

State of New Hampshire

New Hampshire Crisis Standards of Care Plan

Version 1.0

State Disaster Medical Advisory Committee 4-6-2020

Acknowledgements and Preface

Through the collaborative efforts of seven Preventive Medicine Residents of the Dartmouth-Hitchcock Medical Center's Leadership Preventive Medicine Residency (LPMR) program and feedback from members of the New Hampshire State Disaster Medical Advisory Committee (SDMAC), the New Hampshire Crisis Standards of Care (CSC) Plan was established. The LPMR physicians lead the research to draft the CSC Plan and applied the core competencies of leadership; measurement of illness burden and outcome; quality, value and safety healthcare improvement; and reflections on personal and professional practice as required by the program. We sincerely appreciate the great work of the LPMR program physicians: Charles Burney, MD; Barry Howe, MD; Patrick Ho, MD; Mark Abel, MD; Ritika Zijoo, MD; Suthanya Sornprom, MD; and Hena Waseem, MD.

Membership of the New Hampshire SDMAC was comprised of representatives from across the state in the areas of: medical ethics, legal counsel, academics, health policy, emergency management, emergency medical services, nursing, hospitals, hospital and healthcare associations, public health, disability and health equity specialists, Governor's office and legislature, and the State's health care coalition. Feedback from the citizens of New Hampshire during the creation of the plan brought the process full circle in the context of 'whole community' planning.

While this plan was developed through the first surge of the COVID-19 Pandemic, our primary focus was catastrophic incidents that would extremely impact the capabilities and capacities of the health care system across the state. Plans are dynamic documents. We anticipate at least annual revisions to this New Hampshire Crisis Standards of Care Plan and other supporting documents to ensure that the best care possible is delivered when the next disaster strikes.

Table of Contents

Acknowledgements and Preface	2
Abbreviations	5
Executive Summary	
Crisis Standards of Care Plan	7
Background	
Situational Awareness	
Indicators and Triggers	7
Activation	
SDMAC and State Triage Committee	8
Crisis Standards of Care Clinical Guidelines Scope	9
Guidance for Crisis Standards Development	10
Implementation of Crisis Standards of Care Clinical Guidelines	10
Appeals Process	11
Overview	11
Coordination of Hospitals and SDMAC	12
Public Communications	13
De-escalation and Recovery	13
CSC Activation Flowchart	14
Exhibit A: Clinical Concepts of Operations	15
Continuum of Care	15
In-Hospital Care	16
Indicators and Triggers	16
Core Strategies	16
Triage	17
Reactive and Proactive Triage	17
Triage Committee	18
Surge Capacity	19
Transfer Guidelines	22
Alternative care sites	23
Out of Hospital Care	23
Clinics	24

Surgical Centers	25
Long-term care facilities	25
Group homes and congregate settings	26
Home care	26
Family-based care systems	27
Emergency Medical Services	28
Palliative and Comfort Care Palliative and Comfort Care in Hospitals and Acute Care Facilities	
Palliative and Comfort Care at Out-of-Hospital Facilities	30
Palliative and Comfort Care at Alternate Care Sites and Systems	30
Just-in-Time Training for Palliative and Comfort Care	30
Advanced Care Planning	31
Psychosocial Support	31
Behavioral and Mental Health Criteria for Behavioral Health Admission	
Capacity of Inpatient Behavioral Health Treatment Units	32
Community and Outpatient Mental Health	32
Pediatrics	33
Healthcare Workforce	
Scope of Practice	34
Trainees and Supervision	35
Other Licensing Considerations	35
Staff Support	35
Exhibit B: Ethical Framework Overview	
Ethical Commitments	36
Ethical Objectives	39
References and Resources	40

