

PILOTING A CARE & DISCHARGE COORDINATOR ROLE TO IMPROVE PATIENT FLOW



Hamilton Health Sciences



Editor's Summary: In *Piloting a Care and Discharge Coordinator Role to Improve Patient Flow* Hamilton Health Sciences Centre developed an initiative to test whether dedicated discharge planning roles on three inpatient units could improve patient flow within one year by assisting the units to identify, understand and address challenges and barriers to flow and timely discharge or transition to other levels of care. The units used a combination of approaches including methods from the IHI, data and communication tools. The results included as much as a 62% improvement in conservable bed opportunity; 18.5 % improvement in bed turns; a 67% improvement in ED wait times, and 23% improvement in ALOS variance to ELOS on one medical floor. For one surgical floor the team achieved an 8% improvement in bed opportunity; 5% improvement in bed turns and a 69% improvement in ED wait times.

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Purpose:

The C&DC role was developed to test whether a dedicated discharge planning role could improve patient flow within one year by assisting the units to identify, understand and address challenges and barriers to flow and timely discharge or transition to other levels of care. The overarching aim of this pilot initiative was to improve patient flow on three HHS clinical inpatient units within one year. Each C&DC was accountable for coordinating unit discharge planning processes while working with the multidisciplinary care team to create a sustainable discharge planning infrastructure.

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| | <p>In 2006/2007 each of Hamilton Health Sciences' (HHS) three acute care sites continued to experience patient flow and bed capacity pressures despite improvements in length of stay (LOS) made over the previous year. Challenges remained with respect to Emergency Department overcrowding and diversions, scheduled care deferrals/cancellations and ability to meet regional program commitments. Downstream problems of high occupancy and off-service rates persisted. HHS also recognized that patient safety, patient satisfaction, and staff satisfaction are all negatively affected when patients, information, and materials do not move through hospitals in a timely and efficient manner.</p> <p>Through analyses that included a review of conservable days per inpatient unit, three clinical inpatient units, one per HHS Site were selected and agreed to host the pilot role of C&DC. Table 1 displays the baseline results for indicators on each of these units prior to the pilot's start.</p> <p>Table 1: C&DC Unit Baseline Indicator Results - Pre-Pilot Implementation See Table 1 on Tables Page</p> |
| Context: | This pilot initiative leveraged the existing skills and experience of the incumbent C&DC's and then matched these clinical experts with a Quality Specialists from the Quality, Patient Safety, and Clinical Resource Management Program. The incumbents were purposefully selected from the unit on which they normally worked in order to ensure that the skills and knowledge in quality improvement and patient flow gained during the pilot period would be embedded beyond the duration of the pilot. The presence of these staff on the pilot units also established and secured strong informal linkages between the three clinical units and the supporting QPSCRM Program. |
| Resources: | For one 30-bed inpatient unit, 1.0 Full-Time Equivalent (FTE) RN and 0.5 FTE Quality Specialist. HHS invested 3.0 FTE RN + 1.5 FTE Quality Specialist for pilot. |
| Source of resource: | Pilot (duration: 1 year) funded by operating dollars. The Care and Discharge Coordinator (C&DC) role incumbents were temporarily seconded from permanent positions (two front-line RNs and a Medical Nurse Associate) on the pilot units (positions back filled). Each C&DC was matched to a Quality Specialist from the QPSCRM Program, who provided the C&DC with education and support in the application of quality tools and methodology in order to achieve the goal of improving patient flow and transitioning patient care. This pilot was guided by the Director of the QPSCRM Program and the Clinical Manager from each of the participating inpatient units. |
| Population group: | Patients with stay on: 6South, a surgical and trauma unit at the Hamilton General Hospital, A3 Medicine, a general medicine unit at Henderson General Hospital, and 4Z, a surgical unit at McMaster University Medical Centre. |
| Patient flow entry and end points: | Entry point for patients was any scheduled or unscheduled admission to Wards 6South, A3, or 4Z, or any intra-hospital transfer or transition of care to those units (e.g. transfer from CCU to Ward A3). End point for patients was any discharge or transition to another level of care from Wards 6South, A3, or 4Z, or any intra-hospital transfer or transition of care (e.g. from an Ward 4Z to ICU). |
| Description/ approach: | Hamilton Health Sciences utilizes the Define-PDSA methodology adapted from the Institute for Healthcare Improvement (IHI) as the organizational model for change and quality improvement. This methodology was applied to the C&DC initiative. The primary "test of change" focused on investigating the hypothesis that a dedicated C&DC role would achieve a reduction in the number of conservable days on each pilot unit. The C & DC would provide "real time" dedicated unit-specific leadership and lead the identification, planning and coordinating of processes that would result in efficient, timely |

