia, the UK and Canada) have integrated physiotherapists into EDs in advanced practice roles-primarily for musculoskeletal (MSK) conditions. In contrast, this type of integration is rare in the French healthcare system. The objective of the present study was to assess the attitudes of French emergency physicians to the incorporation of physiotherapists into ED teams.; **Methods:** A nationwide, cross-sectional survey of emergency physicians practising in France was conducted between 22 November 2023 and 15 February 2024. The study questionnaire assessed the physicians' willingness to collaborate with physiotherapists, the perceived benefits of collaboration and views on task delegation. Descriptive statistics and χ^2 tests were used to analyse the data.; **Results:** Of the 420 respondents, 333 (79.3%) expressed willingness to collaborate with physiotherapists in EDs. The most commonly cited benefits were improved quality of care n=321 (76.4%), greater patient satisfaction n=318 (75.7%), a lower physician workload n=276 (67.5%) and enhanced ED efficiency n=211 (50.2%). The conditions most frequently considered for delegation included suspected ankle sprains n=313 (74.5%), knee sprains n=277 (66.0%) and lower back pain n=271 (64.5%). Compared with junior colleagues, senior physicians with five or more years of experience were significantly more supportive of delegating cases of neck pain (n=110, 41.7%, p=0.017).; **Conclusions:** French emergency physicians are generally supportive of integrating physiotherapists into EDs, especially for the management of non-urgent MSK conditions. The physicians see physiotherapists as capable of providing on-site care and patient education, potentially improving patient flow and alleviating pressures in overcrowded EDs. These findings

offer valuable insights for countries in which the integration of physiotherapy into emergency care is still emerging. (© Author(s) (or their employer(s)) 2026. No commercial re-use. See rights and permissions. Published by BMJ Group.)

Access or request full text: https://libkey.io/10.1136/emermed-2024-214746

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40998571&profid=ehost

3. Acute coronary syndrome rule-out strategies in the emergency department: an observational evaluation of clinical effectiveness and current UK practice

Item Type: Journal Article

Publication Date: 2025

Journal: Emergency Medicine Journal : EMJ 42(9), pp. 585–592

Abstract: **Background:** Numerous strategies have been developed to rapidly rule-out acute coronary syndrome (ACS) using high-sensitivity troponin. We aimed to establish their performance in terms of emergency care length of stay (LOS) in real-world practice.; **Methods:** A multicentre observational cohort study in 94 UK sites between March and April 2023. Recruitment was preferably prospective, with retrospective recruitment also allowed. Adults presenting to the ED with chest pain triggering assessment for possible ACS were eligible. Primary outcome was emergency care LOS. Secondary outcomes were index rate of acute myocardial infarction (MI), time to be seen (TTBS), disposition and discharge diagnosis. Details of ACS rule-out strategies in use were collected from local guidelines. Mixed effects linear regression models tested the association between rule-out strategy and LOS.; **Results:** 8563 eligible patients were recruited, representing 5.3% of all ED attendances. Median LOS for all patients was 333 min (IQR 225, 510.5), for admitted patients was 460 min (IQR 239.75, 776.25) and for discharged patients was 313 min (IQR 221, 451). Heterogeneity was seen in the rule-out strategies with regard to recommended troponin timing. There was no significant difference in LOS in discharged patients between rule-out strategies defined by single and serial troponin timing (p=0.23 and p=0.41). The index rate of acute MI was 15.2% (1301/8563). Median TTBS was 120 min (IQR 57, 212). 24.4% (2087/8563) of patients were partly managed in a same day emergency care unit and 70% (5934/8563) of patients were discharged from emergency care.; **Conclusion:** Despite heterogeneity in the ACS rule-out strategies in use and widespread adoption of rapid rule-out approaches, this study saw little effect on LOS in real-world practice. Suspected cardiac chest pain still accounts for a significant proportion of UK ED attendances. ED system pressures are likely to be explanatory, but further research is needed to understand the reasons for the unrealised potential of these strategies. (© Author(s) (or their employer(s)) 2025. No commercial re-use. See rights and permissions. Published by BMJ Group.)

Access or request full text: https://libkey.io/10.1136/emermed-2024-214616

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40533119&profid=ehost

4. Extracorporeal Cardiopulmonary Resuscitation: Reviewing the Evidence and Exploring Its Equitable Implementation in the UK National Health Service

Item Type: Journal Article

Authors: Akhtar, W. and Barrett, N. A.

Publication Date: 2025

Journal: British Journal of Hospital Medicine (London, England : 2005) 86(7), pp. 1–12

Abstract: Extracorporeal cardiopulmonary resuscitation offers a potentially revolutionary improvement in the historically poor outcomes for refractory cardiac arrest. Current evidence has only demonstrated efficacy in single high volume centres in Europe and the USA and important logistical and health economic considerations remain for a country wide roll out. In this article we will review the evidence and equitable delivery of extracorporeal cardiopulmonary resuscitation in the context of the principles of the United Kingdom healthcare system for a general medical audience.

Access or request full text: https://libkey.io/10.12968/hmed.2024.0792

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40705561&profid=ehost

5. Shifting patterns in emergency department attendance: a time series analysis

Item Type: Journal Article

Authors: Alkhatib, Ahmad;Aylin, Paul;Klaber, Robert and Woodcock, Thomas

Publication Date: 2025

Journal: Emergency Medicine Journal : EMJ

Abstract: Background: Rising demand and limited capacity in primary care are often cited as reasons for the increasing pressure on emergency departments (EDs). The COVID-19 pandemic further strained but also reshaped healthcare services and their accessibility. However, an equally critical yet often overlooked factor is the increasing complexity of cases. This study assessed ED attendance trends for the Northwest London (NWL) population between February 2017 and September 2023, before, during and after the pandemic lockdown measures (March 2020-March 2021) in the UK as a whole and across sociodemographic and multimorbidity profiles.; **Method:** We used the Whole System Integrated Care data warehouse in NWL. We conducted a segmented time-series quasi-Poisson regression for weekly ED attendance for two periods, before and after the pandemic lockdown measures, adjusting for seasonality and autocorrelation. We stratified the model by age, sex and quintiles of the 2019 Index of Multiple Deprivation. We analysed ED attendance trends by multimorbidity groups.; **Results**: There were 3 365 279 ED attendances from February 2017 to September 2023. Before the pandemic, there was a statistically significant annual growth rate of 3.4% (rate ratio (RR) 1.034; CI 1.026 to 1.042), with a rising trend in attendance observed in all patient groups. After

the pandemic, the overall trend stabilised (RR 1.002; CI 0.993 to 1.009). However, attendances have continued to rise for older age groups (61-75 years and 76+ years) and have increased for patients with multimorbidity and complex multimorbidity. Meanwhile, attendance has declined for the least deprived. For the other patient groups, attendance has plateaued.; **Conclusion:** Following the pandemic, total ED attendances stabilised, but have continued to rise for older people, particularly those requiring complex care. This has implications for hospital capacity and places an increased strain on urgent and emergency care. We used high-quality representative population-level linked patient records data. The study was observational with limited causality. Further research should explore specific reasons behind these changes. (© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY. Published by BMJ Group.)

Access or request full text: https://libkey.io/10.1136/emermed-2024-214412

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41344877&profid=ehost

6. Mortality predictors in pediatric emergency department presentations: a systematic review and meta-analysis

Item Type: Journal Article

Authors: Alsabri, Mohammed;ELKarargy, Mohamed A.;Ata, Israa Magdy;Khalifa, Mostafa A.;Hamid, Abdulrahman Khaldoon;Elsnhory, Ahmed Bostamy;Abdelwahab, Omar Ahmed and Urbon, Sarah

Publication Date: 2025

Journal: BMC Emergency Medicine 25(1), pp. 188

Abstract Background: Pediatric patients present to the emergency departments (EDs) with a wide range of clinical manifestations, ranging from mild to severe. A systematic approach is crucial to identify those at high risk of deterioration. However, the predictive value of such predictors remains unclear.; **Objectives:** Our study aims to evaluate different mortality predictors used in pediatric emergency departments (PEDs) regarding the diagnostic accuracy metrics, including sensitivity, specificity, and diagnostic odds ratio.; Methods: We comprehensively searched multiple databases and included all cohort studies, case-control studies, and randomized controlled trials from January 2000 to December 2024 with pediatric patients (aged 0-18 years) presenting to PEDs, where mortality predictors were used to assess for in-ED and short-term post-ED mortality. We employed a bivariate random-effects model for data synthesis and analysis to calculate pooled sensitivity, specificity, diagnostic odds ratio (DOR), and area under the curve (AUC) values.; **Results:** 329 Pediatric Early Warning Score (PEWS) thresholds were analyzed, with the model-derived optimal cutoff 2.189 (AUC) = 0.70; 95% CI: 0.63 to 0.76), high pooled sensitivity (0.95, 95% CI: 0.72 to 0.80) and specificity (0.93, 95% CI: 0.62 to 0.80). In addition, A strong negative predictive value (NPV = 0.0006) and modest positive predictive value (PPV = 0.0003) were noted. Heterogeneity was significant (I^2>99%), driven by PEWS versions and clinical settings. PEWS implementation reduced mortality without increasing ICU admissions in resource-limited settings.; **Conclusions:** PEWS is a good exclusion tool for those at low mortality risk. However, a comprehensive approach with clinical judgment is needed for the risk assessment of high-risk pediatrics. (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1186/s12873-025-01347-0

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41013297&profid=ehost

7. Uncovering success stories: how to resuscitate in situ simulation initiatives in Canadian emergency departments

Item Type: Journal Article

Authors: Baril, Laurence;Caners, Kyla;Walker, Melanie;Dagnone, Damon;Chaplin, Tim;Raymond-Dufresne, Éliane;Baylis, Jared;Purdy, Eve;Britton, Samantha and Cash, Christine

Publication Date: 2025

Journal: Advances in Simulation 10(1), pp. 1–8

Access or request full text: https://libkey.io/10.1186/s41077-025-00376-w

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=188355661&profid=ehost

8. Excess mortality in emergency departments in England

Item Type: Journal Article

Authors: Black, Stephen;Seaman, Shaun and Boyle, Adrian

Publication Date: 2025

Journal: BMJ (Clinical Research Ed.) 390, pp. r1651

Abstract: None.

Access or request full text: https://libkey.io/10.1136/bmj.r1651

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40813134&profid=ehost

9. Over 800 deaths were linked to long emergency department waits in Scotland last year, analysis finds

Item Type: Journal Article

Authors: Bowie, Kate

Publication Date: 2025

Journal: BMJ (Clinical Research Ed.) 390, pp. r2019

Access or request full text: https://libkey.io/10.1136/bmj.r2019

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40992886&profid=ehost

10. Effectiveness of pericapsular nerve group block for hip fracture pain management in the emergency department: results of the ED-PENG-B randomised controlled trial

Item Type: Journal Article

Authors: Calati, Patrick;Lenoir, Camille;Kamel, Larbi Chaht;Contie, Nicolas;Firoloni, Jean-Denis;Sichez, Adele;Sebai, Annas;Chelly, Jonathan and Caumon, Laurent

Publication Date: 2025

Journal: BMC Emergency Medicine 25(1), pp. 245

Abstract: Background: Hip fractures (HFs) managed in the emergency department (ED) are associated with severe pain. Locoregional anaesthesia (LRA) using the pericapsular nerve group (PENG) block may be an effective option for pain management in the ED, helping to reduce morphine use and improve postoperative rehabilitation.; **Methods:** Patients admitted to the ED of a French tertiary hospital with suspected HF were enrolled and randomised into two groups: a standard of care (SOC) group receiving systemic analgesia in line with current recommendations, and an experimental group receiving systemic analgesia plus a PENG block. The primary outcome was morphine consumption per hour from randomisation until 24 hours post-randomisation or until surgery, if performed earlier.; **Results:** Among the 35 randomised patients, 32 were included in the final analysis (11 men and 21 women; median age of 81 74-91] years). Median morphine consumption per hour was significantly lower in the PENG group compared to the SOC group (0.2 0.0-0.5] mg vs 0.4 0.3-0.8] mg, respectively; p = 0.03). No significant differences were observed between groups in terms of total morphine use, pain scores (numeric rating scale), adverse events, or ED length of stay.; **Conclusion:** Early PENG block appears to be a feasible and safe LRA technique when performed by trained emergency physicians and may reduce opioids requirements in patients with HF in the ED. Larger, adequately powered studies are warranted to confirm these findings.; Trial Registration: The study was registered prospectively at https://www.; Clinicaltrials: gov/ on 5 January 2023 (NCT05673486). (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1186/s12873-025-01401-x

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41299315&profid=e

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11. Stress cardiovascular magnetic resonance imaging in intermediate-risk emergency department patients with abnormal high-sensitivity troponin

