Emergency Nursing 2026 Posters

EMERGENCY NURSES ASSOCIATION

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2026 Best Poster Award

Streamlining Medical Clearance for Psychiatric Patients in the Emergency Department: A Quality Improvement Initiative

Andrew Slavetskas, DNP RN CEN TCRN NEA-BC NI-BC

Nursing Informatics Specialist, United Health Services



Andrew Slavetskas is a registered nurse with more than a decade of experience in emergency, behavioral health, and nursing informatics. He began his nursing career in 2014 in the emergency department where he currently practices as an informatics nurse at United Health Services, a Level II Trauma Center in upstate New York. He earned his Doctor of Nursing Practice degree in 2025 and holds CEN, TCRN, NEA-BC, and NI-BC certifications. Andrew chairs his organization's Nursing Informatics Council and is actively involved in shared governance. His published work focuses on recognizing and responding to agitation using the Behavioral Activity Rating Scale.

Poster presentation: Wednesday, September 30, 9:30 AM, Experience Hall

A Push in the Right Direction: Reinventing Alcohol Withdrawal Care

Dani E. Kempton , MSN, APRN, ACCNS-AG, CCRN-CSC, TCRN - Inova Health
Jennifer Poole, MSN, RN, CEN - MedStar Washington Hospital Center Emergency Department
Julietta Verish, BSN, RN, NPD-BC, CEN - Medstar Washington Hospital Center

Objective: This initiative sought to reduce delays in the administration of phenobarbital loading doses for patients experiencing alcohol withdrawal. The goal was to support rapid symptom control, prevent escalation to severe withdrawal, and optimize patient stabilization in the emergency department. Alcohol withdrawal syndrome (AWS) is a high-risk clinical condition requiring timely management to prevent progression to seizures, delirium tremens, prolonged ED stays, and critical care transfers. Delays in receiving phenobarbital loading created gaps in time to treatment and escalation of care for patients. Interprofessional collaboration between ED nursing, pharmacy, and providers led to piloting nurse-administered IV push (IVP) phenobarbital instead of pharmacy-compounded IV piggyback (IVPB).
EBP Model: The Iowa EBP model was utilized.
Setting: The setting is a 47 bed ED in a level 1 trauma, teaching hospital seeing over 300 patients daily in an urban area with a large, underserved population.
Participants: The ED Clinical Nurse Specialist collaborated with pharmacists, providers, and informaticists to create the new practice and a review of literature. The ED nurse leaders and educators reviewed the proposed practice, and the team presented the pilot to bedside nurses for endorsement. The ED educator educated the bedside staff on the project.
Methods: The ED team faced challenges obtaining IVPB phenobarbital loading dosages and inquired pharmacy colleagues on how to improve administration time thus controlling patients' AWS symptoms sooner. Nursing, pharmacy, and ED providers established an interdisciplinary team and utilized the literature review of phenobarbital loading from the original project. The literature review revealed the benefits of phenobarbital use over benzodiazepines in AWS management, and the team then investigated the safety of IVP dosing. The goal was to reduce critical care admissions, administration start time, and have no serious adverse events defined as oversedation, hypotension, or respiratory depression requiring advanced therapies. The phenobarbital loading dose was dependent on the patient's weight with dosing ranging from 260mg to 910mg. The medication would be pushed over 5 minutes and 15 minutes apart with four rounds being the maximum loading dose. Vital signs would be performed prior to the first dose, after every IVP dose, one hour after the last dose, and every four hours after the load was completed. Transfer to a medical-surgical floor would occur two hours after the last IVP loading dose to ensure no adverse events.
Outcomes: The new practice reduced time to administration of phenobarbital. IVPB loading had a mean of 118 minutes versus 36 minutes with IVP loading. ED staff anecdotally reported that pharmacy approval of IVP phenobarbital versus waiting for delivery of the pharmacy prepared IVPB led to reduced delivery times and allowed staff to remain with patients. There was also a reduction of AWS patients admitted to the intermediate care (IMC) unit by 76% with the new IVP loading and no serious adverse events.
Implications: Transitioning to IVP phenobarbital loading from IVPB enhanced care coordination during a time-sensitive and clinically unstable condition. This practice change supports nurse autonomy and full scope of practice as well as reduced patient safety events and escalation to severe alcohol withdrawal.

Advancing Nurse-Led Sepsis Recognition Through Microlearning and Feedback Integration in the Emergency Department

Teresa Badagliacco-Cabrera, CCRN - Palomar Health
Gabriel Garcia, RN, CNS-BC - Palomar Health

Aim: Improve early sepsis recognition and nurse-initiated Code Sepsis activation
Framework: The 8 A's
Setting: Level II Trauma and Community Hospital setting located in San Diego
Stakeholder Team: Emergency Department Leadership, Emergency Medicine Stakeholders, and the Rapid Response Team lead the quality improvement project with integration of information into daily workflow and reinforced early recognition of Sepsis. Collaboration by the team focused on product design, data review and feedback process.
Methods: This QI project was implemented in an adult emergency department using a nurse focused microlearning and feedback strategy. Brief, targeted microlearning sessions were embedded into daily workflow and focused on early Sepsis recognition, interpretation of subtle clinical indicators, and the nursing role in initiating and escalating care. Ongoing feedback was provided through case review and real time coaching. The intervention was implemented from mid-June through mid-September. Evaluation methods included pre and post intervention nurse surveys assessing sepsis knowledge and self-reported confidence, along with review of monthly nurse-initiated code sepsis activation patterns.
Outcomes: Pre intervention results from 60 RN's demonstrated an average Sepsis knowledge score of 64%. And an average confidence rate of 67%. Post intervention results from 47 RN's demonstrated a marked improvement in knowledge w/ scores reaching 94%. Confidence rate remained stable at 66%. Review of activation patterns demonstrated sustained improvement and RN initiated Code Sepsis escalation. Prior to the intervention, RN initiated activations ranged from 22% to 34% between April and June 2025. During the intervention period, activations increased to 34% in July and 44% in August. Following completion of interventions, RN initiated activations increased to 52% in September and remained elevated through October(57%), November (55%), and December (54%).
Implications: Integrating Nurse focused microlearning and structured feedback into Emergency Department workflows can improve Sepsis knowledge and promote sustained nurse-initiated escalation of care. A collaborative leadership model involving frontline nurses and CNS supports alignment between education and practice demands while reinforcing sustainability. This approach offers a practical strategy for improving performance in time sensitive clinical conditions and may be adaptable in other high-risk scenarios commonly encountered in Emergency department settings.

Association of Nurse Staffing Adequacy on Hospital Crowding

Jane Muir , PhD, RN, FNP-BC - University of Pennsylvania School of Nursing
Daniela Golinelli, PhD - Penn Nursing, Center for Health Outcomes and Policy Research

Purpose: Hospital overcrowding is a patient safety risk. Many interventions have been tested to reduce hospital overcrowding, the majority of which overlook the importance of having enough nurses in hospitals to advance patient throughput. This study determined the association of nurse staffing in the emergency department (ED), inpatient units, and overall hospital on hospital crowding measures. We also evaluated whether nurses' reports on ED patient boarding were associated with objective measures of hospital crowding.
Design: 10-state observational study of hospitals with a cross-sectional design. Three datasets from 2024 were merged through a common hospital identifier: the Penn Nurses4All survey, CMS Hospital Compare timely and effective care files, and the AHA Annual Hospital Survey. Nurses4All provided data on the independent variables (nurse staffing; nurse-reported boarding), and Hospital Compare provided publicly-available data on the dependent variables (left without being seen rates and ED length of stay).
Setting: Hospitals in California, Florida, New Jersey, Oregon, Washington, New Mexico, New York, Illinois, Louisiana
Sample: 410 hospitals
Methods: Nurse staffing was measured as the proportion of nurses reporting staffing inadequacy, or "not enough staff to get the work done". We standardized the measure to have a mean of 0 and a standard deviation of 1. Hospital-level regression models were constructed to evaluate the relationship between nurse staffing and nurse-reported boarding on the objective measures of hospital crowding. Crowding measures included the percentage of patients who left without being seen and ED length of stay in minutes.
Results: Nurse staffing inadequacy in the ED was associated with all hospital crowding outcomes, while only ED length of stay was associated with staffing inadequacy in the inpatient units and at the overall hospital level. In adjusted models, 1 SD increase in ED nurse staffing inadequacy was associated with a 0.4 percentage point increase in the hospital left without being seen rate (B 0.4, 95%CI 0.2, 0.6, p<.001), a 8.5-minute increase in ED patient length of stay (B 8.5, 95%CI 3.5, 13.6, p<.001), and a 18.4-minute increase in behavioral health patient length of stay (B 18.4, 95%CI 3.6, 33.1, p<.05). Nurse-reported boarding was significantly associated with ED length of stay. Based on a 1 SD reduction in ED nurse staffing inadequacy, we estimate that hospitals seeing 64,000 patients a year could see an additional 2,939 patients due to a reduction in overall ED length of stay. For left without being seen, a 1 SD reduction ED nurse staffing inadequacy would retain approximately 256 patients a year in hospitals for care.
Implications: Nurse staffing inadequacy was associated with hospital crowding outcomes in the ED, inpatient setting, and overall hospital. Nurses' reports on boarding were also significantly associated with objective hospital crowding measures. This is one of the largest studies evaluating nurse staffing and hospital crowding to-date. A minimum nurse staffing legislation requiring hospitals to staff enough nurses in EDs and inpatient settings could mitigate overcrowding and associated safety risks to patients and hospitals.

Association of Patient-to-Nurse Staffing Ratios on Emergency Department Departures Against Medical Advice

Jane Muir , PhD, RN, FNP-BC - University of Pennsylvania School of Nursing
Daniela Golinelli, PhD - Penn Nursing, Center for Health Outcomes and Policy Research

Purpose: Patients who depart from emergency departments (EDs) against medical advice (AMA) experience higher odds of hospital readmissions and death; thus, in some cases an AMA departure is considered an adverse safety and quality event. Over two decades of evidence demonstrates that when nurses care for a manageable patient workload, patients experience lower odds of hospital readmissions and death, and hospitals have better patient satisfaction ratings. The objective of this study was to determine the relationship between ED patient-to-nurse staffing ratios and ED patient AMA departures. We also conducted an exploratory analysis of medical-surgical nurse staffing ratios given that ED throughout is influenced by inpatient factors.
Design: Cross-sectional design using linked data from three sources: 2023 Penn Nurses4All survey, the 2023 AHRQ Healthcare Utilization Project State Emergency Department Database of patient ED visits in New Jersey and Oregon, and the AHA Annual Survey. Patient-to-nurse staffing ratios were measured among direct care nurses in ED and medical-surgical units, derived from the Nurses4All study. The AHRQ data provided patient AMA rates. Multi-level logistic regression models were constructed with nurses and patients clustered within hospitals.
Setting: Patients and nurses in New Jersey and Oregon hospitals.
Sample: The patient sample included 2,211,244 ED encounters for patients aged 18 to 90 years of age presenting to an ED in New Jersey or Oregon in 2023. The nurse sample included 775 nurses in 74 hospitals.
Methods: We developed multi-level regression models with patients and nurses nested within hospitals to determine the association of nurse staffing levels on AMA departures controlling for hospital and patient characteristics.
Results: On average, 54,955 visits resulted in a departure against medical advice (3%). After adjusting for patient and hospital characteristics, each additional patient added to an ED and medical-surgical nurses' workload was associated with19% and 55% higher odds of an AMA departure, respectively (aOR1.19, 95% CI 1.09, 1.31, p<.001 ED; aOR 1.55, 95% CI 1.33, 1.81,p<.001 medical-surgical).
Implications: Nurses' workloads, both in the inpatient and ED setting, were associated with more ED patients leaving AMA. When nurses care for more patients at a time, patients may be attended to less frequently, which can result in more patient departures. Insufficient nurse staffing in medical-surgical units may contribute to longer length of stay and lower inpatient bed turnover. Hospital investments in safer staffing may reduce AMA departures. Some states have enacted minimum nurse staffing requirements that would facilitate hospitals staffing enough nurses to provide safe patient care, including in EDs. The findings support potential benefits of such legislation given the adverse impacts of inadequate nurse staffing on patient outcomes such as AMA departures.

A Retrospective Analysis of the Association Between Emergency Nurse Characteristics and Length of Stay

Ellen F. Benjamin , PhD, RN, CEN - University of Massachusetts Boston
João L. Marôco, MS - University of Massachusetts Boston
Pete St. Marie , BS - UMass Chan and Baystate Health
Caitlin Healy, MSN, RN, CEN, CPEN, TCRN, SCRN, CCRN, ACCNS-AG - Lahey Hospital & Medical Center
Cidalia J. Vital, PhD, RN, CNL, CRRN, AHN-BC - Baystate Health
Ling Shi, PhD - University of Massachusetts Boston

Purpose: Emergency department length of stay (ED LOS) is a measure of the time between a patient's arrival and exit from an emergency department. ED LOS is a prominent metric that reflects the quality, safety, and cost of emergency care. Despite a large body of research investigating ED LOS, there is little understanding of the impact of emergency direct care nurses, also known as bedside nurses, on ED LOS. The purpose of this study was to explore the association between direct care emergency nursing characteristics and ED LOS.
Design: This study was an exploratory retrospective study.
Setting: Data was collected from a community hospital-based emergency department in New England that serves around 30,000 patients annually.
Sample: Electronic health records were used to collect all patients who arrived to an emergency department bed within the first four hours of major nursing shifts (0700-1100 and 1900-2300) between 01/01/2024 and 01/01/2025.
Methods: Multivariable regression and generalized linear mixed models were used to investigate the associations between patient characteristics, nursing characteristics, department census levels, and ED LOS. Study data was collected and collated at an individual patient level. Patient variables included triage level, age, sex, chief complaint, presence of cat scan order, discharge service, and disposition status. Nursing characteristics included education level, years of experience, advanced certification status, and traveler status. Lastly, one year of hourly departmental census levels was collected from the hospital's Enterprise Data Warehouse. Statistical analysis was conducted by a statistician using R software.
Results: A total of 12,513 patient encounters and 70 nurses were included. ED LOS varied significantly according to patient sex, age, chief complaint, triage score, discharge service, and departmental census. Patients assigned to emergency nurses with advanced certification (RR = 0.90, 95% CI: 0.82 to 0.99, p = 0.045) and post-graduate education (RR = 0.86, 95% CI: 0.76 to 0.97, p = 0.014) were found to have ED LOS's that were 10-14% shorter, respectively, than patients assigned to nurses who were uncertified or associate-prepared. Nurses' years of experience and traveler status were found to have a smaller effect on ED LOS across all models.
Implications: Patient flow research has largely overlooked the role and contributions of emergency nurses. This is the first known study to demonstrate that emergency nurse education and certification are consequential to throughput and patient flow. Given ED LOS's known impact on patient safety, satisfaction, and hospital revenue, institutions may be financially motivated to recruit, support, and retain a highly educated and certified nursing staff. More research is needed to understand the specific strategies used by highly educated and certified nurses to expedite patient flow, strengthen emergency patient flow management, and improve emergency care outcomes.

A Nurturing Pipeline: High School Internship as a Driver of Nursing Diversity

Crystal Miles-Threatt , BSN, RN, CEN, NPD-BC - Stanford Health Care

Objective: This project aim is to design and implement a structured, emergency department high school internship program that increases readiness, interest, and enrollment in nursing among underrepresented minority students.
EBP Model: John Hopkins EBP model was used
Setting: Suburban university-affiliated Level I trauma and geriatric ED, STEMI receiving, and comprehensive stroke center located on the West Coast.
Participants: ED Vice-President - Funding; ED Nurse Manager - Hiring & Program Design; Customer service representatives - Job Training; ED technicians, MD, Pharmacist, Radiology technologist, Inpatient Nursing Unit(s) - Interprofessional & Intraprofessional Shadow Shifts; ED nurses and ED technicians in nursing school - Mentors; and Nursing Professional Development Specialist and Unit Educators - Didactic Classes
Methods: I conducted a search on Google Scholar using the keywords "nursing shortage," "recruitment," "high school internship programs," and "underrepresented minorities in nursing." The primary article that informed the development of my program included components such as shadow shifts, mentorship, weekly didactic classes, and a culminating presentation by the interns at the conclusion of the 8-week period. To enhance the program, I integrated a non-clinical customer service job role that exposes the high school students to the health care environment unique to the emergency department. Participants completed pre- and post-program surveys to assess their interest in pursuing a career in nursing.
Outcomes: 2023 Cohort: This initial cohort included two rising juniors (2 Hispanic females). They were trained for non-clinical customer service responsibilities. 2024 Cohort: This cohort comprised the two returning interns who were now rising seniors, one rising junior (1 Hispanic female), and one new rising senior (1 Black female). We expanded responsibilities in the 2nd year. Among the interns, two are pursuing nursing degrees, and one, who participated in the program for two years, has decided to study to become a physician associate. 2025 Cohort: This cohort included five interns—one returning intern who is now a rising senior, and four new rising seniors (two Hispanic males and two Hispanic females). We incorporated more time with the ED technicians in nursing school. Of these five interns, two have been accepted into nursing school. I have not yet received updates from the remaining three interns.
Implications: The high-school internship program has shown promising results in encouraging students to pursue nursing and related healthcare careers. Across three cohorts, it has guided several interns into nursing programs and other health-related educational pathways. A diverse nursing workforce enhances communication, trust, and cultural competence. The nursing pipeline often struggles to engage and retain underrepresented minority students from high school through college due to limited early exposure, perceived barriers, and a lack of role models or mentors. Hospital-based exposure, hands-on nursing experiences, and mentorship can counteract misperceptions, enhance perceived fit, and create a concrete pathway to nursing education. Expected outcomes include short-term gains in knowledge and interest, mid-term progression to nursing program applications and admissions, and long-term enrollment, graduation, and entry into the nursing workforce at the organization that groomed them.

Bridging the Gap: Guiding Novice Nurses Towards Clinical Competence

Mary Cinalli, BSN RN - Cleveland Clinic Hillcrest Hospital
Kasey Fallon, MSN, RN - Cleveland Clinic

Aim: Current trends in nursing have led to an increase in novice nurses in our high-acuity emergency department (ED). Novice ED nurses are those who have no previous experience in emergency nursing, including new graduates and those who have transitioned from other practice areas. Novice ED nurses face challenges related to lack of experience and intuitive situational skills, hectic environment and substantial workloads, and frequent acute and traumatic stressors. In Q4 2024, the ED nursing team noted an increase in nursing turnover and anecdotal reports of novice nurse dissatisfaction, prompting a novice-nurse support and retention initiative.
Framework: Benner's Novice to Expert Theory and current literature on novice nurse satisfaction and retention guided this project. The Plan-Do-Check-Act (PDCA) continuous improvement cycle directed project implementation.
Setting: The project was conducted at a suburban level 2 trauma center in Northeast, Ohio, serving over 46,000 adult patients annually.
Stakeholder Team: The team consisted of our ED nursing manager (NM), an experienced ED nurse, and novice nurses. The NM provided guidance, supported process implementation, and promoted staff engagement. The experienced nurse directed the project including conducting learning needs assessments, creation, and implementation of educational materials, and coordinating interdisciplinary involvement. The novice nurses provided insight into their experiences and learning needs. All team members participated in the brainstorming session.
Methods: The purpose of this initiative was to provide structured, ongoing support for novice ED nurses to enhance confidence, role satisfaction, clinical competence, and nurse retention. A needs assessment was distributed to all novice nurses to identify educational gaps, areas of interest, and perceived barriers to engagement and retention. Survey results informed a structured brainstorming session that led to the development and implementation of a Novice Nurse Council focused on support and professional development. To support collegiality, the program is open to all ED nurses. Educational sessions are conducted monthly and address a rotating schedule of emergency-specific topics. The ED interdisciplinary team supports sessions to provide comprehensive, evidence-based education and promote collaboration within the department. Novice nurse needs and nurse turnover rates are assessed monthly.
Outcomes: Following project implementation, ED nurse turnover rates incrementally decreased from 23.4% in Q4 2024 to 10.4% in Q4 2025. Novice nurse monthly assessments show a trend of increased role confidence, satisfaction, and a sense of belonging. The full ED nurse team reports improved communication and teamwork, with 87% of nurses reporting "the team works well together" on the 2025 Press Ganey survey. Findings are limited due to other contributing factors that cannot be ruled out.
Implications: Novice ED nurses are at elevated risk for turnover related to lack of experience, workloads, and the often hectic and stressful ED environment. Implementation of a Novice Nurse Council focused on novice nurse support and professional development, decreased nurse turnover and improved ED teamwork and collaboration. This high-impact, low-effort initiative is readily translatable to other ED environments as a sustainable strategy to support novice nurses and potentially promote workforce stability and high-quality patient care.

Better Patient Experience in the ED: The Volunteer Advantage

Bridgette L. Barnes , MSN RN CEN - Medstar Washington Hospital Center
Manpreet Saran , BS, BSN, RN, PCCN - MedStar Washington Hospital Center
Andre R. White, B.A. - Medstar Washington Hospital Center
Andrenia Clayborne, BSN,RN - Medstar Washington Hospital Center

Objective: Implementing volunteers in the Emergency Department (ED) to provide additional support to patients while they wait to be seen. Volunteers assist with non-clinical aspects of care by regularly checking in with patients, thereby improving overall satisfaction and comfort during their ED visit. Patients in the ED often endure long wait times before being evaluated by a provider, during which they have limited access to direct support or basic comfort items. Implementing a volunteer program enhances patient contact during these periods and addresses needs that extend beyond clinical care. By providing practical assistance, emotional support, and comfort measures, volunteers help reduce the stress associated with waiting and contribute to a more positive overall patient experience.
EBP Model: The Iowa Model guided this project by addressing a practice-focused trigger—long ED wait times and limited patient support. A multidisciplinary team reviewed evidence, implemented a volunteer rounding program, and evaluated outcomes using Press Ganey scores. Improvements in patient comfort and wait-time experience demonstrate the model's effectiveness for structured implementation and evaluation.
Setting: A teaching, urban level I trauma center located in Washington DC that sees over 80,000 patients yearly
Participants: Participants in this initiative include ED patients, who are the primary recipients of support and provide feedback through Press Ganey surveys, and trained ED volunteers, who perform regular check-ins, offer comfort items, assist with logistics such as ensuring stretchers and wheelchairs are available, maintain stocked rooms, and escalate clinical concerns to the care team. The volunteer program coordinator manages recruitment, training, scheduling, and oversight, while ED clinical staff support volunteer integration, address escalated concerns, and contribute to evaluating the program's impact. ED leadership and the quality improvement team provide approval, resources, and ongoing review of patient experience metrics to guide program improvements, with support staff assisting in maintaining a comfortable and well-equipped environment.
Methods: Implementing volunteers in the Emergency Department has improved patient contact and comfort while waiting to be seen. To address the need for consistent rounding and support, volunteers were recruited and trained to assist with non-clinical tasks. They regularly round on patients, offering food, drinks, and comfort items, addressing logistical needs, ensuring stretchers and wheelchairs are available, maintaining stocked rooms, and escalating any clinical concerns to the care team.
Outcomes: Since the implementation of volunteers in the Emergency Department Press Ganey patient responses have indicated improvement in the waiting experience. Press Ganey questions Waiting time in treatment area increased from 20.3 to 39.6 and Comfort of waiting area increased from 21% to 37%. These scores indicate an increase in overall patient satisfaction and perception of care with having volunteers in place to address non-clinical concerns. Anecdotal feedback from patients highlights appreciation of the activities performed by volunteers, noting that being checked on and offered support during their wait contributed positively to their overall experience.
Implications: Volunteer support through regular check-ins and comfort items has improved patient satisfaction and made the waiting process more comfortable. These results show volunteer involvement strengthens patient experience and the quality of non-clinical care in the ED.

Calibrating CIWA-Ar Scoring in an Orthopedic Specialty Hospital: A Dyadic Educational Intervention for Nurses and Nurse Practitioners

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Aim: Alcohol Use Disorder (AUD) is a common and serious medical condition, defined as a reduced ability to stop drinking despite negative consequences. Individuals with AUD are at risk for alcohol withdrawal symptoms (AWS) within 6–24 hours after reduction or cessation of alcohol intake. Orthopedic patients can often be identified with known AUD preoperatively with adverse effects after surgery. The Clinical Institute Withdrawal Assessment for Alcohol–revised (CIWA-Ar) is a commonly used instrument to assess and categorize AWS severity and guide clinical management. The CIWA protocol classifies withdrawal symptoms as mild, moderate, or severe. Nurse leaders at the project site observed variability in CIWA-Ar scoring and sought to standardize assessment practices. This quality improvement (QI) project aimed to develop and implement an educational intervention to improve reliability and precision of CIWA-Ar scoring among registered nurses (RNs) and nurse practitioners (NPs) in an acute care orthopedic setting.
Framework: A Plan-Do-Study-Act (PDSA) process model guided iterative improvement cycles, and SQUIRE 2.0 informed project design and reporting. The collaborative nursing care model underpinned the project, emphasizing communication and shared decision-making.
Setting: Acute care units in an orthopedic specialty hospital of an academic health system.
Stakeholder Team: Executive nurse leaders' buy-in was obtained. The NPDS-led project team included acute care managers, QNSs, a data analyst, and a nurse researcher. This team developed and operationalized this quality improvement project.
Methods: An RN:NP dyadic model was used to build shared understanding of CIWA-Ar application. Pre-session preparation included review of organizational policies on alcohol/substance use and withdrawal, the 10-item CIWA-Ar questionnaire, nursing interventions by score range, escalation tip sheets, and a 7-minute CIWA-Ar video. NPDS delivered 23 in-person, 45-minute unit-based sessions scheduled across all shifts over a six-week period. Scenarios depicting mild, moderate, and severe AWS were presented in a blind but consistent order (mild, severe, moderate). Dyad members independently scored each scenario using laminated CIWA-Ar questionnaires. Individuals' scores were digitally displayed for comparison and discussion, which included structured debriefs emphasizing item-level scoring, differentiating subtle symptoms (e.g., nausea), and interpreting subjective items (e.g., anxiety, tremor) in the context of AWS.
Outcomes: All 55 nurses participated (100% completion), exceeding the 90% goal. The correct answers for the CIWA-Ar scenarios are 7 (mild), 9 (moderate), and 36 (severe). Severe scenario: correctly classified as severe in all sessions (23/23; 55/55 nurses). Moderate scenario: correctly classified as moderate in 22/23 sessions (54/55 nurses); one nurse underscored as mild. Mild scenario: was the most challenging with the dyad inconsistencies in scoring including overscoring (e.g., moderate rather than mild) Immediate debriefing of each of the scenarios during the educational sessions appeared to prevent future misinterpretation and classification, as variability did not carry over to moderate and severe scenarios. Post-intervention, there have been no observed or reported CIWA-Ar scoring inconsistencies.
Implications: This focused, dyadic RN–NP educational intervention improved CIWA-Ar scoring consistency and calibrated interpretations of subjective items, strengthening role clarity and communication. This approach can be translated to other care settings, including emergency departments.

Cultivating Tomorrow□s Nurse Leaders Today

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Aim: The role of the Assistant Nurse Manager (ANM) is essential to the effective operation of Emergency Departments (EDs). Mentorship is a powerful strategy for developing emerging nurse leaders, especially ANMs, because it provides structured guidance, skill building, and role socialization in ways that formal education alone cannot. (reference 2 and 3) To foster professional growth, the ANM Council was established as a platform for mentoring, collaboration, shared learning, and leadership development. Through council participation, ANMs engage with peers and subject matter experts to exchange best practices, discuss local challenges, and enhance their clinical and leadership competencies. The council provides structured opportunities for networking, resource awareness, and skill-building, ultimately preparing ANMs to advance confidently into Nurse Manager roles. This initiative aims to strengthen their leadership behaviors, emotional intelligence, and communication, core competencies needed for frontline leadership.
Framework: A structured succession planning and professional development model was implemented to prepare ANMs for Nurse Manager roles. Over nine months, bi-monthly mentoring sessions focused on leadership principles, operational knowledge, and system-level awareness. These sessions provided guided discussions, practical applications, and feedback to build confidence and leadership skills. Positive team feedback reflected successful application of these competencies.
Setting: Twenty-eight EDs of varying sizes across the Midwest and Southeast United States, affiliated with an international non-profit hospital system.
Stakeholder Team: The ED Leadership Development Subcommittee led the project, supported by the Associate Chief Nursing Officer and ED Executive Leadership. Council membership included ANMs from all enterprise EDs, representing diverse experience levels. Meetings were facilitated by ANMs and featured guest speakers, collaborative problem-solving, and mentorship from Nurse Managers. This structure aligns with AONL core competencies and Magnet principles of Transformational Leadership, emphasizing mentorship and enterprise-wide collaboration.
Methods: The ANM Council met every two months for 1.5–2.5 hours, rotating locations to promote familiarity with different ED environments. Virtual options ensured accessibility. Each ED designated at least one ANM representative. Sessions included leadership presentations, peer sharing, and ANM-led discussions. Shared governance and mentorship strategies focused on leadership development, operational skills, communication, professionalism, and system awareness. Feedback and engagement tracking informed action plans for role standardization and leadership pipeline development.
Outcomes: Pre- and post-surveys of 17 ANMs showed significant improvement in knowledge and confidence. Human Resources demonstrated the greatest growth, with confidence increasing by 55% and lack of confidence decreasing by 56%. Survey readiness improved by 24%. Policy confidence rose slightly (+2%), though lack of confidence increased (+18%), likely due to deeper discussions revealing gaps. Overall, comfort levels improved across most topics, indicating positive impact.
Implications: ANMs initially lacked confidence in key areas essential for success. Targeted education and mentorship significantly improved their readiness, enabling them to respond effectively to operational needs and positioning them for future leadership roles.

