# Chapter 7

# Planning for Heavy Surge, Part 3

*Crisis standards of care**are guidelines developed before disaster strikes to help healthcare providers decide how to administer the best possible care when there are not enough resources to give all patients the level of care they would receive under normal circumstances.[[1]](#footnote-1)*

## Overview

### Introduction

In all previous chapters of the *Framework*, you and your planning team worked through two or three scenarios you identified as likely to impact your community. Using these scenarios, you developed plans to manage increasing levels of surge, from moderate to heavy, in which the demand for healthcare services begins to exceed the ability of community healthcare providers to provide these services. As a result of your working through these scenarios, you saw the need to develop a plan for an alternate care system and a plan to prioritize essential healthcare functions. These plans were developed for worst-case-scenario situations. But what happens when the situation gets even worse? What happens when a catastrophe strikes? What happens when your community's healthcare providers do not have enough resources to give all patients in your community the level of care they would receive under normal circumstances? How do your providers give the best care possible under the worst possible circumstances?[[2]](#footnote-2) The answer is to develop crisis standards of care (CSC) for your community. The purpose of this chapter is to help you and your planning team accomplish that task.

The Institute of Medicine (IOM) has taken the lead in publishing guidance[[3]](#footnote-3), [[4]](#footnote-4) on CSC and addressing the moral, ethical, and legal issues associated with these standards. The authors of the *Framework* have used this guidance as a foundation for the work that you and your planning team will undertake in this chapter.

One point on which the authors of the *Framework* are not in complete agreement with IOM is the role of state and local governments. In its 2012 report, IOM states, "While much of the health care component of a crisis standards of care response will occur in the private sector (because the health care system comprises largely nongovernmental partners, with some exceptions), government at all levels must play a crucial role in leading and coordinating CSC planning and implementation efforts. Government also is ultimately accountable for CSC activities, with states having 'the political and constitutional mandate to prepare for and coordinate the response to disaster situations throughout their state jurisdictions.' As recommended in the committee's 2009 letter report, states in particular should lead the development and implementation of CSC protocols 'both within the state and through work with neighboring states, in collaboration with their partners in the public and private sectors.'"[[5]](#footnote-5)

The authors of the *Framework* are of the opinion that, while state and local governments play a key role in the development of CSC, decisions on changing standards of healthcare delivery during a disaster may ultimately be made at the community level. This opinion aligns with one of the key assumptions listed in the Introduction chapter to the *Framework*, which states, "The best strategy for planning for a public health emergency or other disaster situation is to approach it from the community level first."

### Definitions

**Crisis Standards of Care[[6]](#footnote-6)** Guidelines developed before disaster strikes to help healthcare providers decide how to administer the best possible care when there are not enough resources to give all patients the level of care they would receive under normal circumstances

**Medical Surge[[7]](#footnote-7)** The ability to provide adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of an affected community (through numbers or types of patients). It encompasses the ability of healthcare organizations to survive a hazard impact and maintain or rapidly recover operations that were compromised (a concept known as medical system resiliency).

**Medical Surge Capacity[[8]](#footnote-8)** The ability to evaluate and care for a markedly increased volume of patients—one that challenges or exceeds the normal operating capacity

**Medical Surge Capability[[9]](#footnote-9)** The ability to manage patients requiring unusual or very specialized medical evaluation and care. Surge requirements span the range of specialized medical services (expertise, information, procedures, equipment, or personnel) that are not normally available at the location where they are needed.

### HPP/PHEP Capabilities Addressed by This Chapter

The HPP and PHEP capabilities listed below are addressed by this chapter.

**HPP**

*Capability 6: Information Sharing*

*Capability 10: Medical Surge*

**PHEP**

*Capability 6: Information Sharing*

*Capability 10: Medical Surge*

### What to Expect After Completing This Chapter

* You will have helped your community's healthcare providers and their supporting partners understand and try to address the limitations to healthcare delivery for a catastrophic event in your community. This task will be accomplished by developing a plan to alter the type of care offered during a severe disaster or emergency.
* You will have helped your community's healthcare providers identify legal issues to consider and determine community ethical considerations to guide CSC planning.
* You will have established a community ethical framework for CSC development.
* At a minimum, you will have identified a process for making decisions on CSC at the healthcare facility level.

### Applicability and Scope

Developing a heavy surge plan is applicable to all communities regardless of demographic or geographic descriptions and limitations. Additionally, your heavy surge plan should incorporate all agencies and organizations represented within your community's healthcare delivery system.

### Assumptions

* Your planning team has worked through Chapter 6 – Planning for Heavy Surge – Part 2.
* Many different catastrophic scenarios can result in activation of this heavy surge plan.
* The community heavy-surge plan will be activated in a collaborative effort between public health, healthcare, and emergency management partners in the community.
* Medical material and medical professionals will be scarce when the community healthcare system is stressed.
* Your community may have limited capability for treatment of affected patients(e.g., severe burn or trauma injuries, chemical exposures).
* Regardless of the scenario, community healthcare facilities will not have the human resources, the space, or the supplies and equipment necessary to meet the needs of all people seeking medical care.
* The community has limited availability for additional supplies.
* Some resources may be available through mutual aid agreements.
* Although states may provide CSC guidance, the ultimate responsibility for this planning resides with the community.

### Issues and Barriers to Consider

* Drafting a heavy surge plan will not be easy or straightforward. The process requires an extended time commitment. Communities can spend several years developing and revising plans; therefore, do not be discouraged as you begin working through the concepts in this chapter.
* Developing a heavy surge plan requires communication and collaboration with the agencies and organizations represented on your community coalition. Maintaining this communication and collaboration throughout the heavy surge planning process may be difficult because the process requires an extended commitment of time and effort.
* Some of the planning tasks described in this chapter may require approval from federal (e.g., Centers for Medicare and Medicaid Services [CMS]) and state regulators. You should only approach them for approval when you can tell them exactly what you plan to do.
* You and your planning team may experience "push back" or a lack of buy-in from community decision makers or political leaders.
* Communities vary in size and availability of resources. Your community may have to partner with another community or communities (i.e., share resources) to develop a heavy surge plan.
* The engagement of some partners may require approval of leadership at a national level or higher organization level (e.g., national chain pharmacies).
* Planning for CSC can be a very stressful task for some community healthcare providers because of the ethical and legal challenges associated with these strategies. As a result, some providers in your community may resist this type of community planning effort.
* Some scenarios identified as likely to impact your community may require a coordinated, regional response. As a result, you may need to make other communities or emergency responders aware of your work on CSC.
* Some healthcare providers in your community may not want to participate in the community CSC planning effort. As a result, inconsistencies in standards of care between healthcare providers may create liability issues.

