



Effect of Nurse Driven Early Ambulation and Early Oral Intake on Same Day Discharge and Length of Stay for Ambulatory Orthopedic Patient Population

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INTRODUCTION

The Post anesthesia care unit or PACU in most hospitals are where patients are temporarily admitted post op with the main goal to observe vital signs, control pain, and medically manage the patients until they are stable enough to be transferred to the inpatient unit or sent home. The demand for total joint arthroplasty is expected to increase significantly with greater than 50% of surgeries anticipated to be performed in the outpatient setting by 2026. Multiple studies have proven the safety of same day total joint arthroplasty and have identified various factors that are integral to the successful same day discharge of these patients. One of the most common reasons for failure of same day discharge is failure to pass physical therapy. Additionally, the responsibility for first mobilization has been shifting from physical therapy to nursing staff.

IDENTIFICATION OF THE PROBLEM

Enhanced recovery protocols identified multiple risk factors in peri-operative phases. For post-operative orthopedic surgery patients, multimodal analgesia, early ambulation and early oral intake are considered vital to decrease length of stay and overnight admissions. There is no direct correlation between early oral intake and accelerating discharges, but it is considered an important component of enhanced recovery protocols. Traditionally it is the nurse’s assessment that guides when oral intake and ambulation are appropriate.

QI QUESTION/PURPOSE OF THE STUDY

Early mobilization and encouragement of oral intake by nurses postoperatively may facilitate safe discharge home and decreased length of stay for patients.

METHODS

Nursing staff provided education on encouraging early oral intake and early nurse mobilization. Charge nurses reinforced these practices throughout all shifts, placing signs on laptops/workstations to remind staff to chart events in EPIC. An hourly discharge criteria checklist was also created to aid nurses. Time to first oral intake (po), ambulation, void, physical therapy (PT) clearance, and discharge were recorded from EPIC data for ambulatory patients over the duration of 4 months.

FIGURE 1: DISCHARGE CRITERIA CHECKLIST

- Hour 1**
 - Ensure patient’s plan to go home
 - Verify patient’s transportation to home/time necessary for arrival
 - Verify patient’s home pharmacy and closing time
 - Remove facemask/transition to nasal cannula
 - Gradually raise HOB as tolerated
 - Remove bear hugger
 - Introduce ice chips/liquids
 - Once orders entered, check medications/pharmacy/AVS
 - Initiate pre-PT bolus if appropriate
 - Obtain patient’s belongings
 - X-ray if needed
- Hour 2**
 - Initiate pre-PT bolus
 - Dangle/stand patient when appropriate. You do not have to wait for PT to ambulate patients. Early ambulation can be performed by nurse and PCAs. (For hips, just need x-ray clearance)
 - Initiate solids
 - Contact PA for any missing orders, instructions, or necessary courtesy meds
 - If courtesy medications ordered, contact HSS pharmacy to ensure they are being prepared
 - Post-op check if applicable
 - Check “Ready for PT” and contact PT when appropriate
 - Assist patient to bathroom to void if needed
 - If unable to void, bladder scan and work with providers on interventions (fluids, nubain, etc)
 - Clarify patient’s ride/family is aware of plan of care and anticipated discharge time
- Hour 3**
 - Work with physical therapy if not already done
 - Or contact again if patient did not clear previously
 - Initiate post-void bolus if applicable
 - Discharge teaching with patient
 - Get courtesy medication from pharmacy
- Hour 3-4**
 - Perfect serve team for drain removal for spine patients
 - Alert family of patient’s imminent discharge