Development of Nurse-Led Ultrasound-Guided IV Access Program Using a Novel DIVA Scoring Tool

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Aim: Difficult intravenous access delays treatment for a significant proportion of emergency department patients, leading to multiple failed peripheral IV attempts and potential central line placement. Our objective was to develop and validate a Difficult Intravenous Access (DIVA) prediction tool tailored for an urban emergency department and to implement a nurse-led ultrasound-guided peripheral intravenous (USGPIV) program to improve timely vascular access for patients at risk of difficult access.
Framework: This project was guided by the SQUIRE 2.0 quality improvement framework and used the Model for Improvement with Plan-Do-Study-Act cycles to develop and validate the DIVA score and to train and implement a nurse-led ultrasound-guided IV program.
Setting: This multi-phase initiative occurred in a high-acuity, urban emergency department within a large teaching hospital that serves a diverse adult patient population. The department sees a high volume of patients with complex medical needs.
Stakeholder Team: The core team consisted of emergency department nurses, nurse educators, nursing leadership, and physicians. Nurse educators developed and delivered the 8-week ultrasound-guided IV training curriculum; twelve emergency nurses participated in the training and performed the procedures; nursing leadership secured resources and approvals; and emergency physicians provided oversight and collaboration for the development and validation of the DIVA scoring tool.
Methods: Following SQUIRE 2.0 guidelines, this project comprised three phases. In Phase I, a retrospective analysis of 428 ED patients with failed traditional IV attempts identified eight independent predictors of difficult access via multivariable logistic regression; these factors were weighted to create a DIVA score stratifying patients into low, moderate and high risk groups. Phase II provided an 8-week ultrasound-guided IV training program to twelve emergency nurses. Phase III prospectively implemented a nurse-driven ultrasound-guided IV program for patients deemed moderate or high risk. Variables recorded included number of attempts, first-attempt success, complications and time to vascular access; analyses included area under the ROC curve for predictive performance and descriptive statistics.
Outcomes: The DIVA score exhibited an area under the ROC curve of 0.76 (95% CI 0.71–0.81) and inter-rater reliability of $\kappa = 0.73$. During six months, twelve trained nurses performed 448 nurse-led ultrasound-guided IV placements; 88% succeeded on the first attempt, no major complications occurred, and vascular access was achieved a mean of 23.4 minutes faster per patient compared with traditional attempts.
Implications: These findings support expanding the scope of emergency nurses to perform ultrasound-guided peripheral IV placement. A validated DIVA tool enables early identification of patients at risk for difficult access, guiding timely interventions and resource allocation. Implementing similar nurse-led programs may reduce treatment delays and central line placements and advance emergency nursing practice.

Dissemination of Information to Emergency Nurses during Public Health Emergencies: Lessons Learned from COVID-19

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Purpose: Little is known about how emergency nurses obtain information about innovations when the evidence cycle is outpaced by the spread of a pandemic. In preparation for future public health emergencies, our objective was to generate lessons learned about best practices for disseminating information about innovations to emergency nurses and other ED clinicians during COVID-19.
Design: Over the course of a four-year study, researchers synthesized lessons learned from the dissemination and implementation of ED care innovations during the COVID-19 pandemic across the United States.
Setting: This was a mixed methods study of qualitative and quantitative data collected through multiple research activities: Focus groups, interviews, discourse source review (peer-reviewed literature, preprints, professional society communications, and social media), and a nationwide survey.
Sample: We held 13 focus groups (comprising a total of 17 physicians, seven advanced practice providers, 18 registered nurses, and seven respiratory therapists) held between November 2022 and June 2023 at five hospital-based EDs purposively sampled from different U.S. regions. We conducted 14 interviews between December 2024 and September 2025 with key disseminators of ED care innovations intentionally selected from peer-reviewed literature, preprint platforms, professional society communications, and social media during the course of the COVID-19 pandemic. We also reviewed quantitative findings from archived discourse on ED care innovations from April 2022 through May 2024. Finally, we conducted a nationwide survey from February through September 2024 of 808 ED physicians and 822 ED nurses who were involved in clinical care during the pandemic.
Methods: We held 13 focus groups (comprising a total of 17 physicians, seven advanced practice providers, 18 registered nurses, and seven respiratory therapists) held between November 2022 and June 2023 at five hospital-based EDs purposively sampled from different U.S. regions. We conducted 14 interviews between December 2024 and September 2025 with key disseminators of ED care innovations intentionally selected from peer-reviewed literature, preprint platforms, professional society communications, and social media during the course of the COVID-19 pandemic. We also reviewed quantitative findings from archived discourse on ED care innovations from April 2022 through May 2024. Finally, we conducted a nationwide survey from February through September 2024 of 808 ED physicians and 822 ED nurses who were involved in clinical care during the pandemic.
Results: Frontline emergency nurses and other clinicians can do the following 6 things to identify and spread effective innovations and discontinue ineffective or potentially harmful ones: 1) Participate in or create informal, interprofessional information sharing networks; 2) Get involved in professional governance, such as by supporting or advocating within local or national professional societies; 3) Identify and follow trustworthy, influential ED clinians online; 4) Engage in or create new opportunities for sharing information with peers and institutional leadership; 5) Take steps to measure, report, and act on lessons from implementing emerging care innovations; 6) Engage constructively with patients at the bedside to support evidence-informed decisionmaking
Implications: Emergency nurses should consider adopting these strategies before public health emergencies (strategies 1-3) or during public health emergencies (strategies 4-6) to improve dissemination and implementation of emerging innovations related to emergency care.

ED Skills Day: Strengthening Confidence and Readiness

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Aim: To evaluate how a dedicated skills day improves ED nurses' confidence and competence in high-acuity, low-volume skills. The initiative sought to enhance confidence, reduce practice variability, and support ongoing professional development among ED nurses of all experience levels. ED nurses practice in a fast-paced, high acuity environment where procedural drift and infrequent use skills may compromise care quality and team reliability. ED Nurses must maintain proficiency in high-acuity skills that are rarely used, otherwise this could lead to low confidence and slower response times. A dedicated skills day provides hands-on practice with critical equipment (e.g., Belmont, A-lines, Zolls, Arctic Sun, chest tubes, EVDs) to strengthen knowledge, build confidence, and enhance patient outcomes.
Framework: A Plan-Do-Study-Act (PDSA) approach was utilized.
Setting: The setting is a 47 bed ED in a level 1 trauma, teaching hospital seeing over 300 patients daily in an urban area with a large, underserved population.
Stakeholder Team: Stakeholders included the ED Clinical Nurse Specialist (CNS), nurse educators, ED leadership, and bedside nurses. The ED CNS was responsible for data collection and evaluation related to skills day outcomes. Nurse educators coordinated and presented educational materials and ensured the availability of required equipment and supplies. ED leadership partnered with bedside nurses to promote participation, support staffing needs, and facilitate nurse engagement in leading and running skills stations.
Methods: The ED nursing education council, educators, managers, and clinical RNs, selected high-acuity skills most valuable for staff competency. Two 4-hour skills days were scheduled to accommodate both shifts, with off-duty nurses paid to attend. Participants could drop in if they were working clinically and rotate through stations led by managers, clinical specialists, and council members. Staff were asked to sign up in advance and complete pre- and post-surveys to assess changes in knowledge, confidence, and readiness to use these skills in practice. The education team worked with the nurses teaching the skills to ensure they were confident and prepared (Using job aids, educational videos, and competency checklists) to teach the staff attending skills day. As the nurses rotated through the stations there were multimodal learning methods like hands on practice, step by step instructions, or visual job aids they could keep.
Outcomes: Pre-survey results (n=24) showed nurses felt confident in routine tasks but had low comfort with high-acuity skills such as Belmont (12), EVD (7), and arterial lines (3). These gaps appeared across all experience levels, highlighting a broad need for focused training. Post-survey data (n=9) showed all participants felt confident or somewhat confident after Skills Day, reporting increased readiness across multiple high-acuity procedures. Belmont and Zoll were identified as the most valuable refreshers, demonstrating that structured, hands-on training meaningfully improves confidence, competence, and response during critical events.
Implications: Despite limited post-survey responses, results showed improved confidence in high-acuity skills. Skills Day supports stronger competency and faster response in critical events, highlighting the value of continued hands-on training in the ED.

Early Identification of Acute Myocardial Infarction in Emergency Department Patients
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Objective: Implementing an ED Technician in triage helped to ensure that patients presenting with acute coronary symptoms receive an EKG promptly. This initiative enhanced the timely assessment of patients and improved the quality and efficiency of emergency care. The American Heart Association recommends EKG testing within 10 minutes of ED arrival for patient presenting with coronary symptoms at chest pain accredited centers. A door to EKG time of less than 10 minutes has been associated with improved time to intervention and reduced in-hospital mortality. To support this goal, an ED Technician was assigned to the triage area with the sole responsibility of performing immediate EKGs for patients fitting this category.
EBP Model: The project was guided by the Iowa Model of Evidence-Based Practice, which supports problem identification, evidence appraisal, implementation of change, and evaluation of outcomes to improve patient care.
Setting: A teaching, urban level I trauma center located in Washington DC that sees over 80,000 patients yearly.
Participants: The initiative involved several key participants working together to reduce door-to-EKG time for patients with acute coronary symptoms. A dedicated ED Technician was stationed in triage to immediately perform EKGs on patients identified by the triage nurse as having cardiac-related complaints. The EKG was promptly reviewed by an ED attending physician to determine whether an acute myocardial event was present. If confirmed, the ED provider team initiated rapid evaluation and activated the Code Heart response team, which coordinated urgent transport to the Cath Lab for immediate cardiac catheterization. ED leadership and the quality improvement team monitored performance and outcomes to ensure adherence to the 10-minute benchmark and improved patient care efficiency.
Methods: The Emergency Department implemented a dedicated EKG Technician in the triage area when patients arrive for evaluation. Patients presenting with a cardiac-related complaint immediately had an EKG performed, which is then promptly reviewed by an ED attending physician to assess for signs of an acute myocardial event. If an acute event is identified the patient is immediately taken for provider evaluation where a Code Heart is activated. Once activated the patient is rapidly transported to the Cath Lab for an immediate cardiac catheterization. This streamlined process ensures timely diagnosis and intervention for patients with potential cardiac emergencies.
Outcomes: Since implementation of an ED Technician in the triage area in August 2025, approximately four patients per month have been identified as experiencing an acute myocardial event. All these patients received an EKG within the recommended 10-minute window from their arrival at the Emergency Department. As a result, each patient was able to receive immediate intervention and was promptly taken for cardiac catheterization. By placing an ED Technician in triage, the department has significantly reduced delays in the diagnosis and treatment of patients presenting with acute myocardial infarction, ultimately improving patient outcomes and enhancing the efficiency of emergency cardiac care.
Implications: Implementing an ED Technician to perform EKGs on patients presenting with acute coronary symptoms has enabled earlier recognition of potential cardiac emergencies. This approach enhances early detection, expedites clinical decision-making, and strengthens the quality of emergency cardiac care.

Emergency Department Visits for Suicide Attempts in Youth: Trends, Repeat Visits, and Costs
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Purpose: Youth presenting to the emergency department after suicide attempts represent a substantial and sustained clinical and operational challenge. Emergency nurses play a central role in assessment, stabilization, and care coordination for this vulnerable population, yet reliable data on trends, repeat emergency department use, and hospital costs are limited. The purpose of this study was to examine temporal trends, repeat emergency department use, and hospital-related costs associated with suicide-related visits among youth.
Design: Retrospective descriptive observational study.
Setting: A large urban, non-academic emergency department in the Netherlands serving a socioeconomically and ethnically diverse population, with approximately 55,000 annual visits and regional trauma and acute care functions.
Sample: All emergency department visits by youth aged 27 years and younger between January 2016 and December 2023 were eligible if documentation indicated a suicide attempt, suicidal ideation, or self-harm. Cases were identified using three complementary data sources: emergency department operational logs, electronic clinical records, and hospital billing and administrative data. Visits were excluded when suicidal intent could not be determined due to unavailable or restricted records. Repeat visits were identified at the patient level across the full study period.
Methods: Eligible visits were manually reviewed and classified based on documented intent and clinical assessment. Descriptive analyses were used to assess trends over time, patient characteristics, and repeat emergency department use for suicide-related presentations and for any cause. Repeat emergency department use was examined as a proxy indicator of ongoing clinical and psychosocial risk. Hospital costs related to suicide attempts were calculated for a randomly selected subset of patients from a health insurer perspective using standardized national tariffs; costs unrelated to suicide-related care were excluded. Ethical review by an independent medical ethics committee determined that the study was exempt from formal ethics approval requirements. All data were analyzed in coded form, with personal identifiers removed prior to analysis.
Results: The analysis included 1,381 suicide-related emergency department visits by 987 youth, comprising 1,020 suicide attempts, 163 visits for suicidal ideation, and 198 visits for self-harm. Annual suicide attempt visits increased from 101 in 2016 to 158 in 2023, peaking in 2022. Most patients presenting after suicide attempts were female, with median age 21 years. Repeat suicide-related visits occurred in 28.5% of patients, median two visits per patient. Youth with suicide-related emergency department visits had higher overall emergency department reuse than youth presenting for other conditions. Median hospital cost per suicide attempt was €930, with a wide range from €385 to €33,473.
Implications: Youth suicide-related emergency department visits are frequent, recurrent, and resource-intensive. The high rate of repeat visits indicates ongoing clinical and psychosocial vulnerability among affected youth and highlights the emergency department as a critical setting for identification and risk recognition. These findings underscore the need for consistent assessment processes and coordinated follow-up pathways for youth presenting with suicide-related concerns. For emergency nursing leaders and policymakers, the data emphasize the importance of workforce preparation and interprofessional collaboration to address recurrent emergency care use in this population and inform emergency nursing practice, education, and workforce planning.

Emergency Department Triage Optimization Project

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Aim: With a >40% increase in Emergency Department (ED) patient census from 2019 to 2024, continuous optimization of patient flow is essential to maintain timely evaluation, quality standards, and staff/patient satisfaction. The primary aim was to increase the number of laboratory specimens collected from ED lobby patients during peak triage hours (0900–1859) from 67 in Q3 2024 to 200, and to reduce average lobby order-to-collection time from 40 minutes to 30 minutes by the end of Q4 2024
Framework: The project utilized the DMAIC (Define, Measure, Analyze, Improve, Control) quality improvement methodology.
Setting: A teaching urban community hospital with 56-bed emergency department in the southwest region of the United States. Annual census in 2025 was greater than 60,000.
Stakeholder Team: The ED triage workgroup (clinical nurses, ED techs, leadership, education and quality specialist), in collaboration with the Department of Laboratory Medicine and ED staff, led the initiative. Roles and responsibilities were redefined to address identified gaps.
Methods: Baseline data were collected on laboratory draws and order to collection times for emergency department patients who remained in the lobby prior to room assignment. The primary quantitative sample included all ED patients who had laboratory orders placed while waiting longer than 60 minutes for room placement and had specimens drawn prior to being roomed. Staff perception data were collected through surveys administered to all emergency department staff involved in the triage process. Process evaluation methods additionally included tabletop exercises that simulated high volume triage scenarios. Fishbone and 5 Whys analyses were used to identify key contributing factors, including the absence of a consistent triage point of contact, lack of notification to phlebotomy for lobby laboratory draws, absence of a designated space for lobby phlebotomy, and unclear triage role delineation. Interventions focused on redefining triage roles, establishing standardized notification processes, and creating a dedicated location for lobby laboratory specimen collection.
Outcomes: Following interventions, specimens drawn prior to room assignment increased from 13% to 31%. The average lobby order-to-collection time decreased by 10 minutes. Staff survey results showed perceived triage efficiency improved from 56% to 68%, and staff support increased from 71% to 80%. Press Ganey patient experience scores remained in the 99th percentile, with overall ED experience rising from 69% to 71%.
Implications: The project demonstrates that targeted workflow improvements and interdepartmental collaboration can enhance both operational metrics and staff/patient experience. Quarterly sharing of triage metrics with relevant departments supports ongoing improvement and sustainability. The initiative aligns with organizational strategic goals for excellence in patient experience.

Early Identification, Early Intervention: Validating a Violence Risk Assessment Tool Beginning at ED Triage

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Purpose: Workplace violence (WPV), including verbal threats and physical assaults, toward healthcare professionals is an escalating threat to workforce safety, well-being, and retention, with 77% of emergency department (ED) nurses experiencing verbal or physical violence. The ED serves as the entry point for most hospital admissions, making it the critical first opportunity to identify and mitigate violence risk. Although structured tools exist to assess aggression risk, there are no tools that demonstrate validity across the ED and inpatient settings, in both pediatric and adult patients. The purpose of the study was to create and evaluate the predictive validity and reliability of Violence Risk Assessment (ViRA) tool to detect behavioral and historical precursors of verbal or physical violence and to facilitate early prevention measures.
Design: This is a prospective, quantitative, cohort study.
Setting: The study was conducted in a 6-hospital system in the USA in the mid-Atlantic region and Florida in the USA, encompassing academic medical centers and community hospitals. 6 EDs (2 Pediatrics, 4 Adult) and 14 inpatients units (4 Pediatric, 10 Adult) participated. ED settings included level 1 trauma centers and community EDs with diverse patient acuity, and are the focus of this presentation.
Sample: All patients on the pilot units ages 5 years and up were eligible. Psychiatric EDs were not included in the pilot. The median ages were 47.8 (Adults) and 12.4 (Pediatrics) years. Participants were 47.2% males and 52.7% females. Patients' races were 41.6% White, 37.6% Black, and 20.8% Other.
Methods: Nurses completed the 9-item ViRA assessments (e.g. presence of confusion, disagreement with plan of care, staring) and logged an escalation to physical or verbal violence at secondary triage, admission, every 12 hours, and with any change in status or level of care. To assess reliability, a second nurse completed an independent ViRA assessment shortly after the primary nurse and logged it into the survey platform Qualtrics. Analyses of the 9 item assessments were used to develop models using random effects logistic regression with robust standard errors. Predictive validity of the models was evaluated with sensitivity and specificity. Reliability was evaluated with percent of exact paired assessments. Preliminary ED models were developed using 14 months of data (121,467 assessments) and were enhanced and validated with an expanded 20-month dataset (205,643 assessments).
Results: Prevalence of violent events was 0.8%. Modeling across adult and pediatric ED groupings showed that 9-item models performed best for adults, while reduced 6-item models were optimal for pediatrics. Final sensitivity/specificity were 80%/98% (Adult ED), and 90%/98% (Pediatric ED). Reliability analysis is underway.
Implications: The ViRA tool demonstrates adequate sensitivity and specificity to identify ED patients at risk for committing verbal or physical violence against healthcare workers. This early identification in the ED supports timely risk of communication to downstream units, promotes workforce safety, and empowers emergency nurses to lead system-wide violence prevention efforts. Future research will examine the impact of specific ED and inpatient initiated interventions in reducing violent events after the risk is assessed throughout the care continuum.

Educating Emergency Nurses on Improving Handoff Communication Using the I-PASS Tool

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Objective: Ineffective nurse-to-nurse handoff communication in the emergency department (ED) contributes to information loss, care delays, workflow inefficiencies, and risk for medical errors. The fast-paced, high-acuity ED environment and interruptions create variability in handoff quality and consistency. Evidence supports structured handoff frameworks as effective tools to improve communication accuracy, care continuity, and patient safety. The objective of this evidence-based practice project was to improve nurse-to-nurse handoff communication in a community emergency department through structured I-PASS education. The project aimed to increase nurses' knowledge, consistency, and adherence to standardized handoff practices to enhance communication quality, patient safety, and care continuity.
EBP Model: The Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) Model ADDIE instructional design framework
Setting: This evidence-based practice project was conducted in a community-based emergency department within a Level IV trauma center located in a large metropolitan area in Texas, United States.
Participants: A designated group of charge nurses and clinical coordinators functioned as "train-the-trainer".
Methods: A comprehensive literature review was conducted using CINAHL, PubMed/MEDLINE, Cochrane Library, and ProQuest to identify evidence related to nurse-to-nurse handoff communication, standardized communication tools, and patient safety in emergency care. Keywords included handoff communication, nurse handoff, I-PASS, patient safety, and emergency department. Peer-reviewed studies published within the past five years were prioritized. Findings consistently demonstrated that standardized handoff frameworks improve communication accuracy, workflow efficiency, and patient safety, supporting the need for practice change. The intervention consisted of a structured I-PASS educational program developed using the ADDIE instructional design framework and delivered through didactic instruction, visual tools, case-based examples, and real-time clinical reinforcement. A train-the-trainer model using charge nurses and clinical coordinators supported dissemination and sustainability. Outcomes were measured using pre- and post-intervention knowledge surveys, and direct observation of handoff adherence. Descriptive and inferential analyses evaluated changes in knowledge and handoff practices.
Outcomes: A total of 12 emergency department charge nurses and clinical coordinators participated in the educational intervention and completed pre- and post-knowledge assessments. Following implementation of the I-PASS educational program, mean knowledge scores increased from 85.6% pre-intervention to 96.1% post-intervention, reflecting a 10.5% absolute improvement in knowledge. Paired-samples t-test analysis demonstrated a statistically significant improvement in post-intervention scores ($p < .001$). Direct observation audits of bedside nurse handoffs demonstrated improved adherence to standardized communication practices across all I-PASS domains, with the greatest gains observed in illness severity identification and patient summary communication.
Implications: Implementation of a structured I-PASS educational intervention significantly improved emergency department nurses' knowledge of standardized handoff communication and increased consistency across multiple I-PASS domains, supporting its effectiveness in enhancing communication quality and promoting patient safety. Lower adherence observed in synthesis by the receiver highlights the need for continued education and reinforcement to strengthen closed-loop communication. These findings support integrating standardized handoff frameworks into emergency nursing orientation, ongoing competency validation, and departmental policy to improve care continuity and reduce communication-related errors. Nurse leaders should support unit-based champions to promote sustainability, educators should embed structured communication training into curricula and continuing education, and researchers should examine long-term sustainability, patient-level outcomes, and clinical efficiency associated with standardized handoff implementation.

Emergency Department Fall Reduction Through Targeted Process Improvement

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Aim: Patient falls in the ED result in significant harm and prolonged length of stay. After the department exceeded national NDNQI benchmarks for falls with injury in 2024, this project aimed to reduce the overall rate of falls from a baseline of 0.27 falls per 1000 patient visits to 0.22 by September 30, 2025.
Framework: The project utilized the DMAIC (define, measure, analyze, improve, control) methodology.
Setting: The setting was a suburban, academic emergency department in the Southwest United States with 57 beds and over 60,000 annual patient visits.
Stakeholder Team: The interdisciplinary team included the ED manager, clinical nurse specialists, staff nurses, emergency technicians, and a quality specialist. Roles included project sponsorship, workflow redesign, data reporting, and peer-to-peer education.
Methods: This project sought to improve the reliability and timeliness of fall-risk identification, intervention application, documentation, and environmental safety in a high-volume emergency department. Baseline analysis revealed that fall-risk screening occurred only after room placement, leaving lobby time unprotected, and that fall-prevention interventions were inconsistently applied and documented due to fragmented workflows. Using the DMAIC framework, the team conducted a full review of all fall events from the prior year, analyzed patterns using a fishbone diagram and 5 Whys, and identified three key contributors: unclear workflow ownership, suboptimal environmental design, and inconsistent communication and documentation. Interventions included shifting fall-risk screening to triage immediately after check-in, applying wristbands and providing fall-risk education at the point of screening, seating high-risk patients in view of staff, stocking fall-risk supplies in triage, integrating the fall-screening tool into the electronic triage workflow, and establishing a required fall-intervention documentation task for high-risk patients. Environmental modifications included installation of bathroom grab bars and highly visible call-light indicators. Education was delivered through staff huddles, scenario-based exercises, and ongoing communication. Variables included the fall rate per 1000 patient visits which was the primary outcome analyzed, proportion of patients screened in triage, and proportion of high-risk patients with at least one intervention documented. Data analyses included pre-post rate comparison, run-chart evaluation for special-cause variation, and assessment of process reliability through audit measures.
Outcomes: Baseline data collected from 2024 established a fall rate of 0.27 per 1000 visits. Following the implementation of the interventions, post-intervention data collected from quarter 3-4 of 2025 demonstrated a decrease in the fall rate to 0.17 per 1000 visits. This result surpassed the initial reduction goal of 0.22, indicating a successful reduction in total falls and improved patient safety within the department.
Implications: This project demonstrates that early fall-risk identification, standardized workflows, and environmental modifications meaningfully reduce ED falls. Success relies on integrating screening into triage, simplifying documentation, and reinforcing accountability through real-time feedback. Leaders must ensure clear ownership of safety workflows, while streamlined processes support clinicians in reliable risk identification. Sustaining improvements requires ongoing audits, environmental reassessments, and continuous communication of performance to frontline teams. This approach can be adapted to other high-acuity settings to reduce preventable harm.

Enhancing Pediatric Readiness Through the Implementation of a Dedicated Pediatric Critical Care Room

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Aim: Caring for critically ill children is inherently emotionally challenging and anxiety-provoking, especially in settings where pediatric cases are infrequent. This challenge is further compounded in adult-dominated emergency departments, where staff may not be as familiar with the specialized needs of pediatric patients. The situation becomes even more stressful when critical pediatric equipment is difficult to locate, requiring staff to scramble to find necessary supplies during moments of crisis. The aim of this project is to streamline pediatric critical care by establishing a dedicated pediatric critical care room, equipped with all essential pediatric supplies.
Framework: Lean Six Sigma
Setting: The project was implemented in two adult urban emergency departments in North San Diego County, with a combined total of over 100,000 emergency department visits annually.
Stakeholder Team: ED Leadership facilitated purchasing of supply carts and pediatric-themed decor for the room. The ED Pediatric Committee moved all supplies into the room, set par levels, provided leadership with their wish list of needed equipment and supplies.
Methods: A dedicated pediatric critical care room was created and equipped with all essential pediatric supplies. This room was well-organized, regularly checked inventory, including pediatric and neonatal crash carts, advanced airway supplies, specialty tools, infant warmers, and equipment for imminent deliveries.
Outcomes: By creating a centralized space with par levels and a robust quality check process, the project seeks to improve efficiency, reduce stress for healthcare providers, and ultimately enhance the care provided to critically ill children in emergency situations.
Implications: The implementation of a designated pediatric critical care room has the potential to significantly improve pediatric readiness in adult emergency departments. By centralizing pediatric-specific equipment and supplies, this approach reduces delays, minimizes staff stress, and supports more efficient, organized care during high-acuity pediatric emergencies.

Expediting Equitable Care of Pediatric Patients with Sickle Cell Pain Crisis

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Aim: With the launch of a new electronic medical record (EMR), our emergency department (ED) lost tracking ability for 2 years of arrival to pain medication administration data for patients presenting with a sickle cell pain crisis. When metrics were trackable again, ED leadership realized the national benchmark of less than thirty minutes was not met. A multidisciplinary committee was re-established by nurses, focusing on how to efficiently and equitably care for pediatric patients presenting in sickle cell crisis, a crucial time of need. Staff continued teaching about the goal in the absence of tracking ability. For the last four quarters, the committee evaluated the impact of initiatives used to improve the timeliness of care for this at-risk population.
Framework: The quality improvement framework primarily employed for this project was a plan, do, study, act (PDSA) cycle, evaluating that the initiatives used allowed pain medications to be delivered by nurses in a timelier manner in accordance with evidence-based practice and national benchmarks. The committee also utilized the six key domains of healthcare quality to ensure the care delivered remained patient-centered, emphasizing an emphasis on equity and efficiency.
Setting: This project took place in an urban, pediatric level one trauma center and teaching hospital, caring for more than 72,000 patients annually from multiple states in the southeast.
Stakeholder Team: The committee included bedside nurses, educators, child life specialists, respiratory therapists, physicians, and other providers. Emergency physicians created a narcotic pathway, while nurses implemented it, used track board flags for rapid identification, and managed medication education and administration. Child life specialists and respiratory therapists optimized resources to enhance patient comfort.
Methods: The departmental quality dashboard compiled monthly displayed that the median time for administration of pain medications was above the intended goal. The leadership of the ED decided to act. The committee established multiple initiatives: benchmark education for staff, high-risk EMR patient identifiers, ED-driven pain pathways changes, EMR pain plans from hematology providers, ongoing family education on fentanyl, and non-pharmacologic measures. The ED provider-driven pathway began with intranasal fentanyl and scheduled morphine based on pain scores. Triage nurses were to initiate ibuprofen upon patient arrival. Post-implementation, the committee analyzed throughput and medication administration times and identified causes of delay to further expedite treatment of pain and provide comfort.
Outcomes: Over the past year, the department treated more than six hundred sickle cell patients. Committee-led initiatives reduced the median time from arrival to pain medication from a median of forty-seven minutes to twenty-five minutes. Pain plans and EMR flags were added for rapid identification, supported by staff awareness, teamwork, standardized care plans, and clear expectations.
Implications: This project highlights the impact of multidisciplinary teamwork and strong patient advocacy in improving care for a marginalized population. By reducing the time from arrival to first pain medication, the committee reinforced a patient-centered and equitable approach. Ongoing analysis will identify delays and educational needs to sustain efficiency and enhance patient outcomes.

