

Health Care Coalition Influenza Pandemic Checklist

Introduction

This planning tool is intended to assist health care coalitions and their partners in assessing their preparedness for an influenza pandemic. It may also be used to orient the response as a pandemic begins. The tool is not comprehensive, and jurisdictional and coalition differences in composition, resources, and response will result in significantly different priorities and depth of engagement in many of these activities. The coalition should have already conducted a gap and resource analysis that may have identified issues common to this document (See [ASPR TRACIE Coalition Gap and Resource Analysis Tool](#)). Coalitions may use this tool to identify potential gaps in influenza pandemic planning and drive cross-discipline discussions.

This document assumes that the following all-hazards basics are already in place through planning, exercise, and response activities:

- Incident management structures and principles at the facility, agency, and coalition level
- Basic information sharing capabilities between coalition partners (e.g., radio, web-based, telephone) and a process for information sharing during an incident
- Emergency medical services (EMS) mutual aid and disaster response plans
- Hospital disaster and surge capacity plans
- Emergency contact/notification list for all partners

Some additional assumptions that are important to consider:

- The pandemic will occur in waves, and will not have a consistent time or impact profile across the United States. Coalition partners should have mechanisms in place to maintain awareness of current conditions in the community and adjust resources as needed.
- Understanding of the virus, infection control, risk factors, clinical care, and patient outcomes will be in rapid evolution. Monitoring multiple sources of information and adapting to changing circumstances is critical to response success.
- The response will be longer than, and require the most integration of, any incident that coalition partners may face. Use of incident management processes and integration of leadership and subject matter experts to provide consistent, transparent input and guidance is critical to a successful response.

- Health care and EMS system stress will be dynamic – even at the pandemic peak, at some points during the day (or night) normal operating conditions may exist temporarily, only to return later that day to crisis conditions. Plans should include the ability to shift from conventional to crisis care and back as the situation requires.
- Staffing among coalition members will be challenged by illness or fear of illness. Plans should consider staffing contingencies, including policies and procedures for engaging volunteers.
- Those with minor non-influenza illness will seek medical care in much higher numbers due to fear of the disease. Plans should anticipate increased demand on the health care system.
- Families of patients will place a strain on the health care system through information-seeking about loved ones or concerns about exposure/illness. Plans should include processes for handling such inquiries.
- Supply chain and delivery issues will occur and may have dramatic effects on clinical care. Understanding limitations in the oxygen, medication, and general medical supply chains is critical prior to a pandemic so that action can be taken to mitigate negative impacts on clinical care during a response.
- The media will play an integral role in the response based on the information they are sharing, the intensity of how it is shared, and where they are physically positioning themselves (i.e., media staging areas). Coalition partners should establish mechanisms to enable consistent press access policies and coordinated messaging.

While this checklist was developed to address preparedness for an influenza pandemic, coalitions may find that many of these assumptions and the activities described on the following pages are applicable to any pandemic, regardless of the causative agent.

How the Checklist is Organized

The checklist starts with coalition-level activities that integrate information and issues from all disciplines. This does not mean that other issues will not be coordinated with and between coalition partners and take a multi-disciplined approach. Rather, it provides the framework for integrated response. Following the coalition section is a section on Safety and Infection Control issues. This is a critical planning and response section for each discipline. Infection prevention and control as well as discipline-specific input will be required. Finally, there are sections for each Core Coalition Member (EMS, health care, public health, emergency management) with subheadings that address key issues/outputs: Coordination/Regulatory, Specific Functions (e.g., Emergency Department [ED], Inpatient, Dispatch), and Alternate Care Site/System Planning.

Throughout the document, each activity is linked to one of the [2017-2022 Health Care Preparedness and Response Capabilities](#), which may be referred to for additional information.

Process

Coalition leadership should use this tool as a discussion document between and among coalition members. Within each discipline, multiple agencies or facilities may need to engage in dialogue to reach an overall conclusion and rate the current state of preparedness for the listed function within the coalition. This rating is a general impression of the work needing to be done to achieve preparedness. Because preparedness may be variable among members within the coalition, the rating should be an approximation of the overall perceived remaining work in that area. For example, alternate care system plans may be very complete in one jurisdiction and lacking in another, so an approximate value may be used, but the specific areas of deficit should be tracked to assure there is a plan to address them.

For each function, the activity should be rated on a 1-5 scale depending on the level of effort required to attain adequate operational function:

- 5 – No plan or asset currently exists
- 4 – Inadequate plan or assets
- 3 – Possibly adequate plans or assets, but have not been evaluated, tested, and/or incomplete training
- 2 – Adequate plans or assets requiring minor modifications based on exercises, events, or other evaluation
- 1 – No work remaining – plans or assets have been tested in exercises and real-world events and currently require no further modification

This rating may assist coalitions determining priorities for influenza pandemic response planning.

1. Coalition Activities

Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
1.1 Identify and document the roles and responsibilities for coalition members in pandemic planning and response, including identifying a lead agency when necessary (e.g., for alternate care site operation, distribution of personal protective equipment [PPE], points of dispensing activities).	Cap 1, Obj 1		
1.2 Assure that key entities (e.g., long term care, residential facilities, outpatient care) that may not be core members of the coalition are represented in pandemic and other discussions where their operations are critical to a successful response.	Cap 1, Obj 1		
1.3 Identify private sector resources and partners that may support the community and health care system during a response.	Cap 1, Obj 1		
1.4 Assemble list of points of contact for the above entities.	Cap 2, Obj 1		
1.5 Assure coalition operations are sustainable over a long period and may be conducted virtually as much as possible to decrease potential exposures and decrease personnel travel/time commitment.	Cap 2, Obj 2		
1.6 Assure coalition leadership succession plan and adequate personnel for extended operations.	Cap 3, Obj 2		
1.7 Define how the coalition will promote consistent response strategies and joint policy and strategy coordination during a protracted event/pandemic (multi-agency coordination mechanisms). This may include: • Consistent visitor policies at health care facilities • Staff shortages, sharing, and contingencies	Cap 2, Obj 3		

Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
• Resource sharing and coordination • Alternate systems of care (e.g., telephone/telemedicine, nurse hotlines, poison control centers, 911 centers, web-based triage and consultation systems, outpatient surge, alternate care locations.) • Public and provider information coordination, including rumor de-escalation efforts • Scarce resource allocation processes (i.e., crisis standards of care) including vaccine and medication and critical care resource shortages • PPE shortages and contingencies • Telemedicine capabilities among coalition members and other organizations • Facility and Strategic National Stockpile (SNS) cache security • Request/acceptance/transportation coordination of patient transfers (gatekeeping function for areas with multiple tertiary care hospitals) • Mass fatality management, including coordination with emergency management/medical examiner			
1.8 Consider potential indicators and triggers for the above activities.	Cap 2, Obj 1		
1.9 Develop a coalition-wide training, exercise, and evaluation program to improve response capabilities in a pandemic scenario. This may include PPE training, crisis standards of care training, community-based interventions, etc.	Cap 1, Obj 4		
1.10 Ensure ongoing training on appropriate use of PPE and management of suspect pandemic/novel influenza cases in health care facilities.	Cap 1, Obj 4		
1.11 Identify subject matter experts in infectious disease, critical care, and other disciplines who may need to inform response practices and define their incorporation into coalition and/or agency activities.	Cap 1, Obj 4		

Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
1.12 Assess current PPE and other stockpiles (including status of Cities Readiness Initiative/SNS programs) and assure that release, replenishment, and sharing policies are clear and documented (e.g., who gets what, when, and is replenishment expected).	Cap 1, Obj 5		
1.13 Define baseline preparedness supply thresholds for hospitals and EMS agencies in the coalition. This assures that based on their size, each facility/agency has a reasonable starting amount of supplies on hand (e.g., PPE, medications) <i>prior to any incident</i> that may provide a critical buffer during an event, but are sustainable for the facility to rotate or replace.	Cap 1, Obj 5		
1.14 Develop Memoranda of Understanding or other agreements with Department of Defense (DOD) and Department of Veterans Affairs (VA) facilities in the area relative to their cooperation contributing resources to the community when possible.	Cap 1, Obj 1		
1.15 Develop a written Pandemic Annex to the Coalition Response Plan that outlines the health care coalition's multi-agency representation and coordination with emergency management during a pandemic as well as key roles and responsibilities and potential strategies.	Cap 2, Obj 1		
1.16 Define/refine a process for a coalition member to request needed resources from coalition partners. Define/refine the coalition interface with the Emergency Support Function (ESF-8) lead agency and/or the jurisdictional emergency management for resource needs that cannot be met via the coalition. Identify whether the coalition has any available funds to assist with the emergency response efforts.	Cap 2, Obj 1		
1.17 Define the contributions of the coalition to the incident action plan at the jurisdictional or regional level.	Cap 2, Obj 3		
1.18 Define how the coalition members integrate with the Joint Information System (JIS) during a pandemic and develop a list of potential trusted spokespersons.	Cap 2, Obj 1		

Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
1.19 Ensure that coalition member organizations account for at-risk individuals and those with special medical needs, such as children under 5 years, older adults, the homeless, the mentally impaired, and others who could be more vulnerable during a pandemic.	Cap 2, Obj 1		
1.20 Establish a coalition-based protocol for providing situational awareness during a pandemic that includes essential elements of information (EEI) (e.g., patient tracking, bed tracking, available resources, ability to maintain essential services, surge capacity status, syndromic surveillance, etc.) and provides consistent information to the incident common operating picture via the ESF-8 lead agency/agencies. The protocol should include a process to help track available potential scarce resources (e.g., ventilators, Extracorporeal Membrane Oxygenation (ECMO) systems, bariatric equipment, neonatal isolettes, etc.). Consider daily conference calls until the threat wanes.	Cap 2, Obj 3		
1.21 Create or refine an inventory of coalition resources available to support pandemic surge operations. Inventoried resources could include: transport types, bed types, identified or potential alternate care sites, and equipment. Define other potential resource issues and sources of assistance during a pandemic (staff, supplies including clinical care and PPE).	Cap 2, Obj 3		
1.22 Outline plan for how senior health care facility (HCF) executives and their subject matter experts (SMEs) will meet during the response to address health care system response issues.	Cap 1, Obj 5		
1.23 Prepare guidance for how HCFs and EMS organizations can support the daily needs of staff that may be affected by a reduction in community services (e.g., obtaining food, fuel, public transportation, etc.).	Cap 3, Obj 2		
1.24 Identify potential gaps or inconsistencies among coalition member plans, training, equipment, etc. and communicate safety concerns or issues.	Cap 1, Obj 2		

2. Safety/Infection Control Activities

Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
2.1 Develop a coalition-level pandemic safety plan and appoint a safety officer to modify as required.	Cap 4, Obj 1		
2.2 Develop an agency/facility pandemic safety plan and appoint a safety officer to modify as required.	Cap 2, Obj 2		
2.3 Provide staff education about influenza infection control and update policies as required.	Cap 3, Obj 5		
2.4 Support N95 respirator fit-testing for all agency/facility employees and just-in-time education on recommended infection control precautions including fit checking, applying simple mask to patients with cough, and hand hygiene.	Cap 1, Obj 4		
2.5 Monitor availability of N95 respirators/powered air purifying respirators (PAPRs) and other supplies including alcohol-based hand disinfectants, gloves, etc. and watch and alert coalition members to supply shortages. Make recommendations on possible alternatives.	Cap 3, Obj 5		
2.6 Prepare guidelines for conservation and re-use of N95 respirators/PAPRs if severe shortages are imminent (ideally regionally and in conjunction with local public health, occupational safety, and infection prevention providers and agencies – for example, consider use by only the highest-risk staff, re-use in selected situations, continued use while working on cohorted units, etc.).	Cap 4, Obj 2		
2.7 Plan contingencies if appropriate levels of respiratory protection are unavailable.	Cap 2, Obj 3		
2.8 Assure health care worker access to closed points of distribution for vaccine when available and determine priority groups with public health assistance.	Cap 4, Obj 1		
2.9 Develop guidance on use of antivirals for post-exposure prophylaxis and early treatment of health care workers (including EMS) in conjunction with coalition partners and subject matter experts. This should be established at the coalition level to promote consistency, fairness, and equity among all coalition members.	Cap 4, Obj 2		

Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
2.10 Develop guidance for staff monitoring for signs of illness (including self-reporting, self-quarantine, and start/end of shift evaluation) and create a mechanism for reporting both illness and absenteeism.	Cap 3, Obj 5		
2.11 Develop a return to work post illness policy for health care workers. This should be as consistent as possible across the coalition.	Cap 2 Obj 1		
2.12 Encourage HCFs to plan for staff access to medical care for themselves and their families during a pandemic; determine whether illness will be handled as workers' compensation or personal insurance depending on situation/criteria and share best practices.	Cap 2, Obj 1		
2.13 Determine contingency plan for at-risk staff (e.g., pregnant, other defined risk groups) including job expectations and potential alternate roles and locations.	Cap 2, Obj 1		
2.14 Evaluate the need for family support to enable staff to work (e.g., childcare, pet care). Provide information for family care plans.	Cap 3, Obj 5		

