Model Programs to Improve Transitions of Care

Using Teach-Back Methods to Help Reduce Pediatric Readmissions

Improving Transitions of Care

- As a patient moves through the hospital system, the quality of transitions of care is important, especially during the discharge process.[1] Patient readmissions are often avoidable with good communication among hospital staff, patients, and caregivers.[2]
- Communication failures during discharge often leave patients and their family/caregivers unprepared to continue care at home[3]; this may be especially true with pediatric patients and their parents.[4]
- As part of the Affordable Care Act, the Centers for Medicare & Medicaid Services established the Hospital Readmissions Reduction Program.[5] In response, hospitals have initiated multifaceted interventions to improve transitions of care and avoid penalties for excess readmissions.[1]
- A critical component of these interventions is effective patient education. One evidence-based technique for improving patient and caregiver education about medications, discharge plans, and disease-related information is the teach-back method. This method helps verify the patient's and family's understanding of discharge information, identify and correct inaccuracies, and reinforce learning and retention of information.[2]

Case Study: Reducing Pediatric Readmissions at Boston Children's Hospital

In an effort to reduce pediatric readmissions, Boston Children's Hospital implemented a quality improvement initiative from 2012 to 2015.[2] Procedures for discharge were redesigned: a discharge bundle was combined with the teach-back method and handoff procedures were standardized.[2] Prior to this initiative, the unplanned hospital 7-day readmission rate in this institution was 4.2%.[2]

- Setting: urban, pediatric, tertiary care hospital that delivers more than 550,000 outpatient visits and 25,000 inpatient visits per year[2]
- Patient populations: 16 pediatric inpatient units, including surgical, medical, neurology, transplant, intensive care, intermediate care, oncology, and surgical satellite unit[2]

Main Objective: Decrease unplanned 7- and 30-day readmission rates[2]

Perspectives on Transitions of Care

Patient perspective

- Clinicians often do not confirm that the patient understands the discharge plan.[6]
- Many patients have trouble understanding discharge plans because of poor health literacy.[6]
- Without proper understanding of the discharge instructions, patients will not achieve the maximum effect of the treatment plan.[6]

Family and caregiver perspectives

- Family members and caregivers often feel that they are not adequately prepared during discharge.[7]
- Caregivers are not always present when discharge instructions are provided, leaving the patient responsible for informing the caregiver about the discharge plan.[7]

Rationale for Program

The hospital recognized a need for improved continuity and coordination during care transitions:

- Readmission rates varied substantially across hospital inpatient units.[2]
- Responsibility for discharge processes was not always clearly defined.[2]
- Communication of discharge information occurred late, often only on the day of discharge.[2]

Methods: Program Implementation

Following the successful implementation of a pilot program (Phase I) in 2 inpatient nursing units for 6 months, the following changes were gradually implemented in 14 additional inpatient nursing units (Phases II–IV) over a period of 7 months[2]:

- Standing biweekly meetings were scheduled with committee members, which included frontline staff, case management, quality improvement (QI) staff, pharmacy, nurse leadership, nurse educators, physicians, and data analysts.
- Database to capture monthly readmissions was developed.
- Monthly meetings with stakeholders were scheduled.
- Interventions described in Table 1 were implemented.
- Discharge bundle was audited and compliance was measured weekly.
- Discharge interviews were conducted weekly with 10 patients/families to determine comprehension of the discharge bundle.
- Readmissions initiative toolbox was created (Box 1).
- Project champion was designated in each inpatient unit.

Table 1: The intervention components[2]

Improving Discharge Education Using the Teach-back Method	Nurses employed the teach-back method to ensure patient understanding and verify inaccuracies: • Patients/families/caregivers asked to recall, demonstrate, and restate information to promote a safer transition of care from the hospital • Used throughout the hospitalization as part of daily routine, not just at discharge • Identifies clear communication responsibilities with the health care team on every shift and at clinical handoff Structured patient handoff from one nurse to the next helps the incoming nurse understand any knowledge gaps with patients/families. At shift change, the nurses reviewed the following points: • What was taught during the shift? • What needs to be taught? • How is the patient learning best?
Discharge Bundle to Standardize Care and Improve Self-management at Home	Four key elements: • Does the medication list in the electronic health record match the patient's medication list in the discharge summary? • Did the patient and/or the family verbalize whom to call if questions or problems should arise? • Could the patient or family state that they understood the discharge plan? • Was a follow-up appointment scheduled for the patient prior to discharge? Coordinate with the family/caregiver, as needed.

Box 1: Readmissions initiative toolbox[2]

- A *how-to* manual to promote the adoption of the interventions
- Discharge bundle questions
- Root-cause analysis survey tool
- Structured handoff questions
- An introduction letter to welcome new units to the readmission initiative
- Well-defined expectations and role responsibilities for the staff
- Specific examples of questions using teach-back methodology
- Most frequent questions/answers related to the project
- Program champions' contact information
- Baseline readmission rates using run charts
- Key-driver diagram with specific aims and drivers for improvement
- Educational video demonstrating teach-back and structured handoff

Tips for Transitions of Care Interventions

- Continuation training in the teach-back method is suggested (eg, every 6 months)
- Share best practices as program expands (eg, live training with practice scenarios)

