| **Author, Year** | **Sub- category** | **Study Location** | **Study Type** | **Study Design** | **Relevant type of mass casualty event** | **Strategy** | **Findings** | **Outcome Modulators** | **Quality score** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Epley, 200644 | Load sharing | Southwest Texas | Analysis of multiple real events | Pre-post with comparison group: Routine trauma system (pre-/post-) and disaster trauma system | All-hazards, Natural Disaster: Hurricane | Use of comparable coordinated regional trauma systems for routine (Medcom) and disaster (Regional Medical Operations Center) operations to facilitate the rapid transfer of hospitalized and special needs patients following small-scale trauma events and disasters. | Pre-post- analysis of Medcom: • Pre-Medcom (10 mos.): Transfer decision time 115 +/-3 min; transfer accept time 30.5min; total transfer time 145+/-12min. • Post-Medcom (10 yrs): Transfer decision time 80+/-1min, transfer accept time 10 +/-2 min, total transfer time 91 +/- 1 min  Regional Medical Operations Center (RMOC) : • Post-Hurricane Katrina- transferred 6 patients/hour & 170 patients/hour from 2 incoming transports • Pre-Hurricane Rita: transferred 20 patients/hour | Medcom (routine) and RMOC (disaster) regional trauma systems are comparable, inter-related and symbiotic.  Medcom is practical small-scale rehearsal for major disasters.  Authors unaware of comparative data between trauma system; benchmarks would be useful. | 4/8 |
| Simon, 200145 | Load sharing | NYC | Analysis of single real event | Post only with comparison group: Qualitatively compared against counterfactual | Explosive, Terrorism | 1) Control the distribution of urgent patients through scene or central command to limit overwhelming the nearest hospital.  2) Site emergency management centers in a low vulnerability location.  3) Use robust and interoperable emergency communications systems. | No enforced patient distribution system led to moderate and critical patients swamping the two nearest trauma centers, while a 3rd trauma center 3 miles from scene sat idle  Attack damage to Office of Emergency Management (OEM) dramatically exacerbated communication and coordination efforts including patient distribution  Cell phone and radio disruptions (from attack damage and post-attack overload) prevented response coordination - most patient distribution was blind to hospital resource availability | N/A | 2/8 |