Reducing Same-Day Case Cancellation by Implementing 72 hours Preop Phone Calls

Debbie Sharon Centeno
debbiecenteno@yahoo.com

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N660 Evidence-Informed Improvement Project Final Paper

Adapted from Squire 2.0 Guidelines

Reducing Same-Day Case Cancellation by Implementing 72 hours Preop Phone Calls

Debbie Centeno

University of San Francisco

Liesel Buchner DNP, MSN, RN, CNL

July 21, 2024
Abstract

Problem: The increased frequency of same-day surgical cancellations affects patient care quality, causes loss of expenses for patients and facilities, and causes non-compliance with block utilization against regional standards.

Context: A collaborative effort was undertaken to reduce same-day case cancellations in the Ambulatory Surgery Unit (ASU). Patients received preoperative instructions 24 hours before surgery through email or phone call. Data collection revealed that the common causes of same-day cancellations were avoidable reasons (not NPO, patient ill, request for another schedule, no ride), indicating the need for improvement in delivering preoperative phone calls.

Interventions: This included educating preoperative nurses, creating a standard script, reshaping staff assignments, and implementing 72-hour pre-operative phone calls.

Measures: ASU management collected same-day case cancellation data for the project. The data for total case cancellations from January 2024 to June 2024 was taken from Health Connect. TPMG consulting services gives a monthly block utilization report to perioperative leadership.

Results: Same-day cancellations decreased by 16% from January to June 2024. The top three reasons for cancellations were patient illness, not medically cleared, and not NPO. Block utilization remained at 80% after project implementation.

Conclusion: Implementing 72-hour preop phone calls reduced the occurrence of same-day cancellations, but the top reasons remain the same. A recommendation is to try providing preoperative instructions through 24-hour phone calls, which will help reduce same-day cancellations for avoidable reasons.
Keywords: same-day case cancellations, avoidable reasons, block utilization, preop phone calls
Reducing Same-Day Case Cancellation by Implementing 72 hours Preop Phone Calls

Ambulatory Surgery Centers (ASCs) are medical facilities that provide outpatient surgical procedures and preventive diagnostic services to the community (What Is an ASC? n.d.). The surgery unit aims to provide high-quality patient care, reduce costs, and offer convenience to their patients (Smith et al., 2018). Same-day cancellation in ambulatory surgery adversely affects patients' experience and has financial cost implications for hospital providers (Askari et al., 2020). Cancellation within 24 hours of the surgery date is too late to arrange replacement surgery, which results in a significant waste of resources (materials, medication, and staffing) and inefficient use of the operating room (Daar & Al-Mutairi, 2018).

A nurse leader is not just a title but a role significantly impacting a healthcare organization by providing high-quality nursing care, managing relationships to influence care providers, and allocating financial and material resources (Hemberg & Salmela, 2021). My leadership journey has been a transformative process of self-discovery and growth. Starting as a staff nurse and progressing to a nurse manager, I have learned to have authentic respect for others and actively engage in the department's processes and workings. An effective leader can use and understand the exemplary leadership approach most relevant to achieving a healthcare organization's goals (Wei & Horton-Deutsch, 2022).

As a clinical nurse leader (CNL), I aim to establish strong relationships with my team members, getting to know them beyond their professional roles. This will allow me to understand better their strengths, which will, in turn, make the process of assigning projects and cases easier. This approach aligns with the transformational leadership objective of
motivating and inspiring team members to drive change and achieve goals (Hubley et al., 2022).

In project implementation, it is crucial to lead with integrity, value others' input, and be aware of current practices in the clinical setting. I will strive to lead with integrity to foster reliability and credibility and build trust with staff and patients (Hemberg & Salmela, 2021). A caring and compassionate attitude creates a culture of excellence by nurturing people and recognizing the humanity in others (Wei & Horton-Deutsch, 2022). Both transformational and authentic leadership styles are essential in guiding multidisciplinary teams toward necessary changes and promoting safe, quality patient care (King et al., 2019).