Item Type: Journal Article

Authors: Cavalier, Joanna S.;Ike, John D.;Chevalier, Céleste;Cervantes, Anissa;Karatela, Maham F.;Desai, Katha;Patel, Jerishma S.;Graviss, Edward A.;Nguyen, Duc T.;De Azevedo Filho, Clerio;Kim, Han W.;Limkakeng, Alexander T.;Gerardo, Charles J.;Borawski, Joseph B. and Klem, Igor

Publication Date: 2025

Journal: Journal of Cardiovascular Magnetic Resonance : Official Journal of the Society for Cardiovascular Magnetic Resonance 27(1), pp. 101851

Abstract: **Background:** Patients presenting to the emergency department (ED) with chest pain often have abnormal high-sensitivity troponin (hsTn). However, only about 5% have an acute coronary syndrome. We aimed to assess the safety, feasibility, and utility of a clinical disposition protocol, including outpatient observation with stress cardiovascular magnetic resonance (CMR) in intermediate-risk patients with abnormal hsTn of unclear etiology.; **Methods:** Patients with abnormal hsTn and modified HEART-score ≤6 underwent CMR to inform diagnosis, risk stratification, and ED disposition. Patients were followed at 30 and 90 days for all-cause mortality, readmission for myocardial infarction, and unplanned coronary revascularization.; **Results:** CMR was completed in 50 patients (64 years, 56% male) at a median of 23.2 h after presentation to the ED. CMR findings of coronary artery disease (CAD) were present in 19 (38%, 19/50) of patients, of which 13 had known CAD and 6 received a new diagnosis of CAD. In 12 (24%, 12/50) patients, cardiac noncoronary artery disease was diagnosed cardiomyopathy (8), valvular disease (3), and myocarditis/pericarditis (1)], of which the majority (83%) (10/12) were new diagnoses. CMR was normal in 19 (38%, 19/50) patients. After CMR results were reported, the decision to admit was made in 10 (20%, 10/50) patients, while 40 (80%, 40/50) were discharged from the ED without further cardiac testing. Follow-up was completed in 96% (48/50) of patients, of which no patients experienced an adverse event.; **Conclusion:** A disposition protocol with outpatient observation and stress CMR is feasible and useful for determining the etiology of myocardial injury and risk stratification in patients presenting to the ED with chest pain, abnormal hsTn, and intermediate risk.

Access or request full text: https://libkey.io/10.1016/j.jocmr.2025.101851

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=39884655&profid=ehost

12. Integrated diagnostic algorithm for acute vertigo combining TiTrATE, STANDING, and HINTS: a validation study in the emergency department

Item Type: Journal Article

Authors: Cortese, Elvira;Rochelle, Pierre La;Patel, Freya;Koohi, Nehzat and Kaski, Diego

Publication Date: 2025

Journal: Scientific Reports 15(1), pp. 25403

Abstract Accurate diagnosis of acute vertigo (AV) in emergency settings is crucial due to varied underlying causes. Challenges include differentiating non-life-threatening conditions, like vestibular migraine, from severe issues, such as stroke. The "TiTrATE - STANDING Adapted" algorithm was created to help non-specialist emergency physicians diagnose posterior circulation strokes in AV patients, overcoming the limitations of current practices that require specialized knowledge and equipment. This study involved a prospective validation and retrospective analysis of 67 patients at the National Hospital for Neurology and Neurosurgery and University College London Hospital. Patients underwent objective oculomotor assessments through video oculography and pure tone audiometry, conducted by an experienced audiologist in the acute stage. The accuracy of the "TiTrATE - STANDING Adapted" algorithm was compared to final diagnoses made by specialists, which included a comprehensive review of medical histories, objective test results, and imaging studies. The "TiTrATE - STANDING Adapted" algorithm demonstrated a sensitivity of 90%, with low specificity (57.9%), resulting in a high rate of false positives (24 out of 67) and a global accuracy of 62.7%. Conditions such as vestibular migraine and chronic vascular issues (e.g., orthostatic hypotension) were often misclassified, impacting the overall specificity. Integrating TiTrATE, HINTS Plus, and STANDING into a single diagnostic algorithm for acute vertigo in the ED could enhance accuracy and streamline decision-making. However, the combined model must perform at least as well as its individual components. Key improvements needed before implementation include adding vestibular migraine criteria, refining stroke exclusion guidelines, and ongoing validation to boost diagnostic precision and patient outcomes. (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1038/s41598-025-11007-9

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40659780&profid=ehost

13. Respiratory National Early Warning Score for 28-day mortality prediction in suspected sepsis patients in the emergency department

Item Type: Journal Article

Authors: Daorattanachai, Kiattichai;Maithong, Sasimanee;Phungoen, Pariwat;Weschawalit, Sinee and Srivilaithon, Winchana

Publication Date: 2025

Journal: BMC Emergency Medicine 26(1), pp. 17

Abstract: Background: Most early warning scores were derived in heterogeneous acutely ill populations and are not specifically tailored to patients with suspected sepsis in the emergency department (ED). In sepsis, respiratory rate (RR) is frequently elevated as part of the pathophysiologic response, suggesting that sepsis-

focused tools may require recalibrated RR thresholds. We therefore aimed to develop and evaluate the Respiratory National Early Warning Score (R-NEWS), a sepsis-oriented modification emphasizing respiratory parameters, to improve prediction of 28- and 7-day mortality among ED patients with suspected sepsis.; **Methods:** We conducted a prospective cohort study in the ED of Thammasat University Hospital, enrolling adults with suspected sepsis and excluding those with cardiac arrest or do-not-resuscitate orders. Multivariable backward stepwise logistic regression identified significant predictors of 28-day mortality, which were then used to construct the R-NEWS scoring system. Predictive performance was evaluated and compared with NEWS, qSOFA, and SIRS using the area under the receiver operating characteristic curve (AuROC).; **Results:** A total of 1,348 patients were analyzed; 28-day mortality was 13.4%. Five independent predictors were identified: respiratory rate, need for supplemental oxygen, systolic blood pressure, heart rate, and Glasgow Coma Scale. R-NEWS demonstrated good calibration (Hosmer-Lemeshow p = 0.474) and higher discrimination than NEWS, qSOFA, and SIRS. The AuROC of R-NEWS was 0.72 (95% CI, 0.68, 0.76) for 28-day mortality and 0.76 (95% CI, 0.71, 0.81) for 7-day mortality. Internal validation using bootstrapping yielded consistent results. High-risk R-NEWS (≥ 7) was associated with a 28-day mortality of 28.9%, compared with 3.9% in the low-risk group (≤ 3).; **Conclusion:** R-NEWS, a simplified five-parameter score emphasizing respiratory function, demonstrated favorable performance for predicting short- and intermediate-term mortality in ED patients with suspected sepsis. Used alongside clinical judgment, R-NEWS may aid early risk stratification and sepsis management. External, multicenter validation and prospective evaluation are warranted before widespread implementation. (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1186/s12873-025-01443-1

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41388251&profid=ehost

14. Identifying and describing alcohol-related paediatric emergency department attendances amongst under 16 year olds including time trends, incidence rates, and sociodemographic factors associated with alcohol-related harm

Item Type: Journal Article

Authors: Davies, N.;Charalampopoulos, D.;Rose, A. and Messahel, S.

Publication Date: 2025

Journal: PloS One 20(8), pp. e0329502

Abstract: This study used ED attendance data to identify and describe alcohol-related attendances and identify sociodemographic factors associated with risk of alcohol-related harm. Between 2011 and 2022, N = 774 patients had at least one alcohol-related attendance. Descriptive statistics were computed to show the sociodemographic profile of patients, and the number of attendances were aggregated by calendar year. Attendance rates per 100,000 were computed using UK national mid-year population estimates. Associations between sociodemographic characteristics and severity-related outcomes (including whether the patient was admitted to hospital, and whether the patient had multiple attendances) and patient safeguarding concerns were explored through logistic regression. Most attendances were female (73.90%) and around a quarter

(26.75%) were admitted to hospital during at least one attendance. Attendances per year and percentage resulting in admission decreased during the study period. These changes were reflected by attendance rates which fell for boys (50.65 to 15.25 per 100,00) and girls (94.83 to 36.90 per 100,000) between 2011 and 2022. Females were less likely than males to be admitted to hospital (OR=0.61 95%CI = 0.43, 0.88], p = .008). Additionally, younger adolescents were more likely to have reported safeguarding concerns (OR=0.26 95%CI = 0.12, 0.56], p = .001). Finally, patients with safeguarding concerns and non-White ethnicity was associated with multiple attendances during the study period (OR=3.84 95%CI = 1.74, 8.44], p = .001; OR=3.25 95%CI = 1.14, 9.28], p = 0.28). Alcohol-related attendances have declined over the last 11 years, and harms may differ between genders. While most attendances were female, males were more likely to be admitted to hospital. Particular subgroups may be vulnerable to harms, including younger and non-White patients, potentially illustrating that adverse childhood experiences and marginalised characteristics are associated with harmful alcohol consumption. This study confirms that admissions data is likely to underestimate the true numbers of young people experiencing harm, and future research should conduct more robust analyses using attendance data to further understand risk factors.

Access or request full text: https://libkey.io/10.1371/journal.pone.0329502

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40828756&profid=ehost

15. Evaluating the Anticholinergic Burden in Older Patients: Comprehensive Insights from a Nationwide Survey Among Emergency Medicine Specialists in the UK

Item Type: Journal Article

Authors: Dilokthornsakul, Piyawat;Stewart, Carrie;Moss, Phil;Soiza, Roy L.;Birse, Fraser;Subbarayan, Selvarani;Nakham, Athagran;Kitikannakorn, Nantawarn and Myint, Phyo K.

Publication Date: 2025

Journal: Geriatrics (Basel, Switzerland) 10(6)
Abstract: Introduction : Older patients are often exposed to medications with anticholinergic activity. Anticholinergic burden (ACB) from medicines is linked to adverse health outcomes. However, healthcare professionals' familiarity with ACB remains poor, and there is a lack of research on knowledge, attitudes, or practices (KAPs) of ACB among Emergency department (ED) clinicians. **Methods :** A nationwide survey of ACB based on a pilot survey was developed using the KAP framework and assessed for face and content validity by ACB experts. It was distributed to ED physicians across the UK using REDCap through social media and professional networks. **Results :** Among the 108 ED physicians who responded, 54.6% (n = 59) were aware of the term ACB, but 54.2% (n = 32/59) of them were unable to describe it. Their mean scores for quantifying the ACB score and identifying side effects in older patients were 2.9 and 4.1 out of 10, respectively. 88.9% (n = 96) believed that ACB is an important consideration in older patients. 67.6% (n = 73) agreed that awareness of the consequences of prescribing anticholinergic medications to older patients is important. 50% (n = 54) emphasized the importance of being able to assess and quantify the ACB score. Of the 75 physicians who

prescribed these medications, 40% (n = 30/75) were unaware of ACB. 38.7% (n = 29/75) rarely considered ACB, 30.7% (n = 23/75) never considered it, and only 1.3% (n = 1/75) always considered it. The majority of respondents (88.9%, n = 96) agreed that more education on ACB is needed in the ED. **Conclusions :** ED physicians in the UK have limited knowledge and awareness of ACB management and prescribing practices for older patients. However, they show positive attitudes towards their role in ACB management and a willingness to receive further education. The low response rate suggests that findings may reflect a motivated subset of clinicians. These results highlight the need for targeted education and further investigation into curricular coverage of prescribing safety and anticholinergic burden.

Access or request full text: https://libkey.io/10.3390/geriatrics10060137

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41283449&profid=ehost

16. Association between palliative care in the emergency department and cardiopulmonary resuscitation decisions in patients with poor prognosis: a retrospective observational study

Item Type: Journal Article

Authors: dos Santos, Thiago Henrique;da Silva, Rildo Pinto;de Campos, Mateus Rennó;Agnollitto, Maria Izaura Sedoguti Scudeler;Miranda, Carlos Henrique and Pazin-Filho, Antonio

Publication Date: 2025

Journal: BMC Palliative Care 24(1), pp. 1–9

Abstract: Background: Integrating palliative care (PC) into emergency departments (EDs) is increasingly recognized as a strategy to support decision-making and avoid non-beneficial interventions near the end of life. However, evidence remains limited regarding its association with cardiopulmonary resuscitation (CPR) decisions in patients with poor prognosis. **Methods:** We conducted a retrospective cohort study at a tertiary emergency hospital in Brazil, including adult inpatients who died between 2014 and 2024. The primary outcome was the occurrence of CPR during hospitalization. Patients were classified based on whether they received a PC consultation. Time to CPR was analyzed using Cox proportional hazards models adjusted for age, sex, comorbidities, and admission year. CPR attempts were identified using a validated natural language processing (NLP) approach applied to electronic health records (EHRs), with a Kappa agreement of 0.70 (95% CI: 0.61–0.79) compared to manual chart review. **Results:** Among 6,211 patients, 1,757 (28.5%) received a PC consultation before death. PC consultation was independently associated with a lower likelihood of CPR, with an adjusted hazard ratio (HR) of 0.35 (95% CI: 0.32–0.39; $p < 0.001$). In a sensitivity analysis limited to patients who died within 24 hours of admission, the association remained significant (HR: 0.26; 95% CI: 0.18–0.37; $p < 0.001$). **Conclusions:** In this cohort of hospitalized patients who died, palliative care consultation before any CPR attempt was associated with lower rates of CPR, possibly reflecting earlier or more thorough discussions of treatment preferences.

