



TRACIE
HEALTHCARE EMERGENCY PREPAREDNESS
INFORMATION GATEWAY

THE EFFECT OF COVID-19 ON THE HEALTHCARE INCIDENT COMMAND SYSTEM

September 2021



CORONAVIRUS
2019-nCoV

Introduction

Hospitals and other healthcare facilities (HCFs) across the country have been in an extended state of emergency response due to the COVID-19 pandemic. Many healthcare and hospital-based Incident Command Systems (ICS) (e.g., Hospital Incident Command System, or HICS) have been in long-term activation and have involved a broader cross-section of participants than any other prior event. As a result, some healthcare organizations have altered emergency response practices. While the pandemic is unique due to its protracted nature, the necessary coordination between government, emergency managers (EM), regional leadership, public health entities, HCFs, and healthcare coalitions (HCCs) has created valuable lessons about how the ICS can be better applied – particularly in regional multi-agency coordination constructs – and from a corporate HCF perspective.

This [ASPR TRACIE](#) tip sheet highlights several key observations about how healthcare ICS functioned during the COVID-19 pandemic and includes lessons learned collected from interviews, surveys, and literature reviews as of August 2021. While the intended audience of this document includes HCFs, EMs, executives, and leadership, additional stakeholders including regional HCFs, emergency response teams, HCC members, vendors, and staff involved in emergency response may also find this information useful.

ASPR TRACIE recognizes that there are different constructs to how hospitals and healthcare facilities operate during an emergency response situation. In this document, we refer to healthcare or hospital-based Incident Command Systems as ICS. Similarly, HCC, coalition, and coalition members refer to healthcare coalitions or its members, and not to the hospital command system. Our [COVID-19 Patient Surge and Scarce Resource Allocation page](#) includes links to related resources.

Key Observations

- **Resource Management.** Staffing and critical medical supply shortages challenged healthcare ICS across the country.
 - » Depending on how the ICS was structured, different approaches to resource identification, distribution, and evaluating burn rate were utilized.

- » Successful execution was dependent on how well incident command recognized shortages and directed strategies to address them. This included direct communication with staff about shortages, mitigation protocol, conservation, and re-use practices, as well as knowledge about available resources.
- » The level to which HCFs, corporate command, local jurisdictional partners, and/or HCCs were integrated into the allocation process and logistical strategies was often cited as a key factor in successful management. In many cases, local county EM offices assisted healthcare organizations with obtaining resources.
- **Roles and Responsibilities.** Clear delineation of roles and responsibilities was imperative for effective coordination and collaboration across the ICS.
 - » It was important to determine early what organizations, personnel, and entities need to be involved; how to adequately address areas of the response; streamline policy changes; and to ensure critical care, surge, and patient management needs.
 - » Having diverse skill sets and disciplines represented across the response, and their ongoing engagement with regional, state, and local members, was essential to quickly identifying solutions to issues as they arose. In many cases, new responsibilities had to be negotiated during the event which was more difficult in a coordination (i.e., coalition) framework than in a true ICS (command) framework.
- **Relationships and Communication.** Implementing strong communication and information flow strategies and protocols was vital in sustaining situational awareness among HCF personnel and coalition members.
 - » These strategies helped keep organizations on the same page as far as policy, guidance, and best practices. This includes messages given to the public about visitation policies, testing, and vaccinations.
 - » Use of ad hoc working groups and committees was essential to address new issues and facilitate information sharing about emergency response needs and practices as the pandemic escalated. These working groups were essential inside facilities to ensure inter-disciplinary representation, and at the coalition level for specialty information sharing and consistency of practices.
 - » Integrating clinical personnel into the ICS process was key to ensuring command staff were aware of bedside situations so they could develop practical strategies (either by finding resources or creating policies to address shortages). Including non-clinical personnel in the command structure was vital to meeting support needs and successfully resolving issues.
- **Load Balancing.** As the event grew in severity, balancing patient surge equitably across regional hospitals became an ongoing effort that was heavily reliant on close engagement between corporate member facilities and coalition members (medical and non-medical).
 - » Inclusion of skilled nursing and long-term care (LTC) facilities, where appropriate, during these efforts helped optimize bed utilization.
 - » Adapting and developing new technical approaches helped to successfully coordinate patient transport and maintain a consistent level of patient care across larger regions.
 - » Many jurisdictions developed these processes and established Medical Operations Coordination Cells (MOCCs), or similar load balancing coordination centers, for the first time with major implications for future planning and response.

