

#### **ED Patient Flow**

# **Current Awareness Bulletin**

#### February 2024

Our Current Awareness Bulletins provide details of recently published articles in a given subject. They are a quick and easy way to keep up to date.

Please contact the Academy Library to request any articles:



ruh-tr.library@nhs.net



01225 82 4897/4898



Carry out basic searches using the Knowledge and Library Hub.



Sign up to NHS OpenAthens to access our subscriptions.



Contact us to receive our bulletins via email each month.



Get personalised alerts via our KnowledgeShare service.

ruh.nhs.uk/library



### New report sets out how hospital admissions can be avoided and how patient flow can be improved ahead of busy winter period

A major new report released November 2023 sets out how the health and social care system can work better this winter – by avoiding unnecessary hospital admissions and improving patient flow.

Published ahead of what is expected to be another challenging winter period for the NHS and social care, the new study from the County Councils Network (CCN) and Newton explores how the system to admit and discharge older people from hospital and support their care needs could work better, potentially improving the lives of tens of thousands of over 65s and reducing costs to the NHS and local government over £2.5bn.

#### How to solve a problem like hospital discharge

What happens when health and care systems suddenly receive several million pounds from the government and are told to spend it within three months? In this blog, Alex Baylis explores the balance between involvement in decision making and moving at pace.

#### FRAIL strategy: a strategy for the development and/or improvement of acute frailty same day emergency care services

The FRAIL strategy supports wider health care systems to deliver and improve acute frailty services across England by setting out a practical approach. This will mean more older people living with frailty can be safely discharged on the same day they arrive, avoiding admission overnight.

### Five key elements for discharge – supporting people with a learning disability and autistic people to leave hospital

In collaboration with the Local Government Association and Association of Directors of Adult Social Services as Partners in Care and Health, we have published this letter which identifies five key actions that will have the biggest impact on supporting people with a learning disability and autistic people to leave mental health hospital.

Nearly 10,000 discharges to the community have been achieved since 2015. The letter asks colleagues working in integrated care systems across health and social care to make a concerted effort to continue to help people with a learning disability and autistic people leave hospital when they no longer need hospital care.

#### **Emergency Department Crowding**

Emergency Department (ED) crowding represents the greatest threat to the timely delivery of emergency care in the UK and across the world. It is present to a greater or lesser extent in many healthcare systems. Although not a new phenomenon, it has been steadily worsening over time. This does not make it inevitable.

Causes of crowding are complex and can vary between different health systems, hospitals, and over different time periods. It is a source of considerable frustration to Emergency Physicians when crowding is framed as an "ED problem." The consistent factor in ED crowding is that the causes are in the unscheduled healthcare system, and that the solutions lie, for the most part, outside of the ED.

- •See the 2024 RCEM crowding guidance. Its objective is to assist in the understanding of the causes and effects of crowding and to provide options for health systems. It also contains recommendations for policy and research.
- •See the RCEM and College of Paramedics options appraisal for managing ambulance delays.
- •See the RCEM Insight document on crowding. This provides a policy perspective.
- •The RCEM document Right Place, Right Time is a collaborative document examines some of the issues around providing patient care in a stretched system.
- •See the report from IFEM's Emergency Department Crowding and Access Block Task Force.

#### Approaches to Spread, Scale-Up, and Sustainability.

THIS Institute; 2024.

https://www.cambridge.org/core/elements/approaches-to-spread-scaleup-and-sustainability/B2A69BE3D579E3BDB5922340CE23D617

[Few interventions that succeed in improving healthcare locally end up becoming spread and sustained more widely. This indicates that we need to think differently about spreading improvements in practice. Drawing on a focused review of academic and grey literature, the authors outline how spread, scale-up, and sustainability have been defined and operationalised, highlighting areas of ambiguity and contention.]

#### Success Cause Analysis: Learning from What Works to Advance Safety.

Institute for Healthcare Improvement (IHI); 2024.

https://www.ihi.org/insights/success-cause-analysis-learning-what-works-advance-safety

[Success cause analysis (SCA) borrows from root cause analysis — but uses this methodology to understand the factors that contributed to favorable outcomes instead of adverse events. Four safety experts share the benefits of conducting SCAs, including how these analyses can empower employees and promote safer care.]

#### 1. As loud as a construction site: Noise levels in the emergency department

Authors: Adams, Corey; Walsan, Ramya; McDonnell, Rebecca and Schembri, Anthony

**Publication Date: 2024** 

Journal: Australasian Emergency Care 27(1), pp. 26-29

Abstract: Background: The Emergency Department (ED), while being an integral part of healthcare systems, frequently experiences noise levels surpassing the World Health Organization's recommended thresholds. These excessive noise levels could considerably compromise the safety and wellbeing of both patients and staff.; Methods: To evaluate noise levels throughout the ED environment, this study utilized dosimeters to measure noise levels over a 24-hour period in six distinct locations, including the ED Waiting Room and Treatment areas.; Results: The study found that noise exceeded the WHO recommendations in all six areas of the ED for the entire 24-hour period. Peak noise levels were recorded up to 102.8 dB, which is as loud as noise levels at a construction site. The ED Waiting Room exhibited high peak and average noise levels, indicating the urgent need for quality improvement efforts. These findings align with the results of previous research, thereby suggesting that noise levels in the ED have remained problematic for more than a decade.; Conclusion: The findings of this study underscore the importance of addressing excessive noise levels in the ED to create a safe and therapeutic hospital environment for both patients and staff. Healthcare organizations must implement proactive measures to address excessive noise levels in the ED.; Competing Interests: Declaration of Competing Interest The authors declare that there is no conflict of interest. (Copyright © 2023 The Authors. Published by Elsevier Ltd.. All rights reserved.)

## 2. Preparing your emergency department for disaster: Optimizing surge capacity during mass casualty events

**Authors:** Armstrong, John Byron Publow

**Publication Date: 2024** 

Journal: Healthcare Management Forum 37(2), pp. 86-89

**Abstract:** Mass casualty events can cause patient surges within healthcare facilities. These surges can be limited to hours or continue for days or weeks. As emergency departments are the front doors to the healthcare system, it is critical that they are prepared to accept patient surges. Focusing plans on

optimizing space, staff, and supplies is critical to a successful response. Boarded or non-emergent patients must be diverted, discharged, and decanted from the emergency department to expand resuscitation space. If inadequate, non-clinical space may be required for patient care. Staff call-in lists should be maintained, and in-house berthing for staff during prolonged responses may be necessary. Further, identifying the spectrum of care, from conventional to crisis, is necessary to thrive during a disaster response: staff must understand that business as usual will not be compatible with austere disaster response before levels of care begin to decline.; Competing Interests: Declaration of conflicting interestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### 3. Changes in Opioid Prescription Rates at Discharge After Targeted Provider Education in the Emergency Department