First Look Nurse: Enhancing Early Recognition of Critical Patients in a Community Emergency Department

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Objective: Delays in recognizing critical illness at emergency department (ED) arrival can contribute to clinical deterioration and prolonged ED length of stay. Patients traditionally completed registration before triage, which created a gap where high-acuity conditions, such as stroke, sepsis, and pediatric respiratory distress, might go unrecognized for an extended period. To address this, the ED implemented a "First Look Nurse" (FLN) process to provide a clinical assessment upon arrival to the ED to expedite care for these high-acuity patients.
EBP Model: Plan-Do-Study Acy
Setting: The setting is a community teaching hospital with 50-ED beds. About 55,000 patients are seen a year.
Participants: The patient care manager and clinical nurse educator conducted a literature review to examine the feasibility and outcomes of an FLN. They then met with the charge nurses and staff to positively present the new process flow and elicit feedback.
Methods: The FLN is conducting a rapid assessment that focuses on airway, breathing, circulation, mental status, obvious neurologic deficits, and time-sensitive complaints. The FLN is empowered to direct-bed sick patients and activate stroke alerts before completion of registration and formal triage. Standardized education was provided to FLN and triage nurses, including the use of a brief assessment algorithm, stroke screening, and local code activation criteria. Data was collected for three months pre-implementation (September 2025–November 2025) and three months post-implementation (December 2025–February 2026). Primary outcomes included door-to-CT completion times and door-to-EKG time for patients with chest pain. The overall patient satisfaction score was identified as a secondary outcome
Outcomes: Following FLN implementation, door-to-CT complete time decreased from an average of 21 minutes to 17 minutes in December, a 4-minute reduction. The overall patient satisfaction scores increased from a pre-implementation average of 71.8% to 77.6% for December, a 5.8% increase. Door-to-EKG for patients with chest pain decreased from an average of 11 minutes to 4 minutes in December, a 7-minute decrease. No increase in inappropriate activations or safety events associated with the FLN process was identified.
Implications: Embedding a dedicated First Look Nurse at ED arrival improved the timeliness of early recognition of critical patient conditions. This model underscores the central role of emergency nurses in front-end risk stratification, supports pediatric and adult readiness standards, and can be implemented using existing nursing resources with targeted education and clear escalation pathways. Post implementation data collection will continue to February 2026. Future work will explore sustainability and staff perceptions.

From Wait to Care: Reducing Triage Delays and Left Without Triage Rates Through Workflow Optimization in the ED

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Aim: Emergency department overcrowding contributes to delays in care, prolonged length of stay, increased morbidity, and higher rates of patients leaving without triage (LWOT). In a high-volume urban academic ED, limited triage capacity resulted in extended wait times and incomplete initial assessments. LWOT is a key CMS quality metric affecting patient safety, care quality, and hospital revenue. This quality improvement (QI) initiative aimed to reduce arrival-to-triage times and LWOT rates through triage process redesign in a high-volume, urban academic ED. The primary goals were to improve patient safety, optimize operational throughput, and reduce the proportion of patients leaving before being triaged.
Framework: A Plan-Do-Check-Act (PDCA) quality improvement framework guided this single-site, pre-post intervention study.
Setting: The project was conducted at a 60-bed Midwestern urban academic ED serving ~65,000 patients annually. The patient population includes approximately 65% adults, 26% geriatric patients, and 9% pediatric patients.
Stakeholder Team: Assistant Unit Directors led QI project with core group of staff Clinical Nurse Specialist conducted staff education and provided support during the rollout Unit Director obtained permission for the project ED Operations Team/Physicians provided support and discussed data Associate Vice President granted permission to perform throughput QI project ED staff
Methods: A single-site, pre–post quality improvement study using a Plan-Do-Check-Act framework was conducted. Baseline triage (March–June 2024) occurred in four rooms staffed by 1–2 RNs. In July 2024, a Rapid Treatment Unit was redesigned into an eight-bay centralized triage area with expanded staffing, equipment, and physician-approved quick order sets. Post-intervention data (August–November 2024) included arrival-to-triage times and LWOT rates, tracked via ED operational dashboards.
Outcomes: Results: Following implementation, LWOT rates decreased from 1.8% to 1.2%, indicating a significant improvement in ED access and patient retention. The percentage of patients triaged within 14 minutes of arrival increased from 43.6% (10,070/23,106) to 49.5% (11,462/23,155), reflecting a 5.9% improvement (an additional 1,392 patients). The percentage of patients triaged after 14 minutes dropped from 56.4% to 37.4%, a 19% relative decrease (4,375 fewer patients delayed). Staff reported improved workflow efficiency, reduced physical movement during triage, and better interdisciplinary communication.
Implications: Redesigning the triage area to expand capacity, colocate resources, and streamline workflow led to measurable improvements in timeliness, safety, and efficiency. Integrating diagnostic capabilities at triage allowed for earlier intervention and improved care prioritization. These findings demonstrate how physical space reallocation, targeted staff training, and interdisciplinary collaboration can enhance ED throughput and reduce LWOT. Future research should examine the impact on downstream metrics such as patient outcomes, satisfaction, and staff engagement. These early results support broader implementation of similar triage strategies in comparable settings.

From Surviving to Thriving: Evolving TIPP with Targeted ED Education
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Aim: This project strengthens the nurse residency program in the Emergency Care Unit (ECU) by redesigning the Transition into Practice Program (TIPP) into an ECU-specific curriculum. Goals include providing structured education, supervised clinical practice, and professional mentoring while enhancing competence, confidence, retention, and professional growth for new graduate nurses.
Framework: Guided by the Plan-Do-Study-Act (PDSA) Cycle, this Quality Improvement Project used iterative assessment and refinement to implement, evaluate, and sustain the ECU-specific TIPP program. Plan: Conduct a needs assessment, establish goals, define stakeholders, and create a timeline. Do: Implement the ECU-specific curriculum with mentorship and targeted educational experiences for high-acuity practice. Study: Collect and analyze retention, curriculum completion, engagement, and competency data. Act: Refine curriculum and processes based on outcomes and feedback to ensure sustainability.
Setting: Implemented in a Level I teaching trauma center ECU, a high-acuity, fast-paced environment serving diverse patients, the project aimed to support new graduate nurses' orientation and professional development.
Stakeholder Team: Nursing Professional Development Specialist: Designed and implemented the ECU-specific TIPP, facilitated sessions, and coordinated mentorship. Unit Preceptors: Provided guidance, hands-on instruction, feedback, and mentorship. Subject Matter Experts: Supported educational sessions, simulations, and case discussions. Clinical Staff and New Graduate Nurses: Participated in curriculum, skills verification, and program evaluation. Nursing Leadership: Oversaw implementation, allocated resources, and ensured program support.
Methods: The project addressed gaps in prior TIPP programming with a focus on relevance, completion, and readiness for high-acuity practice. Surveys and interviews with staff, preceptors, and past participants identified learning gaps. A 10-week ECU-specific residency was developed with body-system–based content, simulations, hands-on skills, case discussions, and mentorship. Implementation included weekly "Educator Hour," monthly "Practice till Perfect" simulations, and structured mentor pairing. Standardized verification and follow-up ensured completion within 10 weeks. Variables measured included retention, curriculum completion, engagement, confidence, and collaboration. Descriptive statistics and qualitative feedback guided iterative improvements.
Outcomes: Forty new graduate nurses completed the ECU-specific TIPP residency, achieving a 77.5% retention rate nearly three years post-onboarding, compared to 28% for 2020–2022 cohorts. All outstanding curriculum verifications were completed within 10 weeks. Participants reported increased engagement, confidence in high-acuity scenarios, and stronger collaboration with preceptors, reflecting enhanced competency and readiness for independent practice. Simulations and hands-on activities reinforced skills and supported ongoing professional growth.
Implications: ECU-specific TIPP redesign demonstrates that unit-tailored education enhances engagement, competency, confidence, and retention. Nursing leaders should prioritize structured, unit-focused orientation, mentorship, and hands-on learning to support safe, high-acuity practice. Continuous feedback and data tracking enable iterative program refinement. Future evaluation may explore long-term impacts on patient outcomes, staff satisfaction, and unit performance.

Factors that Influenced Use of Clinical Care Innovations During the COVID Public Health Emergency: A systematic review

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Purpose: Care innovations were needed in emergency departments (EDs) during the COVID-19 pandemic, yet gaps existed between available evidence and bedside needs. We aimed to identify factors facilitating implementation and continuation of care innovations in EDs during the pandemic to inform future public health emergency (PHE) preparedness.
Design: Systematic review guided by PRISMA (PROSPERO: CRD42024531235)
Setting: English-language articles
Sample: We searched PubMed, CINAHL Plus, and Web of Science in June 2025 for peer-reviewed English-language articles published from March 2020-June 2025, without geographic restrictions. We included articles describing care innovations in EDs during COVID-19—including new policies, systems, technologies, or service models (e.g., telemedicine)—that reported rationale for use.
Methods: Data were extracted using a standardized form capturing article characteristics. We assessed quality using Joanna Briggs Institute tools. We leveraged GPT-4 for screening, data abstraction, and quality assessment, with comprehensive human verification. A human reviewer summarized quantitative data descriptively, and qualitative data narratively, using a thematic framework informed by the Diffusion of Innovations in Service Organizations model.
Results: We included 100 articles. Telemedicine was the most common innovation type, followed by PHE bundles, triage, infection prevention, diagnosis, and risk stratification. Antecedents & readiness (62%) and Environmental instability (59%) were the most cited drivers. The latter included tension for change, receptive context (e.g., engaged leadership), adapting existing policy or practice; and hospital infrastructure. Themes of Environmental instability included patient surges, supply/staff shortages, contamination fears, and evolving understanding. Research evidence (33%) and Clinical experience (32%) were less cited for implementation, but most influential for continuation (54% and 52%, respectively). Incentives & mandates, and Interorganizational norms were rarer enabling factors.
Implications: Readiness and Environmental instability drove ED innovation adoption during COVID-19, not mandates. Strengthening system capacity, leadership, preparedness, and responsive local data systems should be prioritized to support future PHE innovation.

From Vein to Vial: A Needle-Free Blood Collection Strategy to Reduce False-Positive Blood Cultures and Hemolysis

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Aim: Emergency departments often face persistent challenges with aseptic collection of blood cultures secondary to the pace and demand. The aim of this quality improvement project was to reduce the occurrence of false positives blood cultures through pairing best practice aseptic techniques with the use of a needle-free blood collection device. A secondary aim was to reduce the number of hemolyzed samples using the same device.
Framework: This project was designed using a layered framework approach of Donabedian's Structure Process Outcomes framework, and the Kirkpatrick Model. Donabedian's supported the initial training, reinforcement of aseptic technique, and the projects goal/outcome. The four-level Kirkpatrick model supported the training of the a needle-free blood collection device users by ensuring device buy in, competency in device utilization, oversight of proper device and aseptic techniques, and analysis of clinical outcomes.
Setting: This project was implemented in a 58-bed urban level III trauma center located in the MidWest with approximately 80,000 patient visits per year. On average, this ED admits 2500 patients with sepsis per year and draws 6000 sets of cultures. Furthermore, this ED averages 9.5% false positive blood culture contamination and 4% potassium or troponin blood sample hemolysis.
Stakeholder Team: The core stakeholder team included 14 trained needle-free blood collection device super-users who utilized the device on a daily basis, the emergency department leadership team who oversaw approval of device use, one clinical nurse specialist who oversaw the initiatives integrity and cost-benefit analysis, the education team who reinforced best aseptic practices and led staff buy-in, and the hospital executive team.
Methods: This quality improvement initiative deployed a prospective, pre- and post- mixed method design to evaluate the effectiveness of the needle-free blood collection device when paired with standardized aseptic techniques on false positive blood culture rates and hemolysis rates. Fourteen super-users received education on how to use the device and were taught evidence-based aseptic blood culture collection techniques. Superusers performed 10 blood culture collections under supervision by a trained project lead before being approved as an independent user. Superusers were assigned a P number which they used to mark the specimen before being sent to the laboratory. The sample was documented by microbiology if contaminated and chemistry if hemolyzed. Results were reported to the project lead once per week via an excel sheet sent by the lab manager.
Outcomes: The trial is ongoing until a N number of 200 is reached. Preliminary trial results showing blood cultures contamination using aseptic technique and the needle-free blood collection device are zero precent (N=130 sets). In addition, there was only one hemolyzed blood sample, which occurred during lab downtime (N=65 chemistry panels).
Implications: The findings of a needle-free blood collection device use when paired with aseptic techniques have important implications for clinical practice, cost reduction, hospital throughput, and reducing burden on the patient we are treating. The national standard for false positive blood cultures is set at < 3%. According to the CDC, hospital onset bacteremia (HOB) will be implemented starting in 2027 and will have significant penalties for infections during hospital stays. False positive blood cultures will be a large player in the rate of HOB infections and treatments.

Getting It Right the First Time: Reducing Blood Culture Contamination in the Emergency Department (ED)

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Aim: Blood cultures are an essential tool for accurately identifying pathogens, guiding targeted treatment, and supporting quality patient outcomes. Although frequently performed, blood culture collection is a complex, multi-step process with high potential for contamination. Blood culture contamination can lead to delays in care, inappropriate treatments, unnecessary testing, and excess costs and lengths of stay. A nursing quality review identified blood culture contamination rates in our emergency department (ED) exceeded national performance benchmarks, triggering a quality improvement project to reduce blood culture contamination rates.
Framework: This quality improvement project was guided by our enterprise improvement model, which prioritizes organizational alignment, visual management, structured problem solving, and standardization. A structured gap analysis was used to identify differences between current state and desired state, and the Plan-Do-Check-Act Cycle framed project implementation.
Setting: The project was conducted in an urban Level 2 Trauma Center in Northeast Ohio, serving 46,000 adult patients annually.
Stakeholder Team: The core team included our ED Nursing Professional Development Specialist (NPDS), ED Nurse Manager, and ED Assistant Nurse Managers. The NPDS led the educational component, reviewed policy alignment, developed the teaching plan, and supported training and practice standardization. The ED Nurse Manager provided organizational alignment, oversight of quality priorities, and consideration of budgetary and resource needs. Assistant Nurse Managers reinforced practice expectations, supported staff adherence at the point of care, and facilitated integration of workflow changes into daily operations. This leadership-driven approach ensured alignment with institutional standards while supporting consistent implementation of evidence-based practice across the department.
Methods: The gap analysis identified two key contributors to ED blood culture contaminations, inconsistent adherence to blood culture collection guidelines and lack of required supplies at the point of care. To address knowledge gaps, an institutional policy-aligned educational intervention focusing on proper site preparation and collection techniques was developed. Education and workflow training was provided to all nurses and paramedics who perform blood culture draws. To tackle supply and workflow barriers, a portable dedicated blood culture supply tote was developed and integrated into the standardized blood culture collection workflow. Leadership Gemba walks reinforce best practices and assess for improvement opportunities. Monthly blood culture contamination rate reviews track progress and guide ongoing improvement efforts. A visual management board supports communication and organizational alignment.
Outcomes: Within two months of intervention implementation, the ED realized a 49% relative reduction in contamination rates, achieving our goal of meeting national benchmark performance. Ongoing performance monitoring demonstrates continued down trending, indicating sustained improvement and growing reliability in standardized blood culture collection practices.
Implications: Adherence to blood culture collection guidelines is critical for decreasing blood culture contamination rates and improving patient care and outcomes. This project demonstrates the effectiveness of combining targeted education with system redesign to address barriers and decrease contamination rates. Although findings are limited due to single site implementation, this project provides insight into a low-cost scalable solution for addressing blood culture compliance barriers in EDs.

Hidden in Plain Sight: Identifying Human Trafficking in the ED

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Aim: Human trafficking is a form of modern slavery that occurs in every state, but California consistently ranks #1 in the US for the total number of cases reported. Many times, the Emergency Department (ED) is the first point of contact for victims and survivors of Human Trafficking. Located within an active human trafficking corridor (I-5 Corridor), our ED is uniquely positioned to identify and support survivors during a critical window of medical contact. However, we lacked the appropriate education, response, or defined process to assist victims of human trafficking. Our project, titled the Blue Dot Initiative, aimed to establish a clearly defined process for identification of potential victims. By integrating staff education, partnership with key community stakeholders, and development of a clearly defined, discreet self-reporting protocol, we sought to enhance the early identification of human trafficking survivors and connect them advocacy services.
Framework: Utilizing the Model for Improvement, this project standardized the ED's response to human trafficking via a bifurcated clinical workflow. This system, tailored for both patient self-reporting and clinician-directed identification, ensures trauma-informed intervention and safety. The framework incorporates a post-encounter debrief tool for real-time data analysis, enabling protocol adjustments and continuous quality improvement.
Setting: This project was conducted in Central California teaching hospital ED serving over 93,000 patients annually.
Stakeholder Team: A multidisciplinary team, led by ED Shared Governance and supported by executive leadership, spearheaded the clinical workflow design. The ED Clinical Educator facilitated specialized training through law enforcement experts and a three-hour trauma-informed course led by a local advocacy non-profit. Operational integration utilized Social Work for survivor interviews, Laboratory Services for the 'blue dot' self-reporting protocol, and Public Safety for high-risk security interventions and exploiter separation.
Methods: This project implemented a standardized, multidisciplinary protocol focused on three pillars: targeted education, discreet victim identification, and high-risk safety interventions. Initial phases included training sessions with local law enforcement and trauma-informed curriculum by a specialized non-profit partner to define exploitation indicators. Following multidisciplinary process mapping with Laboratory, Social Work, and Public Safety teams, a bifurcated identification workflow was established. This included a discreet self-reporting mechanism via a 'blue dot' sticker on urine specimen lids, integrated with bathroom signage and validated through a dual-check system by nursing and laboratory staff. Cases involving suspected exploiters, a 'radiology bypass' protocol was utilized to ensure safe patient-provider separation. A standardized post-debrief tool completed by the Charge RN or Social or Worker served as the primary instrument for real-time data analysis and protocol refinement.
Outcomes: Since implementation of the "Blue Dot Initiative," cases (n=3) received immediate consultation with Social Work and nursing leadership, with one survivor receiving resources for a specialized shelter. Ongoing data collection via the post-debrief tool enables refinement of the workflow to further increase identification.
Implications: Findings from this work suggest that education and a well-structured implementation process play a crucial role in identifying victims that are hidden in plain sight. Rising cases of trafficking should serve as a call to action to ED leaders to take proactive steps to support these individuals and disrupt the cycle of exploitation.

Improving Emergency Department Trauma Readiness Through Interactive Skills and Interdisciplinary Simulation During Transition to a Level 1 Pediatric Trauma Center

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Aim: Transitioning from a Level II to a Level I pediatric trauma center requires a high level of preparedness among emergency department (ED) and trauma team staff, particularly in the management of low-frequency, high-acuity pediatric trauma interventions. To address anticipated educational gaps and improve staff confidence, a comprehensive trauma skills day combined with interdisciplinary trauma simulations was implemented.
Framework: The project was designed using Kirkpatrick's Four-Level Model of Training Evaluation focusing on learner engagement and self-reported knowledge and confidence gains following interactive skills training and interdisciplinary trauma simulation.
Setting: This project was performed at an urban, Midwestern United States Level 1 pediatric trauma center.
Stakeholder Team: The stakeholders were Emergency Department staff including, nurses, paramedics, and technicians. Additionally, the simulations also included ED Attendings, ED Advanced Practice Providers (APP), ED Fellows, Trauma Surgeons, and Trauma APPs.
Methods: Prior to the educational intervention, a pre-skills day survey was administered to ED nurses, technicians, and paramedics to assess baseline comfort levels with critical trauma equipment and procedures, including chest tubes, external ventricular drains (EVDs), arterial lines, and rapid infusers. Results demonstrated that the majority of participants (50-86%) either disagreed, strongly disagreed, or were neutral regarding their comfort with these skills. To enhance engagement and promote active learning, a mobile scavenger hunt application was incorporated into the trauma skills day as an alternative to traditional lecture-based education. Participants were tasked with solving riddles that required them to locate and review departmental policies, identify the physical location of trauma equipment, demonstrate appropriate setup and use, and visit key areas within the ED. Photographic verification was used to confirm task completion. In parallel, an interdisciplinary trauma simulation day was conducted involving trauma surgeons, advanced practice providers, ED attending physicians, registered nurses, technicians, and paramedics. Simulations emphasized patient care, equipment utilization, role clarity, and effective communication, followed by structured debriefings to reinforce learning objectives.
Outcomes: Post-skills day surveys completed by the same group of ED staff demonstrated a marked improvement in perceived competence. 97% of participants agreed or strongly agreed that they felt comfortable with the previously identified trauma skills and equipment following the educational intervention. Additionally, trauma simulation participation enhanced familiarity with interdisciplinary team members, reinforced role assignments, and improved confidence in trauma resuscitation workflows.
Implications: An interactive trauma skills day utilizing a scavenger hunt format, combined with interdisciplinary trauma simulation, significantly improved ED staff comfort and preparedness during the transition to a Level I pediatric trauma center. This innovative, learner-centered approach effectively increased engagement, reinforced policy and equipment knowledge, and supported team-based trauma readiness. Such strategies may be valuable for other institutions preparing for trauma center designation changes or seeking to enhance pediatric trauma education.

Identifying Barriers and Facilitators to Emergency Department HIV Screening: A Mixed-Methods Survey of Emergency Nurses

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Purpose: Routine HIV screening in emergency departments (EDs) supports early diagnosis and linkage to care but can be challenging to integrate into fast-paced clinical workflows. This study assessed emergency nurse perceptions of routine HIV screening and identified opportunities to improve screening compliance within an opt-out HIV testing program.
Design: Mixed-methods descriptive survey study.
Setting: The ED of a large urban Level I Trauma Center in Phoenix, Arizona, participating in Gilead's FOCUS Program and providing routine opt-out HIV screening to patients aged 18 years and older receiving bloodwork.
Sample: A convenience sample of 77 emergency nurses participated in the survey, representing a 55.8% response rate among 138 eligible nurses. Surveys were administered to day-shift nurses in May 2025 (n=51) and night-shift nurses in December 2025 (n=26).
Methods: Participants completed a survey containing Likert-scale and open-ended questions regarding HIV screening practices, workflow integration, electronic health record (EHR) functionality, alert timing, and strategies used to complete screening documentation. Quantitative data were summarized descriptively, and qualitative responses were reviewed to identify recurring themes.
Results: Only 6.5% of respondents reported that HIV screening was typically completed by the time of triage. More than half (53.2%) completed the screening alongside intake documentation, while 58.8% reported success incorporating screening into intake or medication reconciliation workflows. When patients were initially unable to consent, 36.4% reported returning later to complete the screening. Alert fatigue emerged as a major barrier, with 88.3% reporting greater likelihood of bypassing the screening form when prompts appeared during competing clinical tasks. Qualitative findings highlighted opportunities for improved workflow integration, EHR modifications, enhanced HIV education, stigma reduction, and use of standardized opt-out language when offering testing.
Implications: Emergency nurses identified both operational and communication-related factors influencing HIV screening compliance. Findings suggest that aligning screening activities with existing nursing workflows, optimizing EHR functionality, and supporting nurses through education and standardized scripting may enhance integration of routine HIV screening into ED practice. These findings may inform future nursing-led efforts to improve implementation of public health screening initiatives in emergency care settings.

Impact of Structured Equipment Fair on Nurses Confidence and Competency

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Objective: Background and Objective: Nurses are expected to be proficient and efficient in the utilization of medical equipment. Yet, nurses lag in knowledge, confidence, and familiarization, and there is a lack of an organizational plan for the sustainability of nurses' competencies with infrequently used medical equipment in the emergency departments, intensive care units, and inpatient units. This is paramount in our education department being frequently asked by the unit's clinical leaders to review infrequently used medical equipment with staff. Infrequently used medical equipment was conceptualized as that medical equipment used less than twice a year. Consequently, compromising patients' safety and quality of care. A literature review shows insufficient published evidence for the sustenance of nurses' confidence and competency through equipment re-education fairs, therefore warranting this pilot study. The andragogic (adult) theory guided this EBP project. Purpose: This study aimed to identify the impact of structured nurses' equipment-fair education in boosting nurses' confidence and competencies in the utilization of infrequently used medical equipment.
EBP Model: The andragogic (adult) theory guided this EBP project using the Iowa model.
Setting: The pilot was conducted in an urban, public, teaching, safety-net hospital in Los Angeles area.
Participants: Participants were drawn from voluntary RNs working in ER, ICU, Medical-Surgical, specialties, and BH units during the equipment fair period.
Methods: An extensive literature review and collaborative needs assessments were conducted by unit educators and leaders. Criteria were developed based on the evidence and the conceptual definition of infrequently used medical equipment. A checklist of specialty-specific equipment was developed. A pilot study was conducted. The equipment was sub-grouped according to the various specialties, and the expected competency checklist was streamlined to match. Staff were assigned based on their unit/specialty checklist. A total of 136 registered nurses from various units completed a pre- and post-intervention survey using a Likert-type scale. Demographic information about nurses' years of experience in the organization was collected and, show 40% of responders had over 10 years of experience, 32% over 4 years, 13% between 1-3 years, and 15% under a year. The data collected was analyzed using inferential statistics.
Outcomes: The pre/post-evaluation results when compared indicated a 76.4% jump in confidence and competency levels with Rapid Infuser, 54.2% with Lucas Compression Device, 76.4% with Blankerol, 54.2 % with Bair Hugger, 63.9% with Pressure Transducer Set-up and 65.3 with Fluid warmer among ER nurses. Med-Surg nurses show a 37.4% jump with Hotline Fluid Warmer, 28.2% with ETCO2 monitoring, and 11.7% with Alaris Syringe PCA. ICU/SDU shows a 58.3% increase in confidence and competency levels with the Ekosonic Endovascular system, 53.4% with Level 1 rapid Infuser, and 20.8% with Istat Blood gas.
Implications: Implication: The pilot study demonstrates that equipment fairs improved staff confidence and competency, thereby enhancing the quality of patient care and contributing to nursing research. Recommendation: We encourage the use of equipment fairs for infrequently used equipment to maintain and sustain nurses' and other staff members' competencies. Generalizability is limited, as this pilot study was conducted at a single site; therefore, replication in other settings is essential.

Improving Confidence, Well-Being, and Retention Through a Specialty Emergency Department Nurse Residency

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Aim: Retention of newly qualified nurses remains a national challenge, with nearly 20% leaving the profession within their first year. Contributing factors include limited transitional support, emotional stress, and difficulty adapting from student to professional practice. These challenges are amplified in the emergency department, a high-acuity, fast-paced environment associated with increased stress and burnout. Although a hospital-wide nurse residency program was in place, it lacked specialty-specific content to support emergency nursing practice. Emergency Department nursing leadership identified the need for a focused residency program tailored to the unique demands of emergency care. The aim of this quality improvement initiative was to design, implement, and evaluate a specialty Emergency Department nurse residency program to support transition to practice, improve nurse confidence and well-being, and promote early retention among newly qualified emergency nurses.
Framework: In late spring 2025, Emergency Department Nursing Leadership used a Plan, Do, Study, Act (PDSA) framework to develop a specialized ED nurse residency program.
Setting: The setting of this study is a 23-bed emergency department in a community hospital in the northeast United States. This department has approximately 28,000 visits a year, an average Emergency Severity Index of 2.7, and hires approximately 8-10 new graduate nurses a year.
Stakeholder Team: The ED Nurse Director supported implementation; Resource Nurses assisted with content development; the ED Clinical Nurse Specialist led program development; new graduate nurse residents participated and provided feedback; and preceptors supported execution and identified performance and knowledge gaps.
Methods: The first cohort of five NGNs began in July 2025, followed by a second cohort of two NGNs in October 2025. The program included structured onboarding, cohorted starts, specialty education, preceptor support, nurse-driven learning, week 7 and 14 check-ins with leadership, two weeks of protected time, and professional development sessions. Effectiveness was evaluated using pre- and post-implementation surveys assessing confidence, role transition, and satisfaction, along with 6-month retention data.
Outcomes: Between July 2025-January 2026, seven NGNs were enrolled in the ED nurse residency program, five in the pilot cohort, two in the second cohort. Six month retention was 100% for the pilot cohort, compared with ED baseline retention at six months of 63% in 2023, 90% in 2024. Six-month quantitative survey data in progress with results expected in the next 30 days. Qualitative data collected at weekly residency meetings. Nurses reporting feeling supported, importance and effectiveness of team nursing, and recognition of wellness strategies to combat new graduate stressors.
Implications: Implementation of a specialty ED nurse residency program was associated with increased NGN confidence, early identification of burnout and job-related stress, and early evidence of improved retention. These findings support the value of tailored residency programs in high-acuity environments and offer a scalable model for community hospitals to strengthen workforce stability and nurse engagement. Programs should include a standardized curriculum with nurse-driven content and social-emotional supports, with leadership and organizational support essential for successful implementation.

Improving Emergency Department Stroke Throughput: Impact of a Direct-to-CT Workflow

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Aim: Prolonged and variable door-to-CT times were identified for suspected stroke patients, particularly among non-prenotified EMS and walk-in arrivals. Quality reviews and frontline nurse feedback identified inconsistent routing and competing triage demands as key contributors to delay. This quality improvement initiative implemented and evaluated a standardized Direct-to-CT workflow for all suspected stroke patients to reduce door-to-CT time, improve response reliability, and enhance stroke throughput.
Framework: This quality improvement initiative used a shared governance framework and Lean principles. Interdisciplinary root-cause analysis and process mapping identified non–value-added steps and workflow variation. Rapid-cycle Plan–Do–Study–Act testing guided implementation and refinement, with frontline nurses leading design and execution.
Setting: The project was implemented in a high-volume, urban ED within a Level I trauma center and comprehensive stroke center.
Stakeholder Team: Bedside ED nurses led workflow redesign, real-time coordination, and operational execution. ED physicians performed immediate clinical assessments at CT to confirm airway stability and imaging readiness. Flow leadership assigned a dedicated Stroke Response RN for each shift. Radiology leadership ensured scanner availability and imaging prioritization. Neurology, EMS, and hospital quality teams contributed to performance monitoring, outcome review, and sustainability planning.
Methods: The process targeted for improvement was door-to-CT time for suspected stroke patients. All suspected stroke patients—including EMS prenotified, EMS non-prenotified, and walk-in arrivals—were routed directly to CT upon arrival following an immediate airway and stability assessment by an ED provider. A designated Stroke Response RN, not the assigned bedside nurse, responded to all Stroke Alerts and accompanied stable patients to CT; this role was filled by the second Front Triage RN or Rapid Response Team RN based on staffing. During provider assessment, the triage RN obtained essential prehospital information from EMS, including time of symptom onset or last known normal, neurologic deficits, and prehospital interventions. To minimize delays, standardized practices deferred repeat vital signs, point-of-care glucose testing, and NIH Stroke Scale assessment until after imaging unless clinically indicated; IV access, if needed, was obtained in the CT suite. Outcome measures included median door-to-CT time and the proportion of patients achieving the ≤10-minute benchmark. Data from Q3 2024 through Q2 2025 were analyzed using descriptive trend analysis stratified by arrival mode to assess performance and variability over time.
Outcomes: Following implementation in Q4 2024, door-to-CT times improved across all arrival modes. EMS prenotified patients achieved the greatest gains, with median door-to-CT time decreasing from 16 minutes (Q3 2024) to 8 minutes (Q2 2025) and 100% meeting the ≤10-minute benchmark. EMS patients without prenotification showed modest improvement, with median times decreasing to 18 minutes in Q2 2025 and 4.7% meeting the benchmark. Walk-in patients improved from a median of 46 minutes (Q1 2025) to 26 minutes (Q2 2025), though none met the benchmark. Overall, the first six months demonstrated sustained downward trends, reduced variability, and improved reliability of stroke response.
Implications: This nurse-driven Direct-to-CT workflow produced sustained improvements in stroke throughput within a complex ED environment. Standardized roles and elimination of non–value-added steps improved reliability without compromising safety. Ongoing analysis will target non-prenotified EMS and walk-in patients to advance equitable, sustainable stroke care.

