ESTABLISHING AN ALGORITHM TO ENSURE THE SAFETY OF DISCHARGED PEDIATRIC PATIENTS FOLLOWING A MOTOR VEHICLE CRASH

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Resources Needed: an organization approved algorithm, car seats, staff educated on the benefits of child passenger safety.

Background: According to the National Highway Traffic Safety Administration, placing children in age-and size-appropriate safety restraint systems can reduce serious and fatal injuries by more than 50%. From 1975 through 2011, the NHTSA estimated that approximately 10,000 lives were saved by child restraints for children under the age of 5 in passenger vehicles with more than 260 young lives saved in the year 2011 alone. Furthermore, an estimated additional 51 lives could have been saved if 100% of the children were placed in child safety restraint seats. The purpose of this program is to establish an organized process to evaluate the need, and distribution of appropriate child safety restraint systems (CSRS) for patients who present to the emergency department (ED) following a motor vehicle crash (MVC).

Methods: An algorithm to assess the need for a CSRS for patients being discharged from the ED after being involved in a MVC was implemented at a Level 1 Trauma Center. National evidence based guidelines, were used to determine proper CSRS recommendations. A brief educational intervention on state legislation, proper installation and best practices was provided to caregivers prior to distribution of the CSRS. A data base was established to collect CSRS registration data, waiver and disclaimer information, as well as demographic information. Quality assurance was conducted monthly to screen for any missed opportunities.

Results/ Lessons Learned: From September 1, 2015-April 30, 2016, 187 patients under the age of 7 (the age that by state law are required to be in a child safety seat) were identified at triage in the PED of a level 1 trauma center as having been involved in an MVC. Once identified that the child was involved in an MVC the algorithm was implemented. 44 patients were identified meeting criteria for a CSRS (as a result of having no CSRS, needing a replacement CSRS due to damage from the impact of the MVC, or having an incorrect CSRS based national guidelines). During this 7-month pilot, 36 registration forms, 43 waiver and disclaimer forms were completed and 58 car seats were distributed to children who would have been previously discharged without screening for state mandated CPS regulations.

Conclusions & Benefits: It is evident that an organized CSRS screening process in the pediatric emergency department has a positive impact on the overall safety of pediatric patients being transported in motor vehicles. Having a systematic process and appropriate CSRS readily available contributes to the success of children discharged home after being involved in a MVC.