Authors: Booth, Deborah; Amalfitano, Christopher and Forestine, Anthony

**Publication Date: 2024** 

Journal: Journal of Pharmacy Practice 37(2), pp. 415-421

Abstract: Introduction: Opioid-related mortality continues to increase in the United States and emergency departments (ED) are a source of opioid prescribing. A review was conducted of prescribing practices and all prescribers were given targeted education to modify prescribing patterns and facilitate guideline recommended opioid prescribing. This study seeks to evaluate prescribing practices after implementation of the education that occurred December 23 to 31, 2019 on prescribing habits. The pre-education group was defined as the period of January 1, 2019 to December 31, 2019. The post-education group was defined as the period of January 1, 2020 to December 31, 2020. Objective: Evaluate the total number of prescriptions and prescription doses in morphine milligram equivalent (MME) prescribed between pre-education and post-education groups. Secondary endpoints will be an evaluation of the number of doses, length of therapy, and the rates of prescribing per 100 discharges. Methods: A retrospective chart review at a single center suburban ED was conducted comparing prescribing after education was provided. Patients were excluded if they were under the age of 18 years, admitted or transferred to an acute care facility, or prescribed an opioid for a non-analgesic purpose. Results: There was a 34% reduction in the total number of opioid prescriptions from the preeducation group compared to the post-education group (4,253 to 2,818). Between the 2 groups, there was a reduction in MME of 8.8 (92.2  $\pm$  60.4 vs 83.4  $\pm$  60), P < 0.001, number of tablets by 0.9 tablets  $(13.6 \pm 5.2 \text{ vs } 12.7 \pm 5.4)$ , P < 0.001, and day supply by 0.12  $(4.45 \pm 2.1 \text{ vs } 4.33 \pm 2.0)$ , P = 0.017. Percentage of the total number of opioid prescriptions per 100 discharges decreased by 0.4% from 5.1% to 4.7%. Conclusion: After targeting providers through education, a reduction in opioid prescribing was identified through all endpoints.; Competing Interests: Declaration of Conflicting InterestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### 4. Optimizing emergency department imaging utilization for pulmonary emboli: A study on the effects of IV contrast rationing

**Authors:** Delgado, Francisco; Hajibonabi, Farid; Hislop, Jada; Johnson, Jamlik Omari; Naeem, Muhammad and Hanna, Tarek

**Publication Date: 2024** 

**Journal:** Clinical Imaging 107, pp. 110090

**Abstract:** Purpose: To study the impact of a contrast mitigation protocol on imaging utilization for pulmonary embolism (PE) in the emergency department (ED).; Material and Methods: Medical records of ED patients with suspected PE who underwent CT pulmonary angiography (CTPA) or ventilation-perfusion (VQ) scans were analyzed in control (3/15/22-4/15/22) and test (5/15/22-6/15/22) periods. The test period included a contrast mitigation protocol due to a global iodinated contrast shortage

(05/2022-06/2022). Out of 610 scans, 28 were excluded for non-PE indications. Patient demographics, time metrics, and imaging reports were recorded.; Results: Among 11,019 ED visits, there were 582 imaging events for suspected PE. The test period exhibited a significantly lower imaging rate of 4.16 % compared to 6.54 % in the control period (p < 0.001). CTPA usage decreased by 47.73 %, while VQ scan usage increased by 775.00 % during the test period. Test period positivity rate was 0.82 %, with CTPA at 0.58 % (1/173) and VQ scan at 1.43 % (1/70). In the control period, the positivity rate was 0.29 %, with CTPA at 0.30 % (1/331) and VQ scan at 0.00 % (0/8). Previous hospitalization history was significantly higher in the test period (70/243 vs. 39/339, p < 0.001). The positivity rates between the two periods showed no significant difference (p = 0.57). There were no significant differences in ED length of stay and image acquisition times.; Conclusion: The contrast mitigation protocol reduced CTPA use, increased VQ scans, and maintained positivity rates and image acquisition times. However, concerns persist about unnecessary imaging and low positivity rates, necessitating further research to optimize PE diagnostic algorithms.; Competing Interests: Declaration of competing interest The authors of this manuscript have no conflicts of interest to disclose. (Copyright © 2024 Elsevier Inc. All rights reserved.)

#### 5. The effect of increasing emergency department observation volumes on downstream admission rates

**Authors:** Grossman, Elianna S.;Fradinho, Jorge;Chiu, David;Wolfe, Richard E. and Grossman, Shamai A.

**Publication Date: 2024** 

**Journal:** The American Journal of Emergency Medicine 77, pp. 17-20

Abstract: Rising length of stay and inpatient boarding in emergency departments have directly affected patient satisfaction and nearly all provider-to-patient care metrics. Prior studies suggest that ED observation has significant clinical and financial benefits including decreasing hospitalization and length of stay. ED observation is one method long employed to shorten ED length of stay and to free up inpatient beds, yet many patients continue to be admitted to the hospital with an average hospital length of stay of only one day. The objectives of this study were to evaluate whether vigorous tracking and provider reviews of one day hospital admits affected the utilization of ED observation and whether this correlated with significant change in rates of admission from observation status. Between September 2020 and May 2021, in a tertiary care hospital with an annual ED volume of 55,0000, chart reviews of 24-h inpatient discharges were initiated by two senior EM faculty to determine perceived suitability for ED observation. Non-punitive email reviews were then initiated with ED attending providers in order to encourage evaluation of whether these patients would have benefitted from being placed into observation. We then analyzed ED observation patient volumes and subsequent admission rates to the hospital from ED observation and compared these numbers to baseline ED observation volume and admission rates between September 2018 and May 2019. A total of 1448 reviews were conducted on 24-h discharges which correlated with an increase in utilization of ED observation from 11.77% (95% CI 11.62, 12.31) of total ED volume in our control period to 14.21% (95% CI 13.84, 14.58]) during the study period. We found that the overall admission rate from ED observation increased from 20.12% (95% CI 18.97, 21.26]) baseline to 23.80% (95% CI 22.60, 25.00]) during the same time periods. Our data suggest that increasing the total number of patients placed into observation by 21% correlated with a relative increase in admission rates from ED observation by 18%. This would suggest that our efforts to potentially include more patients into our observation program led to a significant increase in subsequent admission rates. There is likely a balance that must be struck between under- and over-utilization of ED observation, and expanding ED observation may be an effective solution to hospital boarding and ED overcrowding.; Competing Interests: Declaration of Competing Interest The authors declare the following financial interests/personal relationships which may be considered as potential competing interests. Shamai Grossman MD reports financial support and administrative support were provided by Beth Israel Deaconess Medical Center. Shamai Grossman reports a relationship with Beth Israel Deaconess Medical Center that includes: employment. (Copyright © 2023 Elsevier Inc. All rights reserved.)