## Before You Begin

Ever since Hurricane Katrina hit New Orleans, Louisiana, in August 2005, the public health and healthcare sectors have been trying to gain a firm understanding of how to ethically and legally alter standards of care during a crisis. Thanks to the work of IOM, much progress has been made in understanding the subject since that time. However, the nuances of CSC are still evolving, and more discussion on the subject needs to take place. Other community planners, such as you and your planning team, have struggled with this topic and how to plan for it. Your team probably will struggle with it, too.

The National Preparedness Leadership Initiative[[10]](#footnote-10) CSC Project interviewed representatives of public health and healthcare organizations to determine how far along they are in developing CSC. Conclusions drawn from these interviews underscore the difficulty planners have with CSC. [[11]](#footnote-11) These conclusions are listed below:

* Developing a CSC plan is an extremely complex process.
* No "benchmark" or "gold standard" currently exists.
* The amount of literature is enormous.
* No clearinghouse of useful resources exists.
* Staffing and resources for this initiative are constrained at most agencies, particularly at the local level.
* Success requires a public health professional to exert influence beyond the boundaries of his/her authority.
  + Establish realistic expectations for the time needed to develop a good plan.
  + Exercise patience in that process.
  + Form relationships, particularly based on sociability, that will, in turn.
    - Enable communication, which is essential when working outside of traditional reporting structures.
    - Be adaptable.

Because, as noted by the NPLI CSC Project, developing a CSC plan is a complex process, the goal of this chapter of the *Framework* is not so much to develop and finalize a CSC plan but rather to help you and your planning team to understand, at a minimum, how your community will alter its standards of care during a crisis. The approach taken in this chapter is to look at CSC at the facility level and then build upward from there. You and your planning team will accomplish this task by expanding upon the work you completed in the last chapter with your facility-based teams. Following that, your community coalition will guide your efforts to develop a unified, community-based CSC plan.

## Overview of Crisis Standards of Care

As the name suggests, CSC applies to crises or disasters. All disasters have two things in common: the community's needs exceed available resources and help cannot arrive fast enough. Some disasters are long-term and widespread (e.g., an influenza pandemic), while others are sudden and geographically limited (e.g., an earthquake).

The challenge in preparing for disasters is that they can lead to shortages of critical medical resources. As a result, these shortages require difficult decisions to be made, such as prioritizing who gets vaccines or antiviral drugs or which patients should receive lifesaving ventilators or blood. In extreme cases, some people will not receive all of the treatment they need. The question then becomes how do you give the best care possible under the worst possible circumstances? The answer lies with developing CSC.

The focus of normal, day-to-day healthcare delivery is on the individual patient. The focus of crisis care is on the community as a whole, with a goal of saving more lives than could be saved by business-as-usual methods and standards. With this goal in mind, possible reasons for CSC are to

* Make sure that critical resources go to those who will benefit the most.
* Prevent hoarding and overuse of limited resources.
* Conserve limited resources so that more people can get the care they need.
* Minimize discrimination against vulnerable groups.
* Ensure that all people can trust they will have fair access to the best possible care under the circumstances at hand.

Examples of possible strategies to maximize care during a disaster are

* Space
  + Put patient beds in hallways, conference rooms, or tents.
  + Use operating rooms only for urgent cases.
* Supplies
  + Sterilize and reuse disposable equipment.
  + Limit drugs/vaccines/ventilators to patients most likely to benefit.
  + Prioritize comfort care for patients who will die.
* Staff
  + Have nurses provide some care that doctors usually would provide.
  + Have family members help with feeding and other basic patient tasks.

When you don't have enough resources to save everyone, how should you decide who gets what? Do you offer resources/services on a first-come, first-served basis? Do you hold a lottery? Do you save the most lives possible by giving more care to people who need it most? Do you favor certain groups, such as the old or the young? Answering these questions is not easy to do.

This is where you and your planning team come into play. You need to

* Have a community conversation.
* Engage your community to gain an understanding of their concerns about the use of limited medical resources during disasters.
* Develop CSC guidelines that reflect your community's ethical values and priorities.

In other words, the development of these guidelines needs to be a community-based decision.

## Developing Community Crisis Standards of Care Guidelines

### Overview

This chapter will follow the same step-by-step processes used in the other chapters of the *Framework*. Like the previous chapter on essential healthcare services, you and your planning team will not play an active role in this process. Instead, you will act as neutral counselors who listen to the individuals or teams working through the process and offer support or guidance when appropriate. You and your planning team also will be the "timekeepers" who periodically check on the progress of those working through the process and prod them to move forward when necessary.

The process for developing CSC covers these steps:

* **Research previous work on CSC** – Members of the planning team need to gain an understanding of CSC development by reading available literature and researching what other communities have done with regard to the subject matter.
* **Develop a CSC Workgroup to provide guidance** – The CSC Workgroup comprises members of the community coalition as well as additional members of your community that you and your planning team will select. The CSC Workgroup will be responsible for providing guidance on the development of CSC and will represent the "community conscience" on these standards.
* **Meet with the CSC Workgroup to get their input** – Your CSC plan must reflect the ethical values and priorities of the community. This meeting is where you and your planning team determine these values and priorities.
* **Reconvene healthcare facility-based teams to discuss CSC** – The same facility-based teams that worked on essential healthcare services/functions in the previous chapter will reconvene to discuss CSC. Using guidance provided by the CSC Workgroup, these facility-based teams review their prioritized essential healthcare functions and determine how to maintain them when resources are scarce.
* **Present the community CSC plan to the CSC Workgroup** – The CSC Workgroup provided the guidance the facility-based teams used to develop the community standards of care during a crisis. As an act of inclusivity, this team should be briefed on the plan that was developed and be allowed to voice their opinions on this plan. The plan may be modified based on this feedback.
* **Present the community CSC plan to the community coalition** – The community coalition also will need to be briefed on the plan.
* **Share the plan with nearby communities or stakeholders** – Once the community CSC plan is finalized, it should be shared with nearby communities to keep them informed of how your community intends to deliver healthcare during a disaster. These standards also should be shared with state and local public health departments.

### Research Previous Work on Crisis Standards of Care

Before undertaking the task of helping your community to develop CSC, you and your planning team need to gain an understanding of the subject. This understanding will help you to accomplish the other tasks that follow.

