

Optimizing Throughput in an Endoscopy Unit

Authors: Joseph Galan, Gautham Reddy, Robert Zabala, Felicia Panatera

Problem

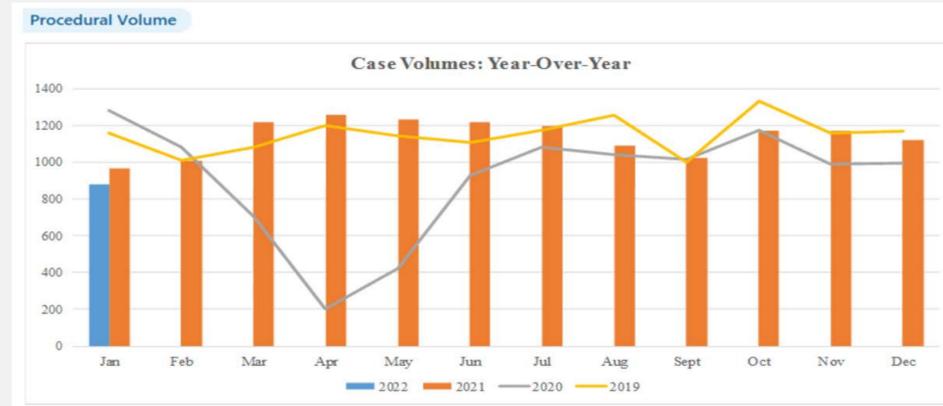
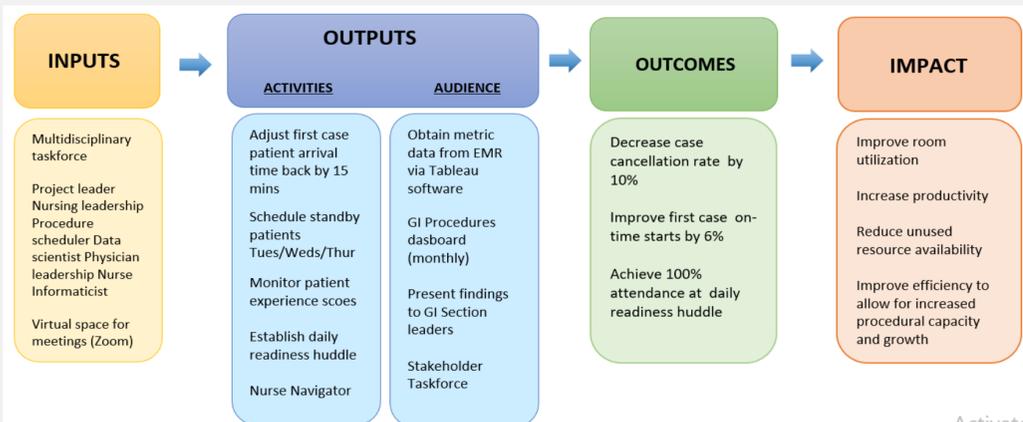
- The American Cancer Society expects an increase in new colon cancer cases, and subsequent demand for endoscopic procedures.
- Demand of endoscopy procedures continues to increase
- The endoscopy unit at this academic medical center is subject to various inefficiencies that impede productivity:
 - First case on-time start (FCOTS): Current YTD is **64%**
 - Case Cancellations result in loss of productivity and throughput delays

Goal

- Increase first case on-time starts **6%** by February 2022.
- Decrease procedure cancellations by **10%**, for an average cancellation rate less than 20% or fewer than 150 cancellations per month by February, 2022.

