Request:

ASPR TRACIE received a request for example Medical Operations Coordination Cell (MOCC) resource evaluation surveys. The requestor noted that the goal of the survey is for their healthcare coalition to fully understand the capabilities and resources that responding hospitals have (e.g., staffing, supplies, specialties, etc.).

Response:

The ASPR TRACIE Team reviewed material on our COVID-19 Resources page and searched for additional open-source resources. Section I of this TA response includes sample questions provided by an ASPR TRACIE subject matter expert that can be tailored for a survey and resources that can be used as example questions to pose or how to categorize information for a MOCC. Section II includes general considerations related to assessing resources for a MOCC. Section III includes resources that provide data on hospitals collected at state and federal levels which may be useful for a MOCC (e.g., supply levels, bed capacity, medical facilities within a region).

Please refer to the Centers for Disease Control and Prevention’s Coronavirus Disease 2019 webpage and the National Institutes of Health COVID-19 Treatment Guidelines for the most up-to-date clinical guidance on COVID-19 outbreak management.

I. Sample Survey/Questionnaires

There are three broad categories of information that are needed to initiate MOCC operations. These are divided into facility baseline resources, facility current resources, and policy/administration questions. In some cases, this is not survey information as much as discussion/planning information to determine the scope and operations of the MOCC. This list is not all-inclusive and will need to be tailored to local needs.

Baseline Resources

- Demographics – name of facility, location, phone number, total operating beds
- Point of contact for facility – ideally a nurse manager / patient placement as well as a medical director
- Referral center phone number (if applicable)
• Beds by type and number (assure that common definitions are used) – floor, monitored, intermediate/step-down, ICU
• Do the ICU services include the following: mechanical ventilation, dialysis, ECMO, other specialty services?
• Surge beds for each bed type that can be made available in addition to usual beds if staffed
• For community hospitals, do you have in-house physician/hospitalist coverage 24/7?
• For community hospitals that do not provide comprehensive critical care, are you comfortable managing the following at your facility: sepsis requiring pressors, respiratory distress requiring non-invasive respiratory support, mild DKA, CHF exacerbation?

Essential Elements of Information / Daily Survey
• Available beds by category
• Occupied beds by category (ideally by % of usual max – e.g., 90% vs. 125%)
• Staffing contingencies used (e.g., adjusted staffing ratios, use of non-traditional staff in units)
• Number of admits boarding in the ED awaiting inpatient bed/transfer
• Non-emergency procedure status – unrestricted, case-by-case, no procedures that will generate inpatient bed need, no non-emergency procedures (or other similar stratification that use common language)
• Critical care contingencies in use (e.g., boarding ICU patients in step-down or other units)
• Surge beds in use

Administration / Policy
• What organization should/will operate the MOCC?
• What authorities does / should the MOCC have?
• What liability protections are afforded MOCC personnel?
• Will the MOCC work across state lines and if so, how far and with what systems/facilities?
• What common phone number will be used to access the MOCC?
• Who will staff the MOCC? How will staffing be expanded when needed?
• Who will set MOCC policy? (State? CEOs? Combination?)
• Who will be on the policy group that will help develop and modify the policies of operation of the MOCC?
• How will transportation / EMS be integrated into transfer decision-making?
• Who will be the medical director for the MOCC?
• How will the MOCC provide or facilitate clinical consultation for care-in-place awaiting transfer if this is required?
• How will the MOCC prioritize patients for transfer when requests exceed capacity – including critical care and pediatrics?
• How frequently and by what means will the MOCC convene the hospitals / providers on calls to review the current situation and determine what load-balancing may be required between facilities?
• How does the MOCC poll or receive real-time information about available beds?
• Will the MOCC function be limited to ICU beds or apply to all bed types?
• Does the MOCC have the ability to compel a system to accept a transfer (particularly if that transfer originates from a critical access/community hospital with a critically ill patient that cannot receive the services needed)?
• What patient data will be collected by the MOCC staff? How will bias (racial, financial) be minimized in this process?
• What criteria will the MOCC used to determine when load-balancing is needed (e.g., specific staffing contingencies implemented at a single facility, single facility with more than X% of patients above other facilities in the area)?
• What data will the MOCC collect? Who is this reported to and how does it inform ongoing operations (e.g., total requests, total patients placed, origin hospital, receiving hospital, bed type requested, etc.)?

The following resources may provide supporting information to add additional survey data including other types of questions to pose and how to categorize information needed for a MOCC.

This sample survey example collects hospital and medical facility capabilities data.

This sample survey adapted by Texas collects hospital and medical facility capabilities data.