Considerations and Lessons Learned

I. COVID-19 and Healthcare ICS Leadership

- **Leadership.** Determine who is best suited for the role of Incident Commander (IC).
 - » Oftentimes executive leadership (e.g., the chief executive officer [CEO]) may not be an optimal choice due to their other responsibilities and focus during a disaster (e.g., continuity of business). Lines of authority and decision-making must be clear if using subordinate staff as ICs.

- » In situations where there is a need for long-lasting or sustained ICS operations, identify additional senior staff that can serve as backup for ICS roles to relieve the primary staff. In facilities that are part of an integrated healthcare system, where appropriate, HCF leadership should be closely aligned to work with corporate incident management leaders.
- » Consider having the CEO and executive suite serve in a capacity similar to elected officials/senior officials in the public-facing ICS system. They may set strategy, but ultimately the Unified Command Team (UCT) or IC would implement strategies and makes decisions needed to prioritize ICS direction and response.
- **Process.** Examine the crisis decision-making processes and the authorities involved with internal practice and corporate expectations to ensure emergency operations are aligned with daily practices.
 - » Adjust as needed for a long-term event. In some cases, streamlining daily processes can improve the ability to enact change that is more aligned with the ICS. However, it is important not to solely focus on daily routines as they will change quickly in a rapidly evolving response effort.
 - » Be mindful of the ebb and flow of the incident (e.g., increasing/decreasing patient volumes, supply levels) and be prepared to adjust accordingly and quickly. Anticipate that there will be new/additional challenges that may alter a process that was previously necessary.
 - » Determine what decisions will be made within the ICS process and which will go through traditional executive processes (this presented challenges in several facilities and healthcare systems during the pandemic).
 - » Ensure there are comprehensive documentation processes in place that will record issues encountered, policy changes, associated decision making, and financial implications (e.g., unforeseen costs and lost revenue).
- **Resiliency.** Address how to effectively support the health and wellbeing of command staff during extended periods of ICS activation (e.g., monitor for staff burnout, increase depth of staffing, widen the talent pool). Identify ways to both gauge the mental health of the workforce and provide ongoing and versatile health and wellness support.
 - » When surges decline, consider encouraging staff to use paid time off (PTO) and/or vacation time, as practical. This will keep staff refreshed if/when patient volumes surge again.
 - » Recognize the mental resiliency needed to manage constant and rapidly changing knowledge about the pathogen, related federal guidance, and operational protocol. Uncertainty can cause frustration and should be identified and managed closely by command staff and other entities (e.g., via regular, concise internal communication).
- **Ongoing Performance Improvement.** During emergencies with extended operations, it is not prudent or effective to wait until the event is over to examine the quality of response to identify lessons learned and best practices.
 - » Adjust structures, workflows, and processes in real-time to immediately improve effectiveness of response operations.
 - » Establish a process for identifying issues and challenges within the facility, such as an “Inter-Action Review.” Determine in what capacity the IC can resolve these issues, when/if it alters current policies, or become a best practice.
 - » Define how those changes will be documented, approved, shared, and implemented.
 - » Consider implementing a “wave” After Action Report (AAR) approach, where the incident scope period for a report is redefined as the beginning and end of a given “wave” or surge period.