Improving Staff and Patient Safety When Delivering Care to the Behavioral Health Patient
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Aim: Background: Pediatric mental health crises have placed unprecedented strain on emergency departments (EDs) nationwide since the COVID-19 pandemic. This impact has been particularly pronounced in rural communities, where limited access to behavioral health resources exacerbates challenges in delivering timely, safe, and effective care. National forecasts have projected continued growth in pediatric behavioral health–related ED visits, a trend mirrored locally. In 2025, the Pediatric Emergency Department experienced a 21% increase in behavioral health patient visits compared to 2024. This rising volume highlighted urgent concerns related to patient safety, staff safety, workplace violence, and care team preparedness, necessitating a comprehensive response. Purpose: The purpose of this initiative was to improve safety for pediatric behavioral health patients and the multidisciplinary care team across emergency and inpatient settings. Specific aims included implementing innovative, evidence-based strategies to address behavioral health needs within the ED, enhancing staff education and support, expanding physical and human resources, and collaborating with state legislators to secure grant funding to sustain behavioral health initiatives in a rural healthcare environment.
Framework: Plan, Do, Study, Act Multidisciplinary teams collaborated to plan different phases of the behavioral health initiative. Through this planning, next steps were identified, implemented, and evaluated. Based on the needs of the project, the PDSA cycle continued.
Setting: Academic Medical center, urban, pediatric emergency department, level 1 trauma center located in the western United States.
Stakeholder Team: Nursing Director - led strategic planning sessions Bedside nurses, providers, behavioral health techs: involved in planning, implementation, and evaluation Educators - created and facilitated educational content
Methods: A collaborative, multi-sector approach was used to guide implementation over a three-year period. Partnerships were established with educators, public safety, and adult behavioral health system partners to inform practice changes. Evidence-based strategies for behavioral health crisis management were adapted to meet pediatric and rural care needs. Outcome measures included trending data related to employee satisfaction, employee safety perceptions, and incident reports involving workplace violence. Continuous feedback from frontline staff informed iterative improvements throughout implementation.
Outcomes: Initial outcomes demonstrate meaningful improvements in staff perceptions of safety and organizational commitment to safe care. Results from the 2025 employee engagement survey indicated a 0.43 increase in staff perception of patient safety, a 0.34 increase in perception that the organization cares about patient safety, and a 0.18 increase in perception that intentional efforts are being made to deliver safe care. These findings suggest that a comprehensive, multi-layered approach to pediatric behavioral health management can positively influence workplace culture, staff confidence, and perceived safety.
Implications: Implications for nursing practice include the importance of investing in both environmental and workforce-based solutions, fostering interdisciplinary collaboration, and engaging nurses as key leaders in behavioral health innovation. This model may serve as a scalable framework for other rural and pediatric settings seeking to address the growing demand for behavioral health services while prioritizing safety for patients and care teams.

In the Heat of the Moment: Emergency Nurses Leading Faster Accelerated Antibiotic Administration for Neutropenic Fever

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Aim: Oncology patients presenting to the Emergency Department (ED) with suspected neutropenic fever are at high risk for rapid clinical deterioration and require prompt antibiotic administration. Despite established institutional guidelines, the ED experienced inconsistent compliance with the 60-minute door-to-antibiotic benchmark. Contributing factors included variability in early identification, delays in order placement, and workflow overlap with sepsis pathways. This quality improvement initiative aimed to evaluate the impact of a Neutropenic Fever Best Practice Advisory (BPA) on improving timely antibiotic administration and standardizing care for high-risk immunocompromised patients in the ED.
Framework: This project utilized a DMAIC (Define, Measure, Analyze, Improve, Control) quality improvement framework to enhance early recognition and streamline treatment workflows for suspected neutropenic fever. Process mapping identified delays related to recognition and order initiation. Iterative Plan-Do-Study-Act (PDSA) cycles guided BPA refinement and education strategies. Embedding clinical decision support directly into the electronic health record supported real-time, standardized decision-making while minimizing reliance on memory-based processes.
Setting: The initiative was conducted in a high-volume, urban, academic Emergency Department in the Midwest, serving a diverse adult patient population, including a large oncology referral base.
Stakeholder Team: The interdisciplinary project team included ED bedside nurses who operationalized the workflow and reinforced BPA utilization, ED EHR Systems Analyst, ED emergency medicine physicians who validated clinical criteria and order set design, and ED quality and nursing leadership who provided oversight and performance monitoring. Collaboration with informatics stakeholders ensured alignment with institutional neutropenic fever guidelines and electronic health record functionality.
Methods: A retrospective analysis of ED encounters meeting suspected neutropenic fever criteria was conducted pre- and post-BPA implementation. Primary outcomes included time from ED arrival to antibiotic administration. Process measures evaluated BPA firing appropriateness and order set utilization. Balancing measures included rates of inappropriate BPA activation and provider feedback related to alert burden. Descriptive statistics were used to evaluate trends over time.
Outcomes: Following implementation of the Neutropenic Fever BPA, the ED demonstrated improved consistency in early identification and antibiotic ordering for high-risk oncology patients. Compliance with the door-to-antibiotic benchmark increased, and workflow variability related to order initiation was reduced. BPA utilization facilitated clearer differentiation between neutropenic fever and sepsis pathways, supporting timely, condition-specific care without increasing inappropriate alerting.
Implications: This initiative highlights the effectiveness of nursing-supported clinical decision tools in improving time-sensitive care for high-risk ED populations. A targeted Neutropenic Fever BPA enhanced workflow reliability, reduced delays, and strengthened interdisciplinary communication. These findings support broader application of condition-specific BPAs to optimize ED performance, patient safety, and quality outcomes in complex clinical environments.

Integrating Nutrition Education into Existing New Graduate Nurse Onboarding
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Aim: This project aimed to improve NGNs' knowledge and confidence related to nutrition for shift work by integrating a brief, targeted nutrition education module into existing nurse onboarding, with the goal of promoting healthier dietary behaviors and supporting workforce sustainability.
Framework: This project was guided by the Model for Improvement using Plan-Do-Study-Act (PDSA) methodology. The intervention was planned based on identified gaps in new graduate nurse nutrition preparedness, implemented through a focused educational module, evaluated using pre-, post-, and follow-up surveys, and analyzed to determine sustained impact and opportunities for continued improvement.
Setting: The project was conducted in a large, urban, teaching hospital located in the southern United States that serves as a tertiary care referral center. The facility supports a comprehensive nurse residency program and provides care across multiple high-acuity inpatient and specialty service lines. New graduate nurses participating in the residency program attend regularly scheduled professional development sessions as part of their onboarding and transition to practice, which served as the setting for delivery of the nutrition education intervention.
Stakeholder Team: Nurse Residency Program Educator / Clinical Nurse Educator Facilitated integration of the nutrition education module into existing residency sessions and supported delivery of the educational intervention. Provided project oversight, approved curriculum content, and ensured alignment with residency program goals and organizational priorities. Project Lead Designed the project, developed the nutrition curriculum, implemented the intervention, collected and analyzed pre-, post-, and follow-up data, and led evaluation of project outcomes.
Methods: This project improved the nurse residency onboarding process by integrating targeted nutrition education for shift work, an area previously unaddressed. A 20-minute module was developed focusing on calorie and protein needs, meal planning, and practical strategies for eating on shift. The independent variable was participation in the intervention. Dependent variables included nutrition knowledge and confidence in identifying and planning healthy meals. These were measured using Likert-scale surveys administered pre-intervention, post-intervention, and at one month. Data were analyzed using descriptive statistics and percentage change to assess immediate improvement and retention over time.
Outcomes: Participants demonstrated significant improvement across all project aims following the nutrition education intervention. Knowledge of calorie needs increased by 45% and protein knowledge by 37% from pre- to post-intervention. Confidence in identifying healthy, shift-friendly meals improved by 20%, while confidence in planning a nutritious diet during shift work increased by 29%. These gains were largely sustained at the one-month follow-up assessment, indicating retention of learning and lasting impact of the educational intervention on nutrition-related knowledge and self-efficacy among new graduate nurses.
Implications: Integrating targeted nutrition education into new graduate nurse onboarding significantly improved knowledge and confidence related to shift work eating, with sustained effects over time. These findings highlight a practical, scalable strategy to support workforce well-being in emergency nursing and other high-acuity environments. Nurse leaders should embed nutrition-focused education into residency programs, while managers can reinforce healthy practices through operational support and break policies. Future research should evaluate long-term effects on burnout, retention, and patient care outcomes, and assess implementation across diverse emergency care settings.

Insulin Pump Safety

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Aim: It was identified through increased occurrence of incident reports that there were opportunities for improvement regarding the care of all patients in the Emergency Department (ED) who presented with an insulin pump. The project's aim was to assess nursing knowledge of the care required for patients who presented with an insulin pump and to develop educational resources to enhance care.
Framework: This Quality Improvement (QI) project was guided by the principles of delivering evidence-based high-quality care, which is the foundation of a High Reliability Organization (HRO), and utilized a PDSA process through the use of Pre/Post-implementation surveys. Goals of implementation include enhanced patient safety, measured by a decrease in occurrence of incidents entered on patients with insulin pumps; increased compliance of required shift assessments and documentation of insulin pumps, evidenced by increased compliance data in the EHR.
Setting: This QI project took place in an ANCC Magnet designated academic medical center located in the Northeast. The ED is a designated ACS Level I trauma center and sees on average 90,000 visits per year.
Stakeholder Team: Stakeholders for this project included frontline ED nurses, team leaders from multiple departments including procedural areas, radiology and obstetrics; other stakeholders were glycemic management, pharmacists, informatics, physicians, and advanced practice practitioners.
Methods: The workgroup developed electronic surveys to assess the level of knowledge and confidence related to insulin pump management. The anonymous, voluntary survey was distributed to ED nurses. After the survey, an education bundle was developed and delivered that included a detailed tip sheet with policies, assessment processes, and documentation standards. Following the implementation of the education bundle, a post-survey was administered. The project workgroup used the PDSA (plan, do, study, act) method for this project. Through multiple brainstorming sessions, the insulin pump icon was added to the Electronic Medical Record. To improve provider awareness, patients with an insulin pump documented as an avatar for Lines Drains Airways (LDA) in the electronic medical record would now display an icon noting the patient has an insulin pump. Hovering over the icon "Insulin Pump" displays a bubble that provides further details with links to resources.
Outcomes: The results of the pre and post survey included data from 275 respondents and showed a 70% increase in reported confidence. There was a 14% increase in documentation compliance, a 3% increase in shift assessment documentation, and a 96% decrease in the number of incidents recorded for patients with insulin pumps.
Implications: Knowledge and confidence with accompanying resources can help ED nurses care safely for patients that have insulin infusion pumps. This project addresses a topic that is relatively common but uses an innovative approach by optimizing the electronic medical record that is intended to remind healthcare providers that the patient has an insulin pump and that these patients have special care requirements.

Improving Emergency Department and Trauma Center Safety: Implementation of an ED Behavioral Emergency Response Team and Security Enhancements

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Aim: Emergency department and trauma center staff reported frequent safety threats from aggressive or combative patients arriving by EMS, law enforcement, or as walk-ins. Prior to intervention, response processes were inconsistent and behavioral emergencies often occurred in public care areas, increasing risk to staff, patients, and visitors. This quality improvement initiative aimed to improve staff safety by implementing a standardized Emergency Department Behavioral Emergency Response Team (ED BERT) process with clear activation criteria, defined response locations, and coordinated security and operational workflows.
Framework: Model for Improvement using iterative Plan–Do–Study–Act (PDSA) cycles to test and refine ED BERT activation, response roles, designated safe locations, and supporting security/environmental workflows.
Setting: Large, urban, academic emergency department and Level I trauma center with high volume and frequent high-acuity medical and trauma presentations.
Stakeholder Team: ED nurse leadership and frontline nurses/techs led workflow design and education. Physician leadership supported activation criteria and clinical escalation. Security leadership/officers partnered on response, safety planning, and environmental controls. Dispatch/call center and prehospital partners supported notification and paging reliability.
Methods: Baseline response relied on a limited paging process ("ED Psych Resus") primarily for patients arriving via law enforcement/EMS, excluding many walk-in events. Through sequential PDSA cycles beginning in 2022, the process was standardized and rebranded as ED BERT, expanding activation criteria to include aggressive/combative patients in the main waiting room and other ED locations. Primary outcome was workplace violence events identified through incident reporting (assaults, threats, weapon/contraband-related behaviors, and significant physical aggression). Trends were evaluated annually from 2021–2025 using descriptive statistics to compare pre- and post-implementation patterns.
Outcomes: Incident reporting data showed a sustained decline in workplace violence events after ED BERT implementation. In 2021 (baseline), 114 events were reported. Following phased implementation beginning in 2022, events decreased to 107 (2022), 67 (2023), and 39 (2024), a 65.8% reduction from baseline. In 2025, 50 events were reported, representing a sustained 56% reduction versus baseline despite ongoing high-risk presentations. Post-implementation events were more frequently identified early and managed through standardized ED BERT activation, supporting coordinated multidisciplinary response.
Implications: A standardized ED BERT process was associated with meaningful, sustained reduction in reported workplace violence. Consistent activation criteria and defined response workflows may improve reliability and reduce escalation in public care spaces. Leaders should prioritize ED-specific behavioral emergency standards, security integration, and environmental safety supports. Ongoing evaluation should include staff injury trends, response reliability, and staff perceptions of safety, and explore scalability of ED BERT models across varied emergency care settings.

Improving Documentation, for Tracking and Injury Data Collection, on Micro-mobility Devices; E-bike and E-scooter, Presenting to the Emergency Department

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Aim: Aim: Community use of micro-mobility devices such as E-bikes and E-scooters has led to a critical increase in injuries requiring emergency department (ED) treatment. Electronic Medical records allow for rapid data collection and analysis to develop treatment protocols and real-time injury prevention strategies, but only if the documentation entered into the record is accurate and facilitates data abstraction. The aim of this quality improvement project was to evaluate the accuracy of electronic health record case identification for e-bike and e-scooter related injuries and develop standardized documentation to improve data capture.
Framework: Implementation Science strategies for audit and feedback and educational interventions designed to improve documentation accuracy.
Setting: The project was undertaken in a mid-sized community ED within a multi-hospital system. The stakeholder team included emergency nurses, emergency physicians, and trauma services team. Implementation Science strategies for audit and feedback and educational interventions designed to improve documentation accuracy.
Stakeholder Team: Emergency room nursing staff, Emergency room providers and Trauma Services. Clinical bedside Pediatric RN primary investigator, Trauma director and educator assisting in facilitating education of staff and project planning.
Methods: EMR data analysis was conducted using ICD-10 codes associated with e-bikes across a community adult, pediatric and 2 free standing EDs over an eight-month period. This data report identified only three cases. To validate the data collection of the EMR, a manual chart review was then conducted over the same eight-month period that potentially involving micro-mobility mechanisms, including falls, bicycle injuries, scooter injuries, and motorized vehicles. This manual audit was only undertaken for potential cases in the pediatric emergency department within the community hospital. Charts were reviewed using EMS reports, triage documentation, and provider notes. Each chart was reviewed to establish whether the injury mechanism represented and E-bike, E-Scooter or a non-electric device. Discrepancies between the documentation and the ICD-10 coding were examined.
Outcomes: The manual review from the above mentioned Pediatric Emergency department only, identified 96 prospective micro-mobility related encounters, on examination of the clinical documentation 34 charts were confirmed as E-bike or E-scooter mechanism. In many cases, inconsistent terminology was observed with EMS, nursing and provider documentation alternately describing the same devices as an e-bike, e-scooter, bicycle, scooter, motorbike or motor vehicle accident. This inconsistency resulted in incorrect or nonspecific ICD-10 code selections and failure to capture these encounters through EMR data collection.
Implications: Improved data collection and analysis supports ED preparedness, trauma planning and the development of community-based outreach injury prevention projects related to the growing uses of these micro-mobility devise. Project findings highlight that reliance on ICD-10 codes alone underestimates the prevalence of e-bike and e-scooter presentations. Based on the identified gap, an educational intervention was developed to improve staff and providers understanding of these micro-mobility device types, and classifications of these devices and correct ICD-10 code selection. Standardizing documentation is expected to improve the accuracy of the EMR, allowing for reliable tracking of emergency departments and analysis of the injuries sustained. Ongoing data collection will be used to assess whether documentation accuracy improves, and this data collection will be complete by April 2026.

Implementing an Emergency Department-Based Stat Laboratory to Reduce Laboratory Turnaround Time and Enhance Throughput

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Aim: Laboratory turnaround time (TAT) significantly affects emergency department (ED) throughput and time-sensitive clinical decision-making. Traditional core laboratory processing introduces delays related to pneumatic tube transport, adding up to 15 minutes, compounded by specimen queuing from hospital-wide demand. These delays impede physician disposition decisions and can prolong ED length of stay. This quality improvement project aimed to reduce laboratory turnaround time by implementing a stat laboratory within the ED, targeting two objectives: decreasing specimen collection-to-receipt time and reducing laboratory processing time. Achieving these objectives was expected to support faster disposition decisions and improved ED throughput.
Framework: This project employed Lean Six Sigma methodology. Lean principles guided identification and elimination of process waste, including transport delays and suboptimal specimen routing, while Six Sigma tools supported statistical process control for turnaround time monitoring and quality assurance.
Setting: The project was conducted at a suburban, university-affiliated Level I trauma center in Northern California serving over 100,000 patients annually.
Stakeholder Team: The interdisciplinary team included Nursing Professional Development Specialists who facilitated workflow education and protocol integration, stat laboratory staff who processed specimens and operated the ED-based laboratory, core laboratory staff who coordinated specimen routing and maintained quality standards, ED operations leadership who directed implementation and resource allocation, and the ED director who provided executive sponsorship.
Methods: The intervention established a stat laboratory adjacent to ED patient care areas, eliminating pneumatic tube transport. Specimens meeting stat criteria were routed to this laboratory rather than the central core laboratory. Variables measured included collection-to-receipt time in minutes, laboratory turnaround time in minutes defined as receipt to result verification for chemistry, hematology, and coagulation panels, and specimen routing percentage stratified by collector type. Ten weeks of high-sensitivity troponin data (November 2025 to January 2026; n = 9,693) were used as a high-volume, time-sensitive tracer assay to evaluate routing adoption trends. Baseline institutional point-of-care testing volume was 29,567 annual tests.
Outcomes: Collection-to-receipt time improved 46.1%, decreasing from 18.81 to 10.22 minutes for phlebotomy-collected specimens and from 18.15 to 9.70 minutes for nursing-collected specimens. Laboratory turnaround time improved 49.7%, decreasing from 39.98 to 20.10 minutes. High-sensitivity troponin collect-to-verify time averaged 62.5 minutes when processed in the stat laboratory compared with 74.2 minutes in the core laboratory. Stat laboratory routing increased from 50.5% in week one to 76.9% by week ten, with overall routing at 70.2%. Collector-type analysis demonstrated that phlebotomy routed 57.9% of specimens to the stat laboratory compared with 43.6% for nursing-collected specimens.
Implications: Diagnostic timeliness in the ED is shaped by workflow decisions across clinical roles. The 49.7% reduction in laboratory TAT and 11.7-minute troponin differential demonstrate that proximity-based laboratory models can shift diagnostic flow earlier without increasing reliance on bedside testing. Variation in routing by collector type reflects modifiable process differences rather than individual performance, highlighting the need for shared standards, role-appropriate education, and decision support within ED workflows. These findings support ED-based stat laboratories as a strategy to improve diagnostic efficiency and throughput in emergency settings. Planned analyses include correlating TAT reductions with ED length of stay and assessing door-to-disposition time for time-sensitive conditions.

Improving Patient Satisfaction Indicators by Implementing Empathy in Action Training

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Objective: This aims of this project were to improve patient satisfaction by enhancing the psychosocial clinical skills and empathy knowledge of Emergency Department (ED) staff by developing and implementing a structured intervention that standardized practices specific to compassionate and respectful communication.
EBP Model: The Johns Hopkins Evidence-Based Practice (JH-EBP) model was used.
Setting: The intervention was implemented at a large academic, safety-net hospital and an ANCC Magnet designated facility in Cleveland, Ohio, which serves approximately 130,000 patients annually across four ED departments. Main campus is both adult and pediatric trauma and burn verified, comprehensive stroke center, and ENA Lantern Award recognized department. These designations support excellence in the delivery of high-quality care to patients presenting all health-related concerns.
Participants: The Executive Director of Emergency Nursing Services, the Nursing Education Professional Department Specialist, the Clinical Quality & EBP Specialist, the Office of Patient Experience, staff nurses and paramedics in the ED. The system nurse scientist led the data analysis.
Methods: In review of the literature, emotional intelligence, empathy, and therapeutic nurse-patient relationships were identified as key drivers of patient satisfaction. The resulting one-time, in-person educational session, titled Empathy in Action, was implemented for ED staff using a first-hand patient exemplar with multiple clinical scenarios to review and an interdisciplinary debrief with nursing staff. This exemplar addressed empathetic communication, patient centered care, & emotional awareness to provide tailored education to front-line nursing staff.
Outcomes: When implemented in February 2025, the emergency department specific National Research Corporation scores (NRC) specific to Nurse Communication (e.g., Did nurses listen carefully to you?), Nurse Respect (e.g., Did nurses treat you with courtesy and respect?), and Nurse Explain (e.g., Did nurses explain things in a way you could understand?) were obtained monthly. These scores were compared pre- & post- intervention and against the national benchmarks. The categories of Nurse Communication, Nurse Respect, and Nurse Explain demonstrated a sustained Year-to-Date increase. Wilcoxon signed-rank tests were conducted to evaluate pre- to post-intervention changes in monthly quality percentages across four patient experience domains. For All ED, median scores increased from 63.10 (IQR = 60.93–66.20) pre-intervention to 68.25 (IQR = 65.23–69.23) post-intervention, reflecting a statistically significant improvement, $W = 4.00$, $p = .014$. For Good Communication, median scores increased from 62.00 (IQR = 61.90–62.10) to 63.50 (IQR = 63.00–63.88), $W = 0.00$, $p = .002$. For Nurses to Explain, median scores increased from 68.60 (IQR = 65.55–69.70) to 76.50 (IQR = 75.33–76.78), $W = 0.00$, $p = .002$. Similarly, Nurses Listen improved from a pre-intervention median of 65.35 (IQR = 63.95–70.83) to 76.60 (IQR = 75.30–77.03) post-intervention, $W = 0.00$, $p = .002$.
Implications: This evidence-based intervention has not only demonstrated a statistically significant impact on patient experience in the emergency department it is also equipping nursing staff with the necessary skills to refine their psychosocial clinical practice. Nurses are often thought to be masters of empathy in the clinical setting, however in high stress, high intensity environments such as the ED our work demonstrates the benefit of ongoing educational support for empathy skill building in ED nurses.

Implementation of an Emergency Department Discharge Callback Process for Viral Respiratory Illness During Flu Season

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Aim: This quality improvement project aimed to implement a standardized emergency department discharge callback process for clinically stable patients with viral respiratory illness in order to improve emergency department throughput, support safe discharge, and reduce unnecessary length of stay during flu season.
Framework: This project used the Model for Improvement with Plan–Do–Study–Act cycles to guide implementation and evaluation.
Setting: The project was conducted in an urban, teaching emergency department within a Level I trauma center in the Midwestern United States. The emergency department serves a high-volume, high-acuity population and experiences seasonal surges related to viral respiratory illness.
Stakeholder Team: The stakeholder team included emergency medicine providers, emergency department registered nurses, Health Unit Coordinators, nursing leadership, and quality and operations personnel. Each group supported workflow development, implementation, follow-up communication, and outcome evaluation.
Methods: A standardized emergency department discharge callback process was implemented for clinically stable patients evaluated for viral respiratory illness without an alternative or concerning diagnosis, guided by a clinical decision algorithm. Providers determined eligibility for discharge with viral testing pending. Nursing staff collected viral swabs, provided discharge education, confirmed callback contact information, and routed discharge paperwork to a designated callback workflow. Health Unit Coordinators reviewed viral test results at scheduled intervals and notified patients using a standardized script, escalating clinical questions to the appropriate care team as needed. For evaluation, discharged patients with an ICD-10 diagnosis of B34.9 (viral illness, unspecified) were identified. The primary outcome measure was emergency department length of stay (LOS). Median and average LOS were compared between pre-implementation and early post-implementation periods using descriptive statistics. Post-implementation data included partial calendar months, with full-month analysis ongoing.
Outcomes: Preliminary analysis of discharged emergency department patients with an ICD-10 diagnosis of B34.9 (viral illness, unspecified) demonstrates a reduction in both median and average emergency department length of stay following implementation of the discharge callback process. These improvements were observed despite an increase in patient volume during the early post-implementation period. Post-implementation data reflect partial calendar months at the time of analysis and are therefore presented as early trends rather than finalized outcomes. Data collection and analysis are ongoing to allow for complete pre- and post-implementation comparison using full-month data.
Implications: Early findings suggest that a standardized discharge callback process for viral respiratory illness is a feasible, low-resource strategy to support emergency department throughput during periods of high seasonal demand while maintaining patient safety and follow-up communication. This nurse-driven workflow promotes efficient discharge of clinically stable patients, reduces unnecessary waiting for test results, and supports closed-loop communication. If sustained improvements in emergency department length of stay are demonstrated with complete data, this approach may inform broader operational strategies for managing seasonal respiratory surges. The use of a standardized algorithm and clearly defined staff roles makes the process scalable and adaptable to other emergency departments seeking to improve patient flow, optimize resource utilization, and maintain quality and safety during periods of increased volume. Future evaluation will include full-month outcome analysis and assessment of sustainability across subsequent respiratory seasons.

Improving the Care of the Pediatric Asthma Patients in a Dedicated Pediatric Emergency Care Space

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Aim: This quality improvement project aimed to enhance timely, evidence-based pediatric asthma care in a high-volume, mixed-age emergency department (ED) by implementing a dedicated pediatric care space and standardized pediatric workflow. Our ED manages approximately 134,000 annual visits, including over 23,000 pediatric encounters, and had persistent challenges meeting regional goals for pediatric asthma care. Primary aims were to reduce door-to-albuterol and door-to-steroid times to under 60 minutes. Secondary aims included measuring Pediatric Asthma Severity Score (PASS) completion and monitoring ED length of stay (LOS) as a balancing measure.
Framework: We used an A3, a structured process-improvement tool, to guide our team through evaluating the current state, identifying barriers, and developing strategies to achieve our door-to-medication goals. The Model for Improvement using iterative Plan-Do-Study-Act (PDSA) cycles supported testing and refining environmental redesign, standardized workflows, and staff education.
Setting: The project took place in a high-volume suburban ED without prior age-specific rooms or pediatric flow. In 2025, the ED treated 23,593 pediatric patients, including 671 encounters involving our pediatric asthma protocol.
Stakeholder Team: We used an interdisciplinary approach led by ED nursing leadership and front-line nurses, who executed the pediatric flow changes and closely monitored door-to-albuterol and door-to-steroid metrics. The team included an ED physician champion who collaborated with inpatient pediatric physicians to align care with pediatric standards. Respiratory therapists were essential partners, providing assessment support, education, and management of prolonged nebulized treatments. Additional contributors included clinical pharmacists, child life specialists, and quality improvement/data analysts.
Methods: This project focused on improving timeliness of pediatric asthma care from patient arrival through assessment and medication initiation. Using data-driven analysis of patient volume, we re-designed eight dedicated pediatric care spaces within one ED pod. The team prioritized early recognition of pediatric asthma patients and rapid delivery of albuterol and systemic steroids through standardized, nurse-driven workflows. Nurses coordinated prioritization and care progression, while respiratory therapists supported asthma severity assessment and treatment delivery. Primary outcome measures included door-to-albuterol and door-to-steroid times, defined as minutes from ED arrival to documented medication administration in the electronic health record. PASS was used to assess severity, guide to treatment escalation, and support reassessment. Time-stamp data were analyzed by comparing baseline and post-implementation performance to evaluate improvements in timeliness and reliability.
Outcomes: Among 671 pediatric asthma encounters in 2025, door-to-albuterol improved from 84.55 to 54.75 minutes (−29.8 minutes, 35.3% reduction). Door-to-steroid improved from 94.37 to 56.75 minutes (−37.62 minutes, 39.9% reduction). PASS completion reached 96%, demonstrating strong adherence to standardized assessments.
Implications: Implementing a dedicated pediatric care space, paired with standardized workflows and competency-based education, resulted in faster and more reliable delivery of evidence-based asthma care in a mixed-age ED. This approach strengthened adherence to severity-guided protocols, improved treatment timeliness, and produced meaningful clinical outcomes. The model is scalable and offers a practical pathway for other high-volume EDs seeking to improve pediatric care without requiring a separate pediatric department.

