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Unscheduled care

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

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References

Anaraki N.R., et al. (2025) 'Factors Iinfluencing SurgeCon Implementation in Four Canadian Emergency Departments Guided by Consolidated Framework for Implementation Research.' *Plos One 20*(12 December) (pagination), Article Number: e0337389. Date of Publication: 01 Dec 2025.
Background Emergency department (ED) overcrowding remains a significant national issue in Canada. To address this issue, SurgeCon, a quality improvement program, was implemented to enhance patient flow, improve communication, and reduce wait times. Despite their potential, interventions like SurgeCon lack evidence on real-world implementation and sustainability in high-pressure, resource-limited ED settings. Objective This study explores the factors influencing the implementation of SurgeCon in four Canadian EDs using the Consolidated Framework for Implementation Research (CFIR) to identify facilitators and barriers. Methods Data were collected over 2.5 years-before, during, and after SurgeCon implementation-in two rural and two urban EDs in Canada using a longitudinal qualitative research (LQR) design. Forty-two semi-structured interviews with physicians, nurses, and hospital managers were analyzed through inductive and deductive thematic analysis, guided by the CFIR framework. Results Facilitators were predominantly associated with CFIR's Innovation Characteristics, particularly the perceived benefits of real-time data collection, workflow optimization, and enhanced communication. However, barriers-mainly linked to outer setting (COVID-19 disruptions), inner setting (resource constraints and fragmented communication), and individual characteristics (leadership engagement and motivation)-outweighed these advantages. Conclusion To strengthen adoption, this study proposes eight strategic action plans focusing on leadership commitment, automation, cross-departmental collaboration, feedback

loops and change management strategies to maximize facilitators and address implementation barriers.

Baker, E. J. (2025) 'Maximising Learning from Patient Safety Incidents in Emergency Care.' *Emergency Nurse : The Journal of the RCN Accident and Emergency Nursing Association* (pagination), Date of Publication: 26 Nov 2025.
In a modern healthcare system, a systems approach to patient safety is essential to learn from incidents and mitigate the risk of avoidable harm to patients. Emergency nurses have an important role in the prevention, identification, reporting, investigation and management of patient safety incidents in the emergency department (ED). This article describes the role of emergency nurses and the ED governance team in patient safety, discusses the interacting work-system factors that contribute to incidents, and introduces the key aspects of the patient safety incident response framework (PSIRF). The author discusses how the PSIRF represents a shift in the way patient safety incidents are managed, with a move away from apportioning blame towards a culture of learning and quality improvement.

Chao K.Y.A., et al. (2025) 'Why do Patients Seek Emergency Care for Problems that could be Managed in Primary Care? A Scoping Review.' *Family Practice 42*(6) (pagination), Article Number: cmaf088. Date of Publication: 01 Dec 2025.
Background: Emergency care systems worldwide are increasingly facing capacity challenges. A significant number of people are using emergency care, including the use of emergency departments and ambulance services, for conditions that could be managed in primary care settings, potentially creating unnecessary strains on the already heavily burdened emergency care systems, leading to overcrowding, inefficient use of healthcare resources, and inadequate access to emergency care for those in need.
Objective(s): This scoping review of the literature aimed to explore existing evidence considering the multifaceted factors contributing to patients' decisions to seek emergency care for conditions manageable in primary care.
Method(s): A comprehensive search of "PubMed", "Embase", "MEDLINE", "CINAHL" and "the Cochrane Library" was conducted, including peer-reviewed articles published from Jan 1st 2004, until June 15th 2024. This review was conducted following the methodological framework presented by Arksey and O'Malley.
Result(s): A total of 44 studies conducted in 21 countries worldwide were included in the final analysis. Key data were extracted and analysed using thematic analysis, and the following themes have been identified: (1) accessibility and convenience, (2) health anxiety, (3) uncertainty and knowledge gaps in healthcare services, (4) external advice and encouragement, and (5) personal influences.
Conclusion(s): Our study maps the existing international literature to inform researchers and policymakers on possible future development of efficient alternative care frameworks and pathways designed to alter emergency care utilisation

behaviours, ultimately reducing unnecessary visits and ensuring efficient care is provided for true emergencies.