Access or request full text: https://libkey.io/10.1186/s12904-025-01894-0

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=rzh&AN=188547828&profid=ehost

17. Impact of sporting, cultural and social events on emergency admissions: a retrospective multicenter study

Item Type: Journal Article

Authors: Fritsch, Mélissa;Brossard, Cyrielle;Akplogan, Mahuna;Bouquet, Pauline;Dib, Camille;Schnee, Amandine;Goetz, Christophe and Abensur Vuillaume, Laure

Publication Date: 2025

Journal: BMC Emergency Medicine 25(1), pp. 217

Abstract: **Background and Importance:** Overcrowding in emergency departments (ED) is a worldwide problem and a major public health issue. Factors influencing fluctuations in admissions, such as weather conditions or road traffic, have been identified.; **Objective:** To determine the impact of national and local events on ED attendance.; **Design:** Observational retrospective cohort study.; **Settings and Participants:** From 1 January 2010 to 31 December 2019, all admissions at two French ED (Metz and Thionville) were screened.; **Outcome Measures and Analysis:** The primary outcome was the number of daily admissions at the ED. A logistic regression tested the association between daily admissions and the occurrence of a special event (sporting, cultural or social event).; **Main Results:** A total of 998 event days were recorded, accounting for 27.3% of the study period. Excluding event days, as well as the day before and the day after an event, the median daily number of admissions was 181 (SD ± 36.37) in Metz and 165 (SD ± 24.29) in Thionville. During event days, the median number of admissions in Metz increased to 195 (SD ± 40.57; OR 1.25; 95% CI: 1.10-1.41]; p 0.001) on event days and 170 (SD ± 24.61; OR 1.29; 95% CI: 1.11-1.51]; p < 0.001) on the following day. Football events had a notable impact on hospital admissions. In Metz, the median daily number of admissions increased to 198 (SD ± 41.09; OR 1.39; 95% CI: 1.14-1.70]; p < 0.001) on the event day and 196 (SD ± 39.57; OR 1.38; 95% CI: 1.11-1.71]; p = 0.004) the following day. In Thionville, the median daily number of admissions the day after a football event was 172 (SD ± 25.54; OR 1.43; 95% CI: 1.15-1.78]; p = 0.001). Social movements also significantly affected admissions in Metz, with the median daily number reaching 200.5 (SD ± 45.62; OR 1.43; 95% CI: 1.11-1.86]; p = 0.007) on the event day and 199 (SD ± 41.12; OR 1.63; 95% CI: 1.16-2.31]; p = 0.005) the following day.; **Conclusions:** The occurrence of sporting, cultural or social events is associated with an increase in ED visits on the same day and the following day. These events contribute to a surge in activity in ED, potentially leading to overcrowding. (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1186/s12873-025-01370-1

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41163178&profid=ehost

18. Peri-intubation Cardiovascular Collapse During Emergency Airway Management

Item Type: Journal Article

Authors: Garcia, Samuel I.;Smischney, Nathan J.;Sandefur, Benjamin J.;D'Andria Ursoleo, Jacopo;Kelm, Diana J. and Wieruszewski, Patrick M.

Publication Date: 2025

Journal: Pulmonary Therapy 11(4), pp. 569–585

Abstract Emergency airway management is a lifesaving procedure but can be associated with significant risks, including hypoxia, hypotension, cardiac arrest, and death. Peri-intubation hypotension, reported in ≥ 40% of cases, is strongly associated with increased morbidity and mortality. While clinical guidelines emphasize the importance of preoxygenation and hemodynamic optimization prior to intubation, the latter remains poorly defined, with limited available data to guide evidence-based strategies to mitigate cardiovascular collapse during rapid sequence intubation. This review synthesizes current knowledge on the epidemiology, risk factors, and pathophysiology of peri-intubation hemodynamic deterioration. We review targeted strategies for hemodynamic optimization of physiologic parameters before intubation. These include volume expansion with fluid resuscitation, vasopressor utilization, selection of pharmacologic agents, invasive hemodynamic monitoring, and advanced preoxygenation techniques. In selected high-risk patients, we also discuss the potential role of extracorporeal membrane oxygenation as an adjunctive or rescue therapy. Our goal is to provide airway specialists with a comprehensive framework for mitigating cardiovascular collapse during emergent airway management and to stimulate further research into this high-risk and understudied domain. (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1007/s41030-025-00326-x

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41094343&profid=ehost

19. POCUS-Guided Forearm Nerve Blocks for Analgesia of Acute Hand Ischemia in the Emergency Department

Item Type: Journal Article

Authors: Gawel, Richard J.;Sillart, Sydney;Panebianco, Nova;Shalaby, Michael and Ciesielski, Ian P.

Publication Date: 2025

Journal: POCUS Journal 10(2), pp. 53–56

Abstract: Background: Acute limb ischemia (ALI) is a vascular emergency associated with significant pain that can be challenging to manage, especially in opioid-tolerant patients.; **Case Report:** A 44-year-old man with opioid use disorder presented with ALI of the right hand not amenable to surgical intervention after self-injection of fentanyl. Despite high-dose opioids, he continued to experience refractory pain. Point of care ultrasound (POCUS)-guided radial and median nerve blocks performed in the emergency department provided substantial relief.; **Discussion:** This case illustrates the novel use of POCUS-guided upper extremity regional

anesthesia by emergency physicians to manage ALI pain. POCUS-guided regional anesthesia may be a safe, effective adjunct in select patients, though patients must be closely monitored for complications. (Copyright (c) 2025 Richard Gawel, Sydney Sillart, Nova Panebianco, Michael Shalaby, Ian Ciesielski.)

Access or request full text: https://libkey.io/10.24908/pocusj.v10i02.19734

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41322186&profid=ehost

20. Predicting sepsis treatment decisions in the paediatric emergency department using machine learning: the AiSEPTRON study

Item Type: Journal Article

Authors: Gomes, Sylvester;Dhanoa, Harpreet;Assheton, Phil;Carr, Ewan;Roland, Damian and Deep, Akash

Publication Date: 2025

Journal: BMJ Paediatrics Open 9(1)
Abstract: **Background:** Early identification of children at risk of sepsis in emergency departments (EDs) is crucial for timely treatment and improved outcomes. Existing risk scores and criteria for paediatric sepsis are not well-suited for early diagnosis in ED.; **Objective:** To develop and evaluate machine learning models to predict clinical interventions and patient outcomes in children with suspected sepsis.; **Design:** Retrospective observational study.; **Setting:** ED of a tertiary care hospital, UK.; Patients: Electronic health records of children 48 hours.Model performance was evaluated using area under the receiver operating characteristic curve (AUC), likelihood ratios and positive and negative predictive values.; **Results:** Triage model: predicted antibiotics at triage (n=35 795; 3.2% with outcome) with an AUC of 0.80 (95% CI 0.76 to 0.84).Antibiotic model: predicted antibiotics post-blood tests (n=4700; 24.2%) with an AUC of 0.78 (95% CI 0.73 to 0.81).Critical care model: predicted critical care (n=4700; 3.3%) with an AUC of 0.78 (95% CI 0.72 to 084).Serious infection model: predicted serious infection (n=4700; 9.4%) with an AUC of 0.76 (95% CI 0.71 to 0.81).Key predictors included triage category, temperature, capillary refill time and C reactive protein.; **Conclusion:** Machine learning models demonstrated good accuracy in predicting antibiotic use following triage and moderate accuracy for critical care and serious infection. Further development and external validation are ongoing. (© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY. Published by BMJ Group.)

Access or request full text: https://libkey.io/10.1136/bmjpo-2024-003273

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40374284&profid=ehost

21. Assessments Under Pressure: Interviews With Triage Nurses in Emergency Departments: An Exploratory Descriptive Qualitative Study

Item Type: Journal Article

Authors: Gorick, Hugh;McGee, Marie and Smith, Toby O.

Publication Date: 2025

Journal: Journal of Advanced Nursing
Abstract: Aims: To understand the experiences and decision-making practices of registered nurses when assessing acuity at triage in emergency departments.; **Design:** The study utilised a qualitative exploratory-descriptive design.; **Methods:** Purposive sampling recruited 11 registered nurses with triage experience from across the United Kingdom. Semi-structured online interviews, incorporating practice-based vignettes, were conducted between April and November 2024. Thematic analysis was selected to analyse the data.; **Results:** Three themes were identified: (1) Pressurised decisions, highlighting the effects of overcrowding, staffing shortages and operational burdens; (2) Holistic assessments, revealing the shift from structured to intuitive decision-making as nurses gain experience; and (3) Confidence, competence and emotional wellbeing, illustrating the psychological impacts of triage and the importance of experience and support.; **Conclusions:** This study provides novel insight into how triage nurses navigate acuity assessment in high-pressure environments. It shows how experience, training and institutional culture influence decision-making and wellbeing. It identifies key areas for targeted intervention.; **Implications for the Profession And/or Patient Care:** Triage nurses face substantial cognitive and emotional strain, which may compromise assessment quality and safety. Findings highlight the urgent need for structured triage training, protected time for assessment and access to wellbeing and peer support systems.; **Impact:** What problem did the study address?: A need for current literature exploring the practices and experiences of triage nurses. What were the main findings?: Triage nurses experience significant environmental and emotional pressures, develop decision-making strategies through experience and require enhanced training and support to ensure safe, effective care. Where and on whom will the research have an impact?: Findings are relevant to emergency departments internationally, triage nurses, nurse educators and healthcare leaders.; Reporting Method: This study adheared to COREQ reporting guidelines, and a copy of the checklist is attached as Data S1.; Patient or Public Contribution: This study did not include patient or public involvement in its design, conduct, or reporting. (© 2025 The Author(s). Journal of Advanced Nursing published by John Wiley & Sons Ltd.)

Access or request full text: https://libkey.io/10.1111/jan.70283

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41074873&profid=ehost

22. Comparison of Canada-United Kingdom-Australia (CANUKA) scores of patients with gastrointestinal bleeding presenting to the emergency department with other gastrointestinal bleeding scores

Item Type: Journal Article

Authors: Hançer Çelik, Fatma;Baykan, Necmi;Ünlü, Fatma;Alpaslan, Mustafa;Akan, Ayşe Şule;Salt, Ömer;Toker, İbrahim and Büyükberber, Nuh Mehmet

Publication Date: 2025

Journal: Turkish Journal of Medical Sciences 55(5), pp. 1097–1102

Abstract Background/aim: Acute gastrointestinal (GI) tract bleeding is a common and potentially life-threatening condition among patients presenting to emergency departments. In this study, we calculated AIMS65, Rockall, Glasgow-Blatchford Score (GBS), and Canada-United Kingdom-Australia (CANUKA) scores in patients with GI bleeding admitted to the emergency department and compared the sensitivity of these scoring systems in predicting the rates of admission to intensive care units and mortality. It is aimed to contribute to clinical practice and help determine an effective risk assessment tool in the management of patients with GI bleeding.; **Materials and Methods:** The study was conducted with patients who were diagnosed with GI bleeding. The study was conducted retrospectively between 1 January 2020 and 31 December 2023. The data of the patients were obtained from the hospital automation system. Patients with missing data were excluded from the study. AIMS65, Rockall, GBS, and CANUKA scores of the patients were calculated and recorded separately.; **Results:** A total of 916 patients were included in our study. The median age was 70 years, and 62.3% of the patients were male. A total of 22.2% of the patients were hospitalized in the intensive care unit (ICU), and the in-hospital mortality rate was 0.9% (n = 8). According to the results of receiver operator characteristic (ROC) analysis of continuous measurements in terms of ICU hospitalization, the ability of the 4 scores to predict ICU hospitalization was statistically significant ($p < 0.001$). The CANUKA Score had the highest and best discriminative ability to predict ICU admission (area under the ROC curve AUC] = 0.734). According to the results of ROC analysis of continuous measures in terms of mortality, the ability of AIMS65, CANUKA, and Rockall scores to predict mortality was statistically significant (p-values <0.001, <0.001, and 0.001, respectively).; **Conclusion:** The CANUKA Score had the best discriminative ability in predicting intensive care unit admission and the best discriminative ability in predicting mortality after the AIMS65 Score. (© TÜBİTAK.)