The References and Resources section of this chapter contains a thorough list of documents and websites pertaining to CSC. Below are a few areas for you and your planning team to research:

* *Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response*, published by IOM in 2012
* *Crisis Standards of Care: A Toolkit for Indicators and Triggers*, published by IOM in 2013
* *Communities of Interest for Crisis Standards of Care and Allocation of Scarce Resources* website created by HHS
* Battlefield or casualty triage conducted by the U.S. Armed Forces
* Work by your state

### Develop a Crisis Standards of Care Workgroup to Provide Guidance

The voices of community members are important to the development of CSC because these standards of care must reflect the ethical values and priorities of the community about the use of scarce medical resources during disasters. You and your planning team will need to identify a group of community members representative of your community's demographic. Please note, though, that one preferred characteristic of the people in the workgroup is to have an understanding of emergency preparedness and response, particularly in the context of decision making. You and your planning team may need to provide just-in-time training for those who do not have this knowledge.

Subject matter expertise or occupations to consider for workgroup members are listed below:

* Clinical – A Chief Medical Officer or someone else familiar with healthcare facility business operations; also, someone familiar with clinical triage
* Legal – Medical practice lawyers or others familiar with medical regulations and laws
* Ethics – People versed in ethical considerations, such as members of local colleges/universities, hospital ethics committee members, or faith-based organization members
* Behavioral health – People who provide behavioral health services in your community
* Hospice/palliative care – People who work with the terminally ill
* Clergy – People who administer to the various religions in your community
* Unique populations – People who serve the unique populations of your community, such as pediatrics, geriatrics, and homeless communities
* Cultural – People who represent the various cultures in your community, such as Native Americans or Hispanics
* Community advocates – People representing faith-based organizations, businesses, or service organizations
* State and local government – People representing the public health or healthcare sector
* Healthcare-related associations – People who represent the healthcare partners in your community, such as a hospital association

Use *Worksheet 7.1 – CSC Workgroup Members* on the next page to identify your workgroup members.

**Worksheet 7.1 – CSC Workgroup Members**

**Instructions:** Use this worksheet to list individuals who will be members of your CSC workgroup.

| **Subject Matter Expertise** | **Name** | **Title** | **Contact Information** |
| --- | --- | --- | --- |
| Clinical | To be filled in | To be filled in | To be filled in |
| Clinical | To be filled in | To be filled in | To be filled in |
| Legal | To be filled in | To be filled in | To be filled in |
| Legal | To be filled in | To be filled in | To be filled in |
| Ethics | To be filled in | To be filled in | To be filled in |
| Ethics | To be filled in | To be filled in | To be filled in |
| Mental health | To be filled in | To be filled in | To be filled in |
| Mental health | To be filled in | To be filled in | To be filled in |
| Hospice/palliative care | To be filled in | To be filled in | To be filled in |
| Hospice/palliative care | To be filled in | To be filled in | To be filled in |
| Clergy | To be filled in | To be filled in | To be filled in |
| Clergy | To be filled in | To be filled in | To be filled in |
| Unique populations | To be filled in | To be filled in | To be filled in |
| Unique populations | To be filled in | To be filled in | To be filled in |
| Cultural | To be filled in | To be filled in | To be filled in |
| Cultural | To be filled in | To be filled in | To be filled in |
| Community advocates | To be filled in | To be filled in | To be filled in |
| Community advocates | To be filled in | To be filled in | To be filled in |
| State government | To be filled in | To be filled in | To be filled in |
| State government | To be filled in | To be filled in | To be filled in |
| Local government | To be filled in | To be filled in | To be filled in |
| Local government | To be filled in | To be filled in | To be filled in |
| Healthcare-related associations | To be filled in | To be filled in | To be filled in |
| Healthcare-related associations | To be filled in | To be filled in | To be filled in |
| Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | To be filled in | To be filled in | To be filled in |
| Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | To be filled in | To be filled in | To be filled in |
| Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | To be filled in | To be filled in | To be filled in |
| Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | To be filled in | To be filled in | To be filled in |
| Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | To be filled in | To be filled in | To be filled in |

### Meet with the Crisis Standards of Care Workgroup to Get Their Input

Now that you and your planning team have identified members of the CSC Workgroup, you need to contact them and ask them to meet with you to discuss CSC for the community during a disaster. More than likely, you will need to meet with them more than once to accomplish the following tasks:

* Inform members of
  + The work that has been done in the *Framework* to date.
  + The two or three scenarios that have been identified as likely to impact the community.
  + The concept of CSC and why these standards are necessary.
* Ensure broad participation in the process and ensure that vulnerable, hard-to-reach populations are represented.
* Increase awareness and understanding about the development of a CSC plan or review of an existing draft plan.
* Gather input on the ethical considerations and priorities that should be the basis of a CSC plan or that are included in a draft CSC plan under review.

When approaching potential CSC Workgroup members, you need to assure them that they will have a chance to share their opinions and concerns and not just hear from the "experts." Also, let them know that all participants will be encouraged to consider what principles should guide CSC and to hear what others think.

Please note that the goal of the CSC Workgroup meeting is not to reach consensus or agreement or to take a vote. CSC planning raises challenging issues over which reasonable people will disagree. Instead, the opinions and concerns raised in this meeting will ensure that any final CSC guidelines accurately reflect, as much as possible, the views of the community about what is as fair and ethical as possible. Furthermore, these opinions and concerns will help public health officials understand what values are important to individuals and to the entire group, and on what issues people differ.

The expected outcomes of the CSC Workgroup meeting are twofold:

* CSC Workgroup members should be well informed of the CSC process. They should be able to
* Explain the concept of CSC and why these standards are necessary.
* Identify ethical considerations and a framework for decision making.
* Understand the difficulty of making medical decisions in this context, and clarify the values and principles that inform their decisions.
* Identify areas of general agreement and disagreement regarding values and principles.
* Understand how the results of this meeting will inform and contribute to community CSC during a crisis.
* You and your planning team should come away with
  + A list of opinions or concerns expressed by the CSC Workgroup with regard to allocation of scarce resources.
  + A list of ethical considerations (see the text box on the next page) or a framework[[12]](#footnote-12) that should be followed as facility-based teams get together to develop CSC.