**Problem Description**

The Ambulatory Surgery Center ASC offers six fully functional operating rooms where 30-32 surgical cases are scheduled and performed daily. The latest report from EPIC shows that ASC experienced a 30% rate of case cancellations in the performance year 2023. This has impacted the optimal block utilization goal of 80% at Folsom ASU. A gap analysis of this microsystem project demonstrated that same-day cancellations averaged 10% to 14% of the total cancellations from January to March 2024 (See Appendix A, Gap Analysis). Two categories of patient-related causes for cancellations were identified: avoidable (such as no-shows, lateness, change of mind, or failure to follow preoperative instructions) and unavoidable (related to the patient's health status) (Meyers et al., 2021). The data suggests that 15% to 50% of same-day cancellations were avoidable, with 5 to 8 occurrences. This calls for interventions to reduce same-day cancellations with avoidable reasons to meet the regional goal of 80% block utilization. Research by Smith et al. (2018) emphasizes that
same-day cancellations pose significant dissatisfaction, emotional distress, and financial burdens for patients and healthcare providers (See Appendix B, Project Charter)

**Specific Project Aim**

The specific aim is to reduce same-day cancellations from 14% to 8% by July 31, 2024, by implementing 72 hours of preoperative phone calls.

**Available Knowledge**

**PICOT Question**

The PICOT question that guided the search connected to evidence-based practice was: Can a 72-hour preoperative phone call (I), compared to no preoperative phone calls (C), decrease the incidence of same-day surgery cancellations with avoidable reasons (O) within six months (T) in the Ambulatory Surgery Center (ASC) (P)?

**Search Strategy**

A systematic electronic search was conducted among six databases: Cochrane, Joanna Briggs, CINAHL, PubMed, and Dynamed. The types of study or publication included in the search were systematic review, critically appraised, and individual research studies. The search was limited to articles published between 2018 and 2024. The main topics and terms used for the search were same-day surgery cancellation, surgery cancellations, ambulatory surgery centers, and surgery delays. The search yielded 20 articles from different databases and narrowed down to seven by reviewing the title, abstract, design, methodology, and conclusion. The top five articles were reviewed and critically appraised to determine their level and quality using the John Hopkins Evidence Level and Appraisal Tool (Dang et al., 2022) (see Appendix C, Evaluation Table).
Critique of Evidence

Askari et al. (2020) conducted a non-experimental retrospective study in a UK-based Day Surgery Hospital. The study collected hospital data from September 2015 to August 2017, resulting in 1,692 canceled cases with a cancellation rate of 8.0%. The study found cancellations were lower during the summer months (July and August). The reasons for cancellations were categorized as follows: patient reasons (49.1%), medical reasons (33.4%), and hospital/administrative reasons (17.5%). The study recommended that cancellation rates due to patient reasons could be reduced with better communication. The study was rated as Level III B.

Pereira et al. (2021) conducted a descriptive qualitative study to identify the perceptions of surgical block nurses regarding surgery cancellations and recommendations to reduce the incidence of cancellations. Data were collected through recorded interviews among seven nurses responsible for elective surgeries. The study identified that surgical planning and patient clinical preparation were avoidable reasons for cancellations and recommended that effective communication and assertive leadership were strategies to reduce cancellation rates. The study was rated as level III B.

Da’ara and Al-Mutairi (2018) conducted a non-experimental, retrospective, cross-sectional study examining the association between same-day surgery cancellation. Data was collected from January 2014 to December 2014, and 440 patients with same-day surgery cancellations were selected. The study identified that reasons for same-day cancellations were unavailability of OR time (12.7%), scheduling issues (2.7%), uncontrolled blood pressure (8.4%), uncontrolled blood sugar (7.1%), patient ill (18%), patient refusal (18%) and other reasons (7.3%). The study concluded that same-day surgery cancellations were due
to patient-related rather than facility reasons (OR availability). The study was rated as level III A.

Meyers et al. (2021) conducted an integrative review of patient-centered interventions to prevent delays and cancellations. The study categorized preoperative clinics, preoperative screening, and focused education as patient-centered interventions that reduce surgery delays and cancellations. The study also identified that patient-centered intervention promotes patient engagement in their care plan, reducing case delays and cancellations. The study recommends that nurses focus on patient-centered intervention and seek opportunities to expand their patient education and assessment role. The study was rated as level V B.

Smith et al. (2018) conducted a non-experimental retrospective analysis of 41,389 ASU surgical procedures. The study found that the most common reasons for surgical cancellations were medical (48%) and patient non-compliance (17%). The study recommends that focusing on foreseeable reasons for case cancellations would enhance patient satisfaction and quality of care. The study was rated as level III-A.