Intervention Design

- Adjust First-Case patient arrival time back by 15 minutes
- Establish Multi-Disciplinary Task-Force
- Reinstitution of Daily Readiness Huddle: Nursing, Anesthesia, Medicine
- Add 1-Standby Patient on Tuesday, Wednesday, Thursday
- Implementation of Nurse Navigator Role



Results

First Case On-Time Starts (FCOTS)

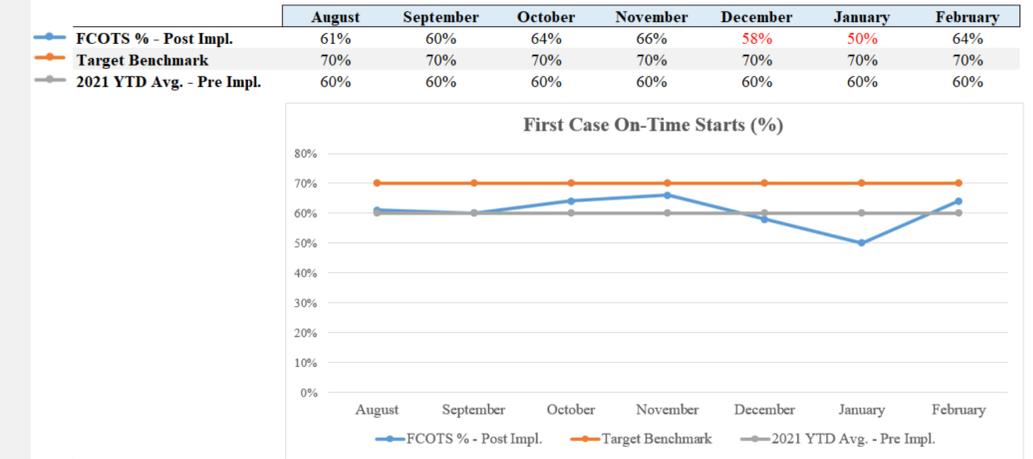
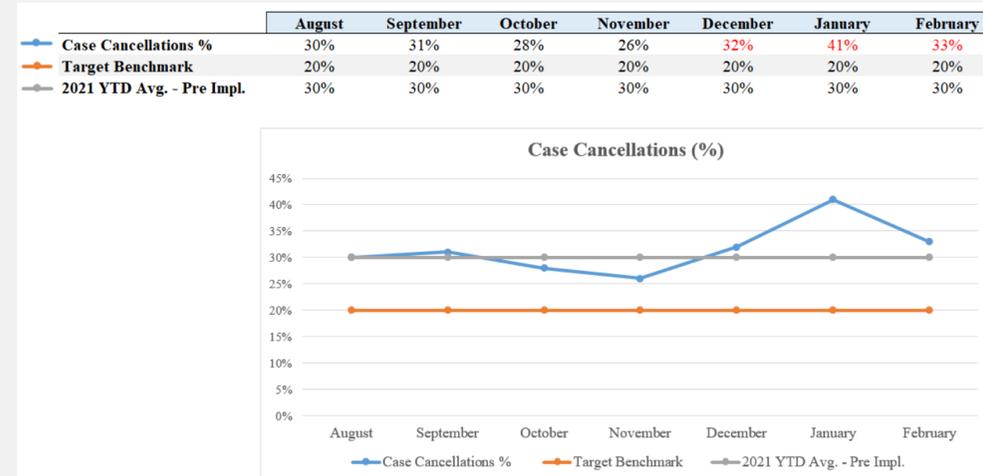
A total of 137 case delays were captured during the implementation period. Over half of the delays were patient readiness reasons.

Roughly 43% of patient readiness reasons were due to late arrival.

Case Cancellations

“Standby” interventions did not appear to negatively affect Patient Experience metrics

Interventions appeared to show improvements to metrics noted pre-COVID surge (Dec 2021)



Outcome Analysis

- Interventions appeared to show improvements to metrics noted pre-COVID surge (Dec 2021)
- “Standby” interventions did not appear to negatively affect Patient Experience metrics
- COVID Surge (Dec-Jan)
 - Increased pre-procedural testing protocols
 - Increased case cancellations
 - Hospital suspended in-person gatherings (huddles)
 - Nurse navigator role achieved partial implementation (hired Dec 2021)

Recommendations

- Opportunity for future evaluation of interventions targeting nursing, physician, and anesthesia readiness
- Opportunity to capture full scope of nurse navigator role implementation and refine orientation/training
- Sustainability should include continuing interventions into the post-pandemic (surge) period when operational stability allows for uninterrupted implementation of interventions