





Schulich-Ivey Quality in Healthcare Consultancy

Capstone Presentations





ICU PATIENT TESTIMONY

"Being tied to the machine. Alarms, continuous rush.

Pushing, poking, pain, seeing a lot of ill people around is
frightening. All the IV fluids, dripping serum. Doctors all the time.

A peculiar smell."



Liver Transplant Accelerated

Recovery Program



Dr. Nelson Gonzalez



Caroline Parsons



Michael Lee



Kathryn Beri



Jasmine Yu

PROBLEM: AIM STATEMENT

By December 2022, for cases undergoing Liver
Transplants at LHSC, have 5-10% of patients
successfully complete the Liver Transplant Accelerated
Recovery Program.

PROBLEM: PROJECT IMPACT

Research show...

- ICU increases **traumatic** patient experiences
- ICU increases risk of infection
- Some LT patients can safely bypass the ICU
- Faster recovery while maintaining quality of care
- Improved patients and family experience



PROBLEM: BUSINESS CASE

AVG LOS ICU for liver transplant patients in days

4.0

Cost per patient per day

\$4186

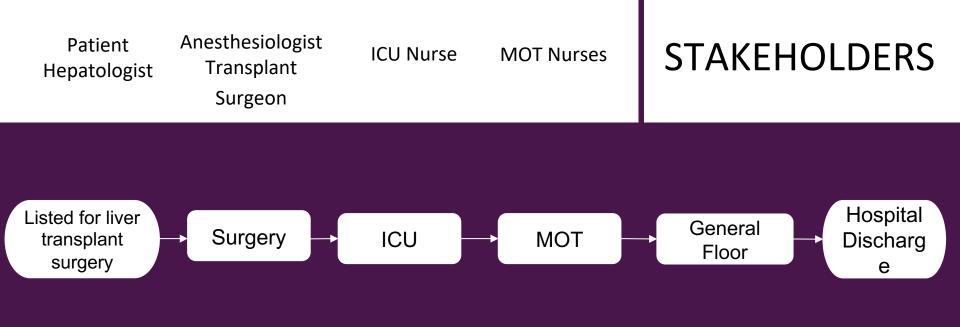
Number of patients per year

3-5

\$50,000-80,000



ROOT CAUSE: PROCESS MAP



There is no existing patient pathway to bypass ICU

INTERVENTION

Patient Hepatologist Anesthesiologist Transplant

Surgeon

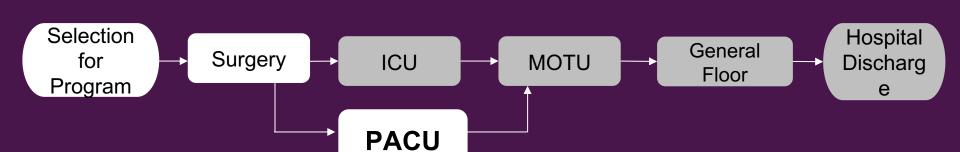
ICU Nurse

PACU Nurses

MOTS

Nurses

STAKEHOLDERS



MEASUREMENT: FAMILY OF MEASURES

Outcome Measures

Process Measures Balancing Measures

- 1. Program completion rate
- Length of stay
 Hospital cost proxy
 Recovery time proxy
- 3. Patient experience

- 1. 30-day hospital re-admission rate
- 2. ICU repatriation rate
- 3. Employee satisfaction

IMPLEMENTATION: BARRIERS

- PACU and MOTU hesitancy
 - 2 Administrative and bureaucratic barriers
 - 3 Low liver transplant rate and program eligibility
 - 4 Lack of available data collection
 - 5 Pandemic

IMPLEMENTATION: STRATEGY



Education





Data-driven Strategy



Time

RESULT:CURRENT DATA

Historical Length of Stay:

• Total LOS AVG: 18.0

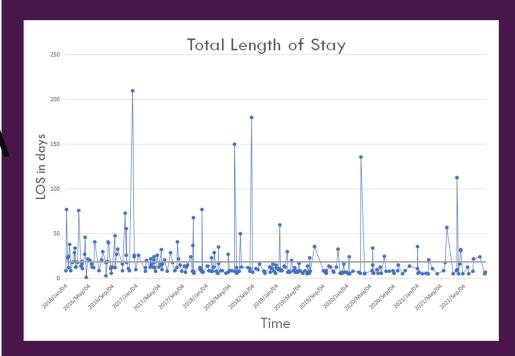
• ICU LOS AVG: 4.0

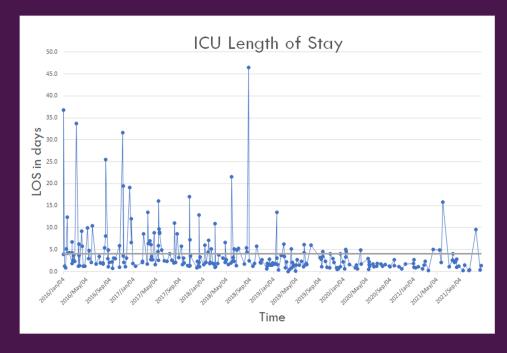
Other Historical Data:

- MELD
- HCC
- PSC

Current Data Collection:

- Total/ICU LOS
- Monitor ICU repatriation and 30-day hospital re-admission rate







NEXT STEPS

- 1. PACU and MOTU approval schedule meeting
- 2. Run a PDSA cycle with 5 eligible liver transplant patients (liver cancer)
- 3. Record and analyze data in real time
- 4. Monitor patient and push for liver transplant patient representative
- 5. Monitor nurse experience

Long-term: Run PDSA cycle; expand eligibility



SUSTAINABILI TY___



Concerns

- Physician decision to fast-track patients
- Nurse support

Recommendations:

- Data collection and communication
- Open feedback from stakeholders
- Sustained effort to increase eligibility



CONCLUSION: LESSONS LEARN

- 1.Buy-in for change is difficult
- 2.Every QI project is different (timeline, processes)
- 3.QI is a continuous process and adaptable
- 4. Using a multidisciplinary approach and diverse team

Thank you!

"Creating an individualized patient experience"



Western

The Centre for Quality, Innovation and Safety