Abbreviations

ACS – Alternate Care Sites

CMHC – Community Mental Health Center

CSC – Crisis Standards of Care

DHHS - Department of Health and Human Services

ECMO—Extracorporeal Membrane Oxygenation

EMS – Emergency Medical Service

EOP – Emergency Operations Plan

ESF 8 - Emergency Support Function 8

ESU – Emergency Services Unit

GSHCC - Granite State Health Care Coalition

HIC - Hospital Incident Command

HTC – Hospital Triage Committee

ICS – Incident Command System

JIC - Joint Information Center

MACE – Multi-Agency Coordinating Entity

NH—New Hampshire

NHICS -Nursing Home Incident Command System

NHHA – New Hampshire Hospital Association

OPLC – Office of Professional Licensure and Certification

PIO – Public Information Officer

SDMAC – State Disaster Medical Advisory Committee

SEOC – State Emergency Operations Center

STC – State Triage Committee

Executive Summary

The New Hampshire Crisis Standards of Care Plan ("CSC Plan") outlines a *process* for stakeholders and experts to collectively determine, communicate, and rapidly update a set of statewide Crisis Standards of Care clinical guidelines ("CSC clinical guidelines") in response to a specific crisis. CSC guidelines are activated when maintaining usual standards of care is impossible due to a public health disaster. They aim to mitigate suffering and death through equitable allocation of scarce healthcare resources. In addition, individual healthcare organizations are also expected to develop their own crisis plans, a necessary extension of their existing Emergency Operations Plans (EOP). This CSC Plan also provides general guidance for the creation of statewide CSC guidelines and individual healthcare organizations in preparing for a crisis (Exhibit A: Clinical Concepts of Operations). All CSC plans and CSC clinical guidelines are foremost grounded in the ethical principles of justice, proportionality, and solidarity, among others, as well as the emergency management legal authorities of the state under which they are activated. Exhibit B addresses these ethical principles that support all crisis standards of care efforts.

Updates and Revisions

The NH Department of Health and Human Services (DHHS) will convene a CSC Committee to revise the CSC Plan and associated CSC guidelines, and solicit stakeholder and community feedback on a biennial basis and during any state-wide public health emergency exercise. On activation of the CSC Plan, a State Disaster Medical Advisory Committee (SDMAC), with members appointed by the Commissioner of the NH DHHS will update the CSC plan and CSC guidelines as outlined below.

Crisis Standards of Care Plan

Background

CSC clinical guidelines may represent a radical departure from usual practice and result in a significantly increased risk of suffering and death. Under such circumstances, even small differences in standards between healthcare organizations can have a magnified impact on perceptions of injustice among patients, healthcare providers, and society. Such differences may also represent real inequities in resources that should be promptly addressed. Unifying crisis standards thus necessarily entails extensive collaboration and coordination among and between healthcare coalitions. This paradigm of crisis management is widely accepted and discussed at length in the Institute of Medicine Crisis Standards of Care Framework.

Situational Awareness

State CSC clinical guidelines are typically implemented in situations in which there will be a prolonged mismatch in the supply and demand for health care resources.

Acute situations such as mass casualty events may provoke a short-term period of crisis care in which resources are temporarily limited. These situations are frequently self-limited as resources and help from surrounding regions arrive. These situations should be addressed in hospital EOPs but may not warrant a state-level response and implementation of CSC clinical guidelines unless a prolonged mismatch (i.e. > 24 hours) in supply is expected.

Activation of the CSC plan itself does not necessarily constitute implementation of CSC clinical guidelines including resource rationing and triage. Activation of the CSC Plan allows for assembly of the SDMAC and creation of a State Triage Committee (STC).

CSC clinical guidelines will only be implemented when:

- Resources have been, or will imminently be, overwhelmed despite exhaustive efforts to augment and share resources with the assistance of state and federal resources.
- The need for implementation of resource rationing and triage has been approved by the DHHS Commissioner in consultation with appropriate authorities and stakeholders.

Indicators and Triggers

The activation of the NH CSC Plan is dependent on three key factors to be considered by DHHS, details of which are dependent on the continuum of crisis care:

- Situational awareness indicators: Monitoring of ongoing regional, national, and global events for possible threats to New Hampshire.
 - Activation of the CSC plan, in general, will require a declaration of a State of Emergency and/or a Public Health Incident.

- Hospital incident command groups may request activation of the CSC Plan via the Granite State Health Care Coalition (GSHCC) or direct request to the State Emergency Operations Center (SEOC) or Emergency Support Function 8 (ESF 8).
- Indicators: Measurements, events, or other data that predict a change in demand for healthcare requiring further analysis, or response, often determined at a state level.
 These can include, but are not limited to:
 - Disruption of facility or community infrastructure and function or request by one or more facilities to implement the CSC plan
 - Failure of hospital "contingency" surge capacity
 - o Availability of material resources
 - Availability of space for patient care
 - Pandemic phase
- Triggers: Decision points based on availability of resources requiring adaptations along the continuum of care (contingency, conventional, and crisis). These are frequently dependent on local situations. Triggers may include, but are not limited to:
 - o Inability to answer all Emergency Medical Service (EMS) calls
 - Inability to maintain appropriate staffing in healthcare centers or implementation of atypical patient-to-provider ratios
 - Inability to transfer patients
 - Shortage of specific equipment (e.g. ventilators) or medications

Activation

The DHHS Commissioner, in consultation with stakeholders, will initiate the CSC plan based on key indicators, triggers, and situational factors. If local conditions necessitate activation of hospital EOPs, they should simultaneously reach out to the SEOC and DHHS for support, regardless of state CSC plan or CSC clinical guidelines activation status.

