Reducing Post-Operative Length of Stay (LOS) for Total Joint Replacement Patients

Elliot 1 - Day Surgery Center

Ashley Brandes, BSN, RN; Shana Starr, BSN, RN; Michael Monahan, PT, OCS; Kelley Greulich, MSN, RN

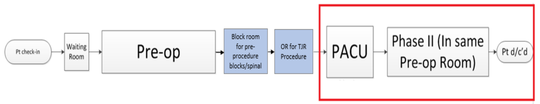
1: Purpose

Background: The first total joint replacement (TJR) at the Elliot 1 Day Surgery Center was performed in August 2017. Over the next 3 years, total joint procedures continued to be performed at low volumes. In Fiscal Year (FY) 21, the surgery center's strategic plan included increasing total joint replacement surgical volumes by offering a 23 hour stay program. This coincided with the recruitment and hire of a total joint surgeon by the Elliot Orthopaedic Surgical Specialty practice. In FY21 TJR volumes increased by 620%. As volumes increased, safe and efficient patient flow became a priority.

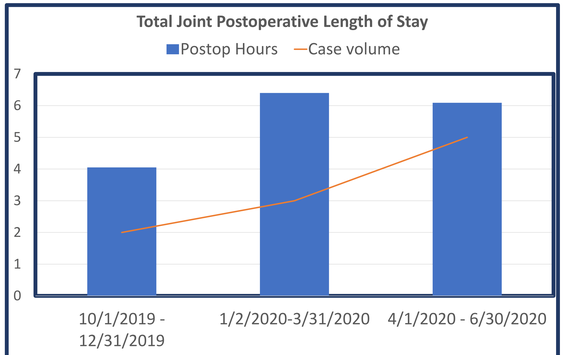
Problem: Patients postoperative length of stay (LOS) was > 5 hours.

Purpose: To create a program that enables expedited discharge to the home environment and facilitates optimal patient outcomes in the post-operative period after total joint replacement. Encouraging early ambulation and discharge to the home environment promptly after surgery decreases risk of infection, increases patient satisfaction, decreases risk of developing Deep vein thrombosis (DVT), and improves patient outcomes in the long term.

Postoperative Length of Stay



Baseline Data



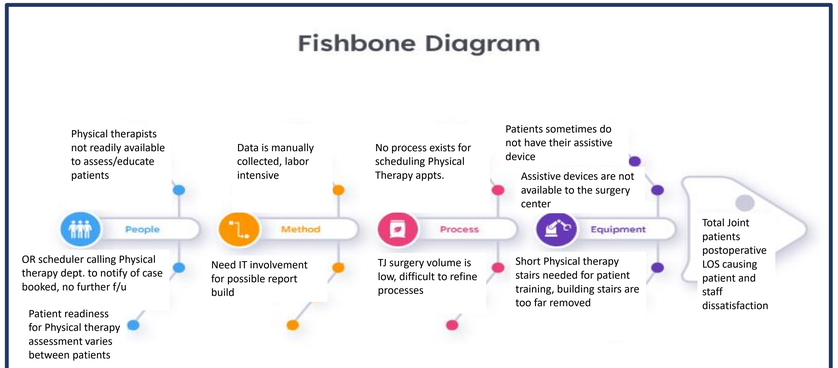
2. Goal

An external benchmark for TJR postoperative LOS for same day discharge was not found. A literature review indicated a range of 4-8 hours of total length of stay (preoperative, intraoperative, and postoperative) for same day surgery.

The leadership team surveyed three ambulatory surgery centers in southern NH that perform total joints. These surgery centers averaged a postoperative LOS of 3 hours.

The goal is to decrease patients who had a total knee or total hip replacement postoperative LOS by 25%, resulting in a postoperative LOS no longer than 3.75 hours. This study is to continue until the goal has been met and sustained for at least 3 consecutive quarters.

