Redshirts: Specialized Trauma Nurses Improve Quality of Care

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Purpose: The redshirt or trauma resuscitation nurse program was started in 1997 to improve quality of care and provide consistency for trauma patients. As the need for nurses to provide higher levels of care increased, the redshirt program expanded to cover rapid response and codes in 2006. Due to high wastage of blood products and large amounts of crystalloid being utilized during resuscitations, the redshirts evolved to administering massive transfusion for trauma patients in the OR in 2015. Due to the success of the MTP administration in the OR, redshirts began administering all MTPs regardless of reason/admit service in 2017. We additionally added pediatric trauma alerts in 2018.

Resources: The main resource needed for the program is FTE support for the positions. Our program has 12 1.0 redshirt FTEs. We also utilize an office, computers, pagers, and phones.

Description: The redshirts are the specialized trauma and critical care nurses at our facility. They are credentialed for the following procedures: intubations, chest tube placement/ pulls, arterial line insertion and line change over wire, cricothyrotomy, EJ placement, IO placement, central line change over wire and flex-ex cervical spine radiography. All redshirts are required to maintain current ATCN, TNCC, BLS, ACLS, PALS, annual credentialing and advanced credentialing. The redshirt program has also helped drive various aspects of the trauma program. The redshirts assist daily with placing trauma patients into the trauma registry. This helps them be accountable to having the required registry inclusion information in their charts. It also helps them educate the ED Nurses on what needs to be included in their charts as well. In addition, it helps keep the trauma registry concurrent and makes sure we can get all the required patients in the registry. The redshirts also help with PI as they are involved in various hospital committees, attend our weekly PI committee, and participate in our systems meeting. The redshirts also help with education as it relates to the trauma program and the hospital. In addition, they also help provide compliance in research endeavors.

Effectiveness: The project is effective as the redshirts are leaders within our health system and provide excellent care to all the patients they encounter. We have been able to measure this effect through our massive transfusion research which showed the redshirts as staying closer to the 1:1 ratio almost 10% more of the time than their anesthesia counterparts. They also decreased the mean intraoperative crystalloid in our patients by almost 3 liters. This research study concluded showing a trend towards decreased mortality by having the redshirts run massive transfusion on trauma patients.

In 2019, the redshirts ran 87 massive transfusions, responded to 127 pediatric trauma activations (level 1 and 2 only), 4,623 adult trauma activations (all levels), 696 rapid responses, and 215 codes blues.

Lessons Learned: The biggest lesson learned has been that expanding your scope is both a good and a bad thing. The more duties we have taken over have sometimes stretched the redshirts thin, but it has also made them essential institutionally. The redshirts undoubtedly played a large role in our ACS verification and our state re-designations. They are a major "pro" to our trauma program.

Conclusions: In conclusion, I would highly recommend trauma programs add trauma resuscitation nurses to their program if they are able. If you are able to get such a program at your institution I would recommend making your nursing staff versatile. We did this by offering a service that no-one else did such as massive transfusion and rapid response.