### 6. Effect of the Telemedicine Enhanced Asthma Management Through the Emergency Department (TEAM-ED) Program on Asthma Morbidity: A Randomized Controlled Trial

Authors: Halterman, Jill S.;Fagnano, Maria;Tremblay, Paul;Butz, Arlene;Perry, Tamara T. and Wang,

Hongyue

**Publication Date: 2024** 

Journal: The Journal of Pediatrics 266, pp. 113867

Abstract: Objective: To test the effectiveness of a telemedicine-based program in reducing asthma morbidity among children who present to the emergency department (ED) for asthma, by facilitating primary care follow-up and promoting delivery of guideline-based care.; Study Design: We included children (3-12 years of age) with persistent asthma who presented to the ED for asthma, who were then randomly assigned to Telemedicine Enhanced Asthma Management through the Emergency Department (TEAM-ED) or enhanced usual care. TEAM-ED included (1) school-based telemedicine follow-ups, completed by a primary care provider, (2) point-of-care prompting to promote guidelinebased care, and 3) an opportunity for 2 additional telemedicine follow-ups. The primary outcome was the mean number of symptom-free days (SFDs) over 2 weeks at 3, 6, 9, and 12 months.; Results: We included 373 children from 2016 through 2021 (participation rate 68%; 54% Black, 32% Hispanic, 77% public insurance; mean age, 6.4 years). Demographic characteristics and asthma severity were similar between groups at baseline. Most (91%) TEAM-ED children had ≥1 telemedicine visit and 41% completed 3 visits. At 3 months, caregivers of children in TEAM-ED reported more follow-up visits (66% vs 48%; aOR, 2.07; 95% CI, 1.28-3.33), preventive asthma medication actions (90% vs 79%; aOR, 3.28; 95% CI, 1.56-6.89), and use of a preventive medication (82% vs 69%; aOR, 2.716; 95% CI, 1.45-5.08), compared with enhanced usual care. There was no difference between groups in medication adherence or asthma morbidity. When only prepandemic data were included, there was greater improvement in SFDs over time for children in TEAM-ED vs enhanced usual care.; Conclusions: TEAM-ED significantly improved follow-up and preventive care after an ED visit for asthma. We also saw improved SFDs with prepandemic data. The lack of overall improvement in morbidity and adherence indicates the need for additional ongoing management support.; Trial Registration: NCT02752165.; Competing Interests: Declaration of Competing Interest The authors declare no conflicts of interest. Funded by a grant from the National Heart, Lung, and Blood Institute of the National Institutes of Health (R01HL091835). The funder had no role in the study design, data collection, data analysis, data interpretation, or writing of the report. (Copyright © 2023 Elsevier Inc. All rights reserved.)

### 7. Leveraging a Learning Collaborative Model to Develop and Pilot Quality Measures to Improve Opioid Prescribing in the Emergency Department

**Authors:** Hawk, Kathryn F.; Weiner, Scott G.; Rothenberg, Craig; Bernstein, Edward; D'Onofrio, Gail; Herring, Andrew; Hoppe, Jason; Ketcham, Eric; LaPietra, Alexis; Nelson, Lewis; Perrone, Jeanmarie; Ranney, Megan; Samuels, Elizabeth A.; Strayer, Reuben; Sharma, Dhruv; Goyal, Pawan; Schuur, Jeremiah and Venkatesh, Arjun K.

**Publication Date: 2024** 

Journal: Annals of Emergency Medicine 83(3), pp. 225-234

**Abstract:** The American College of Emergency Physicians (ACEP) Emergency Medicine Quality Network (E-QUAL) Opioid Initiative was launched in 2018 to advance the dissemination of evidence-based resources to promote the care of emergency department (ED) patients with opioid use disorder. This virtual platform-based national learning collaborative includes a low-burden, structured quality improvement project, data benchmarking, tailored educational content, and resources designed to support a nationwide network of EDs with limited administrative and research infrastructure. As a part of this collaboration, we convened a group of experts to identify and design a set of measures to improve opioid prescribing practices to provide safe analgesia while reducing opioid-related harms. We

present those measures here, alongside initial performance data on those measures from a sample of 370 nationwide community EDs participating in the 2019 E-QUAL collaborative. Measures include proportion of opioid administration in the ED, proportion of alternatives to opioids as first-line treatment, proportion of opioid prescription, opioid pill count per prescription, and patient medication safety education among ED visits for atraumatic back pain, dental pain, or headache. The proportion of benzodiazepine and opioid coprescribing for ED visits for atraumatic back pain was also evaluated. This project developed and effectively implemented a collection of 6 potential measures to evaluate opioid analgesic prescribing across a national sample of community EDs, representing the first feasibility assessment of opioid prescribing-related measures from rural and community EDs. (Copyright © 2023 American College of Emergency Physicians. Published by Elsevier Inc. All rights reserved.)

#### 8. Pediatric Patients Discharged After Transfer to a Pediatric Emergency Department: Opportunities for Telehealth?

**Authors:** Hayden, Emily M.;Samuels-Kalow, Margaret;Dutta, Sayon;Cohen, Ari;Tune, K. N. and Zachrison, Kori S.

**Publication Date: 2024** 

Journal: Annals of Emergency Medicine 83(3), pp. 208-213

**Abstract:** Study Objective: Interemergency department pediatric transfers can be costly, involve risk, and may be disruptive to patients and families. Telehealth could be a way to safely reduce the number of transfers. We made an estimate of the proportion of transfers of pediatric patients to our emergency department (ED) that may have been avoidable using telehealth.; Methods: This was a retrospective analysis of electronic health record data of all pediatric patients (younger than 19 years) who were transferred to a single urban, academic medical center pediatric emergency department (PED) (annual pediatric volume approximately 15,000) between June 1, 2016, and December 29, 2021. We defined transfers as potentially avoidable with telehealth (the primary outcome) when the encounter at the receiving ED resulted in ED discharge and 1) met our definition of low-resource intensity (had no laboratory tests, diagnostic imaging, procedures, or consultations) or 2) could have used initial ED resources with telehealth guidance.; Results: Among 4,446 PED patients received in transfer during the study period, 406 (9%) were low-resource intensity. Of the non-low-resource intensity encounters, as many as another 1,103 (24.8%) potentially could have been avoided depending on available telehealth and initial ED resources, ranging from 210 (4.7%) with only telehealth specialty consultation to 538 (7.4%) with imaging and telehealth specialty consultation, and up to 1,034 (23.3%) with laboratory, imaging, and telehealth specialty consultation.; Conclusion: Our results suggest that depending on available telehealth and initial ED resources, between 9% and 33% of pediatric inter-ED transfers may have been avoidable. This information may guide health system design and PED operations when considering implementing pediatric telehealth. (Copyright © 2023 American College of Emergency Physicians. Published by Elsevier Inc. All rights reserved.)

