

**Reducing Emergency Department Bounce-Back Through Nurse-Driven Discharge
Education**

Madison L. Fountain

College of Nursing, East Carolina University

Doctor of Nursing Practice Program

Dr. Blair Conway

April 2nd, 2024

Abstract

A *bounce-back* is an emergency department (ED) visit by a patient previously treated and discharged who has subsequently checked back in within 48 hours for treatment (Montoy et al., 2019). Bounce-backs constitute a significant healthcare problem, causing decreased health in our population and an increase in the total cost of healthcare (Curcio et al., 2020). The national bounce-back average is 4%, and healthcare systems implement few interventions to solve the issue despite support within the literature to justify that thorough nursing education at discharge lowers bounce-backs. Nurse-to-patient educational gaps in the ED discharge process have decreased emergency nurses' competence and confidence in discharge teaching. The primary objective of this DNP project was to determine if improved nursing education at the time of discharge would decrease bounce-backs. This DNP project found a correlation between bounce-backs and teach-back method implementation, which led to nurse-driven education during discharge. The IOWA method and the Institute for Health Improvement (IHI) recommendations were utilized to implement the teach-back method and incorporate an emergency nursing discharge tool. In this DNP project, many emergency nurses were unaware of bounce-backs, never used the teach-back method, and never received teach-back or discharge training. The project's barriers included a small sample size, no standardized discharge tool or process, and response bias. The study's findings suggest that emergency nursing staff's increased attention to the discharge process positively impacts the rate at which bounce-backs are seen. Further education should focus on the vulnerable populations contributing to bounce-backs.

Keywords: bounce-back, emergency nursing, emergency department, teach-back, discharge education

Background

Bounce-back patients account for 4% of all ED visits in the United States, which nationally account for over one million additional visits yearly (Navanandan et al., 2020). Ineffective discharge education given by emergency nursing staff can lead to non-adherence to prescribed medications, diagnosis confusion, not acting on strict return precautions, and unplanned bounce-back ED visits (Mahajan et al., 2020). Nationwide, 78% of patients discharged from the ED have comprehension deficits, and patients aged 70 years or older have a 22% increased chance of a return visit within 30 days (Schouten et al., 2021). Studies show that only 19% of bounce-back patients are admitted to the hospital, which suggests bounce-backs are likely preventable (Navanandan et al., 2020).

Emergency nurses are the patient's primary source of education during discharge from the ED and play a vital role in addressing the visit summary, appropriate follow-up, newly prescribed medications, and community support (Davazdahemami et al., 2022). Providing poor or inadequate education to patients at discharge can lead to adverse outcomes, noncompliance, and increased emergency room return visits. Quality discharge education given by a competent nursing staff has improved patient competence and health literacy by reinforcing education on discharge recommendations, thereby decreasing confusion and patient return visits (Dermody et al., 2021). The site of this DNP project identified a need to target nurse-focused discharge training to decrease bounce-backs.

Problem Statement

The site of this DNP project was a 19-bed free-standing community ED experiencing an increased number of patients returning within 48 hours post-discharge. The literature supports that the increased number of bounce-backs is attributed to a decrease in patients' comprehension

of their after-visit summary (AVS) and the emergency nurses' need for improved attention to the education given to the patients during the discharge process.

Historically, this institution has experienced a rising trend in patients returning to the ED within 48 hours post-discharge. The organization recognized a gap between discharge education and patient understanding of their visit recommendations, as the emergency nurses saw education as the physician's role. Few interventions had been implemented by the healthcare system to solve bounce-backs.

During data extraction from the electronic health record (EHR), this organization found that they are experiencing a 4.9% daily average readmission rate among patients discharged within 48 hours. The hospital system's bounce-back benchmark is less than 3% per 48 hours. The organization fails to meet the nationally set benchmarks and Healthy People 2030 goals. Bounce-back patients are used as an internal quality metric, and above-average numbers represent errors by healthcare organizations, doctors, and nurses (Davazdahemami et al., 2022).

Purpose Statement

This DNP project aimed to implement a standardized discharge process and tool for emergency nurses modeled on the IHI's teach-back method in an effort to improve discharge teaching, increase patient satisfaction, improve patient health literacy, and reduce bounce-backs. Enhancing the proficiency and self-assurance of emergency nurses in providing discharge education will result in reduced bounce-backs to the emergency room and enhance community health. The goal was to improve nurse-to-patient discharge communication and increase patient health literacy to provide ED patients with improved AVS competence.