3. EMS Activities

Coordination/Regulatory Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
3.1 Determine coordination mechanisms, scope, and likely authorities between coalition EMS agencies including information sharing, resource monitoring/assistance, and policy coordination. Work with local intelligence fusion centers to assist with information sharing and coordination.	Cap 4, Obj 1		
3.2 Determine actions that the state EMS agency is likely to take including: • Suspension or modification of operational requirements for EMS agencies • Specific emergency orders or actions that may limit liability and/or expand scope of operations	Cap 4, Obj 1		
3.3 Determine local ordinances or laws that may affect EMS disaster operations and the authorities or ability to suspend or modify if needed to support non-traditional operations.	Cap 4, Obj 1		
3.4 Evaluate available indicators that may be needed for planning or by other partners and how to track them, e.g., EEI such as number of transports, number of potential pandemic cases, staff illness/absenteeism.	Cap 4, Obj 1		
3.5 Evaluate indicators that have effects on EMS and coordinate access through the health care coalition (e.g., status of emergency departments, alternate care sites, epidemiologic information/forecasting, weather (e.g., snowstorms), availability of staff, availability of supplies).	Cap 4, Obj 1		
3.6 Determine process for vaccination of EMS staff and their families in conjunction with public health, and in the context of vaccine availability.	Cap 4, Obj 2		
3.7 Determine vulnerable supplies and coordinate with vendors and the health care coalition to develop contingency plans/allocation plans.	Cap 4, Obj 1		
3.8 Develop public messages that emphasize using 911 only for life-threatening emergencies and coordinate with JIS.	Cap 4, Obj 2		
3.9 Develop information sharing process both for internal staff and between EMS agencies.	Cap 4, Obj 2		

Coordination/Regulatory Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
3.10 Develop just-in-time education for EMS personnel relative to infection prevention and control, self-care, transmission and family protection, vaccines and antivirals, and normal stress responses.	Cap 1, Obj 4		
3.11 Pre-identify strategies and resources to ensure behavioral health support for staff to mitigate adverse stress and grief and loss reactions.	Cap 3, Obj 5		
3.12 Determine virtual coordination mechanisms that will enable remote engagement of senior staff to prevent exposures and maximize ability to engage in both daily and incident operations.	Cap 2, Obj 2		
3.13 Determine how agency/regional EMS incident action plans will be managed.	Cap 2, Obj 1		
Dispatch Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
3.14 Prepare to initiate auto-answer/recorded answering of 911 calls including diversion of information or non-emergency calls to another call center (e.g., public health hotline). Consider activating a community hotline if such a call center does not exist.	Cap 4, Obj 1		
3.15 Evaluate protocols for conducting call screening to recognize influenza-like symptoms (e.g., cough and fever) and advise the responding EMS personnel of a potentially infectious patient.	Cap 4, Obj 1		
3.16 Adjust response configurations to allow flexibility including: • Prioritization of calls for service (for services that do not currently use priority dispatch systems) including basic algorithms for non-medically trained dispatchers or referring calls to recorded information, nurse triage hotlines, public health information lines, or other technology-based systems • Recommending self-transport or referral to primary care if appropriate (may need to triage calls to medical provider to evaluate if this capability is available)	Cap 4, Obj 1		

Dispatch Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
• Assignment of less than usual resources (e.g., assign law enforcement only on injury accidents unless and until clear information that non-ambulatory/critical injuries are present) • Assignment of non-traditional resources (e.g., using 'jump' cars, community paramedicine, and other responses) • Diversion to an alternate care site • Increasing interpretive service assistance			
Response Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
3.17 Develop triggers for implementing closest hospital transport – ideally done regionally.	Cap 2, Obj 1		
3.18 Develop triggers for implementing 'batch' transports (e.g., answering another call immediately if your current patient is stable) – ideally regionally.	Cap 4, Obj 1		
3.19 Determine indicators and triggers for changing staff shifts and crew configuration – ideally this should be implemented consistently in the region.	Cap 4, Obj 2		
3.20 Provide criteria for patient assessment and emphasis on cough/respiratory and hand hygiene as well as strict adherence to appropriate infection control precautions per Centers for Disease Control and Prevention (CDC) guidance.	Cap 4, Obj 2		
3.21 Develop criteria for on-scene denial of transport by EMS personnel for influenza-like illness and other patients – with or without on-line medical control – ideally regional rather than agency-based criteria and process.	Cap 4, Obj 1		
3.22 Develop/provide patient information sheets on homecare for influenza-like illness including usual clinical symptoms and course, infection prevention, treatment, and when to seek additional medical care.	Cap 2, Obj 3		
3.23 Develop/provide patient information sheets for other conditions that may be left without transport if the service volume suggests a relevant need (e.g., minor injuries).	Cap 4, Obj 1		

Response Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
3.24 Determine alternate transport resources and triggers to utilize them, e.g., private ambulance, wheelchair, contract/courier, for hire vehicles, military assets, buses.	Cap 4, Obj 1		
3.25 Evaluate available staff vs. available transport units to determine ability to meet other non-transport missions (e.g., community paramedicine, EMS personnel staffing alternate care locations or providing hospital support).	Cap 4, Obj 1		
3.26 Determine necessary changes to record-keeping including use of templates.	Cap 2, Obj 3		

4. Hospitals and Health Care Activities

Coordination/Regulatory Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.1 Determine coordination mechanisms, scope, and likely authorities between coalition hospitals and health care systems including information sharing, resource monitoring/assistance, and policy coordination. This should include the role of the coalition to engage with vendors of PPE, pharmaceuticals, and other medical supplies that may be in shortage. Conduct a coordination conference call with healthcare facilities to ensure awareness and consistency.	Cap 2, Obj 3		
4.2 Share each health care organization pandemic plan with other coalition members.	Cap 2, Obj 1		
4.3 Determine mechanisms to engage outpatient settings (homecare, ambulatory care) in information sharing and policy/response coordination.	Cap 2, Obj 1		
4.4 Determine mechanisms to engage skilled nursing facilities in information sharing and policy/response coordination.	Cap 2, Obj 1		
4.5 Determine actions that the state emergency management or public health agency is likely to take that affect health care including: • Suspension or modification of requirements for hospitals or clinics • Specific emergency orders or actions that may limit liability or expand scope of operations (for facilities and providers, including volunteers) • Requests for 1135 waivers from the Centers for Medicare & Medicaid Services (CMS) • Crisis standards of care activation • Issuance of clinical guidelines for care and resource allocation • ‘Taking powers’ of the state relative to medical materials and staff (i.e., does the state have ability to commandeer resources under their emergency powers and does this include medical materials?) • Promulgation or enforcement of legal obligations of medical staff to provide care	Cap1, Obj 2		

