

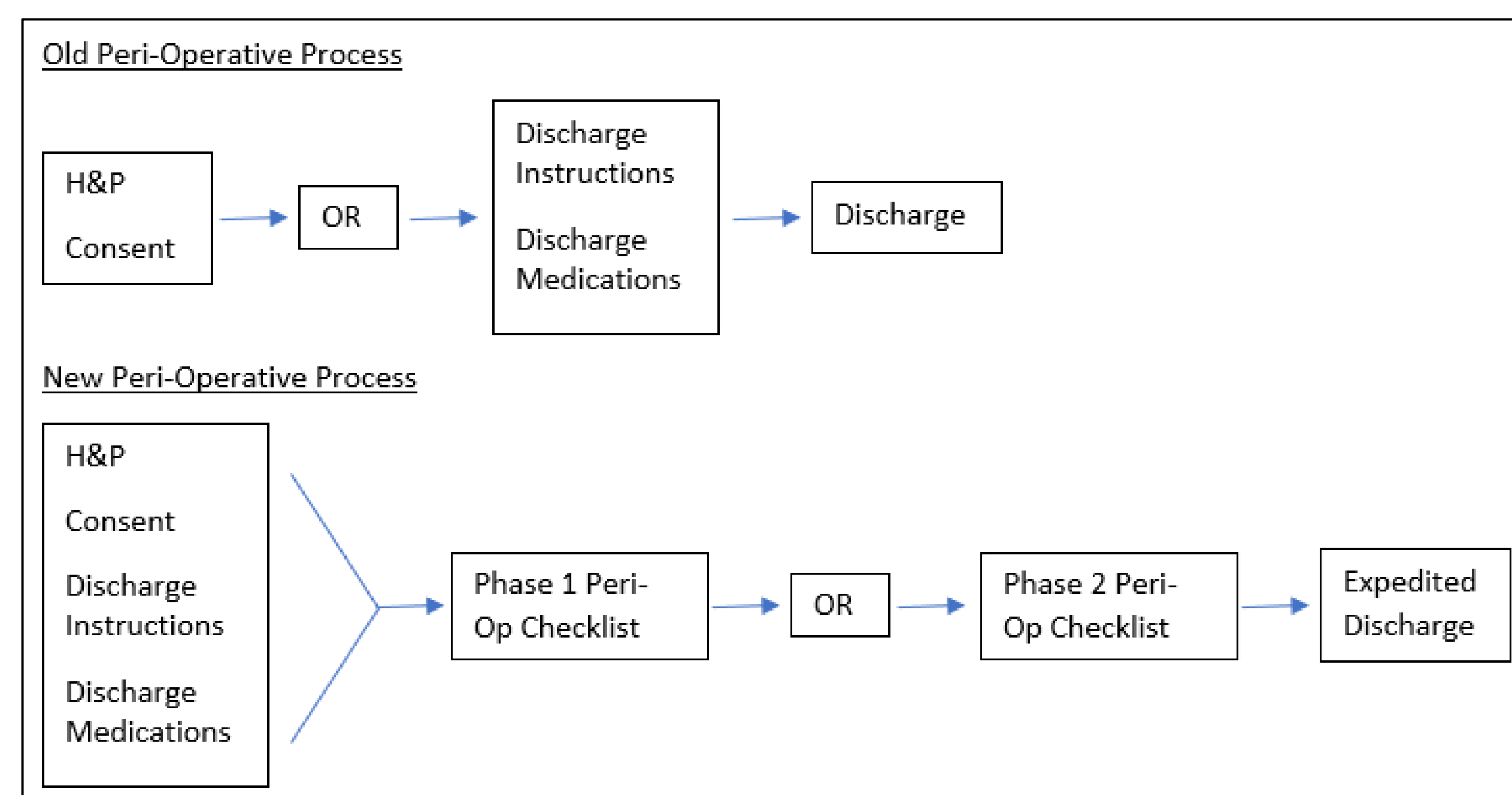
Peri-Operative Checklists to Improve PACU Discharge Delays for Ambulatory Surgeries: A Quality Initiative Project