LESSONS LEARNED - LEADERSHIP

- ✓ During Command Center activation, determine whether the physical assembly of key personnel in the designated command center is best or if communication and decision making can be effectively achieved virtually if/when safety measures call for it.
- ✓ Establish routine conference calls among hospital leadership to streamline approval of new policies and guidance and ensure newly approved processes are documented and distributed for consistency. Document and share the results of these meetings.
- ✓ Establish routine communication with staff so they have a good understanding of the true operational picture and organizational response activities. They should understand if the facility is equipped to handle the current situation, if changes are required, or may be coming, and what changes to expect.
- ✓ Establish comprehensive documentation processes that will record issues, their associated decisions, and related financial implications (e.g., costs encountered, revenue lost).
- ✓ Ensure there are adequate backups for the IC role to ensure continuity, availability, and reduce burnout. Have back-up staff to help expand the breadth of coverage and allow for time off.
- ✓ Engage in routine staff stress management training to help staff recognize and alleviate issues.
- ✓ Establish staff wellness processes early and offer them often. Evaluate the success of these efforts and modify assistance as needed over time.
- ✓ To find space for staff wellness when there is no space to spare, consider conference rooms, repurpose new areas within the facility, or set up tents, where possible.
- ✓ Adjust staffing ratios as needed to optimize resources and as permitted by local and state regulations and seek regulatory modification as needed.
- ✓ Employ rotational staffing during extended operations so that additional personnel can augment staffing levels when/as needed. Personnel should be identified, trained, and ready-to-go as part of the rotation.
- ✓ Check-on workers at all levels regularly to assess workload and burnout to allow for changes and/or rotations to keep the workforce fresh.
- ✓ Implement a continual feedback loop for emergency management staff to assess their stress levels and ensure they understand how to evaluate the wellbeing of staff.
- ✓ Establish processes for documenting and easily reviewing the number of hours worked by staff during the response to monitor staff burnout. This is especially important for staff who are salaried and do not customarily report hours, or for staff working in new or ad hoc positions.
- ✓ As the event ebbs in severity, take time to identify gaps and major challenges. During downtime, communicate and train relevant personnel on these issues in preparation for a resurgence.
- ✓ Maintain critical routine status calls, especially with LTC facilities, skilled nursing centers, and other emergency response stakeholders to maintain situational awareness, discuss areas for improvement, and address challenges and gaps.
- ✓ Use written and electronic surveys, and debrief with command staff early and often, to gauge what is going well, areas for improvement, and overall health of the ICS and workforce. Lessons learned should be incorporated “in real-time” and included in an AAR.
- ✓ Use survey results to tailor the amount, and frequency of, information being provided to facilities and staff.
- ✓ ICS must be able to deal with the implications associated with work-related staff illness, line of duty death, and home-life illness and deaths.
- ✓ Recognize that family is critical. Ensure there is a way to address staff work-life home support in cases where a death may occur at home or among family (e.g., spousal/partner death).
- ✓ Take time to recognize individual and group successes.

II. ICS Coordination and Communication

- **Information Management/Situational Awareness.**

Integrate information sharing platform data and policies with regional partners.

 - » Decide, on a regional basis, the process for submission of required state and federal reporting requirements. Integrate any additional data and data sources for additional visibility at the regional level.
 - » Agree, at a coalition level, what information needs to be collected, who can access the data, and how it can be used. This may include reporting on bed availability, case numbers, staffing, vaccination rates, or resource inventory.
 - » Determine the best mechanisms for managing and relaying critical information.
- **Stakeholder Communications.** As the incident rapidly changes, consider how best to reduce the burden of communication with stakeholders. Include specific working groups and other ad hoc response committees.
 - » Consider managing communications and coordination via an HCC construct, as practical. Ascertain which strategies work best for your facility's structure, role, and needs.
 - » Review a list of stakeholders and determine the flow of information, target audiences, communication frequency, and format, as well as how messages will be developed and approved and additional information security requirements.
 - » Establish routine status meetings to identify gaps, leverage existing partnerships, and establish new networks.
 - » Identify ways to share lessons learned, best practices, and new processes faster to ensure more consistent resource allocation and care management.
- **Stakeholder Coordination.** In complex and sustained response initiatives, recognize the broader role of quality collaboration (e.g., among HCCs, hospital associations, community groups, infection prevention providers, public health agencies). Good leadership engagement between healthcare, local EMS providers, emergency preparedness officials, and public health entities is critical.
 - » Utilize a local, regional, or state-based coordination center comprised of these leaders to ensure proper load balancing, transport, and ambulance routing during surges.
 - » Integrate, where possible, corporate load balancing efforts with local/regional efforts.
 - » Establish ad hoc committees and working groups to help create a united front and ensure consistent implementation of policies that are aligned with corporate member facilities within integrated health systems.
- **Patient Load Balancing.** Coordinate and manage patient transfers and load-balancing activities through a patient load balancing system such as the MOCC. The location, staffing, and function of the center may vary depending on the complexity of the regional healthcare system. Consider the ongoing use of a regional patient referral hotline, or implementation of a similar process to streamline patient load balancing communication and logistics.