Summary of Themes

Each article and the interpretation of research findings can guide the project differently. The analysis of Askari et al. (2020) was helpful as baseline information justifying preoperative phone calls several days before surgery can reduce same-day surgery cancellations. Meyers et al. (2021) recommended patient preparation before surgery and presented ideas for improving the script for preoperative phone calls. Both Smith et al. (2020) and Ferreira et al. (2021) will aid in comparing the design and strategy of communication among surgery schedulers and surgical teams. Da'ar and Al-Mutuari's (2018) study recommendations can guide the project in collaboration with surgery schedulers using
a patient-centered approach when scheduling surgery. The research findings yielded evidence that can be used to guide decision-making and planning to optimize patient care delivery and ASC’s operating room utilization.

**Rationale**

The facility adapted the Kata approach and methodology for quality improvement projects. The Kata approach stems from the lean principles of continuous improvement by developing a Kata mindset. According to Deisher et al. (2019), a Kata mindset is an approach to managing people to increase effectiveness and efficiency with continuous improvement. The five kata questions were used as the framework for reducing same-day cancellations in implementing the 72-hour preop phone call project: What is the target condition? Where are you now? What obstacles are in your way? What is your next step? When can we see what we have learned from taking the step? From the following steps, we do some experiments and apply the PDSA (Plan, Do, Study, Act) model. According to Connelly (2021), the Plan Do Study Act (PDSA) model offers a structured approach to implementing small cycles of change that can be completed quickly. The PDSA approach lets us implement change and assess the effects before the next cycle. New learning can be modified and adjusted before the start of the following cycle. Same-day cancellation reasons are gathered daily and reflected in a Pareto chart, which measures the success or failure of the experiments.

Kotter's 8-step change approach was used to implement the same-day case cancellation management project. Kotter's change model is structured and promotes organizational change through collaboration and engagement. The first action step is to create a sense of urgency to get the team's attention and convince them of the importance of preventing same-day case cancellations. The perioperative educator developed an initial education plan and introduced
the topic during the staff meeting. The second action step is to form a coalition with stakeholders and the administration by creating a team with the Nursing Unit Council (NUC) to help plan, gather data, outline the script, and present and get buy-in from the perioperative team and hospital administration. The third and fourth action steps include creating and communicating a vision that aligns with safety and quality patient care.

In the fifth action step, barriers such as resistance to assignment changes were removed by including frontline staff input. Calling patients was incorporated into the to-do list of staff assigned to the preoperative area to empower actions and manage costs. Small wins were created in the sixth action step when potential cancellations were prevented, and the surgery scheduler could backfill the case. In the seventh and eighth action steps, to build and sustain the change, a comment column was added to the surgery list for nurses to confirm the call, document patient conversations, and establish a workflow for informing the surgery schedulers of potential cancellations.

Context

Microsystem Assessment

The ASU has six operating rooms (OR) with 30-32 surgery cases scheduled daily. The ASC’s growth in providing an alternative to hospital-based surgery impacts health organizations' service quality and patient satisfaction. Based on the five categories in the IHI clinical microsystem assessment tool, the project's success depends on collaboration and establishing open communication among the leadership and staff. Gathering data helps develop clear goals and expectations, recognizing essential individual contributions for process improvement. Feedback and consistent communication of performance results must be part of daily work to support continuous improvement and foster patient care experience.
Purpose

Kaiser Permanente's mission statement is to provide high-quality, affordable healthcare services and improve members' health (Who we are, n.d.). Folsom ASU has grown significantly, expanding its services to more complex surgeries (robotics surgery, Total arthroplasty surgery). Focusing on efficiently using perioperative resources is essential in delivering high-quality care. The operating room (OR) is one of the costliest resources in the hospital; maintaining on-time start in scheduled first cases adds to OR profitability by improving efficiency and patient outcomes (Ellis et al., 2020).

Patients

Ambulatory surgery centers have developed their criteria for scheduling patients for surgery. The standards for screening patients were age, comorbidities, mortalities, and risk for unplanned hospital admission (Pyne et al., 2021). In Folsom ASU, the preoperative nurses screen patients for the same criteria, including negative COVID test results. The anesthesia team also verifies patient information and medical history before surgery.

Professionals

Different departments collaborate to ensure the patient's safe and successful surgery. Leadership, admitting staff, preoperative nurses, physicians, operating room team, recovery room nurses, anesthesia staff, sterile processing staff, materials, and environmental services staff compose ASU’s professional framework.