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Background

- Significant delays in discharge time from the post-anesthesia care unit (PACU) have been reported for ambulatory surgeries
- Delayed discharges from PACU results in:
 - Decreased PACU bed availability
 - PACU hold (inability to transfer patient from OR to PACU due to no bed availability)
 - Increased patient to staff ratio
- Possible complications:
 - Increased provider/patient frustration
 - Extended resident work-hours (due to case delay)
 - Increased patient hospital time
 - Increased hospital resource utilization
 - Lower standard of care
- Goal of project: critically analyze and apply a solution to a possible barrier to discharge of patients from PACU and attempt to reduce discharge time
 - Discharge instructions and medications were possible intervenable targets
 - In the setting of previously demonstrated success of pre-operative checklists to reduce surgical error, we opted to pursue a perioperative checklist

- Data collection:
 - Peri-operative checklist (see example on right)
 - Post-intervention survey to residents (questions regarding survey utilization, recommendations)
 - Prospective data: discharge times for patients when checklist utilized
- Exclusion Criteria: December data (low case volume, application of intervention during holidays), Ashley River Tower night float team



PRE-OPERATIVE SURGICAL TEAM CHECKLIST Place Sticker Here

Date: _____

Procedure/Attending/Resident: _____

PHASE 1: Completed prior to "In OR" (Completed by Resident)

- Patient Name/MRN verified
- H&P Updated/Last PO verified
- Consent Reviewed/Questions Answered
- Site Marked (Mark if applicable) Completed: N/A:
- Medication Reconciliation (Medications sent to MUSC Pharmacy)
- Discharge Instructions placed

PHASE 2: Immediately after OR (Completed by Resident or Verified by RN)

- Updated Medication Reconciliation (Any additional medications)
- Follow-up placed (can be completed pre-op)
- Discharge order

POST-OP TIMES (Completed by Peri-Op RN Team):

In Recovery: _____

Recovery Care Complete: _____

Procedural Care Complete: _____

If time ((In Recovery to Procedural Care Complete) >60 minutes, select reason:

Medication Delay (pharmacy/delivery) Transportation Delay Medical Circumstances

Delay in orders (Meds/Discharge Ins. not complete) Other: _____

Discussion

- Baseline data demonstrated average time to discharge for ambulatory procedures to be approximately 160 minutes.
- 83.8% of residents on ART services reported utilization of the survey with 11.8% non-response rate.
- Of those who did not use the survey or did not respond to the survey, 100% were interns. It is possible they were infrequently in the operating room or were unsure of discharge instructions/medications
- Time to discharge: Decrease in time to RCC from 88.3 minutes to 74.3 minutes with decreased total time to discharge from 159.7 minutes to 108 minutes
- There were multiple checklists that were only partially completed with 25% of checklists having "reasoning behind delay" not filled out. This obscures some of the reasoning behind any delays in discharging.
- Reason behind delay: 37% of delays in discharge were due to subjective patient-specific problems. 27% of checklists completed stated delays in orders or medications was the cause
- Our data shows that although orders and medication administration may contribute to delays in discharge, the majority of discharge delays may be due to patient-specific factors.

METHOD

- Location: Ashley River Tower (ART)
- Team: resident physicians in the Department of Surgery (DOS), PACU nursing staff, attending physician supervisor
- Subject population: all ambulatory surgeries (discharged from PACU after OR) at the ART performed by DOS faculty
- Specific Aim Statement: From January 9th (implementation date) to March 17th (end date), have > 80% of DOS residents at the Ashley River Tower participating in ambulatory surgeries complete the peri-operative checklist.
- Primary outcome measure: % of DOS residents who completed the peri-operative checklist
- Additional outcome measures: Discharge time for cases with associated perioperative checklist completed, reasons for delay in discharge
- Baseline Data: retrospective data (Sept-Nov 2022) - time from entering PACU to recovery care complete and discharge

RESULTS

	Recovery Care Complete	Total Time to Discharge
Sept.	87	133
Oct.	89	221
Nov.	89	125
Aver.	88.3	159.7

Table 1: Baseline data (Sept-Nov) - minutes to specific phase of care

	Recovery Care Complete	Total Time to Discharge
Jan.	80	129
Feb.	70	98
Mar.	73	97
Aver.	74.3	108

Table 3: Prospective data (Jan-Mar) - minutes to specific phase of care for cases utilizing peri-operative checklist

	Total Responses	Percentage
Used	57	83.82
Not Used	3	4.41
No Survey Response	8	11.76
Total	68	100

Table 2: Survey results for on-service ART residents (n=68) regarding utilization of peri-operative survey from January to March