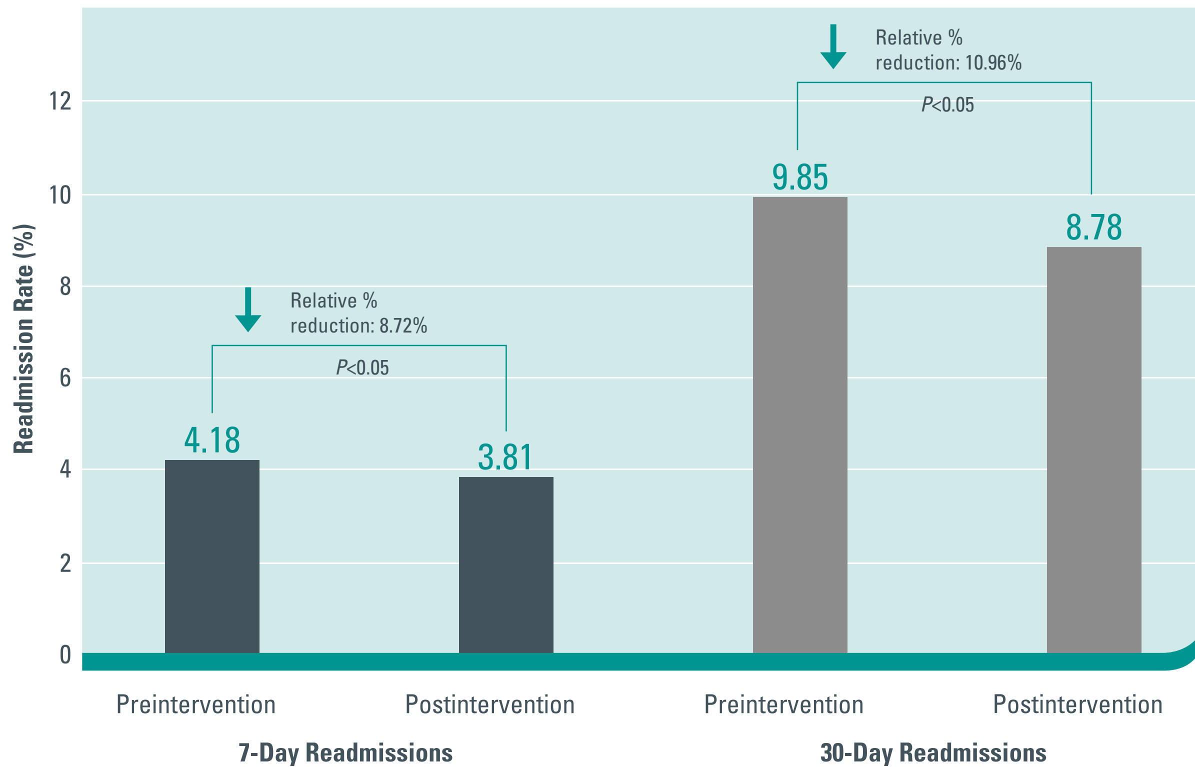
Program Expansion and Analysis of Outcomes

- After the program was rolled out to 16 units in the institution, the teach-back method was disseminated to 63 primary care hospitals in the area.[2]
- Primary outcomes were unplanned hospital readmissions within 7 and 30 days following discharge during the 16-month postintervention period.[2]
  - An unplanned readmission was defined as an unscheduled, nonintentional admission within 7 or 30 days of discharge.
  - Planned readmissions were excluded.
- Readmission rates before and after the intervention were evaluated.[2]

Results: Impact on Outcomes

- Inclusive of the pre- and postintervention periods, 3,044 patients were readmitted within 7 days and 5,900 patients were readmitted within 30 days of discharge.[2]
- Readmission rates before and after the intervention are shown in Figure 1. Results indicate that the implementation of the discharge bundle, teach-back method, and structured handoff communication reduced unplanned readmissions.[2]

Figure 1: Pre- and postintervention readmission rates[2]



- Reductions in readmission rates positively impacted hospital efficiency by freeing up more space for patients.[2]
- Postintervention, total days saved in readmissions were 795 days among all 16 units.[2]
- For patients who were readmitted, the median length of stay was approximately 3 days; length of stay did not differ significantly pre- vs postinterventions.[2]
- Of 4,545 interviews after the intervention, >90% of patients/families were able to articulate their plan of care (vs only 50% before the intervention).[2]
  - Postintervention, there were also improvements in the following measures:
    - Scheduled followup appointments: >90%
    - Patients'/families' knowledge of whom to contact in case of emergency: >90%
    - Medication reconciliation: 70–90%
- The effects of this program were widespread, with reductions in health care costs and the burden placed on patients/families, the community, and insurance companies.[2]

Widespread Adoption of the Teach-back Method: Implementation in the Hospital Setting

- When contemplating the implementation of a QI program that includes the teach-back method, consider the tips on implementation described in Box 2.

Box 2: Practical tips on implementation[2]

Conduct a pilot program to develop, modify, and improve program tools and processes

1. Initiate a 6-month pilot program of test changes to improve discharge education and standardize care before implementing a QI program on a larger scale.
2. When developing a pilot program, consider implementing the following changes/practices:
    a. Obtain buy-in from senior leadership
    b. Establish a QI committee co-led by a physician and a nurse
        i. Include a variety of other stakeholders on QI committee
    c. Select units for high patient volume
    d. Conduct regularly scheduled meetings
    e. Develop a database to capture readmissions data and share data monthly
    f. Initiate interventions to improve discharge education and standardize care (eg, discharge bundle and teach-back methodology)

Initiate a step-wise strategy to disseminate the QI program on a larger scale

1. Identify improving readmission rates as a priority
2. Foster interprofessional collaboration
3. Gradually implement changes in additional units; rollout the changes in phases
    a. Identify unit champions
4. Develop a readmissions initiative toolbox
5. Use the teach-back methodology with patients/families
6. Hold monthly meetings with champions

Be aware that potential challenges may arise

1. Train additional staff to conduct interviews with patients/families during peak patient census
2. Consider including a control group to collect data in patients/families that do not participate in QI initiative
3. Manual data collection is tedious; consider electronic data collection methods

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