Interventions

A comprehensive literature review evaluated interventions in reducing ED bounce-back through nursing discharge education. It is well documented in the literature that lack of patient comprehension of their ED visit is a significant factor in increasing bounce-backs. A literature search was performed through an intervention strategy to evaluate emergency nurses' best actions to improve patient comprehension and health literacy during discharge. There are no current guidelines for EDs to reduce their bounce-back numbers; similar to hospital readmissions, ED revisits can strongly predict the hospital system's care (Becker et al., 2021).

Current best practice shows that emergency nurses should thoroughly explain discharge instructions to patients in written and verbal form until patient comprehension is met (DeSai et al., 2021). However, research lacks areas to improve patients' health literacy and self-efficacy during discharge in busy, overcrowded, and time-sensitive ED settings. Lack of patient comprehension at discharge is associated with a higher risk for ED bounce-back and mortality, costing hospital systems in the United States twenty billion annually (Becker et al., 2021).

The most effective current approaches to decreasing bounce-backs associated with inadequate patient comprehension of their discharge recommendations focused on nurse-driven discharge tools and updated processes (Becker et al., 2021). The most consistent approach in the literature to increasing patients' health literacy during discharge in the ED is implementing the teach-back method. The teach-back method is an evidence-based approach for emergency nurses to improve patient education and quickly assess patient comprehension (Scott et al., 2019). Mahajan et al. (2021) report that discharged patients' comprehension of their AVS rose from 11.9% to 49% after successfully implementing the teach-back method. The teach-back method has proven resourceful and has strong support from nursing leaders and hospital systems;

however, teach-back is being used by only a small percentage of emergency nursing staff across the United States (Eloi, 2021).

Patients who received the teach-back method had reduced numbers of bounce-backs compared to patients receiving standard discharge education (Hesselink et al., 2020). Regardless of a patient's clinical decline or cognitive ability, the teach-back method improved short-term memory retention in older adults. The teach-back tool will allow nursing staff to fill in the patient-nurse communication gap and enable emergency staff to evaluate patients' understanding of the AVS (Eloi, 2021). The teach-back method is feasible in the chaotic ED setting and adds two minutes to standard discharge education (Mahajan et al., 2020).

The teach-back method can be used for complex discharge education and supports a successful transition from acute care settings to home (Scott et al., 2019). Teach-back encourages effective communication, focuses on patient-centered care, promotes motivational interviewing, increases patient engagement, and identifies knowledge gaps and misunderstandings (Klingbeil & Gibson, 2018).

Methodology

With the collaboration of the partnering organization and departmental nurse leaders, the teach-back method was deemed the best intervention for emergency nursing staff. The IOWA Model was utilized during the implementation of the DNP project. Bounce-backs were documented on a weekly basis through the hosting site's EHR. Initially, surveys were conducted on nursing staff on their perceived view, confidence, competence, technique, and use of the teach-back method in their discharge process. Implementation included an educational one-hour PowerPoint on the IHI's discharge process, *always use teach-back* guidelines, and a discharge tool checklist for 20 clinical emergency nursing staff.

Teach-back handouts for clinical staff identifying the main aspects of the new evidence-based discharge tool were used during each patient discharge encounter and placed in each patient room. The discharge tool highlights the main elements of the teach-back method, including *diagnosis, treatment received, referrals, prescriptions, primary care follow-up, and return precautions*. Emergency staff were educated on the discharge process itself, including highlighting key points on the AVS, having the patient off the monitor, cords, and wires, putting the bed rails down, sitting at patient eye level, making eye contact, and using positive body language.

Observations of the 20 staff members were conducted to gauge the use of the teach-back method and the effectiveness of the discharge process. Following observations, each nurse received one-on-one education, allowing for questions and concerns. An IHI teaching video and educational modules were sent to each participant to help them understand the teach-back method in real clinical settings. IHI's *always use teach-back* handouts were placed for morning and night shift huddles for daily reminders the charge nurses would give to their emergency staff. The teach-back method was deemed mandatory, and annual competencies were developed to check off current staff, new graduates, and travel nurses.