Linked EMS and Emergency Department Outcomes Provide Evidence for Improvement in Prehospital Stroke Care

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Purpose: Emergency Medical Services (EMS) providers serve as the critical first point of contact for acute stroke patients, yet accuracy of prehospital stroke identification and adherence to evidence-based stroke care bundles remain poorly characterized at the national level. This study evaluated EMS provider accuracy in identifying stroke patients and examined the relationship between stroke recognition and completion of recommended prehospital stroke care bundles using a large national dataset.
Design: This was a retrospective study of deidentified data from the ESO Data Collaborative, a national EMS database.
Setting: Data were collected from over 900 EMS agencies across multiple geographic regions participating in the ESO Data Collaborative, representing diverse emergency medical service systems from across the USA.
Sample: The study included 27,807 emergency 9-1-1 responses between 2023 and 2025 that resulted in an emergency department diagnosis consistent with Stroke or Transient Ischemic Attacks (ICD-10 code I63). The median patient age was 73 years (IQR: 63-82), with 51% female patients.
Methods: EMS provider impressions were categorized as stroke-consistent if they included stroke, transient ischemic attack, or stroke-related presentations documented in the EMS primary or secondary impression fields. Interfacility and medical transports were excluded. Stroke bundle completion was defined as documentation of all three: blood glucose monitoring, complete stroke assessment, and last known well time. Provider impressions for missed stroke cases were categorized into four clinical domains. Descriptive statistics were calculated and Chi-Square test were performed.
Results: Among 27,807 ED-confirmed stroke patients, 66% (n=18,396) received an EMS impression consistent with stroke, including 63% with stroke as the primary impression and 3% as secondary impression. Complete EMS stroke bundle performance was documented in 51% of all ED-diagnosed strokes but increased significantly to 70% among those with stroke-consistent EMS impressions ($p < 0.01$). Among patients receiving stroke-consistent impressions, individual bundle elements showed higher completion rates when compared to the total population of patients with ED diagnosed stroke: glucose monitoring 93% vs. 89%, stroke assessment 88% vs. 68%, and last known well time documentation 75% vs 56%, respectively. Stroke bundle completion improved annually from 47% in 2023 to 54% in 2025. Patient age and gender did not differ between correctly and incorrectly identified stroke cases. Among the 9,411 patients without stroke-consistent EMS impressions, provider primary impressions included non-stroke specific neurologic or altered mental status presentations (66%), general or nonspecific conditions (16%), pain, injury, or trauma (9%), and cardiac or respiratory complaints (9%).
Implications: This national analysis of linked EMS and ED outcomes reveals that one-third of ED-confirmed stroke patients may go unrecognized by EMS in the prehospital setting, representing missed opportunities for early stroke intervention. The strong association between correct stroke identification in the impression fields and improved care bundle completion demonstrates that provider clinical impression directly influences delivery of evidence-based interventions. The predominance of neurologic and altered mental status presentations among missed cases suggests that atypical stroke presentations may challenge provider recognition. Quality improvement initiatives should integrate EMS and ED data to improve identification of atypical or subtle stroke presentations and emphasize the importance of evidence-based care bundles.

Little Patients, Big Decisions: Improving Pediatric Triage Confidence in the Emergency Department

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Aim: Emergency department nurses were found to be missing critical assessment skills when evaluating pediatric patients, particularly during periods of high respiratory illness incidence. This gap in pediatric triage competency posed a risk to the timely identification and management of children presenting with respiratory distress. The scope of this project focused on enhancing emergency nurses' confidence and clinical judgment in recognizing respiratory illnesses in pediatric patients during the influenza and RSV seasons. This quality improvement project aimed to improve emergency department nurses' confidence in identifying pediatric respiratory emergencies through a brief, targeted educational intervention. By strengthening triage assessment skills, the project sought to promote earlier recognition, appropriate prioritization, and ultimately, improved patient outcomes.
Framework: This project was guided by the Plan-Do-Study-Act (PDSA) framework
Setting: The project took place at an urban, academic Level I safety-net trauma center
Stakeholder Team: Staff nurses, a project manager, interested parties with expertise in pediatric and emergency nursing, nurse educators, nursing leadership, and a pediatric emergency physician.
Methods: The pre–post, non-experimental quality improvement design focused on emergency nurses who performed triages. A pre–post, non-experimental quality improvement (QI) design was used to evaluate the effectiveness of an educational intervention for emergency nurses performing triage assessments. The project targeted triage nurses in the emergency department during the peak influenza and respiratory syncytial virus (RSV) season. The intervention consisted of a brief PowerPoint presentation developed by the project team to enhance nurses' knowledge and recognition of respiratory emergencies. The presentation emphasized evidence-based triage priorities, early identification of respiratory distress, and best practices for patient assessment during flu and RSV surges. Data was collected before and after implementation to assess changes in nurse knowledge and triage performance. The pre-intervention data served as the baseline measure, and post-intervention data were collected after participants completed the educational session. Participation was voluntary, and data were de-identified to maintain confidentiality. The project adhered to institutional QI processes and did not require formal IRB review as it did not involve experimental manipulation or patient-level intervention.
Outcomes: Following the educational intervention, emergency department nurses demonstrated a marked improvement in confidence when identifying respiratory illnesses in the pediatric population. Median confidence scores increased from 3.21 in the pre-survey to 3.96 in the post-survey, indicating a meaningful enhancement in perceived competence. This improvement suggests that the brief PowerPoint-based educational session effectively increased triage nurses' self-assessed ability to recognize and prioritize respiratory emergencies during the influenza and RSV season.
Implications: In emergency nursing practice, integrating short, focused updates, such as seasonal clinical refreshers, can strengthen clinical judgment and preparedness during peak patient surges. Anecdotal feedback suggested that the timely identification and management of pediatric conditions was associated with improved patient satisfaction while maintaining high standards of care.

Medical-Forensic Evaluation of Injury in Victims of Non-Fatal Strangulation

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Purpose: Non-fatal strangulation (NFS) occurs commonly in the context of intimate partner violence (IPV). Despite the knowledge that severe injury and death can occur as a result of the compressive forces of strangulation, there is limited literature on the prevalence of injuries from NFS. Many surviving strangulation victims will have no external visible injury, presenting challenges for the medical evaluation of NFS victims, and often undermining the perceived severity of the presenting condition. To improve the overall care of victims of NFS, clinicians must recognize the most common types of injury that these patients may present with acutely. The purpose of this study was to review the forensic documentation of NFS victims assessed by a Forensic Nurse Examiner, to add to the limited existing literature surrounding frequency of strangulation related injuries. The primary objective was to determine the prevalence of documented external visible injury. Secondarily, the goal was to explore advanced imaging use and findings of internal injury.
Design: Mixed quantitative and qualitative research.
Setting: A mid-size Midwest hospital system with 6 emergency departments.
Sample: Inclusion criteria included age over 18 years, completion of a medical-forensic examination, and disclosure of NFS.
Methods: A retrospective chart review of a cohort of 303 NFS victims was conducted over a 19-month period. A single investigator reviewed forensic nursing documentation in the electronic medical record, and extracted data on external visible injury, the use of advanced imaging, and internal injury. A second investigator reviewed 100% of the charts, with universal agreement. Statistical analysis and interpretations were completed with the assistance of the Northern Kentucky University Burkardt Consulting Center (Highland Heights, KY).
Results: Of 303 patients, 213 (70%) had documented external visible neck injury. The most common finding to the neck was redness, followed by abrasions and bruising. Petechiae, above the point of applied pressure, were documented in 102 patients (34%). Location of petechiae included scalp, facial, neck, eyes, ears, and oral. Subconjunctival hemorrhages were documented in 22 patients (7%). CTA neck imaging was used in 187 patients (62%). Abnormalities were noted on 9 CTA neck results (5%) -- 5 vascular abnormalities, 3 lung opacities, 2 neck edema, and 1 peri-laryngeal edema.
Implications: The dramatic variations in patient presentation support the current literature that, regardless of the presence or absence of documented findings, no assumptions should be made about the seriousness of injury or patient safety. 4 of the 9 positive CTAs were in patients who had no documented external visible injury, underscoring the importance of imaging to detect potentially devastating injury.

Minutes Matter: Reducing Delays in Antibiotic Administration for Sepsis Patients in the Emergency Department

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Objective: Local data suggested that some sepsis and septic shock patients in the Emergency Department (ED) experienced delayed administration of IV antibiotics (> 1 hr). Rapid administration of antimicrobials is an important and effective intervention to reduce mortality in sepsis. Therefore, our objective was to improve the time from IV antibiotic order to IV antibiotic administration by enhancing nurses' knowledge of the current evidence, identifying and removing barriers leading to delays, and providing ongoing feedback.
EBP Model: The Iowa Model was used.
Setting: The project was implemented in the Emergency Departments (ED) of an ANCC Magnet With Distinction designated community two-campus hospital in Southern CA.
Participants: Clinical ladder ED staff nurses conducted chart audits, provided education to staff, and developed a sepsis checklist; the Sepsis Program Manager conducted the literature search, and collected and analyzed project outcome data.
Methods: The current Surviving Sepsis Campaign (SCC) Guidelines recommend administering antimicrobials immediately, ideally within 1 hr of recognition, for adults with possible septic shock or a high likelihood of sepsis. This is consistent with the 2018 SSC Hour-1 Bundle which set the goal of giving antimicrobials immediately for patients presenting with sepsis or septic shock, defining presentation time as ED triage. To support timely antibiotic administration, we implemented several interventions. First, nurses agreed on a goal to administer antibiotics within 30 minutes of order time in at least 70% of cases. All ED nurses then attended a skills day training focused on sepsis education, the new timing goal, and strategies to identify and overcome barriers to timely antimicrobial delivery. Sepsis goals and project outcomes were tracked and regularly reviewed with the ED Unit Practice Council. Updates were communicated to staff through email, communication books, and unit postings. The ED Sepsis order set was revised to include a nursing order to insert two IVs. Chart audits were conducted to measure time to antibiotic, and individualized peer feedback was provided for cases needing improvement. Additionally, a structured, timebound sepsis checklist was developed to support nurses in consistently achieving the 30 minute administration goal. Retrospective chart audits established baseline performance prior to the start of interventions in January 2025. Time from antibiotic order to administration was then evaluated through ongoing chart audits over 12 consecutive months.
Outcomes: Initial baseline data demonstrated time from IV antibiotic order to administration within 30 minutes averaged 41%. Findings showed that we surpassed our goal with post-intervention data demonstrating continuous improvement in time to IV administration 78% of the time in December 2025.
Implications: Meaningful reduction in antibiotic delays is achievable by leveraging frontline nurses empowered with a goal, tools and feedback strategies without additional staffing or advanced technology. Research should examine workload impact and strategies to improve antibiotic timing such as optimizing order sets, checklists, and electronic tools. Professional development of ED nurses should include ongoing education on current sepsis guidelines, and hospitals should review sepsis cases to determine whether limited IV access contributes to delays.

More Than One Story: Understanding the Layers of Trauma in Survivors of Intimate Partner Violence & Sexual Assault

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Purpose: Polyvictimization—the experience of multiple forms of violence across the lifespan—is common among individuals presenting for care following sexual assault or intimate partner violence. These overlapping trauma exposures are associated with a range of adverse health outcomes, including chronic illness, mental health disorders, substance abuse, and housing instability. Forensic Nurses are uniquely positioned to identify these histories and deliver trauma-informed interventions that extend beyond the immediate crisis, tailoring education, safety planning, and referrals to support long-term recovery. A series of standardized screening questions were added to the medical-forensic examination documentation within the electronic medical record. The questions assess prior victimization by the current offender and by others during childhood and adulthood.
Design: A mixed methods research design best met the needs of this project by allowing for both qualitative and quantitative data collection and analysis. The qualitative component is essential for exploring the subjective experiences of patients during the screening process, particularly given the sensitive and potentially retraumatizing nature of disclosing polyvictimization. The quantitative component allowed for the analysis of measurable outcomes, such as the percentage of patients who disclose polyvictimization, and the percentage of patients experiencing adverse health and socioeconomic outcomes. Integrating these forms of data offers a comprehensive understanding of both the effectiveness and the impact of routine polyvictimization screening in forensic nursing practice.
Setting: A mid-size hospital system in the Midwest that includes six emergency departments.
Sample: Adult patients (males and females over the age of 18) patients who consented to a medical-forensic examination by a Forensic Nurse, following an incident of sexual assault or intimate partner violence.
Methods: Using the data from the screening, a retrospective chart review was conducted to examine the prevalence of polyvictimization and associated health impacts among 600 adult patients who received a medical-forensic examination for recent sexual assault or intimate partner violence. A single investigator reviewed forensic nursing documentation in the electronic medical record, and extracted data on prior victimization in adulthood and childhood, including the narratives provided by the patient in quotation marks, and their history of chronic health issues, mental health issues, and social issues. A second investigator reviewed 100% of the charts, with universal agreement. Statistical analysis and interpretations were completed with the assistance of the Northern Kentucky University Burkardt Consulting Center (Highland Heights, KY).
Results: Findings suggest a high prevalence of polyvictimization, with the majority of patients disclosing prior trauma histories, including childhood abuse and repeated victimization in adulthood. Commonly observed health and social impacts included anxiety, depression, post-traumatic stress symptoms, mood and personality disorders, hepatitis C, substance use, and homelessness. These estimates may be conservative, as health information was collected through open-ended prompts rather than a standardized tool, and some patients may have underreported due to stigma or discomfort.
Implications: These findings underscore the value of structured polyvictimization screening in forensic nursing care. Recognizing cumulative trauma exposure can strengthen the delivery of patient-centered care and support more effective connections to long-term services. Forensic nurses play a vital role in identifying polyvictimized individuals and ensuring their complex needs are met through compassionate, coordinated care.

Navigating Specialized Care for Older Adults: An Emergency Room Geriatric Nursing Service

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Purpose: The purpose of this Institutional Review Board (IRB) approved research study is to evaluate the effectiveness of a geriatric nurse service in the emergency room for patients over 70 years with outcomes that include clinical throughput metrics and patient satisfaction scores.
Design: The study is a retrospective cohort design for adult patients aged over 70 admitted to the emergency room during pre- and post-intervention periods (7/1/2022-6/30/2023 and 5/1/2024-4/30/2025, respectively)
Setting: The study setting included a mid-Atlantic 342 licensed bed community hospital within the emergency department with 22 beds and 10 fast-track beds with 42,000 patient visits per year with ~ 27 % patients aged over 70 years.
Sample: The sample included patients over the age of 70, admitted to the Emergency Department between May 1, 2024-April 30, 2025, that includes the geriatric nursing service, and compared patients over the age of 70 admitted to the Emergency Department between July 1, 2022-June 20, 2023, prior to initiation of the geriatric nursing service. Overall, 21948 patients met inclusion criteria (10212 pre, 11736 post).
Methods: We compared outcome measures from aggregate-level reports (patient experience, visit volume, ER length of stay [LOS], rates of left-without-being-seen, and readmissions using regression analyses (clustered errors multiple-testing adjusted). Aggregate-level reports of patient satisfaction score, ED CAHPS, were compared including the summary domains and individual questions. The intervention included assigning a geriatric certified nurse to patients over 70 in the ED, in addition to the ED primary nurse, that included implementing evidence based geriatric screening tools accompanied by applicable interventions. Measurements include the use of patient satisfaction scores, ED CAHPS, ER length of stay in hours, and percentage of patients that left-without-being-seen.
Results: Outcome measures had statistically significant changes associated with the intervention including: patients were more likely to indicate that “nurses explain in a way you understand” (64.6%-74.5%),”nurses listen carefully to you” (68.55%-74.52%); ER LOS decreased (7.5 hours to 6.9 hours); left-without-being-seen rate decreased (4.7% to 3.6%); all while daily ER visit volume increased 15.0%.
Implications: This study showed improved patient outcomes among those over 70 in the ER after employing a geriatric nursing service. Even though overall ER volume increased, ER LOS reduced, and patients were less likely to leave the ER without being seen. Patients also reported improved patient satisfaction scores.

Naloxone Within Reach: Expanding Access Through an ED Distribution Box

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Aim: This project aims to establish and evaluate a 24/7 naloxone distribution box at the Emergency Department (ED) patio by tracking the amount of inventory withdrawn, refill frequency, and caregiver engagement during the first three months of implementation.
Framework: This project utilized the Model for Improvement, incorporating Plan-Do-Study-Act (PDSA) cycles to design, test, and refine the naloxone distribution box workflow, caregiver education, and technology-enabled inventory tracking processes.
Setting: The project took place in a community-based, urban Emergency Department in Southern California. The ED serves a diverse, high-acuity population with significant behavioral health and substance-use needs and operates within a mixed medical-surgical and emergency services environment with continuous access to acute care resources.
Stakeholder Team: The project team consisted of a nurse manager who provided overall oversight and alignment, and an assistant nurse manager who coordinated daily operations and workflow development. Acute care emergency nurses contributed to process mapping, frontline feedback, and implementation. Emergency department technicians supported daily stocking and inventory logging. The education department delivered staff training and harm-reduction materials, while security personnel ensured safe placement and monitoring of the distribution box. Quality improvement staff assisted with data tracking and analysis.
Methods: This project sought to improve naloxone accessibility and reliability by implementing a standardized 24/7 ED-patio distribution box supported by a clear workflow. The box was stocked with naloxone kits and QR codes linking to behavioral health and substance-use resources. A digital logging system was used to record each withdrawal and refill with timestamped counts. Key measures included daily kits taken, refill quantities, refill intervals, running inventory, and caregiver engagement through training completion and confidence ratings. Planned analyses focused on descriptive statistics, 7-day moving averages to assess usage stability, regression to identify trends, and inventory modeling to estimate days to stock depletion. These methods enabled continuous monitoring and refinement of the process.
Outcomes: Preliminary data show strong utilization of the naloxone distribution box since its launch on December 10, 2025. Across the first 23 logged entries, 288 kits were taken, indicating consistent community demand. Daily usage averaged 12.5 kits, increasing to 20.6 kits on active withdrawal days. A 7-day moving average showed stable use without significant trends. Three refills (240, 24, and 120 kits) produced a mean interval of 10.5 days, and inventory modeling projected 7–8 days to stock depletion after each refill. Occasional zero-inventory days highlighted the need for continuous monitoring. Caregivers completed training and reported high confidence with naloxone education, and QR-code scans showed steady engagement with linked resources.
Implications: Early results indicate that a 24/7 naloxone distribution box can effectively expand community access to harm-reduction resources while fitting seamlessly into ED workflows. Steady usage, consistent refill needs, and strong caregiver engagement suggest that this model is practical and sustainable for emergency nursing practice. These findings reinforce the importance of ongoing harm-reduction education and highlight the value of digital tracking for maintaining reliable inventory. For leaders, the project offers a scalable, low-burden approach to improving public health outcomes. Continued data collection will help refine inventory thresholds and evaluate the longer-term impact of ED-based naloxone distribution.

Nurse-Led Bedside Shift Handover to Strengthen Shared Decision-Making in the Emergency Department

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Purpose: Patient-centred communication and shared decision-making are essential to high-quality emergency care but remain difficult to integrate consistently into emergency department workflows due to crowding and nursing workload. Bedside shift handover may provide a structured opportunity to involve patients during care transitions. The purpose of this study was to evaluate the implementation of nurse-led bedside shift handover combined with shared decision-making and its associations with patient-reported experiences and emergency department operational outcomes.
Design: A hybrid type III effectiveness–implementation study using an interrupted time-series design and multivariable regression analyses.
Setting: A single urban, non-academic emergency department in Western Europe with high patient volume and variable crowding.
Sample: Routinely collected data from 117,085 emergency department visits between January 2023 and April 2025 were included. Of these, 45,946 visits met eligibility criteria for bedside shift handover, defined by nurse-to-nurse shift change during the emergency department stay. All eligible visits were included without exclusion criteria. All emergency department nursing staff were exposed to the intervention as part of routine care.
Methods: A structured nurse-led bedside shift handover supported by a standardized communication framework and a shared decision-making prompt was implemented. Implementation strategies included staff training, local champions, awareness activities, and leadership support. Primary outcomes were documented bedside shift handover occurrence, emergency department length of stay, revisit rates, and patient-reported experience measures. Nursing workload and emergency department crowding were measured using validated departmental indicators and examined as contextual variables. Interrupted time-series analyses and multivariable regression models were applied. The study was reviewed by a medical ethics committee and exempted from formal ethics approval requirements due to the use of routinely collected data.
Results: Documentation of bedside shift handover increased from 1.4% before implementation to 9.2% during the implementation phase, peaking at 32% following intensified implementation activities. Uptake closely followed implementation intensity and was negatively associated with nursing workload (stationary $R^2 = 0.81$). Bedside shift handover occurred more frequently among patients undergoing diagnostic testing or admission. Emergency department length of stay was modestly longer for visits with bedside shift handover (+8%; 95% CI 6.1–10.1), while revisit rates did not differ. Patient-reported involvement in decision-making increased from 19.6% to 75.0% over the implementation period ($p < 0.001$), alongside higher overall satisfaction.
Implications: Nurse-led bedside shift handover can be implemented and sustained in a high-pressure emergency department but is highly sensitive to nursing workload and crowding. Improvements in patient-reported involvement were observed at the system level rather than being attributable to individual exposure, suggesting broader communication effects. Emergency nursing leaders should consider staffing and organisational conditions when implementing bedside communication interventions. These findings provide actionable evidence to inform emergency nursing leadership, staffing decisions, and implementation strategies for bedside communication practices.

No Detours to Healing: Redefining Emergency Department Flow

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Aim: The aim of this initiative was to implement direct-to-room processes by December 2025 to reduce patients leaving prior to care completion by 50%, decrease discharge length of stay (LOS) by 15%, and improve overall patient experience scores by 10 points in the Emergency Department (ED).
Framework: Using the Institute for Healthcare Improvement (IHI) Model for Improvement, an inclusive, team based group of traditional and non-traditional emergency care roles conducted a current-state assessment and converted all available space into treatment areas, expanding capacity from three to thirteen rooms. Patient flow was redesigned to allow direct-to-room placement without prerequisites, supported by resource managers coordinating front- and back-end processes. Interventions included point-of-care testing at mobile workstations, radiology queue prioritization, efficiency targets for each care step, and real-time performance dashboards. Continuous improvement was driven by rapid Plan-Do-Study-Act (PDSA) cycles, adjusted by shift.
Setting: The facility is 162-bed community hospital in coastal North Carolina, serving veterans, military families, and an aging civilian population. Our full-service ED cares for over 50,000 patients annually and operates 39 beds.
Stakeholder Team: The Chief Nursing Officer (CNO) and Chief Medical Officer (CMO) were executive sponsors. ED medical and nursing directors collaboratively lead the practice change and provided real time data in multidisciplinary huddles. Directors from each service line in the organization attended monthly workgroup sessions and supported needed changes to achieve the new flow pattern. Front end staff served as subject matter experts.
Methods: To reduce patients leaving prior to care completion and discharge LOS data was collected through timestamps in the Electronic Medical Record (EMR) to determine: (1) arrival to provider (2) arrival to room (3) discharge length of stay (4) left without being seen (5) left against medical advice. This data was analyzed and shared in daily, weekly and monthly reports to the stakeholders. Patient experience data was collected through Press Ganey surveys.
Outcomes: Comparing Fiscal Year (FY) 2023 to FY 2026 to date arrival to room time decreased from 37 minutes to 14 minutes, a 62% reduction, and arrival to provider time dropped from 45 minutes to 19 minutes, a 57% reduction. Discharge LOS improved from 217 minutes to 173 minutes, a 20% reduction. LWBS rates fell from 4.29% to 1.27%, a 70% reduction. LWBS/AMA rates decreased from 6.01% to 2.85%, a 52% reduction. Press Ganey ED overall experience score improved from 55.05 points to 66.12 points.
Implications: This initiative challenged long-standing norms by removing traditional triage steps and creating a patient-first model supported by real-time data and rapid-cycle improvement. This approach demonstrates that significant operational and experiential improvements can be achieved through workflow redesign, multidisciplinary collaboration, and continuous performance monitoring. The team plans to present data and share this innovative model to stakeholders throughout our hospital system. Site visits have already begun for those inspired by our process improvement project.

No Falls, Just VIBES: A Phased Approach

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Aim: No Falls, Just VIBES (Visualize Risk, Implement with Yellow, Bring it in Huddles, Empower the Team, Stop Falls) was a nurse- and staff-led initiative developed to translate evidence-based practices into strategies to reduce patient falls in the Emergency Department (ED). In 2024, the ED reported 63 falls with injury, including four falls with major injury, despite standardized prevention protocols. To address this gap, a frontline workgroup designed No Falls, Just VIBES in April 2025. A phased weekly rollout was used to promote sustainable practice changes without overwhelming staff. The initiative aimed to improve patient safety and outcomes.
Framework: The project was guided by Lean Six Sigma to redesign workflows and integrate fall-prevention interventions into practice. Staff focus groups were conducted to understand processes and identify barriers to effective fall prevention. Inefficiencies and unnecessary variation, such as retrieving supplies from multiple locations, were eliminated. Waste reduction, workflow standardization, and enhanced communication were implemented to maintain patient safety and staff engagement.
Setting: The initiative was implemented in an urban teaching hospital ED in New York that serves over 100,000 patients annually.
Stakeholder Team: This interdisciplinary initiative was led by ED nursing leadership in partnership with bedside nurses and technicians. Attendings, residents, and physician assistants participated in daily huddles to identify high-risk patients, reinforcing shared responsibility for fall prevention. Nursing leadership, including the Quality Clinical Program Manager, Educators, Nurse Managers, Director, and Senior Clinical Nurses, provided oversight and operational support. The System Vice President of Emergency Nursing, Chief Nursing Officer and Director of Nursing Quality supported system-wide adoption of the project.
Methods: A retrospective analysis of data from April 2024 to April 2025 was conducted. No Falls, Just VIBES targeted patients identified as high risk using the Kinder Fall Risk Assessment Tool. Primary outcomes included falls with major injury, while secondary outcomes included falls with injury. This Quality Improvement project streamlined identification of high-risk fall patients and implementation of prevention strategies using a phased, weekly rollout. Week 1 emphasized education, communication, badge buddies, and Fall Advocates as unit leaders. Week 2 centralized yellow fall-risk kits for timely access. Week 3 implemented structured huddles, rounding tools, and proactive hourly rounding. Week 4 focused on team empowerment through fall data review, case studies, and competency reinforcement.
Outcomes: From April to November 2025, there were 24 falls with injury, representing a 47% reduction compared to 51 falls during the same period in 2024. Notably, there have been no falls with major injury since implementation. Though fall rates continued to fluctuate during high-census months, overall, the decrease was significant. Anecdotally, staff reported increased satisfaction due to improved communication, streamlined workflows, and greater transparency of fall data. These improvements enhanced staff engagement, interdisciplinary collaboration, and vigilance.
Implications: This project demonstrates the effectiveness of a tiered, frontline-driven approach to fall prevention. By integrating evidence-based practices into daily workflows, No Falls, Just VIBES supports relationship-centered care and advances patient safety and quality. The long-term goal is to standardize this model across units and throughout the health system to sustain reductions in falls.

Preventing Pressure Injuries in the Emergency Department

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Aim: Emergency Department overcrowding creates competing clinical priorities for registered nurses, increasing the risk of missed or delayed identification of pressure injuries. Critically ill patients are particularly vulnerable, and limited time and resources in the ED can result in inadequate skin assessments and delayed prevention measures. Hospital-acquired pressure injuries are associated with increased morbidity, mortality, healthcare costs, reduced operational efficiency, and potential litigation. This quality improvement initiative aimed to improve early identification and validation of skin assessments and to prevent pressure injuries by ensuring appropriate assessment and intervention within 12 hours of a patient's arrival to the Emergency Department.
Framework: The project was designed using a pre-post quality improvement framework at a single-site, Level-1 Trauma Center. A convenience sample of patients presenting to the Emergency Department within 12 hours of arrival was used. Data were abstracted and analyzed for compliance with Braden Scale documentation, skin validation, and identification of pre-existing skin impairments both before and after the implementation of the initiative to evaluate its effectiveness.
Setting: The study setting was a Level 1 trauma center in the North East who see over 90,000 patients a year.
Stakeholder Team: The core team of healthcare professionals included the Emergency Department Director, Nurse Manager, Assistant Nurse Managers, and Clinical Nurse Educators The educators role was to educate the staff on proper documentation, staging of pressure injuries, and obtaining photoes. Educational resources were created to assist with compliance. Chart audits performed by the Nurse Manager and Assistant Nurse Managers helped to review compliance. Education occurred daily to monitor and improve documentation
Methods: Our initiative was the development of a dedicated Skin Team to identify present on arrival pressure injuries, early detection of pressure injuries, prevent pressure injury, and increase compliance with documentation of a Braden Scale Score and Skin Validation. The Skin Team is comprised of a RN and two Nursing Assistants. This team was educated on proper documentation, staging of pressure injuries, and Tissue Analytics. "Badge Buddies", an education resource created to assist with compliance was implemented. Chart audits and real-time education occurred daily to monitor and improve documentation.
Outcomes: Prior to the implementation of the Skin Team, the compliance with documenting a Braden Scale Score within 12 hours was 41.5%. The compliance with Skin Validation within 12 hours was 1.3%. After implementing the Skin Team, our compliance with documenting a Braden Scale Score within 12 hours increased to 96.8% and Skin Validation increased to 66.3%. Skin impairments that identified on arrival increased by 29.9% and the facility-acquired incidence decreased by 59.1%.
Implications: Creating the Skin Team has increased the nurse's knowledge on preventing pressure injuries. This initiative has improved patient outcomes by focusing on prevention and proactive management of pressure injuries. The Skin Team has reduced the incidence and severity of pressure injuries, increased the documentation of arrival pressure injuries, which has decreased the facility-acquired incidence. It has reduced costs for the facility. The estimated cost of treating pressure ulcers is 2.5 times the cost of preventing them

Preventing Workplace Violence

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Aim: To reduce workplace violence (WPV) incidents in a high-volume emergency department by improving reporting and follow up, enhancing staff awareness, and implementing targeted, data-driven prevention strategies to strengthen staff safety and psychological well-being for both patients and clinicians.
Framework: This project was guided by a quality improvement framework utilizing Plan-Do-Study-Act (PDSA) cycles and Just Culture principles. Data analytics and frontline staff engagement were used to identify trends, test the effectiveness of interventions, and promote shared accountability for safety.
Setting: The project was implemented in a community hospital emergency department, serving a diverse patient population with frequent behavioral health in high-acuity presentations.
Stakeholder Team: The multidisciplinary stakeholder team included emergency nurses, emergency department leadership, quality and safety representatives, hospital security, and administrative leadership. Frontline staff input was incorporated to ensure interventions were practical and sustainable.
Methods: A retrospective analysis of workplace violence incident reports over a 12-month period was conducted using electronic reporting data. Incidents were categorized by type, location, timing, and staff role. Based on identified trends, interventions included leadership rounding focused on safety, staff education on WPV reporting and de-escalation, real-time safety huddles, and enhanced collaboration with security. Pre- and post-intervention data were compared to evaluate effectiveness.
Outcomes: Following implementation, workplace violence reporting increased, indicating improved staff awareness and reporting confidence. Physical assault incidents decreased, while early identification and de-escalation events were more effective. Staff engagement and perception of leadership support for safety improved, contributing to a stronger culture of safety in the emergency department.
Implications: Emergency departments can reduce workplace violence by leveraging data analytics, frontline engagement, and leadership visibility. This project demonstrates a scalable, nurse-driven approach to WPV prevention that supports staff retention, resilience, and safer care environments across emergency settings.

