

# Trauma Simulations: Beyond the Emergency Department

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## BACKGROUND

- Complex trauma patients utilize resources from multiple departments while in the Emergency Department and continues through resuscitation.
- Clear concise communication between personnel is essential to providing optimal care.
- Opportunities for improving communication between departments were identified through review of care for critically ill trauma patients.

## PURPOSE

Swedish Medical Center, a Level 1 Trauma Center has utilized trauma simulation training in the Emergency Department for several years. The goal was to integrate several departments into the simulation to improve patient care and communication during trauma activations.

## IMPLEMENTATION

- Key stakeholders identified to include emergency department staff, trauma surgeon, trauma residents, trauma nurse coordinator, blood bank, operating room staff, anesthesia, and radiology
- Collaborated to develop a trauma resuscitation scenario requiring interdepartmental communication and workflow through massive transfusion (MTP) and emergent surgical intervention
- Implemented a pre and post quiz to evaluate effectiveness
- Implemented a debriefing process



## RESULTS

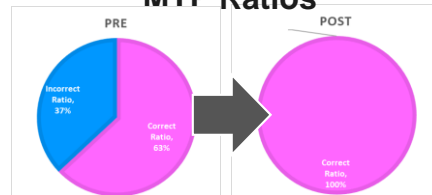
### Self Assessed Staff Confidence



### MTP-Time to Plasma

Prior to Multidepartment Simulation	Post Multidepartment Simulation
31.5 minutes	3 minutes

### MTP Ratios



## CONCLUSION

- Better communication through simulation has improved MTP throughout trauma resuscitation
- Staff report an increase in confidence in caring for trauma patients
- Staff perception of hand off report has improved
- Clear identification of issues through simulation decreases errors in patient care

## REFERENCES

Garvey, P., Liddil, J., & Eley, S. (2016). Trauma Tactics: Rethinking trauma Education for Professional Nurses. *Journal of Trauma Nursing*, 23(4), 210-214.  
 Pirrung, J.M. (2016). A Key to Success: Building an Internal Trauma Education Program. *Journal of Trauma Nursing*, 23(4), 237-238.  
 Briggs, A., Raja, A.S., Joyce, M.F., Yule, S.J., Jiang, W., Lipsitz, S.R., Havens, J.M. (2015). The Role of Nontechnical Skills in Simulated Trauma Resuscitation. *Journal of Surgical Education*, 72(4), 732-739.  
 Shin, S., Park, J., Kim, J. (2015). Effectiveness of Patient Simulation in Nursing Education: Meta-analysis. *Nurse Education Today*, 35(1), 176-182.