Processes

Before the patient is scheduled, the care provider and surgeon determine the need and urgency for surgery scheduling. The medical and anesthesia provider will determine if the patient can have surgery in the ASU setting. The surgery scheduler will determine the
appropriate timing and date of surgery. The preoperative phone call nurse will email the
preoperative instructions to the patient the day before surgery. The pre-operative phone call
nurses will only call the patient if the medical record indicates that the patient did not read
their preoperative instructions. The arrival time and NPO instructions were included in the
preoperative instructions.

Patterns

Physicians and nurse managers in the perioperative department meet every Monday
morning for managers to report updates in each department. Data and trends were presented
during the meeting, along with updates on process improvement projects. Data reveals that
Folsom ASU needs to consistently meet the regional expectation of 80% block utilization
due to an increase in same-day cancellations. Currently, the facility averages 77% to 79% in
block utilization for the month and 4% to 8% in monthly cancelations. The top three reasons
for cancelations were patient illness, not being medically cleared for surgery, and no ride or
caregiver at home.

SWOT Analysis

A SWOT analysis evaluated the ambulatory unit's strengths, weaknesses,
opportunities, and threats (Appendix D, SWOT/C Analysis). The internal strengths included
consistent monthly staff meetings and daily messaging huddles for consistent updates and
communication in the department. The ASU also has dedicated nurses who are willing to
improve our processes and motivated to help patients make decisions about their care.
Medical and nursing administrators view the issue of improving the patient care experience
and reducing the impact on economic costs as a high priority, and they support staff. The
most vital opportunity is the potential to improve patient care experience. This strength aligns with our organizational goal of providing safe, quality, affordable surgery.

However, the following weaknesses and threats were identified: surgery cases were limited to patients passing criteria appropriate for the ASU setting. Internal weaknesses include staffing challenges due to the number of staff on medical leave, which affects coverage for sick calls and vacations. The staff's resistance to accepting changes in daily assignments, the required education of all staff for the added task, and the need for a strong script that would only focus on the patient's readiness for surgery and the ability to keep the surgery date were also identified as weaknesses. The primary threat is overfilling the case schedule to cover potential cancellations. In the event of no case cancellations, overfilling block times would leave the department open for patient and staff dissatisfaction due to surgery delays and the potential for staff overtime due to case overrunning.

**Power Interest Grid**

The Power Interest Grid was used to categorize stakeholders based on their power, interest, or influence in the project. The surgeons and the perioperative leadership have a high interest and influence and will be closely engaged in detailed communication. The perioperative nurses and patient care technicians have low power and high interest and are to be kept informed through huddles and staff meetings. (see Appendix E, Power Interest Grid).

**Communication Plan**

The team met weekly to examine challenges and opportunities encountered during the week. The nurse leader attends monthly quality meetings to report progress, findings, and data results to the perioperative director, chief operating room services, and chief executive.
Intervention

We started by informing the preoperative and postoperative nurses of the quality gap and improvement project to increase awareness. The perioperative educator differentiated the roles of the 72-hour and 24-hour phone calls. The preoperative call nurses were instructed that 72-hour preop phone calls would confirm the patient's ability to come in on the surgery date and the transport and carer's availability after surgery. The allotted time for phone calls was five minutes. A script was created to standardize the questions asked to patients. The surgery schedule was printed so nurses could track all patient calls. The staff's daily assignments were modified to include preoperative phone calls.

Cost-benefit analysis

In calculating cost savings, a sample of case cancellations for five months is used in two specialties, namely, orthopedics and robotics. Each specialty has subcategories with 29 cancelations in 5 months and a total loss in revenue of $1,012,419.00. The project implementation will use the same daily core staffing and only adjust job responsibilities. The assigned RN will be making 28-30 daily phone calls. Each staff nurse in the PACU will require an hour of education by the perioperative educator. The total cost for project implementation is $33,600.00. The projected cost avoidance within five months of implementation is $2,024,438.00, and the total cost savings are $2,935,657.00. (See Appendix F, Financial Analysis).

Study of the Intervention

To assess the completion of patient phone calls, the project champions and nurse leaders review the checklist and daily census. They validate pre-op phone calls based on nurse documentation in the surgery schedule. The team analyzes monthly reports of canceled
cases from EPIC to determine the intervention's success. They also collect data on the reasons for same-day cancellations by the project team.

The nurse manager and project leader collected data on same-day cancellations and their reasons. A Pareto chart showed the frequency of the avoidable reasons. A report of the total number of same-day cancellations was taken from Health Connect to determine the rate of same-day cancellations.

