IMPROVING THROUGHPUT OF JOINT AND SPINE PATIENTS FROM PHASE I: A RAPID IMPROVEMENT EVENT

BACKGROUND
Anne Arundel Medical Center is a 424-bed not-for-profit regional health system headquartered in Annapolis, Maryland. Our organization performs more joint replacements than any other hospital in Maryland, almost 2000 per year. Our 20-bed PACU recovers approximately 60 patients per day; joint replacements and spine surgeries account for 20-30% of our daily volume. Once Phase I discharge criteria was met, the average time to transfer a patient to the Joint and Spine Center (JSC) was 62 minutes (additional data mining revealed the transfer time was actually 65 minutes). The process of transferring patients from PACU to the JSC was untimely and variable. The delays created multiple issues including operating room hold times, delay in same-day physical therapy evaluations, patient and family dissatisfaction, and PACU staff frustration.

OBJECTIVES OF PROJECT
To create a process to decrease the transfer time of patients from 62 minutes to 31 minutes from PACU to our Joint and Spine Center.

PROCESS OF IMPLEMENTATION
Lean methodology is a customer-centric methodology used to continuously improve any process through the elimination of waste in everything we do.

Using this approach, we:
- Outlined our current and future state
- Identified gaps and barriers in our future state
- Developed over 23 high-impact, easy to implement, nurse-driven potential solutions. Examples include:
  - Visibility of PACU’s electronic status board by Joint and Spine nurses
  - Standard work for Phase I discharge criteria
  - Flexible staffing to demand in JSC
  - Daily huddles to engage all staff on performance and encourage contribution of improvement ideas
- We created standard work to maintain this process

STATEMENT OF SUCCESSFUL PRACTICE
Within 30 days of implementing changes to improve flow from PACU to the Joint and Spine Center, we demonstrated an average transfer time of 30 minutes. That is a 50% improvement in turn-around times. This work clearly shows small interventions can bring positive, nurse-driven changes. We have been able to sustain this process over the last six months, and our average transfer time is 37 minutes, which is significantly less than our starting transfer time. Metrics are reported each day during daily huddles, PACU staff are engaged in the process and strive to meet our goal.

IMPLICATIONS FOR ADVANCING THE PRACTICE OF PERIANESTHESIA NURSING
Other PACUs can take our strategies and implement them into their organizations. Within our organization, we hope to spread this process to other surgical units to streamline and expedite the transfer of patients. Implications for further research could be patient, nurse, and physician satisfaction, OR hold time metrics, same-day PT evaluations and overall length of stay.

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Special thank you to our RIE team