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Discharge Process Optimization

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Executive Summary

Introduction of the Problem

The discharge and planning process begins as soon as the patient enters the healthcare system, making it one of the most complex aspects in the care of a patient. As the demands of the nurse become increased with higher acuity and documentation requirements, the delivery of discharge instructions is often one of the most, and at times, only, formal education opportunities between the nurse and the patient. Discharge education and instructions summarize what the patients need to know to safely care for themselves at home, including what medications to take and when, what signs and symptoms to look for, and other necessary instructions specific to their care (Alper & Hernandez, 2014). It is imperative that the healthcare team communicates these necessary topics to the patients. Without a solid understanding of his/her plan of care, the patient is more likely to be readmitted. Not only can this be devastating to a patient's health, but readmissions cost the United States between 15 to 20 billion dollars annually, making it financially impactful as well (Jencks, Williams, & Coleman, 2009). Due to this, it is important that healthcare providers facilitate the best understanding of discharge care to the patients to ensure the best outcomes for health and wellness and to prevent any unnecessary costs.

Literature Review

This focused review evaluated the literature specifically addressing patient education needs and deficiencies regarding discharge from the acute hospital setting. The evidence confirms there is dissatisfaction of patients surrounding discharge (Alper & Hernandez, 2014) (Cain et al., 2012) (Okrainec et al., 2017). Additionally, information was gathered from the studies and articles to support several practices that would enhance understanding for patients when compiling discharge instructions. Themes on health literacy, visual presentation,

technology, and caregiver inclusion emerged. Common themes were identified to implement changes to current discharge practices that aim to enhance patient understanding of education upon discharge. While many practices were identified to increase patient satisfaction and comprehension with discharge, gaps in literature were noted surrounding the effectiveness of specific interventions. Namely, all articles utilized implemented multiple interventions in order to improve discharge, which made it difficult to determine which pieces were effective and should be implemented.

This project aimed to create a solution that would address the four major themes that were identified: health literacy, visual presentation, technology, and caregiver inclusion. Health literacy is an issue that has been reinforced to health professionals in regard to educating patients for many years; however, this literature review reveals it continues to be a relevant issue. When patients do not understand the discharge education, they are more likely to be readmitted or suffer from complications (Alper & Hernandez, 2014) (Okraïnec et al., 2017). The visual presentation of the discharge instructions is correlated with better understanding and retention according to patients (Kourbelis et al., 2020) (Okraïnec et al., 2017). Therefore, creating engaging, simple discharge instructions, allows the healthcare providers to attempt to provide education to all patients at an understandable level. Leveraging technology when possible and promoting patients taking notes while reviewing discharge instructions has shown some benefits regarding comprehension and knowledge retention (Bui, Myerson, & Hale, 2012) (Mueller & Oppenheimer, 2015). Lastly, by having a strong patient-caregiver dyad, the likelihood of readmission and complications is decreased (McLeod-Sordjan et al., 2011).

Based on this literature review, it is noted that there are several best practices that can be employed to standardize the discharge process in the acute care setting. The DNP Project

utilizing this literature review information seeks to address creating a workflow standard of what should be included when compiling and delivering discharge instructions in the acute care setting. In order to meet the needs, the solution must address what evidence has presented to be successful. By creating simplified, visually-appealing, education that is pre-built for nursing staff to insert into discharge instructions, patients will be receiving information that they need to care for themselves at home in a format that they can understand. The education solution provided will utilize key information from the literature including writing at an appropriate health literacy level and the use of visuals to present and simplify information. Leveraging current technology and practice allows this solution to seamlessly fit into staff workflow, ideally making a smoother transition for the nurses compiling and delivering the discharge instructions. A standardized nursing process needs to be established, as well as tools and audits to sustain the changes after implementation. Increasing patient satisfaction with discharge education will allow patients to leave the healthcare system safer and more confident in caring for themselves.

