Quality Improvement Project
Reducing Overall Length of Stay
Souris Hospital
Define

- The average length of stay at Souris Hospital exceeds the expected length of stay
- We have identified various factors that impact a patient’s length of stay
- Factors affecting length of stay differ for acute patients and alternative level of care patients
Define

Problem Statement:
Patient discharges are delayed due to lack of communicated discharge plan/date, patient and family expectations, cost, and coordination and timing of health service delivery. This causes frustration and disruption for staff and patients and families.
Define

Process Map:
Measures

- Time of Admission
- Type of Patient on Admission
- Type of Patient on Discharge
- Patient’s Address
- Referrals
- Date Expected Date of Discharge (EDD) assigned
- EDD met
- Goals documented on kardex
- Date family notified of discharge plan
- Patient/family agree with discharge plan
- Discharge date/goals adjusted
- Financial assessment done
- Patient leaves on discharge date 1100hrs
- Discharge location
Analyze - Baseline Data

Length of Stay by Patient

- Average LOS (days): 21.8
- Median LOS: 19.0

Patient IDs: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

Days: 0, 10, 20, 30, 40, 50, 60

LOS (days)
Analyze - Baseline Data

Length of Stay for ALC Pts

- ALOS 25.8
- Median 25.0

Patient ID: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13
Analyze - Baseline Data

Length of Stay Acute Patients

- Patient ID: 2, 3, 4, 5, 6, 7, 10, 11
- Days: 2, 3, 4, 5, 6, 7, 10, 11

- LOS of Acute
- ALOS: 8.5
- Median: 6.0
Analyze - Baseline Data

Admission Type

- Count of Acute on admission: 10
- Count of ALC on admission: 4
- Count changed to ALC from Acute: 5
Analyze - Baseline Data

Number of Referrals to each area

- PT: 7
- Other: 6
- OT: 4
- Social Work: 2
- Home Support: 2
- Wound Care: 1
- HC Nursing: 1
- MH: 1
- Addictions: 1
Analyze - Baseline Data

EDA Met or Not Met

<table>
<thead>
<tr>
<th>Status</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDD Met</td>
<td>2</td>
</tr>
<tr>
<td>EDD Not Met</td>
<td>10</td>
</tr>
<tr>
<td>Expire</td>
<td>2</td>
</tr>
</tbody>
</table>
Analyze - Baseline Data

Goals Documented

- Goals on Kardex: Yes
- Goals not on Kardex: 4

Patients: [Bar chart showing distribution]
Analyze - Baseline Data

Discharge Time Met

- Patient Leaves on Time Yes: 8
- Patient Leaves on Time No: 3
- Blank (includes 2 deaths): 3
Analyze - Baseline Data

Time Patient Leaves Hospital

- Pt# Average Time Pt discharged
- Pt# Patient Leaves Building Time
Analyze - Baseline Data

Discharge Location

- Patient Discharged to Home: 7
- Patient Discharged to Family
- Patient Discharged to Community Care: 3
- Patient Discharged to Long Term Care: 1
- Patient Discharged to Other
- Blank: 3
Analyze

- Census was low during this data collection period – only 14 admissions from October 23 to November 8.
- Overall average length of stay was 21 days
- Average length of Stay for ALC patients – 26 days
- Average length of stay for acute patients – 8.5 days
- The majority of referrals were for PT and OT
- The time from date of referral to when the patient was seen varied from same day to 8 days depending on the service.
  - OT – 8 days (8.5??)
  - Other – 7 days (7.5?? … what’s other)
  - PT – 4 days
Analyze

• Only 50% of patients were assigned an expected date of discharge
• Of the 12 patients assigned an EDD, only 2 (17%) were discharged on or before the expected date of discharge.
• Only 54% of patients had their plan of care/discharge goals documented on their kardex
• 73% of patients were discharged by 11 am. Note, it was originally thought that this was a major contributing factor to increased length of stay but it was determined that this was not the case.
• The majority of patients were discharged home, followed by community care
Improve

Aim Statement

• By 17 Jan, 80% of acute patients have an expected date of discharge established within 36 hours of admission.