# 9. Machine learning models for predicting unscheduled return visits of patients with abdominal pain at emergency department and validation during COVID-19 pandemic: A retrospective cohort study

**Authors:** Hsu, Chun-Chuan; Chu, Cheng-C J.; Ng, Chip-Jin; Lin, Ching-Heng; Lo, Hsiang-Yun and Chen, Shou-Yen

**Publication Date: 2024** 

Journal: Medicine 103(8), pp. e37220

**Abstract:** Machine learning (ML) models for predicting 72-hour unscheduled return visits (URVs) for patients with abdominal pain in the emergency department (ED) were developed in a previous study. This study refined the data to adjust previous prediction models and evaluated the model performance

in future data validation during the COVID-19 era. We aimed to evaluate the practicality of the ML models and compare the URVs before and during the COVID-19 pandemic. We used electronic health records from Chang Gung Memorial Hospital from 2018 to 2019 as a training dataset, and various machine learning models, including logistic regression (LR), random forest (RF), extreme gradient boosting (XGB), and voting classifier (VC) were developed and subsequently used to validate against the 2020 to 2021 data. The models highlighted several determinants for 72-hour URVs, including patient age, prior ER visits, specific vital signs, and medical interventions. The LR, XGB, and VC models exhibited the same AUC of 0.71 in the testing set, whereas the VC model displayed a higher F1 score (0.21). The XGB model demonstrated the highest specificity (0.99) and precision (0.64) but the lowest sensitivity (0.01). Among these models, the VC model showed the most favorable, balanced. and comprehensive performance. Despite the promising results, the study illuminated challenges in predictive modeling, such as the unforeseen influences of global events, such as the COVID-19 pandemic. These findings not only highlight the significant potential of machine learning in augmenting emergency care but also underline the importance of iterative refinement in response to changing realworld conditions.; Competing Interests: The authors have no conflicts of interest to disclose. (Copyright © 2024 the Author(s). Published by Wolters Kluwer Health, Inc.)

#### 10. Characteristics and patient impact of boarding in the pediatric emergency department, 2018-2022

Authors: Kappy, Brandon; Berkowitz, Deena; Isbey, Sarah; Breslin, Kristen and McKinley, Kenneth

**Publication Date: 2024** 

Journal: The American Journal of Emergency Medicine 77, pp. 139-146

Abstract: Objectives: Boarding admitted patients in the emergency department is an important cause of throughput delays and safety risks in adults, though has been less studied in children. We assessed changes in boarding in a pediatric ED (PED) from 2018 to 2022 and modeled associations between boarding and select quality metrics.; Methods: We performed a retrospective analysis of PED patients admitted to non-psychiatric services, broken into four periods: pre-COVID-19 (Period I, 01/2018-02/2020), early pandemic (II, 03/2020-06/2021), COVID-19 variants (III, 07/2021-06/2022), and non-COVID respiratory viruses (IV, 07/2022-12/2022). Patients were classified as critical (intensive care units (ICU)) or acute care (non-ICU inpatient services) based on their initial bed request. We compared median boarding times with Kruskal-Wallis tests. We assessed the relationship between boarding time and hospital length-of-stay (LOS) through hazard regression models, and the association between boarding time and PED return visit, readmission, and patient safety events through adjusted logistic regressions.; Results: Median PED boarding time significantly increased from Period I (acute: 2.4 h; critical: 3.0 h) to Period II (acute: 3.0 h, critical: 4.0 h) to Period III (acute: 4.4 h, critical: 6.6 h) to Period IV (acute: 6.2 h; critical: 9.5 h). On survival analysis, as boarding time increased, hospital LOS increased for acute admissions and decreased for critical admissions. Increased acute care boarding time was associated with higher odds of a filed safety report.; Conclusions: Since July 2021, PED boarding time increased for admitted children across acute and critical admissions. The relationship between acute care boarding and longer hospital LOS suggests a resource-inefficient, selfperpetuating cycle that demands multi-disciplinary solutions.; Competing Interests: Declaration of Competing Interest The other authors have no conflicts of interest to disclose. (Copyright © 2023 Elsevier Inc. All rights reserved.)

### 11. Implementing a virtual emergency department to avoid unnecessary emergency department presentations

**Authors:** Kelly, Jaimon T.;Mitchell, Nicole;Campbell, Katrina L.;Furlong, Karen;Langley, Matthew;Clark, Sean;Rushbrook, Elizabeth and Hansen, Kim

**Publication Date: 2024** 

**Journal:** Emergency Medicine Australasia 36(1), pp. 125-132

Abstract: Objective: EDs are necessary for urgent health concerns; however, many physical ED visits could be better treated in alternate settings. The present study aimed to describe the feasibility, acceptability and effectiveness of a Virtual ED to reduce unnecessary physical ED presentations at a large tertiary health service in Australia. Methods: This observational study using the RE-AIM framework (Reach, Efficacy, Adoption, Implementation and Maintenance) evaluated the feasibility of a Virtual ED using routinely collected health service data and process-evaluation to assess intervention fidelity and adherence between April 2020 and 31 March 2022. The primary outcome for the present study was the feasibility of the Virtual ED model of care. Results: The Virtual ED received 2080 direct calls for patients with a mean age of 50.3 years, with 70.4% managed in the Virtual ED alone and 29.6% referred for physical ED presentation. Of the 2080 direct referrals, 95.8% were potentially avoidable ED presentations. Of those referred, 28.3% required an admission. Of calls managed entirely by Virtual ED, 18 (1.2%) unexpectedly required a hospital admission within 48 h. General practitioner respondents rated the Virtual ED service as helpful to very helpful. The service had an average of 212 referrals per month, with a 65.2% average growth rate. The Virtual ED service was considered helpful and clinically appropriate, with a high level of ED avoidance. Conclusion: The Virtual ED prevented 70% of community triaged patients from presenting to the physical ED, with good uptake from all referrers, supporting the use of virtual care pathways in emergency care management.

# 12. An emergency-department-initiated outreach program for patients with opioid use disorder is associated with an increase in agonist therapy and engagement in addictions care: a one-year cohort study

**Authors:** Lakkadghatwala, Rukaiyah;Lane, Daniel;Scheuermeyer, Frank;Hilburt, Jesse;Buxton, Jane;Johnson, Cheyenne;Nolan, Seonaid;Sutherland, Christy;Moe, Jessica;Daoust, Raoul;Dong, Kathryn;Christenson, Jim;Miles, Isabelle;Orkin, Aaron;Whyte, Madelyn and Kestler, Andrew