The NH DHHS will assist in coordinating activation and implementation of CSC plan and CSC clinical guidelines through its Emergency Services Unit (ESU) and ESF 8, SDMAC, and STC.

SDMAC and State Triage Committee

The NH DHHS will convene the SDMAC to establish CSC clinical guidelines, provide guidance to health care facilities, and make recommendations to the Governor and SEOC during the incident. The SDMAC will consist of members appointed by the Commissioner of NH DHHS of representatives from key stakeholders such as government officials for the state of NH, as well as legal and medical experts, risk management professionals, community representatives, ethicists, and leaders from medical societies, health care coalitions, and associations supporting hospitals, primary care, long-term care, home care, mental health, patients with disabilities, and palliative care.

The SDMAC will solicit key subject matter experts to form a State Triage Committee (STC), a subcommittee of the SDMAC, who will be appointed by the Commissioner of NH DHHS with

membership relevant to the crisis at hand. Depending on the type and nature of the crisis, the subject matter experts appointed to the STC may include physicians who are content-matter experts in areas relevant to the crisis and practicing clinicians in the state of New Hampshire as well as a medical ethicist, an attorney, a state medical officer, and a state emergency management representative. Other considered roles for inclusion are a critical care nurse, a pharmacist, a risk management representative, and 2-3 of the following: internal medicine/pulmonary critical care physician, anesthesia critical care physician, surgical critical care physician, pediatric critical care physician, and emergency medicine physician as indicated by the type of crisis.

The STC will develop the CSC clinical guidelines, which will establish recommendations for the triage of critical health care resources and provide guidance to hospital triage officers/committees and the SDMAC. They may consult and collaborate with hospital triage committees, hospital ethics committees, and additional experts at their discretion. They may solicit and use guidelines developed at stakeholder hospitals to inform state recommendations.

Crisis Standards of Care Clinical Guidelines Scope

Some crisis standards can and should remain individualized as organizational-level EOPs. State CSC clinical guidelines should address top priority issues that the SDMAC deems highly consequential and broadly applicable for all healthcare stakeholders, and for which alignment of criteria between hospitals is necessary. While hospitals and other care facilities may have EOPs and CSC that may have slight variation, any significant variation in CSC in top priority issues will require coordination and standardization. The following areas should be considered for guidelines:

- Emergency Medical Services
 - Triage policies
- Acute care facilities
 - o Allocation of limited, life-saving treatments, including but not limited to:
 - Oxygen
 - Blood
 - Mechanical ventilation
 - Critical care and hospital beds
 - Hemodialysis
 - Extracorporeal Membrane Oxygenation (ECMO)
 - Medications
 - Criteria for hospital admission, escalation of level of care, potentially lifesaving but high-risk surgical procedures, code situations
 - Bed management and inter-facility transfers
 - Healthcare personnel policies
 - Quarantine/isolation, and return to work policies
 - Workforce sharing

- Visitor policies
- Out of hospital care
- Alternative care sites

Guidelines will be prepared for any areas deemed to be of significant enough importance to warrant state guidance to promote alignment amongst healthcare facilities throughout New Hampshire.

Guidance for Crisis Standards Development

The STC will utilize guidance provided in the 2009 and 2012 Institute of Medicine reports on CSC as well as up-to-date, peer-reviewed guidelines and literature relevant to the crisis at hand. Additional guidance is provided in Exhibit A of the CSC Plan. The STC will follow ethical principles as outlined in Exhibit B of this document.

