

## Introduction

A gap in the education of blood administration was recognized when a Midwest regional medical center experienced an increase in blood administration errors. A root cause analysis identified that there was a lack of understanding of the blood dual verification process.

The current course content was reviewed so gaps could be addressed. Currently the course is four hours long and focuses on the documentation of blood products in the electronic medical record.

Current Curriculum includes:

Hour 1: Lecture that reviews:

- ❖ Pre-transfusion requirements
- ❖ Blood verification process
- ❖ Nursing interventions during a blood administration
- ❖ Identifying signs and symptoms of a reaction.

Hour 2: Hands on portion completed alongside the instructor including:

- ❖ Documenting a unit of blood in the electronic medical record
- ❖ Placing a proper order in the EMR

Hours 3-4: Self-paced:

- ❖ A ten-minute dual checkoff with an instructor
- ❖ A computer based learning module quiz
- ❖ Documentation on their own in the EMR on a unit of blood

The proposed solution is to eliminate classroom time with staff sitting through a lecture and move to a flipped classroom approach with simulations.

## Addressing the Gap

- ❖ Nurses will complete pre-course requirements prior to a simulation class which includes:
  - ❖ A 30-minute lecture video on the organization's policy and procedure
  - ❖ Six online modules that guide staff through the documentation process
  - ❖ Reviewing required materials
- ❖ Simulation focused class will include:
  - ❖ Dual verification bedside check of the blood product
  - ❖ Documentation in the EMR at the bedside
  - ❖ Consist of a primary nurse and a second verifier to reinforce the policy of requiring two licensed professionals at the bedside
- ❖ Audit tool will be completed to ensure all safety measures have been taken and all documentation pieces are completed appropriately
- ❖ Post-course follow up at 30-60-90 days by the department educator will be conducted in the unit
- ❖ An annual mandatory competency validation of the bedside dual verification process will be completed by the department educator

## Lesson Plan

The lesson topic: *The Blood Administration course will provide nurses with comprehensive education related to administering blood products that includes: an online lecture review of the transfusion policy, six interactive CBL's reviewing the ordering and documentation process in the EMR, as well as a simulation of the dual verification process at the bedside, IV pump and tubing usage, and documentation in the EMR.*

## Competency Statements:

1. At the end of this course the learner will be able to demonstrate thorough documentation in the blood navigator in the EMR.
2. At the end of this course the learner will be able to demonstrate the proper bedside dual verification process with a second licensed professional.
3. At the end of this course the learner will be able to explain the process of emergent and massive blood transfusion and documentation.

## Teaching Strategies

- ❖ Video lecture on the policies and procedures of blood administration
- ❖ Role-play during simulation for hands on experience of the dual verification and documentation processes
- ❖ Discussion during and after the simulation to facilitate questions and answers that will enhance the learning experience.

## Required Materials

- ❖ Reviewing the organization's blood product administration policy and procedure
- ❖ Reviewing the organization's competency
- ❖ Review of BMC Health Services Research article by Najafpour et al. (2017) Preventing blood transfusion failures: FMEA, an effective assessment method
- ❖ Reviewing The Joint Commission's 2018 National Patient Safety Goals on patient identification.



## Learning Objectives

*Learning objectives for the competency statement: At the end of this course the learner will be able to demonstrate the proper bedside dual verification process with a second licensed professional.*

1. The nurse can identify three licensed professionals who are able to complete the dual verification as the second licensed professional.
2. The nurse can identify the three patient identifiers utilized during the dual verification
3. The nurse can discuss each of the blood verification components that are to be checked.
4. The nurse can identify the location in the EMR for the second licensed professional to sign off of the dual verification.

## Key Concepts

- ❖ Gain an understanding that the dual verification must be completed at the bedside.
- ❖ Identify that the licensed professionals that are able to complete the second check while at the bedside are RN's, LPN's and Paramedics.
- ❖ Identify the three patient identifiers: Name, DOB, and medical record number.
- ❖ Understands that the blood sticker on the front of the bag is from the Red Cross and only contains information from the donor.
- ❖ Recognizes that the sticker on the tie tag contains patient information from Parkview Health's blood bank.
- ❖ Recognizes that the Red Cross sticker is to be checked with the blood bank sticker to ensure blood type matches or is compatible and has correct patient name and MRN.
- ❖ Understands that the blood contents must be checked for proper color and consistency.
- ❖ Identifies the two correct barcodes on the blood bag that need to be scanned in the EMR.
- ❖ Identifies that the correct action in the EMR is "Dual Verify" to populate the correct sign off screen for the second verifier.
- ❖ Understands that all pre-transfusion requirements are met and documented before signing off.

## Evaluating Success

- ❖ End of Course Survey on a 5-point Likert Scale
- ❖ 30-60-90 day follow up with department educator
- ❖ Utilizing Rogers 5-step change theory as part of the decision making process
- ❖ Successes to then be model in other courses within the organization.

## References

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