Access or request full text: https://libkey.io/10.55730/1300-0144.6064

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41234461&profid=ehost

23. Hepatitis C Screening in Emergency Departments: The DETECT Hep C Randomized Clinical Trial

Item Type: Journal Article

Authors: Haukoos, J.;Rothman, R. E.;Galbraith, J. W.;Hopkins, E.;Hsieh, Y. H.;Lyle, C.;Gravitz, S.;Kamis, K. F.;White, D. A. E.;Lyons, M. S.;Gardner, E. M.;Al-Tayyib, A. A.;Sabel, A. L.;Linas, B. P.;Morgan, J. R.;Wyles, D. L. and Rowan, S. E.

Publication Date: 2025

Journal: JAMA 334(6), pp. 497–507

Abstract: Importance: Identification of individuals with hepatitis C virus (HCV) infection is a public health priority. Emergency departments (EDs) have been a focus of screening efforts, as they serve large numbers of at-risk patients who commonly do not access health care elsewhere. However, the optimal approach to HCV

screening in ED settings remains unknown.; **Objective:** To evaluate the effectiveness of HCV screening in EDs with the hypothesis that nontargeted screening identifies more new diagnoses than targeted screening.; **Design, Setting, and Participants:** Prospective, multicenter, pragmatic randomized clinical trial performed at 3 urban EDs in Denver, Colorado; Baltimore, Maryland; and Jackson, Mississippi. Patients were 18 years or older, with exclusions for critical illness, inability to provide consent, or previously diagnosed HCV.; Interventions: As part of routine ED care, patients were randomly assigned to undergo either nontargeted screening, in which HCV testing was offered regardless of risk, or targeted screening, in which testing was offered based on risk assessment.; **Main Outcomes and Measures:** The primary outcome was newly diagnosed HCV infection (RNA detected). Secondary outcomes were repeat HCV diagnoses; HCV test offer, acceptance, and completion; HCV genotype and fibrosis staging; components of the HCV care continuum; and all-cause mortality through 18 months of follow-up. Analyses were conducted from January to March 2025 by intention-to-treat analysis, using relative risk (RR) with 95% CIs and Fisher exact tests.; **Results:** A total of 147 498 patient visits were randomized (median IQR] age, 41 29-57] years; 51.5% male; and 42.3% Black, 20.9% Hispanic, and 32.2% White). Of these, 73 847 patients underwent nontargeted screening, resulting in 9867 (13.4%) tested for HCV and 154 new HCV diagnoses, whereas 73 651 patients underwent targeted screening and 23 400 (31.8%) were identified to have risk factors for HCV infection, resulting in 4640 (6.3%) patients tested for HCV and 115 new HCV diagnoses. Compared with targeted HCV screening, nontargeted HCV screening identified significantly more new diagnoses of HCV infection (RR, 1.34 95% CI, 1.05-1.70]; P = .02). Among patients newly diagnosed with HCV infection, small proportions from the nontargeted and targeted screening groups were linked to follow-up care (19.5% vs 24.3%, respectively), initiated direct-acting antiviral (DAA) treatment (15.6% vs 17.4%), completed DAA treatment (12.3% vs 12.2%), and attained sustained virologic response at 12 weeks (SVR12) (9.1% vs 9.6%).; **Conclusions and Relevance:** In this multicenter randomized clinical trial, a nontargeted screening approach was superior to targeted screening for identifying new HCV infections among patients seen in 3 urban EDs. The substantial decrease in patients who went from diagnosis to SVR12 highlights an urgent need for innovative models of HCV treatment.; Trial Registration: ClinicalTrials.gov Identifier: NCT04003454.

Access or request full text: https://libkey.io/10.1001/jama.2025.10563

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40632510&profid=ehost

24. Complete AI-Enabled Echocardiography Interpretation With Multitask Deep Learning

Item Type: Journal Article

Authors: Holste, G.;Oikonomou, E. K.;Tokodi, M.;Kovács, A.;Wang, Z. and Khera, R.

Publication Date: 2025

Journal: JAMA 334(4), pp. 306–318

Abstract: Importance: Echocardiography is a cornerstone of cardiovascular care, but relies on expert interpretation and manual reporting from a series of videos. An artificial intelligence (AI) system, PanEcho, has been proposed to automate echocardiogram interpretation with multitask deep learning.; **Objective:** To

develop and evaluate the accuracy of an AI system on a comprehensive set of 39 labels and measurements on transthoracic echocardiography (TTE).; **Design, Setting, and Participants:** This study represents the development and retrospective, multisite validation of an AI system. PanEcho was developed using TTE studies conducted at Yale New Haven Health System (YNHHS) hospitals and clinics from January 2016 to June 2022 during routine care. The model was internally validated in a temporally distinct YNHHS cohort from July to December 2022, externally validated across 4 diverse external cohorts, and publicly released.; **Main Outcomes and Measures:** The primary outcome was the area under the receiver operating characteristic curve (AUC) for diagnostic classification tasks and mean absolute error for parameter estimation tasks, comparing AI predictions with the assessment of the interpreting cardiologist.; **Results:** This study included 1.2 million echocardiographic videos from 32 265 TTE studies of 24 405 patients across YNHHS hospitals and clinics. The AI system performed 18 diagnostic classification tasks with a median (IQR) AUC of 0.91 (0.88-0.93) and estimated 21 echocardiographic parameters with a median (IQR) normalized mean absolute error of 0.13 (0.10-0.18) in internal validation. For instance, the model accurately estimated left ventricular ejection fraction (mean absolute error: 4.2% internal; 4.5% external) and detected moderate or worse left ventricular systolic dysfunction (AUC: 0.98 internal; 0.99 external), right ventricular systolic dysfunction (AUC: 0.93 internal; 0.94 external), and severe aortic stenosis (AUC: 0.98 internal; 1.00 external). The AI system maintained excellent performance in limited imaging protocols, performing 15 diagnosis tasks with a median (IQR) AUC of 0.91 (0.87-0.94) in an abbreviated TTE cohort and 14 tasks with a median (IQR) AUC of 0.85 (0.77-0.87) on real-world point-of-care ultrasonography acquisitions from YNHHS emergency departments.; **Conclusions and Relevance:** In this study, an AI system that automatically interprets echocardiograms maintained high accuracy across geography and time from complete and limited studies. This AI system may be used as an adjunct reader in echocardiography laboratories or AI-enabled screening tool in point-of-care settings following prospective evaluation in the respective clinical workflows.

Access or request full text: https://libkey.io/10.1001/jama.2025.8731

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40549400&profid=ehost

25. Could low-acuity emergency medical services patients be redirected to primary care? Findings from a multi-center survey in Berlin, Germany

Item Type: Journal Article

Authors: Holzinger, Felix;Kümpel, Lisa;Resendiz Cantu, Rebecca;Alberter, Anja;Möckel, Martin and Heintze, Christoph

Publication Date: 2025

Journal: BMC Emergency Medicine 25(1), pp. 138

Abstract: **Background:** Emergency medical services (EMS) are frequently used by low-acuity patients, which contributes to emergency department (ED) crowding. The feasibility of EMS transporting low-acuity patients directly to general practitioner (GP) practices remains a matter of debate. We therefore investigated the circumstances of EMS utilization in patients who subsequently receive ambulatory treatment in the ED. We

wanted to find out how often a primary care (PC) consultation could have been a suitable alternative in such cases.; **Methods:** Low-acuity ED utilizers transported by EMS were surveyed on demographics and medical characteristics and asked about the appropriateness and acceptability of a potential PC redirection, supplemented with case assessments by EMS personnel. Additionally, treatment documentation from both the ED and EMS was analyzed. Descriptive statistics were conducted. Associations between categorical variables were examined by Chi 2 tests.; **Results:** A total of n = 358 low-acuity EMS participants were recruited. Participants had a mean age of 47.6 years; gender f/m: 58.1%/41.9%. In the hospital, 71.8% were assigned to the Manchester triage system (MTS) category 3 and 28.0% to category 4. A third of the patients had decided to alert EMS at their discretion, while other people (e.g., relatives, colleagues) had been involved twice as often. Patients most commonly cited severe symptoms and related fears as reasons for engaging EMS services. EMS personnel categorized the complaints as treatable by a GP in 37.0%, while 44.5% of patients would have been open to PC management. However, these assessments exhibited substantial discrepancies, as evidenced by a Cohen's Kappa coefficient of approximately 0.1. From a preclinical perspective, only 24.4% of cases met the criteria for potentially realistic diversion. These encompassed both patient openness to alternative care pathways and EMS discernment of cases as potentially appropriate.; **Conclusions:** PC diversion is estimated to be feasible for a maximum of a quarter of ED outpatients. Markers for potential management in PC show highly discrepant results, and there is no validated system or score for preclinical identification of patients eligible for safe redirection. As EMS is intended for high-acuity emergencies, such patients could potentially also benefit from options like telemedicine care at home or alternative transportation.; Trial Registration: German Clinical Trials Register (DRKS00023480); date: 27/11/2020. (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1186/s12873-025-01295-9

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40739617&profid=ehost

26. Child death in the emergency department: experience from a 10-year retrospective review

Item Type: Journal Article

Authors: Jump, Pamela;McDermott, Bethany;Chase, Clarissa;Pryde, Kate and Owens, Daniel R.

Publication Date: 2025

Journal: Archives of Disease in Childhood
Abstract: **Objective:** To describe the demographic characteristics, causes and temporal patterns of child deaths occurring in a paediatric emergency department (ED) over a 10-year period.; **Design:** Single-centre retrospective observational study.; **Setting:** A major trauma centre in the UK with a standalone paediatric ED.; **Patients:** 58 children aged 0-17 years who died in the ED or were brought in dead between January 2014 and December 2023.; Interventions: None.; **Main Outcome Measures:** Causes of death, demographics, seasonal and diurnal variation, parental presence and safeguarding concerns.; **Results:** Median age at death was 2 years. The highest proportion of deaths occurred among infants under 1 year (36%) and adolescents aged 13-17 years (31%). Leading causes of death included sudden unexpected deaths (26%), infections (24%) and acute medical or surgical conditions (16%). Overall mortality was highest during winter months (29%), notably due to infections (50% of infection-related deaths). Sudden unexpected deaths showed clear early morning

peaks, with 40% occurring between 04:00 and 07:59. Adolescents (13-17 years) represented 31% of deaths, predominantly due to infections and suicide or self-harm. Parental presence during resuscitation was high (83%). Prior safeguarding concerns were documented in 28% of cases, rising to 100% in deaths due to inflicted injury or abuse.; **Conclusions:** Child deaths in the ED present distinct patterns differing from national childhood mortality statistics, emphasising sudden and acute conditions. Recognising these unique characteristics can guide improvements in clinical practice, ED-specific bereavement support, targeted staff training and resource allocation for periods of highest risk.

Access or request full text: https://libkey.io/10.1136/archdischild-2025-329375

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40957663&profid=ehost

27. Augmented reality for guiding resuscitation in rare cardiac channelopathies: a call for innovation in emergency care

Item Type: Journal Article

Authors: Khalid, Muddassir;Omer, Sarah;Rehman, Muhammad Asad and Ria, Supoma Gosh

Publication Date: 2025

Journal: Annals of Medicine and Surgery (2012) 87(10), pp. 6926–6927

Abstract: Competing Interests: Authors declare no conflict of interest.

Access or request full text: https://libkey.io/10.1097/MS9.0000000000003761

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41181463&profid=ehost

28. The influence of real-time feedback on the quality of resuscitation: A prospective study comparing bystanders, paramedic course participants, and emergency physician trainees

Item Type: Journal Article

Authors: Krispin, Stella-Karolin;Haase-Fielitz, Anja;Spalding, Grit;Steigerwald, Jana and Trenkmann, Lars

Publication Date: 2025

Journal: GMS Journal for Medical Education 42(5), pp. Doc66

Abstract: **Objective:** The aim of this study was to analyze the potential benefits of real-time feedback in resuscitation training for participants in the prehospital emergency chain and to compare differences in the

quality of chest compressions (CC) with and without feedback.; **Methods:** The primary endpoint was to analyze the proportion of CC achieving the recommended depth (5-6cm) and frequency (100-120/min) during two minutes of CC. This prospective cohort study compares bystanders (N=75), paramedic trainees (N=75), and emergency physician trainees (N=75) with and without the feedback system of the Zoll X-Series ® .; **Results:** Without feedback, paramedics (P) achieved the target compression frequency in 82.7%, bystanders (B) in 49.8%, and emergency physician trainees (EP) in 75% (P vs. B, p<0.001; EP vs. P, p=0.759; EP vs. B, p=0.217). There were no significant differences in target compression depth without feedback. With feedback, P achieved the compression frequency in 90.7%, B in 72.8%, and EP in 91.4% (P vs. B, p<0.001; EP vs. P, p=0.425; EP vs. B, p<0.001).With feedback, P achieved the compression depth in 56.9%, B in 47.3%, and EP in 75.1% (P vs. B, p=0.759; EP vs. P, p=0.217; EP vs. B, p=0.002).; **Conclusion:** The results underscore the importance of real-time feedback in emergency medical training, especially for B. All cohorts showed significant improvement, indicating that feedback enhances CC and promotes skill development. Given the importance of high-quality CC, their early optimization in training is essential. This highlights the need for standardized training concepts, including timing recommendations for feedback systems. Future studies should consider real-life prehospital conditions and investigate chest compression to validate transferability to real-life scenarios.