Project Shield: Between Care and Chaos

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Objective: Workplace violence remains a critical threat. Weapons entering emergency departments pose a significant threat to staff, patients, and visitors. Traditional security measures often fail to detect concealed weapons. The objective of this evidenced based practice initiative was to reduce the presence of weapons in the emergency department by implementing a primary weapons detection system with a secondary search line. A secondary aim was to increase the staff's feeling of safety in the workplace.
EBP Model: This evidence-based practice project was guided by Donabedian's Structure-Process-Outcome framework, with a primary focus on the structure of the emergency department environment. Structural changes included remodeling the front emergency department entrance and installing a weapons detection system. Further measurements were conducted analyzing how environmental and workflow changes influence safety outcomes.
Setting: The project was implemented in a 55 bed Midwest community level III emergency department treating 80,000 patients per year. The ED sees a diverse patient population in a low socioeconomic location with frequent encounters involving substance use disorder, behavioral health, trauma, and high acuity presentation of patients.
Participants: The multidisciplinary stakeholder team included: Emergency department leadership, who identified the safety risks and initiated interventions. Facilities, security, and operations leaders, who oversaw structural redesign and entrance remodeling. Hospital administration who supported with capital resources and policy alignment. Emergency nurses and frontline staff provided workflow feedback and escalated safety concerns. Interprofessional collaboration was essential for success.
Methods: The emergency department entrance was remodeled to create a controlled point of entry with a weapons detection system (passthrough metal doctor, Xray, and physical pat downs) designed to screen all individuals entering the department. Security workflows were redesigned to support consistent screening, secondary searches, 24-hour surveillance, and safe weapon removal when indicated. Monthly weapon counts were tracked as a primary outcome measure. Staff feedback related to perceived safety and workflow impact was also collected during implementation. Data was reviewed monthly at a multidisciplinary workplace violence committee to assess trends and perform PDSA refinements.
Outcomes: The weapons detection system identified and removed 3204 weapons over a 10-month time frame. Breakdown of detected items are as follows: knives N=1914 (60%), Blunt weapon N=1225 (38%), pepper spray/mace N= 61 (2%) firearms N=3, sword N=1. Leadership, security, and frontline staff reported improved situational awareness and perceived safety within the department. Data collection is ongoing.
Implications: This project highlights the effectiveness of environmental design and technology as a pinacol to weapons screening and the mitigation of lethality of workplace violence. Rapid identification and removal of weapons improved the perceived safety of staff not only in the ED but the entire hospital. Implications for emergency nursing practice include advocacy for physical space redesign, collaboration with security operations, and using weapon detection systems to reduce the risk and lethality of workplace violence. Furthermore, reporting data to inform policy and resource allocation is a crucial aspect as it pertains to future workplace violence prevention. Future analyses will examine correlations between weapon detection and reported workplace violence events, staff and security injury rates, and staff retention.

Project Swift (Safe, Welcoming, Individualized, Fast, Treatment)
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Aim: In 2024, our hospital's average length of stay (LOS) in the ED was 13–24 hours. Prolonged stays increase infection risk, costs, and lower satisfaction. Project Swift, a nurse-driven initiative, aims to reduce LOS, improve patient flow, reduce readmissions, and deliver efficient, high-quality, patient-centered care.
Framework: The project was designed using Six Sigma and Lean methodologies, supported by Plan–Do–Study–Act (PDSA) cycles.
Setting: An academic Level 1 trauma center providing comprehensive emergency and critical care, serving diverse populations, and training medical students and residents.
Stakeholder Team: A multidisciplinary team delivers patient care: charge nurses coordinate care, providers evaluate and treat, nurses implement orders, registration manages financial intake, social work addresses needs, and clerical staff support logistics.
Methods: This project applied Lean and Six Sigma principles to emergency department flow, emphasizing patient-centered, data-driven efficiency. By shifting Rapid Medical Evaluation (RMED) to 0700 from 1100 and adding a dedicated Triage charge nurse, low-acuity patients were evaluated and discharged sooner without using beds, reducing waste, eliminating duplicated work, improving coordination, cutting wait times by 50%, increasing front-end discharges by 18%, and significantly decreasing overall length of stay. In the North Pod, which manages ESI 1–3 patients, redirecting Fast Track ESI 3 patients to the Fast Track Room optimized provider use, raised discharge rates from 0% to 95%, reduced wait times, enhanced the patient experience, and increased ED capacity despite staffing and space challenges. Similarly, a fast-track lane in West using one chair for ESI 3 patients allowed charge nurses to select stable, workup-complete patients for rapid discharge, decreasing ESI 3 LOS from 15.5 to 7.5 hours. To address overcrowding caused by discharged patients occupying rooms for nonclinical needs, an ED Discharge Lounge was implemented using a "pull system," in which a dedicated lounge team proactively identified and escorted eligible patients. By centralizing transportation, clothing, education, and portal enrollment, this system freed bed space, improved efficiency, and enhanced patient satisfaction, aligning with models successfully used at Montefiore and UAB. Overall, from January 2024 to May 2025, ED LOS dropped from 7.5 to 4.5 hours, with ESI 3 patients' stays falling from 8.5 to 6.4 hours, resulting in measurable gains in efficiency, patient experience, and Press Ganey scores.
Outcomes: Despite closed units, staffing shortages, and high acuity, LOS fell from 472 to 281 minutes, with acuity-3 averages decreasing from 8:35 to 6:24 during the project.
Implications: Based on the data from these QI projects, RMED timing, fast-track lanes, and the Discharge Lounge demonstrated significant reductions in ED LOS, improved patient flow, and higher patient satisfaction. Challenges included area closures due to low staffing or census, increased patient acuity, limited staff awareness, low engagement, communication gaps, and resistance to change. These findings highlight the need for structured staff education, clear communication, and strong leadership support. Managers should ensure adequate resources and recognize staff contributions; nurses should be empowered through streamlined protocols; and researchers can examine long-term impacts on outcomes. Ongoing projects are expected to reduce LOS further, improve discharge efficiency, and enhance patient satisfaction.

Pediatric Emergency Department Autism Designation

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Aim: The aim of this quality improvement project was to become a pediatric Autism Designated Center by enhancing staff competency and confidence in caring for children on the autism-spectrum disorder through department-wide training focused on standardized, sensory-aware care practices. This quality improvement initiative was to implement a comprehensive autism-specific training program for all roles that may interact with Autistic patient and their families and deliver evidence-based strategies to recognize and improve care throughout their visit.
Framework: To achieve a Certified Autism Center™ (CAC) designation, we utilize a rigorous Model for Improvement. This framework transitions the hospital from standard care to a sensory-aware, neuro-inclusive environment.
Setting: This initiative took place within a regional teaching hospital in northern New Jersey with a Children's hospital within a larger hospital. The pediatric emergency department sees ~30,000 patients a year.
Stakeholder Team: The stakeholder team included a multidisciplinary group of Emergency Department staff members who supported planning, implementation and training. The Pediatric Emergency Medicine directors led the clinical oversight and were regarded as the clinical leads. Child-life specialists were consulted and provided insight on family-support care strategies. Nursing educators oversaw the role out of the initiative and tracked completion of competency, tracked training completion, and functioned as a liaison between interdepartments, the clinical leads, and the ED staff.
Methods: Training was delivered using a teired, role-specific education model. Clinical staff completed approximately 3 hours of autism-focused training, while non-clinical staff completed 1-hour training. Practices and environment were also validated through the IBCCES with an on-site visit and walkthrough to ensure standards were compliant to their standard. Per the IBCCES, training was to be completed by no less than 80% of the forward-facing staff. That is, any team member that could potentially interact with the patient at any time during their visit. This included Providers, Nurses, ED Technicians, Child-Life Specialists, Security, Registrars, and Radiology. A multi-disciplinary initiative was undertaken with a goal of capturing no less than 80% of staff that directly interact with autistic patients including nurses, technicians, providers, security, registrars, radiologists, and social work clinicians. Selected staff were assigned and were required to complete 3 hours of self-learning modules, with a post-test to assess learning. IBCCES conducted an on-site survey to measure the environment and gauge staff's understanding of potential barriers, and their overall understanding of a patient's need who are on the autism spectrum.
Outcomes: Our Pediatric Emergency Department has been recognized as a Certified Autism Center™ (CAC) by The International Board of Credentialing and Continuing Education Standards (IBCCES). This designation is awarded to organizations who demonstrate superior care and resources to autistic patients and their families.
Implications: With the success of this initiative, the program is now being considered across all sister hospitals as well as the inpatient pediatric teams across our system. The goal is to uniform the care given throughout the Atlantic Health system and support long-term sustainability and continue to standardize the best practices in Autism-related care. Active monitoring measuring the number of autistic patients we care for, caregiver satisfaction, and staff satisfaction is in progress.

Quality Medics at Work: Laying the Foundation for Timely Sepsis Antibiotic Administration

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Aim: Sepsis is the leading cause of death in US hospitals with most cases presenting in emergency departments (EDs). Risk of death increases 4-9% every hour sepsis antibiotics are delayed. SEP-1 Bundle guidelines recommend administering antibiotics within three hours of sepsis identification. To exceed this standard, our goal is to administer sepsis antibiotics within one hour of provider order. A nursing quality review identified that our ED one-hour sepsis antibiotic administration rate was below our 87% target, prompting a nurse-led quality improvement initiative.
Framework: This project was guided by the four pillars of our enterprise improvement model, organizational alignment, visual management, problem solving, and standardization. The Five Why approach guided our root cause analysis and the PDCA Cycle framed project implementation.
Setting: The project was conducted at a suburban level 2 trauma center in Northeast Ohio, serving over 46,000 adult patients annually.
Stakeholder Team: The team consisted of our ED nurse manager (NM), assistant nurse managers (ANMs), paramedics, and the Sepsis Program Manager. The NM monitored organizational alignment and budgetary concerns and communicated needs to executive leadership. The ANMs and paramedics performed the root cause analysis, brainstormed potential solutions, and created the new workflow. The Sepsis Program Manager monitored data and supported education and implementation of the new process.
Methods: The root cause analysis identified inconsistent communication and patient care interruptions as significant factors contributing to antibiotic administration delays. The brainstorming session focused on ways to improve sepsis team communication and optimize current resources. ED paramedics were identified as an underutilized team resource. A quality paramedic was added to the sepsis response team to facilitate communication and early collection of labs required prior to antibiotic administration. Nurses and paramedics collaborated to establish the new standardized workflow. Key steps include sepsis alert activation, a sepsis team huddle in the patient's room, and the quality paramedic completing initial labs and notifying the nurse that antibiotics can be administered. Education on the new process included hands-on training and assessment of readiness. One-hour sepsis antibiotic administration rates are tracked monthly to assess workflow compliance. Monthly team meetings review performance and address opportunities for improvement. A visual management board communicates progress and highlights exemplary performance.
Outcomes: One month following new workflow implementation, sepsis antibiotic administration rates increased slightly but were still below target. Two months post implementation, rates exceeded our 87% target and have remained above target for three consecutive quarters. Team members report improved team communication and efficiency in providing sepsis care. Findings are limited due to the inability to rule out other contributing factors.
Implications: Fast-paced high-volume EDs run the risk of breakdowns in communication and disruptions in patient care. Adding a quality paramedic to the ED sepsis team improved efficiency and communication, and decreased delays in antibiotic administration. This underscores the importance of interdisciplinary collaboration, creative use of existing resources, and using all team members to the full extent of their licenses. These findings are potentially applicable to other high-stakes ED situations including stroke, STEMI, and trauma responses.

Rapid Response for Private Vehicle Arrivals: Reducing DTN/DTP Times Through Early BEFAST Identification

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Aim: Stroke patients arriving to the emergency department via privately owned vehicle experience longer door-to-needle and door-to-puncture times compared to those arriving by emergency medical services, largely due to delayed symptom recognition and stroke alert activation. Posterior circulation stroke symptoms are particularly underrecognized, contributing to treatment delays and inequitable care. The aim of this quality improvement project was to reduce door-to-needle and door-to-puncture times for stroke patients arriving by private vehicle through early identification and activation using the BE FAST screening tool, with a focus on improving recognition of posterior circulation symptoms.
Framework: This project was designed using the Model for Improvement framework. Root cause analysis informed targeted interventions, and iterative process changes were implemented to address identified delays in triage, communication, and stroke alert activation.
Setting: The project was conducted in a large, urban emergency department with a high annual stroke volume that serves as its regions only comprehensive stroke center and is also a level one trauma center. The department treats both emergency medical services and privately transported stroke patients and includes dedicated stroke and neurointerventional services.
Stakeholder Team: The core project team included emergency department stroke nurse navigators, over seen by their stroke program manager, who led process mapping, data collection, staff education, and implementation of interventions. Emergency nurses participated in triage workflow changes and bedside screening, as well as educational classes. Admission workers were also educated. Emergency physicians and emergency department leadership supported stroke alert activation practices. Leadership stakeholders provided operational support and facilitated dissemination of education and visual tools throughout the department.
Methods: The pre-intervention privately owned vehicle stroke process was mapped to identify delays in symptom recognition and stroke alert activation. Root cause analysis revealed inconsistent use of BE FAST, limited awareness of posterior stroke symptoms, and nurse hesitation to independently activate stroke alerts. Interventions included targeted staff education, BE FAST visual aids, triage and admission workflow changes led by stroke nurse navigators, and reinforcement of nurse-driven stroke alert activation. Door-to-needle and door-to-puncture times for privately transported stroke patients were collected pre- and post-intervention and compared using median time measurements.
Outcomes: Post-intervention data demonstrated improved treatment times for privately transported stroke patients. Median door-to-needle time improved from 45 minutes pre-intervention to 36 minutes post-intervention. Median door-to-puncture time improved from 113 minutes to 72 minutes. Among patients presenting with posterior circulation symptoms, median door-to-needle time improved from 61.5 minutes to 43.5 minutes, and door-to-puncture time improved from 145 minutes to 72 minutes. Staff demonstrated improved confidence in recognizing posterior symptoms and correctly identifying BE FAST criteria.
Implications: Early identification of stroke symptoms using BE FAST and nurse-driven stroke alert activation can significantly reduce treatment delays for patients arriving by private vehicle. This project supports equitable stroke care regardless of arrival mode and highlights the importance of education and visual decision support in emergency nursing practice. Emergency leaders should consider empowering nurses to activate stroke alerts and implementing standardized screening tools to improve outcomes. These findings support broader adoption of BE FAST education and process redesign to enhance timely stroke care in emergency departments.

Right Time, Right Patient, Right Priority: Boosting Triage Accuracy in Novice Nurses

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Aim: To improve the accuracy and consistency of triage acuity scores in the emergency department through enhanced training and evaluation of inter-rater reliability.
Framework: The project was guided by the Plan-Do-Study-Act (PDSA) framework.
Setting: Our hospital is a tertiary care facility and a Level 1 Pediatric Trauma Center, serving as the largest provider of pediatric services in New York State. We are proud to hold Magnet® designation for nursing excellence in 2016, 2020, and 2025. Additionally, we earned the Lantern Award in 2021 and 2024, recognizing our leadership, innovation, and exceptional performance in emergency care.
Stakeholder Team: The stakeholder team for this initiative included a diverse group of professionals within the emergency department. Experienced nurses served as champions and triage preceptors, providing mentorship and guidance throughout the training process. Novice nurses were key participants, engaging in enhanced education and clinical practice to improve their triage skills. The nurse educator and clinical skills facilitator conducted the triage training classes and collected the pre-implementation and post-implementation data. This collaborative team approach was essential for driving the success of the quality improvement initiative.
Methods: Before implementing the initiative, an assessment of inter-rater reliability was conducted through direct observation of 74 triage intakes. The Emergency Nurses Association Emergency Severity Index (ESI) 5th edition served as the standardized tool for triage scoring. Baseline findings revealed that nurses with more than three years of experience achieved 83% reliability, while those with less experience scored 48%, highlighting a significant gap in consistency. To address this, a structured intervention was developed using the Plan-Do-Study-Act (PDSA) framework. The first cycle focused on forming a champion group of experienced nurses to serve as triage preceptors. In the second cycle, these champions received education on effective training strategies. The third cycle introduced novice nurses to triage principles through didactic instruction, case-based discussions, and role play. Finally, the fourth cycle provided hands-on clinical triage experience under the guidance of champions. Three months after completing the enhanced training program, a follow-up assessment was conducted to measure improvement in inter-rater reliability.
Outcomes: Following the intervention, inter-rater reliability improved significantly. Experienced nurses achieved a reliability score of 91%, while novice nurses reached 73%, representing a 52% increase from their baseline score. These results demonstrate a marked improvement in triage consistency and accuracy, highlighting the effectiveness of the enhanced training and mentorship program.
Implications: Enhanced training and structured mentorship significantly improved inter-rater reliability in triage, with novice nurses increasing by 52% and experienced nurses achieving near-perfect consistency. These results suggest that standardized education and mentorship should be integrated into emergency nursing practice and policy to reduce variability and enhance patient safety. Future research should examine sustainability and the impact on outcomes and efficiency. Managers and leaders should allocate resources for ongoing training and reliability audits, while nurses should engage in mentorship and apply standardized tools consistently. Researchers are encouraged to explore scalability and cost-effectiveness across diverse emergency settings.

Rounding for Resilience: Fostering ED Staff Well-Being and Retention

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Aim: A 2022 Safety, Communication, Operational Reliability, and Engagement (SCORE) survey conducted at a community hospital emergency department (ED) identified high levels of burnout and emotional exhaustion, low staff engagement, and poor perceptions of leadership visibility and support, in the context of a 37% staff vacancy rate. These findings highlighted a need to strengthen leader–staff connection, visibility, and follow-through. In response, this quality improvement initiative implemented a standardized leader rounding (LR) process supported by an electronic concern-tracking board and informed by the Institute for Healthcare Improvement (IHI) Joy in Work framework. The initiative aimed to enhance staff engagement, improve visibility of frontline concerns, and promote timely communication and follow-up in a high-volume community ED.
Framework: This initiative was guided by the Promoting Action on Research Implementation in Health Services (PARIHS) framework, emphasizing alignment of evidence, context, and facilitation to support sustainable implementation. The IHI Joy in Work framework complements PARIHS by informing the relational components of LR through structured prompts designed to promote psychological safety, engagement, and trust. Together, these frameworks supported both implementation rigor and human-centered leadership.
Setting: The project was implemented in a community-based ED with more than 200 staff members and an average daily volume of approximately 240 patient visits.
Stakeholder Team: Stakeholders included ED nurse managers, clinical coordinators, and nurse educators who conducted LR, as well as frontline ED nurses who shared concerns and feedback. Organizational leadership supported implementation through oversight and accountability.
Methods: A standardized LR process was conducted Monday through Friday at 8:00 a.m. during shift change. Designated nurse leaders used structured prompts informed by the IHI framework to invite staff to share concerns related to workflow, resources, communication, and well-being. Concerns were documented in real time using an electronic tracking system and categorized using a red–yellow–green escalation model. Weekly data included LR completion rates, the number of concerns logged, and the number of concerns resolved within 24 hours.
Outcomes: Run chart analysis demonstrated strong reliability of LR, with a median completion rate of 80% across the 12-week implementation period, reflecting consistent leader engagement and integration into daily workflows. During the implementation period, 18 frontline concerns were identified, of which 6 (33%) were resolved within 24 hours. While rapid resolution varied from week to week due to workflow changes, competing clinical priorities, and concurrent quality improvement initiatives, LR consistently ensured that concerns were captured, documented, and tracked, thereby strengthening transparency, visibility, and leadership accountability.
Implications: Structured LR is a feasible and scalable strategy to enhance visibility of frontline concerns and leadership presence in the ED. Transparent tracking and follow-up may support trust and psychological safety, even when rapid resolution is limited by system-level constraints.

Redesigning Fast Track for Future Success - A Quality Improvement Project

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Aim: For our quality improvement project, we found that overcrowding was a chronic issue we faced in the pediatric emergency room. Additionally, we concluded that a significant portion of our patient population are lower acuity patients and had complaints that were suitable for a “fast track” area. Therefore, we aimed to improve patient throughput in our emergency room while simultaneously improving our door to doctor time frame, length of stay, and left before treatment complete occurrences.
Framework: This project used a continuous quality improvement approach. The efficient adjustments to the fast track's operational hours and staffing over several years are consistent with the Plan-Do-Study-Act (PDSA) cycle methodology, which allows for testing changes, learning from the results, and refining the process over time.
Setting: The project was conducted at a level 1 teaching trauma hospital in northern New Jersey. The pediatric emergency department specifically sees an average of 43,200 a year.
Stakeholder Team: Core team members invested in this quality improvement project are staff nurses, physicians, residents, mid-level providers, ancillary staff, and leadership within the pediatric emergency room.
Methods: During a profound surge in our pediatric emergency room, leadership strategized methods to safely and efficiently care for our patients and found the optimization of a fast-track area was key. In order to complete this, additional mid-level advanced providers such as nurse practitioners and physician assistants were hired and additional nursing staff was designated for fast track. Moreover, the operating hours of the fast- track area were altered and extended to meet the need of the unit and its census. Specific metrics that were utilized and analyzed during this quality improvement project included door to doctor time, length of stay, and left before treatment complete data longitudinally,
Outcomes: The implementation and optimization of the fast track area resulted in significant improvements. Door-to-provider time decreased from a high of approximately 45 minutes in 2021 to consistently between 10-15 minutes from 2023 through 2025. The LBTC rate also showed a marked decline, falling from a peak of over 4% in 2022 to well under 1% in 2024 and 2025 (year-to-date). These results indicate that expanding bed availability and dedicating staff to a fast track process is associated with lower wait times and fewer patients leaving before being treated.
Implications: Upon completion of our longitudinal quality improvement study, our pediatric emergency room has gained great insight from the data collected. For instance, it is evident that the implementation and optimization of fast track substantially improves various metrics within the department such as door to doctor time frame, length of stay, and left before treatment complete occurrences. Consequently, improvements in such metrics has a direct positive impact on patient experience, patient satisfaction, and staff morale. Therefore, researchers recommend and call the attention of all emergency department leadership to prioritize the optimization of their specific fast track areas.

Reducing Blood Culture Contamination Through Standardized ED Collection Practices

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Aim: Blood culture contamination (BCC) is a common and costly issue in healthcare, with significant consequences including unnecessary antibiotic use, prolonged hospital stays, and increased costs (average cost of a single contaminated blood culture is ~$4,538). Studies have shown standardizing collection kits and utilization of diversion devices can effectively reduce contamination rate. SMMC ED RNs are responsible for ~1,000+ blood cultures draws per month. Prior to implementation of diversion devices ED RN drawn BCC rate ~4%. Our goal is to improve patient safety and care while achieving significant cost savings by reducing blood culture contamination. We will accomplish this by standardizing our blood culture collection kits and utilizing diversion device, aiming to bring our contamination rate below the 2.5% system goal.
Framework: PDSA
Setting: The project was conducted in a Level II Trauma, Stroke, and STEMI receiving center located on the West Coast. The emergency department serves a diverse and high-acuity patient population requiring frequent blood culture collection as part of diagnostic evaluation.
Stakeholder Team: The initiative involved a multidisciplinary stakeholder team. Emergency department nurses performed the blood culture collections and adopted the standardized workflow. Nurse educators led the development and delivery of competency-based instruction, ensuring staff were proficient with aseptic technique and correct use of the diversion device. Department leadership supported the project through resource allocation and operational oversight. Unit clerks assembled and stocked the standardized kits across clinical areas to reduce variability in equipment availability. Laboratory sent monthly contamination reports which was evaluated by ED leadership for trends and communicated this to frontline staff.
Methods: Blood culture collection kits are made by ED clerks and stocked in each pod by ED techs for easy access. Diversion device training and education provided during RN onboarding and through 1:1 preceptor orientation. Monthly contamination reports provided by lab, reviewed by ED leadership who provides 1:1 feedback with RNs responsible for contamination draws. Recognition for top 3 RNs who have the most draws without contamination.
Outcomes: From January 2023 to June 2025, -61% change in contamination rate. Prior to implementation of kits and diversion devices contamination rate average of approximately 4%. Since implementation contamination rate is averaging 1.5%. This is 880 patient lives positively impacted. $108.5K average monthly cost saved with a cumulative $3.26M cost saved.
Implications: Implementation of standardized kits and diversion technology resulted in a substantial reduction in contamination rates, averaging approximately one and a half percent following the intervention. This improvement enhanced diagnostic accuracy, decreased unnecessary antibiotic exposure, and produced meaningful cost savings. For emergency nursing practice, these findings highlight the importance of consistent technique, structured education, accessible supplies, and ongoing data feedback. Leaders should prioritize reliable stocking processes, competency reinforcement, and transparency in performance data to sustain improvements. Future research may explore the influence of nurse experience, workflow interruptions, and simulation-based training on contamination prevention. Continued monitoring is anticipated to demonstrate ongoing reductions in contamination and reinforce the value of standardized blood culture collection processes in emergency care.

Reducing Blood Culture Contamination in the Emergency Department Using a Needle-Free Blood Collection Device: A Quality Improvement Project

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Aim: Blood culture contamination remains a significant quality and safety concern in emergency departments, leading to unnecessary antimicrobial exposure, increased diagnostic testing, prolonged length of stay, and higher healthcare costs. This quality improvement project aimed to reduce blood culture contamination associated with peripheral intravenous collection by implementing a needle-free blood collection device aligned with existing nursing workflow.
Framework: The project was designed using the Model for Improvement and implemented through Plan-Do-Study-Act cycles to evaluate feasibility, effectiveness, and workflow integration.
Setting: The project was conducted in a high-volume, urban, Level I trauma center emergency department in the Midwestern United States.
Stakeholder Team: The stakeholder team consisted of an emergency department clinical nurse specialist who led project design, implementation, and evaluation; unit-based nurse educators who supported process development and staff education; and departmental leadership who provided operational support and facilitated implementation.
Methods: Baseline blood culture contamination rates were reviewed and found to exceed recommended benchmarks. A needle-free blood collection device was implemented as a quality improvement intervention to reduce contamination associated with peripheral intravenous blood culture collection. Twenty emergency department nurses were trained and validated to use the device through supervised practice. Device-assisted blood cultures were obtained during routine patient care over a four-week implementation period. All blood cultures collected during this timeframe were included. Contamination rates from device-assisted cultures were compared with cultures collected using standard methods during the same period. Nursing workflow impact and user experience were assessed using a post-implementation survey. Contamination rates were analyzed using a two-proportion comparison.
Outcomes: Device-assisted blood cultures demonstrated a significantly lower contamination rate compared with standard collection methods (2.1% versus 8.2%), representing a 68% relative reduction ($p = 0.016$). Overall departmental contamination rates decreased during the implementation period despite intentional pilot-phase implementation among a limited cohort of trained nurses. Nurses reported high ease of use, perceived improvement in patient experience, and reduced needlestick risk, though workflow challenges were noted during high-acuity situations and early in the learning curve.
Implications: Needle-free, device-assisted blood culture collection represents a feasible and effective strategy to reduce contamination in emergency department settings when aligned with nursing workflow. Broader adoption and expanded staff training may further enhance diagnostic accuracy, patient safety, and antimicrobial stewardship while minimizing disruption to emergency care delivery.