**Ethical Considerations**

**(From Crisis Standards of care: A Systems Framework for Catastrophic Disaster Response)**

| **Consideration** | **Description** |
| --- | --- |
| Fairness | An ethical policy does not require that all persons be treated in an identical fashion, but it does require that differences in treatment be based on appropriate differences among individuals. If particular groups receive favorable treatment, such as access to vaccines, this priority should stem from such relevant factors as greater exposure or vulnerability and/or promote important community goals, such as helping first responders or other key personnel stay at work. Policies should account for the needs of the most at risk and support the equitable and just distribution of scarce goods and resources. |
| Duty to Care | Health professionals, by virtue of their training, have an obligation to provide care, especially during a disaster. However, they are educated to care for individuals rather than for populations and thus may need to adjust the goals of care as dictated by the situation. Recognizing that scarce resources may restrict treatment choices, clinicians must not abandon patients, and patients should not fear abandonment, when a catastrophic disaster forces a shift to CSC. Ethical elements of disaster policies should support the professional's duty to care. For instance, policies should separate triage responsibilities from the provision of direct care whenever possible. Those caring for individual patients should work to improve those patients' health and not simultaneously make decisions intended to benefit the group rather than the individual patient. |
| Duty to Steward Resources | Healthcare institutions, public health officials, physicians, and other healthcare professionals have a duty to steward scarce resources. The context of disaster, by definition, creates scarcity, since demand overwhelms supply. Ill-considered and wasteful use of limited medicines or other critical material may result in unnecessary deaths. The goal of preserving lives requires that professionals accept the responsibility to plan and to use resources prudently. As scarcity increases, balancing the obligation to honor the duties of care and stewardship will require more difficult choices. |
| Transparency | A public engagement process is crucial for drafting ethical policies that reflect a community's values and merit its trust. Officials should communicate clearly those plans currently in place, and should also work with the community to ensure that policies reflect local values and preferences. An inclusive process will incorporate input from professional groups and other organized stakeholders, as well as from those who are less well represented in the political process but may be greatly affected by policy choices. An ethical process will likely be iterative, characterized by responsible planning, transparency in underlying values and priorities, robust efforts toward public engagement, response to public comment, commitment to ongoing revision of policy based on dialogue and data, and accountability for support and Implementation. |
| Consistency | Consistency in treating like groups alike is one way of promoting fairness. The public may feel that scarce resources have not been allocated fairly if patients at different hospitals in the same affected area receive vastly different levels of care. At the same time, however, efforts to keep policies consistent across institutions or geographic regions may limit local flexibility in implementing guidance. |
| Proportionality | Disaster policies may require burdensome recommendations, including social distancing, school closures, or quarantine. These burdens should be commensurate with the scale of the disaster and offer clear benefits in proportion to the burden. |
| Accountability | Effective disaster planning requires that individuals at all levels of the health care system (public and private sectors) accept and act upon appropriate responsibilities. Government entities are accountable to their communities for planning and implementing policies related to disasters. Accountability before, during, and after a disaster is key to building trust. |

Use *Worksheet 7.2 – CSC Workgroup Outcomes* below to capture opinions and concerns expressed in the CSC Workgroup meeting.

**Worksheet 7.2 – CSC Workgroup Outcomes**

**Instructions:** List the opinions/concerns about CSC expressed during the CSC Workgroup meeting and by whom it was expressed. In the space provided, also list the rationale for this opinion/concern. Next, list the ethical considerations the workgroup determined should guide the development of CSC for the community.

| **Opinion/Concern** | **Expressed By** | **Rationale** |
| --- | --- | --- |
| To be filled in | To be filled in | To be filled in |
| To be filled in | To be filled in | To be filled in |
| To be filled in | To be filled in | To be filled in |

| **Ethical Considerations** |
| --- |
| To be filled in |
| To be filled in |
| To be filled in |

After the CSC Workgroup meeting, compile the opinions and concerns captured in *Worksheet 7.2* into similar categories for presentation to your community's facility-based teams.

### Reconvene Facility-Based Teams to Discuss Crisis Standards of Care

After you have collected the above information during your CSC Workgroup meeting, you and your planning team need to reconvene the healthcare facility-based teams that you created in the previous chapter on essential healthcare services (Chapter 6). You need to make sure that each facility-based team has appropriate representation to undertake the task of discussing CSC, such as people with knowledge of ethics and legal/regulatory requirements and liaisons from community-based and faith-based organizations.

You and your planning team can meet with these facility-based teams in several small meetings or in one large, group meeting. The purpose of this meeting is to "launch" them into developing CSC. To do this, you will need to provide them with an overview of CSC and the research you and your planning team conducted on the subject. (You should provide a list of these resources for the facility-based teams to consult as they develop CSC.)

The key steps you want your facility-based teams to follow are

1. Review the resources provided by the planning team to fully understand the concept of CSC and the work others have done on the subject.
2. Review past disasters, if any, in your community or similar communities and the lessons learned with regard to the allocation of scarce resources.
3. Review prioritized essential healthcare functions (Chapter 6) and determine how to maintain them with scarce resources.
4. Compile the information you collected.
5. Brief healthcare facility/system leadership on your CSC work.
6. Reconvene your facility-based team to discuss leadership feedback.
7. Reconvene all facility-based teams to discuss CSC planning.

**Note:** At this point, most of the remaining work on crisis standards of care will be done by facility-based team members. You and your planning team will take on the role of neutral counselors and timekeepers as explained in the Overview on page 185. Therefore, the discussion in the remaining subsections of this section will be directed to these team members (i.e., the use of the third person "you" refers to these team members).

#### Research Crisis Standards of Care

The planning team has researched CSC and provided you with a list of the resources they identified. You and your facility-based team members should thoroughly review these resources so that you fully understand the concept of CSC and how other communities, counties, your state, or other states have worked through the process. In particular, you should review the reports published by IOM in 2009, 2012, and 2013.

#### Review Past Disasters in the Community

If your community experienced a disaster in the recent past, you should review if and how scarce resources were allocated. In particular, you want to review the lessons learned from the disaster in terms of how community members viewed the allocation of these scarce resources and the decision-making process used to determine how to allocate them.

#### Review Prioritized Essential Healthcare Functions and Determine How to Maintain Them with Scarce Resources

Your team identified and prioritized essential healthcare functions for your facility in Chapter 6. In essence, what you determined in that chapter was the healthcare functions your facility would maintain during heavy medical surge situations resulting from the scenarios identified as likely to impact your community. Those prioritized healthcare functions still apply in this chapter, but the difference here is that your team now has to determine how to maintain these functions in the face of even heavier surge and with scarce resources.

Some of the functions you prioritized in Chapter 6 were given medium and low priorities using the tier-rating system you developed (see page 157), and probably would not be offered in a heavy surge situation requiring the implementation of CSC. Therefore, for this task, focus only on essential functions that were given a high priority.