**Publication Date: 2024** 

Journal: Substance Abuse Treatment, Prevention, and Policy 19(1), pp. 14

Abstract: Background: People with opioid use disorder (OUD) are high-risk for short-term mortality and morbidity. Emergency department (ED) interventions can reduce those risks, but benefits wane without ongoing community follow-up.; Objective: To evaluate an ED-based intensive community outreach program.; Methods: At two urban EDs between October 2019 and March 2020, we enrolled patients with OUD not currently on opioid agonist therapy (OAT) in a prospective cohort study evaluating a oneyear intensive community outreach program, which provided ongoing addictions care, housing resources, and community support. We surveyed patients at intake and at scheduled outreach encounters at one, two, six, and twelve months. Follow-up surveys assessed OAT uptake, addictions care engagement, housing status, quality of life scores, illicit opioid use, and outreach helpfulness. We used descriptive statistics for each period and conducted sensitivity and subgroup analyses to account for missing data.; Results: Of 84 baseline participants, 29% were female and 32% were housed, with a median age of 33. Sixty participants (71%) completed at least one follow-up survey. Survey completion rates were 37%, 38%, 39%, and 40% respectively at one, two, six, and twelve months. Participants had a median of three outreach encounters. Among respondents, OAT was 0% at enrolment and ranged from 38% to 56% at follow-up; addictions care engagement was 22% at enrolment and ranged from 65% to 81% during follow-up; and housing was 40% at enrolment and ranged from 48% to 59% during follow-up. Improvements from baseline to follow-up occurred for all time periods. OAT and engagement in care benefits were maintained in sensitivity and subgroup analyses. Respondents rated the outreach program as helpful at all time periods, CONCLUSION: An ED-initiated intensive outreach program for patients with OUD not yet on OAT was associated with a persistent increase in OAT use and engagement in care, as well as housing. (© 2024. The Author(s).)

### 13. Unplanned Emergency Department Visits Following Revision Total Joint Arthroplasty: Incidences, Risk Factors, and Mortalities

Authors: Lin, Yu-Hsuan; Hung, Tsung-Hsuan; Chang, Chih-Wei; Chen, Yi-Chen and Tai, Ta-Wei

**Publication Date: 2024** 

Journal: The Journal of Arthroplasty 39(3), pp. 813

Abstract: Background: The incidence of unplanned emergency department (ED) visits following revision total joint arthroplasty is an indicator of the quality of postoperative care. The aim of this study was to investigate the incidences, timings, and characteristics of ED visits within 90 days after revision total joint arthroplasty.: Methods: A retrospective review of 457 consecutive cases, including 254 revision total hip arthroplasty (rTHA) and 203 revision total knee arthroplasty (rTKA) cases, was conducted. Data regarding patient demographics, timings of the ED encounter, chief complaints, readmissions, and diagnoses indicating reoperation were analyzed.; Results: The results showed that 41 patients who had rTHA (16.1%) and 14 patients who had rTKA (6.9%) returned to the ED within 90 days postoperatively. The incidence of ED visits was significantly higher in the rTHA group than in the rTKA group (P = .003). The most common surgery-related complications were dislocation among rTHA patients and wound conditions among rTKA patients. Apart from elevated calculated comorbidity scores, peptic ulcer in rTHA patients and cerebral vascular events and chronic obstructive pulmonary disease in rTKA patients might increase chances of unplanned ED visits. Patients who had ED visits showed significantly higher mortality rates than the others in both rTHA and rTKA cohorts (P = .050 and P = .008, respectively).; Conclusions: The ED visits within 90 days are more common after rTHA than after rTKA. Patients in both ED visit groups after rTHA and rTKA demonstrated worse survival. Efforts should be made to improve quality of care to prevent ED visits. (Copyright © 2023 Elsevier Inc. All rights reserved.)

### 14. Usability and Evaluation of a Health Information System in the Emergency Department: Mixed Methods Study

**Authors:** Østervang, Christina; Jensen, Charlotte Myhre; Coyne, Elisabeth; Dieperink, Karin B. and Lassen, Annmarie

**Publication Date: 2024** 

Journal: JMIR Human Factors 11, pp. e48445

Abstract: Background: A lack of information during an emergency visit leads to the experience of powerlessness for patients and their family members, who may also feel unprepared to cope with acute symptoms. The ever-changing nature and fast-paced workflow in the emergency department (ED) often affect how health care professionals can tailor information and communication to the needs of the patient.; Objective: This study aimed to evaluate the usability and experience of a newly developed information system. The system was developed together with patients and their family members to help provide the information needed in the ED.; Methods: We conducted a mixed methods study consisting of quantitative data obtained from the System Usability Scale questionnaire and qualitative interview data obtained from purposively selected participants included in the quantitative part of the study.; Results: A total of 106 patients and 14 family members (N=120) answered the questionnaire. A total of 10 patients and 3 family members participated in the interviews. Based on the System Usability Scale score, the information system was rated close to excellent, with a mean score of 83.6 (SD 12.8). Most of the participants found the information system easy to use and would like to use it again. The participants reported that the system helped them feel in control, and the information was useful. Simplifications were needed to improve the user experience for the older individuals.: Conclusions: This study demonstrates that the usability of the information system is rated close to excellent. It was perceived to be useful as it enabled understanding and predictability of the patient's trajectory in the ED. Areas for improvement include making the system more usable by older individuals. The study provides an example of how a technological solution can be used to diminish the information gap in an ED context. (©Christina Østervang, Charlotte Myhre Jensen, Elisabeth Coyne, Karin B Dieperink, Annmarie Lassen. Originally published in JMIR Human Factors (https://humanfactors.jmir.org), 21.02.2024.)

### 15. An explainable machine learning approach for hospital emergency department visits forecasting using continuous training and multi-model regression

**Authors:** Peláez-Rodríguez, C.; Torres-López, R.; Pérez-Aracil, J.; López-Laguna, N.; Sánchez-Rodríguez, S. and Salcedo-Sanz, S.

**Publication Date: 2024** 

Journal: Computer Methods and Programs in Biomedicine 245, pp. 108033

Abstract: Background and Objective: In the last years, the Emergency Department (ED) has become an important source of admissions for hospitals. Since late 90s, the number of ED visits has been steadily increasing, and since Covid19 pandemic this trend has been much stronger. Accurate prediction of ED visits, even for moderate forecasting time-horizons, can definitively improve operational efficiency, quality of care, and patient outcomes in hospitals.; Methods: In this paper we propose two different interpretable approaches, based on Machine Learning algorithms, to accurately forecast hospital emergency visits. The proposed approaches involve a first step of data segmentation based on two different criteria, depending on the approach considered: first, a threshold-based strategy is adopted, where data is divided depending on the value of specific predictor variables. In a second approach, a cluster-based ensemble learning is proposed, in such a way that a clustering algorithm is applied to the training dataset, and ML models are then trained for each cluster.; Results: The two proposed methodologies have been evaluated in real data from two hospital ED visits datasets in Spain. We have shown that the proposed approaches are able to obtain accurate ED visits forecasting, in short-term and also long-term prediction time-horizons up to one week, improving the efficiency of alternative prediction methods for this problem.; Conclusions: The proposed forecasting approaches have a strong emphasis on providing explainability to the problem. An analysis on which variables govern the problem and are pivotal for obtaining accurate predictions is finally carried out and included in the discussion of the paper.; Competing Interests: Declaration of Competing Interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. (Copyright © 2024 The Author(s). Published by Elsevier B.V. All rights reserved.)