Access or request full text: https://libkey.io/10.3205/zma001790

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41321803&profid=ehost

29. Optimising Paracetamol Prescribing for Safer, Greener, and Cost-Effective Care: Lessons From an Ongoing Emergency Department Quality Improvement Project

Item Type: Journal Article

Authors: Lakshmanan, Vijay and Rosser, Michael

Publication Date: 2025

Journal: Cureus 17(9), pp. e92108

Abstract: Paracetamol is one of the most frequently prescribed analgesics in emergency departments (EDs). While intravenous (IV) and oral formulations provide similar analgesic effects, IV paracetamol is more expensive and has a carbon footprint several-fold higher than oral administration. In patients who can take oral medication, the oral route is safer, greener, and more cost-effective. At Royal Preston Hospital in Preston, UK, the baseline audit data from December 2022 to November 2023 revealed that IV paracetamol accounted for approximately 38% of all 1 g paracetamol doses prescribed in the ED. Following informal teaching sessions and staff engagement, a re-audit from February to April 2024 demonstrated no significant reduction in IV use. A further audit from May 2024 to March 2025 revealed no significant reduction in IV paracetamol use, with prescribing rates continuing to hover around 35% to 40% across most months. These findings highlight that early educational interventions can influence prescribing behavior but may be insufficient to deliver lasting change. To build on this work, a structured quality improvement (QI) approach was adopted to implement more targeted and sustainable interventions, including formal teaching, visual prompts, and regular feedback

cycles. By encouraging appropriate use of oral paracetamol, this project aims to reduce unnecessary IV prescribing while improving patient safety, lowering costs, and contributing to environmentally sustainable practice. Importantly, this remains an ongoing, multi-cycle initiative, with a third round of data collection commencing in August 2025. This QI report aims not only to outline the effectiveness and sustainability impact of optimizing paracetamol prescribing but also to demonstrate how similar projects can be replicated across various other healthcare departments worldwide. Such initiatives have the potential to promote safer, greener, and more cost-effective care with global relevance.

Access or request full text: https://libkey.io/10.7759/cureus.92108

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40949074&profid=ehost

30. The power of nursing triage notes: alcohol and substance use challenges in frequent attenders to rural emergency departments

Item Type: Journal Article

Authors: Lavelle-Cafferkey, Sadie;Sheerin, Fintan and Comiskey, Catherine

Publication Date: 2025

Journal: Emergency Nurse : The Journal of the RCN Accident and Emergency Nursing Association
Abstract: Background: Patients who frequently attend emergency departments (EDs) due to alcohol and substance use often have complex healthcare needs, which can place significant demands on services, particularly in rural areas. Nursing triage notes capture critical information about these presentations.; **Aim:** To use nursing triage records to provide context which can aid greater understanding of patients who repeatedly attend the ED with alcohol- or substance-related health issues within a wider dataset.; **Methods**: A retrospective review of triage notes from three rural hospitals in Ireland from October 2020 to February 2023 included 31 patients who had attended more than ten times each, accounting for 623 attendances in total. Data were analysed for substance use, mental and physical health concerns, mode of arrival and referral, including any police involvement.; **Results:** Alcohol was implicated in 94.7% (n=590) of attendances. Mental health crises occurred in 13.3% (n=83), physical injuries in 38.7% (n=241), and issues surrounding withdrawal or detoxification in 10.6%(n=66). Ambulances transported 49.9% (n=311) of patients, and the police (An Garda Síochána in Ireland) were involved in 8.2% (n=51) of cases.; **Conclusion:** Nursing triage notes provide essential insight into the complex health needs of frequent attenders seeking emergency care. They can assist nurses in the early identification of patients who would benefit from integrated care pathways and coordinated interventions. This would reduce repeated presentations to the ED and improve patient-centred care and patient outcomes in rural settings.

Access or request full text: https://libkey.io/10.7748/en.2025.e2253

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41367146&profid=e

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31. Performance of ChatGPT, Gemini and DeepSeek for non-critical triage support using real-world conversations in emergency department

Item Type: Journal Article

Authors: Lee, Sukyo;Jung, Sumin;Park, Jong-Hak;Cho, Hanjin;Moon, Sungwoo and Ahn, Sejoong

Publication Date: 2025

Journal: BMC Emergency Medicine 25(1), pp. 176

Abstract: **Background:** Timely and accurate triage is crucial for the emergency department (ED) care. Recently, there has been growing interest in applying large language models (LLMs) to support triage decision-making. However, most existing studies have evaluated these models using simulated scenarios rather than real-world clinical cases. Therefore, we evaluated the performance of multiple commercial LLMs for non-critical triage support in ED using real-world clinical conversations.; **Methods:** We retrospectively analyzed real-world triage conversations prospectively collected from three tertiary hospitals in South Korea. Multiple commercial LLMs-including OpenAI GPT-4o, GPT-4.1, O3, Google Gemini 2.0 flash, Gemini 2.5 flash, Gemini 2.5 pro, DeepSeek V3, and DeepSeek R1-were evaluated for the accuracy in triaging patient urgency based solely on unsummarized dialogue. The Korean Triage and Acuity Scale (KTAS) assigned by triage nurses was used as the gold standard for evaluating the LLM classifications. Model performance was assessed under both a zero-shot prompting condition and a few-shot prompting condition that included representative examples.; **Results:** A total of 1,057 triage cases were included in the analysis. Among the models, Gemini 2.5 flash achieved the highest accuracy (73.8%), specificity (88.9%), and PPV (94.0%). Gemini 2.5 pro demonstrated the highest sensitivity (90.9%) and F1-score (82.4%), though with lower specificity (23.3%). GPT-4.1 also showed balanced high accuracy (70.6%) and sensitivity (81.3%) with practical response times (1.79s). Performance varied widely between models and even between different versions from the same vendor. With few-shot prompting, most models showed further improvements in accuracy and F1-score.; **Conclusions:** LLMs can accurately triage ED patient urgency using real-world clinical conversations. Several models demonstrated both high sensitivity and acceptable response times, supporting the feasibility of LLM in non-critical triage support tools in diverse clinical environments. These findings apply to non-critical patients (KTAS 3-5), and further research should address integration with objective clinical data and real-time workflow. (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1186/s12873-025-01337-2

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40890624&profid=ehost

32. Medications used for seizure-emergency management in the UK community: A clinical practice research datalink retrospective database study

Item Type: Journal Article

Authors: Ma, Y.;Lu, C.;Hastie, P.;Bartmann, A. P.;Laloyaux, C. and Borghs, S.

Publication Date: 2025

Journal: Epilepsia Open 10(4), pp. 1023–1033

Abstract: Objective: Assess the prevalence, characteristics, and healthcare resource utilization (HCRU) of patients prescribed certain benzodiazepines for seizure-emergency management in the United Kingdom.; **Methods:** Retrospective cohort study using Clinical Practice Research Datalink (CPRD-Aurum) and Hospital Episode Statistics (HES) data that included patients with ≥1 recorded seizure-emergency medication prescription between 2016 and 2020. Patient characteristics were described for the whole sample. Inpatient, outpatient, and Accident and Emergency (A&E) encounters during 2019 were described. The 2019 prevalence of seizure-emergency medication prescription among patients with epilepsy was calculated.; **Results:** In 2019, 6.7% (9336/139667) of CPRD-Aurum patients with epilepsy were prescribed seizure-emergency medication. Between 2016 and 2020, 26 534 patients with seizure-emergency medication were identified (mean/median age: 41.5/41.0 years 71.8% were adults]; 50.3% male). In this sample, the most prescribed seizure-emergency medication was buccal midazolam (60.6% of patients). Rectal diazepam was prescribed for 19.0%; oral benzodiazepines for 20.3%. Of the oral benzodiazepines prescribed for seizure-emergency management, oral diazepam was most common (97.5%). Buccal midazolam was prescribed both to children and adults (44.2%/55.8%); rectal diazepam and oral benzodiazepines mainly to adults (93.3%/99.5%). Among 11 594 patients with HES linkage in 2019, 25.1% experienced ≥1 epilepsy-specific inpatient hospitalization (median hospitalization days in patients with ≥1 hospitalization = 2.9 IQR 12.0]); 35.7% had ≥1 neurology-specific outpatient visit (median visits in patients with ≥1 visit = 2.6 3.4]); 8.7% had ≥1 epilepsy-related emergency attendance (median attendances in patients with ≥1 attendance = 3.0 4.0]); 7.8% arrived in A&E by ambulance due to epilepsy (median arrivals in patients with ≥1 arrival = 2.2 3.4]).; **Significance:** In 2019, 6.7% of patients with epilepsy were prescribed seizure-emergency medication. Nevertheless, patients continue to encounter challenges to manage seizure-related emergencies, as shown by high HCRU, suggesting that it may be time for a new treatment paradigm. The recently proposed concept of Rapid and Early Seizure Termination (REST) warrants further investigation.; **Plain Language Summary**: In people with epilepsy, some seizures last too long and will not stop on their own, or may happen one after another, becoming emergencies that need medical attention; seizure-emergency medications are given to stop the seizure and prevent other medical problems. We looked at the share of people with epilepsy who had a seizure-emergency medication prescription in a UK database, and this group's use of health services. In 2019, 7% of people with epilepsy were prescribed a seizure-emergency medication. Use of health services was high in this group, highlighting the need for better treatment options. (© 2025 UCB Biopharma SRL and The Author(s). Epilepsia Open published by Wiley Periodicals LLC on behalf of International League Against Epilepsy.)

Access or request full text: https://libkey.io/10.1002/epi4.70035

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40365851&profid=ehost

33. Socioeconomic inequality and access to emergency care: understanding the pathways to the emergency department in the UK

Item Type: Journal Article

Authors: Madia, Joan;Boyle, Adrian A.;Ray, James;Novak, Alex;Pope, Catherine J.;Wheeler, Bella;Petrou, Stavros;Wittenberg, Raphael and Nicodemo, Catia

Publication Date: 2025

Journal: BMJ Open 15(12), pp. e108770

Abstract: Objective: To examine how socioeconomic deprivation influences referral pathways to emergency departments (EDs) and to assess how these pathways affect subsequent hospital outcomes.; **Design:** Retrospective observational study.; **Setting**: Emergency department of a large teaching hospital in the East of England, providing secondary and tertiary care.; **Participants:** 482 787 ED attendances by patients aged 16 years and over, recorded between January 2019 and December 2023. Patients were assigned Index of Multiple Deprivation (IMD) deciles based on residential postcode.; **Main Outcome Measures:** Referral source (general practitioner (GP), National Health Service (NHS) 111, ambulance, self-referral, other), total ED time, 4-hour breach, hospital admission and unplanned return within 72 hours.; **Results:** Substantial socioeconomic inequalities were observed in referral pathways. Patients from the most deprived areas were significantly less likely to be referred by a GP (4.7%) than those from the least deprived areas (14.7%) and more likely to arrive via ambulance (32% vs 24%). These differences persisted after adjusting for demographic, clinical and contextual variables. Ambulance referrals showed the longest ED stays, ranging from 347 to 351 min across IMD deciles (overall 95% CI 343 to 363) and the highest probability of 4-hour breaches (51%; 95% CI 50% to 53%). Self-referrals had the greatest rates of unplanned returns within 7 days (up to 7.1%; 95% CI 5.5% to 8.7%). In contrast, NHS 111 and GP referrals were associated with shorter stays, lower breach rates and fewer reattendances. Minimal variation in outcomes was observed across deprivation levels once referral source was accounted for.; **Conclusions:** Inequalities in how patients access emergency care, particularly reduced GP and NHS 111 referrals among more deprived groups, appear to underpin disparities in ED outcomes. Referral source captures important clinical and system-level factors that influence patient experience and resource use. Interventions to improve equitable access to structured referral pathways, particularly in more deprived areas, may enhance both the efficiency and fairness of emergency care delivery. Further research using national data is needed to assess broader policy implications and economic costs associated with differential access. (© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY. Published by BMJ Group.)