Cuerva Carvajal A., et al. (2026) **'Improving the Quality of Emergency Care with a Risk Map.'** ***Journal of Healthcare Quality Research 41*****(1) (pagination), Article Number: 101180. Date of Publication: 01 Jan 2026.**
Objective: To describe the process of developing a risk map in a hospital emergency department.
Method(s): A risk map was developed for the observation area of the emergency department of a secondary-level hospital belonging to the Regional Health Service of Andalusia. The work involved the systematic identification of potential problems, their prioritization, and the proposal of improvement measures, following a structured risk analysis methodology applied to patient safety.
Result(s): A total of 25 main problems were identified. After prioritization, the following critical areas were highlighted: direct patient monitoring; medication safety during treatment administration; standardization of clinical procedures; continuity of care during night shifts; appropriate management of patient isolation; analysis of previous initiatives; and the implementation and auditing of new improvement proposals.
Conclusion(s): The use of structured tools aimed at patient safety, such as risk maps, is both feasible and useful for identifying improvement areas in emergency services. Their application allows problems to be prioritized, interventions to be targeted, and a systematic framework to be established for the continuous improvement of healthcare quality.

Feng J., et al. (2025) **'A SHAP-Interpretable Machine Learning Framework for Predicting Delayed Discharge in Ambulatory Total Knee Arthroplasty: Comparative Validation of 14 Models.'** ***Frontiers in Medicine 12*****(pagination), Article Number: 1714792. Date of Publication: 2025.**
Background: The rising global demand for total knee arthroplasty (TKA) has accelerated the shift toward ambulatory surgery, aimed at same-day or next-day discharge. However, significant variability in discharge protocols and high rates of delayed discharge in unselected patients challenge its widespread implementation. This study develops an interpretable machine learning framework to preemptively identify risk factors for delayed discharge in ambulatory TKA.
Method(s): This retrospective study analyzed data from 449 patients who underwent ambulatory total knee arthroplasty between September 2021 and June 2024. Fourteen machine learning models were developed and validated using preoperative variables selected via LASSO and multivariate regression. The dataset was split into training (70%) and validation (30%) sets, with hyperparameter tuning performed through grid search and 5-fold cross-validation. SHAP analysis was applied to interpret feature importance in the optimal model.
Result(s): Analysis of 449 patients identified five key predictors-ejection fraction, preoperative eGFR, preoperative ESR, diabetes mellitus, and Barthel Index-via LASSO and multivariate regression. Among 14 machine learning models, CATBoost exhibited optimal performance, with an AUC of 0.959 in training and 0.832 in validation, supported by high net benefit in decision curve analysis. SHAP analysis identified EF and preoperative ESR as the most influential features, confirmed risk directionality for low EF and low Barthel Index, and revealed nuanced interactions,

such as the inverse relationship of EF with risk, enhancing model interpretability. Conclusion(s): This study establishes that machine learning, particularly the CATBoost model, effectively predicts delayed discharge in ambulatory total knee arthroplasty using five key preoperative variables. SHAP analysis further enhanced model interpretability by revealing feature interactions, such as the modulating role of ejection fraction. These predictors enable improved risk stratification and personalized discharge planning, supporting optimized resource use and patient management. While limitations like single-center data require cautious interpretation, the findings highlight the potential of predictive analytics for clinical deployment. Further validation in diverse settings is warranted to translate these findings into clinical practice.

Ingielewicz A., et al. (2025) **'Comparative Evaluation of the Manchester Triage System and Emergency Severity Index in Predicting Critical Events in the Emergency Department.'** ***BMC Emergency Medicine*** **(pagination), Date of Publication: 24 Nov 2025.**
BACKGROUND: Given the increasing number of patients presenting to Emergency Departments (EDs), the use of effective and reliable triage tools is essential. Such systems enable rapid assessment of the urgency of medical intervention, which contributes to improved workflow, optimized resource allocation, and potentially better clinical outcomes. This study presents a direct comparison of two of the most widely used triage systems globally: the Manchester Triage System (MTS) and the Emergency Severity Index (ESI), evaluating their classification agreement and predictive value for critical events in the ED population.
METHOD(S): This retrospective study included 1,072 patients who were concurrently assessed using both systems during a transitional six-month period in which both MTS and ESI were applied in parallel at the study hospital. The correlation between triage categories assigned by each system was analyzed, as well as their association with predefined critical events.
RESULT(S): A moderate level of classification agreement was observed between the two systems (Cohen's kappa = 0.51; Spearman's rho = 0.49). ESI assigned over 80% of patients to priority level 3, whereas MTS distributed patients more evenly between levels 3 and 4. Both systems demonstrated a statistically significant association between higher acuity levels and an increased risk of critical events-lower category numbers (i.e., higher priority) corresponded with a greater likelihood of severe complications.
CONCLUSION(S): The results confirm the effectiveness of both triage systems in assessing patients' clinical condition while highlighting important differences in their classification structures. These findings may inform the choice of triage system in clinical practice and underscore the need for further research on optimization and potential integration with artificial intelligence-based decision support tools.