Reducing Cognitive Load and Improving Medication Preparation Efficiency in Urban and Rural Emergency Departments Using Digital Dosing Support

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Purpose: Medication dosing and preparation in emergency care is vulnerable to error due to time pressure, interruptions, weight-based calculations, and high cognitive workload for nurses. These risks are present in both high-volume urban emergency departments and rural and remote departments where pharmacy support may be limited and nurses frequently manage complex medication preparation independently. The purpose of this study was to evaluate the real-world impact of a digital medication dosing support tool on medication preparation efficiency, nurse cognitive workload, and adoption across two contrasting emergency care contexts.
Design: Prospective, mixed-methods implementation study.
Setting: Two Canadian emergency department practice contexts: a high volume urban emergency department and a northern regional emergency department serving rural and remote communities.
Sample: Emergency nurses engaged in medication preparation and administration at both sites. Eligible use cases included all patients presenting to the emergency department.
Methods: Building on a prior simulation-based crossover trial that established the tool's efficacy, this prospective, mixed-methods, pre-post implementation pilot evaluated the real-world impact of the digital dosing support tool. The study was conducted across two Canadian practice settings: a high-volume urban tertiary center and a rural regional emergency department. Data were collected from emergency nurses during a baseline control period and a subsequent post-implementation intervention phase. Quantitative efficiency outcomes were assessed via direct observation and defined as follows: time-to-calculate (from medication order to completion of dose determination) and time-to-patient (from medication order to preparation readiness). Cognitive workload was measured before and after implementation using validated instruments, while clinical adoption was tracked using automated software usage logs. Qualitative data regarding workflow integration and perceived safety were gathered through semi-structured interviews. Quantitative metrics were analyzed using descriptive statistics and pre-post comparative tests, and qualitative data were interpreted using thematic analysis.
Results: Building on prior simulation-based validation which demonstrated significant workflow improvements, interim analysis of this real-world pilot suggests similar trends in efficacy and safety. Preliminary data indicate adoption rates exceeding 75% for eligible medication preparations. While data collection is ongoing, early observations suggest a clinically meaningful reduction in median time-to-calculate (estimated 40–80% decrease) relative to baseline standard practice. Based on these trends, the final analysis is anticipated to confirm statistically significant reductions in time-to-patient and variability across medication subtypes. Similarly, projected outcomes for nurse cognitive workload estimate a 15–30% reduction in perceived demand. Emerging qualitative themes indicate context-specific benefits: rural staff report enhanced confidence given limited pharmacy support, while urban staff emphasize reduced task switching and interruption burden during high-throughput periods.
Implications: Preliminary findings indicate that workflow-integrated digital dosing support offers a scalable solution to enhance medication safety and efficiency across diverse emergency care contexts. For clinical practice, the observed potential for reduced cognitive workload suggests that digital safety guardrails can support nurses in high-risk environments, regardless of local pharmacy resource availability. Consequently, nursing leadership and administrators should prioritize implementation strategies, including site-specific training and local governance protocols, to ensure successful adoption. Upon completion of data collection, final analyses will focus on quantifying the statistical significance of these efficiency gains to support digital tool integration in critical care.

Reducing UA Contamination in the ED- A Quality Improvement Initiative

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Aim: Urinalysis contamination remains a common problem in the emergency department, leading to diagnostic delays, repeat testing, higher costs, and patient dissatisfaction. Frontline nurses identified that cleansing wipes in standard UA kits frequently tore during use, limiting effective cleansing and increasing contamination risk. This project addressed an equipment and workflow gap affecting diagnostic accuracy. The aim was to reduce clean-catch UA contamination rates by improving the reliability of cleansing supplies and standardizing nursing practice through education and consistent use of more durable wipes.
Framework: The project used the Plan-Do-Study-Act framework to support rapid testing and evaluation of change within routine clinical workflows. PDSA guided problem identification, implementation, outcome evaluation, and sustainability planning. This framework supported frontline engagement and data-informed decision-making for a low-cost practice change.
Setting: The project took place in a community-based emergency department within a multi-hospital health system in the Pacific Northwest. The department provides 24-hour care with high patient throughput, frequent diagnostic testing, and time-sensitive clinical decision-making in a fast-paced, collaborative environment.
Stakeholder Team: The interdisciplinary team included staff nurses who identified the issue, trialed the intervention, and provided feedback. A charge nurse supported daily coordination and practice reinforcement. The nurse manager provided leadership oversight and supported sustainability. The Clinical Nurse Specialist guided project design, data interpretation, and alignment with evidence-based practice, while a quality improvement analyst supported data acquisition and analysis. This structure ensured clinical relevance and leadership support.
Methods: The project focused on the clean-catch UA collection process, replacing wipes prone to tearing with more durable alternatives without adding time or complexity to workflow. Nursing staff received brief education through shift huddles and real-time coaching. The primary outcome was UA contamination rate based on laboratory criteria. Baseline data from a two-week period were compared with a two-week post-intervention period. Secondary measures included staff-reported usability, workflow impact, and repeat specimen collections. Analysis involved descriptive comparison and percent change, with qualitative review of staff feedback.
Outcomes: The intervention achieved a 70 percent reduction in contaminated UA specimens. Estimated avoidance of 20 repeat UAs per 100 collections resulted in average direct laboratory cost savings of approximately $400 per 100 specimens, excluding nursing time and supplies. Avoided repeat collections were associated with an estimated 45-minute reduction in emergency department length of stay per affected patient. Staff reported improved usability, fewer workflow interruptions, and fewer repeat collections. Patients experienced reduced discomfort and frustration. The intervention was effective, feasible, and well integrated into routine practice.
Implications: This project demonstrates that small, frontline-driven changes can produce meaningful improvements in quality, efficiency, and patient experience. Permanent adoption of durable wipes and ongoing monitoring are recommended, with consideration for spread to other units. Education on specimen collection best practices should be incorporated into onboarding and competency processes. Future analyses may include formal cost savings, length-of-stay metrics, patient satisfaction, and sustainability to strengthen the evidence base and support broader dissemination.

Sepsis First Responders: Early Identification and Treatment Saves Lives

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Aim: Sepsis is a life-threatening condition where every hour of delayed treatment increases mortality risk. The Emergency Department (ED) is often the first point of contact for patients presenting with systemic symptoms of sepsis and evidence-based literature confirms that early antibiotic and fluid resuscitation in the ED setting significantly lowers mortality in sepsis. This quality improvement project will aim to decrease sepsis mortality in the ED by 10%.
Framework: PDSA is the framework used to design the project.
Setting: A suburban, community hospital in the Northeast is the study setting in
Stakeholder Team: Emergency Department Registered Nurses - educated on use of checklist and handoff procedure Emergency Department Attending Physicians - educated on the developed checklist and sepsis bundle components Chair of the Emergency Department - partner to educate frontline ED MDs on the checklist and sepsis bundle components and partnered with quality management on project Senior Nurse Manager, Emergency Department - developed sepsis checklist and partnered with quality management on project Assistant Nurse Managers, Emergency Department - developed sepsis checklist and educated frontline ED RNs Director of Nursing, Emergency Department - developed sepsis checklist and partnered with quality management on project Clinical Quality Improvement Specialists - partnered with the ED team, provided sepsis education program to ED RNs and ED MDs Senior Director, Quality Management & Performance Improvement - partnered with the ED team to support the project
Methods: The planned interventions aim to address the identified opportunities by standardizing care, improving communication, enhancing staff knowledge, and providing real-time support. The ED team will partner closely with the hospital's Quality Management (QM) Department. A standardized, concise checklist was developed and implemented for ED RNs to ensure all steps to the process were followed. QM will be a partner for auditing sepsis cases in real-time or near real-time, focusing on adherence to the sepsis bundle and the use of new tools. To ensure all stakeholders input were prepared for the roll-out, a re-education program was developed and delivered to all ED RNs and MDs. A visual board was installed at the ED nurse's station to display key, real-time information in the ED for awareness.
Outcomes: Post-intervention, the ED's 6-hour sepsis bundle compliance increased from 66.7% to 84.9%. This led to a decline in sepsis mortality in the ED from 9.2 to 8.0%.
Implications: As we continue to improve, real-time feedback exchanged through the partnership with the Quality Management team, ED leadership team, ED RN, and ED MD contributed to a large success. Identified challenges included inconsistent accessibility of the form and perceptions of the form as an additional administrative task. As we continue to improve, the developed sepsis checklist will become an integral part of the inter-unit handoff process for all sepsis patients transferring from the ED to an inpatient unit.

Sink Sepsis: Improving Sepsis Bundle Compliance in the Emergency Department Through Standardization and Accountability

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Aim: Sepsis is a leading cause of morbidity and mortality, making compliance with the Centers for Medicare and Medicaid Services sepsis (SEP-1) bundle a critical quality metric tied to hospital reimbursement. Baseline data from January through June 2024 revealed an emergency department bundle compliance rate of 49 percent, significantly below the national benchmark of 63 percent. The project aimed to increase average compliance to 75 percent by June 30, 2025, without adversely impacting the median emergency department length of stay.
Framework: The project utilized the Six Sigma DMAIC (Define, Measure, Analyze, Improve, Control) methodology to structure the quality improvement initiative.
Setting: The project took place in the emergency department of a large, academic, quaternary care center located in the southwestern United States.
Stakeholder Team: An interdisciplinary team was formed including a clinical nurse specialist as team leader and a nursing quality specialist as project editor. An emergency department operations administrator served as sponsor. A physician sepsis champion and a dedicated sepsis coordinator provided clinical expertise and led peer-to-peer accountability efforts, while clinical nurses and educators facilitated staff training and daily rounding.
Methods: The primary outcome variable was defined as SEP-1 bundle compliance, calculated as the proportion of abstracted cases successfully meeting all CMS measure criteria versus those that failed. The balancing measure tracked the median emergency department length of stay from arrival to departure. Pre- and post-intervention compliance rates were compared to assess statistical significance. To guide the Six Sigma DMAIC process, the team analyzed non-compliant baseline cases to identify and aggregate the most frequent opportunities for improvement. Root cause analysis utilizing Fishbone diagrams and Pareto charts pinpointed barriers such as lack of education and standardized processes. Subsequent interventions included a Sink Sepsis education campaign, electronic health record optimizations including reflex lactate orders, and a new accountability model featuring standing case reviews.
Outcomes: Post-intervention data collected from January through June 2025 demonstrated a significant increase in average sepsis bundle compliance from the 49 percent baseline to 84 percent, exceeding the 75 percent goal. Statistical analysis confirmed the improvement was significant with a p-value of 0.03. The balancing measure of median emergency department length of stay remained unchanged at 4.0 hours, indicating that increased bundle adherence did not impede department throughput.
Implications: Standardizing workflows and integrating accountability models can drive substantial quality improvement without compromising efficiency. The use of real-time dashboards and multidisciplinary rounding effectively sustained gains, ensuring the facility met national benchmarks and avoided value-based purchasing penalties. It is recommended that nurse leaders adopt similar accountability frameworks, as these strategies offer a replicable model for other departments seeking to improve regulatory compliance while maintaining operational flow.

Strategies to Advance Inclusive Leadership in Emergency Nursing
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Purpose: The purpose of this project is to translate qualitative findings on gendered leadership experiences into actionable strategies that strengthen inclusive leadership within emergency nursing. By examining how underrepresented leaders navigate cultural expectations, emotional strain, and team dynamics in acute care environments, this work identifies opportunities to enhance equity, communication, and psychological safety across emergency departments.
Design: A qualitative thematic analysis was adapted for emergency nursing application. Findings from semi-structured interviews about leadership experiences in acute care settings were restructured to identify relevance for high-acuity, team-dependent emergency environments. Themes were mapped to leadership behaviors, organizational culture, and workforce development priorities specific to ED practice.
Setting: Analysis centers on U.S. acute care hospitals with 24/7 emergency departments where rapid decision-making, interprofessional communication, and high patient turnover intensify the influence of interpersonal dynamics on leadership effectiveness. EDs were selected due to their unique reliance on shared leadership, role clarity, and rapid team coordination.
Sample: The original sample included 11 nurse leaders working in acute care hospitals who described leadership experiences shaped by gendered expectations, emotional strain, and workplace interactions. For this poster, insights from leaders in the ED were examined for applicability to emergency nursing teams, charge nurse roles, and frontline leadership pathways.
Methods: Interview transcripts were coded using iterative thematic analysis to identify meaning units related to emotional strain, expectations of leadership behavior, relational challenges, and perceptions of credibility. Themes were then cross-referenced with known ED leadership demands. A translation matrix was developed to align findings with ED-specific competencies such as situational communication, psychological safety, conflict navigation, and equitable team engagement. The resulting synthesis yielded a set of practical strategies tailored to emergency nursing.
Results: Three emergency nursing–relevant findings emerged: Unspoken behavioral expectations influence leader credibility in the ED. Leaders described navigating assumptions about communication style, composure, and interpersonal responsibilities, which can shape delegation and trust in rapid-flow environments. Emotional strain affects leadership performance and team cohesion. Managing staff distress, family interactions, and high-acuity events intensifies emotional labor, particularly when leaders feel pressure to perform within behavioral norms. Inclusive leadership behaviors improve psychological safety and team functioning. Strategies such as transparent communication, equitable voice-sharing, intentional mentoring, and structured debriefing foster stronger collaboration and reduce interpersonal friction. These findings highlight actionable opportunities for EDs: enhancing leader preparation, structuring equitable feedback pathways, normalizing emotional reflection, and embedding inclusive communication practices in daily operations.
Implications: Integrating inclusive leadership strategies into ED practice can strengthen team resilience, improve staff retention, and enhance patient care quality in high-acuity settings. By acknowledging how cultural expectations shape leader experiences and by establishing structures that support underrepresented leaders, emergency departments can advance fairness, clarity, and collaboration. This work contributes to emergency nursing by offering a practical framework for building psychologically safe teams, supporting diverse leadership voices, and ensuring that ED leadership development aligns with national priorities for equity and workforce well-being.

Streamlining Care for Vulnerable Populations: Rapid Response for Stroke, STEMI, Sepsis, and Trauma

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Aim: The aim of this project is to develop a process to identify and prioritize vulnerable patients in the emergency department (ED) who are at high risk for adverse outcomes, specifically those with Stroke, STEMI, Sepsis, and Trauma. In an ED where 70% of patients are cared for in alternative care spaces or waiting rooms due to overcrowding and boarding, it is essential to swiftly identify these high-risk patients and extract them from the chaos. By creating a streamlined approach, we aim to focus resources on these patients early, ensuring they receive timely interventions and optimal care. This initiative seeks to improve outcomes by reducing delays in diagnosis and treatment for the most vulnerable patients, thus enhancing care coordination and reducing the risk of severe complications.
Framework: PDSA
Setting: A Level II Trauma Center in an urban, district hospital in North San Diego County with nearly 100,000 emergency department visits per year.
Stakeholder Team: ED Medical Directors who collaborated with Trauma Surgeons, Neurologists, and Cardiologists; ED Leadership Team continuously reinforcing expectations and providing education to ED nursing team; Interdisciplinary collaboration with radiology to prioritize imaging studies; Integration of Rapid Response Team in the ED to support clinical efforts
Methods: To optimize care for high-risk, vulnerable patients, we developed four distinct Pit Stop processes for Stroke Codes, STEMIs, Code Sepsis, and patients meeting Trauma Resource criteria. Each process had a designated location and algorithm to ensure efficient, rapid care: Stroke Code Pit Stop: Located in CT for immediate imaging and intervention. STEMI Pit Stop: Positioned in the elevator alcove leading to the Cath Lab, facilitating quick transfer. Trauma Resource Pit Stop: Situated next to the Trauma Bays, allowing easy access for potential upgrades. Code Sepsis Pit Stops: Two separate locations were designated based on the patient's entry type—ambulance or walk-in. Each patient group followed a specific algorithm, with designated resources assigned to streamline the process. The goal was to remove the most vulnerable patients from the chaos of the overcrowded ED, ensuring they received prioritized care, faster diagnosis, and timely interventions to improve patient outcomes.
Outcomes: STEMI: Achieved the 2nd highest STEMI volume in the county while maintaining the fastest door-to-device times, improving rapid reperfusion and patient outcomes. Stroke: Reduced door-to-needle times for thrombectomy cases, ensuring faster intervention for patients experiencing acute ischemic strokes. Sepsis: Improved compliance with SEP-1 from 44% to 80%, significantly enhancing the timely administration of sepsis bundles and reducing sepsis-related morbidity. Trauma Resource: Substantially decreased time to diagnosis and treatment, leading to faster interventions and a reduction in adverse events, ultimately improving the care and outcomes for trauma patients.
Implications: The Pit Stop processes demonstrate the power of streamlined care for high-risk patients, with several key implications: Improved Outcomes: Faster diagnosis and treatment for Stroke, STEMI, Sepsis, and Trauma led to better patient outcomes and fewer adverse events. Efficient Resource Use: Dedicated locations and staff for each patient type optimized ED resources and reduced overcrowding. Better Coordination: Enhanced collaboration between ED, trauma, and pre-hospital teams improved care delivery.

Strengthening Code Surge Readiness Through Tabletop Drills

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Objective: Use consecutive tabletop drills to design and enhance a Code Surge Plan that should strengthen team coordination during ED overcrowding, while demonstrating the capability to build and test the plan even when activation thresholds aren't reached. The Code Surge Plan provides a multidisciplinary response from all disciplines within the hospital to support severe ED overcrowding. Due to the real-time NEDOCS threshold of dangerously overcrowded x2 hours rarely being met during the planning phase and live drills were repeatedly canceled, the team then shifted to tabletop scenarios, allowing departments to practice coordination, identify gaps, and refine the surge response despite limited activation opportunities.
EBP Model: Iowa Model of Evidence-Based Practice to Promote Quality Care.
Setting: A teaching, urban level I trauma center located in Washington DC seeing over 80,000 patients yearly
Participants: Nursing leadership developed the surge plan lead the table top drills with the support and guidance of the emergency preparedness director. Stakeholders included in the drill comprised of: emergency department physician leadership, support service leadership, staffing office, senior nursing directors and clinical administrators.
Methods: Following two unsuccessful activation drills because the threshold was not reached, the Code Surge Committee transitioned to structured tabletop exercises with guidance from the Emergency Preparedness Director. Multiple scenarios were developed to test activation steps, communication methods, overnight and weekend response, PA system failures, and staffing challenges. Multidisciplinary representatives and nursing divisions participated, offering real-time feedback. Two sequential TEAMS-based tabletop drills were held, with insights integrated into each iteration to strengthen the plan.
Outcomes: The tabletop drills method successfully revealed workflow gaps, defined role expectations, and improved coordination across nursing, physician, support services, and capacity management. Opportunities identified included optimizing change-of-shift announcements and establishing a command center during prolonged surges. Scenario testing also identified communication and staffing barriers, leading to targeted revisions in the Code Surge Plan. Participants, especially those who did not involve the initial development of the plan, reported increased confidence in activation steps and response actions. The updated plan is now streamlined and ready for implementation.
Implications: Tabletop drills proved highly impactful, strengthening readiness, improving coordination, and refining the Code Surge Plan. This approach enhances activation clarity, communication, and the multidisciplinary response to ED overcrowding.

Strengthening Emergency Department Response to Obstetric Crises Through Focused Nursing Education

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Aim: High-risk, low-frequency obstetric emergencies in the emergency department require rapid recognition, coordinated team response, and familiarity with specialized equipment. Variability in caregiver confidence, clinical knowledge, and system readiness can negatively impact maternal and neonatal outcomes. This quality improvement initiative aimed to strengthen emergency department caregiver preparedness for obstetric crises through targeted education focused on clinical recognition, team communication, and equipment readiness.
Framework: The project was designed using the Plan–Do–Study–Act (PDSA) framework to support iterative improvement. Educational content and simulation scenarios were planned and implemented, caregiver performance and system readiness were observed, and findings were used to guide immediate remediation and follow-up educational strategies.
Setting: The initiative was conducted in the emergency department of an urban Level II trauma center in the Midwest. The department provides care for a diverse, high-acuity patient population and functions as a teaching environment for nurses and other healthcare learners.
Stakeholder Team: The project was supported by a collaborative stakeholder team that included Emergency Department and Labor & Delivery Nursing Professional Development Specialists, ED and L&D nursing leadership, the provider team, and bedside caregivers. This interdisciplinary collaboration ensured alignment of educational content with clinical practice, operational workflows, and patient safety priorities.
Methods: The project focused on improving caregiver readiness for obstetric emergencies, including maternal hypertensive crises, seizures, obstetric hemorrhage, OB Emergency Rapid Response Team activation, maternal code modifications, and neonatal resuscitation. Educational interventions included interactive case discussions, role-play, and simulation-based practice. Participant performance, engagement, and confidence were observed during scenarios, and obstetric emergency equipment readiness was assessed. Immediate feedback and remediation were provided, and observational data were summarized descriptively to identify strengths, gaps, and system-level improvement opportunities.
Outcomes: Participants demonstrated strong knowledge of first-line antihypertensive management, appropriate escalation of care, and effective use of infant warming equipment. Opportunities for improvement included recognition of magnesium sulfate toxicity, familiarity with OBERT activation processes, and pharmacologic management of obstetric hemorrhage. Engagement was high, with active participation in discussion and skills practice. System improvements included remediation of incomplete or expired obstetric hemorrhage supplies and alignment of neonatal resuscitation monitoring equipment with current standards. Follow-up education was provided through ongoing nursing education offerings.
Implications: This initiative demonstrates that targeted, simulation-based education can enhance emergency department preparedness for obstetric emergencies while uncovering system vulnerabilities. Integrating standardized equipment checks, recurring in-situ simulation, and competency reinforcement into routine practice may improve maternal and neonatal safety. Nurse leaders and educators should prioritize interdisciplinary collaboration and ongoing skills validation to sustain readiness. Future evaluation will focus on long-term knowledge retention and the impact of these interventions on clinical performance during real obstetric emergencies.

System-Wide High-Level PPE Training Across Hospital Points of Entry: A High-consequence Infectious Diseases Readiness and PPE Standardization Model

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Aim: High-consequence infectious diseases (HCIDs) are defined as novel or reemerging pathogens with person-to-person spread, few medical countermeasures, and high mortality rates. Examples include Middle East respiratory syndrome, novel influenza, and viral hemorrhagic fevers. Albeit rare, HCIDs pose significant risk at hospital points of entry. Early identification, isolation, and competent high-level PPE (personal protective equipment) use is essential to prevent exposure. However, many health systems lack standardized, cross-disciplinary HCID readiness. This quality improvement project evaluated the readiness of emergency department nurses and providers to manage high-consequence infectious diseases following implementation of a nurse-driven standardized training program.
Framework: This project used the Model for Improvement framework. It implemented a standardized nurse-driven training program to improve emergency department readiness for HCID response. The outcome was evaluated to determine if trainee readiness was improved following the intervention.
Setting: The project was conducted across four emergency departments within a large, urban academic healthcare system designated as a national high-level isolation unit (HLIU) for HCIDs.
Stakeholder Team: A multidisciplinary team led the project, including a HLIU nurse educator (curriculum development and training), an emergency medicine physician (clinical alignment), and HCID clinical nurse expert (curriculum review).
Methods: HLIU subject matter experts developed a novel training model to disseminate across a large metropolitan hospital system. Nurse subject matter experts delivered training. In line with HCID standards, it included multidisciplinary HCID scope, standardized personal-protective equipment (PPE) protocols, novel just-in-time (JIT) digital resources, and waste-management protocols. The readiness model was evaluated on attendance metrics and individual competency. To evaluate individual competency, two methods are used. Trainers assess the trainee's ability to safely don and doff HCID PPE. Secondly, a Likert-scale self-assessment survey is used to evaluate competency.
Outcomes: To date, 140 frontline clinicians across emergency departments have completed HCID training at four of eleven hospitals. Trainees include physicians, advance-practice providers, and nurses. Interim review indicates higher competency and improved readiness using a 5-point Likert-scale. To date, mean readiness scores increased from 2.5 pre-intervention to 4.29 post-intervention. Formal evaluation, mock drills, and continued implementation are ongoing.
Implications: Interim review demonstrates substantial improvement in emergency department HCID readiness following standardized nurse-led training. Integration of HCID education into emergency department competency may enhance response reliability during high-consequence, low-frequency HCID events. Findings suggest standardized education along with JIT resources reduces knowledge gaps and strengthens frontline confidence, supporting use as a sustainable preparedness model. Leaders should prioritize ongoing HCID training that aligns with national standardized HCID workflows to maintain system readiness. At the policy level, structured preparedness education supports workforce safety and high-reliability response. Future evaluation will examine knowledge retention, performance in simulation or real-world events, and long-term sustainability of readiness improvements. Training is scheduled at two additional emergency departments in Spring 2026.

Small Patients, Critical Journeys; Reducing Transport Times for Pediatric Patients in the Emergency Department

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Aim: To reduce length of stay for pediatric patients requiring interfacility transfer by implementing a Pediatric Pre-Alert process enabling earlier recognition of transfer criteria, expedited communication with the transfer center, and proactive coordination with transport and receiving facilities. In 2024, these patients experienced average length of stay (LOS) between 540-590 minutes. Extended delays resulted in overcrowding, suboptimal resource utilization, and delay in getting patients to higher level and specialty care.

Framework: The Project used LEAN quality improvement principles combined with Plan-Do-Study-Act (PDSA) methodology to systematically identify workflow inefficiencies. Process mapping visualized the complete transfer pathway and identified delayed recognition of transfer eligibility as a critical bottleneck. Iterative PDSA cycles enabled real-time refinement of pre-alert criteria, optimization of communication workflows between the ED and transfer center, and continuous monitoring of process adherence. These quality improvement tools established a structured framework for enhancing efficiency, improving interdisciplinary collaboration, and supporting sustainable practice changes.

Setting: The project was conducted in a suburban Level II trauma center and teaching hospital Emergency Department in Northern California. During the 2024-2025 evaluation period, pediatric interfacility transfers increased substantially, highlighting the operational need to improve transfer timeliness and reduce LOS variability.

Stakeholder Team: The interdisciplinary stakeholder team included ED registered nurses responsible for early identification and escalation of transfer criteria. ED leadership oversaw implementation and compliance. Hospital transfer center personnel coordinated real-time communication with the contracted transport company and receiving pediatric facilities. Emergency technicians supported documentation and process adherence. The contracted transport company collaborated on resource optimization and maintained detailed timestamp documentation for continuous process evaluation. Collaboration across these stakeholders ensured alignment of clinical, operational, and logistical priorities.

Methods: We compared transfer processes before and after implementation by tracking key time intervals: ED arrival, recognition of transfer need, transfer request initiation, transport notification, and ED departure. Staff education was provided to all ED personnel on EMS transport level capabilities and appropriate resource utilization. Monthly retrospective chart reviews assessed pediatric transfer volume, average ED LOS (excluding psychiatric transfers), pre-alert compliance rates, and barriers contributing to prolonged LOS. Data analysis comprised descriptive statistics and longitudinal trend monitoring from January through December 2025.

Outcomes: Following protocol implementation in late March 2025, analysis of pediatric transfer data demonstrated significant improvement in ED throughput. Average ED LOS decreased from 490 minutes in January 2025 to 349 minutes by December 2025—a reduction of 141 minutes (29% improvement). The pre-alert process showed consistent adoption across the measurement period, with monthly tracking revealing sustained improvements in transport coordination efficiency.

Implications: This project demonstrates the effectiveness of early identification and proactive transport coordination in reducing pediatric transfer delays. The sustained 29% reduction in average LOS suggests that process improvements can be maintained when supported by standardized workflows, continuous monitoring, staff education, and interdisciplinary engagement. Due to this success, the project is being considered for implementation at two other emergency departments in our hospital system. Efforts for 2026 will focus on refined patient identification criteria, standardized pre-alert screening tools integrated into clinical workflow, and comprehensive staff education on transport capabilities and regulatory requirements.

Streamlining Medical Clearance for Psychiatric Patients in the Emergency Department: A Quality Improvement Initiative

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Aim: Our emergency department (ED) faced challenges with long lengths-of-stay with patients that required a psychiatric evaluation. Patients have to receive a medical clearance from an emergency department provider before receiving psychiatric care, effectively creating two different visits. Medical clearance practices varied widely, leading to some patients not being medically cleared appropriately and necessitating a repeat psychiatric evaluation. To address this, the project team implemented changes to better standardize what diagnostics are necessary to medically clear a patient. The primary aim was two-fold: to reduce the length of stay of this specific patient population and to reduce the number of patients that required a repeat psychiatric evaluation.
Framework: The project followed the Plan-Do-Study-Act (PDSA) framework to exact change in ED workflows. Each cycle evaluated workflow performance, user feedback, and outcome and process measures to inform process adjustments. This approach supported rapid-cycle changes while ensuring that those changes were sustainable.
Setting: The setting for this project was a general hospital in upstate New York. The ED sees approximately 19,000 visits a year with about 30% behavioral-health related.
Stakeholder Team: The project team consisted of a project lead, the ED director of nursing, the ED medical director and associate medical director, the director of psychiatry, and the ED nurse manager. This multidisciplinary team ensured all facets of the care team that were affected by change were represented on the project team.
Methods: Baseline data were collected and analyzed for the first six months of 2024. The project team was assembled in September of 2024 and data were collected during PDSA cycles from September 2024 to December 2025. Outcome measures included length of stay and the proportion of patients requiring repeat psychiatric evaluations. Process measures included arrival-to-clearance time and the proportion of patients receiving urine drug screens and psychiatric laboratory testing. All patients that required a psychiatric evaluation were included in this project. Interventions included education for emergency nurses and providers, process reinforcement, and implementation of the SMART Medical Clearance Form within the electronic health record to standardize diagnostic decision-making. Run charts were utilized during the project to track trends in outcome and process measures. Outcomes were evaluated using pre- and post-intervention comparison via t-test and chi-square tests to assess changes in process and outcome measures.
Outcomes: Among all patients, the team saw a decrease in total length of stay (1219 to 682 minutes), the duration from arrival-to-disposition (719 to 446 minutes), and the percentage of patients that required a second psychiatric evaluation (15% to 11%). Among adult only patients (≥ 18 years), more pronounced decreases were observed, from 1308 to 594 minutes, 795 to 430 minutes, and 18% to 10% respectively.
Implications: This nurse-led quality improvement project demonstrates that standardizing medical clearance through clinical decision support can improve emergency department throughput and reduce length of stay for patients requiring a psychiatric evaluation. The use of iterative PDSA cycles enabled sustainable workflow changes that reduced repeat evaluations and can be adapted to other emergency departments to improve efficiency, patient flow, and care consistently.

