

Intrauterine Hemorrhage Cart: In a Non-Obstetrical Post Operative Setting

Vanessa McRandal MSN,RN; Jolene Johnson RN; Molly Delong MSN, RN, CSRN; Jamie Raab BSN, RN
UPMC Magee Womens Hospital, Pittsburgh, PA



About UMPC Magee Womens Hospital

- In 2023, UPMC Magee Womens Hospital (UPMC MWH) surgical services department performed over 15,600 surgical procedures. There was a strong emphasis on gynecological and gynecological oncology procedures.
- Within the hospital there are two separate post anesthesia care units (PACU), one for obstetrical/cesarean deliveries (OB PACU) and one for non-obstetrical/general cases (Surgical PACU). Each PACU is staffed with specialized nurses who are remarkably competent in their respective areas of employment.

Background

- Intrauterine hemorrhages are often associated with the obstetrics realm of women’s health. However, it can occur in patients who have undergone dilation and curettage/evacuation procedures, as well as other gynecologic related surgeries.
- With intrauterine hemorrhages that include a uterine artery, the blood flow within this vessel can be as high as 500mL/minute (Kogutt et al., 2022). In a non-obstetric setting, these situations can occur at any point. Staff should be prepared at a moments notice to ensure a timely intervention.
- A need was identified after an intrauterine hemorrhage occurred in the Surgical PACU Phase I and interventions were delayed due to lack of essential supplies centralized to one area within the Surgical PACU.
- A study was conducted to see how effective an obstetrical hemorrhage cart was in the event of a hemorrhage and found that there was a 79.8% reduction in time and an 88.7% reduction in distance (steps) traveled for supplies (Kogutt et al., 2022).

Objectives

- Decrease the time it takes from identification to intervention of an intrauterine bleed.
- Ensure patient safety throughout the duration of an active bleed and the recovery period.
- Help nurses feel well prepared and ready when there is an active intrauterine bleed.

Implementation

- A nurse leader and nurse educator collaborated with several departments within the hospital to obtain and create a hemorrhage cart.
- A nurse educator and PACU Phase I nurse attended an Obstetrical Hemorrhage class that was presented by the UPMC MWH Labor and Delivery educators to obtain the most up to date practices that can be implemented into the Surgical PACU.
- The nurse educator provided Surgical PACU Phase I/II staff nurses with education on supplies and their general use within the cart.
- Debriefing with the Surgical PACU Phase I nurses occurs after situations that require the hemorrhage cart. This allows for continual updates/improvements to the cart and identification of educational needs.
- The hemorrhage cart and commonly seen scenarios are now used in the yearly competencies for the Pre/Post staff nurses.



Results

	From identification to cease of hemorrhage (minutes)
Before cart implementation	28
After cart implementation	15
After cart implementation	5

- Fortunately, the need for the hemorrhage cart is far and few between in the Surgical PACU. Although it is not a common occurrence, preparedness and timing of intervention can determine life or death for a patient.
- There has been a definitive improvement with care and interventions for intrauterine hemorrhages when the cart has been available to staff.

Statement of Successful Practice

- The Surgical PACU Phase I nurses are now able to easily obtain essential supplies during an identified, active intrauterine hemorrhage.
- The time it takes from identification to stopping the hemorrhage has significantly decreased.
- The cart contains supplies that can and was used for other types of hemorrhaging situations in the Surgical PACU.

Implication for Peri-Anesthesia Nursing Practice

- Morbidity and mortality associated with this post-op complication in the Surgical PACU Phase I decreases by maintaining and utilizing the Hemorrhage Cart.
- Evaluate the education needs and debrief with staff to ensure knowledge retention of the situational needs of an intrauterine hemorrhage.

What is in the Cart?

- Large bore IVs and start kits
- Lab work supplies
- Lactated Ringers
- Medication administration supplies
- Gauze
- Sterile vaginal packing gauze
- Under-buttock drape
- Chuck pads
- Procto Swabs
- Surgical gowns and sleeves
- Sterile Gloves
- Bakri (intrauterine balloon)
- Foley catheter
- Speculums
- Sterile water
- Flashlights
- Exam light
- *medications are stored in Accudose*

References

Hacker, F. M., Linkov, F., Serra, A. E., Petticord, V., Zabielski, M. T., Simhan, H. N., & Sakamoto, S. B. (2020). Lessons learned from a gap analysis of obstetric hemorrhage protocols across a health system. *Maternal and Child Health Journal*, 25(1), 59–65. <https://doi.org/10.1007/s10995-020-03050-x>

Kogutt, B. K., Kim, J. M., Will, S. E., & Sheffield, J. S. (2022). Development of an obstetric hemorrhage response intervention: The postpartum hemorrhage cart and medication kit. *The Joint Commission Journal on Quality and Patient Safety*, 48(2), 120–128. <https://doi.org/10.1016/j.jcjq.2021.09.007>

Acknowledgements

We would like to thank the UPMC Magee Womens Hospital Pre/Post nurses who identified the need for change to increase our patients’ safety. Thank you to Molly Delong and Jamie Raab for collaborating and creating the hemorrhage cart that now resides in our PACU phase I.



UPMC Magee Womens Hospital Surgical Services
Presented in April 2024 at the National ASPAN Conference