Here are some discussion points for you and your team members to consider as you review your list of essential healthcare functions for your facility:

**Human Resources**

What strategies can you implement to augment the human resources necessary to maintain this function? Examples of strategies are cross training existing staff to perform tasks they normally do not perform or using family members to provide basic patient needs. Another strategy is to use more experienced clinicians to provide oversight of junior staff who are less familiar with a procedure.

**Physical Space**

If applicable, what other space in your facility can be used to maintain this function? Examples are corridors and meeting rooms.

**Equipment**

What strategies can be implemented to augment the equipment necessary to maintain this function? For example, you may decide to reuse equipment that you normally would not have reused.

**Supplies**

What strategies can be implemented to augment the supplies necessary to maintain this function? As with equipment, you may decide that you have to reuse some supplies, such as masks.

**Laws and Regulations**

What laws or regulations need to be relaxed or waived in order for you to implement the above strategies? Many laws and regulations are in place to limit what a facility can and cannot do with regard to the provision of healthcare. You need to know what they are so that you stay within the confines of applicable law.[[13]](#footnote-13)

**Authority**

What external authorities have the power to relax or waive laws or regulations? Who within the facility has the power to relax or waive these laws or regulations? You need to know who has the authority to allow you to change your facility's standards of care.

**Allocation of Scarce Resources**

For this essential healthcare function, what ethical considerations will you use to determine who gets scarce resources and who does not? Also, who within your facility has the authority to make this determination[[14]](#footnote-14)? The answers to these questions can be found in the information coming out of the CSC Workgroup meeting.

**Trigger(s)**

For this essential healthcare function, what circumstances would transition your healthcare facility into implementing strategies with regard to staff, space, or equipment/supplies or with regard to allocating scarce resources? You need to determine the circumstances that would trigger[[15]](#footnote-15) your facility into altering its standards of care.

**Coordination**

What core[[16]](#footnote-16) and noncore[[17]](#footnote-17) partners, if any, will you need to coordinate with to implement your strategies with regard to staff, space, or equipment/supplies or with regard to allocating scarce resources? You may need to coordinate with others, such as vendors or other healthcare facilities, to implement your strategies.

**Communication**

How will the relaxation or waiver of laws or regulations be communicated to facility staff? For this essential healthcare function, how will the plan for the allocation of scarce resources be communicated to patients? How will the plan be communicated to the community? Communication is an important aspect of planning. You need to determine whom you will tell about your plan, when you will tell them, and what you will tell them.

**Issues**

What issues do you foresee with regard to implementing your strategies for staff, space, or equipment/supplies or allocating scarce resources? How can you address these issues? It is important to look ahead and plan to deal with issues that may arise.

Use *Worksheet 7.3 – Review Guide for Essential Healthcare Functions* on the next page to capture the answers to these questions.

**Worksheet 7.3 – Review Guide for Essential Healthcare Functions**

**Instructions:** Write in the scenario likely to impact your community below. Then write in the sector, facility name, and essential healthcare function for that facility. Next, complete each information box in this worksheet with the requisite information.

**Scenario:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Sector:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Facility Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Essential Healthcare Function:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Human Resources**

| **Question** |
| --- |
| What strategies can be implemented to augment the human resources necessary to maintain this function? |

**Space**

| **Question** |
| --- |
| If applicable, what other space in the facility can be utilized to maintain this function? |

**Equipment and Supplies**

| **Questions** |
| --- |
| What strategies can be implemented to augment the equipment necessary to maintain this function? |
| What strategies can be implemented to augment the supplies necessary to maintain this function? |

**Laws and Regulations**

| **Questions** |
| --- |
| What laws or regulations need to be relaxed or waived in order for you to implement the above strategies? |
| Who has the power to relax or waive these laws or regulations? |
| What is the process for getting them relaxed or waived? |

**Allocation of Scarce Resources**

| **Questions** |
| --- |
| For this essential healthcare function, what ethical considerations will you use to determine who gets scarce resources and who does not? |
| For this essential healthcare function, who within your facility has the authority to make this determination? |

**Trigger(s)**

| **Question** |
| --- |
| For this essential healthcare function, what circumstances would transition your healthcare facility into implementing strategies with regard to staff, space, or equipment/supplies or with regard to allocating scarce resources? |

**Coordination**

| **Questions** |
| --- |
| What core partners, if any, will you need to coordinate with to implement your strategies with regard to staff, space, or equipment/supplies or with regard to allocating scarce resources? |
| How will you coordinate with them? |
| What noncore partners, if any, will you need to coordinate with to implement your strategies with regard to staff, space, or equipment/supplies or with regard to allocating scarce resources? |
| How will you coordinate with them? |

**Communication**

| **Questions** |
| --- |
| How will the relaxation or waiver of laws or regulations be communicated to facility staff? |
| For this essential healthcare function, how will the plan for the allocation of scarce resources be communicated to patients? |
| For this essential healthcare function, how will the plan for the allocation of scarce resources be communicated to the community? |

**Issues**

| **Questions** |
| --- |
| What issues do you foresee with regard to implementing your strategies for staff, space, or equipment/supplies or allocating scarce resources for this essential healthcare function? |
| How can you address these issues? |

| **Notes** |
| --- |
| To be filled in |

#### Compile the Information You Collected

The information you collected in *Worksheet 7.3* gives you the basic elements needed to develop a CSC plan for your facility. Use *Worksheet 7.4 – Facility-Level CSC Plan Template* on the next page to compile the information from *Worksheet 7.3*.

**Worksheet 7.4 – Facility-Level CSC Plan Template**

Instructions: Complete a template for each scenario identified as likely to impact your community. Write in the scenario identified as likely to impact your community below. Then write in the sector and facility names. Next, complete each information box in this worksheet with the requisite information.