Access or request full text: https://libkey.io/10.1136/bmjopen-2025-108770

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41387005&profid=ehost

34. Collaborative Working to Address Inappropriate ED Attendances by Nursing Home Residents

Item Type: Journal Article

Authors: McCarthy, Mary and Sheahan, Patricia

Publication Date: 2025

Journal: BMJ Open Quality 14(4)
Abstract: **Background:** Increase in life expectancy in Ireland and social isolation has led to an increasing number of people living in residential care facilities (RCFs). Residents are frequently transferred to emergency departments (ED) for a variety of reasons. Studies found that up to 40% of these hospital admissions were deemed inappropriate. An inappropriate admission in previous studies has been defined as a situation in which care in lower cost settings would be as safe and less disruptive than care in higher cost hospital settings.; **Methods:** A review of a convenience sample of ED attendances to University Hospital Kerry (UHK) found that 50% were inappropriate. A SMART aim in a quality improvement project (QIP) is an aim which is Specific, Measurable, Achievable, Relevant and Time based. The SMART aim of this QIP was to reduce the number of persons residing in RCFs, being inappropriately referred to UHK, from 50% to 30% from March 2024 to May 2025.Quality improvement (QI) measures included the standardisation of terminology through the workings of the palliative frailty multidisciplinary team, development of a communication document on resuscitation status and treatment escalation preferences, and the implementation of an advanced nurse practitioner (ANP) palliative care service for RCFs supported by a palliative medicine physician. Education was integral in this QIP.; **Results:** QI measures resulted in a reduction in monthly ED attendances of RCF residents from a median of 82 to 50. Inappropriate attendances reduced from 50% to 31%. Stakeholders' feedback on the new service was overwhelmingly positive. The project resulted in financial savings for the health service.; **Conclusion:** Integration of the geriatric and palliative medicine services with staff of RCFs allowed for sharing of knowledge, standardisation of terminology and development of alternative models of care and pathways to access specialties. The introduction of a designated ANP palliative care service for RCFs has been essential in helping residents to receive the right care, in the right place, at the right time. (© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.)

Access or request full text: https://libkey.io/10.1136/bmjoq-2025-003683

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41314682&profid=ehost

35. Evaluating the diagnostic accuracy of point-of-care ultrasound for paediatric appendicitis: a UK multicentre observational study

Item Type: Journal Article

Authors: McCreary, David;Chan, Nigel;Miller, Bethaney;Rees, Jon;Sarvesh, Bhaskar and Mullen, Niall

Publication Date: 2025

Journal: Archives of Disease in Childhood
Abstract: **Objective:** To evaluate the diagnostic accuracy of point-of-care ultrasound (POCUS) performed by paediatric emergency medicine (PEM) clinicians for suspected paediatric appendicitis.; **Design:** Prospective

observational study.; **Setting:** Two paediatric emergency departments in the UK.; **Patients:** Patients aged 1-16 years presenting with abdominal pain and right lower quadrant tenderness on examination.; Primary Outcome **Measures:** Sensitivity, specificity, positive predictive value and negative predictive value of POCUS.; **Secondary Outcome Measure**: Comparison to radiology-performed ultrasound in terms of agreement of findings.; **Results:** 226 patients were included in our study, of which 130 (58%) were boys. The mean age of patients was 9.7 years. 28 patients had appendicitis confirmed on histological examination, giving a prevalence of 12.4%. Compared with our reference standard, POCUS demonstrated a sensitivity of 0.89 (0.71-0.97), specificity 0.96 (0.92-0.98) positive predictive value 0.76 (0.57-0.88) and negative predictive value 0.98 (0.95-1.00). The appendix was visualised in 82/226 patients (36%). There was a very high degree of agreement between POCUS and radiology-performed ultrasound with a Cohen's kappa (k) of 0.87 (95% CI 0.70 to 1.00).; **Conclusion:** POCUS performed by PEM clinicians has a high degree of accuracy in detecting paediatric appendicitis. There was a high level of agreement between POCUS and radiology-performed ultrasound. (© Author(s) (or their employer(s)) 2025. No commercial re-use. See rights and permissions. Published by BMJ Group.)

Access or request full text: https://libkey.io/10.1136/archdischild-2025-329440

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41192956&profid=ehost

36. Changes in emergency healthcare use following intervention by Navigator, an emergency department social support programme: a multi-centre retrospective before-and-after study

Item Type: Journal Article

Authors: McHenry, Ryan D. and Goodall, Christine A.

Publication Date: 2025

Journal: European Journal of Emergency Medicine : Official Journal of the European Society for Emergency Medicine 32(3), pp. 188–193

Abstract: Background and Importance: Patients living with social deprivation, and those with experiences of violence, substance misuse, mental ill-health and homelessness are known to use emergency departments (EDs) more often. It is not known whether a programme of social support initiated during ED attendance may lead to a reduction in healthcare use.; **Objectives:** The objective of this study is to determine the change in emergency, inpatient and outpatient healthcare use following a social support programme, Navigator, initiated during an ED attendance.; **Design**: Retrospective before-and-after study.; **Settings and Participants:** Adult patients ≥16 years, attending EDs in the West of Scotland from 14 th September 2016 to 10 th March 2023, with a Navigator programme encounter.; Intervention or Exposure If Any: The Navigator social support programme, delivered by trained support workers, initiated during ED attendance, and targeting patients affected by issues including violence, substance misuse, mental ill-health, domestic abuse and homelessness.; **Outcome Measures and Analysis:** Healthcare use rates in the 365 days following intervention, as change compared to those in the 365 days prior to the intervention. The primary outcome was the number of ED attendances in the year following intervention compared with the year prior to intervention. Secondary outcomes included

inpatient admissions, inpatient bed days, outpatient appointments and outpatient appointments where the patient did not attend. Changes in use rates were analysed with negative binomial regression and reported as incidence rate ratios for interpretation as percentage change. Analysis was repeated for a subgroup of frequent attenders to the ED.; **Main Results:** Of 1421 Navigator programme encounters, 1056 were included for analysis. Median attendance in the year prior to intervention was 3 interquartile range (IQR) 1-5], and in the year following intervention was 2 (IQR 0-4). Negative binomial regression demonstrated that in the year following Navigator intervention, there was a 29% (95% confidence interval: 24-33%) reduction in ED attendances.; **Conclusion:** The Navigator programme was associated with reduced emergency and acute healthcare use in the year following intervention, with increased scheduled outpatient care. There is the potential for a social support programme, delivered from the ED, to change patterns of healthcare use, and future work should consider prospectively assessing the impact of such an intervention.

Access or request full text: https://libkey.io/10.1097/MEJ.0000000000001206

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=39621013&profid=ehost

37. Co-design of a Mobile Stroke Unit pathway highlights uncertainties and trade-offs for viable system-wide implementation in the English and Welsh NHS

Item Type: Journal Article

Authors: Moseley, L.;McMeekin, P.;Allen, M.;Ford, G. A.;James, M.;Laws, A.;McCarthy, S.;McClelland, G.;Park, L. J.;Pearn, K.;Phillips, D.;Price, C.;Shaw, L.;White, P.;Wilson, D. and Scott, J.

Publication Date: 2025

Journal: BMC Emergency Medicine 25(1), pp. 97

Abstract: Background: Mobile stroke units (MSUs) are specialist ambulances equipped with scanning and point of care testing that can identify patients eligible for intravenous thrombolysis - medication to dissolve a clot used in ischaemic strokes - and provide this on location. While benefits of MSUs have been demonstrated, this is context dependent. Routine use of MSUs across the English and Welsh National Health Service (NHS) has not yet been considered, and as such no pathway for their operation exists. This study aimed to co-design a viable pathway, detailing dispatch, staffing and treatment decisions, for MSUs within the NHS context.; **Methods:** The study used interdisciplinary co-design alongside Nominal Group Technique (NGT) to generate consensus. Participants were recruited using a combination of purposive, opportunistic and snowball sampling. Data collection took place in online workshops, across three rounds, with supplemental interviews conducted where required. Data were analysed as an ongoing process, with participants checking interpretations after each round, and then further analysed deductively to identify key uncertainties following all the rounds. Consensus threshold for the NGT was set a priori at ≥ 80%.; **Results:** An MSU pathway that reached consensus for being viable within the NHS was developed with consideration for current systems and pressures. Key uncertainties were identified such as where to base the MSU. We also identified where participants had to make trade-offs in the co-designed pathway, such as staffing considerations. Together, the

uncertainties and trade-offs represent challenges to MSU implementation and are presented alongside the process to reach the finalised pathway. Future developments which may have implications for the implementation of MSUs were also explored.; **Conclusions:** The co-designed MSU pathway provides a foundation for MSU implementation in the English and Welsh NHS and can be subjected to local and regional modifications required for implementation. However, optimal implementation is likely hindered by several uncertainties and trade-offs, including the geographical base of the MSU and staffing, that represent challenges to implementation of MSUs at scale. Future developments in acute stroke care may help to mitigate these challenges, such as developments in artificial intelligence to read scans and improved access to telemedicine.; Clinical Trial Number: Not applicable. (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1186/s12873-025-01243-7

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40484953&profid=ehost

38. Compliance with NICE, BAUS, RCR, and RCEM Guidelines for Acute Renal Colic: A Two-Cycle Quality Improvement Study at Lister Hospital Emergency Department, United Kingdom

Item Type: Journal Article

Authors: Nehvi, Aabid;Ofedie, Audrey;Salahuddin, Syed Maaz;Akhtar, Fahad;Shrestha, Binay and Faruqui, Shakeel

Publication Date: 2025

Journal: Cureus 17(9), pp. e93387

Abstract: **Background:** Acute renal colic is a common emergency department (ED) presentation requiring rapid diagnosis and management. National bodies emphasize timely imaging, appropriate biochemical testing, and ED throughput standards.; **Objective:** To evaluate and improve compliance with the National Institute for Health and Care Excellence (NICE), British Association of Urological Surgeons (BAUS), Royal College of Radiologists (RCR), and Royal College of Emergency Medicine (RCEM) standards in the ED management of acute renal colic at a United Kingdom (UK) district general hospital, with the following prespecified targets: RCEM four-hour compliance ≥90% (local "green" standard); median time from ED arrival to CT-KUB (CT scan of the kidneys, ureters, and bladder) request ≤90 minutes and CT report ≤90 minutes; >90% of scans within BAUS/NICE imaging timeframes (≤14 h/≤24 h); STONE (sex, timing, origin, nausea, erythrocytes) score documentation ≥75% and serum calcium testing ≥65% (with serum urate ≥20%); and ≥30% reduction in repeat CT within three months.; **Methods:** A retrospective two-cycle quality improvement project (QIP) was conducted. Cycle 1 (December 2023-March 2024) included 114 consecutive adults with suspected renal colic; Cycle 2 (March-August 2024, n = 114) assessed post-intervention impact. Metrics included urine dip turnaround, CT-KUB request and reporting times, RCEM four-hour compliance, serum testing, STONE score use, repeat CT rates, diagnostic yield, and length of stay. Interventions comprised a "Straight to CT" pathway, Integrated Clinical Environment (ICE)/iRefer STONE prompts, staff education, and workflow optimization. Categorical variables were analyzed using chi-square or Fisher's exact tests; continuous outcomes were reported as median (interquartile range (IQR)) and compared using Mann-Whitney U tests.; **Results:** Cycle 1

showed prolonged urine dip turnaround (median: 144 minutes), CT request (166 minutes), and report (124 minutes), with RCEM four-hour compliance as 16.7% (19/114). Cycle 2 improved significantly: urine dip 68 minutes (U=2102; p<0.001), CT request 75 minutes (U=1850; p<0.001), CT report 70 minutes (U=1924; p<0.001), RCEM compliance 57% (χ^2=39.9; p<0.001; odds ratio (OR) 6.63 95% confidence interval (CI): 3.58-12.29). Serum calcium testing improved (χ^2=5.27; p=0.022), urate testing (Fisher's exact p<0.001), STONE score use (χ^2=127.0; p<0.001), and repeat CT <3 months halved (RR: 0.50, 95% CI: 0.25-0.98; p=0.038; CI width noted for cautious interpretation). Diagnostic yield showed an upward trend (68.4% vs 57.9%; p=0.090) and alternative diagnoses a decreasing trend (7.0% vs 11.4%; p=0.252). Median ED stay reduced from 7.5 to 3.9 hours (U=1765; p<0.001).; **Conclusion:** This QIP demonstrated that targeted interventions significantly enhanced adherence to NICE, BAUS, RCR, and RCEM guidelines, reduced diagnostic delays, and improved emergency department efficiency in managing acute renal colic. Scalable strategies, including STONE score integration and streamlined imaging, expedited workflows, increased RCEM four-hour compliance, and boosted metabolic testing rates while reducing repeat CT scans. Non-significant trends in diagnostic yield and alternative diagnoses suggest improved clinical precision without compromising safety, offering a replicable model for optimizing renal colic care within existing resources, pending further multicenter validation.