Koch A.T., et al. (2026) **'Innovative Telehospitalist Model Optimizes Medical Triage in Collaboration with Community Emergency Departments: A Cross-Sectional Study.'** ***Journal of Telemedicine and Telecare 32*****(1), 32–39.**
IntroductionOptimal hospital bed utilization requires innovative patient care models. We studied a novel hospitalist model utilizing telemedicine to facilitate collaboration with affiliated emergency departments (EDs) and support medical triage and care of ED patients with high likelihood of hospital admission.MethodsTelehospitalists based

at a tertiary care facility collaborated with four community EDs in the same healthcare network between January 1, 2022, and April 30, 2023. Telehospitalists supported ED clinicians in medical care decisions and facilitated patient disposition. Emergency department length of stay (LOS) and disposition were evaluated, as were hospital LOS, 30-day readmission, and in-hospital mortality. For patients discharged from the ED, 7-day ED readmission and subsequent hospitalization were evaluated.ResultsTelehospitalists discussed 550 "admit-likely" patients with ED clinicians: 105 patients (19.1%) discharged from the ED and avoided admission; 322 patients (58.5%) were admitted to local or nearby community hospitals; 123 patients (22.4%) transferred to the tertiary care facility. Emergency department LOS differed significantly among disposition groups, including patients discharged home (10.2 h), admitted to local hospitals (12.6 h), and transferred to tertiary care hospitalist services (14.9 h; $p < 0.001$). Hospital LOS and in-hospital mortality were not significantly different among disposition groups. Patients admitted locally had lower 30-day readmission compared to those transferred to tertiary care facility (odds ratio = 0.59 [0.36, 0.99], $p = 0.048$).DiscussionTelehospitalists as triage clinicians is an innovative approach to support local ED clinicians and patients. Telehospitalists optimized hospital bed utilization and healthcare system resources by facilitating safe discharges to home and expediting tertiary care transfers when necessary.

Lage D.E., et al. (2025) **'Characteristics Associated with Accepting Hospital at Home among Patients with Cancer and their Caregivers: A Cross-Sectional Survey.'** ***Supportive Care in Cancer 33*****(12) (pagination), Article Number: 1117. Date of Publication: 01 Dec 2025.**
Purpose: To assess patient characteristics associated with acceptability of a hypothetical hospital at home (HaH) program in patients hospitalized with cancer and describe associated caregiver characteristics and clinical needs.
Method(s): A cross-sectional survey assessing acceptability of a hypothetical HaH program was completed by 250 patients and 33 caregivers. Eligible patients were English-speaking adults (18 + years), admitted to the medicine service at a cancer hospital. Unpaid adult caregivers were surveyed as well.
Result(s): The median age of patients was 63, 134 (54%) were female, 38 (16%) identified as Black and 21 (8.8%) as Hispanic. Overall, 208 patients (83%) rated participation in HaH as acceptable, as did 28 (85%) caregivers. Patients with advanced cancer were more likely to accept HaH (84.6% vs. 71.0%, $p = 0.041$). Acceptability differed statistically by race ($p < .05$) and was lowest among Black patients (74%). Of the patients who rated HaH acceptable, 137 (67%) had advanced imaging or a procedure after the first day of admission and 21 (10%) had a non-clinical contraindication to HaH such as a home member using illicit drugs (15, 7%).
Conclusion(s): The majority of patients hospitalized with cancer and their caregivers would agree to receive hospital-level services at home. Those with advanced cancer were more likely to agree to HaH, while patients from underrepresented racial and ethnic groups were less likely to agree. Future work should explore appropriate criteria for HaH eligibility in oncology and address both patient and caregiver concerns around this novel care delivery model.

