## EP10b

Provide one example, with supporting evidence, when nurse(s) collaborated with the Nurse AVP/Nurse Director to evaluate data to meet an operational need (not workforce related).

## **Example b: Standardizing the Process and Workflow for Retrieving Post-partum Hemorrhage Medications to Decrease the Time to Patient**

The Joint Commission (TJC) sets operational standards to meet the emergent needs of post-partum patients experiencing uterine hemorrhage. These standards include the delivery of urgent post-partum hemorrhage (PPH) medications to the patient/bedside in a timely manner. Tracy Frisbee, MBA, MHA, BSN, RN, NEA-BC, Executive Director, Women's and Children's Services, requested Women's Division nursing staff to replicate the TJC timing studies to evaluate WakeMed's response times to post-partum hemorrhage in August 2022.

Amanda Freedman, MSN, APRN, RNC-OB, ACNS-BC, Perinatal Clinical Nurse Specialist, and Lora Wright, CPHQ, PCMH CCE, Kaizen Sensei, Kaizen Promotion Office, organized and facilitated the replication of the timing studies. Clinical nurses at WakeMed Cary, WakeMed North, and WakeMed Raleigh campuses performed the timed trials. Clinical nurses conducted the timing studies at the Raleigh campus in September 2022, at the Cary Campus in October 2022, and at the North campus in November 2022. The results indicated variations in the timing and process of retrieving PPH medications across campuses. (Evidence EP10b-1, Timed Observation Forms) In reviewing the results, Frisbee and her staff identified an operational need to standardize the process and the products required for patients experiencing a post-partum hemorrhage.

Frisbee launched a two-day Kaizen event to be conducted in December 2022 and February 2023 to analyze the processes, data, and workflows for PPH medication retrieval and make recommendations for changes to create standard work.

The findings from the Kaizen event revealed differences in the placement and the name of the PPH medication kits in the Pyxis machine, and differences in the contents of the kits. Frisbee's Kaizen team met in December 2022 along with pharmacy personnel to finalize the name of the PPH kit and its contents for use across the three campuses. (Evidence EP10b-2, Kaizen Project Form, December 2022)

## **Evaluation of Data and Collaboration between the Nurse Director and Other Nurses**

The second Kaizen event was conducted in February 2023. Frisbee reviewed the scope of the project, evaluated the data on the internal PPH rates and retrieval times for medications, and evaluated the timed trials data with the following clinical nurse, nurse leader, and pharmacy personnel attendees: Freedman; Wright; Caleigh Schaeffer, MSN, RNC-OB, Clinical Nurse II, Labor and Delivery North; Jennifer S. Bishop, BSN, RNC-OB, C-EFM, Clinical Nurse IV, Labor and Delivery Raleigh; Jessica Lemons,

RN, Clinical Nurse II, Labor and Delivery Cary; Dawn Prosser, BSN, RN, RNC-OB, C-EFM, Nurse Manager, Labor & Delivery Cary Campus; Donna Lake, BSN, RN, RNC-OB, Nurse Manager, Labor & Delivery Raleigh and North Campuses; Alyson Baldree, BSN, RN, RNC-OB, Supervisor/Educator Cary Labor & Delivery; Anne Jones, BSN, RN, RNC-OB, Supervisor/Educator North Labor & Delivery; Lisa Phillips, BSN, RN, RNC-OB, Supervisor/Educator Raleigh Labor & Delivery; Erin Koontz, PharmD, Manager Pharmacy; Mary Coleman, PharmD, Supervisor Pharmacy; and Abbie Williamson, PharmD, Executive Director Pharmacy Services.

Bishop, Schaeffer, and Lemons reviewed and evaluated the data from the timed trials and offered several recommendations to improve the process. For example, Schaeffer recommended using bright colored stickers to help staff members locate medications for PPH medications, and Schaeffer and Lemons recommended locations in the patient rooms to store supplies to decrease retrieval times. After evaluating the data and medication retrieval times, Bishop recommended that five tablets of Misoprostol (a medication for PPH) be stored in one Ziplock bag that Pharmacy would create, rather than nurses having to manually count out the medication from a different source. The meeting included a consensus on a standardized location and labels for PPH kits and standardizing education on the new process. (Evidence EP10b-3, February 2023 Kaizen Breakout Session Agenda and Minutes)

## **Operational Need Addressed**

Once it was determined how to standardize this process across campuses, Frisbee wrote an email to unit managers, which they were to send to all Labor and Delivery employees, explaining the new process for timely retrieval of the PPH medications. (Evidence EP10b-4, Email from Frisbee to Lane) Freedman created a learning module that was placed on the WakeMedU site to ensure the new process was understood by clinical nurses who worked in Labor and Delivery units. The new processes went live on April 18, 2023, after the system-wide communication and education was complete.

The medication retrieval timing studies were repeated on all three campuses in April 2023 to evaluate the success of the operational process change and education provided. The operational change was determined to be a success when retrieval times for PPH medications were reduced on each WakeMed campus. The initial medication retrieval time ranged from 61 to 131 seconds between campuses. After the intervention, the times ranged from 8 to 19 seconds between campuses. Before the intervention, the longest total medication retrieval process took 4 minutes and 1 second; after the intervention, the longest total medication retrieval process took 2 minutes and 4 seconds. Time is crucial, as a patient can lose 500ml of blood due to PPH in one minute. (Evidence EP10b-5, PPT Medication Retrieval Time Improvement May 2023 NSQI Meeting)