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A Post-discharge Process Framework to Improve Follow-Up, Medication Reconciliation, Patient Satisfaction, and Readmission Rate in Pediatric Hospital

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Abstract

The process of discharging patients from hospitals is a critical aspect of healthcare that requires effective communication and patient involvement. Proper pediatric discharge planning involves educating parents or caregivers on the patient's status. Hospitalists should not view discharge as the end of their commitment to patients. An inappropriate post-discharge process can lead to increased readmission rates, drug interactions, and patient dissatisfaction. This study introduced the FMSR framework to improve the efficacy of the post-discharge process in a pediatric hospital to help healthcare systems decrease readmission rates, reduce medication discrepancies, and increase patient satisfaction. A patient-centered approach and shared decision-making can promote patient safety and an efficient transition from hospital to home. Patient education prepares caregivers to return home with knowledge and better patient care. This study discusses the importance of continuous follow-up a few days after discharge in the home care unit. By implementing effective follow-up procedures in a pediatric hospital, healthcare providers can enhance the quality of patient outcomes and lead to a more patient-centered and effective healthcare system.

Keywords: Discharge process, Follow-up, Medication reconciliation, Patient satisfaction, Readmission rate, Pediatric hospital.

1 | Introduction

As a pivotal point in the healthcare continuum, the patient discharge process requires careful review and refinement. In recent years, healthcare systems worldwide have recognized the multifaceted challenges associated with patient discharge and have initiated efforts to increase its effectiveness and patient-centeredness [1]. Many factors negatively influence a successful discharge, such as cultural status, physical

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abilities, cognitive impairment, and depression. The discharge process often becomes lengthy and is influenced by numerous factors. Delays in completing the discharge process can be attributed to bottlenecks arising from various elements, including the complexity and number of steps within the procedure, the time required for each step, and interruptions that disrupt the process flow [2].

As healthcare evolves, our approach to patient discharge must be developed. The traditional model of discharge planning is gradually giving way to more patient-centered strategies [3]. By embracing shared decision-making and engaging patients as active participants in their care journey, we can increase patient satisfaction and promote better health outcomes [4]. Readmission not only represents unnecessary healthcare costs but is also an emotional and financial burden to patients and families [5]. Patient empowerment and participation in the discharge process can lead to smoother transitions and reduce readmissions, ultimately contributing to the healthcare system's overall efficiency [6].

Consequently, the hospital discharge process involves not only the clinical aspects of healthcare but also the socio-cultural influences of each patient [7]. Beyond the clinical aspects of discharge, which include medication reconciliation and ensuring a seamless transition from hospital to home or other care setting, we also recognize the importance of the human elements. By collectively addressing these elements, we can pave the way for a more patient-centered approach to the discharge process that ultimately increases safety, patient satisfaction, and the overall quality of healthcare. Considering that children's immune systems are still underdeveloped and they are more sensitive and vulnerable to illnesses, the processes related to their medical care are of paramount importance [8]. Since pediatric hospitals or pediatric wards in general hospitals often face capacity limitations and excessive daily or seasonal overcrowding, one should pay attention to the discharge process and post-discharge education.

The discharge process in a pediatric hospital is paramount to ensuring the patients' well-being and continued care. It goes beyond the mere physical act of leaving the hospital, as it involves comprehensive planning to address the unique needs of children and their families [9]. Proper pediatric discharge planning involves educating parents or caregivers on essential topics, such as medication management, symptom recognition, and follow-up appointments, which are crucial for maintaining a child's health after hospitalization. Additionally, it considers the emotional and psychological aspects of both the child and their family, providing support and resources to ease the transition from hospital to home [10]. By emphasizing the discharge process in pediatrics, we not only enhance the quality of care after discharge but also decrease the readmission rate, contribute to long-term health, and involve patients in decision-making. According to a review of the conducted research, there have been few studies focused on the pediatric discharge process; therefore, the current research aims to provide a solution for improving the post-discharge process in a pediatric hospital and introduce an index that can be used to improve the desired indicators of the hospital, patients, and caregivers.