Coordination/Regulatory Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.6 Evaluate available indicators that may be needed for planning or by other partners and how to track them, e.g., number of ED visits, available beds, available ventilators, number of potential pandemic cases, staff illness/absenteeism.	Cap 2, Obj 2		
4.7 Evaluate indicators that have effects on hospitals and coordinate access through the health care coalitions (e.g., status of EMS agencies, alternate care sites, epidemiologic information/forecasting, availability of supplies).	Cap 4, Obj 2		
4.8 Determine indicators and potential triggers for vaccination of health care staff and their families in conjunction with public health.	Cap 4, Obj 2		
4.9 Determine a process for expedited credentialing of supplemental staff and for the orientation/mentoring of supplemental or shared staff.	Cap 4, Obj 1		
4.10 Determine threshold for use and priority list for supplemental staff (e.g., first shared health care system staff, then similarly credentialed and licensed staff, then Medical Reserve Corps, etc.).	Cap 1, Obj 2		
4.11 Determine indicators and potential triggers for implementation of alternate care systems in conjunction with public health.	Cap 4, Obj 2		
4.12 Develop public messages that emphasize using emergency departments only for life-threatening emergencies and coordinate with the JIS. Be prepared to manage the expectations of the public relative to scarce resources (what is the shortage, what is being done, who are the priority groups, etc.).	Cap 4, Obj 2		
4.13 Determine common visitor policies for coalition hospitals.	Cap 4, Obj 2		
4.14 Develop just-in-time education for health care personnel relative to pandemic influenza transmission, vaccination, clinical course, at-risk populations, complications, treatment (including antivirals), infection prevention and control, self-care, transmission and family protection, and normal stress responses.	Cap 4, Obj 2		
4.15 Pre-identify strategies and resources to ensure behavioral health support for staff to mitigate adverse stress and grief and loss reactions.	Cap 3, Obj 5		

Coordination/Regulatory Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.16 Determine virtual coordination mechanisms that will enable remote engagement of senior staff to prevent exposures and maximize ability to engage in both daily and incident operations.	Cap 4, Obj 2		
4.17 Determine how facility/regional hospital incident action plans will be managed.	Cap 2, Obj 3		
4.18 Determine how awareness of retail pharmacy stocks (e.g., of antiviral medications) will be maintained and shared with ambulatory/emergency care workers.	Cap 3, Obj 3		
4.19 Determine behavioral health support plan that includes use of individual HCF staff as well as local, regional, state and federal assistance for meeting patient and staff needs (including those in a leadership role).	Cap 2, Obj 2		
4.20 Determine direction for tracking response cost and lost revenue implications associated with response.	Cap 3, Obj 2		
Health Care Facility Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.21 Determine incident management activation/configuration based on impact (phased approach) as well as incident action plan cycles and development process.	Cap 2, Obj 1		
4.22 Designate a point of contact for the facility/agency to liaison with the coalition and other partners.	Cap 2, Obj 1		
4.23 Identify SMEs to inform operational decisions and potential resource allocation decisions.	Cap 2, Obj 1		
4.24 Determine methods for patient/family information provision including alternate languages/interpretive services.	Cap 2, Obj 1		
4.25 Determine staff communication mechanisms and redundant information management process.	Cap 2, Obj 1		
4.26 Determine indicators and potential triggers for changing services provided (e.g., limit elective services).	Cap 2, Obj 1		

Health Care Facility Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.27 Determine strategies to maintain services for at-risk patients during the pandemic period (e.g., pregnant, dialysis) but unrelated to influenza.	Cap 1, Obj 2		
4.28 Determine likely resource shortages and identify relevant vendor, cache, and coalition options for managing shortages.	Cap 3, Obj 3		
4.29 Develop service restriction plans in case of staff shortages or increased demand (e.g., respiratory care, nutritional support, pharmacy, laboratory, radiology, elective surgeries/procedures).	Cap 2, Obj 1		
4.30 Develop/update crisis standard of care language in emergency operations plan including the potential for triage decision-making (who, process, communication, considerations) and staff management (how will staff expertise be maximally utilized vs. add additional training for some staff).	Cap 2, Obj 1		
4.31 Evaluate the plan for providing just-in-time staff education via electronic and other non-classroom means including information about the pandemic, vaccination, transmission, infection prevention measures, usual clinical symptoms and course, treatment (including antivirals), risk factors, and complications.	Cap 1, Obj 4		
4.32 Establish connection with homecare and long-term care partners to facilitate rapid discharge process from the hospital.	Cap 4, Obj 2		
4.33 Develop indicators and possible triggers for implementing alternate systems of care (including phone and web-based assessments as well as in-person care) including establishing health care system-based alternate care sites (e.g., on-site or managed completely by health care entity at owned and re-purposed site).	Cap 4, Obj 2		
4.34 Develop indicators and possible triggers for establishing community alternate care sites in conjunction with public health and emergency management including what support may be required from the health care system.	Cap 2, Obj 1		

Health Care Facility Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.35 Develop demand staffing plans for all categories of staff. Modify staff responsibilities and shifts as required (supervisory staff work clinically, suspend most education and other administrative burdens, determine where less-trained staff can safely provide support and the extent of family member support).	Cap 4, Obj 2		
4.36 Engage union/labor leaders in relevant discussions of staff responsibilities and hours during pandemics.	Cap 3, Obj 5		
4.37 Anticipate supply shortages and coordinate with vendors, the health care coalition, and emergency management to coordinate resource supply, distribution, and scarce resource strategies.	Cap 3, Obj 3		
4.38 Develop a plan for implementing a supplemental facility security/controlled access plan (which may be phased) particularly during the peak pandemic weeks to assure controlled campus ingress and egress and monitoring.	Cap 2, Obj 1		
4.39 Provide patients and staff with information about stress responses, resilience, and available professional mental health resources. Develop staff monitoring for those exposed to high levels of cumulative stress or specific severe stressors (death of co-worker, etc.).	Cap 4, Obj 2		
4.40 Consider ways to maintain staff resilience and morale when congregate gatherings and close physical contact are discouraged. This may need to include memorial services for staff members.	Cap 3, Obj 5		
4.41 Determine if the fatality management plan is sufficient for an increased volume of decedents at the facility.	Cap 4, Obj 2		
4.42 Develop procedure for notifying the state agency for healthcare administration if licensed bed availability/capacity changes as a result of the pandemic.	Cap 4, Obj 1		

