Title: ENHANCING THE BLOOD ADMINISTRATION PROCESS UTILIZING PROCESS IMPROVEMENT

Authors: Kate Holmes RN BSN, Clinical Nurse Coordinator Wheaton Franciscan Healthcare Racine, WI 262-687-4010, Katherine.holmes@wfhc.org and Julie DeLisle RN MSN, Transfusion Safety and Blood Management Officer for BloodCenter of Wisconsin

Oral Presentation

Background/Significance:
BloodCenter of WI and Wheaton Franciscan All Saints collaborated to analyze the transfusion process and blood utilization at the hospital in an initiative called TxMD.™ This initiative includes work with a data management tool to look at blood utilization and the use of Lean methodology to reduce waste and gain efficiency within the transfusion process. A value stream analysis of the transfusion process at the hospital was completed and revealed that there were variations in the blood administration process; such as variations in transportation of blood products and in interpretation of current policies and procedures. An outcome of the value stream was to do a Rapid Improvement Event (RIE) to standardize the blood administration process and delivery of blood products.

Purpose/Methodology: A RIE was utilized to analyze the blood administration process from the time of request, administration of the product, and transfusion completion, including all documentation within the process. The RIE was lead by a multidisciplinary team that included laboratory technicians, registered nurses, patient care associates, health unit coordinator, clinical nurse coordinator, and BloodCenter Transfusion Safety Officer. During the RIE the team mapped out the blood administration process from start to finish, performed a gap analysis to identify wastes, created solutions for gaps and developed and tested rapid experiments based on information from the solution approach. Knowing that the hospital environment may be a barrier to quick implementation, the team made sure all competencies, policies, and handouts were completed entirely. The Plan Do Study Act (PDSA) model was utilized the next week on two medical units prior to implementing the improvements hospital wide.

Outcomes/Results: The blood administration process was standardized and antidotal feedback from patients and nurses was positive. Specific improvements within the blood administration process included:
- Adjusted the rate of administration to align with best practice guidelines allowing the total transfusion time to decrease.
- Developed competency to educate assistive staff on blood verification.
- Initiated a process utilizing the pneumatic tube system to transport blood products decreasing the amount of associate travel time to obtain blood.
- Modified electronic blood product issue form making the tool easier and more accurate for nursing and the blood bank.
- Identified cost savings in changing the size of the biohazard bag.
- Created “QUIK notes” to educate associates on new standardized processes.

Implications: These improvements within the blood administration process have had a positive impact on nursing time and efficiency and patient/family outcomes and experiences. The RIE approach and the PDSA model are being utilized for further improvements of the blood administration process, including work on computerized order entry along with an electronic blood product issue form and the practice of informed consent documentation.