CDC. (2014). National Hospital Care Survey Facility Questionnaire.
This example questionnaire can be used to collect hospital statistics data.

Provides guidance on the federal government’s request for data from hospitals during the COVID-19 pandemic. Page 4 includes a survey example provided for assessing facility capabilities.

This zip file includes sample questionnaires used to assess facility capabilities and resources. Note: this is based on international facilities but may still be useful/transferable to domestic facilities.


This survey is used to assess medical facility capabilities and resources.


This categorized list may be used to develop a survey to collect data on medical equipment.


This sample nurse staffing survey toolkit includes sample questions to assess staffing numbers, capabilities, capacity starting on page 4.

U.S Department of Commerce. (2014). Comprehensive List of Medical Supplies

This categorized list of basic medical supplies may be used to assess medical equipment and supplies.


This survey was used to collect information on facility services, capabilities. Note: many questions are international focused (or for resource lacking areas) but can be used as a baseline.


This survey was used to collect information on facility services and capabilities.


This data dictionary includes terms may be used as baseline to create a medical facility resource survey.


These data points may be used as an example for facility services survey.
II. MOCC Resources


This document describes load-balancing and the MOCC as options for managing patient surge. See guidance on collecting and analyzing data related to regional health system loads, issues, and transfers starting on page 2.

ASPR TRACIE. (2020). Establishing Medical Operations Coordination Cells (MOCCs) for COVID-19.

This webinar features speakers describing MOCCs, lessons learned from past experiences, and how MOCCs are being used during the COVID-19 pandemic. Information provided on what resources should be assessed for MOCC starting on slide 17.


This updated page articulates key considerations for states; elements needed for use of relief healthcare facilities; relief healthcare facility resources and capacity; and interfacility and patient communication. It also highlights examples of implementation of a regional MOCC in Texas and response to an extreme surge in regions of Michigan.


This presentation introduces a regional COVID-19 coordination center concept. The center would provide a framework to coordinate across the region’s healthcare and public health system using all available resources to mitigate the pandemic and manage it consistently. A key feature is a regional crisis standards of care triage team to help determine appropriate placement of patients.


This toolkit offers flexible and modifiable guidance 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. See Appendix A-H, pages 33-50, provide strategies and guidance for MOCC data reporting, patient transfers, coordination workflows. Also see this EMS Supplement for the MOCC Toolkit.

This document outlines the statewide hospital plan for a surge of COVID-19 patients. The regionally based plan defines four tiers of operations based on the amount of surge.


This article discusses the regional medical operations center concept and provides an overview of how to set up such a system for communication and coordination among multiple response partners within a region.

III. General Resources

These resources may provide hospital data collected at federal and state levels.


Query tool to search for hospital profiles that include, staffing levels, accreditations, certifications, facility services.


Summary of annual survey data including, bed occupancy projection tools, map of community hospitals, and medical facility types.


This webpage shares information on the Arizona Surge Line, a 24/7 call line that facilitates the interfacility transfer of patients during a healthcare surge. Included is a link to an operating manual describing the planning, execution, and outcomes of the Arizona Surge Line during the response to COVID-19 and its applicability to future emergencies. Other resources include webinars introducing the service; process flow maps; protocols and other resources for participating hospitals, post-acute care facilities, and volunteer critical care and palliative care physicians; the executive order establishing the service; and news articles describing the Arizona Surge Line.


These capability standards serve as benchmarks for communities across a variety of public health and medical domains. Because of the organization of the document across diverse emergency response functions many of the tasks and priorities can be translated directly into exercise objectives and points of evaluation. Page 8 provides guidance for assessing resource elements during a health emergency.
The RAPT data layer and sources PDF provides information on the types of information the tool provides including hospital, medical professional, alternate care site capacity and community infrastructure and resource data.

The guidance specific to these capabilities highlights what healthcare delivery system (e.g., hospitals, healthcare coalitions, and emergency medical services) have to do to effectively prepare for and respond to emergencies that impact the public’s health. Page 14 of the document provides guidance for assessing regional healthcare resources.

This all-hazards template (developed by a group of emergency management and disaster medicine experts from the U.S.) can provide hospital administrators a "snapshot" of current capacity and help improve planning by linking action items to institutional triggers across the surge capacity continuum.

This article examines the association between hospitals’ high COVID-19 caseload surge and mortality risk. In a study looking at adult COVID-19 inpatients admitted in 558 US hospitals from March to August 2020, the authors note that nearly 1 in 4 COVID-19 deaths was potentially attributable to hospitals strained by surging caseload.