SURGICAL TEAM TO PACU RN HAND OFF TO IMPROVE PATIENT SAFETY

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FOCUS

Describe the Process that was Improved pre-implementation:

Post operative hand off from the surgical team to the PACU RN was examined for this process improvement project. Currently at UCH there is no standardized surgical team to PACU RN hand off. There is currently no expectation of a member of the surgical team to give a post op hand off. UCH follows American Society of Anesthesiologists Standards requiring a bedside hand off from the Anesthesiologist to the PACU RN. This project centered around patient safety in the acute post-operative period. This process improvement would improve patient safety in the acute post-op phase and improve open communication between the PACU RNs and the surgical team. Essential patient information at the time of a patient transfer is crucial for maintaining patient safety.

Which Dimension of Performance and Prioritization did this project address: Efficiency, Safety, Staff Satisfaction, Effectiveness, Patient Centeredness

Prioritization: High Potential for Improvement and Patient Safety

Identify the stakeholder team: PACU DBC, PACU RNs. All surgical teams have been identified as stake holders for this project. Michelle Ballou, MBA, MS, RN, Frank Newsome, Chelsea Chapman, Krista Hall, Felicity Fisk MD, Lindsay Schroeder, AGPCNP, MSN, Viviane Abud, MD, Robert McIntyre, MD, Christopher Lace, MD, Nathaen Weitzel, MD, Jessie Larson, PA-C,MPAS, MS, Mark Wilcox MD, Kelsey Goon, MD, Jaime Arruda MD

What was the current knowledge about the process? A post operative hand off from a surgical team member is not required. UCH does have a Direct OR to ICU handoff Transfer process that includes a handoff from the OR RN to the bedside RN 1 hour before arrival to the unit, and then a bedside handoff from the Anesthesiologist and a member of the surgical team to the bedside RN when the patient arrives on the unit.

What were the sources of variation: This process is not standardized for PACU, thus bedside hand off is inconsistent. Data from RN surveys revealed that there were patient safety issues or delays in care believe to be related to no surgical handoff. Multiple RL's reported by RNs have been identified in the categories of patient safety issues, delay in care, missing or conflicting orders. An inefficient or lack communication between the surgical team and the PACU RN was also identified by the Perioperative Improvement Survey. This was addressed when developing a perioperative services value stream mapping (VSM).

What did the review of literature reveal about best practice for the process? (also discuss the literature search process and ultimately, how many articles were reviewed) According to data from the AANA Patient-Centered Paranesthesia Communication, a failure to communicate effectively is amongst the top causes of sentinel events, and that "a standardized model to teach and monitor verbal and written patient handoff competencies can help establish a shared common language for patient handoff communications across provider types, practice setting, and hand off types"

What improvement was selected? Post operative hand off from the surgical team to PACU RN

PLAN

Describe the process you went through to identify the selected improvement. After being identified as a problem, the plan to improve bedside hand off through a UEXCEL Credentialing project was encouraged by the PACU DBC. Key stakeholders were identified and approval for a project to improve post operative hand off was approved by the Perioperative Services leadership team**.**

Describe how you rolled out your selected improvement. Due to the large variety of surgical specialties at UCHealth, three teams were identified for initial intervention. The three teams identified were all Orthopedic specialties, all General Surgery teams, and Neurosurgery. Initial bedside surveys revealed Orthopedic specialties giving bedside hand off the least. Ortho Spine and Ortho Trauma were chosen as a focus. An email invitation template to participate in a hand off trial was created and distributed to team members from these teams. Ortho Spine team members agreed to a 4 week trial period in which bedside hand off would be monitored for four weeks. Ortho Trauma declined participating in a trial at this time.

What outcomes did you select to measure and how did you measure them? The frequency of a post operative bedside hand off given on patient admission to PACU. Hand off could be given right before the patient arrived, at exact arrival time, or given within fifteen minutes of a patients arrival to PACU. The data was tracked via a bedside survey attached to each Ortho Spine patient chart and given to the PACU RN.

DO

Describe what happened:

A key surgical team agreed to a hand off trial. For one month, bedside surveys were attached to patients of the Orthopedic Spine surgical team to determine if a surgical team member came to give a bedside report. Four months after end of the trial, repeat beside surveys were collected for Orthopedic Spine patients to determine continued compliance to the proposed hand off protocol. This trial yielded data in favor of implementing this improvement project.

Barriers encountered:

Not all stakeholder feedback has been in favor of this project unless it can absolutely prove value added versus waste. During an initial meeting with the Perioperative ACMOs, there were several key concerns of when a hand off might not be added value but may be considered wasted time. Based on the results of this conversation, each one of these scenarios was carefully addressed with a potential work flow/ process map.

Several surgical teams did not respond to emails sent in regards to trialing a bedside hand off. Several attempts were made.

A key surgical team responded and agreed to an initial meeting but rejected partnering for a hand off trial.

The time between reaching out to teams and actually setting up meetings and implementing processes was often lengthy.

