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Maximizing Medical and Health Outcomes after a Catastrophic Disaster: Defining a New “Crisis Standard of Care”

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# Maximizing Medical and Health Outcomes After a Catastrophic Disaster: Defining a New “Crisis Standard of Care”

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**Background:** When healthcare demand exceeds resources during catastrophic disasters such as pandemic flu, hurricanes, or earthquakes, physicians shift focus from individual patients to populations of patients.

**Objectives:** To define the key principles and identify areas for future research for providing optimal care after a catastrophic disaster.

**Methods:** Investigators performed an exhaustive literature review to identify all articles about standard of care during a catastrophic disaster. In addition, the State of California provided access to prepublication copies of academic and stakeholder consensus documents.

**Results:** Analysis of 22 articles identified the following key principles for “Crisis Standard of Care” 1) prioritize population health rather than individual outcomes; 2) respect ethical principles of beneficence, stewardship, equity, and trust; 3) modify regulatory requirements to provide liability protection for healthcare providers making resource allocation decisions; 4) designate a crisis triage officer and include provisions for palliative care in triage models for scarce resource allocation (e.g. ventilators).

**Conclusions:** Despite the science of disaster medicine being in its infancy, several key principles exist for maximizing health outcomes during a catastrophic disaster. Evidence-based research is urgently needed to assess when to shift to the new “Crisis Standard of Care” and to determine optimal methods of educating healthcare providers to understand principles for optimizing care in a resource-poor environment. In addition, codifying the science of triage, developing and testing prognostic tools, and studying the effectiveness of crisis health risk communication strategies for healthcare workers and the public are key areas for future research.