ASPR TRACIE Resources

[COVID-19 Patient Surge and Scarce Resource Allocation](#)

[Hospital Operations Toolkit for COVID-19](#)

[Innovations in COVID-19 Patient Surge Management \(Tip Sheet\)](#)

[MOCC Toolkit](#)

LESSONS LEARNED - COORDINATION AND COMMUNICATION

- ✓ Streamline messaging; find a balance that keeps communication efforts at manageable level. Establish a manageable and useful messaging schema to notify staff of situation updates and changes without excessive communication (e.g., too many messages, too redundant). The [ASPR TRACIE Hospital Operations Toolkit](#) has additional information on risk communication and information sharing.
- ✓ Establish a tempo for daily briefings, coalition updates, meetings, and other critical information sharing activities. Decide what essential topics will be covered (e.g., personal protective equipment [PPE] inventory status, staffing levels, or policy guidance changes) and how to address and document information needs. Tempos can be increased and decreased based on patient surge volumes and other issues.
- ✓ Consider what reporting requirements will be ongoing and how to automate collection of this data for daily use in dashboards and incident specific metrics. Be prepared to provide ongoing situational awareness and status updates both within and between facilities for an extended period of time. Establish thresholds for increasing/decreasing the rate and amount of information sharing needed.
- ✓ Standardize reporting data for required entities so it becomes a routine. Create common definitions for data points to make information actionable across systems and between partnering agencies. For example, simply establishing a common definition for a Person Under Investigation (PUI) versus a “positive case” will help ensure accuracy in data collection and dissemination.
- ✓ Consider implementing a “Virtual Incident Command Center.” Stand up new technology to streamline communication, information sharing, and prepare to maintain these systems, policies, and software. Use a knowledge center, or other electronic platform, to collect critical data for federal, state, local entities. Create regional reports for distribution. Use a single email address to streamline communications and information sharing. Provide system access to EMS and hospital leadership to maintain situational awareness.
- ✓ Have established relationships across an integrated healthcare system to extend resources during a surge when everyone is inundated and to help quickly compare new/updated best practices and share critical situational awareness information and data.
- ✓ Create ad hoc medical advisory committees and working groups to focus on specific complex issues related to your facility or region (e.g., morgue surge, vaccination planning, alternate care sites, staffing allocation).
- ✓ Ensure working groups and committees are comprised of a diverse set of members with a good understanding of hospital operations, an established rapport within the community, and who understand local demographics. Broaden groups to include pharmacies, laboratories, supply chain representatives, environmental services, HCC members, and other essential staff that can inform solutions to issues and assist with developing best practices that can become hospital policy.

III. Operations

- **Crisis Standards of Care (CSC).** Recognize that contingency, and sometimes crisis care, will be a significant issue. Most CSC plans developed pre-pandemic were limited in that they primarily addressed ventilator triage, used triage teams only for ventilator triage, and/or required a specific emergency declaration or “official declaration” that CSC “existed.”
 - » Plans for resource shortages need to be better integrated and address a wider spectrum of contingencies. Documents, protocols, and new processes will need to be created in real-time as the event evolves and/or escalates.

