

# ASPR TRACIE Technical Assistance Request

**Request Receipt Date (by ASPR TRACIE):** 27 October 2020

**Response Date:** 28 October 2020

**Type of TA Request:** Standard

## Request:

The requestor asked for tools to do assessments of surge capacity.

## Response:

ASPR TRACIE reviewed existing resources on our [Novel Coronavirus Resources](#) page. Section I includes surge capacity assessment tools. Section II includes other resources that may assist with surge planning activities, including establishment of alternate care sites (ACS) and activation of crisis standards of care (CSC). Related information may be found in the COVID-19 [Alternate Care Site](#), [Crisis Standards of Care](#), [Critical Care Surge](#), and [Information and Peer-Reviewed Resources](#) collections.

Please refer to the Centers for Disease Control and Prevention's [Coronavirus Disease 2019 webpage](#) for the most up-to-date clinical guidance on COVID-19 outbreak management.

## I. Surge Capacity Assessment Tools

American Society of Health-System Pharmacists. (2020). [Patient Surge Management During a Pandemic: Toolkit for Hospital and Health System Pharmacy](#).

This toolkit highlights lessons learned related to executive emergency orders, drug utilization, pharmacy workforce management, facility surge, and pharmacy service lines along with resources created in response to COVID-19.

ASPR TRACIE. (2019). [Healthcare Coalition Resource and Gap Analysis Tool](#). U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response.

This tool is designed to help healthcare coalition (HCC) partners develop a common understanding of their resources and existing gaps, and strategies for prioritizing which gaps to close. Gaps may include inadequate plans or procedures, staffing, equipment and supplies, skills and expertise, and/or services. HCCs are encouraged to modify the template to reflect their coalition members, resources, and unique community attributes. A companion HCC Aggregator Tool allows information from multiple HCCs to be summarized to present an overall picture of a larger geographic area, including an entire state. (For a 508 compliant version of this tool, copy and paste this link into your browser: <https://files.asprtracie.hhs.gov/documents/aspr-tracie-healthcarecoalition-resource-and-gap-analysis-pdf.pdf>.)

Centers for Disease Control and Prevention. (2020). [COVID-19 Surge](#). U.S. Department of Health and Human Services.

This spreadsheet-based tool calculates estimates of the number of persons needing hospitalizations, intensive care unit (ICU) care, and ventilator support compared to existing and expanded hospital capacity. Users can also simultaneously see the outputs of three mitigation strategies versus no interventions.

Centers for Disease Control and Prevention. (2020). [Personal Protective Equipment \(PPE\) Burn Rate Calculator](#). U.S. Department of Health and Human Services.

This Excel-based calculator updated 4/7/2020 allows healthcare facilities and other workplaces to enter the quantity of their current stock of various types of personal protective equipment (PPE) and calculate an average consumption rate (burn rate). Based on the burn rate, they can estimate their remaining PPE supply.

COVID-19 Healthcare Resilience Working Group. (2020). [Considerations for Assessing Regional Patient Load-Balancing Effects during COVID-19](#).

Surges of COVID-19 cases have overwhelmed hospitals in many areas of the U.S. Often, severe patient loads are concentrated on a few facilities in a region. This document describes load-balancing and the Medical Operations Coordination Cell (MOCC) as options for managing patient surge.

COVID-19 Healthcare Resilience Working Group. (2020). [Critical Care Load-Balancing Operational Template](#).

This template provides a framework for indicators and triggers that may assist states that are implementing MOCCs to address patient surge related to COVID-19.

Healthcare Resilience Working Group. (2020). [PPE Preservation Planning Toolkit](#).

This toolkit is designed to aid any organization that uses PPE with planning and implementing preservation strategies. It provides estimates of the value of implementing preservation actions to reduce (use of), to reuse, or to repurpose PPE, in conventional, contingency, or crisis capacity conditions.

Healthcare Systems Engineering Institute. (2020). [Surge Capacity Bed Management Tools](#). Northeastern University.

This modeling tool provides one to thirty day ahead projections of an individual hospital's demand for medical and ICU beds, ventilators, PPE, medication, and staffing.

Institute for Healthcare Improvement. (2020). [Hospital Preparedness for a COVID-19 Surge: Assessment Tool](#). (Requires free registration to download.)

This 11-page checklist focuses on systems and processes for monitoring and improvement. Topics include staffing, space, supplies, infection control, staff well-being, and structures for planning, decision-making, and communications.