Lustman A., et al. (2025) **'Lessons from a Large National "Hospital at Home" Program,.'** ***Israel Journal of Health Policy Research 14*****(1) (pagination), Article Number: 79. Date of Publication: 01 Dec 2025.**

Background: Hospital at Home (HAH) is a potential solution to the increasing demand for hospital beds, but concerns remain about its scalability. This study examines safety, effectiveness, and patient satisfaction in a large-scale HAH program.
Method(s): This retrospective cohort study utilized data from Clalit Health Services (CHS). The study population included all patients participating in the HAH program during 2022 who were discharged with a primary diagnosis of pneumonia, congestive heart failure, urinary tract infection, or cellulitis. These individuals were matched with patients admitted to general medical wards, and logistic regression analysis was performed to evaluate the association between admission type and outcomes. The primary safety endpoint was all-cause mortality at 30 days, while the primary effectiveness endpoint was rehospitalization within 30 days. Patient experience was measured using a telephone questionnaire.
Result(s): A total of 3,335 HAH patients were matched to 3,335 hospital patients. At 30 days, mortality was 192 (5.8%) for HAH patients and 305 (9.1%) for hospital patients, with an adjusted odds ratio of 0.6 (CI 0.49-0.73, P < 0.001). Readmissions at 30 days were 435 (13%) among HAH patients and 526 (16%) in hospital patients, adjusted OR 0.8 (CI 0.70-0.92, p = 0.002). 84% of patients indicated a preference for HAH over hospital admission for future care.
Conclusion(s): HAH can provide a safe and effective setting to treat patients who need hospital-level care, with high levels of patient satisfaction. HAH has the potential to provide a scalable solution for the ever-increasing demand for hospital beds. Trial registration The study was approved by the CHS (community) institutional ethics and data utilization committee (0169-21).

Madia J., et al. (2025) 'Socioeconomic Inequality and Access to Emergency Care: Understanding the Pathways to the Emergency Department in the UK.' *BMJ Open 15*(12) (pagination), Article Number: e108770. Date of Publication: 12 Dec 2025.
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 482787 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.

NHS England. (2025) Principles for providing patient care in corridors.

Oppelaar M.C., et al. (2025) 'Remote Monitoring is Associated with Less Routine and Emergency Care in Pediatric Asthma.' *Pediatric Pulmonology 60*(12) (pagination), Article Number: e71417. Date of Publication: 01 Dec 2025.
Introduction: There is need for real-life, long-term and large-scale multicentre studies on remote monitoring (RM) in respiratory care to determine its true potential for daily practice. We aimed to analyze the effect of RM with digital action plans on healthcare utilization in long-term pediatric asthma care.
Method(s): This was a cohort study in six Dutch pediatric asthma clinics from 2017 until 2023 using healthcare utilization and RM data. Children aged 6-18 years with >= 2 years follow-up were included. Differences in median number of outpatient visits between the RM and regular care groups were assessed. Incidence rate ratios (IRR) were calculated for emergency visits and hospitalizations. Interrupted time series analysis was used to evaluate changes in number of outpatient visits after introduction of RM over time. Asthma control of children with RM was analyzed over time.
Result(s): We included 2526 children, of which 1372 (54.2%) used RM. The median number of annual outpatient visits was lower in the RM group than in the regular care group (DELTAMedian 0.65, p < 0.001). RM was associated with a decreased risk of emergency visits (IRR 0.52; 95% CI 0.44, 0.61) and hospitalizations (IRR 0.43; 95% CI 0.34, 0.55). RM was associated with an annual outpatient visit reduction of -9.4 (95% CI -17.0, -1.9) per 100 children. The proportion of children with controlled asthma increased from 76.7% to 86.0% 3 years after introduction of RM.
Conclusion(s): RM with digital treatment plans is associated with reductions in both regular and emergency healthcare utilization while maintaining high rates of well-controlled asthma.

Russell B.M., et al. (2026) 'Impact of an Oncology Urgent Care Center on Preventable Emergency Department Visits: Revisiting Lessons from a Global Pandemic to Improve Quality of Care.' *Supportive Care in Cancer 34*(1) (pagination), Article Number: 4. Date of Publication: 01 Jan 2026.
Purpose: Oncologic urgent care centers (UCCs) have been shown to reduce emergency department (ED) visits. However, their impact on potentially preventable

