Improving the Home Discharge Process from Acute Care Neurosciences Units

Alberta Health Services

Editor's Summary: In *Improving the Home Discharge Process from Acute Care Neurosciences Units*, Alberta Health Services used process improvement methodologies to improve throughput in inpatient care or access to ambulatory care. The initiative in the Department Clinical Neurosciences at Foothills Medical Centre used an interdisciplinary team, streamlined the care pathway, provided visual cues to discharge and patient flow, developed processes and protocols, including a discharge checklist for caregivers and patients, and provided appropriate patient education materials to the patient and family to make the necessary preparations. The results include an improvement from 20% to 76% of patients being discharged within 1 hour of the decision and an improvement from 40% to 98% of patients being admitted within less than 1 hour. In addition, patient and family satisfaction ratings have also improved.

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Purpose:	The overall objective was to address patient flow; in particular to improve outflow from the Emergency Department by addressing throughput in inpatient care or access to ambulatory care. Delayed patient admissions were resulting in congestion, overcrowding, and prolonged wait times in Emergency Departments across the Region.
Context:	This was a project chartered under the umbrella of a system wide regional initiative focused on "Getting Rid of Inappropriate Delays that Limit Our Capacity to Care" (GRIDLOCC) - a two year project funded by the "Wait Times Management Initiative" through the Government of Alberta.

Resources:	FTEs: 1.0 x 42 weeks (includes time of all project team members, facilitators, and sponsors)
Source of resource:	☒ *In kind* contributions from the organization ☒ Dedicated internal funding ☒ External funding (example grant, Ministry etc.)
Population group:	General Neurology and General Neurosurgery patients discharged home from two acute patient care units.
Patient flow entry and end points:	Admission to an acute patient care unit, until the patient is discharged home and the next patient is admitted.
Description/ approach:	The Lean quality improvement methodology was leveraged in the form of a two-day "value stream map" event followed by a four-day "kaizen" rapid improvement event.
Tools and tactics:	Some of the principal process improvements included: - Interdisciplinary team discussions on anticipated patient discharge dates on admission and daily to identify patients 48 hours prior to discharge and enable home care requirements to be arranged. - Implementation of visual management tools to identify pending discharge at the nursing station and in patient rooms. - Implementation of a discharge checklist for team members and caregivers. - Development and implementation of a "patient passport" (family resource), which outlines duties and tasks for family members to ensure a smooth transition home, arrange post hospital care, and improve communication to families about patient progress and engagement in care. - Providing patients with written medical discharge summaries prior to discharge. - A standard work 'swim-lane' chart was created to define the standard work required of each team member in the discharge process from the day of admission. Pocket reference cards specific to each role were distributed to staff as a quick reference to stabilize and embed the process into daily practice.
Measurement approach:	Cycle times from confirmed decision to discharge until the patient leaves the unit, and from the room being cleaned and ready until the next patient is admitted. As well as patient/family satisfaction ratings with the discharge process.
Impact/ evaluation:	For the past year, the Neurosciences team has been able to sustain a two to three fold improvement in their discharge processes as 76% of all patients leave within one hour of the decision to discharge (pre-kaizen was 20%) and 98% of the next patients are admitted in less than one hour (pre-kaizen was 40%). Our satisfaction ratings have also improved with patients and family members reporting a significant difference with respect to their knowledge and awareness of the confirmed date of discharge before the actual day of discharge ($p=.01$) as well as all the activities and steps required to prepare for discharge ($p=.03$).

Observation/ Discussion:	The changes brought about from the Kaizen event have encouraged and enabled our interdisciplinary team to focus on a streamlined approach to the patient's discharge planning that incorporates a more strategic method. Moreover, we now have a process in place that facilitates meeting both the needs of our patients as well as the capacity demands on the unit and the hospital. It is possible to improve patient flow and ensure patients move through clinical systems quicker and more efficiently. Furthermore, the team appreciates the power that comes from making these changes by improving the overall experience of patients and family members and making our services more patient-centered.
Critical success factors/ lessons:	Frontline staff tracked performance of the new discharge process on a "production control" or "andon" board in the form of a wall-sized poster. The success of process improvements was monitored closely by the unit managers through frequent "Gemba walks" around the unit to review the process control boards. Partnering a quality improvement consultant with an operational co-lead (clinician) was advantageous. Sponsors and managers played a vital role in supporting the kaizen work and implementation of the new process.
Limiting factors:	Real-time awareness of bed occupancy and patients waiting for beds.