Improving Operational Efficiency by Assigning Peripheral IV (PIV) Placement to Preop Nurses

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Background
Evidence shows that delays in the operating room have a major effect on patient flow and resource utilization. With reported operating room costs ranging from $30 to more than $100 per minute, first procedure start time is a key target to improve operating room efficiency and reduce unnecessary cost. (Lee, 2019).

In our preoperative areas, one of the top three reasons for first case delays were due to peripheral intravenous (PIV) insertion. This task was completed by the anesthesia providers; however due their increase in tasks and responsibilities, PIV insertion continued to be identified as a top first case delay reason.

Objectives
This project aimed to reduce PIV-related first case delays in the operating room from September 2021 to August 2022 by reassigning the PIV insertion task to the preoperative nurses.

Implementation
- The PACU leadership team worked with a core group of staff and collaborated with anesthesia providers to implement this change in practice.
- The team discovered opportunities for improvement and modified the barriers in revising this task assignment.
- Schedules for both patients and staff were adjusted to accommodate earlier arrival times that would provide an adequate amount of time for first case PIV insertions.
- Preop staffing numbers were also reviewed and amplified to provide additional support.
- Charge nurses were tasked to assess and assist with PIV insertions when there is a need.
- An escalation process for difficult PIVs was established to initiate timely and effective communication.

Statement of the Successful Practice
Data reflected significant improvement for PIV insertion-related delay for first case starts:
- The baseline data from September 2020 to February 2021 showed PIV-related delays averaged at 3.4% of all first case delays.
- After the pilot, PIV-related delays averaged at 2.6% of all first case delays from March 2021 to August 2021.
- The PIV-related delays continued to improve with a sustainability percentage of 0.6% of all first case delays from September 2021 through August 2022.

Implication for Peri-anesthesia Nursing
Inter-professional communication and collaboration promote teamwork between professions and enhances skills. (Etherington, 2019). This teamwork helps to encourage accountability to achieve optimal outcomes in our health care system; which can have a direct impact on our patients.

References

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