## **B7**

## Amber Khemlani

Advisor(s): Ketan Shevde

Co-author(s): Joshua Appelbaum, Emily Yang, Varsha Talanki, Joshua Singavarapu, Dr. Ketan Shevde

## Identifying Causative Factors that Lead to Delays in OR Efficiency and Impact OR Utilization

Background: The purpose of this project is to address the operating room efficiency at SUNY Downstate. Operating room costs contribute significantly to the hospital's finances. Factors known to impact operating room efficiency include teams being unavailable, missing equipment, patient tardiness, operating room turnover time, and missing medical clearance.

Methods: The data was collected between 8/2024 to 10/2024 and was compared with previously collected data from 4/2023 - 6/2023. Data parameters collected included start and end time of surgical cases, factors that delayed start time, and the number of delayed and cancelled cases. Data collection involved communicating with the operating room staff to determine causes of delay.

Results: We found that the most significant factors leading to delays of cases were the surgery team being unavailable, operating room turnover, and patient tardiness. We also found that the operating rooms were being utilized significantly less in 2024 compared to the previously analyzed data from 2023.

Limitations: Limitations to this study include only a subset of the dataset being analyzed due to limitations with collection. Specifically, on certain dates, no operating room staff was available to discuss the causes of the delays. In addition, not all cases were reported with start and end times, making approximating the total operating room time for the day difficult.

Discussion: The results of this study can be used to increase efficient utilization of SUNY Downstate's operating rooms and specifically address the top causes of operating room delay.