After the After Action Report:

Turning lessons learned into change following a Mass Shooting at a Level 1 Trauma Center

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Background

Many of the preparations for mass trauma has been geared toward transportation related incidents. In the fall of 2019, a mass shooting occurred injuring over 20 people in a city with only a single Trauma Center. This prompted a review of the approach to preparation, response, clinical care, surgical intervention and recovery of an intentional hostile incident.

The after action report (AAR) created after this event highlighted several opportunities for improvement. However, the ability to translate these after action reports into actionable and realizable improvements is often the most challenging part in disaster recovery and preparedness.

Areas of Focused Evaluation

- Pre-hospital care
- Arrival care and re-triage
- Surge equipment
- Tertiary and quaternary triage
- Family center operations
- Team communication
- Trauma center organization
- Continuity of Operations
- Debriefings and recovery



Incident

The major trauma incident was a large house party in the fall of 2019 in a city neighborhood where gunfire erupted in a fenced-in back yard resulting in 18 victims with ballistic injuries and 6 patients with stampede style injuries. There were two on scene fatalities. Ten shooting patients were brought to the trauma center along with 2 additional unrelated Level 1 traumas at the same time. There were 15 different guns used that fired over 60 rounds.

Opportunities identified in the After Action Report

- A need for better situational awareness of community events
- The need for objective activation triggers to escalate trauma center response
- A need for improved pre-staged drop off care and triage supplies
- Improved process for alerting, communicating and calling back staff during off hours
- A need to biopsy and monitor the status of the Trauma Center for available beds, staff, resources and barriers to care delivery.
- Challenges exist with managing a family resource and reunification center during a pandemic and an incident associated with a potential criminal act.

Changes Implemented

Activation level created for trauma incidents with ≥ 5 patients Regular tabletop re-triage training for staff

Pre-configured communication distribution lists of leadership and clinical staff Acquisition of trauma surge carts with triage, treatment and command equipment Trauma surge plans made available though smartphone application Staff competed the ACS DMEP training

Objective

There are two main components that warrant a review of this topic. First, the logistical process to engage stake holders and influence change and second, the newly adopted best practices that trauma centers should consider. As a process for adopting change, the Trauma Center engaged stakeholders in standing meetings, assigned specific tasks with deadlines, developed new tools, established new best practices, published these in an APP resource and developed routine standing virtual Trauma Surge Drills. The improvements in trauma surge response included revised care guidelines, acquisitions include trauma surge carts, "parking lot" triage education, activation guides, organization charts, creation of a trauma stress response team and testing of technology to communicate clinical teams during a disaster.