Emergency Department Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.43 Determine screening process and location (e.g., curbside screening prior to entry, supplemental screening at intake, etc.).	Cap 4, Obj 1		
4.44 Determine how suspect cases will be isolated from other waiting patients and during ED care.	Cap 4, Obj 2		
4.45 Emphasize hand and respiratory hygiene and other infection prevention techniques through education, policies, signage, and easy availability of supplies.	Cap 4, Obj 1		
4.46 Develop referral plans for patients that do not need emergency care.	Cap 4, Obj 1		
4.47 Develop care plans that reduce the number of staff caring for suspect/confirmed cases and protocolize care.	Cap 4, Obj 2		
4.48 Assure administrative engagement in decision-making/use of incident management.	Cap 2, Obj 3		
4.49 Develop an infection prevention plan for the ED specific to the pandemic influenza and conduct education and develop signage and other necessary materials. Ensure the infection prevention and control department is notified as soon as possible when a patient screens positive.	Cap 4, Obj 2		
4.50 Create templated charts for pandemic patients including discharge instructions and prescriptions.	Cap 4, Obj 1		
4.51 Create 'fast-track' or other methods for rapid evaluation and prescribing for minor illness.	Cap 4, Obj 1		
4.52 Ensure integrated process to negotiate admissions and resource access.	Cap 4, Obj 1		
4.53 Assure the specific needs of pediatric and at-risk populations are addressed in surge capacity planning.	Cap 1, Obj 2		
4.54 Plan to implement alternate triage and referral strategies when appropriate.	Cap 4, Obj 2		
4.55 Provide patients and families with information about stress responses, resilience, and available professional mental health/behavioral health resources.	Cap 4, Obj 2		

Inpatient Care Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.56 Create/modify surge capacity plans including doubling of appropriate rooms for patients with like/similar ailments and use of flat-space areas for crisis care.	Cap 4, Obj 2		
4.57 Determine isolation policies/areas for inpatients with influenza, including cohort care isolation areas/zones.	Cap 4, Obj 2		
4.58 Create critical care surge plan including location and needed supplies (monitors, oxygen, ventilators) not available on-site based on American College of Chest Physicians guidance of 200% of usual capacity.	Cap 4, Obj 2		
4.59 Anticipate changes to usual unit criteria to meet demand (e.g., thresholds for laboratory values or frequency of nursing interventions such as neuro checks or glucose checks may be waived).	Cap 4, Obj 2		
4.60 Adjust charting and administrative requirements as needed.	Cap 4, Obj 2		
4.61 Emphasize hand and respiratory hygiene and other infection prevention techniques through education, policies, signage, and easy availability of supplies.	Cap 4, Obj 2		
4.62 Develop a surveillance plan to document any fever or respiratory symptoms among inpatients and staff and guide further evaluation/isolation. Develop isolation protocols for staff with symptoms.	Cap 4, Obj 2		
4.63 Develop care plans that reduce the number of staff caring for suspect/confirmed cases and protocolize care.	Cap 4, Obj 2		
4.64 Adjust daily nursing expectations/duties as required to meet demand.	Cap 4, Obj 2		
4.65 Develop environmental services room decontamination and waste stream plans.	Cap 3, Obj 3		
4.66 Assure the specific needs of pediatric and at-risk populations are addressed in surge capacity planning.	Cap 4, Obj 2		
4.67 Provide patients and families with information about stress responses, resilience, and available professional mental health/behavioral health resources.	Cap 4, Obj 2		
4.68 Develop palliative care plans for implementation when needed.	Cap 4, Obj 2		

Outpatient Services/Community Health Centers/Free Standing Health Facilities Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.69 Develop staffing plan to allow for expanded service hours when needed. Determine if outpatient locations and services should remain open if the threat is too great to staff and patients.	Cap 4, Obj 2		
4.70 Determine screening process and location (e.g., curbside screening prior to entry, supplemental screening at intake, separate well/ill clinics, etc.).	Cap 4, Obj 1		
4.71 Develop telemedicine service plan for use for patients with special needs or general population.	Cap 4, Obj 2		
4.72 Develop a plan to expedite medication refills, obstetrician visits, and other office visits prior to the arrival of pandemic cases in the community. The practice should have days to weeks to pre-emptively manage its workload in anticipation of limited elective services during the pandemic period.	Cap 3, Obj 2		
4.73 Develop a process for screening and triage of phone and email requests for care to limit office visits to those that require an in-person provider evaluation.	Cap 4, Obj 2		
4.74 Develop a process to limit/cancel non-essential visits which can 'flex' with the demands of the pandemic.	Cap 4, Obj 2		
4.75 Emphasize hand and respiratory hygiene and other infection prevention techniques through education, policies, signage, and easy availability of supplies. Develop patient movement and transportation route plans.	Cap 4, Obj 2		
4.76 Evaluate maximal use of space. Convert specialty clinics to acute care, extend hours, etc.	Cap 4, Obj		
4.77 Consider which clinics may be converted into in-patient units (e.g., surgicenters).	Cap 4, Obj 2		
4.78 Develop referral/deferral plans for patients that do not need acute care (e.g., perform virtual/telephone medication management, automate prescription refills).	Cap 4, Obj 2		
4.79 Assure administrative engagement in decision-making/use of incident management to assure continuity and consistency between providers and agencies/facilities.	Cap 4, Obj 3		