**Scenario:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Sector:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Facility Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

| **Overview** |
| --- |
| Description of plan and its purpose |
| List of essential healthcare functions to be maintained at the facility during a heavy-surge event and why they will be maintained |
| List of ethical considerations that will be used to determine how scarce resources will be allocated  Identification of who has the authority to determine that these considerations will be used during a heavy-surge event |
| List of laws/regulations that must be relaxed or waived to implement CSC   * For each law/regulation, identify who has the authority to relax or waive it * For each law/regulation, identify the process for relaxing or waiving it * For each law/regulation, identify how the relaxation or waiver will be communicated to facility staff * For each law/regulation, identify how the relaxation or waiver will be communicated to patients |

| **Essential Functions**  **(Complete this section for each essential function)** |
| --- |
| Description of strategy for augmenting human resources for this function |
| Description of strategy for augmenting space for this function |
| Description of strategy for augmenting equipment for this function |
| Description of strategy for augmenting supplies for this function |
| Description of the circumstances (i.e., triggers) that would transition your healthcare facility into implementing the above strategies |
| Description of the core partners with which your facility would coordinate to implement the above strategies and how you would coordinate with them |
| Description of the noncore partners with which your facility would coordinate to implement the above strategies and how you would coordinate with them |
| Description of any issues you foresee with regard to implementing the above strategies and how you plan to address them |

#### Brief Healthcare Facility/System Leadership on Your CSC Work

Now that you have determined which healthcare functions are essential to maintain during a heavy-surge event requiring implementation of CSC, the next prudent step is to brief the leadership of your healthcare facility/system on your work in order to get their approval. Before you meet with them, you will need to determine how you will present your findings. Below are a few agenda items/talking points to help you prepare for the meeting:

* Describe the purpose of the task

Describe the work of the CSC Workgroup, particularly the ethical considerations that were identified and guided your CSC work

* Describe these processes:
  + Researching CSC
  + Reviewing past disasters in the community
  + Reviewing prioritized essential healthcare functions
  + Determining how to maintain these functions with scarce resources
* Present your CSC plan, going over each essential function one at a time and describing your strategies for maintaining that function during a heavy-surge event
* Provide time for questions and discussion

You may find that your leadership disagrees with your strategies or other parts of the plan. Until you have leadership approval, you cannot and should not proceed any further with the tasks outlined in this chapter.

#### Reconvene Your Facility-Based Team to Discuss Leadership Feedback

Once you have leadership approval, you should regroup with your facility-based team to discuss the feedback you received from your leadership. Make adjustments to your plan as necessary.

**Note:** The planning team will be responsible for completing the remaining tasks in this chapter.

#### Reconvene All Facility-Based Teams to Discuss CSC Planning

You and your planning team should reconvene all facility-based teams, either in person or by telephone, to discuss individual facility CSC plans and determine

* Common issues that have arisen as a result of the planning effort or discussions with leadership
* Other ethical considerations that may have been identified
* Concerns facility-based teams may have with implementing CSC during a heavy-surge event
* Scenario-specific situations that have not been addressed, such as a tornado striking the community in the midst of a severe influenza pandemic (i.e., two planning scenarios occurring at the same time)

Planning team members should document discussions and compile them into themes as shown above for presentation to the community coalition.

### Present Findings to the Community Coalition and the Crisis Standards of Care Workgroup

The work done by the planning team, the CSC Workgroup, and the facility-based teams is now ready to be shared with the community coalition and the CSC Workgroup for review and input. Agenda items to cover with the coalition include

* A review of the research done on CSC and the lessons learned
* A presentation on how the CSC Workgroup was created and who is included on the team
* Presentation and discussion of the opinions, concerns, and recommendations made by the CSC Workgroup
* Review and discussion of the individual facility-based CSC plans
* Outcomes of the meeting with facility-based teams
* Discussion of next steps, including ultimately developing a community-based CSC plan

### Develop a Community Crisis Standards of Care Plan

Your discussion with the coalition and CSC Workgroup will be the beginning of the planning team's task to develop a community-based CSC plan, which is beyond the scope of the *Framework*. However, the authors of the *Framework* want to underscore the importance of having a unified, community CSC plan. IOM stated it appropriately, saying

*Without a plan and good communication, different providers and hospitals may be functioning with different levels of resources and make very different decisions. This could lead to inconsistent levels of care in the community from hospital to hospital, which would be not only confusing, but unfair. Crisis standards of care require that medical providers, facilities, public health agencies, and public safety agencies have a plan to work together to do the most they can with the resources available.[[18]](#footnote-18)*

### Share Your Crisis Standards of Care Work

The "Before You Begin" section of this chapter contained conclusions from the NLPI CSC Project's interviews with representatives of the public health and healthcare sectors. Two conclusions should be mentioned again here:

* Developing a CSC plan is an extremely complex process.
* No "benchmark" or "gold standard" currently exists.

Other communities nearby to yours may not have undertaken the task of developing CSC or they may just be getting started on the task. Sharing your work with them and also discussing your approach will be beneficial to them and make the task easier to accomplish. You also should share your work with other stakeholders, such as your state public health department, to keep them informed of your planning efforts.

## Self-Evaluation Checklist

**Chapter 7 – Planning for Heavy Surge, Part 3, Self-Evaluation Checklist**

**Instructions:** Use this checklist to make sure you have completed all the tasks for planning for crisis standards of care.

**CSC Research**

| **Task** | **Complete?** |
| --- | --- |
| Planning team members have researched published articles and documents on CSC. | 🞏 |
| Planning team members have researched work done by other communities, counties, and states on CSC. | 🞏 |
| Planning team members fully understand the concept of CSC. | 🞏 |

**CSC Workgroup**

| **Task** | **Complete?** |
| --- | --- |
| Planning team members have identified potential members of a CSC Workgroup. (*Worksheet 7.1*) | 🞏 |
| Planning team members have met with the CSC Workgroup to explain the purpose of the CSC work being done in the community. | 🞏 |
| Members of the CSC Workgroup have provided a list of opinions or concerns with regard to allocation of scarce resources. (*Worksheet 7.2*) | 🞏 |
| Members of the CSC Workgroup have provided a list of ethical considerations that should guide the allocation of scarce resources. (*Worksheet 7.2*) | 🞏 |

**Facility-Based Teams**

| **Task** | **Complete?** |
| --- | --- |
| Facility-based teams have been reconvened and explained their role in developing CSC for the community. | 🞏 |
| Facility-based teams fully understand the concept of CSC. | 🞏 |
| Facility-based teams have reviewed past disasters in the community and lessons learned from these disasters in terms of allocating scarce resources. | 🞏 |
| Facility-based teams have reviewed prioritized essential healthcare functions and have determined how to maintain them with scarce resources. (*Worksheet 7.3*) | 🞏 |
| Facility-based teams have compiled the information they collected. (*Worksheet 7.4*) | 🞏 |
| Facility-based teams have briefed their healthcare facility/system leadership on their CSC work. | 🞏 |
| Facility-based teams have reconvened to discuss leadership feedback. | 🞏 |
| All facility-based teams have reconvened with each other to discuss CSC planning. | 🞏 |

**Community Coalition**

| **Task** | **Complete?** |
| --- | --- |
| The work done by the planning team, the CSC Workgroup, and the facility-based teams has been shared with the community coalition and the CSC Workgroup. | 🞏 |
| The community coalition has laid out a roadmap for development of a unified, community-based CSC plan. | 🞏 |
| The work done by the planning team, the CSC Workgroup, and the facility-based teams has been shared with other communities. | 🞏 |
| The work done by the planning team, the CSC Workgroup, and the facility-based teams has been shared with other stakeholders. | 🞏 |

## Conclusion

Undoubtedly, developing CSC for your community has been the most difficult task you and your planning team have undertaken in the *Framework*. Fortunately, you have taken a whole-community approach by involving members of your community who are not directly involved in the delivery of healthcare to provide input and perspective on CSC. Hopefully these standards will never need to be implemented, but you have planned for and are prepared to respond to worst-case scenarios.

