

Dumke College of Health Professions

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NURSING

ABSTRACT

Patient overcrowding in emergency departments (ED) negatively impacts the quality of patient care, patient safety, and caregiver engagement. Solutions to reduce overcrowding should be centered around developing a process that promotes efficiency, quality, and empowers the caregiver to provide an excellent patient experience. The purpose of this project is to implement a nursing-driven throughput process. Areas of focus include a rapid triage model that focuses on patient intake and a team-based care model focused on efficient disposition. These processes were designed to reduce overall length patient length of stay in the ED. The benefits of this project are centered around improving patient outcomes in the ED that are associated with reduced length of stay. Other benefits include increased communication and collaboration with the nursing staff to improve caregiver engagement.

PICO QUESTION

In emergency nursing, does changing patient triage and caregiver workflow as compared with the current model reduce patient overcrowding and decrease patient length of stay?

LITERATURE REVIEW

A thorough literature review provided support for common themes associated with reducing ED overcrowding and length of stay.

- Implementing a transprofessional care model (1).
- Utilization of an Advanced Practice Provider (APP) (2).
- Implementation of Continuous Quality Improvement (CQI) model (3).
- A strong focus on communication techniques (4).

Reducing Emergency Department Overcrowding

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PROJECT METHODOLOGY

If caregivers intend to deliver high-quality healthcare to their patients, they must evaluate their delivery methods. This project involves finding better methods to streamline patient intake in the ED by improving the nurse triage process using the Advanced Research and Clinical Practice through Close Collaboration model as a guide (5). It also focuses on improving the patient throughput process in the ED by delivering quality healthcare with a focus on team-based processes. These improvements were designed with the understanding that, when ED overcrowding is reduced, it positively impacts other quality indicators. Quality measures designed to reduce ED overcrowding impact patient safety, length of stay, and patient satisfaction, which can improve health outcomes. Engaging nursing teams to innovate and design processes that positively affect these quality indicators can also impact the level of caregiver engagement and satisfaction in the workplace.

Patient Intake & Throughput (PIT) Process Improvement

This nurse-driven triage model is designed as a interdisciplinary team of nurses, physicians, and technicians to immediately deliver patient care upon arrival to the ED.

Benefits of PIT Change

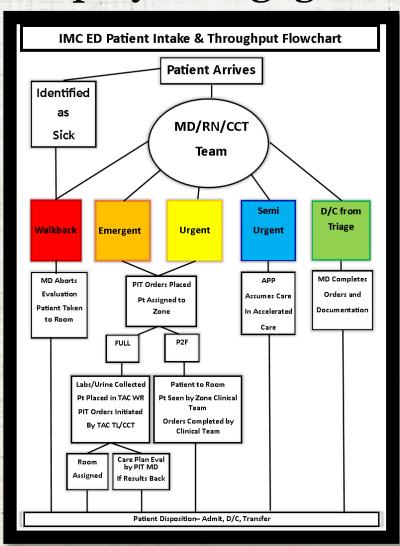
- Improved door-to-treatment time for patients.
- Improved patient satisfaction scores.

PIT Change- The following items were created to implement this process improvement:

- A staff orientation to the new PIT process through educational seminar and a PowerPoint presentation.
- The creation of a staff simulation used to PIT process that allows for practice and feedback.
- A PIT process flowchart to clarify roles and steps in the new triage process.

Evaluation of PIT Changes- The success of the change will be evaluated in the following ways:

- The effectiveness of patient quality will be determined through the evaluation of timed performance measures.
- The caregivers' perceptions of the effectiveness of the PIT process changes will be measured through an employee engagement survey.



Team-Based Care for Patient Disposition Changes

The team-based care changes include using interdisciplinary teams of physicians, nurses, and technicians to treat and disposition patients in a specific area of the ED.

Benefits of Team-based Care

- Improved patient outcomes in disposition-todischarge and length of stay in the ED.
- Improved caregiver communication and collaboration.
- Higher caregiver satisfaction.

Project Deliverables for Team-based Care Changes

- A staff orientation to team-based care using an educational seminar and PowerPoint presentation.
- A staff simulation utilizing a team-based care model for patient care.
- An ED map and schedule template to help caregivers better understand team-based care.

Evaluation of Team-based Care Changes

- The impact of the change on patient quality measures will be determined through an analysis of performance measures.
- The employee engagement survey outcomes will be used to evaluate the effectiveness of the new team-based staff communication practices.