The nursing staff received a post-implementation survey on the weekly use of the teach-back method, their conviction and confidence regarding the method, and concerns in comparison to the beginning of the project. At the end of the DNP project, the bounce-back rate and patient satisfaction scores were accessed through the project site's EHR for comparison.

The Collaborative Institutional Training Initiative Program was completed for the project pre-approval process. The DNP course faculty overviewed a quality self-certification form that was submitted to East Carolina University's quality improvement and program evaluation self-

certification tool for Institutional Review Board (IRB) review. The project did not need IRB approval and was reported as a quality improvement project.

The project site required approval from the Nursing Research Council (NRC) and an IRB review. A PowerPoint presentation of the project was submitted to the NRC. After acceptance from the project site's NRC, a self-certification survey was conducted to see if the project needed project site IRB approval. The IRB site team members conducted a 30-minute interview with the DNP student and their mentor leader, who deemed the project as quality improvement. Mandatory documentation was uploaded to IRB.net, and the hospital's IRB team noted that the project did not need IRB approval.

Results

Twenty emergency nurses participated in the quality improvement DNP project over five months. Participating nurses were surveyed, interviewed, and provided with education during project implementation. 30% of emergency nursing staff needed to be made aware of bounce-backs and that it is being used as a significant ED benchmark. 35% of emergency staff had teach-back education with their organization before the project started. Patient satisfaction scores showed a minimal change during implementation, increasing from 87% to 90%.

The bounce-back percentage at the start of project implementation was 4.90%, rising steadily at 0.25% weekly over several months. During the first 30 days of implementation, bounce-back rates significantly dropped to 3.63%. At the project's end, bounce-backs had fallen 0.8% in total and completed at 4.04%.

The initial percentage of emergency nursing staff that felt confident in using the teach-back method was 78%, and staff that thought the teach-back method was a convenient tool was 82%. After project implementation, the surveyed nurses' confidence and convention scores

regarding using the teach-back method increased, with confidence at 92% and convenience at 95%.

Participants were asked how often they use the teach-back method per week during their discharge process, totaled by surveying *none*, *very few*, *most*, and *all*. Emergency nurses who chose *none* improved from 10% to 0%, and those who chose *very few* improved from 40% to 5%. ED nurses who *mostly* performed the teach-back method improved from 30% to 20%, and nurses who used the technique *all the time* increased from 20% to 75%.

Implications

Creating a standardized discharge process for emergency nurses modeled on the IHI's teach-back method lowered patient bounce-backs, increased emergency nurses' confidence in the discharge education process, and demonstrated the importance of adherence to the teach-back method. Implications for future practice include a discharge tool checklist, yearly teach-back competencies, monthly tracked bounce-back rates, and daily discharge process huddles.

Mandatory educational competencies involving the teach-back method, monitored by department leaders, are needed for nursing staff to remain competent and consistent in incorporating the skill. Daily reminders, including posters, discharge check-off sheets, and shift huddles, proved to increase nursing compliance as bounce-backs decreased during times of implementation and increased in times of observation.

The teach-back method is a realistic tool that can be used by all emergency nurses regardless of years of nursing experience and busy environments. Teach-back information should be mandatory for all new staff, including new graduates, travel nurses, and flex nurses. Nurses who did not claim the project site as their home base needed more education as there was no purposeful orientation to the discharge process or flow of the department. Emergency nurses who

did not consistently work within the unit showed less confidence, were more likely to be unaware of bounce-backs, and would rarely use the teach-back method.

Conclusion

A revamped evidence-based discharge process and tool improved emergency nurses' confidence and compliance in using the teach-back method, increased patients' comprehension of their AVS, and decreased department bounce-backs. Focusing on a nurse-driven discharge process proved to work in a chaotic and fast-paced working environment regardless of the nursing staff's clinical experience. Future studies are needed to assess the percentage of AVS retention after implementing the teach-back method and the vulnerable populations that contribute to bounce-backs.

