**BACKGROUND**

Within our large academic healthcare organization, one of the most significant challenges is safely recovering patients once the primary recovery area is fully occupied. In 2019 we had over 21,000 minutes of Operating Room/Procedural Area (ORPA) holds where patients were recovered in the procedural areas. Recovering patients in the Operating Room (OR) has financial implications, since there is loss of revenue when the room is not being utilized for a scheduled procedure. In addition to the financial cost of delayed OR start times, dissatisfaction of the patients, surgery staff, and surgeons was also evident. The goal was to streamline, coordinate, and optimize patient recovery in a value focused environment while also assigning post procedural/surgical patients to the appropriate level of recovery.

Recovery 2.0 is a problem-solving project created to address the most significant challenges in our perioperative process. Our interprofessional team uses a goal-oriented approach based on The Four Disciplines of Execution (McChesney, Covey, 2012), or 4DX. The process begins with a narrow focus on one of the most important goals as determined by team members- ORPA delays.

Our goal was a 40% decrease in the time delays associated with ORPA holds over the course of 6 months.

**OBJECTIVES**

- **CAUSES OF ORPA HOLDS**
  - 1. Hosp bed availability - 50%
  - 2. PACU/DOSC Staff/Beds - 10%
  - 3. Surg/Proc Demand Var - 20%
  - 4. DOSC Opportunities - 20%

**IMPACT OF ORPA HOLDS**

The aforementioned 21,000 minutes of documented delays in 2019 is an underestimate of the actual magnitude of this problem because any delays less than 10 minutes are traditionally not counted at our facility; the majority of delays fall into this group. OR cost varies significantly based on the complexity of cases, ranging from $22-134 per minute. Cost of recovery in the OR is challenging to estimate, as one must take into account loss of revenue when the room is not being utilized for a scheduled procedure and the increased cost of employee overtime if delays are significant. Additionally, OR delays negatively impact patient, surgeon, and surgical staff satisfaction.

**THE ANESTHESIA RECOVERY PROGRAM**

Our team decided to identify a change in workflow that could be implemented by the clinicians and staff to reduce the impact of ORPA delays. Our plan, which we call the Anesthesia Recovery Program (ARP), is triggered whenever an ORPA hold will exceed 10 minutes. Average ORPA holds are approximately 20 minutes, while the procedural room turnovers are closer to 40 minutes, allowing most cases that would have been subjected to ORPA holds to proceed without delays. Additionally, a decision tree was created with guidelines in place in order to stratify recovery area assignments by optimizing the recovery workflow.

**RESULTS**

- Unfortunately, we were impacted by the COVID-19 pandemic 6 weeks into the project. At that point we were already documenting improvements in ORPA delays, with up to 85% of delays mitigated by the Anesthesia Recovery Program. When case volumes returned we were able to continue our progress.
- Improved patient, surgeon, and OR staff satisfaction
- Improved OR turnover times
- A greater percentage of scheduled cases performed in our operating room “block” time.