Take 2-Give 2: Using Visual Cues to Create Connections and Improve Sepsis Process Compliance
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Aim: Sepsis is the leading cause of death in US hospitals with most cases presenting in emergency departments (EDs). Structured sepsis responses with dedicated teams, alerts, and electronic health record (EHR) tools are recommended to improve sepsis bundle compliance and outcomes. Our ED monitors sepsis alert activation and EHR sepsis narrator use rates as key components of our sepsis response. In August 2024, our ED was below target for sepsis alert activations 43.3% (target >50%) and EHR sepsis narrator use 72.2% (target >85%) prompting an interdisciplinary quality improvement project.
Framework: The project was guided by our enterprise improvement model, which prioritizes organizational alignment, visual management, structured problem solving, and standardization. The Five Why approach framed root cause analysis and Plan-Do-Check-Act Cycle steered project implementation.
Setting: The project was conducted in a 19-bed community hospital Emergency Department (ED) in Northeast Ohio, serving approximately 25,000 patients annually
Stakeholder Team: The full team of registered nurses (RNs), providers, paramedics, nurse manager, and health unit coordinators (HUCs) participated in root cause analysis and brainstorming. RNs and paramedics reviewed literature and developed tools and educational materials. Education sessions included all team members. Scopes of practice delineated process roles and implementation. The ED nurse manager monitored the full project for organizational alignment and budgetary concerns.
Methods: The root cause analysis identified fragmented communication, process knowledge gaps, and lack of role clarity as key drivers in below target sepsis alert activation and EHR sepsis narrator use rates. The literature review identified visual cues as a potential solution. Two new visual cues, a track board sepsis label and Take 2-Give 2 posters, were created. The track board label cues a sepsis alert, bringing the team to the bedside and triggering sepsis narrator's initiation. Take 2-Give 2 posters connect sepsis alerts and narrator activation to critical one-hour bundle elements. Following education, the new process was implemented in October 2024. Sepsis alert activation and EHR sepsis narrator use rates are monitored monthly to track compliance and opportunities for improvement. A visual management board communicates progress and highlights exemplary performance.
Outcomes: Since Q1 2025, monthly sepsis alert activation and EHR sepsis narrator use rates have exceeded targets, averaging 52% and 91%, respectively. The track board label and Take 2-Give 2 poster visual cues have become a standardized part of our ED sepsis response. The team reports improved communication, process knowledge, and role clarity.
Implications: Communication and process compliance are influenced by the often variable and hectic nature of ED environments. This interdisciplinary quality improvement project showed that visual cues can foster communication, clarify responsibilities, and support process compliance. Although findings are limited due to single site implementation in a small community ED, future work is warranted to assess feasibility in larger EDs and applicability to other ED response processes such as stroke and STEMI.

Targeted Sepsis Care: Impact of Novel Host-Response Test on Sepsis Alerts, Cultures, and Antibiotics

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Aim: This Quality Improvement (QI) project evaluated the impact of integrating a novel FDA-cleared host-response sepsis test into an Emergency Department (ED) screening and treatment protocol, focusing on changes in sepsis alerts, blood culture utilization, and antibiotic use, while maintaining or improving identification of true sepsis cases.
Framework: The Plan Do Study Act (PDSA) framework guided this initiative. The team designed and implemented a new sepsis protocol incorporating a novel host-response diagnostic test. The team monitored its clinical impact and used findings to refine the approach through iterative cycles of evaluation and improvement.
Setting: Sepsis is a common and life-threatening condition, often resembling other urgent conditions. Most cases originate in the community and present to the ED requiring rapid intervention to reduce the risks of morbidity and mortality. While sepsis alerts help meet clinical and quality targets, they can contribute to alert fatigue as well as an overuse of blood cultures and antibiotics. In a suburban teaching hospital, these challenges were evaluated during the implementation.
Stakeholder Team: This initiative required a multi-disciplinary approach involving the Physicians, the ED care team, and the Critical Care, Laboratory, Pharmacy, and Quality Departments. Project Team Leads collaborated with the ED staff to implement the new screening and diagnostic-led treatment protocol and monitored the impact on sepsis alerts, blood culture utilization, and antibiotic prescribing.
Methods: Pre-implementation (Pre) data was collected from 195 patients between April 30 and May 15, 2025. Post-implementation (Post) data were collected from 1,433 patients between June 17 and September 16, 2025. Data sources included electronic medical records (EMR) and the Vocera messaging system. Daily sepsis alert data were extracted from Vocera for both Pre (April 1-June 16, 2025) and Post (June17-September 16, 2025), periods. Additional metrics such as ED census, blood culture utilization, intravenous and broad-spectrum antibiotic administration, and sepsis prevalence, were obtained from the EMR. Sepsis prevalence was defined using ICD-10 codes: R65.1, A41.9, R65.2, A41.51, A41.81.
Outcomes: Post-implementation, sepsis alerts dropped by 54.2% ($p < 0.05$), despite a slight increase in the average daily ED census from 128 to 135 patients ($p < 0.05$). Sepsis rates (ICD-10) declined slightly from 2.93% to 2.67% (p = ns), reducing the alert-to-sepsis ratio from 1.86 to 0.94 ($p < 0.05$). Blood culture collection dropped from 9.6% (Pre) to 5.7% (Post) of ED census, while the true sepsis prevalence positive predictive value increased by a relative 31% from 9.2% to 12.1%. IV antibiotic use in suspected infection cases in the ED declined by a relative 36% (from 66.6% Pre to 42.9% Post), while Broad-spectrum antibiotic use in these cases dropped by a relative 49% (from 40.0% Pre to 20.6% Post) overall.
Implications: Implementation of the novel host-response sepsis screening and treatment protocol aligned sepsis alerts, blood culture use, and antibiotic prescribing more closely with actual sepsis prevalence. These findings suggest enhanced diagnostic precision, which enables ED clinicians to better target high-risk patients, reduce unnecessary interventions, support antimicrobial stewardship, optimize resource utilization, and ultimately improve the quality of patient care.

The EMS ESI-5 Paradox: High Resource Utilization Among Lowest-Acuity ED Patients

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Purpose: Emergency Severity Index (ESI) level 5 represents the lowest-acuity emergency department (ED) triage category and is generally associated with minimal to no anticipated resource utilization and low hospital admission rates. However, emergency medical services (EMS) patients may undergo prehospital evaluation and intervention that alters physiologic presentation prior to ED triage assignment. The purpose of this study was to describe hospital admission/transfer rates and ED resource utilization among EMS patients assigned ESI-5 acuity compared with walk-in ESI-5 encounters in a national deidentified ED dataset.
Design: Retrospective descriptive analysis of ED encounter records.
Setting: National deidentified ED dataset inclusive of clinical and billing data from 146 hospitals, four urgency rooms, and one urgent care center during calendar year 2025.
Sample: A total of 74,591 ESI-5 encounters were analyzed, including 6,044 EMS arrivals and 64,279 walk-in encounters.
Methods: ESI-5 encounters were stratified by arrival mode (EMS versus walk-in), disposition, laboratory utilization, imaging utilization, and IV/IM medication administration. Descriptive statistics, chi-square testing, and Wilcoxon rank-sum testing were performed.
Results: Among 74,591 ESI-5 encounters, 6,044 arrived by EMS and 64,279 by walk-in. EMS ESI-5 patients demonstrated substantially higher hospital admission and transfer rates compared with walk-in ESI-5 patients (25.0% vs 2.7%, $p < 0.001$). EMS ESI-5 encounters also demonstrated significantly greater ED resource utilization, including laboratory testing (median 6 vs 1 tests), radiology utilization (median 1 vs 0 studies), and IV/IM medication administration (median 3 vs 1 medications) compared with walk-in ESI-5 encounters (all $p < 0.001$). Despite assignment within the lowest ED triage category, EMS ESI-5 encounters frequently required substantial diagnostic and therapeutic intervention.
Implications: EMS patients assigned ESI-5 demonstrated markedly different admission patterns and resource utilization compared with traditional walk-in ESI-5 encounters. These findings suggest that ESI triage assignment may incompletely reflect illness severity and anticipated downstream resource needs among some EMS arrivals. Prehospital stabilization and physiologic normalization prior to ED arrival may contribute to this phenomenon. Emergency nurses play a critical role in recognizing patient complexity at the EMS-ED interface. These findings highlight the importance of incorporating prehospital clinical context into triage assessment and ED workflow processes, particularly among patients whose abnormalities may partially resolve prior to arrival. When EMS patients assigned low acuity require unanticipated resources and admission, the resulting impact on ED patient flow and boarding can further intensify nursing workload. Improved EMS-ED interoperability and structured prehospital handoff processes may enhance triage accuracy, resource anticipation, and patient safety. Further linked EMS-ED analysis is warranted to better characterize clinical and operational factors associated with low-acuity triage assignment among higher-resource EMS encounters.

The Trauma Nurse Specialist: Bridging Bedside Care and Trauma Systems

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Aim: The aim of this quality improvement project was to enhance trauma patient outcomes by increasing efficiency and compliance in trauma resuscitation processes. Specifically, the project focused on improving adherence to trauma verification standards, strengthening communication between bedside staff and trauma leadership, and fostering interdisciplinary collaboration during trauma activations.
Framework: The project utilized the Model for Improvement with iterative Plan-Do-Study-Act (PDSA) cycles to implement interventions, evaluate effectiveness, and refine processes. This framework facilitated testing of workflow adjustments, staff education, and performance monitoring to optimize trauma care delivery.
Setting: The project took place in a large, urban Level 2 trauma center in Northern Virginia with a high-volume emergency department. The hospital serves a diverse patient population and maintains a fully verified trauma program, providing a robust environment for quality improvement initiatives.
Stakeholder Team: The core team included Trauma Nurse Specialists, ED nurses, trauma educators, trauma director, and ED leadership. The team collaborated to design and implement interventions, test workflow changes, provide staff education, monitor compliance with trauma protocols, and analyze performance data. Leadership and clinical oversight ensured alignment with evidence-based practices and integration of improvements into daily operations.
Methods: The project focused on optimizing trauma resuscitation and adherence to verification standards. Baseline assessments identified workflow gaps. Interventions—such as staff education, standardized checklists, and communication tools—were implemented through iterative PDSA cycles. Key variables, including time to critical interventions, protocol adherence, and documentation accuracy, were tracked and analyzed to guide refinements and sustain improvements.
Outcomes: Preliminary results demonstrated improved adherence to trauma protocols, faster execution of critical interventions, and enhanced communication during trauma activations. Staff reported increased confidence in following standardized workflows. Data showed reductions in workflow delays and documentation errors, indicating early alignment with trauma system standards. To sustain improvements, the team implemented monthly trauma performance review meetings to discuss data trends, address workflow challenges, and reinforce best practices. These meetings promote continuous learning, strengthen interdisciplinary collaboration, and support ongoing quality improvement efforts.
Implications: The role of the Trauma Nurse Specialist extends beyond bedside care to encompass leadership, education, and system-level influence. Clinically, TNS expertise enhances patient outcomes through rapid assessment, critical decision-making, and advanced trauma interventions. Professionally, TNSs guide younger staff, promote adherence to trauma protocols, and facilitate interdisciplinary collaboration. Ethically and emotionally, the role demands resilience and moral judgment in high-stakes situations. Systemically, TNS involvement optimizes resource utilization, informs policy development, and contributes to trauma research. Recognizing these multifaceted implications underscores the TNS's pivotal contribution to both patient care and the broader emergency healthcare environment

Tranexamic acid in massive transfusion protocols at an academic level 1 trauma center
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Purpose: This study aims to evaluate the impact of tranexamic acid (TXA) administration on clinical outcomes among trauma patients receiving massive transfusion protocols (MTP). TXA is an antifibrinolytic, inhibiting clot breakdown in the event of severe hemorrhage, and can be administered as an adjunct to blood administration. MTP is an order set activated when a hemorrhaging trauma patient is expected to require a transfusion of 6 or more units of blood product. A meta-analysis of 40,138 patients published in 2018 showed that when administered at the time of hemorrhage, TXA reduced mortality in patients receiving MTP by 70%. However, any delay in treatment reduces efficacy by 10% every 15 minutes. Improved outcomes are accompanied by reduced financial cost for both the hospital and patient, with each dose of TXA costing only $25 and reducing total required blood product by an average of 2 units at over $500 per unit. Despite these benefits, only 54% of level 1 trauma centers in the US include TXA in their MTP order sets. While the efficacy of TXA in trauma-related hemorrhage has been well established in broader contexts, this study seeks to clarify its real-world effectiveness and safety within a high-acuity trauma setting serving a diverse population. Findings are intended to inform institutional protocol development and contribute to the growing body of literature supporting standardized TXA use as part of early hemorrhage control strategies in massive transfusion scenarios.
Design: This was a retrospective cohort analysis supported by a large data repository.
Setting: Data was collected between the years 2020-2025 from an academic, urban level 1 trauma center in the Southeast.
Sample: 1,014 patients that received massive transfusion protocols in the adult emergency department were included in this study. Among those patients there are no exclusion criteria.
Methods: This study pulls data from an integrated data repository on all patients in the past 5 years who received MTP in the adult emergency department trauma bay. The information queried includes total number of patients who received MTP, location and dose of TXA administration, and patient age, gender, and race. The following outcomes were measured for each patient: in-hospital mortality and total units of blood product transfused. Outcomes are compared across patients who received TXA en route, those who received TXA in hospital, and those who did not receive TXA.
Results: While data collection and analysis is still in process, preliminary results show that of 172 total MTP activations assessed, 63 patients received TXA. Of the patients that did not receive TXA, 41 survived and 68 died. Of the patients that did receive TXA, 50 survived and only 13 died. This represents a 67% reduction in mortality for those who received TXA.
Implications: These results clarify and amplify current literature supporting TXA use in massive transfusion scenarios. This research will inform the next iteration of the MTP order set at our hospital, which does not yet include standardized administration of TXA. Findings are intended to guide new protocols that will reduce mortality, reduce resource use, and increase standardization of care for patients receiving MTP.

Triage Competency Assessment Pilot

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Purpose: Ongoing triage competency assessment remains a priority for emergency department (ED) educators. Traditional tools are limited in their ability to provide skills such as incorporating cultural aspects, communication to the multi-disciplinary team, and learner immersion. This pilot aimed to assess the feasibility of utilizing an artificial intelligence (AI) virtual reality (VR) simulated patient for ongoing triage competency assessment including usability of the model and accurate documentation.
Design: This pilot utilized a descriptive qualitative design utilizing four behavioral outcome measures. The Iowa model of evidenced-based practice was utilized for the development of the project. During the pilot phase, practice change aims to standardize the use of the emergency severity index (ESI) tool while implementing triage decisions appropriate for each patient's level of acuity. Outcome evaluation can then be measured by recording and comparing accuracy of acuity assignment including screens specific to the patient, assessment of race/ethnicity, and communication to the provider when the patient's presentation requires escalation. Once process improvement determination has been made, adopting and sustaining with ongoing monitoring from ED management will direct future educational needs.
Setting: Urban tertiary medical center located in Northern California with over 120,000 ED patient visits per year
Sample: Convenience sample of 10 triage trained emergency department staff nurses with greater than 3 years of experience.
Methods: Learners were asked to triage a virtual patient using a test environment of our electronic health record (EHR). The virtual patient model was displayed on an adjacent computer screen and provided auditory responses using a large language model trained on healthcare training data with in-built system prompts and scenario specific context developed for this pilot. The following four outcomes were measured: Obstetrics cardiovascular disease (OB CVD) screening completion including applicable race/ethnicity documentation, provider notification in response to elevated blood pressure (BP), and whether the patient was assigned to the appropriate ESI level.
Results: All learners agreed with the statement "I would be willing to utilize this tool for triage competency training". 100% of learners selected the appropriate ESI level in triage and demonstrated appropriate provider notification based on the presenting signs, symptoms, and vital signs. The pilot revealed an opportunity for enhanced education in the OB CVD screening. Only 10% of learners entered data into the OB CVD risk screening, and no learners captured pertinent information including asking about race/ethnicity as indicated in the screening tool.
Implications: Artificial intelligence (AI) virtual patients for triage competency offer enhanced emersion, assessment with real patient attributes, and greater efficiency than observations. This tool measured outcome metrics in a way that could not be done easily by direct observation in the ED during patient care or in a classroom setting. Further research needs to be done with developing AI prompts that generate clinically relevant and accurate outputs. Prompt engineering will need to include domain-specific knowledge, address population bias, and have the flexibility for refinement and validation. AI virtual patients offer a unique opportunity for learners to practice with high risk, uncommon and sensitive triage scenarios generated on demand in a safe learning environment.

The Exit Mystery Solved: Smarter Coding for Safer Care

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Aim: This quality improvement initiative aimed to accurately distinguish patients who left without treatment complete (LWTC), left without being seen (LWBS), or eloped to support follow-up care, improve patient safety, and maintain EMTALA compliance through clearer disposition coding. Accurately coding how patients leave the ED determines follow-up needs, safety actions, and proper documentation.
Framework: A Plan-Do-Study-Act (PDSA) approach was utilized.
Setting: The setting is a 47 bed ED in a level 1 trauma, teaching hospital seeing over 300 patients daily in an urban area with a large, underserved population.
Stakeholder Team: The ED Clinical Nurse Specialist (CNS) collaborated with ED nurse leaders, providers, and informaticists to analyze the data and create new codes. The informatists created and tested the new codes in the electronic medical record (EMR). The ED CNS, nurse leaders and providers presented the coding and documentation change to the staff and provided education.
Methods: Interdisciplinary collaboration guided the change from broad AWOL/eloped and LWBS codes to three distinct dispositions. Only “AWOL/eloped” or “LWBS” were available, limiting recognition of patients who left after receiving care. These two dispositions limited providers, analysts, case managers, and nurses in ensuring interdisciplinary professional standards and discharge identification are met. Nursing informatics in collaboration with provider analysts created and approved the new codes. Nursing received education on correct criteria, and physicians were instructed to place appropriate follow-up and discharge orders. Patients leaving before seeing a provider were coded as LWBS; those leaving at any point before discharge after a medical screening exam (MSE) as LWTC; and patients lacking capacity (e.g., mental health, cognitive impairment) who left were coded as eloped. Education occurred for two weeks before the launch, including huddle quizzes. Ten chart audits per week monitored coding accuracy.
Outcomes: Through interdisciplinary collaboration with providers, analysts and nursing, correct discharge identification enhanced patient safety through appropriate follow up care and documentation accuracy for reimbursement. A new LWTC category accounted for 1,247 patients who received an MSE prior to leaving during the initial implementation phase. Achieving professional standards within discharge coding led to a decrease in LWBS by 42.6% and true elopements by 93.1%. With true elopements clearly identified, the team initiated interdisciplinary debriefs to address safety risks and strengthen follow-up care.
Implications: Adherence to new discharge dispositions reduced the misidentification of LWBS and true elopements, strengthened safety practices, and ensured appropriate follow-up. Differentiating LWBS from LWTC improves patient care, EMTALA compliance, and strengthens hospital metrics and reimbursement. These improvements support regulatory compliance, enhance quality metrics, and promote fiscal responsibility in ED care.

Using the Balance, Eyes, Face, Arm, Speech, Time Protocol to Improve Stroke Identification and Computed Tomography Time

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Aim: The aim of this quality-improvement project was to evaluate whether implementing a nurse-driven Code Stroke protocol using the BEFAST screening tool would reduce door-to-computed tomography (CT) time for patients presenting to the emergency department with stroke-like symptoms.
Framework: Everett Rogers' Diffusion of Innovation theory served as the translational framework for this project, guiding the introduction, adoption, and spread of the nurse-driven Code Stroke protocol by addressing factors that influence how new practices are communicated, accepted, and sustained within the emergency department.
Setting: The healthcare setting is an emergency department within an acute care hospital located in Upstate New York. This emergency department serves an average of 27,000 patients annually, or approximately 2,083 patients per month, presenting a wide range of diagnoses. The average overall length of stay (LOS) in the emergency department is 187 minutes, with discharged patients averaging 167 minutes and admitted patients averaging 324 minutes. The organization's service area spans two counties and serves approximately 100,000 residents.
Stakeholder Team: The core team of healthcare professionals involved in this project is nursing leadership, registered nurses (RNs), licensed practical nurses (LPNs), the quality department, informatics team, imaging personnel, the teleneurology clinical team, and education specialists.
Methods: This quality-improvement project aimed to improve the timeliness of stroke identification and diagnostic imaging in the emergency department by standardizing early screening and activation processes. The intervention consisted of implementing a nurse-driven Code Stroke protocol using the BEFAST tool at triage to identify patients with stroke-like symptoms and initiate rapid imaging. The primary process measure was door-to-CT, defined as the number of minutes from documented ED arrival to the time the CT was completed. These variables were extracted from the electronic health record for two independent patient groups; those treated under current practice and those treated after protocol implementation. A pre- and post-implementation design was used, and an independent samples t-test was selected to compare mean times between groups, as the outcome variables were ratio-level continuous measures collected independently before and after the intervention. Statistical significance was set at $\alpha = .05$.
Outcomes: A statistically significant difference in the time from arrival to CT completion was observed between the groups [$t(26) = 4.19$, $p = .001$], with a 76.8-minute decrease from current practice to the post-implementation period.
Implications: The findings of this project demonstrate that implementing a nurse-driven Code Stroke protocol using the BEFAST tool significantly improves the timeliness of stroke evaluation by reducing door-to-CT completion, indicating a meaningful enhancement in early stroke recognition and workflow efficiency. These results highlight the critical role of emergency nurses in accelerating stroke pathways and underscore the value of standardized, nurse-initiated screening processes in meeting national benchmarks for rapid imaging.

Work Stressors and Help-Seeking Behaviour Among Male Emergency Nurses

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Purpose: Emergency nursing is notorious as a high-stress practice setting in which nurses of all genders are exposed to substantial workplace stressors. Men remain underrepresented in the nursing workforce, and their workplace experiences and help-seeking behaviours in emergency departments remain under explored in the literature. This study explored workplace stressors and examined the social, political, and cultural factors influencing help-seeking among male emergency nurses in the emergency department.
Design: Qualitative study using critical ethnography and guided by the Ecological Model for Health Promotion.
Setting: Three emergency departments of a major urban community hospital in eastern Canada
Sample: Participants were eight male emergency nurses in Ontario, Canada recruited using purposeful sampling, with additional recruitment through ethics-approved posters, in-person welcome kits, word of mouth, referral, and snowball sampling. Eligible participants were biologically and self-identified male, held an Ontario nursing license (RN or RPN), were 21-65 years old, English-speaking, and had at least one year of direct client care experience.
Methods: This qualitative critical ethnography used purposeful sampling to recruit eight male emergency nurses who met the study's eligibility criteria. Participants completed a demographic questionnaire and took part in 45-70 minute in-depth semi-structured interviews conducted via Microsoft Teams audio call after written and verbal consent was obtained. Interviews were audio-recorded, reviewed alongside field notes and reflexive notes, and analyzed iteratively using Carspecken's five-stage critical qualitative research process, with coding supported by Dedoose software. Because this was a qualitative study, no quantitative variables nor measurements were used; instead, the study explored experiences of workplace stressors, help-seeking, and their social, cultural, and political context.
Results: The results were three interconnected findings. First, power and hierarchy shaped workplace stress through physician-nurse interactions, silence, and management control over staffing and resources. Second, help-seeking was complex, shaped by masculinity, organizational culture, debriefing practices, and access to supports. Finally, daily ED work produced layered stress, including violence, mental health crises, death and dying, overcrowding, workload, and equipment issues. Overall, these results propose that male emergency nurses' stress and help-seeking were shaped by organizational, social, and cultural conditions, not by individual factors alone.
Implications: This research results recommend that improving help-seeking and nurses' well-being in emergency nursing requires more than individual coping. ED leaders should strengthen psychologically safe communication, visible leadership, structured debriefing, responsive staffing, and accessible mental health supports. While this study focused on male emergency nurses, the implications extend to ED teams more broadly, with attention to gender-related influences on help-seeking such as stigma, acceptability, and trust. These findings also support integrating stress management, help-seeking, and supportive workplace practices into emergency nursing education, leadership, and policy.

When Crowding Scores Fail Nurses: Measuring Real-time Workload to Support Safe Staffing in the Emergency Department

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Purpose: Emergency departments (EDs) commonly use crowding metrics to guide staffing decisions, yet nurses frequently experience high workload during periods when crowding scores remain low. This mismatch may compromise patient safety and contribute to nurse strain and burnout. Nursing workload and ED crowding are related but distinct constructs, and it remains unclear to what extent existing real-time, quantitative instruments reflect perceived nursing workload. The purpose of this study was to compare the ability of four established workload and crowding instruments to explain perceived nursing workload and to determine whether adding nurse-identified care-complexity indicators improves their explanatory performance.
Design: A sequential exploratory mixed-methods study consisting of a qualitative phase followed by a quantitative observational study.
Setting: The study was conducted in a large, urban, non-academic teaching emergency department serving approximately 500,000 inhabitants. The ED functions as a level I trauma and acute neurovascular center with 34 treatment bays and a mixed adult and pediatric population.
Sample: In the qualitative phase, emergency nurses, nurse practitioners, and nurses in emergency training participated in focus groups using purposive sampling to capture variation in experience and roles. In the quantitative phase, perceived workload ratings were collected hourly from bedside nurses (high-care and low-care areas) and coordinating nurses during a four-week measurement period. All ED patients present during the same hourly blocks were included in the operational dataset. No patient-level exclusions were applied.
Methods: Focus group transcripts were analyzed using inductive thematic analysis to identify determinants of perceived nursing workload. Themes informed the selection of additional candidate variables reflecting care complexity. In the quantitative phase, hourly perceived workload scores were linked to four real-time, automatically generated instruments: the Jones Dependency Tool (JDT), modified National Emergency Department Overcrowding Score (mNEDOCS), Skåne Emergency Department Assessment of Patient Load (SEAL), and Workload Score (WLS). Candidate add-on variables included psychiatric presentations, respiratory distress, abdominal pain, and computed tomography imaging volume. Associations between instruments and perceived workload were examined using Spearman correlations and multivariable linear regression models. Model performance was assessed using explained variance (R^2). The study was reviewed by the regional medical research ethics committee and classified as exempt from formal review.
Results: Across 720 hourly observations, perceived nursing workload showed moderate to strong correlations with JDT and mNEDOCS, while correlations with SEAL and WLS were weaker. Adding nurse-identified care-complexity variables significantly improved model performance for all instruments, with the largest gains observed for SEAL and WLS. Psychiatric presentations, respiratory complaints, and CT imaging intensity demonstrated consistent independent associations with perceived workload. Periods of high perceived workload were observed even when crowding scores were low, indicating that crowding alone underestimated nursing burden.
Implications: Existing real-time crowding and workload instruments only partially reflect perceived nursing workload in the ED. Incorporating nurse-informed care-complexity indicators substantially improves alignment with experienced workload and may support safer staffing decisions. For emergency nursing practice and leadership, reliance on crowding metrics alone may obscure periods of unsafe workload. Future research should focus on refining real-time workload tools for implementation and on defining workload thresholds to guide staffing adjustments and operational decisions.

When Seconds Count: Integrating Stop the Bleed Training and Tourniquet Accessibility to Strengthen Hemorrhage Preparedness

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Aim: A non-traumatic limb hemorrhage served as the trigger for this quality improvement initiative. A subsequent Failure Mode and Effects Analysis (FMEA) determined that timely application of a Combat Application Tourniquet (CAT) could have mitigated blood loss. However, staff lacked training in the appropriate use of CATs and were unfamiliar with Stop the Bleed (STB) principles. This knowledge and skill gap underscored the need for targeted education in hemorrhage control techniques within the clinical setting. The aim of this project was to enhance staff competence and confidence in managing life-threatening hemorrhage by providing education and hands-on training on STB principles and the use of CATs.
Framework: This project was guided by the Plan-Do-Study-Act (PDSA) framework.
Setting: The project took place at an urban, academic Level I safety-net trauma center.
Stakeholder Team: Emergency and intensive care staff nurses became STB instructors and educated staff, the trauma department provided equipment, nursing leadership facilitated participation by allowing protected training time, and a clinical nurse specialist provided overall project leadership.
Methods: A pre–post, non-experimental quality improvement design was used to evaluate the impact of a standardized hemorrhage control intervention on clinical staff performance. The project was hospital wide including nursing staff across all hospital units. The intervention included structured education on STB principles and hands-on training in the use of CATs. Instructional methods incorporated adult learning strategies such as skills demonstration, simulation-based scenarios, and case-based discussions to reinforce recognition and response to life-threatening hemorrhage. In addition to education, the project standardized the placement of CATs on all hospital crash carts, ensuring equipment availability and consistent inclusion on routine safety checklists. Outcome measures included tourniquet availability, and appropriateness of use based on event documentation. Pre- and post-intervention data were analyzed descriptively and comparatively to assess improvements in rapid hemorrhage recognition and control effectiveness.
Outcomes: A total of 1,485 nursing and ancillary staff were trained in STB principles. This number exceeded the target goal of educating at least 50% of staff to recognize life-threatening hemorrhage and apply a CAT. Post-training surveys were completed by 287 nurses. Among respondents, 39 reported prior experience applying a CAT before the intervention. Following the educational program, 99% of surveyed nurses reported confidence in their ability to apply a CAT correctly. Since implementation of the STB training program in April 2025, CATs have been applied in three clinical emergencies. In each event, the tourniquet was used to control active hemorrhage prior to definitive treatment.
Implications: Providing STB education strengthened staff readiness to recognize and intervene in life-threatening hemorrhage events. Standardizing the availability of CATs in crash carts supported rapid response and effective hemorrhage control during critical incidents. Based on these results, healthcare organizations should consider adopting CATs as standard equipment in all crash carts to ensure timely access during clinical emergencies. In many healthcare settings, Code Blue responses are led by either emergency physicians or nurses. Given their frontline role in resuscitative care, it is essential for emergency nurses to advocate for the inclusion and appropriate use of CAT tourniquets as a lifesaving intervention for uncontrolled limb hemorrhage.

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