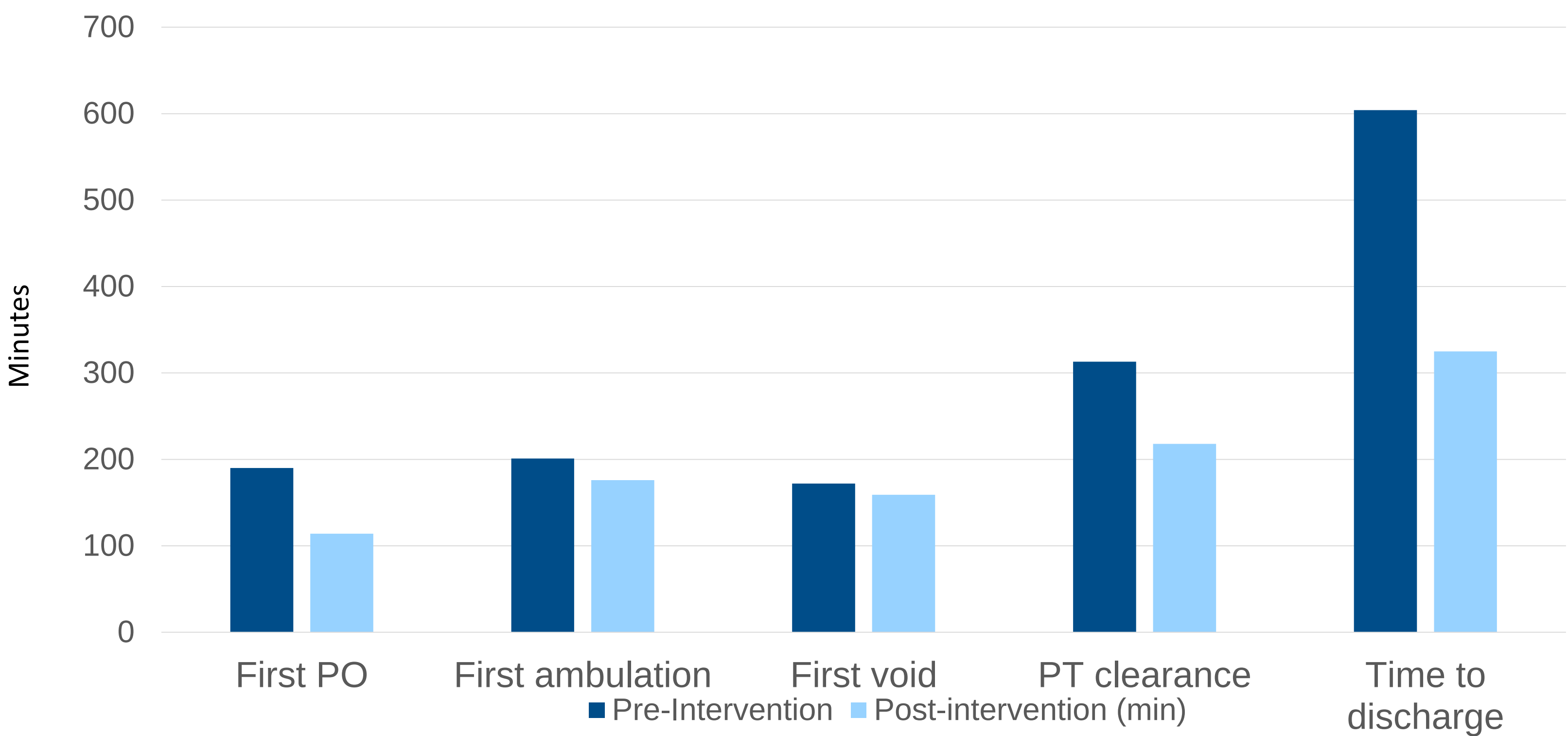
DISCUSSION

Multiple initiatives were instituted during the trial time frame, possibly decreasing LOS. Decrease to first void and clearance by physical therapy, both criteria that need to be met for discharge from PACU, could be linked to early ambulation and oral intake.

CONCLUSIONS

Nurse driven early ambulation and oral intake were associated with decreased time to clear PT and LOS.

FIGURE 2: RESULTS PRE INTERVENTION VS POST INTERVENTION (IN MINUTES)



RESULTS

Time to first po decreased from 190 to 114 minutes. Time to ambulation decreased from 201 to 176 minutes. Time to first void decreased from 172 to 159 minutes. Time to clear PT decreased from 313 to 218 minutes. Time to discharge decreased from 604 to 325 minutes.

IMPLICATIONS FOR PERI ANESTHESIA NURSES AND FUTURE RESEARCH

This demonstrates postoperative nurses’ actions in the recovery of ambulatory patients, in alignment with trends aiming to decrease hospital length of stay. Further nursing interventions should be investigated.

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