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| | <p>and effective progression of patients’ plans of care and discharge planning. Within this "primary test of change” multiple, additional tests of change would be identified and tested through concurrent Plan, Do, Study, Act (PDSA) cycles designed to achieve:</p> <p style="text-align: center;">(See Table 2 on Tables Page):</p> <ul style="list-style-type: none"> ◆ Consistent, real-time application of existing HHS discharge planning related policies and procedures intended to expedite care delivery, facilitate earlier patient discharge and accelerate post acute transfer. ◆ Use of a data driven approach to determine unit-specific sources of delay and barriers to discharge for subsequent solution development and implementation ◆ Identification, development and testing of specific resources/tools/strategies to improve patient flow and timely discharge planning at the unit level |
| <p>Tools and tactics:</p> | <p>At the conclusion of the pilot, focus groups identified the following tools and processes developed through the C&DC role pilot as both beneficial and sustainable.</p> <ul style="list-style-type: none"> ◆ <i>Use of a Central White-board</i> – Improved communication with medical staff and residents and/or between nursing and allied health. ◆ <i>One-on-one Meetings with Physicians</i> – Increased frequency of face to face meetings between medical staff and the C&DC was perceived to improve communication between physicians the care team. ◆ <i>Morning Mini-Rounds</i> – Introduction of 10-15 minute daily morning mini rounds supported coordination of the team’s “to do list” for the day. ◆ <i>Discharge Pamphlet</i> – Facilitated opening discussion with patients and their families regarding preparation for discharge ◆ <i>Rotating Facilitation of Discharge Planning Rounds</i> – The introduction of rotating responsibility among discharge planning team staff for facilitation of discharge planning rounds built recognition of “shared accountability” for discharge. ◆ <i>Repatriation Tracking Sheet</i> – Tracking tool developed improved monitoring and prompt follow up on discharge planning tasks related to repatriation patients. ◆ <i>Discharge Plan with Issues Log</i> – Tool designed to track “next steps” and any issues/barriers to discharge in a single location accessible to and referenced by unit and physician staff improved monitoring of follow up, progress, and changes related to discharge planning |
| <p>Measurement approach:</p> | <p>Consistent with the Define-PDSA model, the question 'How will we know that change is an improvement?' was posed, and the following measures were developed and tracked.</p> <ul style="list-style-type: none"> ◆ Decrease conservable bed opportunity (Target: 75%) ◆ Increase the number of “bed turns” per budgeted bed ◆ Improve unit workflow related to discharge planning as reported by stake-holders from the units’ multidisciplinary teams ◆ Increase clinical team awareness, understanding, and consistent completion (compliance) of expected discharge planning processes. ◆ Reduce ED Wait Time (i.e. from time of admission in ED to time of transfer to ward) ◆ Reduce barriers that impede discussion of discharge planning processes/activity. |

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| Impact/ evaluation: | <p>Sample qualitative results included:</p> <ul style="list-style-type: none"> ◆ Reinforcing staff behaviour to ask, “What is stopping the patient from going home [or to a next level of care] at this time?” ◆ Contributed to understanding specific sources of delays / barriers to discharge ◆ Increase in physician communication and/or requests for assistance from allied health for assessments related to plan of care and to support discharge planning; ◆ Increased and improved documentation related to ALC, referrals for rehab, repatriation ◆ Sample quantitative results included: (See Table 3 on Tables Page) |
| Observation/ Discussion: | <p>C&DC's accepted as a valued support to other RN staff with respect to issues important to them such as time and workload management, continuity, access to needed resources, advocacy, communication linkages. This supports improvement in staff satisfaction with discharge planning. Dedicated C&DC role ensures protected time for patient flow / transition activities and effectively prompts clinical and medical staff to complete discharge planning activities in a timely manner.</p> |
| Critical success factors/ lessons: | <p>For optimal results, dedicated C&DC roles should be adopted by clinical units only following evaluation of how the role fits with the unit's current clinical team structure and respective roles/responsibilities as well as how the role fits with the surrounding system of patient flow processes. Role clarity for all discharge planning team members is essential. C&DC role was assessed as being most effective when implemented as part of a “systems approach” to improving patient flow.</p> |
| Limiting factors: | <p>Focused efforts required to ensure that unit stakeholders perceive testing and implementing of new processes and tasks as adding value rather than just adding “work”.</p> |

TABLES PAGE

Table 1

| Pre C&DC Start on Pilot Units | Conservable Bed Opportunity (bed equivalents from conservable days) | Bed Turns (separations per budgeted bed per month) | ED Wait Times (hours - order to admit to depart ED) | Percent of Typical Discharges where Actual LOS is within 1 Day of ELOS |
|-------------------------------|---|--|---|--|
| Ward A3 Medicine | 9.0 | 2.7 | 23.5 | 49.7 |
| Ward 6S Surgery | 5.0 | 4.2 | 9.8 | 70.6 |
| Ward 4Z Surgery | 3.5 | 3.7 | 6.6 | 75.0 |

Table 2

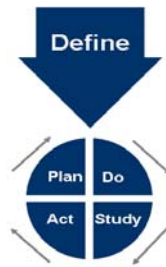


Table 3

| C&DC Pilot Unit | Percent Improvement to Conservable Bed Opportunity | Percent Improvement to Bed Turns | Percent Improvement to ED Wait Times | Percent Improvement to Typical Discharges where Actual LOS is within 1 Day of ELOS |
|------------------|--|----------------------------------|--------------------------------------|--|
| Ward A3 Medicine | 62.0% | 18.5% | 66.7% | 23.5% |
| Ward 6S Surgery | 8.0% | 4.8% | 69.0% | 0.4% |
| Ward 4Z Surgery | 3.8% | 8.1% | 6.5% | 3.7% |