The script was modified twice to accommodate additional questions from patients. The allotted time for phone calls was variable, and nurses found it difficult to stay within the five-minute mark due to patients’ additional questions (Transport resources, questions about lab requests or results, COVID test if suspected of exposure). A comment column was added to the printed schedule for nurses to document questions or additional problems encountered during phone calls. A workflow was created to inform the surgery scheduler of case cancellations.

**PDSA Cycle**

The Plan-Do-Study-Act (PDSA) model was used to test the change or intervention used for this project. The cycle began with recruiting the team and brainstorming what we wanted to accomplish, the process, and how to do it. The second cycle (DO phase) was started after creating the script and adjusting staff assignments. In the third cycle (STUDY phase), the ANM and project leader monitored the printed schedule and confirmed that nurses were documenting the 72-hour phone call.

In the last cycle (ACT phase), the nurse leader and system administrator will continuously monitor same-day case cancellations and collect data on the reasons for cancellations (See Appendix G, PDSA Cycle).
**Ethical Considerations**

The project followed the American Nurses Association (ANA) Ethical Standard and USF's Jesuit values. The Jesuit values emphasize three principles: curing personalis, being persons for others, and diversity in various forms (University of San Francisco, n.d.).

Since this project is a quality improvement initiative, ensuring that all patients are treated equally was crucial. The project integrated the Jesuit values and ANA Ethical Standards, prioritizing integrity, safety, and patient well-being (ANA, 2015). Patient confidentiality was maintained to uphold integrity.

The success of the 72-hour preoperative phone call project depends on the multidisciplinary team collaborating towards a common goal. Improved communication, teamwork, and stakeholder feedback will enhance OR utilization efficiency (Ellis et al., 2020).

Faculty have approved this quality improvement project using QI review guidelines, and it does not require IRB approval. (See Appendix H, The Statement of Determination).

**Outcome Measure Results**

Pareto charts helped examine the data and measure the number of cancelations from January to June 2024 (see Appendix I, Pareto Chart). The top three reasons for cancelations were patient illness, not being medically cleared, and not being NPO.

Same-day cancellations decreased by 16% from January to June 2024. Block utilization remained 80% after project implementation (See Appendix J). The OAS Care Experience survey has increased from 90.8% to 94.2% in the April 2024 results (See Appendix K, OAS CAHPS Performance).
Summary

The decrease in same-day cancellations highlights the effectiveness of patient-centered interventions in implementing 72-hour pre-op phone calls. The 16% reduction in cancellations did not meet the target goal of 8%, representing continued efforts that will need to resume. While there were fewer same-day cancellations, an avoidable reason (such as NPO status) was the third most common reason for cancellation, indicating that patients needed focused education in the preoperative instructions. The 72-hour preop phone call allowed surgical backfilling and efficient use of the operating room space. Reduction in case cancellation led the facility to meet the regional standard of 80% block utilization.

The project found areas for improvement in the communication plan, such as giving preoperative instructions and following up with phone calls after scheduling surgeries. The effectiveness of sending preoperative instructions via email needs to be reviewed. It was also discovered that same-day cancellation needs to be differentiated in EPIC's monthly total cancellation report. The same-day cancellation data monitoring was done manually, and the staff sometimes missed the reasons. The recommendation is to implement 24-hour preop phone calls with the 72-hour preop phone call and assess if it will further reduce case cancellations.

Many contributions to this quality improvement project increased its effectiveness. The positive work culture of the assistant nurse manager and the staff dramatically influenced the project's success. Ensuring buy-in from nurses requires the mutual understanding that concern for patient experience and holistic care through surgery was the focus of the quality project. Combining evidence-based research, an expert leader and an engaged nursing team created an environment for success.
Conclusion

Due to same-day case cancellations, the ambulatory center experiences patient dissatisfaction and incurs financial costs. Finding replacement patients is challenging due to the ambulatory surgery unit (ASU) selection criteria. Allowing a 72-hour patient readiness assessment and scheduling window provides time to find suitable surgical candidates.

This project has shown promise in decreasing same-day cancellations at ASU. Further research is necessary to ascertain the effectiveness of distributing preoperative instructions via email. The project’s sustainability can be enhanced by collaborating with other healthcare facilities that reduce same-day cancellations to improve patient satisfaction and optimize block utilization.
References


*Who we are.* (n.d.). Kaiser Permanente. https://about.kaiserpermanente.org/who-we-are

surgery. *Journal of Clinical Anesthesia*, 84, N.PAG.

https://doi.org/10.1016/j.jclinane.2022.111011

Appendix A

Gap Analysis

Area under consideration: Folsom Ambulatory Surgery Unit (ASU)

Implementation of 72-hour phone calls before the scheduled surgery date.