(PP) presentations, including those with diagnoses in CMS' OP-35 (OP-35) quality metric, has not been evaluated. This study assesses the impact of a specialty-specific UCC on PP ED visits in patients receiving chemotherapy.
Method(s): In this retrospective, single-center analysis, patients were included if they received parenteral or oral chemotherapy within 30 days of ED presentation between March 2019 and June 2021. A UCC tailored toward managing patients with COVID-19 symptoms was opened between March 2020 and June 2021 (intervention period). Outcomes compared before and during the intervention period included weekly incidence of PP ED visits, defined as visits that would be captured in OP-35. Interrupted time series design was utilized.
Result(s): A total of 2272 ED visits occurred in the study period. Most were for patients > 55 years old (n = 1706, 75%), female (n = 1227, 54%), and with gastrointestinal cancer (n = 637, 28%). Overall 928 (41%) ED visits during the study period were PP. There were 3.8 (95% CI, 0.6 to 7.0) PP weekly ED visits during the intervention period versus 11.0 (95% CI, 9.4 to 12.6) before the intervention period, reflecting a reduction in 7.2 weekly visits (95% CI, - 10.8 to - 3.6).
Conclusion(s): The opening of an oncologic UCC was associated with a reduction in PP ED visits. UCCs can be important in an oncologic service line to reduce unnecessary ED usage, but prospective evaluations are needed to confirm this finding.

Santos E., et al. (2026) **'Interventions to Reduce Overcrowding in Emergency Departments: An Umbrella Review.'** ***International Emergency Nursing 84*****(pagination), Article Number: 101729. Date of Publication: 01 Feb 2026.**
Objective: To identify and evaluate the effectiveness of interventions and/or strategies to reduce overcrowding in Emergency Departments (EDs).
Method(s): An umbrella review was performed using the JBI method. Eight search resources were considered. Two independent reviewers carried out the selection of studies, quality assessment, data extraction, and synthesis.
Result(s): Twenty systematic reviews were included, which identified several interventions to reduce overcrowding in EDs, such as: joint triage (physicians and nurses); creation of fast tracks; introduction of Rapid Assessment Units; request for auxiliary diagnostic tests by nurses; streaming; collaboration with Primary Health Care (PHC) for referral of non-urgent cases; allocation of PHC units within or adjacent to EDs; triage by PHC professionals; extension of PHC hours; increase in hospital capacity; creation of full capacity protocols; hiring of specialist professionals; lean thinking; reverse triage. The most effective interventions and/or strategies were: joint triage; creation of fast-track routes; introduction of rapid assessment units; request for auxiliary diagnostic tests by nurses; streaming; and collaboration with PHC for referral of non-urgent cases.
Conclusion(s): The combination of effective triage, appropriate flow management, and proactive action by the team appears to be key to mitigating overcrowding in the EDs. Joint triage and fast-track routes are the most effective measures. The expanded role of nurses - including their ability to request examinations and manage rapid assessment units - is also crucial to speeding up care.

Sarma D., et al. (2026) **'Categorization of the Models for Urgent Care Delivery: The Need for Standardization.'** ***Annals of Emergency Medicine 87*****(1), 41–46.**
Urgent care centers play an increasingly vital role in the health care landscape as demand for timely and episodic care rises because of primary care shortages and crowded emergency departments (EDs). Urgent care centers serve as a critical bridge between primary and emergency care, but significant variability exists in their scope of practice, staffing, equipment, and available services. This variation leads to corresponding differences in the types of patient illnesses, injuries, acuity, and complexity that an individual urgent care center can appropriately evaluate and treat. Some urgent care centers can manage only very minor illnesses (eg, simple lacerations and uncomplicated pharyngitis), whereas others have staffing and resources (eg, advanced laboratory testing and imaging) necessary to manage more complex illnesses (eg, abdominal pain and minor head trauma in patients taking anticoagulation therapies). Additionally, the training and specialty of urgent care providers varies, including physicians trained in internal medicine, family practice, and emergency medicine, as well as nurse practitioners and physician assistants. Emergency physicians, in particular, are positioned to enhance the ability of urgent care centers to manage a broad spectrum of clinical presentations, reduce unnecessary ED transfers, and improve care quality and efficiency. Despite these important differences in staffing and capabilities, there is a striking lack of research and data about the position and effect of urgent care centers on the health care system in general, as well as the ability to offload crowded EDs in particular. We hypothesize that in order to optimally study the role of urgent care centers in the health care system, there is a need to categorize and study the different types of urgent care centers based on their individual capabilities and the populations that they each serve. To provide a framework for this type of study, this paper proposes a 5-tier model of urgent care capability based on clinical and operational factors, including provider qualifications, diagnostic testing capabilities, hours of operation, and integration with larger health systems. This is a system that differentiates urgent care centers based on capabilities into discrete tiers with a goal to optimize the study of which model will optimally fill the needs of acute, unscheduled care while supporting health system efficiency.