ASPR TRACIE Resources

[COVID-19 and Skilled Nursing Facility Lessons Learned](#)

[COVID-19 and Telehealth Quick Sheet](#)

[COVID-19 Considerations for Long-Term Care Facilities](#)

[COVID-19 Crisis Standards of Care Resources](#)

[Hospice and COVID-19](#)

[Palliative Care in COVID-19](#)

- » Establish how existing HCF policies that guide CSC will be integrated, approved, and implemented across a broad array of health systems.
- » Determine a process for identifying, modifying, and approving these policies and new standards.
- » Establish processes for load-balancing, policy development, and resource request and allocation that contribute to avoiding crisis decisions (i.e., keep the systems in conventional or contingency status).
- **Palliative Care.** Determine how to integrate long-term, palliative care, and hospice into the HCF and regional response.
 - » Palliative care and ethics will require close engagement with any resource triage decision guidance. These specific disciplines may require collaboration or coordination mechanisms during an event.
- **Telemedicine.** Consider use of telemedicine as a means to extend services/care and provide strategic-level clinical direction. For example, telemedicine can supplement intensive care needs (e.g., an advanced/remote monitoring ICU) and ensure proper load balancing within a system. It can allow residents and non-traditional pulmonary/critical care providers who work in surge ICUs (e.g., EM, surgical critical care, anesthesia, pulmonary critical care providers who primarily work outpatient) to have a second set of eyes on patients. Telehealth services can help ensure the implementation of common treatment protocols and ongoing triage of resources (if needed) 24/7 and permits intensivists to force-multiply and ensure quality care from a distance.

LESSONS LEARNED - OPERATIONS

- ✓ Ensure contingency and CSC plans are comprehensive and address not only biomedical equipment and medication allocation, but other potential needs specific to the situation.
- ✓ Establish benchmarks to monitor staffing (e.g., ratios, use of non-traditional staff) as most CSC plans do not address staffing in a meaningful way. Circulate best practices for onboarding, orienting external staff, or re-assigning internal staff from higher acuity units.
- ✓ Critical care consultation should be made available when clinical resource limitations occur. Clinical staff should not place restrictions on critical resources outside their scope of clinical practice without either a specialized consultation or use of accepted/approved facility practice for the situation. During a disaster or incident, critical care consultation may be necessary in cases where the clinician of record is personally involved- and thus biased in making allocation decisions- so that an objective third party needs to be involved, or, when the clinician of record may not be an expert in the field to make a call.
- ✓ As crisis conditions evolve, consider creating an incident-specific CSC working group to address and attempt to align individual scarce resource protocols, ensure general medical approaches are consistent across the region and HCF system, and to help facilitate and advise rapid/real-time development of medical protocol and policies for facility and regional use.
- ✓ Establish a surge line/state-wide patient transfer hub (MOCC) to assist with transport and load balance needs. Work with EMS and other external entities to coordinate movement. Identify who within the coalition will oversee

LESSONS LEARNED - OPERATIONS

- the surge line/call center, establish protocol for documenting transport requests and activities. The MOCC may also be a gateway for consultation with critical care physicians to discuss adaptive strategies.
- ✓ Engage subacute, skilled nursing, and LTC facilities, when appropriate and if possible, during surge and patient load balancing efforts to optimize bed utilization. Placement of these patients helps open hospital beds but should be done with the understanding that these facilities may be as overwhelmed as hospitals during different phases of the response.
 - ✓ Integrate where possible corporate load balancing efforts with local/regional efforts.
 - ✓ Develop an EMS CSC transport considerations/guidance document with area EMS medical directors to be used during a surge. Share guidance among EMS agencies to inform their local policies and practices to ensure consistency.
- ✓ Address operational and financial issues related to patients crossing state lines to ensure successful load balancing.
 - ✓ Establish an early and effective method for tracking individual facility-related expenses, lost revenue, and award of federal funding.
 - ✓ Consider and seek where needed 1135 waivers, and any other local, state, or federal regulatory relief, including disaster declarations.
 - ✓ Review approved regulatory changes pertaining to surge, staffing, and clinical practice that must be returned to pre-incident levels or seek permanent regulatory relief.