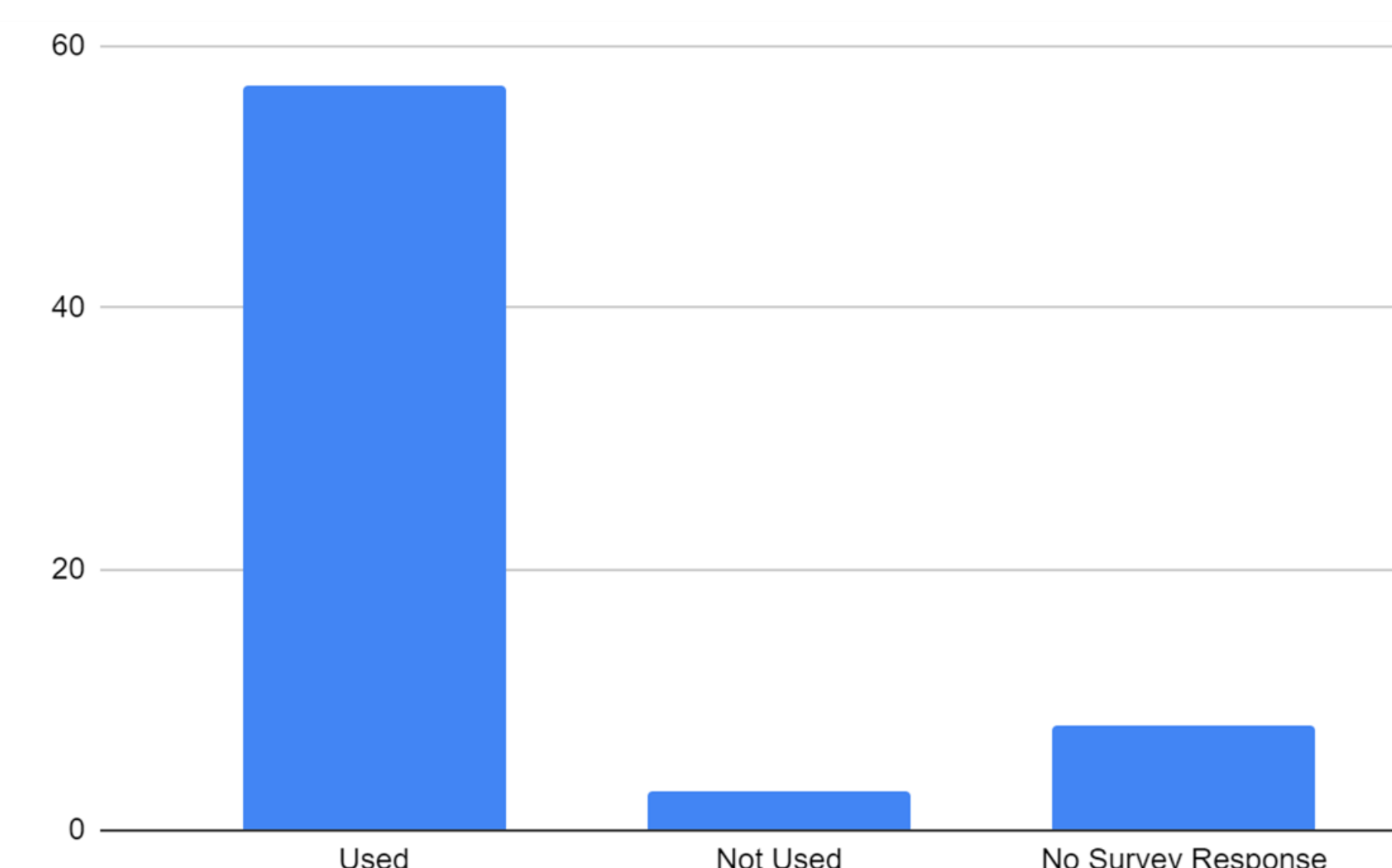


Figure 1: Survey results for on-service ART residents (n=68) regarding utilization of peri-operative survey from January to March

Further Work/Alternative Projects

- Further work:
 - Improve access to peri-operative checklist
 - Continue to ensure resident involvement
 - Ensure completion of peri-operative checklist before every case
 - Identify attending preferences for ambulatory discharge for facilitation of instruction/medication completion
 - EPIC completion checklist (H&P, Consent, d/c instructions, d/c medications)
 - Develop alternative QI projects to improve below alternative causes of identified problem (standardization of medication ordering/delivery, post-op pain regimens)
- Alternative causes of PACU discharge delays:
 - Medication delivery delays despite pre-operative completion
 - Delay in medical clearance
 - Delay in transportation arrival
 - Delay in transport to vehicle