A Multi-Disciplinary Team Approach to Quality and Efficiency in the Total Knee Arthroplasty Patient

Lori Anne Wittner BSN, RN, CNOR
Lehigh Valley Health Network, Lori.Wittner@lvhn.org

Follow this and additional works at: http://scholarlyworks.lvhn.org/patient-care-services-nursing
Part of the Perioperative, Operating Room and Surgical Nursing Commons

Published In/Presented At

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.
Behavioral Objectives:
- Apply principles of Lean and Six Sigma for process improvement.
- Implement a standard process from the point of admission through the PACU setting for all patients undergoing a Total Knee Arthroplasty.
- Streamline instrumentation utilized for a Total Knee Arthroplasty.
- Re-evaluate the streamlined process and apply to other service lines.

Problem Statement:
In a 23 bed in-patient operating room, the challenge in the peri-operative setting was to incorporate Lean principles to provide a quality, standardized model of patient care for Total Knee Arthroplasty patients. An efficient standard of care would optimize flow, allowing our in-patient hospital to remain competitive with the attractive, ambulatory surgery settings that are vastly on the rise.

Rationale:
- Incorporate a standard of care for pre-operative patient education to help decrease anxiety.
- A predicted course from admission through the PACU setting allows nurses to navigate for the patient and promote a smooth workflow through the perioperative arena.
- Offers surgeons a desirable alternative to reallocating their business to the popular out-patient surgery centers.

Methodology:
- A series of collaborative inter-departmental team meetings held to devise a pain management protocol.
- Developed standard work for Anesthesia providers, pre-operative holding nurses, and the operating room personnel.
- Instrument vendors engaged with OR staff to decrease amount of instrumentation needed per case.
- Instrumentation decreased from 6 carriers to 2 to ease with instrument set-up and turnover.

Results:
- “Wheels in” to “incision time” reduced by 20%.
- Patient pre-operative wait time decreased.
- Surgeon and staff satisfaction increased.

Outcome:
- We are never “too good” for change! All processes can be reviewed and improved.
- Consistency is imperative for patient comfort, employee performance, and surgeon satisfaction.
- Applying Lean principles and streamlining processes and instrumentation can allow in-patient hospital ORs to be equally efficient as ambulatory surgery centers.