<table>
<thead>
<tr>
<th>Desired State</th>
<th>Current State</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce same-day patient self-cancellations</td>
<td>About 50% of case cancellations are due to patient self-cancellations 24 hours before the surgery date.</td>
<td>The CNL will collect data on the frequency and reasons for patient self-cancellation</td>
</tr>
<tr>
<td>Be able to backfill surgery cancellations</td>
<td>Limitations in finding replacements for canceled cases due to required patient optimization and patient selection criteria</td>
<td>Implement 72-hour patient phone calls to promote patient engagement and verify patient ability to come for surgery.</td>
</tr>
</tbody>
</table>
Appendix B

Project Charter

**Project Charter:** Reducing same-day Cancellation by Implementing 72 hours Preop Phone Calls

**Global Aim:** To prevent unnecessary cancellations, improve the ability to backfill surgical cases, and improve patient care experience by providing timely access to surgical care.

**Specific Aim:** To maintain the daily expected caseload for the operating room by reducing avoidable same-day cancellations from 14% to 8% by July 31, 2024, by implementing 72 hours of preoperative phone calls before the surgery date.

**Background:**

Same-day cancellation in ambulatory surgery adversely affects patients' experience and has financial cost implications for hospital providers (Wongtaman et al., 2022). Cancellation of scheduled surgeries also affects optimal block utilization. ASU Block Utilization must meet the regional expectation of 80% block utilization. Currently, 50% of case cancellations are due to patients canceling themselves 24 hours before the surgery date or day. Cancellation within 24 hours of the surgery date is too late to arrange replacement surgery, which results in a significant waste of resources (materials, medication, and staffing) and inefficient use of the operating room (Smith et al., 2018).

**Sponsors**

<table>
<thead>
<tr>
<th>Physician Operating Room Director</th>
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<tbody>
<tr>
<td>Chief of Operations</td>
</tr>
<tr>
<td>Perioperative Services Director</td>
</tr>
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</table>

**Goals**

To reduce same-day case cancellations with avoidable reasons and improve the ability to backfill surgical cases by implementing 72 hours Preop Phone Calls

1. Re-format staff assignments sheet, and preop and post-op call assignments will be rotated among staff.
2. Identification of and education for PACU nurse champions
3. Identify the surgery scheduler to notify if a patient cancels or reschedule surgery during the call.
4. Accurate documentation of the reasons for case cancellation.
5. Standardized workflow to backfill cases canceled during preop phone calls.

**Measures**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Data Source</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>% patients same-day case cancellations with avoidable reasons</td>
<td>Monthly Canceled case reports – EPIC</td>
</tr>
<tr>
<td>Process</td>
<td>% of completed 72hrs preop phone calls by Preop nurses</td>
<td>ASU Master Daily Schedule- Preop RN documentation</td>
</tr>
<tr>
<td>Balancing</td>
<td>% ASU Care Experience Performance</td>
<td>Outpatient Surgery (OAS) CAHPS Performance</td>
</tr>
</tbody>
</table>

**Team**

<table>
<thead>
<tr>
<th>Team</th>
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<tbody>
<tr>
<td>ASU Manager</td>
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<tr>
<td>ANM PACU</td>
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<tr>
<td>CNS/Educator</td>
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<tr>
<td>Quality Nurse</td>
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<tr>
<td>Surgery Scheduler</td>
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<tr>
<td>Staff nurse champions</td>
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<tr>
<td>System Administrator</td>
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</tr>
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</table>
Appendix C

Evaluation Table

PICOT Question: In the Ambulatory Surgery Unit (ASU) (P), can 72-hour preoperative phone call (I) decrease the incidence of same-day surgery cancellations with avoidable reasons (O) within six months (T)?

<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Sample</th>
<th>Outcome/Feasibility</th>
<th>Evidence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Askari, A., Nunn, R., Hajishahla, W., Shehzad, K., &amp; Riaz, A. (2020). Reasons for Same-day Cancellation in a Dedicated Day Surgery Hospital. <em>Ambulatory Surgery</em>, 26(3), 30–34.</td>
<td>Non-Experimental Retrospective study</td>
<td>1692 Cancelled cases</td>
<td>The cancellation rate is approximately 8% in 2 years. The median number of 75 canceled cases per month. Reasons for cancelation – 49.1% were due to patient-related reasons (non-attendance). Feasibility: Useful for ideas in improving strategy for better communication.</td>
<td>III B</td>
</tr>
<tr>
<td>Study</td>
<td>Design</td>
<td>Sample</td>
<td>Outcome/Feasibility</td>
<td>Evidence Rating</td>
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<td>Study</td>
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Appendix D

**Strengths**
- Strong teamwork and collaboration among nurses and healthcare staff.
- Support from medical and nursing administrators.
- Consistent monthly staff meetings, daily management system for staff huddles.