IV. Logistics

- **Logistics.** A system can quickly become inundated with supply requests.
 - » Identify available capabilities to monitor supply chain and inventory data needs.
 - » Assume a daily requirement to document and analyze incoming and outgoing supplies and determine criteria for the allocation of supplies.
 - » Establish a centralized process to track these requests to reduce staffing burdens. If possible, consider use of a technical platform to collect web-based resource requests (e.g., a resource request platform) and have contracts, and all necessary agreements, in place with vendors and external partners to streamline purchasing and trade.
 - » **Determine how best to “right size” facility,** healthcare system, regional, and state caches of materials, PPE, and medical supplies.
 - » Determine a method for assessing the “burn rate” to anticipate needs based on patient load balancing mechanisms.
 - » Ensure that policies and process exist to request and allocate available common/cache resources.

ASPR TRACIE Resources

[COVID-19 Supply Chain Resources](#)

[COVID-19 Workforce Resilience/Sustainability Resources](#)

[Partnering with the Healthcare Supply Chain During Disasters](#)

[Strategies for Managing a Surge in Healthcare Provider Demand](#)

LESSONS LEARNED - LOGISTICS

- ✓ Proactively address resource and supply chain management needs. Identify backup suppliers, who can authorize purchases, where to reach out for resource sharing needs, and what acceptable alternatives are (e.g., PPE optimization/ preservation techniques, medically acceptable alternatives).
- ✓ Have a prioritization plan in place, maximums, or other thresholds that enable equitable allocation decisions when multiple competing requests exceed available resources. Thresholds could include Urgent, High, Moderate and Low needs. Decisions should be made based not only on expressed need but also on “burn rate” and stock-on-hand—whenever possible—as the definition of “need” and the goals of the requests may vary between facilities.
- ✓ Clearly direct how supplies should be used according to the capacity level in place to ensure supplies are not wasted due to nonadherence to reuse recommendations. Confirm facilities are using supplies correctly/safely, through training materials, to include respiratory protection in the form of N95 respirators.
- ✓ Keep an updated vendor list with contact information and outline the process for vendor/supplier communication. Recognize that maintaining a spreadsheet may not be feasible during a surge and emailing documents back and forth is not sustainable.
- ✓ Consider creating a regional supply chain working group to share ideas. Use these networks to identify private entities (e.g., chemical plants, research institutes) and other non-medical local organizations that can donate PPE and essential resources.
- ✓ Make use of [CDC crisis capacity suggestions](#) and consider developing additional crisis capacity recommendations and/or collect alternative ideas/solutions.
- ✓ Have a strategy and method in place to monitor daily resources at the facility level. Know what changing resource and staffing levels are, as well as overall clinical status.
- ✓ Identify technical solutions to streamline management of resource requests and supply chain inventory more effectively (e.g., an inventory management system).
- ✓ Consider using a real-time collaborative document capability that allows multiple users to populate data simultaneously (e.g., Google docs) if a system is unavailable, too complex.
- ✓ Create and share a weblink or resource management-specific email address as a low-tech solution to rapidly send/receive resource requests across health systems, to stakeholders.
- ✓ Identify a logistics coordinator to facilitate resource requests, manage inventory data, and oversee receipt and distribution of supplies (possibly at the supply chain site).
- ✓ Rotate cache supplies into the facility storeroom supply stream to prevent outdated, degradation, expiration of cache supplies.
- ✓ Leverage community networks, relationships with academic medical centers, and external resources to assist with resource shortages (e.g., use academic universities or veterinary labs to expand testing capabilities).
- ✓ Ensure requests for cache assets are made only after attempts to procure supplies through traditional channels have failed. In many cases, facilities request coalition or state assets because there was no available or low-cost option where preferred purchasing agreements would have allowed them to procure supplies through their usual vendors.
- ✓ Implement a process to track supplemental staffing needs, possibly across a large integrated health system, that is able to identify, distribute, and re-distribute supplemental staff. Consider use of electronic staffing systems, or at the coalition level, utilize state-based contracts with providers to fill staffing needs. Use standard metrics of staff strain to determine staffing allocations.
- ✓ Know where to find essential staffing information (e.g., available staff type, numbers, rates, what is included in contracts, time to start/end work, contracts/agreements needed).
- ✓ Ensure that ICS staff are aware of collective bargaining, and any state regulatory limitations, on staff practices (e.g., mandatory ratios, level of licensure).
- ✓ Create a healthcare worker database to connect staffing requirements with healthcare providers who are seeking employment.

