With every area of the United States at risk for at least some type of catastrophic disaster and with healthcare systems running more and more on “just-in-time” supply and staffing strategies, it is critical to plan for situations when healthcare demand exceeds supply.

Crisis standards of care (CSC) planning, initially conceived during the H1N1 pandemic, has matured to become an extension of surge capacity planning. CSC planning can help healthcare providers “do the greatest good for the greatest number” when conventional and contingency strategies have failed, and remaining strategies must prioritize the potential health benefits of the entire community over those of the individual patient.

One of the primary goals of CSC planning is to stay out of crisis by using incident management to move to a proactive (rather than a reactive) approach as early as possible during an event.

Emphasis should be placed on leveraging the resources available across healthcare coalitions and/ or health systems in order to try to balance demand by moving patients where they can be cared for, adapting care, and bringing in resources, among other tactics and techniques.

As many states and healthcare entities grapple with these issues, and states are in the process of completing or writing state plans in order to meet the ASPR National Healthcare Preparedness Program (NHPP) grant requirements, several common issues have emerged which are worth drawing attention to:

“Paper Plans” – Since an integrated approach between medical care, public health, emergency management, and emergency medical services (EMS) is critical to the success of crisis care planning, it is unfortunate that in many states and healthcare coalitions the writing of the plan remains the end goal and involving clinicians, residents, and political officials in the process of planning for CSC receives less attention. CSC requires not a single government-level plan, but the integration of crisis planning principles into existing response plans (e.g., a crisis annex) at the facility, coalition, regional, state, and federal levels. Stakeholders at each level must understand their role, and the inter-dependent nature of the actions taken (for example, implementing triage protocols at a 911 dispatch center and changing transport criteria may require multiple actions by the EMS medical
director, jurisdictional government, and state government/EMS board involvement to adjust protocols and regulations in order to facilitate the EMS strategies).

**Proportionality** – Plans should assure flexibility so that access to care is not limited more than required by the situation. Operating under “crisis conditions” represents a dynamic process, and limits placed today may not be relevant tomorrow.

The responses and response structures should be able to adapt based upon good situational awareness with regards to the availability and access to specific resources. For example, prioritizing certain groups and individuals for resources in short supply (e.g., prioritizing high-risk patients for limited influenza vaccine) may be appropriate at certain times, but not others. Excluding individuals from receiving care when resources are currently available to them, however, is not appropriate. Being able to differentiate when such plans need to be implemented is an important part of this planning effort.

**Prognosis** – In 2014, the American College of Chest Physicians published the Consensus Statement Care of the Critically Ill and Injured During Disasters and Pandemics, which is required reading for most hospital providers and planners. The suggestions therein modify critical care triage based on experiences from the 2009 pandemic that demonstrated the fallibility of existing ventilator triage decision support tools. None of the tools used to predict death or other outcomes were intended to predict how an individual patient will do. Therefore, though the Sequential Organ Failure Assessment (SOFA) score and other prognostic indicators may have value when comparing patients who need a resource, they should generally not be used to exclude a patient based on a set threshold. Clinical tools (such as the Minnesota Department of Health Strategies for Scarce Resource Situations) can still be very helpful, but they should always be modified as needed to reflect the specific event.

**Process** – While many of the resource shortfalls that may occur in a disaster can be anticipated, the successful implementation of strategies depends on having the process for decision making (who, what, where, when, how) described in the emergency plan. The plan should describe the role of the facility/agency, how crisis decisions will be made, which subject matter experts will be involved (and how and when), policy development, integration with healthcare coalition and health system activities, and how the transitions from conventional, to contingency, and to crisis (and back) will be managed. Although triage decisionmaking processes are a part of this, planners and providers should remember that the need to triage specific critical care resources will be a rare situation. Overwhelming outpatient volumes, and increased demand for specific pharmaceuticals, personal protective equipment, or staff are far more likely to occur and should be the focus of the majority of planning and discussions.

**Practice** – CSC plans are developed through both “bottomup” (facility) and “top-down” (state public health) efforts to document process. These plans, like all others, must be tested. Though it is very difficult to conduct fullscale exercises of CSC plans, they must be subject to robust discussions, workshops, and tabletop exercises at all levels to assure that
the healthcare administrators and providers are comfortable with the facility plans, and that, in concert with their coalition partners, they understand how those plans interact with agency plans and community expectations. The interaction between the facilities and the state is critical to providing the policy, logistical, and legal support to the clinical efforts, allowing providers to deliver the “greatest good.” Application of CSC processes to day-to-day shortages (e.g., in pharmaceutical supplies) can highlight the importance of integration of clinical experts into the incident management process and of the tiered approach to managing a scarce resource situation. The approach to CSC planning is generic and welloutlined in documents such as the 2012 and 2013 Institute of Medicine guidance, but the resources and roadblocks vary dramatically depending on local factors. Though many times the focus of CSC planning efforts is on controversial areas, the core of CSC planning does not involve triage of life-saving resources. Its emphasis should be on the integration of well-described incident management and decision approaches needed when “usual” surge plans are inadequate. Augmenting our emergency plans to account for these situations are the bread and butter of basic disaster planning and the foundation upon which CSC planning activities should be based.

John L. Hick serves as ASPR TRACIE’s Lead Editor on detail from HHS/ASPR. He is an Emergency Physician and Deputy Chief EMS Medical Director at Hennepin County Medical Center in Minneapolis, MN and a Professor of Emergency Medicine at the University of Minnesota. Dan Hanfling, MD, Contributing Scholar, UPMC Center for Health Security; Member, InterAgency Board, Health and Medical Responder Safety; Attending Physician, BestPractices, Inc. (a division of EmCare); Clinical Professor of Emergency Medicine, George Washington University; Strategic Adviser, HHS/ASPR, Hospital Preparedness Program. 

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