Access or request full text: https://libkey.io/10.7759/cureus.93387

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41024753&profid=ehost

39. Association of hospital and health system factors with emergency department length of stay in older adults with dementia

Item Type: Journal Article

Authors: Nothelle, Stephanie K.;Slade, Eric P.;Magidson, Phillip D.;Prichett, Laura;Finney, Amanda;Chotrani, Tanya;Amjad, Halima;Szanton, Sarah;Boyd, Cynthia M. and Wolff, Jennifer L.

Publication Date: 2025

Journal: BMC Emergency Medicine 25(1), pp. 193

Abstract: **Background:** Persons living with dementia (PLWD) have longer lengths of stay (LOS) in the Emergency Department (ED), which increases risk of delirium, falls and medication errors. Care of PLWD in the ED is complex and presence of dementia care specialists (geriatrics, neurology, psychiatry) may streamline care. We sought to understand the contribution of health system factors, including presence of dementia care specialists, to LOS among PLWD.; **Methods:** We linked statewide ED visit data on patients discharged from the ED for Arkansas, Arizona, Florida and Massachusetts from the 2018 Healthcare Cost and Utilization Project State Emergency Department Database to the American Hospital Association Annual Survey and Healthcare Information Technology supplement. We included ED visit records for persons ≥ 65 years with ICD-10 dementia diagnoses. Median LOS was estimated at the hospital level and then used as a dependent measure in hospital-level Poisson multivariable models that conditioned on system characteristics.; **Results:** We included 72,083 ED visits resulting in discharge at 225 health systems. Most EDs were in non-governmental,

not-for-profit community hospitals (n = 159, 71%). Median patient age was 83 years (IQR 67, 92), females comprised a mean of 64% of visits. Median LOS was 4 h (IQR 3-7), mean LOS was 9.3 h (SD 16.3). Neurology was the most commonly available dementia care service (n = 180, 80%), followed by psychiatric services (n = 139 EDs, 62%) and geriatric services (n = 132, 59%). In Poisson models adjusting for a parsimonious set of co-variates, the presence of geriatric services was associated with a 16% lower mean LOS (IRR 0.84, 95% CI 0.73-0.97), however, this association lost significance in fully adjusted models (IRR 0.87, 95% CI 0.76-1.01).; **Conclusions:** Availability of geriatric specialty services may offer hospitals an advantage in streamlining ED care for PLWD and in reducing visit length for this complex patient group. These findings reinforce the potential value of the Geriatrics Emergency Department Accreditation programs. (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1186/s12873-025-01353-2

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41013282&profid=ehost

40. Artificial intelligence-guided detection of under-recognised cardiomyopathies on point-of-care cardiac ultrasonography: a multicentre study

Item Type: Journal Article

Authors: Oikonomou, Evangelos K.;Vaid, Akhil;Holste, Gregory;Coppi, Andreas;McNamara, Robert L.;Baloescu, Cristiana;Krumholz, Harlan M.;Wang, Zhangyang;Apakama, Donald J.;Nadkarni, Girish N. and Khera, Rohan

Publication Date: 2025

Journal: The Lancet.Digital Health 7(2), pp. e113–e123

Abstract: **Background:** Point-of-care ultrasonography (POCUS) enables cardiac imaging at the bedside and in communities but is limited by abbreviated protocols and variation in quality. We aimed to develop and test artificial intelligence (AI) models to screen for under-diagnosed cardiomyopathies from cardiac POCUS.; **Methods**: In a development set of 290 245 transthoracic echocardiographic videos across the Yale-New Haven Health System (YNHHS), we used augmentation approaches, and a customised loss function weighted for view quality to derive a POCUS-adapted, multi-label, video-based convolutional neural network that discriminates hypertrophic cardiomyopathy and transthyretin amyloid cardiomyopathy from controls without known disease. We evaluated the model across independent, internal, and external, retrospective cohorts of individuals undergoing cardiac POCUS across YNHHS and the Mount Sinai Health System (MSHS) emergency departments (between 2012 and 2024) to prioritise key views and validate the diagnostic and prognostic performance of single-view screening protocols.; **Findings:** Between Nov 1, 2023, and March 28, 2024, we identified 33 127 patients (mean age 58·9 SD 20·5] years, 17 276 52·2%] were female, 14 923 45·0%] were male, and for 928 2·8%] sex was recorded as unknown) at YNHHS and 5624 patients (mean age 56·0 20·5] years, 1953 34·7%] were female, 2470 43·9%] were male, and for 1201 21·4%] sex was recorded as unknown) at MSHS with 78 054 and 13 796 eligible cardiac POCUS videos, respectively. AI deployed to single-view POCUS videos successfully discriminated hypertrophic cardiomyopathy (eg, area under the receiver operating characteristic curve 0·903 95% CI 0·795-0·981] in YNHHS; 0·890 0·839-0·938] in MSHS for apical-4-chamber

acquisitions) and transthyretin amyloid cardiomyopathy (0·907 0·874-0·932] in YNHHS; 0·972 0·959-0·983] in MSHS for parasternal acquisitions). In YNHHS, 40 (58%) of 69 hypertrophic cardiomyopathy cases and 22 (46%) of 48 transthyretin amyloid cardiomyopathy cases would have had a positive screen by AI-POCUS at a median of 2·1 (IQR 0·9-4·5) years and 1·9 (0·6-3·5) years before diagnosis. Moreover, among 25 261 participants without known cardiomyopathy followed up over a median of 2·8 (1·2-6·4) years, AI-POCUS probabilities in the highest (vs lowest) quintile for hypertrophic cardiomyopathy and transthyretin amyloid cardiomyopathy conferred a 17% (adjusted hazard ratio 1·17, 95% CI 1·06-1·29; p=0·0022) and 32% (1·39, 1·19-1·46; p<0·0001) higher adjusted mortality risk, respectively.; **Interpretation:** We developed and validated an AI framework that enables scalable, opportunistic screening of under-recognised cardiomyopathies through simple POCUS acquisitions.; Funding: National Heart, Lung, and Blood Institute, Doris Duke Charitable Foundation, and BridgeBio.

Access or request full text: https://libkey.io/10.1016/S2589-7500(24)00249-8

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=39890242&profid=ehost

41. Cessation of smoking in people attending UK emergency departments: the COSTED RCT with economic and process evaluation

Item Type: Journal Article

Authors: Pope, Ian;Clark, Lucy V.;Clark, Allan;Ward, Emma;Belderson, Pippa;Stirling, Susan;Parrott, Steve;Li, Jinshuo;Coats, Timothy;Bauld, Linda;Holland, Richard;Gentry, Sarah;Agrawal, Sanjay;Bloom, Benjamin M.;Boyle, Adrian;Gray, Alasdair;Geraint Morris, M. and Notley, Caitlin

Publication Date: 2025

Journal: Health Technology Assessment (Winchester, England) 29(35), pp. 1–36

Abstract: Background: The emergency department represents a potentially valuable opportunity to support smoking cessation. Evidence is lacking around the use of e-cigarettes in opportunistic settings like the emergency department.; **Objective:** To undertake a randomised controlled trial in people who smoke attending United Kingdom emergency departments, testing a brief intervention which included provision of an e-cigarette versus signposting to smoking cessation services, assessing smoking abstinence.; **Design:** A two-arm pragmatic, multicentre, parallel-group, individually randomised, controlled superiority trial with an internal pilot, economic evaluation and mixed-methods process evaluation.; **Setting:** Six emergency departments across England and Scotland.; **Participants:** Adults who smoked daily, who were attending the emergency department for medical treatment or accompanying someone attending for medical treatment, were invited to participate. People were excluded if they had an expired carbon monoxide of < 8 parts per million, required immediate medical treatment, were in police custody, had a known allergy to nicotine, were daily e-cigarette users, were considered not to have capacity to consent or had already taken part in the trial.; **Intervention:** Brief stop smoking advice, e-cigarette starter kit and referral to stop smoking services.; **Main Outcome Measures:** The primary outcome was biochemically validated sustained abstinence at 6 months.

Those lost to follow-up, or not providing biochemical verification, were considered not to be abstinent. Secondary outcomes were: self-reported 7-day smoking abstinence, number of quit attempts, number of cigarettes per day, nicotine dependence and incidence of self-reported dry cough or mouth or throat irritation.; **Results:** At 6 months, of 972 participants randomised, biochemically verified smoking abstinence was 7.2% in the intervention group and 4.1% in the control group (percentage difference = 3.3%) (95% confidence interval 0.3 to 6.3; p = 0.032) relative risk 1.76 (95% confidence interval 1.03 to 3.01)]. Self-reported 7-day abstinence at 6 months was 23.3% in the intervention group and 12.9% in the control group (percentage difference = 10.6%) (95% confidence interval 5.86 to 15.41; p < 0.001) relative risk 1.80 (95% confidence interval 1.36 to 2.38)]. Daily e-cigarette use was 39.4% in the intervention group and 17.5% in the control group at 6 months. No serious adverse events related to taking part in the trial were reported. The economic evaluation found the intervention was likely to be cost-effective, judged by the National Institute for Health and Care Excellence threshold. The process evaluation found the intervention to be acceptable to both staff delivering it and participants receiving it. The brief nature of the intervention was highly adaptable to context, and interviews demonstrated how the intervention supported different pathways towards cessation.; **Limitations:** The inability to blind participants or researchers, the relatively low level of biochemical verification due to the nature of the population recruited and the fact that those in the control group did not receive usual care.; **Conclusions:** An opportunistic smoking cessation intervention comprising brief advice, an e-cigarette starter kit and referral to stop smoking services is effective for sustained smoking abstinence with few reported adverse events.; **Future Work:** Future work will include testing other behaviour change interventions in the emergency department and adapting the Cessation of Smoking Trial in the emergency department intervention for other settings.; Funding: This synopsis presents independent research funded by the National Institute for Health and Care Research (NIHR) Health Technology Assessment programme as award number NIHR129438.

Access or request full text: https://libkey.io/10.3310/JHFR0841

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40748216&profid=ehost

42. Role of emotions in change and change management in an emergency department: a qualitative study

Item Type: Journal Article

Authors: Ratnapalan, Savithiri;Lang, Daniel;Janzen, Katharine and Muzzin, Linda

Publication Date: 2025

Journal: BMJ Leader 9(3), pp. 247–255

Abstract: **Background:** Changes in emergency departments are frequently implemented to improve efficiency and reduce costs. However, staff acceptance and adoption are crucial for the intended success of changes.; **Objectives:** This study explored staff perceptions of factors influencing the implementation of changes and any common themes linking changes and factors influencing changes in an emergency department at a university teaching hospital in the UK.; **Methods:** We used constructivist grounded theory methodology to perform a secondary analysis of 41 interview transcripts of physicians, nurses, support workers and managers

involved in paediatric emergency care.; **Results:** Participants identified leadership, communication and education as factors impacting change management. They described many emotions associated with changes and with communication, leadership and education or the lack of any of them during changes. Both positive and negative emotions sometimes coexisted at individual, team or organisational levels. Negative emotions were due to real-life challenges and concern over compromised patient care. Professional values dictated the actions or inactions that transpired either because of these emotions or despite these emotions in health professionals.; **Conclusions:** Emotions to change should be acknowledged and addressed by credible leadership clear communication and education to improve the change process, its success and ultimately, patient care. (© Author(s) (or their employer(s)) 2025. No commercial re-use. See rights and permissions. Published by BMJ Group.)

Access or request full text: https://libkey.io/10.1136/leader-2024-001074

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=39089864&profid=ehost

43. Artificial Intelligence Analysis of Chest Radiographs for Predicting Major Adverse Events in Patients Visiting the Emergency Department With Acute Cardiopulmonary Symptoms

Item Type: Journal Article

Authors: Rhee, C.;Hong, K. J.;Kim, K. H.;Goo, J. M. and Hwang, E. J.

