Introduction

The short procedure unit (SPU) is an outpatient unit at Thomas Jefferson University Hospital. The SPU prepares (Pre-Op) and recovers (Post-Op) patients for elective procedures. Approximately 31,000 patients are prepared and recovered by this unit annually. In 2018, a cross functional team was brought together to evaluate the current state of the SPU’s process and make recommendations for improvement. The team evaluated the following opportunities:

- Medical and Surgical patients populations were processed together and had separate workflows
- No system for patient assignment, nurses self selected patients
- Charge nurses had four phones and retroactively addressed issues
- Registration was done by nursing assistants
- Issues with patient readiness accumulated in a “Problem Bin”
- Stretch Readiness and Availability
- Batched patient arrivals for 1st, 2nd, 3rd cases

AIM

The desired outcome of this project was to develop and implement a process to assign and delegate nurse assignments in a systematic approach to hold staff accountable and ensure patients are appropriately prepped for their procedure in a timely and safe manner

Goals:

- Reduce SPU RN Care Time
- Increase % of patients ready for holding area on time

SPU Foundation

- Unity
- Cohesion
- Efficiency
- Accountability
- Alignment

Project Design and Strategy

This project followed the Lean Six Sigma methodology, DMAIS. The team worked with Lean Six Sigma Leaders to drive process and culture change efforts and assist with solutions.

- Gathered Voice of Customer including procedural areas, nurses, and patients
- Conducted physical process observations
- Developed cross functional team
- Developed and tracked lead measures such as the RN Care time for Medical and Surgical patients
- Tracked First Case On times and stretcher readiness
- Measured case count and average times by nurse for accountability

Percent of Patients Ready for Holding Area Within 35mins

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Methods

- Define - Conducted voice of customer defined project opportunity
- Measure - Conducted process observations defined lead and lag measures
- Analyze - analyzed the results of all findings
- Improve - conducted rapid process improvement events and further data analysis to pilot changes
- Sustain - built system resiliency and accountability for sustained changes

Actions & Changes Made

Divided Patient Population by Medical & Surgical

- Collected on going metrics to identify key patient populations
- Shifted nursing assignments by patient type Medical & Surgical
- Created Discharge lounge to expedite Post-Op care
- Set clinical care targets for Pre-Op & Post-Op

Realigned Staff Roles and Responsibilities

- Assigned nurses to Bays to reduce discovery waste and allowed for clear tasks
- Educated nurses in cross disciplinary understanding of the multiple procedural areas
- Roles and responsibilities defined to allow for staff to operate at the top of license (Operations Coordinator, additional NA & CCT)

Optimized technology and equipment

- Standardized Equipment in all Bays
- Streamline EMR Workflows
- Optimize status boards

Patient Volume Vs. Average Pre-Op Time

Acronyms

- TJUH - Thomas Jefferson University Hospital
- SPU - Short Procedure Unit
- SPU RN Care - In SPU to Patient Ready for Holding
- NA - Nursing Assistant
- EMR - Electronic Medical Record

Results and Outcomes

- Reduction in SPU RN Care, Controlled Variation in SPU RN Care
- Reduction in time spent in Phase II recovery
- Increase Staff engagement increased moral and job satisfaction (Scores above benchmark)

Average SPU RN Care Time (Pre-Op)

Average SPU Phase II Recovery (Post-Op)

Next Steps

- Implement operations coordinator to monitor data and metrics
- Invest in staff to develop technical skills with data and clinical nursing care
- Mirror surgical processes into the procedural area processes for further standardization
- Enhance transportation staffing model to accommodate for additional patient discharges and movements to the holding area
- Increase balance and stagger patient arrivals for 1st, 2nd, 3rd cases.