References

- Becker, C., Zumbrunn, S., Beck, K., Vincent, A., Loretz, N., Müller, J., Amacher, S. A., Schaefer, R., & Hunziker, S. (2021). Interventions to improve communication at hospital discharge and rates of readmission: A systematic review and meta-analysis. *JAMA*, 4(8), e2119346. <https://doi.org/10.1001/jamanetworkopen.2021.19346>
- Curcio, J., Little, A. S., Bolyard, C., Gupta, A., Secic, M., & Sharkey, M. (2020). Emergency department “bounce-back” rates as a function of emergency medicine training year. *Cureus*, 12(9). <https://doi.org/10.7759/cureus.10503>
- Davazdahemami, B., Peng, P., & Delen, D. (2022). A deep learning approach for predicting early bounce-backs to the emergency departments. *Healthcare Analytics*, 2, 100018. <https://doi.org/10.1016/j.health.2022.100018>
- Dermody, S., Hughes, M. J., & Smith, V. (2021). The effectiveness of pictorial discharge advice versus standard advice following discharge from the emergency department: A systematic review and meta-analysis. *Journal of Emergency Nursing*, 47(1), 66-75. <https://doi.org/10.1016/j.jen.2020.07.005>
- DeSai, C., Janowiak, K., Secheli, B., Phelps, E., McDonald, S., Reed, G., & Blomkalns, A. (2021). Empowering patients: Simplifying discharge instructions. *BMJ Open Quality*, 10(3), e001419. <https://doi.org/10.1136/bmjopen-2021-001419>
- Eloi, H. (2021). Implementing teach-back during patient discharge education. *Nursing Forum*, 56(3), 766-771. <https://doi.org/10.1111/nuf.12585>
- Hesselink, G., Sir, Ö., Koster, N., Tolsma, C., Munsterman, M., Olde Rikkert, M., & Schoon, Y. (2022). Teach-back of discharge instructions in the emergency department: A pre-post

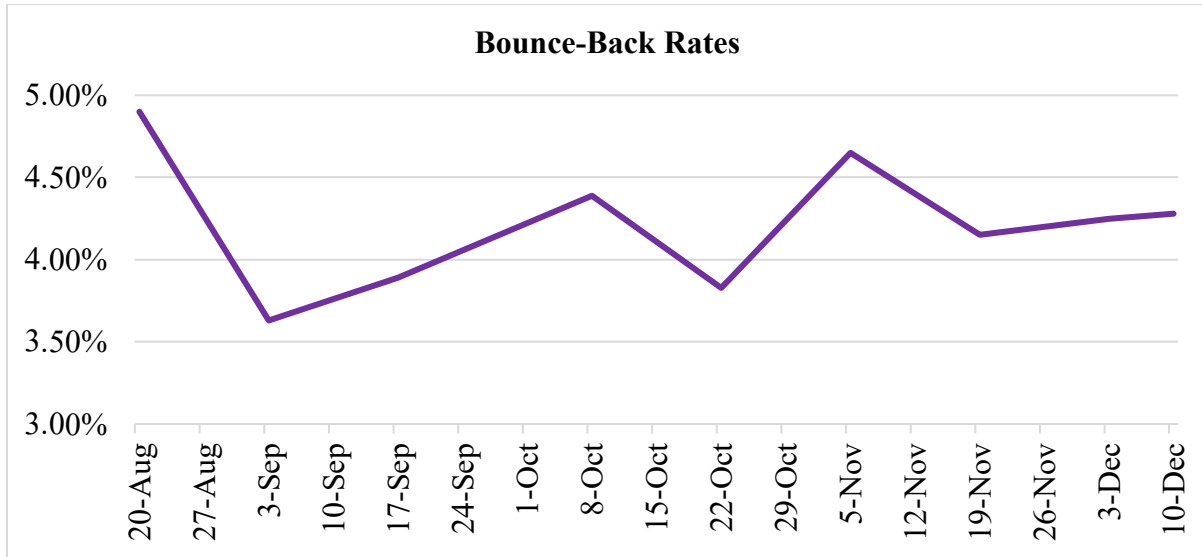
- pilot evaluation. *Emergency Medicine Journal*, 39(2), 139–146.
<https://doi.org/10.1136/emmermed-2020-210168>
- Klingbeil, C., & Gibson, C. (2018). The teach back project: A system-wide evidence based practice implementation. *Journal of Pediatric Nursing*, 42, 81–85.
<https://doi.org/10.1016/j.pedn.2018.06.002>
- Mahajan, M., Hogewoning, J. A., Zewald, J. J. A., Kerkmeer, M., Feitsma, M., & van Rijssel, D. A. (2020). The impact of teach-back on patient recall and understanding of discharge information in the emergency department: The emergency teach-back (EM-TeBa) study. *International Journal of Emergency Medicine*, 13(1), 49.
<https://doi.org/10.1186/s12245-020-00306-9>
- Montoy, J. C., Tamayo-Sarver, J. H., Miller, G. A., Baer, A. E., & Peabody, C. R. (2019). Predicting emergency department “bounce-backs”: A retrospective cohort analysis. *Western Journal of Emergency Medicine*, 20(6), 865–874.
<https://doi.org/10.5811/westjem.2019.8.43221>
- Navanandan, N., Schmidt, S. K., Cabrera, N., Topoz, I., DiStefano, M. C., & Mistry, R. D. (2020). Seventy-two-hour return initiative: Improving emergency department discharge to decrease returns. *Pediatric Quality & Safety*, 5(5), e342.
<https://doi.org/10.1097/pq9.0000000000000342>
- Schouten, B., Driesen, B. E. J. M., Merten, H., Burger, B. H. C. M., Hartjes, M. G., Nanayakkara, P. W. B., & Wagner, C. (2022). Experiences and perspectives of older patients with a return visit to the emergency department within 30 days: Patient journey mapping. *European Geriatric Medicine*, 13(2), 339–350. <https://doi.org/10.1007/s41999-021-00581-6>