This chapter represents the next-to-last chapter in the *Framework*. If you and your planning team are satisfied that your work on CSC for your community is complete, proceed to the final chapter in the *Framework* to wrap up all of the work you have done thus far.

## References and Resources

**Adapting Standards of Care under Extreme Conditions: Guidance for Professionals During Disasters, Pandemics, and Other Extreme Emergencies**

<http://nursingworld.org/MainMenuCategories/WorkplaceSafety/Healthy-Work-Environment/DPR/TheLawEthicsofDisasterResponse/AdaptingStandardsofCare.pdf>

The American Nurses Association released this document in March 2008. The document identifies significant policy questions to be addressed and suggests strategies to guide health professionals, institutions, and policy makers in such challenging situations.

**Communities of Interest for Crisis Standards of Care and Allocation of Scarce Resources**

<http://www.phe.gov/coi/Pages/default.aspx>

The HHS Office of the Assistant Secretary for Preparedness and Response (ASPR) developed this website to better disseminate information and manage documents; share promising practices and ideas; and provide a workspace where users from inside and outside HHS/ASPR can come together to share documents and ideas regarding the CSC and allocation of scarce resources.

**Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response**

<http://www.iom.edu/reports/2012/crisis-standards-of-care-a-systems-framework-for-catastrophic-disaster-response.aspx>

In this 2012 report, IOM examines the effect of its 2009 report, and develops vital templates to guide the efforts of professionals and organizations responsible for CSC planning and implementation. The report provides a foundation of underlying principles, steps needed to achieve implementation, and the pillars of the emergency response system, each separate and yet together upholding the jurisdictions that have the overarching authority for ensuring that CSC planning and response occurs.

**Crisis Standards of Care: A Toolkit for Indicators and Triggers**

<http://www.iom.edu/Reports/2013/Crisis-Standards-of-Care-A-Toolkit-for-Indicators-and-Triggers.aspx>

This 2013 IOM report provides resources that may be used by federal, state, and local governments; public health agencies; emergency medical services; emergency management and public safety agencies; hospitals; and out-of-hospital healthcare organizations and agencies. This report examines indicators and triggers that guide the implementation of CSC and provides a discussion toolkit to help stakeholders establish indicators and triggers for their own communities.

**Crisis Standards of Care: Where Do We Begin?**

<http://www.phe.gov/coi/Documents/Crisis%20Standards%20of%20Care%20-%20Where%20do%20we%20begin.pdf>

This presentation on the Harvard National Preparedness Leadership Initiative Crisis Standards of Care Project was given in January 2013. It highlights the activities undertaken as part of the project and the lessons learned on CSC planning.

**Crisis Standards of Care: Summary of a Workshop Series**

<http://www.iom.edu/reports/2009/crisis-standards-of-care-summary-of-a-workshop-series.aspx>

The IOM Forum on Medical and Public Health Preparedness for Catastrophic Events hosted a series of regional workshops in Irvine, California; Orlando, Florida; New York, New York; and Chicago, Illinois, between March and May of 2009. The goal of each workshop was to learn from the work already being done to develop state, regional, and local CSC policies and protocols; to identify areas requiring further development, research, and consideration; and to facilitate communication and collaboration among neighboring jurisdictions. This report summarizes the discussions that took place at all four workshops.

**Engaging the Public in Critical Disaster Planning and Decision Making – Workshop Summary**

<http://www.iom.edu/Reports/2013/Engaging-the-Public-in-Critical-Disaster-Planning-and-Decision-Making.aspx>

The IOM Forum on Medical and Public Health Preparedness for Catastrophic Events sponsored an interactive workshop at the National Association of County and City Health Officials Public Health (NACCHO) Preparedness Summit, held March 12-15, 2013, in Atlanta, Georgia. The workshop aimed to provide practitioners with guidance and key principles of public engagement. It examined theories and practices of public engagement, explored challenges and lessons learned, and included sample public engagement exercises. This document summarizes the workshop.

**Ethical Considerations: Care of the Critically Ill and Injured During Pandemics and Disasters: CHEST Consensus Statement**

<http://journal.publications.chestnet.org/issue.aspx?journalid=99&issueid=930941>

Mass critical care entails time-sensitive decisions and changes in the standard of care that it is possible to deliver. These circumstances increase provider uncertainty as well as patients' vulnerability and may, therefore, jeopardize disciplined, ethical decision-making. Planning for pandemics and disasters should incorporate ethics guidance to support providers who may otherwise make ad hoc patient care decisions that overstep ethical boundaries. This article by the American College of Chest Physicians Task Force for Mass Critical Care provides consensus-developed suggestions about ethical challenges in caring for the critically ill or injured during pandemics or disasters. The suggestions in this article are important for all of those involved in any pandemic or disaster with multiple critically ill or injured patients, including front-line clinicians, hospital administrators, and public health or government officials.

**Ethical Issues in Pediatric Emergency Mass Critical Care**

<http://journals.lww.com/pccmjournal/toc/2011/11001>

As a result of recent events, including natural disasters and pandemics, mass critical care planning has become a priority. In general, planning involves limiting the scope of disasters, increasing the supply of medical resources, and allocating scarce resources. Entities at varying levels have articulated ethical frameworks to inform policy development. In spite of this increased focus, children have received limited attention. Children require special attention because of their unique vulnerabilities and needs. This article by the Task Force for Mass Critical Care addresses this topic.

**Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations, A Letter Report**

<http://www.iom.edu/Reports/2009/DisasterCareStandards.aspx>

At the request of HHS/ASPR, IOM convened a committee in 2009 to develop guidance for CSC that should apply in disaster situations—both naturally occurring and manmade—under scarce resource conditions. This report focuses on articulating current concepts and guidance that can assist state and local public health officials, healthcare facilities, and professionals in the development of systematic and comprehensive policies and protocols for CSC in disasters where resources are scarce. In addition, the committee provides guidance to clinicians, healthcare institutions, and state and local public health officials for how CSC should be implemented in a disaster situation.