2 | Method

A pediatric hospital, often referred to as a children's hospital, is a specialized healthcare facility exclusively dedicated to the medical care and well-being of infants, children, adolescents, and sometimes young adults. These hospitals are staffed with highly trained pediatric healthcare professionals and equipped with state-of-the-art medical technology tailored to the unique needs of young patients. With a compassionate and child-friendly environment, pediatric hospitals provide comprehensive medical services, ranging from routine check-ups to advanced treatments for various pediatric illnesses and conditions. Their primary goal is to ensure the optimal health, comfort, and emotional support of children and their families, making them essential institutions in the field of pediatric medicine.

This study was conducted in a pediatric hospital in Iran, with 144 available beds and 12 clinical wards. This hospital is the only subspecialty pediatric hospital in its province; therefore, the admission rate is too high, and the importance of examining the discharge process becomes noticeable.

We observed the process flow of the discharge and drew it. The discharge process usually involves two main stages: first, informing the patient's family that their child will be discharged, and second, bill initiation and payment [11]. This process involves many activities and pending tasks, such as checking and confirming the discharge order. The process involved in this study is presented in the Appendix. Nursing is often responsible for teaching patients and caregivers [5]. In our observation of the hospital, after the patient's payment, reporting and teaching treatment at home were conducted by the nurses in all cases. The quality of discharge teaching is partially linked to a decreased readmission rate. If there is a serious need to continue treatment at home, the home care unit will educate the patient. Otherwise, the patient will be discharged with the mentioned medical teaching. Education prepares patients and caregivers to return home with knowledge and skills to safely and appropriately care for themselves. *Fig. 1* illustrates the discharge process flow for a patient. It includes various stages from assessing the patient's condition to completing documentation and the patient's departure from the hospital.

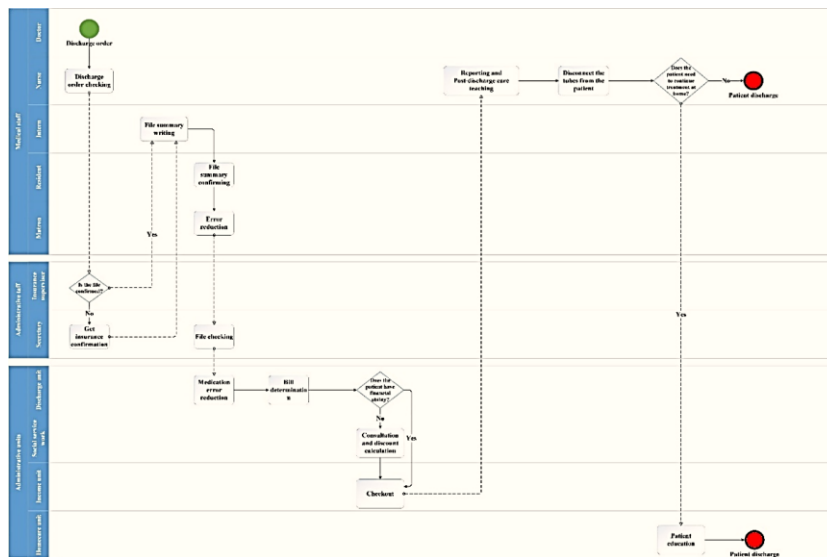


Fig. 1. Discharge process flow.

3 | Result

The post-discharge phase in a hospital has profound significance, with several critical aspects warranting attention. Firstly, the readmission rate is a vital indicator of the efficacy of the entire patient care journey. A high readmission rate can signal that issues persist or worsen after discharge, prompting the need for a comprehensive re-evaluation of the discharge process and post-discharge care. Patient satisfaction, another pivotal element, reflects a patient's overall experience during and after their hospital stay. A satisfied patient is more likely to adhere to post-discharge recommendations and follow-up appointments, leading to improved health outcomes. Ensuring that patients attend follow-up appointments is integral to the continuity of care and prevents potential complications.