Methodology

This project was a quality improvement project designed to implement a change to nursing workflow to provide a better discharge process for patients. The project location was a 433-bed regional care hospital in Central Illinois and the target population were adult medical/surgical patients. The principal investigator was given permission by both directors of inpatient services, the Chief Operating Officer, and the Chief Nursing Officer. The Institutional Review Board at Southern Illinois University at Edwardsville and Carle Foundation Hospital both approved this project prior to project implementation.

A discharge process workflow was developed by an interdisciplinary team that included a doctoral nursing student, inpatient nursing leadership, information technology, clinical

education, case management, and staff nurses. The workflow was designed and integrated into existing Epic technology and staff were educated on the process by creating an interactive module. Education was also placed in a location where staff could reference the process in real time if needed after completion of the module. After a period of 60 days, which was 30 days after the required completion of the module, the patient satisfaction data was examined in order to determine if a change resulted.

Evaluation

After a period of 60 days, data was collected to determine if the workflow change had an effect on patient satisfaction. The facility utilizes the technology solution, NRC Health, to obtain real time feedback from patients regarding their experience. This allows the facility to obtain patient satisfaction response data immediately upon survey completion. Three specific domains of NRC data were evaluated based on project purpose: ‘nurses explained things’, ‘received education about medications’, and ‘confidence and trust in nurses’. These domains are categories written by NRC that correlate to specific questions on their surveys. Domains were evaluated at 60 days’ post workflow change go live date to determine if the project had desired effects on patient satisfaction scores. Patient satisfaction scores overall decreased during the 60 days of data collection. Overall Net Promoter Score decreased from 68.3 (n=862) in March 2021 to 62 (n=1,867) in August 2021. The three specific domains were evaluated based on a period of data from ‘the last month’. This allows the data to be evaluated after the nursing education on discharge process optimization, to see if there was any increase in those specific patient satisfaction domains. The domain of ‘nurses explained things’ increased from 66.3 (n=913) to 74.7 (n=2,090). The domain of ‘education about medications’ decreased from 58.8 (n=709) to 61.9 (n=2,018). Lastly, the domain of ‘confidence and trust in nurses’ decreased from 68.9

(n=910) to 73.6 (n=2,085). The conclusion was that the discharge process workflow was effective in increasing patient satisfaction scores related to the discharge process, however ineffective in increasing overall patient satisfaction scores for the organization.

Clinical Relevance

A lack of patient understanding of critical discharge elements, such as medication instructions, what signs and symptoms warrant a provider call or Emergency Department (ED) visit, and how to continue to progress based on clinical diagnosis are vital to the success and progression of the patient's care after discharge. Data shows patient perceptions of discharge and the understanding of key aspects, such as the chief diagnosis and medication administration instructions post-discharge, is poor (Alper & Hernandez, 2014). It is imperative to modify the discharge process to ensure patients have the education and tools they need to confidently care for themselves after they leave the hospital. Optimizing the discharge process to include information patients need, will help to mitigate these deficiencies in the discharge process and lead to an increase in patient satisfaction with discharge. This increase in understanding and satisfaction could potentially lead to an overall decrease in readmissions and thus decreasing unnecessary hospital utilization and cost.

Limitations

This project, like any other, had its limitations. The two main limitations were related to the data collected and the impact on nursing staff. Data collected using the NRC patient satisfaction metrics, is not specific to the discharge process. This made it challenging to isolate metrics for improvement and ensure that any change was derived from the project versus any other variable. Additionally, the COVID-19 pandemic created challenges for healthcare workers

nation-wide during the timeframe this project was implemented. This project hinged on asking nurses to change their practice which was a big ask during such a difficult time in healthcare.

Conclusion

Given the current state of healthcare amidst a global pandemic and all of the alterations being made to accommodate an increased capacity of patients, it is difficult to measure outcomes utilizing patient satisfaction data. While overall patient satisfaction decreased during the project implementation, the domains specific to patient discharge did show an increase. This suggests, as the literature supports, that there are multiple factors that affect patient satisfaction relating to the discharge process. It is important for healthcare to keep adapting to create a discharge process that engages patients and allows them a better understanding of their plan of care. The results suggest that implementing a standard discharge process may increase aspects of patient satisfaction, however will likely not drive overall satisfaction of the organization.

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