Instructor Guide for Massive Transfusion, Transfusion Reaction, Post Partum Hemorrhage Case

Resource files included in the submission: High Fidelity Simulation Case includes how to run case and Debriefing information / handouts

Explanation of when, how, and the order in which to use each resource file: All information is in the Simulation Case file.

The purpose/goal of the resource (including educational objectives): The purpose is to provide an active learning environment for learners to practice and improve their skills in the following domains:

- 1. Develop an approach to identifying hemorrhagic shock and appropriately instituting the massive transfusion protocol
- 2. Identify and manage post partum hemorrhage
- 3. Identify and manage a transfusion reaction
- 4. (Optional) Identify and manage an amniotic fluid embolism
- 5. Perform closed loop communication

The conceptual background (why and how it was created): Post partum hemorrhage is a rare but life threatening occurrence, as is use of the massive transfusion protocol, and transfusion reactions. The identification and treatment of these pathologies are emergent and potentially lifesaving.

Practical implementation advice (materials needed, length of session, faculty/facilitator needs, preparation needs, etc.): Run the simulation case for approximately 30 minutes, then do a debriefing discussion for at least 30 minutes. The reference handouts (included in the case template) can be handed out after the debriefing is completed.

How has it been successfully deployed (including common pitfalls, tips for success, etc.): This has been successfully run for EM residents as well as EM faculty. For each case, the helpfulness of the nurse and consultant should vary based on the performance of the learners. For learners performing at very well, the nurse and consultant are not very helpful. For learners that are having more difficulty, the nurse and consultant can become more helpful. More details on prior experience and revisions are available in section XI.E.

What are the limitations of the resource and what are your ideas for improving/expanding it (adding this self-reflection component is encouraged): Modifications have been made based on how this scenario has run in the past, detailed in section XI.E. Any further modifications are welcome to make this scenario most applicable to your learners.