Stevenson G, M. A., Cavallero F. (2025) **Delayed discharges from hospital: comparing performance this year and last.**

Thomsen S.H.N., et al. (2026) **'Cost Analysis of Admitting Nursing Home Residents to Hospital at Home: A Danish Micro-Costing Approach.'** ***Public Health 250*****(pagination), Article Number: 106065. Date of Publication: 01 Jan 2026.**
Objectives Hospital at Home (HaH) is a new care concept aimed at reducing hospital admissions by providing specialised healthcare to patients at home. The aim of this study was to compare the cost of a HaH model with traditional hospital admission for nursing home residents with acute illness in the Northern Region of Denmark. Study design This study employed a retrospective micro-costing approach based on initial findings from the early implementation of the HaH model. The analysis was conducted from a healthcare sector perspective. Methods A comprehensive framework for cost analysis was developed based on policy documents, clinical guidelines, and interviews with administrative and leading healthcare professionals.

Data on resource usage was obtained from clinical experts and case notes. Costs for resource usage were valued using payroll data for different job categories and Danish DRG-tariffs. The estimated costs of care models were compared and deterministic sensitivity analysis identified important factors for the cost difference. Results The analysis showed that the HaH model is associated with cost savings of 40-45 % compared to traditional hospital admissions. Furthermore, the sensitivity analysis indicate that it is crucial to consider the extent of additional time healthcare professionals allocate to extra care, when a nursing home resident is admitted at home, as this parameter significantly influences the costs associated with HaH. Conclusions Based on the costing framework, we found that the HaH model was cheaper than traditional hospitalisations. These results were robust to variations in resource use of different activities in the HaH model.

Travis, H. L. (2025) **'Redesigning the First Point of Contact for Walk-in Patients in the Emergency Department: A Service Evaluation of the First Encounter Model.'** ***Emergency Nurse : The Journal of the RCN Accident and Emergency Nursing Association*** **(pagination), Date of Publication: 03 Dec 2025.**
In UK emergency departments (EDs), crowding, lack of inpatient beds and high patient acuity, compounded by triage 'bottlenecks', inconsistent streaming and fragmented communication between healthcare professionals, can compromise patient care, safety and experience. This article details the evaluation of a service improvement initiative - the First Encounter model - that aimed to address these issues through redesigning the first point of contact for walk-in patients. The initiative involved the co-location of two senior healthcare professionals - a band 6 or 7 senior nurse and the emergency physician in charge (EPIC) - at the ED entrance during peak hours. The aim was to improve the timeliness of patient assessment, strengthen patient experience and support staff's confidence in their clinical decision-making. The findings revealed that the percentage of patients who received clinical engagement within 15 minutes of arrival at the ED more than doubled; the average triage time halved; compliance with the four-hour target improved modestly; waiting-room congestion reduced; and staff felt more confident in their clinical decision-making. The model appears scalable and adaptable to other EDs, although further evaluation is required to establish its sustainability and broader patient outcomes.

Understanding Corridor and Escalation Area Care in 165 UK Emergency Departments: A Multicentre Cross-Sectional Snapshot Study. (2025) ***Emergency Medicine Journal*** **(pagination), Date of Publication: 2025.**
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.