Outpatient Services/Community Health Centers/Free Standing Health Facilities Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.80 Develop infection prevention plan for the clinic specific to pandemic influenza and conduct education and develop signage and other necessary materials.	Cap 4, Obj 2		
4.81 Create templated charts for pandemic patients including discharge instructions and prescriptions.	Cap 4, Obj 1		
4.82 Create 'fast-track' or other methods for rapid evaluation and prescribing for minor illness.	Cap 4, Obj 1		
4.83 Determine how suspect cases will be isolated from other patients in the clinic space.	Cap 4, Obj 2		
4.84 Consider specific clinics designated for suspect cases, or specific hours for acute illness clinics.	Cap 4, Obj 2		
4.85 Develop care plans that reduce the number of staff caring for suspect/confirmed cases and protocolize care.	Cap 4, Obj 2		
4.86 Determine at-risk and functional needs populations that may be impacted and assure access to care.	Cap 4, Obj 2		
4.87 Assure that clinic providers are included in public health estimates of priority groups and that the clinic understands how it will obtain vaccine for health care workers.	Cap 4, Obj 2		
4.88 In conjunction with public health, determine the role of the clinic in providing influenza vaccination.	Cap 4, Obj 2		
4.89 Plan to provide just-in-time staff education via electronic and other non-classroom means including information about the pandemic vaccination, transmission, infection prevention measures, usual clinical symptoms and course, treatment (including antivirals), risk factors, and complications.	Cap 1, Obj 4		
4.90 Determine potential indicators/triggers for alternate care systems (including telephone prescribing/encounters and early evaluation and treatment locations as needed).	Cap 4, Obj 2		

Outpatient Services/Community Health Centers/Free Standing Health Facilities Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.91 Provide or develop patient resources on pandemic influenza including transmission, prevention, vaccination, usual clinical course, antivirals, risks for more severe disease, and when to seek medical care. These materials should also encourage patients to have at least a 30 day supply of usual medications on hand.	Cap 4, Obj 2		
4.92 Provide patients and families with information about stress responses, resilience, and available professional mental health/behavioral health resources.	Cap 4, Obj 2		
4.93 Assure the specific needs of pediatric and at-risk populations are addressed in surge capacity planning.	Cap 1, Obj 2		
Homecare Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.94 Determine incident management process and authorities; assure administrative engagement and support.	Cap 2, Obj 3		
4.95 Establish prioritization process for homecare intake or ongoing services including denial and referral to other services. Adjust home visit schedules and responsibilities as required.	Cap 4, Obj 2		
4.96 Establish liaison process with hospitals to share information on current and projected capacity and needs.	Cap 4, Obj 2		
4.97 Establish liaison process with health care coalition to provide updates on capacity and assist with resource and staffing issues including the process for requesting additional resources from coalition partners or emergency management.	Cap 4, Obj 2		
4.98 In conjunction with public health, determine the role of the homecare agency in providing influenza vaccination.	Cap 4, Obj 2		
4.99 Determine contingency staffing plan.	Cap 4, Obj 2		
4.100 Address staff transportation-related issues that may be anticipated such as reduced access to fuel.	Cap 4, Obj 2		

Homecare Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.101 Develop/provide education to homecare professionals about influenza transmission, vaccination clinical course, treatment (including antivirals) and complications (in addition to infection control/staff safety information as outlined above).	Cap 4, Obj 2		
4.102 Emphasize hand and respiratory hygiene and other infection prevention techniques through education, policies, signage, and easy availability of supplies.	Cap 4, Obj 2		
4.103 Develop/provide just-in-time training to staff taking on non-traditional roles as required to maintain critical services. Coordinate with health care coalition to determine potential options.	Cap 4, Obj 2		
4.104 Obtain or develop printed materials (including at appropriate reading level and in relevant languages) for clients including information about influenza (including infection prevention measures and clinical disease), service modifications due to the pandemic, and resources. These materials should encourage patients to have at least a 30 day supply of usual medications on hand.	Cap 2, Obj 3		
4.105 Determine how volunteer/other staff could contribute to homecare activities.	Cap 4, Obj 1		
4.106 Establish telephone/virtual support for clients to provide information and 'check in' status.	Cap 4, Obj 2		
4.107 Monitor clients for mental health related issues and provide information on normal stress responses.	Cap 4, Obj 2		
4.108 Provide just-in-time staff education via electronic and other non-classroom means including information about the pandemic, transmission, infection prevention measures, usual clinical symptoms and course, treatment, risk factors, and complications.	Cap 4, Obj 2		
4.109 Assure that at-risk individuals serviced (e.g., on home oxygen, dialysis patients, etc.) have ongoing access to appropriate services and are listed in an agency database for easy reference.	Cap 3, Obj 3		
4.110 Provide patients and families with information about stress responses, resilience, and available professional mental health/behavioral health resources.	Cap 4, Obj 2		

Long-term Care/Skilled Nursing Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.111 Determine incident management process and authorities; assure administrative engagement and support.	Cap 2, Obj 3		
4.112 Liaison with the health care coalition/hospitals to assure maximal available residential beds.	Cap 2, Obj 3		
4.113 Determine potential supply shortages and work with vendors and the health care coalition if resource availability is limited.	Cap 2, Obj 3		
4.114 Develop a process to address shortages of supplies at the facility level including administration, nursing, medical direction, and subject matter expert input – ideally this can be a regional construct rather than at each facility.	Cap 4, Obj 1		
4.115 Develop a plan for more advanced care at the facility if hospital capacity is unavailable. This should involve nursing, medical direction, administrative representatives, and include consideration of telemedicine.	Cap 4, Obj 2		
4.116 Determine any potential regulatory relief (CMS 1135 or other waivers, state regulations relief, staffing requirements, etc.) that may be needed to effectively respond to the pandemic as well as issues regarding staff licensure/certification.	Cap 4, Obj 2		
4.117 Determine with medical director and nursing director changes in thresholds for emergency department referral. These may vary across the pandemic according to demand.	Cap 4, Obj 2		
4.118 Evaluate potential staffing and responsibility changes and how less-trained staff and families could contribute to operations.	Cap 4, Obj 2		
4.119 Determine the potential contributions of Medical Reserve Corps or other supplementary staff.	Cap 4, Obj 2		
4.120 Develop a process for rapid credentialing and training of non-facility supplemental health care staff.	Cap 4, Obj 1		
4.121 Develop infection detection process at the facility to promptly detect and isolate residents and staff with suspected influenza and monitor their close contacts.	Cap 4, Obj 2		