**Legal Considerations During Pediatric Emergency Mass Critical Care Events**

<http://journals.lww.com/pccmjournal/toc/2011/11001>

Liability is a significant concern for healthcare practitioners and facilities during pediatric emergency mass critical care that necessitates a shift to crisis standards of care. This article by the Task Force for Mass Critical Care describes the legal considerations inherent in planning for and responding to catastrophic health emergencies and makes recommendations for pediatric emergency mass critical care legal preparedness.

**Legal Preparedness: Care of the Critically Ill and Injured During Pandemics and Disasters: CHEST Consensus Statement**

<http://journal.publications.chestnet.org/issue.aspx?journalid=99&issueid=930941>

Significant legal challenges arise when health-care resources become scarce and population-based approaches to care are implemented during severe disasters and pandemics. Recent emergencies highlight the serious legal, economic, and health impacts that can be associated with responding in austere conditions and the critical importance of comprehensive, collaborative health response system planning. This article discusses legal suggestions developed by the American College of Chest Physicians Task Force for Mass Critical Care to support planning and response efforts for mass casualty incidents involving critically ill or injured patients. The suggestions in this chapter are important for all of those involved in a pandemic or disaster with multiple critically ill or injured patients, including front-line clinicians, hospital administrators, and public health or government officials.

**Surge Capacity Principles: Care of the Critically Ill and Injured During Pandemics and Disasters: CHEST Consensus Statement**

<http://journal.publications.chestnet.org/issue.aspx?journalid=99&issueid=930941>

This article by the American College of Chest Physicians Task Force for Mass Critical Care provides consensus suggestions for expanding critical care surge capacity and extension of critical care service capabilities in disasters or pandemics. It focuses on the principles and frameworks for expansion of intensive care services in hospitals in the developed world. A companion article addresses surge logistics, those elements that provide the capability to deliver mass critical care in disaster events. The suggestions in this article are important for all who are involved in large-scale disasters or pandemics with injured or critically ill multiple patients, including front-line clinicians, hospital administrators, and public health or government officials.

**Surge Capacity Logistics: Care of the Critically Ill and Injured During Pandemics and Disasters: CHEST Consensus Statement**

<http://journal.publications.chestnet.org/issue.aspx?journalid=99&issueid=930941>

Successful management of a pandemic or disaster requires implementation of preexisting plans to minimize loss of life and maintain control. Managing the expected surges in intensive care capacity requires strategic planning from a systems perspective and includes focused intensive care abilities and requirements as well as all individuals and organizations involved in hospital and regional planning. The suggestions in this article by the American College of Chest Physicians Task Force for Mass Critical Care are important for all involved in a large-scale disaster or pandemic, including front-line clinicians, hospital administrators, and public health or government officials. Specifically, this article focuses on surge logistics—those elements that provide the capability to deliver mass critical care.

**Triage: Care of the Critically Ill and Injured During Pandemics and Disasters: CHEST Consensus Statement**

<http://journal.publications.chestnet.org/issue.aspx?journalid=99&issueid=930941>

Pandemics and disasters can result in large numbers of critically ill or injured patients who may overwhelm available resources despite implementing surge-response strategies. If this occurs, critical care triage, which includes both prioritizing patients for care and rationing scarce resources, will be required. The suggestions in this chapter by the American College of Chest Physicians Task Force for Mass Critical Care are important for all who are involved in large-scale pandemics or disasters with multiple critically ill or injured patients, including front-line clinicians, hospital administrators, and public health or government officials.

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1. *Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response*, Institute of Medicine, 2012. [↑](#footnote-ref-1)
2. The definition of heavy surge in this chapter aligns with IOM's term, *crisis capacity*, in which adaptive spaces, staff, and supplies are not consistent with usual standards of care, but provide sufficiency of care in the setting of a catastrophic disaster (i.e., provide the best possible care to patients given the circumstances and resources available). (See <http://www.ncbi.nlm.nih.gov/books/NBK32751/>) [↑](#footnote-ref-2)
3. *Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response*, Institute of Medicine, 2012. [↑](#footnote-ref-3)
4. *Crisis Standards of Care: A Toolkit for Indicators and Triggers*, Institute of Medicine, 2013. [↑](#footnote-ref-4)
5. From *Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response*, Institute of Medicine, 2012. [↑](#footnote-ref-5)
6. Ibid [↑](#footnote-ref-6)
7. From *Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies*, U.S. Department of Health and Human Services, September 2007. [↑](#footnote-ref-7)
8. From *Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies*, U.S. Department of Health and Human Services, September 2007. [↑](#footnote-ref-8)
9. Ibid [↑](#footnote-ref-9)
10. The National Preparedness Leadership Initiative (NPLI) is a joint venture of the Harvard School of Public Health's Division of Policy Translation and Leadership Development and the Harvard Kennedy School's Center for Public Leadership. It works in collaboration with key government agencies to ensure today's unprecedented challenges are met with uncommon leadership from federal, state, and local officials and encourages connectivity across public, private, and nonprofit sectors. [↑](#footnote-ref-10)
11. "Crisis Standards of Care: Where Do We Begin?", Presentation of Harvard National Preparedness Leadership Initiative CSC Project and Tool Demonstration, January 2013. [↑](#footnote-ref-11)
12. See *Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response*, Institute of Medicine, 2012, page 1-72, Ethical Framework, for information on this topic. [↑](#footnote-ref-12)
13. See *Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response*, Institute of Medicine, 2012, page 1-55, Legal Issue in Emergencies for information on this topic. [↑](#footnote-ref-13)
14. Clinicians providing direct care should not be a part of a decision team as this represents a clear conflict of interest. [↑](#footnote-ref-14)
15. *Crisis Standards of Care: A Toolkit for Indicators and Triggers* (Institute of Medicine, 2013) provides information on the subject of triggers. [↑](#footnote-ref-15)
16. Core partners are the sectors (i.e., public health, healthcare) and their subsectors (e.g., health departments, hospitals) that play an active role in the day-to-day delivery of healthcare. [↑](#footnote-ref-16)
17. Noncore partners are the sectors (i.e., emergency management, government, support services) and their subsectors (e.g., law enforcement, mayor's office, faith-based organizations, community service organizations) that do not play an active role in the day-to-day delivery of healthcare. [↑](#footnote-ref-17)
18. From *Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response*, Institute of Medicine, 2012. [↑](#footnote-ref-18)