

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 the hospital is a critical aspect of healthcare that requires effective communication and patient involvement. Proper pediatric discharge planning involves educating parents or caregivers on patient status. Hospitalists should not view discharge as an end to their commitment to patients. An inappropriate post-discharge process can lead to increase readmission rate, drug interactions, and patient dissatisfaction. This study introduces the FMSR framework to improve the efficacy of the post-discharge process in the pediatric hospital to help healthcare systems decrease readmission rate, reduce medication discrepancies, and increase patient satisfaction. A patient-centered approach and shared decision-making can promote patient safety and efficient transition from hospital to home. Patient education prepares caregivers to return home with knowledge and take better care of their patients. This research 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

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کنفرانس مهندسی و مدیریت فرآیندهای کسب و کار



Introduction

As a pivotal point in the healthcare continuum, the patient discharge process requires careful review and refinement. In recent years, healthcare systems around the world have recognized the multifaceted challenges associated with patient discharge and have initiated efforts to increase its effectiveness and patient-centeredness (Li et al., 2022). Many factors negatively influence a successful discharge such as cultural status, physical abilities, cognitive impairment, and depression. The discharge process often becomes a lengthy affair, 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's flow (Topham et al., 2022).

As healthcare evolves, so must our approach to patient discharge. The traditional model of discharge planning is gradually giving way to more patient-centered strategies (Rosenstengle et al., 2022). By embracing shared decision-making and engaging patients as active participants in their care journey, we have the opportunity to not only increase patient satisfaction but also promote better health outcomes (Baldino et al., 2021). Readmission not only represents unnecessary healthcare costs but is also an emotional and financial burden to patients and families (Luther et al., 2019). Patient empowerment and participation in the discharge process can lead to smoother transitions and reduced readmissions, which ultimately contribute to the overall efficiency of the healthcare system (Lockwood and Mabire, 2020).

Consequently, the hospital discharge process involves not only the clinical aspects of healthcare but also, the socio-cultural influences of each patient (Liljas et al., 2022). 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 addressing these elements collectively, 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 are related to their medical care of paramount importance (Philips et al., 2019). 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 holds paramount importance in ensuring the well-being and continued care of the patients. 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 (Philips et al., 2021). 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 post-hospitalization. Additionally, it takes into account the emotional and psychological aspects of both the child and their family, providing support and resources to ease the transition from hospital to home (Ernst, 2020). 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, the patients and the caregivers.



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 carried out in a pediatric hospital in Iran, which has 144 available beds, and 12 clinical wards. This hospital is the only subspecialty pediatric hospital in its province, so the admission rate there, is too high, and the importance of examining the discharge process becomes noticeable.

We observed the process flow of the discharge and then 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 (Hisham et al., 2020). This process involves many activities and many pending tasks, such as checking and confirming the discharge order. The process involved in the study is presented in Appendix.

Nursing most often bears the major responsibility of patient and caregiver teaching (Luther et al., 2019). In our observation of the hospital, after the patient's payment, in all cases, reporting and teaching treatment at home were conducted by the nurses. 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 patient will be educated by the home care unit. 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.

Result

The post-discharge phase in a hospital holds profound significance, with several critical aspects warranting attention. Firstly, the readmission rate serves as 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 reevaluation of the discharge process and post-discharge care. Patient satisfaction, another pivotal element, reflects the overall experience a patient has 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 patients attend their 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 is focused on engaging the patient and caregivers in the post-discharge process. FMSR stands for **F**ollow-up, **M**edication reconciliation, **S**atisfaction, and **R**eadmission rate.

Table 1. Element of FMSR Framework

Follow-up	The follow-up of the patient and caregiver, by the home care unit, includes the review and evaluation of the patient's status, ensuring the effectiveness of the treatment and the teaching of the nurses in a short period after discharge.
Medication Reconciliation	Medicationre reconciliation assesses the accuracy and effectiveness of medication management during the transition from 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 their care.
Readmission Rate	Readmission rate measure the percentage of patients who are 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 transitions post-discharge.

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 a vulnerable transition. 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 transitions post-discharge, emphasizing the importance of a seamless and patient-centered approach to achieving better healthcare outcomes. Together, these aspects underscore the holistic and patient-centric approach required to optimize the post-discharge phase and enhance the overall healthcare experience.