Long-term Care/Skilled Nursing Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.122 Emphasize hand and respiratory hygiene and other infection prevention techniques through education, policies, signage, and easy availability of supplies.	Cap 4, Obj 2		
4.123 Develop visitor policies designed to minimize potential exposures (ideally consistent across the coalition) and communicate via physical (signs at entrances and on units) and electronic means. Determine if visitation should be restricted or stopped if threat is too high for patients and staff.	Cap 4, Obj 2		
4.124 Communicate any change in services or policies to staff, residents, families, and the health care coalition.	Cap 4, Obj 2		
4.125 Designate a point of contact for the health care coalition.	Cap 2, Obj 3		
4.126 Designate a point of contact for family/resident information or questions.	Cap 2, Obj 3		
4.127 Develop infection control/isolation plan for ill suspect or confirmed cases.	Cap 4, Obj 2		
4.128 Assure staff are considered by public health in priority group vaccination planning.	Cap 4, Obj 2		
4.129 Plan to administer vaccine to residents when available. Complete necessary closed point of distribution planning with public health agency as required.	Cap 4, Obj 2		
4.130 Provide patients and families with information about stress responses, resilience, and available professional mental health/behavioral health resources.	Cap 4, Obj 2		
4.131 Assure fatality management plans are appropriate to address potentially increased numbers of deaths during a pandemic.	Cap 4, Obj 2		
4.132 Plan for providing just-in-time staff education via electronic and other non-classroom means including information about the pandemic, transmission, infection prevention measures, usual clinical symptoms and course, treatment, risk factors, and complications.	Cap 1, Obj 4		

Alternate Care Site/System Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
4.133 Assure integration with public health and other health systems regarding consistent scripts for web and telephone based nurse triage lines/9-1-1 public safety answering points/ poison control centers/locally generated “apps” and integration with additional telephone/virtual prescribing - particularly for at-risk populations.	Cap 4, Obj 2		
4.134 Determine support needed from the health care system for ‘flu clinics’ for early screening and treatment as planned by public health.	Cap 4, Obj 2		
4.135 Understand/assist with plan for alternate care site(s) for hospital overflow – roles, responsibilities, authorities, staffing, material resources, criteria, level of clinical care (understanding that this may not be feasible if staff absenteeism is high at the hospitals).	Cap 4, Obj 2		
4.136 Assure the specific needs of pediatric and at-risk populations are addressed in surge capacity planning.	Cap 1, Obj 2		
4.137 Assure enough staff, supplies, prophylaxis, and logistical support are on hand before opening the site.	Cap 4, Obj 2		
4.138 Provide patients and families with information about stress responses, resilience, and available professional mental health/behavioral health resources.	Cap 4, Obj 2		

5. Public Health Activities

Coordination/Regulatory Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
5.1 Determine coordination mechanisms, scope, and likely authorities between public health agencies in the coalition including information sharing, resource monitoring/assistance, and policy coordination. This should include cooperative planning for population-based interventions to assure regional consistency.	Cap 2, Obj 1)		
5.2 Determine actions that the state or local emergency management or state public health agency is likely to take that affect public health including: • Public health emergency declarations • Isolation/quarantine orders • Orders affecting mass gatherings or schools • Suspension or modification of requirements for vaccine administration or provider licensure • Specific emergency orders or actions that may limit liability (including for volunteers) or expand scope of operations • Crisis standards of care activation • Issuance of clinical guidelines for vaccination, patient care, and resource allocation • Lab testing protocols • ‘Taking powers’ of the state relative to medical materials and staff • Promulgation or enforcement of legal obligations of medical staff to provide care	Cap 2, Obj 3)		
5.3 Evaluate available indicators that may be needed for planning or by other partners and how to track them, e.g., number of ED visits, available hospital beds, number of potential pandemic cases.	Cap 4, Obj 2		
5.4 Determine the potential role of Medical Reserve Corps members and other volunteers including alternate systems of care.	Cap 4, Obj 2		

Coordination/Regulatory Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
5.5 Determine at-risk and functional needs populations that may be impacted and assure access to care.	Cap 1, Obj 2		
5.6 Plan to monitor and communicate health alerts and other relevant information rapidly to health care workers including via formal health alerts and other mechanisms and in conjunction with coalition partners.	Cap 4, Obj 2		
5.7 Develop public messages or public service announcements about influenza transmission, available treatments, at-risk groups, vaccine effectiveness and availability, and when to seek care for illness. Assure concordant messages with hospitals and EMS and coordinate message delivery with the JIS. Be prepared to manage the expectations of the public relative to scarce resources (what is the shortage, what is being done, who are the priority groups, etc.).	Cap 2, Obj 1		
5.8 Determine lead agency and plan for mental health effects of a pandemic including social isolation, fear, and other factors. This should include support for persons with existing mental health conditions as well as population-based measures and for newly symptomatic individuals. Virtual means of counseling should be emphasized as much as possible.	Cap 4, Obj 2		
5.9 Pre-identify strategies and resources to ensure behavioral health support for staff to mitigate adverse stress and grief and loss reactions.	Cap 3, Obj 5		
5.10 Determine virtual coordination mechanisms that will enable remote engagement of senior staff to prevent exposures and maximize ability to engage in both daily and incident operations.	Cap 4, Obj 2		
5.11 Determine how public health incident action plans will be managed and integrated with emergency management.	Cap 2, Obj 3		
5.12 Plan to provide just-in-time staff education via electronic and other non-classroom means including information about the pandemic, transmission, infection prevention measures, usual clinical symptoms and course, treatment, risk factors, and complications.	Cap 4, Obj 2		
5.13 Determine the role of SNS, other Federal, and state cache assets during a pandemic and understand/facilitate the request, distribution, and tracking process.	Cap 4, Obj 2		

Alternate Care Site/System Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
5.14 Determine indicators and potential triggers for implementation of alternate care systems in conjunction with hospitals and emergency management.	Cap 4, Obj 2		
5.15 Develop plans for hotlines to support community information needs with referral to medical providers/triage lines per personal insurance or specifically developed by public health for the incident; coordinate with Joint Information Center.	Cap 4, Obj 2		
5.16 Develop plans for telephone/virtual prescribing for at-risk populations.	Cap 4, Obj 2		
5.17 Determine support needed for 'flu clinics' for early screening and treatment as appropriate. These may be needed in particular to support at-risk populations that may have difficulty accessing usual clinics (e.g., due to restrictions on mass transit/travel or limited mobility).	Cap 4, Obj 2		
5.18 Develop plan for alternate care site(s) for hospital overflow – roles, responsibilities, authorities, staffing, material resources, criteria, level of clinical care (understanding that this may not be feasible if staff absenteeism is high at the hospitals).	Cap 4, Obj 2		
5.19 Provide access to guidance for family/home based care of patients with less severe disease including expectations for symptoms, duration, supportive care, and when to seek medical care.	Cap 4, Obj 2		
Community-based Intervention Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
5.20 Determine triggers for community-based interventions including social distancing and school closures.	Cap 4, Obj 2		
5.21 Develop mass vaccination plan with phased approach as vaccine becomes available including priority groups, open and closed points of distribution, thresholds for distribution of vaccine within the medical care system vs. mass clinics, staffing and logistics.	Cap 4, Obj 2		

