

Purpose

- Our goal in this project was to decrease phase 1 length of stay to increase operating room throughput and utilization, decrease OR holds, increase patient experience and outcomes, and maximize utilization of resources.
- Ineffective throughput has significant financial implications and decrease patient experience scores related to early ambulation, pain control, and seeing their families sooner.
- The target was to reach 120 minutes or less for our highest length of stay population (hysterectomies) and 90 minutes or less for overall cases. This excluded our G.I. population which is high in volume, quick to recover and would potentially skew length of stay to look falsely low.

Background

- Based on patient experience scores and baseline data, phase 1 length of stay times were longer than national benchmarks.
- Many of our patients have elective surgeries that are not truly elective due to the oncologic classification of their disease. We also aimed to provide surgical intervention to more of these patients in a timelier manner through improved OR utilization.

Successful Practice Statement

- Since implementation, average length of stay overall decreased from 112 minutes to 90 minutes.
- Our highest phase 1 length of stay population, hysterectomies, decreased from 181 average minutes to 113 average minutes.
- Patients reported higher experience scores with early ambulation and visiting with family sooner. Fiscal productivity and OR utilization also increased.

Optimizing Throughput by Increasing Nursing Education and Decreasing Length of Stay

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PACU Discharge Tool

UPON ARRIVAL

- Assess patient - Chart assessment as soon as possible
- If responsive- remove facemask/place on nasal cannula
- Sit patient up to at least 45 degrees
- Utilize Nursing measures to optimize comfort before narcotics:
- Warm blankets
- raise knees
- heating packs
- Allow the bed pan even if their bladder was drained
- Check for toradol and tylenol - reschedule tylenol
- Consider more fluid resuscitation if 3L was not already given

DURING PACU STAY

- Continue to utilize nursing measures even if narcotics are needed
- Wake the patient at least q15min
- If needing narcotics, give the correct dose based on patient's pain score
- Give them ice chips to hold and eat to help stay awake
- If patient requests a drink - give them gatorade
- Start using the script to prepare patient for the next phase

PHASE 2 READINESS

- Is pain within 3 points of baseline preoperative pain score?
- Is the patient on room air and not apneic?
- Are o2 saturations above 94% or at the preoperative baseline -2?
- Is blood pressure at baseline or within -20%?
- Is nausea controlled?
- Has any shivering stopped?
- Has any itching stopped?
- Is the patient easily arousable to verbal stimuli and able to speak coherently?

Throughput Scripts

We are SO busy:

- People love coming to Magee
- We perform a lot of different surgeries.
- We have a great reputation, patients come from all over.
- We are a Magnet designated hospital.

Moving from phase 1 to 2

Phase 2 to discharge

WAKE CRITERIA

- Patients must meet an 8 or greater out of 10 to move out of phase 1 AND be free of:
  - Lightheadedness
  - Nausea/vomiting
  - Itching
  - Shivering
- Patients must meet a criteria of 10/10 or their preoperative baseline to be discharged from phase 2 to go home
- Pain score must be within 3 points of patient's preoperative baseline
- If a patient is on home oxygen, select a score of 11 "rather than 10 or 2."
- Preoperative pain assessment score should be measured with movement at the anticipated site of surgery. (PreOp knee pain for knee surgery rather than preop back pain for knee surgery.)
- Minimum of 2 evaluations for lightheadedness must be performed before moving out of phase 1.
- Patient must be sitting or at a 45 degree angle
- Minimum of 5 minutes apart from the previous assessment
- Minimum of 15 minutes from "end of procedure" on the tracker

Movement	Score
Purposeful movement of (at least) one lower and one upper extremity	2
Purposeful movement of at least one upper extremity (but neither lower extremity)	1
No purposeful movement	0

Blood Pressure	Score
Within 20% of preoperative baseline, without lightheadedness	2
Between 20%-40% of preoperative baseline, without lightheadedness	1
Less than 40% of preoperative baseline, without lightheadedness	0

Oxygen Saturation	Score
SpO2 greater than or equal to 95% or greater than or equal to preoperative reading minus 2 without supplemental O2	2
SpO2 greater than or equal to 95% or greater than or equal to preoperative reading minus 2 with supplemental O2	1
SpO2 less than or equal to 94% or less than (preoperative reading minus 2) with or without supplemental O2	0

Mental Status/LOC	Score
Awake and/or immediately aroused when called, follows command without delay	2
Arousable to stimuli (squeezes), exhibits protective reflexes, and follows commands (but delayed)	1
Obtunded or persistently somnolent, with or without protective reflexes, with or without following commands	0

Respiratory Function/Airway Patency	Score
Coughs and deep breathes freely, and/or on command	2
Coughs involuntarily, but not on command; maintains airway without support	1
Tachypnea, dyspnea or apnea, and/or requiring airway maintenance	0

Implementation

- Audits were conducted on past phase 1 patients' length of stay to determine baseline data. It was determined there were no trends in longer lengths of stay and broad education was necessary.
- Perianesthesia leaders, and educator met with phase 1 charge RNs to discuss audits.
- Education was provided to all RNs in the form of "back to basics" in phase 1 nursing care that included a deep dive into using the WAKE score to move patients based on their individual criteria rather than time frames. We also reviewed ASPAN standards and goals of phase 1 vs phase 2 care.
- A discharge tool was created as a stop light report for reference.
- A prompting script for RNs to reference in all areas of the department was created.
- Charge RNs became "discharge champions", checking in with RNs whose patients were approaching 60 minutes in phase 1 to offer resources if needed. Daily phase 1 huddles discussed length of stay and updates in real time.
- Monthly updates were provided to all staff during staff meetings on the progress of the project.

Implications for Advancing PeriAnesthesia Nursing Practice

- By safely decreasing length of stay in phase 1, inefficiencies and complications were reduced. Phase 1 RNs play a critical role in optimizing throughput and capacity management. Providing RNs with continuing education and resources promotes teamwork and a shared responsibility of operational goals.
- Decreasing phase 1 length of stay can improve patient experience and outcomes while affording the organization the opportunity to provide life changing surgical intervention to more patients.