THEORETICAL FRAMEWORK

- The Advancing Research and Clinical Practice through Close Collaboration (ARCC) model aims to promote practice improvement throughout a system(5); this model is designed to help the organization. To improve throughput efficiency to reduce the length of stay in the ED, an organization must choose a theory the emphasizes cultural change at that level. As the ARCC model is utilized in the emergency department, each step will help create that cultural change and sustain it (5).
- The five steps of the model include 1) assessment of the organizational culture and readiness for implementation; 2) identification of strengths and weaknesses of the EBP process in the organization; 3) identification of EBP mentors; 4) implementation of evidence into practice in the organization; and (5) evaluation of the outcomes from the practice change (6).

CONCLUSIONS

As the landscape of healthcare evolves, strategies to reduce ED overcrowding must also evolve to reflect how the community uses the ED. Overcrowding directly affects patient care quality, decreases caregiver satisfaction, and places the ED at risk for more significant systemic problems. By implementing a nurse-driven triage model and team-based care approach, caregivers are empowered to impact ED wait times, patient throughput, and reduce the overall length of stay. The PIT model and team-based care approach allow caregivers to collaborate to improve communication and workplace efficiency. As a result, they can improve team morale, increase communication efficiency, and create an environment that focuses on delivering the best patient care experience.

REFERENCES

Morphet, J., Griffiths, D. L., Crawford, K., Williams, A., Jones, T., Berry, B., & Innes, K. (2016). Using transprofessional care in the emergency department to reduce patient admissions: A retrospective audit of medical histories. Journal of interprofessional care, 30(2), 226-231. Retrieved from https://www.tandfonline.com/doi/abs/10.3109/13561820.2015.1115394/abs/10.3109/13561820.2015.1115394
 De Gruchy, A., Granger, C., & Gorelik, A. (2015). Physical therapists as primary practitioners in the emergency department: A six-month prospective practice analysis. Physical Therapy, 95(9), 1207–1216. Retrieved from http://jcore reference.highwire.org/content/ptjournal/95/9/1207.full.pdf
 Ng, D., Vail, G., Thomas, S., & Schmidt, N. (2010). Applying the lean principles of the Toyota production system to reduce wait times in the emergency department: A six-month prospective practice analysis. Physical Therapy, 95(9), 1207–1216. Retrieved from http://jcore

Ng, D., Vail, G., Thomas, S., & Schmidt, N. (2010). Applying the lean principles of the Toyota production system to reduce wait times in the emergency department. CJEM: Canadian Journal of Emergency Medicine, 12(1), 50–57. Retrieved from https://pdfs.semanticscholar.org/b5cb/a77460de331b57407c79d77b3d529192ae3b.pdf
 McBeth, C. L., Durbin-Johnson, B., & Siegel, E. O. (2017). Interprofessional huddle: one children's hospital's approach to improving patien

en&ved=2ahUKEwjQpLjzsYjtAhWjGDQIHaDuB_AQMygWegUIARCsAg

Melnyk, B. M. & Fineout-Overholt, E. (2019). Evidence-based practice in nursing and healthcare: A guide to best practice. (4th ed.). Philadelphia, PA: Wolters Kluwer.
Schaffer, M. A., Sandau, K. E., & Diedrick, L. (2013). Evidence-based practice models for organizational change: overview and practical applications. Journal of Advanced Nursing, 69(5), 1197-1209. Retrived from https://diwqtxtsixzle7.cloudfront.net/40115470/Evidence-based_practice_models_for_organ20151117-13885-1byqvm7.pdf?1447796348=&response-content-disposition=inline%3B+filename%3DEvidence_based_practice_models_for_organ.pdf&Expires=1604537422&Signature

flow. Pediatric nursing, 43(2), 71. Retreived from https://search.proquest.com/openview/6ccd967f62a7d643ddffa52c4945cd88/1?pq-

7. Emergency Room Photo. (2020). Retrieved from https://cdn.pixabay.com/photo/2018/04/16/23/25/emergency-room-3326156_1280.jpg
8. Emergency Services Photo. (2020). Retrieved from https://www.google.com/imgres?imgurl=https%3A%2F%2Fp1.pxfuel.com%2Fpreview%2F754%2F608%2F53%2Femergency-emergency-services-hospital-medicine.jpg&imgrefurl=https%3A%2F%2Fwww.pxfuel.com%2Fen%2Fsearch%3Fq%3Durgent%2Bcare&tbnid=xYKVSPjWYrnLpM&vet=1 2ahUKEwjQpLjzsYjtAhWjGDQIHaDuB_AQMygWegUIARCsAg..i&docid=4QVxoCriIEObBM&w=910&h=603&q=emergency%20room&hl=