6. Emergency Management Activities

Activities	Applicable Health Care Preparedness and Response Capability	Coalition Rating (1-5)	Remaining Work Needed
6.1 Define the emergency orders and actions that the local jurisdiction and state may invoke to support the pandemic response.	Cap 1, Obj 2		
6.2 Determine the likely level of activation of the Emergency Operations Center including virtual functions to avoid gathering of leadership whenever possible.	Cap 2, Obj 1		
6.3 Assure understanding of the resource request process that public health and hospitals will use.	Cap 4, Obj 3		
6.4 Maintain situational awareness of EMS system and hospital statuses.	Cap 2, Obj 3		
6.5 Partner with public health to determine authorities and lead agency for alternate care sites.	Cap 2, Obj 1		
6.6 Support public health logistics for mass vaccination and other interventions.	Cap 2, Obj 1		
6.7 Provide interface with public officials with public health and health care for proactive briefings and information sharing.	Cap 2, Obj 3		
6.8 Account for pandemic-level pressure on decedent processing (e.g., funeral homes, crematoriums, medical examiners, temporary holding areas, extent of death investigations, etc.) in mass fatality plan.	Cap 4, Obj 2		
6.9 Provide just-in-time staff education via electronic and other non-classroom means including information about the pandemic, transmission, infection prevention measures, usual clinical symptoms and course, treatment, risk factors, and complications.	Cap 1, Obj 4		
6.10 Pre-identify strategies and resources to ensure behavioral health support for staff to mitigate adverse stress and grief and loss reactions.	Cap 3, Obj 5		
6.11 Maintain communication, collaboration, and coordination with healthcare coalition.	Cap 2, Obj 3		

7. Influenza Pandemic Resources

Christian, M., Devereaux, A., Dichter, J., et al. (2014). [Care of the Critically Ill and Injured During Pandemics and Disasters: Introduction and Executive Summary](#). Chest. 146(4_suppl).

This article provides an introduction to and methodology supporting the consensus statement of the American College of Chest Physicians on the care of the critically ill and injured during pandemics and disasters. Other articles in this supplement focus on specific aspects of such care.

Hanfling, D., Altevogt, B., Viswanathan, K., and Gostin, L. (2012). [Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response](#). The National Academies of Sciences, Engineering, and Medicine.

This report was designed to help authorities operationalize the concepts first developed in the 2009 Institute of Medicine Report titled, “Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: A Letter Report.” It provides practical templates and toolkits for the emergency response disciplines and emphasizes the importance of a systems framework. This report also includes a “public engagement” template specifically to guide communities in hosting meetings and encourages the inclusion of citizens in their policy process.

Hanfling, D., Hick, J., and Stroud, C. (2013). [Crisis Standards of Care: A Toolkit for Indicators and Triggers](#). The National Academies of Sciences, Engineering, and Medicine.

This toolkit contains key concepts, guidance, and practical resources to help individuals across the emergency response system develop plans for crisis standards of care and respond to a catastrophic disaster. It includes sample indicators, triggers, and sample tactics for use in the transition from conventional surge to contingency surge to crisis surge, and a return from crisis response to conventional response.

Minnesota Department of Health, Office of Emergency Preparedness, Minnesota Healthcare System Preparedness Program. (2019). [Patient Care: Strategies for Scarce Resource Situations](#).

This card set can help facilitate an orderly approach to resource shortfalls at a healthcare facility. It is a decision support tool to be used by key personnel, along with incident management, who are familiar with ethical frameworks and processes that underlie these decisions.

National Security Council. (2005). [National Strategy for Pandemic Influenza](#).

This document provides a framework for U.S. government planning for and response to pandemic influenza.

Oak Ridge Institute for Science and Education. (2016). [Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies](#). U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

Based on the proceedings of a CDC-convened stakeholder meeting, this guide addresses situational awareness, continuity of operations, facility operations, crisis standards of care, staffing, and fatality management issues that long term care providers should consider in their emergency preparedness planning efforts.

U.S. Department of Health and Human Services. (2017). [Pandemic Influenza Plan: 2017 Update](#).

This updated plan builds upon the 2005 Pandemic Influenza Plan and its subsequent updates, focusing on the seven domains of: surveillance, epidemiology, and laboratory activities; community mitigation measures; medical countermeasures; health care system preparedness and response activities; communications and public outreach; scientific infrastructure and preparedness; and domestic and international response policy, incident management, and global partnerships and capacity building.

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (n.d.). [CDC Pandemic Tools](#).

This web page hosts several free, downloadable pandemic modeling tools and the Influenza Risk Assessment Tool.

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (2006). [Home Health Care Services Pandemic Influenza Planning Checklist](#).

This checklist can help public and private healthcare organizations assess and better their pandemic influenza preparedness and planning.

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (n.d.). [Hospital 2009 H1N1 Pandemic Influenza Readiness Review Checklist](#).

This checklist can help hospital staff with decision making and influenza plan development.

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response, Technical Resources, Assistance Center, and Information Exchange. (2016). [Crisis Standards of Care Topic Collection](#).

This Topic Collection contains links to articles, guidelines and strategies, lessons learned, pandemic-specific planning, studies and reports, toolkits, webinars, and plans, tools, and templates related to crisis standards of care.

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response, Technical Resources, Assistance Center, and Information Exchange. (2017). [Epidemic/Pandemic Flu Topic Collection](#).

This Topic Collection contains links to additional resources to assist in influenza epidemic and pandemic planning.

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response, Technical Resources, Assistance Center, and Information Exchange. (2017). [Select HCC Resources](#).

This dedicated webpage features resources that may be particularly helpful to health care coalitions working to improve their preparedness capabilities.

U.S. Department of Transportation, National Highway Traffic Safety Administration. (2007). [EMS Pandemic Influenza Guidelines for Statewide Adoption](#).

This document provides guidelines to EMS agencies and other stakeholders to support the development of their pandemic influenza plans and related operational protocols.

8. Acronyms

CDC	Centers for Disease Control and Prevention
CMS	Centers for Medicare and Medicaid Services
DOD	Department of Defense
ECMO	extracorporeal membrane oxygenation
ED	emergency department
EEI	essential elements of information
EMS	emergency medical services
HCF	health care facility
JIS	Joint Information System
PAPR	powered air purifying respirators
PPE	personal protective equipment
SME	subject matter expert
SNS	Strategic National Stockpile
TRACIE	Technical Resources, Assistance Center, and Information Exchange
VA	Department of Veterans Affairs