Residents rotate throughout the surgical teams requiring frequent reeducation about bedside hand off process.

Some resident reported not believing in the "culture" of having to give a bedside report to an RN.

CHECK

A pre-trial survey revealed:

- 98% of surveyed PACU RN staff would like to receive a post op surgical team handoff.
- 90% of the UCH Metro PACU RN's reported that they had experience patient safety issues or delays in care that they believe were due to no surgical handoff.

A bedside pre-trial survey revealed that out of three selected surgical teams to investigate, Orthopedic teams were consistently absent for a bedside hand off compared to other teams. (Figure A)

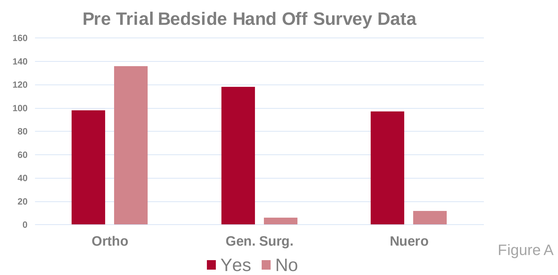

Figure A

A bedside survey of Orthopedic Spine yielded results of an in-person bedside hand off occurring 100% of the time during the trial period.(Figure B)

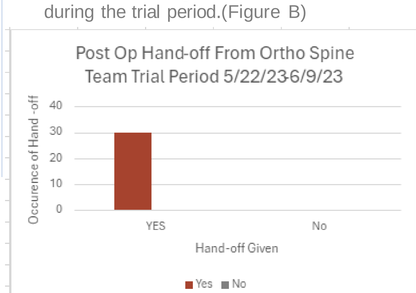

Figure B

A beside spot survey of Orthopedic Spine four months after completing of the initial trial yielded results of an in-person hand off occurring 87% of the time.

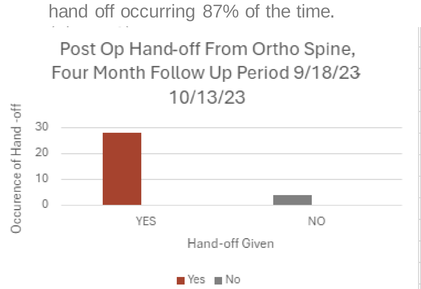

Figure C

ACT

Act to hold the gain:

What are the implications based on this process improvement practice?

Although limited data has been collected for this specific project thus far, extensive research of hand off procedures supports that a bedside hand off is not wasted time and may in fact improve patient safety. In 2017 the Joint Commission released an infographic based off one of its publications in "Sentinel Event Alert". The infographic recommends a face to face hand-off whenever possible. This allows all providers to ask questions and get all information at one it is coming from multiple sources.

The perioperative nursing staff has noted that Obstetrics & Gynecology consistently comes to the bedside post operatively, provides the best contact number to call for acute post op questions/needs, and completes post op orders in a timely manner. With each new rotation of residents, it is passed on that a "warm hand off" to the PACU RN is expected. The Ob/Gyn team feels that an in person hand off provides the RN with pertinent information and decreases call and interruptions in the OR. Attending Physician Jaime Arruda, stated that she will go to PACU herself to give a hand off if her resident informs her they are unable to go.

Although the Ortho Spine team did not give hand off 100% of the time following the initial trial, the data showed a definite improvement and that implementation of a bedside hand off was indeed feasible.

What are the plans for sustainability, revision and re-testing, or abandoning for the selected improvement?

Due to limited data at this point in the project, the plan is to continue to attempt trialing bedside hand off with different surgical teams. This project will be ongoing. At this current time, the OB/Gyn team has agreed to a four week bedside handoff monitoring trial.

This data collection has only taken place in the Central PACU. The next step would be collect data from the same teams when they are working in the East PACU.

Post operative hand off has been identified as an issue by the VSM so continued follow up with this initiative will be beneficial to propelling this project.

A follow up meeting with the Perioperative ACMOs will be scheduled in the next coming months to provide the data collected during this initial trial phase. The purpose of this data sharing will be support that a bedside hand off is value added and not waste.

Discuss how you followed up with stakeholders regarding implications and recommendations. A constant stream of communication was maintained with several skate holders throughout this process including Michelle Ballou, Frank Newsome, and Chelsea Chapman. Ortho Spine was contacted immediately following the end of the initially trial phase. The attempt was to send a survey to the team members to inquire if they felt bedside hand off was time wasted, it they found it difficult to give a bedside hand off, and if they felt the received less calls/pages or less interruptions in the OR from nurses while the patient was in the PACU. Unfortunately, the Ortho Spine team was unable to provide this data after several failed attempts to contact them.

What is the plan for dissemination of findings: This poster will be presented at the December 2023 PACU staff meeting. An abstract of this project was submitted to the American Society of PeriAnesthesia Nurses (ASPAN) for consideration for poster presentation at the 2024 ASPAN National Conference.

References

- List citations in APA format and include Level Of Evidence (LOE) at the end (e.g. LOE-III).
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