Crisis standards of care clinical guidelines developed by the STC will:

- Be tailored to the crisis at hand and the availability of resources.
- Be grounded in the ethical principles outlined in Exhibit B.
 - Not consider age, sex, or disability alone.
 - Not discriminate based on religion, race, ethnicity, sexual orientation, state or country of origin, insurance status, or ability to pay.
- Be informed by applicable legal statutes, with integration of state and federal emergency orders, and waivers to expand access to medically necessary services.
- Primarily consider survivability and benefit from treatment in order to provide the most benefit for the community or population.
- Be transparent and accountable in their development and application
- Be widely disseminated to the public, who will be given the opportunity to provide feedback

During activation of the CSC Plan, any standards and guidelines created will be subject to regular updates through an iterative process based on resource availability and feedback from Hospital Incident Commands (HIC), Hospital Triage Committees (HTC), GSHCC, NHHA, and the community. The creation of any state CSC clinical guidelines is expected to be a collaborative process with HTCs, many of whom will already be devoting significant time and resources to the development of these plans.

Implementation of Crisis Standards of Care Clinical Guidelines

The Chest 2014 Consensus Statement on Triage recommends a multilevel triage committee system with a state-level triage committee supporting individual triage committees at each hospital within the healthcare system (Christian et al. 2014). Decisions regarding triage and allocation of scarce resources, when possible, should not be made by bedside clinicians. Triage committees should be utilized to make proactive triage decisions and relieve bedside clinicians of the burden of decision making when allocating resources.

Each HIC should appoint a Triage Committee (or at minimum a Triage Officer), typically formed of 2 to 4 willing clinicians tasked with applying the CSC clinical guidelines and protocols in order to allocate care and resources at the hospital level.

- 1. DHHS and the SDMAC will appoint a STC formed of subject matter experts to collaboratively develop state level CSC clinical guidelines, assure alignment of crisis standards within the state, provide guidance to hospitals and alternate care sites on their implementation, and adjudicate appeals when indicated.
- 2. HTCs should direct any concerns, recommendations, or questions regarding the CSC clinical guidelines to the STC.

The standards used by all triage committees in the state should be aligned in criteria and application to minimize disparities in the delivery of care, while accounting for differences in the available resources at facilities.

Appeals Process

Concurrent Appeals

During a crisis, bedside clinicians should be provided a mechanism to appeal a triage decision in real time to the HTC if the initial decision was based on incorrect information, there is a change in patient condition, or new clinical information is available. The HTC may consult the STC if needed for clarification or assistance in applying the CSC clinical guidelines.

The appeals process therefore starts at the local/institutional level. If a satisfactory decision cannot be determined at the local level, the STC should be engaged for secondary review.

Retrospective Appeals

During or after a crisis, clinicians, patients, or caregivers should be given the opportunity to submit retrospective appeals to help determine if triage guidelines were incorrectly applied during the crisis. This process would not be able to change decisions in real time or constitute binding legal determinations or be used in any way for liability. The retrospective appeals process could provide information to the caregivers and lessons could be applied in future crises. These appeals would first be evaluated by individual HTC and/or ethics committees but could be sent to the STC for adjudication if indicated.

Retrospective appeals made after crisis de-escalation and dissolution of crisis response teams at the local and state level should be heard in the hospital's ethics committee. When assistance is required, these requests should be directed to DHHS.

Communication

Overview

Proactive communication regarding implementation of CSC clinical guidelines is critical for maintaining public trust. Clear, unified messaging promotes the ethical principles of transparency and accountability, and relies on the alignment of CSC clinical guidelines used by

all healthcare facilities and services in the state of NH. Rapid and reliable communication among healthcare entities and the SDMAC will promote this alignment, which in turn will support strong and consistent messaging at all levels of the response.

Coordination of Hospitals and SDMAC

Direct and indirect lines of communication from DHHS and the SDMAC (and STC) to healthcare facilities should be established and maintained during activation of the CSC Plan for the purposes of information sharing and communication of standards of care. Figure 1 demonstrates a basic communication structure for the flow of information.

