| **Author, Year** | **Sub-category** | **Study Location** | **Study Type** | **Study Design** | **Relevant type of mass casualty event** | **Strategy** | **Findings** | **Outcome Modulators** | **Quality score** |
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| Aylwin, 200679 | Trauma surgery\*Also in Optimize resources | Western Europe | Analysis of single real event | Retrospective case review | Explosive | 1) Trained/experienced triage at scene2) Simplified on-scene triage (urgent (P1 & P2), not urgent (P3), expectant3) Re-triage at every stage, directed by trained/experienced providers with explicitly designated authority4) Damage Control approach (minimize use of all critical hospital resources) | Accuracy of on-scene triage was much higher for locations where fully trained responders (versus by medically trained bystanders) performed triage (33% overtriage versus 82% overtriage of critical patients)Speed of scene clearance - Average of 27 P1 & P2 (most seriously wounded) patients per hour (= 2.2 minutes per patient)Second stage screening (at the ED Door) reduced the surge demand (by screening out over-triage and identifying under-triaged/deteriorating patients) reducing initial overtriage to 0% and undertriage to 20% of critical patients.Increase available surge capacity - created 10 ICU bed spaces and made all ORs available within 2 hours | N/A | 5/8 |
| Dhar, 2008110 | Trauma surgery | Asia | Analysis of single real event | Post only with comparison group: Comprehensive care (implied) | Natural Disaster: Earthquake | "Damage control" surgery for the orthopedic injuries of MCE polytrauma patients if referral to hospital is delayed or comprehensive care resources unavailable | Acceptable outcome at 1 year compared with comprehensive care = 49/62 (79%) "excellent" or "good" outcomes; only 3 non-unions (unhealed fractures)Mortality - 0%Operating Room Time (relative to definitive repair) - mean: 38.5 minutes for external fixation (37% of internal fixation time) | Results inferior for intra-articular (joint involved) fractures | 5/8 |
| Kanter, 200777 | Pediatrics\*Also in Optimize resources | Not relevant | Computer simulation | N/A | Unspecified | 1) Control distribution of pediatric disaster victims to avoid overcrowding near scene2) Expand hospital capacity by altering standards of care to provide only "essential interventions" | Simulated mortality was reduced both by controlling the distribution of disaster victims and by relaxing standards of care. The greatest reduction was achieved by employing both strategies together. | Findings are based upon a variety of untested and extrapolated assumptions. Thus, "the reported results are not intended to recommend particular response strategies."A large urban center is modeled; the applicability to rural or suburban environments is unclear. | 3/9 |
| Labeeu, 1996111 | Orthopedics | Rwanda | Analysis of single real event | Post only with comparison group: Standard care (implied) | Trauma: War | External fixation of fractures rather than definitive orthopedic care | External fixation used for 1,129 fractures. Average time of placement was 30 minutes. Numerous complications, not quantified. Authors consider this to be the best compromise between nonoperative methods and definitive care. | N/A | 1/6 |
| Merin, 2010109 | General | Haiti | Analysis of single real event | Post only with comparison group: Standard care (implied) | Natural Disaster: Earthquake | Altered standards of care, and allocation of resources towards patients most likely to benefit. | Authors assert that they treated more patients than they would have if they had not relaxed standards of care or had they not allocated resources with the goal of maximizing the number of lives saved. | N/A | 1/6 |