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Quality Improvement Activity: Blood Transfusion

On November 4, 2020 a patient was admitted through the emergency room for a severe nosebleed that lasted for five hours. The patient was ordered to receive a full blood transfusion. The patient was transported to the medical floor where he would receive his transfusion. The patient was blood type O positive and the emergency room ordered the blood so that it would be ready when he got to the floor. The nurse that was assigned to the patient also had five other patients that she was caring for. When the blood arrived for the patient the nurse took the blood into the patient's room and without double checking to verify that she had the correct blood for the correct patient, she hung the blood. Protocol required that a second nurse verify and co-sign that blood samples are given to the correct patient. The floor was busy, and the second nurse signed off without verifying. The second nurse assumed that her friend and coworker had verified using two correct identifiers. Within 15 minutes of the transfusion the patient began having chills, nausea and their blood pressure started to drop. The nurse quickly recognized that the patient was having signs and symptoms of ABO incompatibility reaction and immediately stopped the transfusion. A saline drip was ordered to keep the line open and the patient was transferred to the ICU for close monitoring. It turned out that the reaction happened because the nurse assumed that the blood that had come from the pharmacy was for her patient when in fact it was not. The nurse had given the patient blood type AB when the patient was type O positive. The nurse did not use any identifiers to verify the blood she was giving was the correct blood for the correct patient. Her nurse friend who was supposed to cosign, also did not verify that the correct blood was being given to the correct patient. In the end the patient was okay, but the reaction could have been serious and potentially fatal.

Describe the scenario. In what way did the patient care or environment lack? Is this a common occurrence?

In the scenario above the patient needed a blood transfusion after losing a large amount of blood from a persistent nosebleed. The patient was seen in the emergency room and then transferred to the hospital floor to receive his blood transfusion. Patient care was lacking when the nurse did not use two identifiers to ensure that the correct blood was being given to the correct patient. The second nurse also did not follow correct protocol because she co-signed without even verifying. The floor was very busy and that may have contributed to why the nurses did not verify. It is a common occurrence for nurses to co-sign certain tasks without verifying first, assuming that their co-workers are competent and have not made any errors. However, it is our job to follow protocol even when the floor is busy and there are other patients waiting to be cared for. Thankfully, the nurse was aware of transfusion adverse reactions and was paying attention to the patient when he started having chills, nausea and his blood pressure started to drop. Her quick action of stopping the infusion may have prevented a more serious reaction.

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What circumstances led to the occurrence?

The circumstance that directly led to this occurrence was the nurse not identifying that she had the correct blood product for the correct patient. It is unknown why the nurse did not scan the blood before hanging. If she had done that then she may have been alerted through the electronic medical record that she had the wrong blood product for the wrong patient.

In what way could you measure the frequency of the occurrence? (interviewing nurses, examining charts, patient surveys, observations, etc.)

The frequency of occurrence of blood transfusion errors could be measured in a number of ways: interviewing nurses, reviewing incident reports and reviewing the average number of blood transfusion errors in relation to taking shortcuts. Research shows that the most common cause of a blood transfusion error is not properly identifying the blood product and/or the patient who is receiving the blood.

What ideas do you have for implementing interventions to address the problem?

To address the problem of mistakes happening during blood transfusions we plan to implement nursing protocols that result in safer patient outcomes.

- Require that both nurses double checking and signing off on the blood products can do it in the patient's room at bedside.
- Design a checklist that both nurses can use when giving blood transfusions to avoid steps being skipped or missed.
- Provide the staff with further training on blood transfusions hazards and appropriate preventative measures to be implemented during all steps of blood transfusions.
- Keep a record of how many blood transfusions errors each unit has and keep it posted where all employees can see.
- Issue incentives for the unit that has the least number of blood transfusion errors.

How will you measure the efficacy of the interventions?

Measuring the efficacy of the interventions suggested can be done by recording and comparing the number of blood transfusion errors that happened before and after implementing nursing protocols to administer blood products in a safer manner.