3. Identify the Gap



High Impact Causes

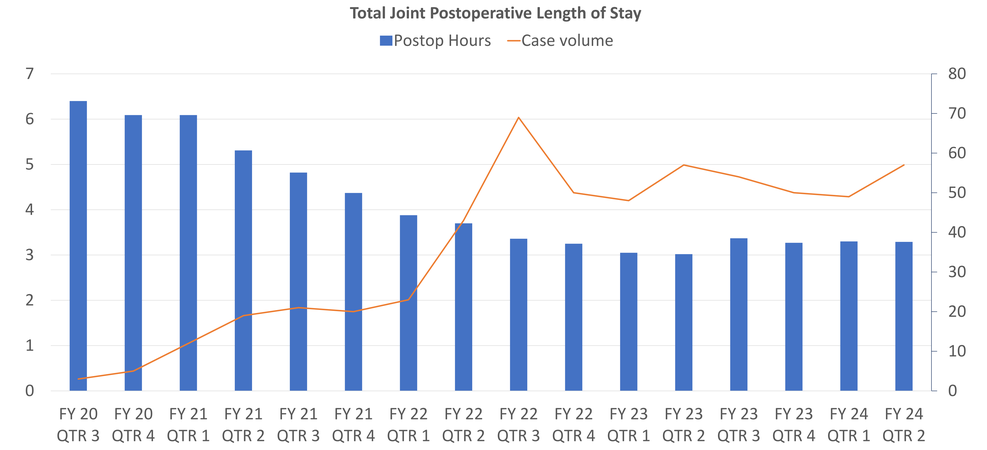
1. Patient needing physical therapy (PT) assessment and education prior to discharge. Scheduling this time is difficult.
   - WHY? The scheduling of PT is dependent on the patient Phase I recovery and the availability of PT.
   - WHY? Length of phase I recovery varies between patients. The Physical therapists are booked with outpatients. They are accommodating the TJR patients in between their outpatient appointment.
2. Variability in expectations/standards of nursing care post total joint surgery.
   - WHY? Total joint surgery volumes have been low for the surgery center. Knowledge deficit/limited orientation/plan

4. Corrective Actions

Root Cause	Counter Measures
No defined PT scheduling process	• As total joint procedures are scheduled, ASC scheduler will notify physical therapy of surgical date and time via email • Day of surgery nursing will page/call physical therapy to discuss and establish an available time frame for PT assessment once patient has transferred to recliner and pending transfer to phase II
Inconsistent communication among nursing team of the new PT scheduling/ notification plan	• Continue efforts to improve communication between nursing and physical therapy. • Hold debriefs/huddles to discuss what went well and what communication gaps still exist
Patients sometimes forget to get and/or bring their devices to the surgery center	• Nursing to collaborate with Durable Medical Equipment Dept. (DME) to identify opportunities to assist • DME will stock the surgery center with assistive devices • DME will collaborate with physical therapy to determine what devices are needed and par levels • DME will educate ASC leadership in necessary paperwork for the devices
Patients continue to wait for PT assessment/ education/training due to the PT outpatient schedule	•Develop Nurse training/education program to perform the patient mobility assessment/evaluation and patient assistive device education to support the surgery center's patients •Initial training will be provided to a focused group of 4 postoperative nurses, inclusive of the Resource Nurse • The education/training program needs to be broadened beyond the focus group to all postoperative nurses. • Begin transition from physical therapists to nursing providing all patient education/ evaluation/training with physical therapists available for support as needed • Implement new hire and annual Basic Mobility and Safe lifting competency

5. Remeasure

Post-operative LOS decreased from >5hours to 3.25 hours



6. Communicate

- Quality Committee: Quarterly 7/24/20 – 7/10/23
- Governing Board: 4/26/21 – 8/10/23
- Staff Meetings: Monthly throughout study
- Staff Newsletters & Staff Huddles
- Poster presentation Nurses' Week 2024

What did we learn?

Learning
Patients had expectations of being discharged in a timelier manner.
Nursing staff and physical therapy expressed frustrations from the inconsistency in process. Needed more frequent communication with teams to explain process.
Frequent calls to ortho offices and to patients to remind them about providing and bring the assistive devices did not result in consistency. People are human and forget, patients are no exception. When assistive devices were not available delays occurred. Defined process needed.
Although PT scheduling communication and notification became consistent, the greater root cause in delayed discharges was the PT outpatient schedule. ASC TJR patients were on hold until the PT outpatient schedule had opportunity for the therapist to see the ASC patients.

References

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