## II. Additional Resources

ASPR TRACIE. (2020). [Healthcare Coalition Infectious Disease Surge Annex Template](#). U.S Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response.

The 2019-2023 Hospital Preparedness Program (HPP) Funding Opportunity Announcement (FOA) requires HCCs to develop a complimentary coalition-based infectious disease annex to their base medical surge/ trauma mass casualty response plan. This infectious disease surge annex aims to improve capacity and capabilities to manage a small number of patients with high-consequence pathogens or a large number of patients during a major epidemic or pandemic.

ASPR TRACIE. (2019). [Healthcare Coalition Influenza Pandemic Checklist](#). U.S Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response.

This planning tool is intended to assist HCCs and their partners in assessing their preparedness for an influenza pandemic. It may also be used to orient the response as a pandemic begins. This checklist can help HCCs assess, create, and improve their pandemic preparedness and response plans.

Centers for Disease Control and Prevention. (2020). [Optimizing Personal Protective Equipment \(PPE\) Supplies](#).

This site has multiple links to help healthcare facilities and staff optimize their PPE, with specific guidance on the usage of gowns, masks, eye protection, and N95 respirators, PPE decontamination procedures, and responses to frequently asked questions.

COVID-19 Health Care Resilience Taskforce. (2020). [Strategies for Managing a Surge in Healthcare Provider Demand](#).

This resource highlights strategies that local healthcare workforce decision-makers could adopt to optimize healthcare workforce assets, assess ongoing staffing needs, and identify resources to meet patient surge during the COVID-19 pandemic.

Federal Emergency Management Agency: [Coronavirus \(COVID-19\) Pandemic: Personal Protective Equipment Preservation Best Practices](#).

This guidance summarizes best practices for national implementation to sustain personal protective equipment while ensuring the protection of workers during the COVID-19 pandemic response.

Healthcare Resilience Task Force. (2020). [Alternate Care Site \(ACS\) Toolkit: Third Edition](#).

This Toolkit was developed to help state, local, tribal and territorial (SLTT) entities to address potential shortages in medical facilities during the 2020 COVID-19 pandemic. It is intended to provide technical assistance to SLTT entities in establishing and operationalizing ACS.

Healthcare Resilience Task Force. (2020). [COVID-19 Workforce Virtual Toolkit: Resources for Healthcare Decision-Makers Responding to COVID-19 Workforce Concerns](#)

This toolkit provides a curated set of resources and tools for decision-makers managing healthcare workforce challenges in response to the COVID-19 emergency.

NRCC Healthcare Resilience Task Force. (2020). [Medical Operations Coordination Cells Toolkit: First Edition.](#)

This toolkit offers flexible and modifiable guidance, developed by the U.S. government, aimed to assist regional, state, local, tribal and territorial governments to ensure load-balancing across healthcare facilities and systems so that the highest possible level of care can be provided to each patient during the COVID-19 pandemic.

Hick, J. (2020). [Critical Care Planning - COVID-19 Quick Notes.](#)

This two-pager summarizes critical care planning for COVID-19. It includes a figure depicting the expansion of critical care from conventional to contingency/crisis levels. The document offers key points to operationalize the concept in terms of space, staffing, supplies and to provide critical care.

Kaiser Permanente Northern California. (2020). [COVID-19 Hospital Surge Playbook.](#)

This playbook follows a “Space, Stuff, Staff” strategy to rapidly expand inpatient and critical care capacity. It includes an overview of surge capacity concepts, checklists, tables, decision trees, diagrams, and supply and equipment lists.

Minnesota Department of Health. (n.d.). [Health Care Considerations – Crisis Standards of Care – Health Care Facility Scarce Resource Decision-Making Tree.](#) (Accessed 10/28/2020.)

This decision tree is intended for use by healthcare facilities to guide triage planning during a CSC situation.

Society of Critical Care Medicine. (2020). [Configuring ICUs in the COVID-19 Era.](#)

This document - updated as needed - provides information on configuring ICUs based on lessons learned by hospitals that have cared for COVID-19 patients. Topics include increasing and managing ICU capacity, adapting various aspects of critical care delivery and the care environment, communicating with patients, providing emotional support to staff, and adjusting operations in other areas of the hospital.

The National Academies of Sciences, Engineering, and Medicine. (2020). [Rapid Expert Consultation on Staffing Considerations for Crisis Standards of Care for the COVID-19 Pandemic](#)

This resource builds upon prior consultation (issued on March 28, 2020) and focuses on CSC and staffing needs--including deployment and allocation of expert clinical staff--to ensure the care of COVID-19 patients.