Publication Date: 2025

Journal: Korean Journal of Radiology 26(9), pp. 877–887

Abstract: **Objective**: In this study, we investigated whether artificial intelligence (AI) analysis of chest radiographs (CXRs) can predict major adverse clinical events in patients visiting the emergency department (ED) with acute cardiopulmonary symptoms.; **Materials and Methods:** This secondary analysis of a previous clinical trial included patients who visited the ED with symptoms suggestive of acute cardiopulmonary disease and underwent chest radiography between June 2020 and December 2021. All patients underwent triage upon arrival at ED according to the Korean Triage and Acuity Scale (KTAS). The CXRs were retrospectively analyzed using a commercial AI (Lunit INSIGHT CXR, version 3.1.4.1) capable of detecting seven abnormalities on a single frontal CXR. The predictive performance of the AI analysis for major adverse cardiopulmonary events (any among hospitalization, ED revisits, and death in the ED due to acute cardiopulmonary disease) was compared with that of the KTAS using the area under the receiver operating characteristic curve (AUC). Multivariable (the AI analysis result and KTAS level) logistic regression analysis was conducted to investigate whether the AI analysis result was an independent predictor of the events and whether the combination of the AI analysis and KTAS has additional merit.; **Results:** Among 3576 patients (1966 males; mean age, 64 years), 1148 (32.1%) experienced major adverse cardiopulmonary events. AI analysis of CXRs outperformed the KTAS in predicting these events (AUC, 0.795 vs. 0.610; $P < 0.001$). The AI analysis result was an independent predictor of these events after adjusting for the KTAS level (adjusted odd ratios of 1.032 and 6.913 for every 1% increase and ≥15%, respectively, in the AI probability score; $P < 0.001$). The combination of the AI analysis and KTAS showed an AUC that was higher than that of the KTAS alone (0.799; $P < 0.001$) and in-par with that of the

AI analysis only (P = 0.187).; **Conclusion:** AI analysis of CXRs showed greater accuracy than the KTAS did in predicting major adverse cardiopulmonary events in patients visiting the ED with acute cardiopulmonary symptoms. AI analysis may enhance the efficacy of patient triage in the ED. (Copyright © 2025 The Korean Society of Radiology.)

Access or request full text: https://libkey.io/10.3348/kjr.2025.0237

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40873378&profid=ehost

44. Are acute asthma presentations to the emergency department an opportunity for optimising long-term management? A qualitative study on beliefs and behaviours of healthcare professionals

Item Type: Journal Article

Authors: Skene, Imogen;Griffiths, Chris;Pike, Katherine;Bloom, Benjamin Michael;Pfeffer, Paul and Steed, Liz

Publication Date: 2025

Journal: Emergency Medicine Journal : EMJ 42(9), pp. 608–614

Abstract: **Background:** Guidelines recommend Emergency Department (ED) healthcare professionals (HCPs) ensure patients have a supply of inhaled corticosteroid on discharge after an acute asthma presentation. By optimising medication, acute asthma presentations to EDs are a potentially reachable moment to improve long-term asthma management as well as treating the acute exacerbation. Optimising medication for long-term asthma management requires behavioural changes from HCPs, which may be considered unacceptable or unfeasible. Understanding health beliefs and attitudes of HCPs who provide asthma treatment in emergency care is a critical step in determining whether interventions could be developed to address this.; **Aims:** To explore the health beliefs, attitudes and behaviours of HCPs involved in the care of adult patients presenting to the ED with asthma.; **Methods:** UK HCPs, purposively sampled for profession, experience and work setting, were invited to participate in a semi-structured face-to-face or online interview. These were conducted between November 2021 and June 2022. Eligible participants had experience of caring for patients with asthma in either the ED or primary care setting. Interviews were analysed with reflective thematic analysis.; **Results:** 19 HCPs were interviewed. Four themes were identified, constructed around the beliefs and behaviours of HCPs: (1) Compassionate understanding, that is, recognising the accessibility of ED, patients' self-management and the emotional aspects of exacerbations, (2) Doing what is right for the patient, that is, maximising a reachable moment, (3) Tensions of capacity in the system, that is, acknowledging workload within ED and (4) ED as providers of preventative care.; **Conclusion:** This study found HCPs recognise both the accessibility of the ED as a place for patients to seek help and that there are potential opportunities to optimise asthma control, but there are barriers to overcome. ED professionals may be willing to make changes in the best interests of the patients if they can follow guidelines and receive training. (© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.)

Access or request full text: https://libkey.io/10.1136/emermed-2024-214407

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40240076&profid=ehost

45. A randomized control trial comparing Falls Reduction for Elderly Emergency Department (FREED) interventions and usual care

Item Type: Journal Article

Authors: Sri-On, Jiraporn;Pongvirat, Kanokporn;Rujichanantakul, Sukkhum;Nithimathachoke, Adisak;Pholphijit, Thanathip;Fusakul, Yupadee and Liu, Shan Woo

Publication Date: 2025

Journal: BMC Emergency Medicine 25(1), pp. 224

Abstract: Background: This study evaluated the effectiveness of a Falls Reduction for Elderly Emergency Department (FREED) intervention in reducing recurrent falls among older adults presenting to the emergency department (ED) after a fall at 6 months.; **Methods:** This randomized controlled trial conducted in an ED in Bangkok, Thailand, included patients aged ≥ 60 years who had experienced a fall in the previous 7 days. The patients were randomized to receive the FREED intervention or usual care, including a systematic fall risk assessment, medication review, vitamin D supplementation, physical therapy referrals, and home environment assessment. The primary outcomes analysis included the intention-to-treat (ITT) and per-protocol (PP) analyses.; **Results**: After excluding 1,026 ineligible individuals, 216 patients (median age: 75 interquartile range: 69-81] years were enrolled, 108 in the FREED intervention and 108 in the usual care arm. Six-month follow-up data were available for 97% of the participants. The intergroup difference in repeated falls (primary result) was not significant (intervention group: 20.4%, control group: 25.0%; the observed absolute risk reduction of 4.6% was not statistically significant (95% confidence interval: -15.8% to 6.5%, p = 0.42). At 6 months, activities of daily living (ADL) scores decreased very slightly in both groups, with no between-group differences.; **Conclusion:** The FREED intervention was feasible and acceptable among older ED patients who had fallen but did not significantly reduce repeated falls at 6 months. Fall prevention in the ED can be challenging, and multicenter studies with longer follow-up periods are required to further explore the impact of ED-initiated fall prevention interventions.; Clinical Trial Number: TCTR20180522002.; Trial Registration: The trial was registered in the Thai Clinical Trial Register on 22 May 2018. (© 2025. The Author(s).)

Access or request full text: https://libkey.io/10.1186/s12873-025-01383-w

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41199222&profid=ehost

46. Assessment of vaping and substance use documentation in the emergency department and acute medical unit

Item Type: Journal Article

Authors: Tiffen, Lucy;Sund, Lachlan John;Kennedy, Callum;Hollands, Megan;Dargan, Paul I. and Wood, David M.

Publication Date: 2025

Journal: Emergency Medicine Journal : EMJ
Abstract: Competing Interests: Competing interests: We declare no support from any organisation for the submitted work; DMW is a senior editorial board member for the Journal of Medical Toxicology, a member of UK Advisory Council on the Misuse of Drugs and an expert advisor to the European Monitoring Centre for Drugs and Drug Addiction and United Nations Office on Drugs and Crime; PID is a senior editorial board member for the Clinical Toxicology Journal, a Commissioner to the UK Commission on Human Medicines, President-Elect of the European Association of Poisons Centres and Clinical Toxicologists and an expert adviser for the World Health Organisation, the Advisory Council on the Misuse of Drugs, European Monitoring Centre for Drugs and Drug Addiction and the United Nations Office on Drugs and Crime.

Access or request full text: https://libkey.io/10.1136/emermed-2025-214920

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40987547&profid=ehost

47. Dying matters in the emergency department: staff experiences of end-of-life care in a UK major trauma centre

Item Type: Journal Article

Authors: Ubayasiri, Nicola and Edwards, Sarah

Publication Date: 2025

Journal: BMJ Supportive & Palliative Care
Abstract: Competing Interests: Competing interests: None declared.

Access or request full text: https://libkey.io/10.1136/spcare-2025-005974

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41314779&profid=ehost

48. Why do non-urgent patients present to the paediatric emergency department?

Item Type: Journal Article

Authors: Veitch, Jennifer and Bentley, Jamie

Publication Date: 2025

Journal: BMJ Paediatrics Open 9(1)
Abstract: Competing Interests: Competing interests: None declared.; Non-urgent presentation to the paediatric emergency department (PED) is an underexplored area within the context of the National Health Service (NHS). Therefore, a pilot study was undertaken in the Royal Hospital for Children and Young People Edinburgh to evaluate the awareness of the unscheduled care policy within NHS Lothian and the reasons why parents/carers bring their child to the PED for non-urgent complaints. It was found that there was a general lack of awareness of the unscheduled care policy, and that non-urgent presentation was often due to inappropriate referral. (© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY. Published by BMJ Group.)

Access or request full text: https://libkey.io/10.1136/bmjpo-2025-003613

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=40889949&profid=ehost

49. Navigating the Emergency Department: A Qualitative Study on Resident Doctors' Insights Into an Electronic Emergency Department Handbook

Item Type: Journal Article

Authors: Wickramanayake, Udara and Brown, Emelia

Publication Date: 2025

Journal: Cureus 17(12), pp. e99401

Abstract: **Background** Resident doctors entering Emergency Medicine (EM) face heavy workloads, rapid decision-making demands, and variable access to local protocols. While electronic handbooks show promise in other specialties, evidence from emergency departments (EDs) in the United Kingdom is limited. This study evaluated an electronic ED handbook's impact on confidence and knowledge among new ED doctors at a District General Hospital. **Methods** Using an interpretivist qualitative design, we conducted semi-structured interviews with purposively sampled 15 resident doctors (Foundation Year 2 (FY2), clinical fellows, general practitioner (GP)/EM trainees), all of whom had used the handbook during induction at Queen Elizabeth Hospital, King's Lynn (QEHKL), United Kingdom. Interviews (~20 minutes) were conducted by an EM registrar with training in quality improvement and research. These interviews were audio-recorded, transcribed verbatim and pseudonymised, and then analysed using reflexive thematic analysis following Braun and Clarke's six-phase approach. **Results** Six themes emerged: (i) Orientation and Transition Support - reduced induction overload and clarified expectations, (ii) Rapid Access to Local Protocols and Referral Pathways - single-point access to SDEC, stroke, urology and paediatric pathways, (iii) Decision-Making, Safety and Confidence - bedside guidance for acute coronary syndrome (ACS), head injury, venous thromboembolism (VTE)/deep vein thrombosis (DVT), burns and paediatrics, (iv) Efficiency and Workflow - less time searching intranet, smoother external referrals, (v) Usability and Accessibility - intuitive hyperlinks and mobile use, and (vi) Information Reliability and Maintenance - need for timely updates, fixing broken links and governance. Confidence gains were most pronounced among international medical graduates. All participants

recommended the handbook for future cohorts. **Conclusion** The electronic ED handbook appeared to support resident doctors during their transition into EM by enhancing confidence, preparedness, and workflow efficiency. These findings offer useful exploratory insight into how a locally tailored digital tool can assist clinicians early in their ED placement. However, as a qualitative study conducted in a single centre, the results reflect participant perceptions rather than objective outcomes. Future multi-centre or mixed-methods research would be valuable to examine broader applicability and assess measurable effects on practice and patient care. (Copyright © 2025, Wickramanayake et al.)

Access or request full text: https://libkey.io/10.7759/cureus.99401

URL: https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=41552088&profid=ehost

50. The impact of virtual reality (VR) on pain management in the emergency department: a systematic review and meta-analysis

Item Type: Journal Article

Authors: Zaki, Hany A.;Elmelliti, Hussam;Ponappan, Benny;Abosamak, Mohammed F.;Shaban, Ahmed;Shaban, Amira;Elgassim, Mohamed and Shaban, Eman E.

Publication Date: 2025

Journal: BMC Emergency Medicine 25(1), pp. 229

Abstract: Background: Although pharmacological and non-pharmacological therapy are available, pain management in the emergency department (ED) may be difficult. In recent years, virtual reality (VR) has emerged as a practical distraction approach for pain relief, especially in children and adolescents. However, little is known about the efficacy of VR in the ED. Therefore, the current study investigated the effect of VR on pain management in adult and pediatric patients in the ED.; **Objectives:** Primary objective: To assess the effect of VR on pain intensity.; **Secondary Objectives:** To investigate patient satisfaction with VR as a pain management method and to assess the incidence of cybersickness after VR intervention.; **Search Methods:** We comprehensively searched CENTRAL, Google Scholar, PubMed, and MEDLINE databases for all studies published until May 2024. The search was limited to records authored in English and it did not include grey literature, such as theses and dissertations.; **Selection Criteria:** We included randomized and non-randomized studies reporting the use of VR to manage pain in patients presenting to the ED.; **Results:** The pooled analysis demonstrated a significant reduction in pain scores with the use of VR (SMD: -0.67; p = 0.001). Furthermore, subgroup analyses showed consistent pain reduction with the use of VR across adult and pediatric patients (SMD: -1.08; p = 0.01 and SMD: -0.39; p = 0.009, respectively). Significant pain reduction was also observed in patients undergoing minor medical procedures and those with acute pain unrelated to medical procedures (SMD: -1.55; p = 0.03 and SMD: -0.32; p = 0.002, respectively).; **Conclusion:** Overall, VR offers effective pain management in adults and pediatric patients with non-procedural acute pain and those undergoing painful procedures in the ED.; Systemic Review Protocol Registration: PROSPERO: CRD42024609121.; Clinical Trial Number: Not applicable. (© 2025. The Author(s).)