**Weaknesses**
- Staff resistance to accepting change in daily assignments and responsibilities.
- Staffing challenges (sick calls, vacation coverage, medical leaves).

**Opportunities**
- Potential to improve patient care experience by increasing patient satisfaction, promoting engagement, and decreasing patient anxiety.
- Improved efficiency by increasing the ability to backfill potential cancellations.
- Potential in meeting the regional goal of 80% block utilization.
- Potential to reduce surgery backlogs by replacing case cancellations.

**Threats**
- Limitation of available patients due to ASU selection criteria.
- Overfilling of surgical blocks to cover for potential same-day cancellations.
Appendix E

Power Interest Grid

- **Keep Satisfied**
  - High Power & Low Interest
  - Anesthesiologist

- **Engage Closely & Consult**
  - High Power & High Interest
  - Surgeons
  - Perioperative Leadership

- **Monitor**
  - Low Power & Low Interest
  - Surgery Schedulers

- **Keep Informed**
  - Low Power & High Interest
  - Perioperative Nurses
  - Patient Care Technicians
  - Anesthesia Technician
Appendix F

Financial Cost Analysis

<table>
<thead>
<tr>
<th>Implementation Cost</th>
<th>Weekly Wage</th>
<th>Monthly Wage</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN X1 $80/8hr/week</td>
<td>$3,200</td>
<td>12,800</td>
<td>RN assigned for phone calls</td>
</tr>
<tr>
<td>1 hr Education for 40 RN's 80 x 40</td>
<td>$3,200</td>
<td>40 RNs - number of RNs in PACU</td>
<td></td>
</tr>
<tr>
<td>Periop Educator $100/16hr</td>
<td>$1,600</td>
<td></td>
<td>It would take 2 days to educate 40 RNs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Surgery</th>
<th>$ Ave. Cost/Service</th>
<th># DOS for 5 mos</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Arthroscopy</td>
<td>45,994.00</td>
<td>8</td>
<td>367,952</td>
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<tr>
<td>Joint</td>
<td>50,411</td>
<td>7</td>
<td>352,877</td>
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<tr>
<td>Hip Replacement</td>
<td>43,583.50</td>
<td>6</td>
<td>261,498</td>
</tr>
<tr>
<td>Robot GYN</td>
<td>62,391.08</td>
<td>3</td>
<td>187,173.24</td>
</tr>
<tr>
<td>Robot Gen Surg</td>
<td>36,949.08</td>
<td>1</td>
<td>36949.08</td>
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<tr>
<td>Robot Urology</td>
<td>104,998.08</td>
<td>4</td>
<td>419,992</td>
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<tr>
<td><strong>Total loss of revenue for 29 cancellations</strong></td>
<td><strong>29</strong></td>
<td><strong>1,012,419</strong></td>
<td></td>
</tr>
</tbody>
</table>

Workforce Investment

| RN X 1 - Full Time monthly wage     | 12800         | RN will make 25-30 phone calls. Depending on the number of scheduled cases |
| 40% benefits                        | 1.4           | Project does not require to hire additional FTE - task of phone calls will be added |
| Annual Wage                         | 250880        | to current RN assignment and role will be rotated among staff |

Cost Avoidance

| Total Cancellation Cost - 5 months  | 1,012,419     | |
| Total workforce investment - 5 months | 64,000     | RN Monthly wage (12800 x 5 months) |
| Education for 40 RNs                | 3200          | The cost of one time education for x 40 RNs |

**Cost Avoidance** 2,024,438

**Cost savings**

| Cost Avoidance | 2,969,257 |
| Implementation Cost | 33,600 |

**Cost Savings** 2,935,657  Cost Savings with project implementation
Appendix G

PDSA Cycle

Plan - Implement 72 hr preop phone call, create a script, educate staff, assign staff, rotate assignment

Do - Document patient phone calls, identified scheduler to inform if patient cancels during phone call

Act - Continue tracking same-day cancellation with accurate documentation of reason

Study - Compare case cancellations and block utilization form 2023 to 2024, Block utilization has improved, Number of same-day cancellation the same from 2023 to 2024.
Appendix H

CNL Project: Statement of Non-Research Determination Form

Student Name: Debbie Conteno

Title of Project: Reducing Same-Day Cancellation by Implementing 72 hours Preop Phone Calls.