Villani M., et al. (2025) 'Embedding a Virtual Emergency Department Pathway within Emergency Medical Services Secondary Triage for People Living in Residential Aged Care.' *Prehospital Emergency Care* , 1–13.
OBJECTIVES: Patients living in residential aged care homes (RACH) frequently experience acute health episodes prompting contact with emergency medical services (EMS). To improve health care access and reduce unnecessary emergency department (ED) presentations, a referral pathway to the Victorian Virtual ED (VVED) was introduced to EMS secondary triage (comprehensive telephone-based assessment of lower acuity cases). This study evaluates the impact of the pathway on referral outcomes, ED diversion, and patient safety indicators.
METHOD(S): A retrospective cohort study of patients living in RACH who underwent EMS secondary triage in Victoria, Australia was conducted. Data were compared between an 18-month pre-implementation period and an 18-month post-implementation period following the introduction of the referral pathway. Descriptive analyses, interrupted time-series and multivariable logistic regression were used to assess changes in referral outcomes, ED diversion, and recontact within 72 hours.
RESULT(S): A total of 59,546 secondary triage cases from RACH were included. Referrals to alternate care pathways increased from 6.8% pre-implementation to 11.2% post-implementation, largely driven by referrals to the VVED (6.7%), while ED diversion also increased (18.7% to 28.9%). Interrupted time-series analysis showed introduction of the VVED pathway was associated with an increase in referrals to alternate care pathways (IRR: 1.349 (95%CI:1.182, 1.539)). In the post-implementation period, referral to the VVED was associated with increased age (AOR 1.12 (95%CI: 1.04,1.20), per 10 year increase), metropolitan event location (AOR 1.18 (95%CI: 1.04,1.34), compared with regional location), out-of-hours calls (AOR 1.55 (95%CI:1.39,1.72), compared with calls between 0800 and 1700), complaints of external injury (AOR 1.50 (95%CI:1.13, 1.98) compared with generally unwell), and lower acuity care timeframes (AOR 19.13 (95%CI:15.01, 24.39) compared with recommendation for immediate care). Seventy-two-hour recontact to EMS increased, from 3.1% to 3.5% (p = 0.002) while lights and sirens transports to ED remained stable (2.5%).

CONCLUSION(S): The introduction of the VVED referral pathway to secondary triage was associated with increased use of alternate care pathways and a significant increase in ED diversion for RACH residents. Specific patient and call time characteristics were associated with VVED referral, suggesting the VVED has a targeted role in meeting access needs out of hours and for select clinical presentations.

Vukovic A.A., et al. (2025) **'Improving Emergency Department Boarding Time: Balancing Efficiency and Safety.'** ***Pediatrics*** **(pagination), Date of Publication: 17 Dec 2025.**
BACKGROUND AND OBJECTIVE: Emergency department (ED) crowding and prolonged boarding times negatively impact care. Our objective was to decrease the average ED boarding time for patients admitted from the ED to any inpatient (IP) acute care unit at our main campus by 35% over 24 months.
METHOD(S): Our multidisciplinary team used the Model for Improvement to identify inefficiencies within the existing admission process and created a key driver diagram to guide intervention design. Serial Plan-Do-Study-Act cycles tested and refined interventions initially piloted on one high-volume IP unit before implementation across the institution. Interventions focused on creating shared knowledge of the admission process, optimizing IP room preparation, improving communication between process stakeholders, and streamlining the admission process. We used statistical process control charts to measure the impact of our interventions over time. Our outcome measure was ED boarding time. Very rapid transfer rate, or patients transferred to an intensive care unit within 3 hours of admission, and ED length of stay (LOS) were balancing measures. Our left without being seen (LWBS) rate served as a measure of care access.
RESULT(S): Our average ED boarding time decreased by 40% from 169 to 102 minutes, accompanied by a decrease in ED LOS and LWBS rate. There was no change in our very rapid transfer rate.
CONCLUSION(S): Engaged institutional and site of care leadership was integral to our project success. By understanding our system, creating clear expectations for process timelines, and streamlining communication, we were able to meaningfully improve transitions of care.

Zhao Q., et al. (2026) **'An Unsupervised Machine Learning Approach for Defining Surge Levels in Emergency Medical Services.'** ***Healthcare Analytics 9*****(pagination), Article Number: 100443. Date of Publication: 01 Jun 2026.**
A surge period occurs when demand significantly exceeds available capacity, creating operational strain in emergency medical services (EMS) and leading to measurable declines in system performance. Although surge levels are a critical metric for EMS operations, no established method exists for their objective definition. This study introduces a genetic algorithm-based unsupervised clustering model designed to define surge levels using EMS operational data. Unlike the National Emergency Department Overcrowding Scale, which depends on subjective assessments, the proposed approach objectively categorizes surge levels and supports regional customization through hyperparameter tuning and feature selection. The model's adaptability allows healthcare leaders to determine the desired number of surge-level categories and tailor the feature set to local operational needs. A case study in Nova Scotia, Canada, demonstrates the model's

effectiveness, accurately identifying 88.96 % of busy periods with recall and precision of 96.49 % and 78.57 %, respectively. These results indicate that the approach provides a robust and flexible tool for defining surge levels, enabling data-driven decision-making in EMS system management.

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