### 16. Staff perceptions of barriers to self-harm care in the emergency department: A cross-sectional survey study

**Authors:** Richards, Hannah;Rajaram, Gowri;Lamblin, Michelle;Knott, Jonathan;Connolly, Owen;Hetrick, Sarah and Robinson, Jo

**Publication Date: 2024** 

**Journal:** Australasian Emergency Care 27(1), pp. 15-20

**Abstract:** Background: Emergency departments (EDs) are often the first point of contact for people with self-harm; however, they do not always receive optimal care. The study objective was to examine the perspectives of ED staff who respond to self-harm presentations, perceived barriers to providing optimal, guideline-concordant care, and staff's familiarity with existing guidelines.; Methods: An online cross-sectional survey comprising purpose-designed questions concerning self-harm in the ED was completed by 131 staff (83.2% nurses) from two hospitals in Victoria, Australia. Survey results were analysed using Stata version 16 and frequencies and percentages were calculated.; Results: Respondents reported knowledge of how to appropriately manage a person presenting with self-harm. However, lack of space (62.3%) and time (78.7%) to conduct the appropriate assessments, lack of self-harm training (71.8%), and limited awareness of or access to guidelines and recommendations for self-harm management within the ED (63.6%), were identified as primary barriers to their ability to appropriately manage these presenters.; Conclusions: Improvements to the ED environment and processes, as well as the provision of regular self-harm specific education and training for all ED staff are needed. Implementation of best-practice standards should prioritise guideline-concordant care, with a particular focus on the education needs of nursing staff.; Competing Interests: Declaration of

Competing Interest This study was conducted in Melbourne, Victoria, Australia. No conflicts of interest were declared by the authors. (Copyright © 2023 The Authors. Published by Elsevier Ltd.. All rights reserved.)

#### 17. Emergency department evaluation and management of constipation

Authors: Richardson, Christopher

**Publication Date: 2024** 

Journal: Emergency Medicine Practice 26(3), pp. 1-24

**Abstract:** Each year, over 1.3 million patients visit the emergency department for constipation. Most cases are benign, but serious complications, such as fecal impaction and stercoral colitis, must be ruled out. Evidence to guide the evaluation and treatment of constipation in the emergency department is limited, and many of the decades-old treatments have not been studied in modern, rigorous, controlled trials. In the emergency department, constipation is a clinical diagnosis, and ideal management includes excluding dangerous mimics or complications and, for most patients, discharging the patient with a bowel regimen tailored to the likely cause of their constipation, with appropriate referral to primary or specialty care. This review evaluates consensus guidelines on management of constipation as well as the early data on the newer prescription medications for chronic and opioid-induced constipation.

#### 18. Missed nursing care in emergency departments: a cross-sectional descriptive study

**Authors:** Rooddehghan, Zahra;Karimi, Hamid;Mohammadnejad, Esmaeil;Sayadi, Leila;Haghani, Shima and Karimi, Raoofeh

**Publication Date: 2024** 

Journal: BMC Emergency Medicine 24(1), pp. 1-12

19. Descriptive evaluation of patients receiving one-time intravenous vancomycin doses at a large academic medical center emergency department

Authors: Schuchter, Kyle; Shuler Truoccolo, Donna, M.; Wilson, William S. and Anton, Greta

**Publication Date: 2024** 

Journal: The American Journal of Emergency Medicine 77, pp. 177-182

Abstract: Background: Intravenous (IV) vancomycin is commonly used to treat a variety of infections caused by methicillin-resistant Staphylococcus aureus (MRSA). The practice of administering a single dose of IV vancomycin prior to emergency department (ED) discharge may be clinically ineffective and foster antimicrobial resistance. Furthermore, this practice introduces an unnecessary infection risk along with preventable adverse effects while potentially increasing ED length of stay (LOS). There is a paucity of literature identifying patient characteristics and objective findings in this patient population. which may foster future antimicrobial stewardship initiatives in the ED.; Methods: This was a singlecenter, retrospective, descriptive analysis of adult patients seen in the ED between January 2020 and January 2023 who received a single dose of IV vancomycin and were subsequently discharged from the ED without hospital admission. Information was collected on patient demographics and select comorbidities, vancomycin indication and dosing, ED LOS, initial vitals and labs, concomitant antibiotics administered, culture results, 30-day return ED visits and admissions, and antibiotics prescribed at ED discharge.; Results: A total of 295 patients met inclusion criteria. A total of 32.1% of patients met SIRS criteria. The most commonly selected order indication for IV vancomycin was "skin and skin structure infection" (41%). A total of 86.1% of patients received concomitant antibiotics in the ED and only 54.6% of patients were prescribed oral antibiotics at ED discharge. A total of 80% of patients had at least one

culture obtained during the ED visit. In those who had at least one culture obtained, 78.4% of patients had negative cultures and 4.2% of patients had MRSA positive cultures, with MRSA skin cultures being the most common (3.1%). Return ED visits and admissions within 30 days were not statistically significantly different between patients who did and did not receive oral antibiotics at ED discharge.; Conclusions: Despite a lack of clinical efficacy reported in prior literature and the potential risks, administration of a one-time dose of IV vancomycin prior to ED discharge is commonly encountered in clinical practice. There are opportunities for enhanced antimicrobial stewardship related to IV vancomycin use in the ED. Areas of future focus include the utilization of oral antimicrobials when clinically appropriate, particularly for skin and soft tissue infections, and clarification of antibiotic allergies.; Competing Interests: Declaration of Competing Interest The authors have no disclosures or financial conflicts of interests. (Copyright © 2023 Elsevier Inc. All rights reserved.)

### 20. Pharmacological agents for procedural sedation and analgesia in the emergency department and intensive care unit: a systematic review and network meta-analysis of randomised trials

**Authors:** Sharif, Sameer;Kang, Jasmine;Sadeghirad, Behnam;Rizvi, Fayyaz;Forestell, Ben;Greer, Alisha;Hewitt, Mark;Fernando, Shannon M.;Mehta, Sangeeta;Eltorki, Mohamed;Siemieniuk, Reed;Duffett, Mark;Bhatt, Maala;Burry, Lisa;Perry, Jeffrey J.;Petrosoniak, Andrew;Pandharipande, Pratik;Welsford, Michelle and Rochwerg, Bram