V. Facility Engagement with HCCs

- **Collaboration.** Efficacy of emergency response and preparedness activities can be dependent on proper planning and coordination within an HCC. This is especially true in cases where extended response efforts will put high demand on daily healthcare operational capabilities.
 - » Forming HCC-level working groups at the executive level can improve coordination among emergency managers, and importantly, clearly define emergency response roles and responsibilities.
 - » Consistent forms of communicating/interacting can improve response-level information-sharing and allow for more rapid identification of issues/challenges within the HCC. These working groups may be formed ad hoc but once formed should implement regularly scheduled meetings that are documented and shared.
 - » Facilities should refer to a coalition's overarching response plan for when and how decisions need to be made, particularly outside of the HCF, as a group. Individual facility response plans should be consistent with, but not beholden to, an HCC plan. Due to the complicated nature of creating and approving policies, and the need for rapid guidance in emergency situations, guidelines or best practices should be referenced and modified for use across the HCF and does not solely contain coalition level guidance.

LESSONS LEARNED - FACILITY ENGAGEMENT WITH HCCs

- ✓ Plans that involve moving resources from unaffected areas, within an HCC, should consider how resource allocation will be impacted if/when all locations are affected (such as during the pandemic).
- ✓ Facilities will need a scarce resource allocation plan that should be consistent with, but not restricted by the HCC plan.
- ✓ Use the pandemic as an opportunity to refine hospital surge plans and coalition surge estimates, including the potential use of non-patient care spaces at hospitals for alternate care sites.
- ✓ Conduct regular situational updates among coalition members and across integrated healthcare systems. Record and share minutes of these meetings.
- ✓ Enable coalition members and stakeholders to convey vetted information up to regional managers or down to the facility and community levels as needed to ensure consistent situational awareness and response efforts.
- ✓ Utilize a CEO working group to facilitate collaboration and cooperation with emergency managers, executives, and stakeholders across the HCC to help clearly define roles and responsibilities.
- ✓ Ensure the coalition includes members from various facility types. Engage skilled nursing facilities, LTC, dialysis centers, EMS, and the like to increase resources and broaden expertise.
- ✓ Create other working groups (e.g., critical care, infection prevention) and use conference calls and other communication methods to facilitate sharing of "current state" and "best practice" information that is separate from CEO-level discussions.
- ✓ Ensure HCC-based roles and responsibilities are understood among inexperienced emergency response staff. Implement necessary training as needed.
- ✓ Practice surge training within the HCC as a valuable tool for preparedness. Conduct exercises with coalition members to ensure understanding of the ICS structure and roles as well as the role of the coalition and other state/regional structures involved in response coordination. Incorporate different types of training, including stress management, fit testing, PPE donning/doffing, and point of distribution training to meet the needs of different disciplines.
- ✓ Maintain ongoing IC training and refresher training during downtimes. Include technology training for any new ICS knowledge centers, portals, platforms, and software.
- ✓ When many staff need just-in-time training, develop web-based videos that can be shared online

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