Brief Description of Project: Folsom Ambulatory Surgery Unit (ASU) has six operating rooms and does an average of 28-33 surgical cases daily. In the past six months, we had 18 to 30 same-day surgery cancellations per month, causing significant patient dissatisfaction, emotional distress, and financial burden to patients and healthcare providers. Reasons for same-day surgery cancellations were collected and divided into avoidable (patient-related factors) and non-avoidable (medical reasons, previous case run-over due to complications) categories. The project will not hire an additional FTE but will restructure a prooperative RN's role and responsibility to call 28-31 patients daily. The team will coordinate with the perioperative educator to provide training sessions with nurses and for management to create a workflow with surgery schedulers for potential cancellations.

A) Aim Statement: To maintain the daily expected caseload for the operating room by reducing avoidable same-day cancellations from 8% to 5% by July 31, 2024 by implementing 72 hours preop phone calls before the surgery date.

B) Description of Intervention: The team proposes to assign a proop RN to call patients to remind them of their surgery three days before the scheduled date. The team will create a script primarily focusing on the patient's readiness and ability to keep the surgery date. The position for proop calls will be rotated daily and staff assignments will be divided between preoperative and post-operative phone calls. The nurse manager and system administrator will be notified of any case cancellations and inform surgery schedulers of potential cancellations for case replacement. The nurse leader and core team will have a weekly check-in every Friday, review the daily census of phone call notes, and get feedback on the test of change.

C) How will this intervention change practice? The 72-hour preop phone call will increase patient engagement and increase ability to backfill potential cancellations.

D) Outcome measurements: Decrease of same-day cancellation with avoidable reasons from 8% to 5% data reported from the monthly cancelled cases in EPIC

To qualify as an Evidence-based Change in Practice Project, the criteria outlined in federal guidelines will be used: http://answers.hhs.gov/chrp/categories/1569

☐ This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

☐ This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:
**EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST**

Instructions: Answer YES or NO to each of the following statements:

<table>
<thead>
<tr>
<th>Project Title: Reducing Same-Day Cancellations by Implementing 72-hours Preop Phone Calla</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>The aim of the project is to improve the process or delivery of care with established/accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>The specific aim is to improve performance on a specific service or program and is a part of usual care. ALL participants will receive standard of care.</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does NOT follow a protocol that overrides clinical decision-making.</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/or patients.</td>
<td>yes</td>
<td></td>
</tr>
</tbody>
</table>

**ANSWER KEY:** If the answer to ALL of these items is yes, the project can be considered an Evidence-based activity that does not meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files. If the answer to ANY of these questions is NO, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Heidenman, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

**STUDENT NAME** (Please print): Debbie Centeno

Signature of Student: [Signature] DATE: 04/28/2024

**SUPERVISING FACULTY MEMBER NAME** (Please print): Lisa Buchner DNP, MSN, RN, CNS

Signature of Supervising Faculty Member: [Signature] DATE: 04/28/2024
Appendix H

Pareto Chart

Same-Day Case Cancellation Jan-June 2024
Appendix I

Block Utilization Report

Utilization  Block Utilization  (Block Utilization w/ Turnover Hours / Block Hours)

Trend — Block Utilization  Block Hours  All: NCAL // Venue: ASU // Facility: Folsom ASC // Service: All // Specialty: All

By Service  June data  All: NCAL // Venue: ASU // Facility: Folsom ASC

By Facility  June data  KI7Non-KI // Venue: ASU // Service: All // Specialty: All
## Appendix K

### Outpatient Ambulatory Surgery CAHPS Performance: by Location

**Official Topbox Scores for Q02.0: Recommend the facility using Closed data**

Current Period (October - April) **PY2024** | Previous Period (October - September) **PY2023**

Data refreshed on 7/12/2024 6:18:42 AM

<table>
<thead>
<tr>
<th>Location Display</th>
<th>Current Score</th>
<th>Current Pctl</th>
<th>Previous Score</th>
<th>Previous Pctl</th>
<th>∆ Score</th>
<th>∆ Pctl</th>
<th>Sig</th>
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