**Publication Date: 2024** 

Journal: British Journal of Anaesthesia 132(3), pp. 491-506

Abstract: Background: We aimed to evaluate the comparative effectiveness and safety of various i.v. pharmacologic agents used for procedural sedation and analgesia (PSA) in the emergency department (ED) and ICU. We performed a systematic review and network meta-analysis to enable direct and indirect comparisons between available medications.; Methods: We searched Medline, EMBASE, Cochrane, and PubMed from inception to 2 March 2023 for RCTs comparing two or more procedural sedation and analgesia medications in all patients (adults and children >30 days of age) requiring emergent procedures in the ED or ICU. We focused on the outcomes of sedation recovery time, patient satisfaction, and adverse events (AEs). We performed frequentist random-effects model network metaanalysis and used the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) approach to rate certainty in estimates.; Results: We included 82 RCTs (8105 patients, 78 conducted in the ED and four in the ICU) of which 52 studies included adults, 23 included children, and seven included both. Compared with midazolam-opioids, recovery time was shorter with propofol (mean difference 16.3 min, 95% confidence interval CI] 8.4-24.3 fewer minutes; high certainty), and patient satisfaction was better with ketamine-propofol (mean difference 1.5 points, 95% CI 0.3-2.6 points, high certainty). Regarding AEs, compared with midazolam-opioids, respiratory AEs were less frequent with ketamine (relative risk RR] 0.55, 95% CI 0.32-0.96; high certainty), gastrointestinal AEs were more common with ketamine-midazolam (RR 3.08, 95% CI 1.15-8.27; high certainty), and neurological AEs were more common with ketamine-propofol (RR 3.68, 95% CI 1.08-12.53; high certainty).; Conclusion: When considering procedural sedation and analgesia in the ED and ICU, compared with midazolam-opioids, sedation recovery time is shorter with propofol, patient satisfaction is better with ketamine-propofol, and respiratory adverse events are less common with ketamine. (Copyright © 2023 British Journal of Anaesthesia. Published by Elsevier Ltd. All rights reserved.)

### 21. Involuntary sedation of patients in the emergency department for mental health: A retrospective cohort study

**Authors:** Southerland, Lauren T.; Pasadyn, Cassandra L.; Alnemer, Omar; Foy, Chase; Vaswani, Sheela; Chughtai, Sana; Young, Henry W. and Brownlowe, Katherine B.

**Publication Date: 2024** 

**Journal:** The American Journal of Emergency Medicine 77, pp. 53-59

Abstract: Background: Involuntary sedation of agitated mental health patients in the Emergency Department (ED) is standard practice to obtain accurate medical assessments and maintain safety. However, the rate of this practice and what factors are associated with the use of involuntary sedation is unknown. The purpose of this study was to obtain baseline data on involuntary sedation in our EDs.; Methods: Retrospective chart review of patients with ED visits for mental health care in 2020-2021. Patients >12 years old who received both a psychiatry consultation and involuntary sedation were included. Data variables included demographics, medical and mental health diagnoses, sedatives given, substance use, ED length of stay, and disposition. The primary outcome was repeated involuntary sedation.; Results: Involuntary sedation was used in 18.8% of the mental health patients screened for study inclusion. 334 patients were included in the study cohort and 31.6% (n = 106) required repeated involuntary sedation. Their average age was 35.5 ± 13.5 years with 58.4% men, 40.1% women, and 1.2% transgender persons. Most (90.0%, n = 299) had prior mental health diagnoses with the most common being substance use disorder (38.9%, n = 130), bipolar disorder (34.1%, n = 114), depressive disorder (29.0%, n = 97), and schizophrenia (24.3%, n = 81). Two-thirds (65.9%, n = 220) had current substance use and 41.9% (n = 142) reported current use with a chemical associated with aggression. Hospital security was called for 73.1% (n = 244). Current cocaine, methamphetamines, or alcohol use was associated with decreased odds of repeated sedation (0.52 OR, 95% CI 0.32-0.85). Prior mental health diagnosis and non-white race were associated with increased odds of repeated sedation. In the multivariable regression, the effect of race was more significant.; Conclusions: Involuntary sedation was used in 18.8% of ED patients for mental health care and almost a third were repeatedly sedated, with race being a potential risk factor for repeated sedation. ED care could benefit from evidence-based interventions to reduce the need for involuntary sedation.; Competing Interests: Declaration of Competing Interest The authors report no conflicts of interest. LTS has grant money (NIH) for other investigator-initiated research that was not used to conduct the research for this manuscript. (Copyright © 2023. Published by Elsevier Inc.)

## 22. Strategies to improve care for older adults who present to the emergency department: a systematic review

**Authors:** Testa, Luke;Richardson, Lieke;Cheek, Colleen;Hensel, Theresa;Austin, Elizabeth;Safi, Mariam;Ransolin, Natália;Carrigan, Ann;Long, Janet;Hutchinson, Karen;Goirand, Magali;Bierbaum, Mia;Bleckley, Felicity;Hibbert, Peter;Churruca, Kate and Clay-Williams, Robyn

**Publication Date: 2024** 

**Journal:** BMC Health Services Research 24(1), pp. 1-35

#### 23. Development of an Emergency Department Surge Plan Based on the NEDOCS score

**Authors:** Wilkins, Thad; Shiver, Stephen; Butler, Christa; Corcoran, Leanna; Marshall, Roslyn; Brody, Carol; Cliett, Kimberly; Nolan, Mary Anne; Sowinski, Tracie and Schreiber, Mark

**Publication Date: 2024** 

Journal: Annals of Family Medicine 21

Abstract: Context: Emergency Department (ED) overcrowding is a significant problem worldwide. Many factors contribute to ED overcrowding, including staffing shortages, diagnostic testing delays, and inadequate inpatient beds to meet the demand. ED overcrowding results in patient safety issues like higher inpatient mortality and other negative impacts, such as an increased length of stay (LOS) and an increased trend of leaving the ED before undergoing an evaluation and treatment. The National emergency department overcrowding study (NEDOCS) is a scoring system to detect ED overcrowding objectively. Objective: To determine the impact of implementing an ED adult surge plan on ED throughput. Study Design: Prospective single-site study of adults presenting to the ED from January to April 2023. Setting or Dataset: Academic medical center. Population studied: Adult ED patients. Outcome Measures: Mean adult ED hold times, mean ED LOS, left without seen rate, mean door-to-doctor exam time, mean NEDOCS scores. Results: This analysis included 16,701 ED visits and 12,269

patients. During this time, 3,751 (22.5%) patients were admitted to inpatient status, and 1,413 (8.5%) were admitted to observation status. Pre-implementation, the mean ED hold time was 9.9 hours which decreased to 5.7 hours post-implementation (p=0.03). Pre-implementation, the mean ED LOS was 15.4 hours which decreased to 14.1 hours post-implementation (p=ns). Pre-implementation, the left without being seen rate was 4.8%, which decreased to 4.0% post-implementation (p=ns). Pre-implementation, the mean door-to-doctor exam time was 57.6 minutes which decreased to 54.0 minutes postimplementation (p=ns). Pre-implementation, the mean NEDOCS score was 186.2, which decreased to 131.2 post-implementation (p<0.0001). Conclusions: Our study suggests that implementing an ED adult surge plan can significantly improve ED hold hours and NEDOCS scores. However, it is important to note that other important ED throughput metrics (mean ED LOS, left without seen rate, mean door-to-doctor exam time) did not significantly improve. Further research may be necessary to understand the factors contributing to these outcomes and identify additional interventions that may improve ED throughput.; Competing Interests: Authors report none. (2023 Annals of Family Medicine, Inc.)