Scott, C., Andrews, D., Bulla, S., & Loerzel, V. (2019). Teach-back method: Using a nursing education intervention to improve discharge instructions on an adult oncology unit. *Clinical Journal of Oncology Nursing*, 23(3), 288–294.

<https://doi.org/10.1188/19.CJON.288-294>

Figure 1

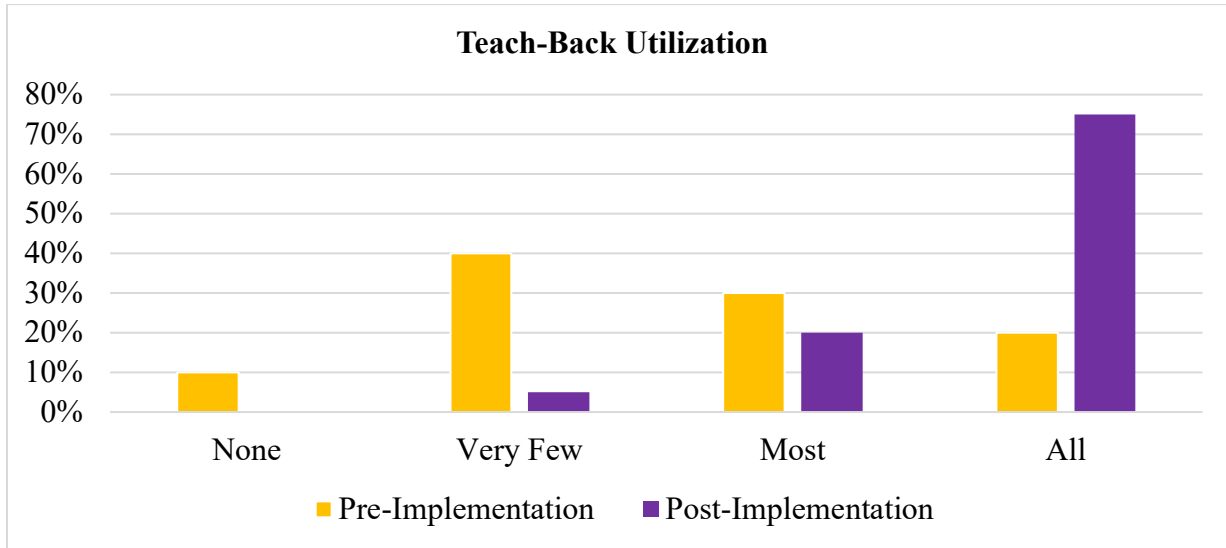
Line Graph Depicting Bounce-Back Rates



Note. The entire implementation period of August to December 2023.

Figure 2

Teach-Back Utilization by Emergency Nursing Staff



Note. The entire implementation period of August to December 2023.