A Quality Improvement Project to Decrease Cataract Surgery Cancellations:

An Executive Summary Detailing the Project Design and Implementation

Miranda Zambelli

College of Nursing, East Carolina University

Doctor of Nursing Practice

Advisor: Dr. Krystle Vinson

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Executive Summary

Why focus on decreasing cataract surgery cancellations? (Main Points)

- Patients deserve timely access to health care, and as healthcare providers, we aim to meet that need through better nurse-patient communication prior to the day of surgery.
- Weighing the risks versus benefits can be difficult, especially when a patient has been waiting for this procedure.

Background & Purpose: Why are cataract surgeries being cancelled?

Since the early 2000s, GLP-1s (Glucagon-Like Peptide-1s) have been used to treat diabetes; however, their popularity has surged recently, with more than 6 million prescriptions written in the first three months of 2023 for diagnoses other than diabetes (Aleccia, 2023). With this popularity, a new phenomenon emerged in the world of anesthesia. Within the preoperative nursing units, anesthesia providers are weighing risks versus benefits when it comes to decision-making on whether to intubate a patient or to administer lighter sedation. All decisions have risks, but in patients taking GLP-1s, the risk of aspirating retained gastric contents (RGCs) is markedly increased. Without a clear liquid or low-residue diet before surgery, Silveira et al.'s study found that 24% of patients taking GLP-1s still had food or gastric contents in their stomachs after the standard eight-hour fasting protocols typically used before sedation (2023). This study also demonstrated a risk reduction, with only a 3.6% chance of patients having RGCs on the day of surgery when they had followed a low-residue or clear liquid diet for 24 hours before being sedated (Silveira et al., 2023).

The project site hospital I worked with has a 24-hour clear liquid diet fasting policy for all patients who have taken a GLP-1 in the last 30 days. Between January and April 2024, we experienced 17 cataract surgery cancellations due to noncompliance with the new GLP-1 fasting guidelines. Eight of those patients had adhered to a standard eight-hour fasting period before surgery. Upon chart review, we also found text explaining that the patient had no prior knowledge of the new fasting guidelines.

Over the 12-week project implementation, we utilized a preoperative phone call tool designed to enhance nurse-patient communication and identify patients who required teaching specific to the new GLP-1 fasting guidelines versus the standard 8-hour fasting guidelines. Patients were contacted at least 48 hours before their scheduled surgery to ensure timely communication of the fasting guidelines.

Methodology

The research design was based on the Institute for Healthcare Improvement's Quality Improvement Project Charter, with a plan to utilize the Plan-Do-Study-Act (PDSA) framework for change during the 12-week project (Institute for Healthcare Improvement, 2018). We set a goal of decreasing cataract surgery cancellations by 50%. A weekly report identified patients with any historical prescriptions for GLP-1s, and we used this list as our sample population. The sample size consisted of 117 patients with historical prescriptions for GLP-1s. A chart review of each patient was conducted to determine if they had been compliant with the new GLP-1 fasting guidelines, and this data was recorded on an Excel spreadsheet. Other demographics, such as age, sex, surgery time, time of call, outcome of call, and the specific GLP-1 used by the patient with the last administration date, were also recorded on the Excel spreadsheet.

Present the Results

The project compared cataract cancellations from January to April 2024 with those from the same months in 2025. In 2024, there were eight cataract surgery cancellations related to noncompliance

with GLP-1s. During project implementation, we encountered only 3 cataract surgery cancellations. We exceeded our goal of reducing cataract surgery cancellations by 50%, achieving an actual reduction of 62.5%.

Discuss Strengths and Limitations

Strengths

During the 12-week project timeline, we experienced no cancellations until week eight. Then we had two more cancellations in weeks 11 and 12 of implementation. Overall, there was not a lot to change except for the change in hospital policy to decrease fasting times for patients on GLP-1s to only 24 hours. The policy had previously required a 48-hour clear liquid diet before sedation.

Limitations

Because there is no official guideline on fasting for patients on GLP-1s, as is customarily published by the American Society of Anesthesiologists (ASA), several recommendations and numerous independent studies exist on the topic of fasting timelines to reduce the risk of aspiration with sedation. Additionally, the ASA's recommendations leave the decision to proceed with any given type of sedation to the individual anesthesia provider (Silveira et al., 2023). This ultimately meant that patients may still have their cataract surgery, even if they had been noncompliant with the new GLP-1 fasting guidelines. With the anesthesiologists' autonomy and the absence of fundamental guidelines from the ASA, the results could be skewed.

Implications and Conclusions

Implementing a nurse-patient teaching aid in the preoperative phone call tool would demonstrate the impact of nurse-led teaching on patient outcomes in the preoperative unit. We can have a positive impact on this patient population by increasing access to cataract surgery. Promote the

hospital's mission to improve patient care through education, leadership, and teaching (UNC Health Rex, n.d.). Meet national healthcare goals, including the Healthy People 2030 objectives to improve access to care as well as quality of healthcare (Office of Disease Prevention and Health Promotion, n.d.).

Conclusions

Cataract surgery cancellations decreased in both patients taking GLP-1s and all other patients, with only seven cancellations throughout the 12-week project, compared to 17 cancellations in 2024. We believe this project shows that by focusing on improved communication between nurses and patients, we can increase every patient's access to the care they need. Because of this project's success, we can roll out the preoperative phone call tool to other preop units in the hospital, with confidence that we can increase our patients' access to healthcare.

References

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