### 24. Orthopaedic trauma patients' experiences with emergency department care and follow-up through Virtual Fracture Care review: a qualitative study

**Authors:** Willinge, Gijs;Spierings, Jelle;Mathijssen, Elke;Goslings, Carel;Twigt, Bas and van Veen, Ruben

**Publication Date: 2024** 

**Journal:** BMJ Open 14(2), pp. e076040

Abstract: Objectives: This study aimed to identify factors influencing orthopaedic trauma patients' experiences and satisfaction with emergency department (ED) care and follow-up through Virtual Fracture Care (VFC) review workflow.; Design: This study employed an explorative, descriptive, qualitative design using individual, semistructured interviews.; Setting: An urban level 2 trauma centre and teaching hospital in Amsterdam, the Netherlands.; Participants: Eligible patients were Dutchspeaking or English-speaking orthopaedic trauma patients, aged 18 years or above, who visited the hospital's ED between June and September 2022, and were treated through VFC review workflow. Exclusion criteria were: reason for follow-up other than injury, eye/motor/verbal score <15 at ED admission, follow-up treatment in another hospital, treatment initiated in another hospital, acute hospital admission (<24 hours). Twenty-three patients were invited for participation, of whom 15 participated and were interviewed.; Results: Several influential factors contributed to seven generic themes: (1) waiting times, (2) information provision, (3) healthcare professional communication, (4) care expectations, (5) care coordination, (6) care environment and (7) patient condition. Overall, participants were satisfied with received care. Interpersonal skills of healthcare professionals, and timing and content of provided information were specifically valued. Additionally, patients stated that their needs in the ED differed from those after ED discharge, and appreciated the way the VFC review workflow addressed this. Points of improvement included more active involvement of patients in the care process and prevention of inconsistent instructions by different healthcare professionals.; Conclusions: Patient experiences with ED care and VFC review follow-up are influenced by factors categorised into seven themes. The VFC review workflow effectively addresses these factors, leading to positive feedback. Recommendations for healthcare professionals include anticipating evolving post-ED information needs, engaging patients early to provide clarity about the care process, involving them in treatment decisions and expanding information provision across the entire care pathway.; Competing Interests: Competing interests: None declared. (© Author(s) (or their employer(s)) 2024. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.)

# 25. The Relationship Between Accurate Triage and Core Measures Compliance for Acute Myocardial Infarction and Heart Failure in Older Adults Presenting to the Emergency Department

Authors: Wolf, Lisa and Russell, Angelique

**Publication Date: 2024** 

Journal: Journal of Nursing Care Quality 39(2), pp. 183-187

Abstract: Background: Accurate emergency department (ED) triage in the geriatric population is an important nurse-sensitive quality indicator; however, few quality indicators are verified for impact.; Purpose: To examine the relationship between triage accuracy in adults older than 65 years and Core Measures for acute myocardial infarction (AMI) and heart failure (HF).; Methods: A correlational approach was used to determine strength and direction of the relationship between variables.; Results: Strong positive correlations were found between triage accuracy and mortality for AMI and HF, as well as with 30-day hospital readmissions for AMI. A weak negative correlation was found between triage accuracy and 30-day hospital readmissions for HF.; Conclusions: Accurate triage can lead to a more effective care trajectory for patients, better adherence to Core Measures, and better outcomes. Accuracy in triage for AMI and HF is a valid indicator of ED quality care.; Competing Interests: Lisa Wolf is a clinical consultant for Mednition, Inc. Angelique Russell is employed by Mednition, Inc. Angelique Russell declares no conflict of interest. (Copyright © 2023 Wolters Kluwer Health, Inc. All rights reserved.

#### 26. Reduction of hospital length of stay through the implementation of SAFER patient flow bundle and Red2Green days tool: a pre-post study.

Authors: Benevides Santos Paiva M.

**Publication Date: 2024** 

Journal: BMJ Open Quality;13(1):e002399.

**Abstract:** [The SAFER patient flow bundle and Red2Green days tool implementation were associated with a significant decrease in hospital LOS in a university hospital IMU ward. There is a considerable improvement opportunity for hospital LOS reduction by changing the multidisciplinary team's attitude during patient hospitalisation using these strategies.]

## 27. The effect of having a physician in the triage area on the rate of patients leaving without being seen: A quality improvement initiative at King Fahad Specialist hospital.

Authors: Mahmood FT; AlGhamdi MM; AlQithmi MO; Faris NM; Nasir MU; Salman A

**Publication Date: 2024** 

Journal: Saudi Medical Journal Jan; Vol. 45 (1), pp. 74-78;.

**Objectives:** To evaluate the effect of the presence of a physician in the triage area on the number of patients who leave without being seen (LWBS) and some of the factors affecting emergency department (ED) crowding. **Methods:** This was a pre-post study carried out at King Fahad Specialist Hospital, Dammam, Saudi Arabia. The 3-month study, consisting of 7826 patients, was split into pre-physician and post-physician periods. Variables compared across these periods were the number of LWBS patients, length of hospital stay, time to physician, and time to disposition decision. Statistical analysis was carried out using R version 4.3.0.

**Results:** Our results showed that the presence of a triage physician significantly decreased the number of LWBS patients (p < 0.001) and the time taken to encounter an ED physician (p < 0.001). However, it did not have any significant impact on the length of **hospital** stay (p = 0.5) or time to disposition decision (p = 0.9).**Conclusion:** The appointment of a triage physician has streamlined **patient** flow and decreased LWBS rates in the ED, demonstrating the need for more thorough research in this area.

#### 28. Back to patient safety basics: improving communication with patients

Authors: Tingle J.

**Publication Date: 2024** 

Journal: British Journal of Nursing 2024;33(1):40-41.

**Abstract:** [In analysing complex problems and situations, often a simple solution can turn out to be the best one. It is possible to overcomplicate our approach and to neglect the obvious. It is increasingly difficult for NHS staff to keep up to date with the amount of patient safety information produced and to distil, analyse and if appropriate incorporate into policies and practice at the workface.]

#### 29. Healthcare Safety Needs Radical Collaboration.

Authors: Mate K.

**Publication Date: 2024** 

Journal: Healthcare Executive 2024;40(1):38-39.

**Abstract:** [This article describes how data-driven stakeholder cooperation can help produce proactive solutions to improve safety for patients and the health care workforce. "Radical collaboration" builds and leverages new relationships among stakeholders, centers patients and their families in the work, engages every part of the health system, and uses emerging technologies — especially artificial intelligence (AI) — to both support and augment the efforts of stakeholders.]