SMART Discharge Protocol: A Pilot Study to Standardize the Discharge Process in an Acute Care Hospital

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SMART Discharge Protocol
A framework applied to our current discharge process to ensure 5 key areas are addressed during hospitalization and at discharge—Always.

- Symptoms
- Medications
- Appointments
- Results
- Talk

Aim:
The aims of this project were to: (1) Develop the SMART Discharge Protocol as an Always Event to include a written plan, curriculum, and patient access to instruction records, (2) Implement the SMART Discharge Protocol on three pilot units with varying patient populations, and (3) Evaluate the effectiveness of the SMART Discharge Protocol by measuring 30 day readmission rates, 30 day return to Emergency Department, and patient satisfaction.

Multidisciplinary Team:
The SMART Discharge Protocol was created, initiated and monitored by the SMART Steering Committee. This committee included: the chief Nursing Officer, Chief Medical Officer, Chief Information Officer, SMART Project Coordinator, Director of Nursing Quality and Research, Institute for Patient-Family Centered Care consultant, Information Systems Analysts, unit directors and staff members, and four patient-family advisors. The committee met every other week for one hour with additional time for training, pre- and post-intervention meetings, and curriculum development.

Project Design:
The SMART Steering Committee, which included both multi-disciplinary staff and patient-family advisors, designed and conducted focus groups to develop the curriculum and tools needed for SMART Discharge Protocol training and implementation. The protocol and accompanying tools were piloted on a Medical Surgical Unit, a Neonatal Intensive Care Unit, and a Heart and Vascular Unit. The SMART Project Coordinator met with unit-level leadership pre- and post-intervention to address potential and actual obstacles to completing the SMART Discharge Protocol. Information gathered from those meetings was addressed prior to piloting on the subsequent unit.

Changes Made:
a) Computerized discharge instruction format: Identified the discharge instruction format as a barrier to documentation of protocol completion. Revised documentation structure in electronic medical record to align with SMART Discharge Protocol for improved clarity and accuracy.
b) “Be Smart, Leave SMART” Journal: Distributed journal to patients on pilot units as a means to communicate questions and concerns with the healthcare team during hospitalization and at time of discharge.
c) Curriculum: Developed and initiated SMART Discharge Protocol curriculum for nurses, physicians, pharmacists, ancillary staff and the entire healthcare team on pilot units. The curriculum, which included scripting, was individualized for each unit.
d) Patient access to medical records: Patients discharged from inpatient areas were given access to information in their electronic medical record post-discharge through a computer application called ‘My Chart’.
e) Follow-up phone calls: Made phone calls 48 hours post-discharge to Neonatal Intensive Care Unit patients and patients at high risk for readmission. The focus of these calls was to assess patient and family understanding of SMART Discharge Information and to reinforce content.

Changes Tested:
The SMART Discharge Protocol was piloted on the Medical Surgical Unit (MSU) initially. After implementation, several areas for improvement were identified, including: staff role clarification, increased physician participation and use of appropriate process measures. Obstacles were discussed and addressed prior to initiating the SMART Discharge Protocol on the Neonatal Intensive Care Unit (NICU) and then again before Heart and Vascular Unit (HVU) adopted the protocol. Patient-family advisors, along with staff on the three pilot units, also recognized the need for improved content and format of the computerized discharge instructions. Changes to the discharge instructions were first introduced on MSU and NICU. After a six month trial period, the changes were successfully implemented housewide.

Measurement of Improvement:
Process measures included: Auditing the number of patient-completed SMART journals and the computerized discharge instructions for accuracy and completeness of content.

Outcome measures included: 30 day readmission rates, 30 day post-hospitalization Emergency Department visit rates, and patient satisfaction scores related to medication teaching and preparation for discharge using HCACHPS questions.

Results:
- MSU: Readmission rates increased 3% post-intervention. Emergency Department visit rates declined 1% percent. Three of four measures of HCACHPS scores increased post-intervention. (Figures A, C)
- NICU: Both readmission and Emergency Department post-hospitalization visit rates declined more than 1% post-intervention. There was insufficient data to describe changes in post-intervention patient satisfaction scores. (Figure B)
- HVU: Data is currently being collected to include readmission rates, Emergency Department visit rates and patient satisfaction scores.

Sustainability:
In order to ensure the sustainability of the SMART Discharge Protocol, 30 day readmission rates, 30 day post-hospitalization Emergency Department visit rates, and patient satisfaction data will continue to be collected and analyzed. In addition, process measures related to the accuracy and completeness of the computerized discharge instructions will be audited and reviewed by hospital staff and patient-family advisors.

Lessons Learned:
Initiating the SMART Discharge Protocol on three pilot units shed light on significant areas for improvement related to our organization’s discharge process. Several key lessons learned include: physician and unit leadership support is critical for successful project implementation; patient-family engagement must be present when designing and developing a new hospital program; units that are not testing other quality improvement initiatives concurrently should be chosen for a pilot study, and the roles and responsibilities of staff members involved in change must be clearly defined.