• By 17 Jan, 80% of patients have a plan of care (i.e. specific patient goals to facilitate their discharge) established within 36 hours of admission.

A secondary aim of this QI project includes:

• Reduce length of stay for patients by standardizing the discharge process.
PDSA 1

Description: Set discharge date within 36 hours.

Plan (required actions):

- Establish informal education sessions for staff
- Review discharge guide
- Post CIHI data for reference linked to diagnosis
- EDD posted on patient white board
- EDD discussed with patient and family

Date Implemented: December 4, 2013
Improve

PDSA 2

Description: Patient goals established within 36 hours of admission (established during initial assessment)

Plan (required actions):
- Communicate need for setting patient goals within 36 hours with staff and physicians
- Patient goals are defined by care team and documented within 36 hours and are tied to discharge of patient
- Patient goals identified on a specific location on the kardex
- Patient goals documented on white board
- Review discharge sheet with patient the day of discharge

Date Implemented: December 4, 2013
Improve

Overall Length of Stay
Souris Hospital

Baseline:
Median = 19 days
Average = 21.78

Post PDSA
Median = 7.5 days
Average = 12.52

Days

Baseline
Post PDSA
Median

19 days
7.5 days
Acute Length of Stay
Souris Hospital

Baseline:
Median = 6 days
Average = 8.5 days

Post PDSA
Median = 4 days
Average = 5.32 days
Improve

**ALC Length of Stay**
**Souris Hospital**

- **Baseline**: Median = 25 days, Average = 25.8 days
- **Post PDSA**: Median = 22 days, Average = 24.5 days
Improve

EDD Assigned

48% Improvement

Baseline: 7 (Yes) 7 (No)
Post PDSA: 39 (Yes) 1 (No)
Improve

Goals on Kardex

14% Improvement

Baseline

Post PDSA

Yes

No

7

4

31

9
Improve

![Bar chart showing improvement in EDD Met]

**66% Improvement**
Improve

Discharge Location

- Home
- Family
- Community Care
- Long Term Care
- Expired
- Transferred to QEHC

Baseline vs Post PDSA
Improve

- Patient census for this data collection period was 40 (versus 14)
  - Overall average length of stay decreased from 19 days to 7.5 days
  - Average acute length of stay decreased from 6 days to 4 days
  - Average ALC length of stay decreased from 25 days to 22 days
  - There was a 48% improvement in assigning the expected date of discharge (from 50% to 98%)
  - There was a 66% improvement for meeting the expected date of discharge (from 17% to 83%)
  - There was an improvement for establishing patient goals by 14% (from 64% to 78%). Please note ensuring goals for all patients whether ALC or acute will be a focus going forward.
**Improve**

- Nursing and allied health staff more conscientious of the need to establish discharge goals to facilitate a timely discharge
- Physicians more engaged in discharge process
- Improved communication between patients and their families and staff/physicians
- Increased awareness of patients and their families regarding the patient’s discharge and the discharge process
- Improved coding
- Health team is more aware of what to expect and when to expect it regarding the discharge of patients
Control

• Standard Work – part of standard work

• Visual Control – green sheet is used for EDD form

• Training – part of the orientation package for new staff (EDD and white boards, etc.)

• Audit – intermittent audit to ensure standard/ procedure is complied with

• Policy & Procedure – set EDD within 36 hours of admission implemented as part of admitting process
Lessons Learned

• Communication among the health care team was essential
• Use the tools appropriately
• Having the data to support this improvement project was important
• This project helped to identify other areas for quality improvement
Next Steps

• Communication of improvements to other facilities
• Shared learnings
• Transfer process between facilities. Lots of opportunity for improvement
• Optimize provincial bed utilization
Enter Team Names: Terry Campbell, Krista Boland, Darlene MacNeill-Veld, Edna Miller, Danielle Mill, Jolene Coffin, Una Hassenstein