Conclusion

Currently, the discharge process is complicated by problems including time constraints, patient and caregiver overload, and coexisting comorbidities that add complexity to the patient's care needs at home. Patient empowerment and involvement in the discharge process can lead to a smoother transition and reduced instances of readmission, ultimately contributing to the overall efficiency of the healthcare system (Lockwood and Mabire, 2020). The transition from hospital to home is a vulnerable period of discontinuity and potential adverse events. Hospitalists and other healthcare providers should not view discharge as an end to their commitment to patients but rather should attempt to promote a safe and efficient transition of care (Kripalani et al., 2007). 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.

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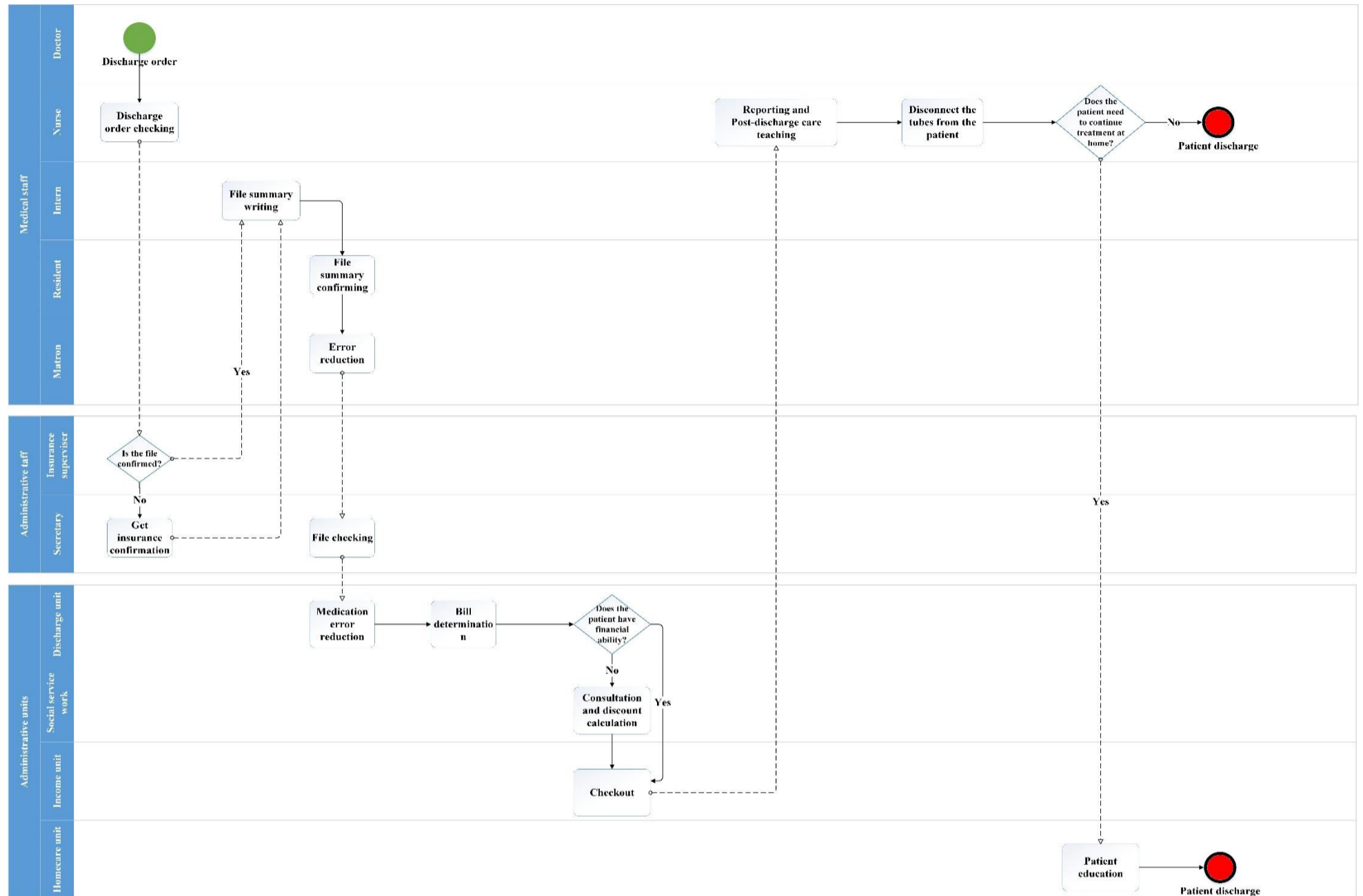
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دانشگاه مهندسی صنایع و سیستم‌ها



کنفرانس مهندسی و مدیریت فرآیندهای کسب و کار

Appendix



کنفرانس مهندسی و مدیریت فرآیندهای کسب و کار

