

INFORMATION SHEET TO BE PART OF A RESEARCH STUDY

Title of Research: Clinical Workflow Factors in Whole Blood Versus Blood Component Transfusions

UAB IRB Protocol #: IRB-300006008

Principal Investigator: Justin Miller, RN, Ph.D. Student

Sponsor: The University of Alabama at Birmingham, School of Nursing

Supported By: TriService Nursing Research Program

You are being asked to participate in a research study because of your experience transfusing blood products to trauma patients. Resuscitation of trauma patients is a complex, physical, cognitive, and time-intensive task that impacts the patient's mortality. The purpose of this research study is to measure and compare the time and physical and cognitive workloads required to manage trauma-related bleeding using whole blood versus component therapy in an in-hospital trauma simulation. Recent research suggests that the outcomes of patients who receive blood components in a ratio similar to whole blood have similar outcomes to patients who receive whole blood. We hope to compare the physical and cognitive workload and the amount of time it takes to transfuse whole blood compared to blood components given in a 1:1:1 ratio of (pack red blood cells, plasma, and platelets).

If you agree to join this study, you will be asked to complete one round of resuscitation with whole blood and one round with blood components in a simulated trauma scenario. We estimate the amount of time it will take to complete this research will be approximately 1 hour.

You will:

- ☐ Receive a pre-brief, which will review the purpose of the study/simulation, explain the steps to be followed in the simulation (as outlined below), and to reiterate that this simulation will in no way evaluate individual performance or affect your employment, you have the right to stop at any point and your data will remain confidential
- ☐ Complete the whole blood or blood component transfusion (decided by flipping a coin)
- ☐ Complete the NASA Task Load Index (NASA TLX)
- ☐ Receive a 15-minute break
- ☐ Complete the second transfusion type in a simulated patient
- ☐ Complete the NASA TLX
- ☐ Debrief to provide an opportunity for you to verbalize your experience during the simulation – what you thought went well and what did not.

Two research team members will record the amount of time it takes to complete each of the following tasks and the time it takes to complete the entire scenario.

The tasks measured will include:

- ☐ Receiving the trauma pre-alert
- ☐ Notifying the blood bank of the need for a Massive Transfusion Cooler
- ☐ Receiving of the trauma patient
- ☐ Attaching oxygen saturation monitor, blood pressure cuff, and ECG monitors

- ☐ Establishing a large-bore venous access
- ☐ Drawing Type and Screen, CBC, VBG, and BMP
- ☐ Priming Blood Tubing
- ☐ Signing name and time blood drawn on type and screen lab label
- ☐ Receiving uncrossed blood from the blood bank
- ☐ Transfusing whole blood or blood components
- ☐ Documentation of transfusions

The NASA TLX measures:

- ☐ Overall workload
- ☐ Mental Demand
- ☐ Physical Demand
- ☐ Temporal Demand
- ☐ Frustration
- ☐ Effort
- ☐ Performance

You will be paid \$20 on a Greenphire card at the end of the debrief.

Your participation in this research is strictly voluntary, and you may withdraw at any time without consequence or penalty. Participation in this study is not part of your duties as an employee. Although your identity and demographic information will be known to the study team, your responses to surveys and the results of the simulation will remain completely confidential. A numerical code will be assigned to you and will be used as your study identification number. Your information will not be shared with your employer, nor will your participation in the study or information related to your performance in the study.

By participating in this study, you are consenting to allow your responses to be used in this research.

If you have any questions, concerns, or complaints about the research please contact the Principal Investigator, Justin Miller at ~~808-294-3095~~[253-968-6002](tel:253-968-6002). If you have questions about your rights as a research participant, or concerns or complaints about the research, you may contact the UAB Office of the IRB (OIRB) at (205) 934-3789 or toll free at 1-855-860-3789. Regular hours for the OIRB are 8:00 a.m. to 5:00 p.m. CT, Monday through Friday.