



US HEALTHCARE SURGE AND CRISIS STANDARDS OF CARE FACTS

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Surge can be defined as “a sizable increase in demand for resources compared with a baseline demand. Related to health care, surge implies a sizable increase in demand of medical or public health resources. In addition to influx (volume rate), surge is further composed of the following components: event (type, scale, and duration) and resource demand (consumption and degradation).”^{1(p1089)}

Components of daily surge capacity include: the system (eg, triage method, physician tasks, admission process), space, staff, and supplies.¹

There is no fixed answer for how much surge capacity exists in the US healthcare system, as it is a function of time (time to prepare, patient length of stay, time compression of event, duration of response) and the clinical resources needed to take care of patients.²

- One study found that, of 3,491 patients at 3 separate hospitals, 44% did not require intervention and were suitable for early discharge, with a net surge capacity estimated at 66%, 71%, and 81%, respectively.³ This demonstrates that inpatient beds can be a major contributor to surge capacity and that “hospital surge capacity for standard inpatient beds may be greater than previously believed.”³
- Another study found that annual bed statistics can be misleading and “may not capture fluctuations in bed capacity that could be important in disaster planning.”⁴ There can be large fluctuations in bed occupancy depending on the time of the week or year, and when compared to longer-term averages, occupancy may be within—or less than—federal benchmarks.⁴ Importantly, while surge capacity in terms of “licensed beds” almost always met federally established guidelines across regions, it usually did not meet these standards when measured in terms of “maintained beds” in all regions.⁴ Licensed beds require additional resources (eg, staff, equipment) to be converted into a maintained bed and may be of limited use when these resources are scarce during an emergency.⁴

FEDERAL MEDICAL STATIONS

- A federal medical station is “a non-emergency medical center set up during a natural disaster to care for displaced persons with special needs—including those with chronic health conditions, limited mobility, or common mental health issues—that cannot be met in a shelter for the general population during an incident.”⁵
- Federal medical stations are managed by the division of Strategic National Stockpile and contain “rapidly deployable caches containing beds, supplies, and medicines.”⁶

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- A federal medical station is deployed with a federal medical station strike team, “which is a group of technical specialists with specific, in-depth knowledge of the stockpile and supply operations.”⁵

CRISIS STANDARDS OF CARE

- During the 2009 influenza pandemic, the Office of the Assistant Secretary for Preparedness and Response (ASPR) asked the Institute of Medicine to convene the Committee on Guidance for Establishing Standards of Care for Use in Disaster Situations. The goal of this meeting was to “develop guidance that state and local public health officials can use to establish and implement standards of care that should apply in disaster situations—both naturally occurring and manmade.”⁷
- The committee highlighted 6 recommendations “that allows consistency in establishing the key components required of any effort focused on crisis standards of care in a disaster situation:”⁷
 1. Develop consistent state crisis standards of care protocols with 5 key elements.
 2. Seek community and provider engagement.
 3. Adhere to ethical norms during crisis standards of care.
 4. Provide necessary legal protections for healthcare practitioners and institutions implementing crisis standards of care.
 5. Ensure consistency in crisis standards of care implementation.
 6. Ensure intrastate and interstate consistency among neighboring jurisdictions.

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