Lastly, medication reconciliation, the process of accurately managing medications post-discharge, is indispensable. Errors or discrepancies in medication regimens can lead to adverse events, underscoring the critical role of medication reconciliation in patient safety. Focusing on these factors in the post-discharge phase is essential for enhancing patient outcomes, reducing readmissions, and promoting an efficient transition from hospital to home. The FMSR is introduced in this research to improve the efficacy of the post-discharge process in the pediatric hospital. FMSR's acronym refers to four major components (*Table 1*) and focuses on engaging the patient and caregivers in the post-discharge process. FMSR stands for follow-up, medication reconciliation, satisfaction, and readmission rate.

Table 1. Element of FMSR framework.

Indicators	Description
Follow-up	The follow-up of the patient and caregiver by the home care unit includes reviewing and evaluating the patient's status, ensuring the effectiveness of the treatment, and teaching the nurses in a short period after discharge.
Medication reconciliation	Medication reconciliation assesses the accuracy and effectiveness of medication management during the transition from the hospital to home. It measures the percentage of patients who experience medication-related problems after discharge, such as medication errors or adverse drug events.
Patient satisfaction	Measuring patient satisfaction through surveys and feedback can provide insights into the quality of care during and after discharge. It reflects patients' experiences with the discharge process, post-discharge support, and overall satisfaction with care.
Readmission rate	The readmission rate measures the percentage of patients readmitted to the hospital within a specified time frame (e.g., 30 days) after their initial discharge. High readmission rates can indicate issues with the quality of care and post-discharge transitions.

According to *Table 1*, the post-discharge phase in healthcare is a critical period that demands meticulous attention and comprehensive strategies to ensure the well-being of patients and their caregivers. The follow-up by the home care unit, encompassing patient evaluation and treatment effectiveness assessment, serves as a vital link in the chain of care continuity, offering ongoing support and guidance during vulnerable transitions. Medication reconciliation plays a pivotal role in guaranteeing the safe and accurate management of medications as patients move from hospital to home, minimizing the risk of medication-related issues. Finally, monitoring readmission rates provides a quantitative gauge of the quality of care and post-discharge transitions, emphasizing the importance of a seamless and patient-centered approach to achieving better healthcare outcomes. These aspects underscore the holistic and patient-centric approach required to optimize the post-discharge phase and enhance the overall healthcare experience.

4 | Conclusion

The discharge process is currently complicated by problems, including time constraints, patient and caregiver overload, and coexisting comorbidities that complicate the patient's care needs at home. Patient empowerment and involvement in the discharge process can lead to smoother transitions and reduced instances of readmission, ultimately contributing to the overall efficiency of the healthcare system [6]. The transition from hospital to home is a vulnerable period of discontinuities and potential adverse events. Hospitalists and other healthcare providers should not view discharge as an end to their commitment to patients but should attempt to promote a safe and efficient transition of care [12]. The post-discharge framework can play a significant role in bridging the gap between inpatient and outpatient care through the post-discharge framework and effective communication with patients, their family members, and physicians.

In conclusion, the post-discharge phase represents a multifaceted challenge and opportunity in healthcare. By prioritizing patient satisfaction, reducing readmissions, ensuring accurate medication management, and implementing effective follow-up procedures, healthcare providers can create a continuum of care that enhances the quality of patient outcomes, reduces healthcare costs, and ultimately leads to a more patient-centered and effective healthcare system.

Author Contribution

Conceptualization: FF, BM, and MS; Data curation: FF, BM, and MS; Funding acquisition: there is no funding; Investigation: FF, BM, and MS; Methodology: FF and BM; Project administration: MS; Software: FF and BM; Supervision: MS; Validation: FF, BM, and MS; Visualization: FF and BM; Writing – original draft: FF and BM; Writing–review & editing: FF, BM, and MS; All Authors have read and approved the manuscript.

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Conflicts of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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