- Hospital incident command (HIC) groups will nominate two liaisons to the SDMAC through which urgent communications and feedback can be given.
 - Regional Multi-Agency Coordinating Entities (MACEs) will work with HICs to develop plans for regional alternative care sites
 - HIC groups will share summary data regarding triage decisions with the SDMAC, to
 the extent deemed necessary to assure general crisis standard alignment and flag
 patterns of significant wide scale deviation that may indicate a need to update
 guidelines. The STC will not review individual HTC decisions unless requested under
 the appeals process.
- The SDMAC will designate an SDMAC Liaison to facilitate communications and be the primary point of contact for hospitals and the GSHCC for concerns pertinent to CSC planning.
- CSC clinical guidelines will be disseminated to all HTCs and to the GSHCC.
 - The GSHCC will serve as the indirect point of contact between hospitals and the SDMAC and will maintain up-to-date CSC clinical guidelines for dissemination to facilities in the state.
- Guidelines or recommendations related to EMS care will be disseminated via DHHS ESU to regional MACEs via established channels.
- Additional lines of communication to other response organizations and healthcare facilities (e.g. home care agencies, long-term care facilities, hospice facilities, etc.) will be established and maintained by the ESU and ESF 8 with relevant feedback passed to the SDMAC, and relevant recommendations from the SDMAC disseminated to those entities.

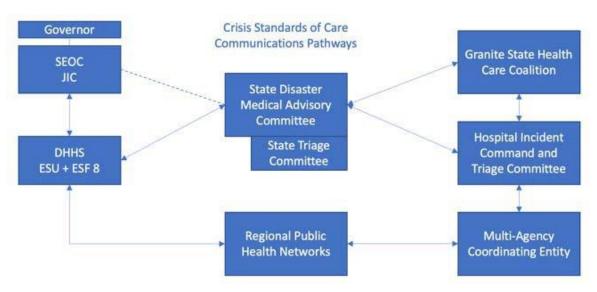


Figure 1: Crisis Standards of Care Communications Pathways

Public Communications

Public communications regarding the CSC Plan and CSC clinical guidelines and their application will be handled primarily by the DHHS Public Information Officer (PIO) in coordination with the SEOC, the Joint Information Center (JIC), and regional public health networks.

- Like implementation of the CSC clinical guidelines, communications to the public regarding their purpose and notifications regarding their use should be proactive and transparent.
- The NH DHHS will conduct regular virtual town halls to gather community feedback.
- Stakeholders and members of the community may submit appeals regarding the standards to DHHS to be considered by the SDMAC during the iterative process

De-escalation and Recovery

Continuous monitoring of the situation and information sharing by the SEOC, NH DHHS/ESU, the SDMAC, GSHCC, and individual facilities will inform any decisions to de-escalate CSC clinical guidelines. This may be a stepwise process dependent on local, regional, and state conditions, and will be led by DHHS, ESU, and the SDMAC.

Clinics, hospitals, and all other organizations impacted by institution of the CSC clinical guidelines are encouraged to host formal Crisis Debriefings to assist in recovery, identify areas of improvement, and provide institutional feedback.

The NH DHHS/ESU, SDMAC and STC will conduct Crisis Debriefings within one month of deescalation. Information brought forth as a result of these debriefings will be considered at the biennial NH Crisis Standards of Care Committee meetings and incorporated in the Update & Revisions process.

CSC Activation Flowchart



Figure 2

Indicators for State CSC Plan Activation

- · One or more hospitals request activation of CSC
- · Atypical patient-to-provider ratios in one or more sites
- · Other indicators or triggers detailed elsewhere

Considerations for State CSC Plan Activation

- DHHS Commissioner initiates activation in consultation with Governor, hospitals, regional public health networks
- · State of Emergency or Public Health Incident Declaration

CSC Activation Steps

- · SDMAC convened by DHHS
- · Subject matter experts identified and STC formed
- · DHHS/SDMAC/STC work with JIC on messaging
- · SDMAC notifies GSHCC and public health regions about CSC

SDMAC/STC Activities

- STC works with HICs/Triage Committees to form unified priorities and protocols for triage of resources, update frequently based on resource availability, new data
- Coordinate with GSHCC, NHHA, other stakeholders
- · Distribute guidelines to healthcare facilities, EMS
- Work with JIC/PIOs on transparent, proactive communication

Hospital Triage Committee Activities

- HTCs implement guidelines at hospital level, coordinate with STC on changes/updates to guidelines and protocols
- Maintain bidirectional communication with STC focused on updates, summary triage decision data, resources, needs, and difficulties to maintain high-level situational awareness and inform updates to guidelines

CSC De-escalation Steps

- SDMAC works with DHHS and healthcare facilities to monitor situation and deescalate crisis standards as appropriate
- SDMAC coordinates with DHHS Commissioner to rescind CSC
- Debrief sessions held to update plans

Exhibit A: Clinical Concepts of Operations

Continuum of Care

Per the IOM 2009 report, "disaster events will be marked by a sudden or gradual increase in demand for healthcare services and a related decrease in the supply of resources available to provide such care. This will result in a healthcare-sector response that requires implementation of a variety of 'surge capacity' strategies that include steps taken to reduce demand for care (e.g., the implementation of community-based triage capabilities and risk communication about when to seek care) and the augmentation of ambulatory care capacity in addition to better described inpatient care strategies." Figure 3 demonstrates the continuum of care as demands increase and their possible implications.

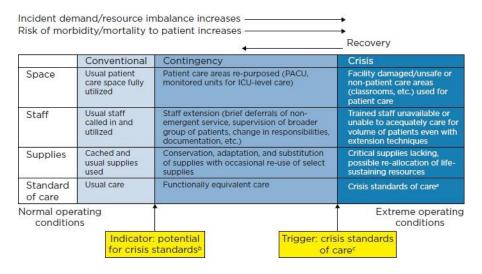


Figure 3: Continuum of incident care and implications for standards of care

NOTE: Post anesthesia care unit (PACU); intensive care unit (ICU)

^a Unless temporary, requires state empowerment, clinical guidance, and protection for triage decisions and authorization for alternate care sites/techniques. Once situational awareness achieved, triage decisions should be as systematic and integrated into institutional process, review, and documentation as possible.

^b Institutions consider impact on the community of resource use (consider "greatest good" versus individual patient needs – e.g., conserve resources when possible), but patient-centered decision making is still the focus.

^c Institutions (and providers) must make triage decisions balancing the availability of resources to others and the individual patient's needs – shift to community-centered decision-making. SOURCE: IOM 2009, p. 53

In-Hospital Care

This framework is intended as a selection of resources that may be of use in developing crisis standards of care for individual hospitals and may be useful when directing the response to a crisis at the state level.

Sources: IOM 2009/2012, Minnesota Framework for Healthcare Facilities, Arizona CSC Guidelines

Indicators and Triggers

"Indicators and triggers represent the information and actions taken at specific thresholds that guide incident recognition, response, and recovery. When specific indicators cross a threshold that is recognized by the community to require action, this represents a trigger point, with actions determined by community plans. These include activation of a general disaster plan, which often occurs at the threshold between conventional and contingency care, or activation of CSC plans, which would occur at the threshold between contingency and crisis care."

Detailed information on indicators and triggers can be found in the 2013 IOM/NAM Crisis Standards of Care: A Toolkit for Indicators and Triggers.

Core Strategies

When developing an EOP (Emergency Operations Plan) or crisis plan consider these six strategies:

- 1. <u>Prepare:</u> pre-event actions taken to minimize resource scarcity (e.g. stockpiling of medications or supplies).
- 2. <u>Substitute</u>: use an essentially equivalent device, drug, or personnel for one that would usually be available (e.g. exchanging morphine for fentanyl).
- 3. <u>Adapt</u>: use a device, drug, or personnel that are not equivalent but that will provide sufficient care (e.g. anesthesia machine for mechanical ventilation; LPN with RN supervision instead of multiple RNs).
- 4. <u>Conserve</u>: use less of a resource by lowering dosage or changing utilization practices (e.g. minimizing use of oxygen driven nebulizers to conserve oxygen).
- 5. <u>Re-use:</u> re-use (after appropriate disinfection/sterilization) items that would normally be single-use items.
- 6. <u>Re-allocate</u>: restrict or prioritize use of resources to those patients with a better prognosis or greater need.

Triage

Triage refers to prioritization for care or resources. There are three basic types of triage (IOM 2009):

- 1. Primary triage: performed at first assessment and prior to any interventions. This may occur at hospital emergency departments, clinics or other healthcare access points. An example includes triage by EMS providers at a disaster scene. Facilities, hospitals, and acute care facilities can use SALT Triage, other MUCC compliant methods approved at the local level in a mass casualty event, or emergency department triage levels 1-5.
- 2. Secondary triage: performed after additional assessments and initial interventions (e.g. triage performed by surgery staff after administration of intravenous fluid and an initial CT scan). Secondary triage is used to determine the need and priority for the operating room, burn care, further imaging etc. Decisions during this phase rely on the best clinical judgment of providers based on their knowledge of the incident and patients' conditions (usually trauma, burns, or chemical exposures). Triage decisions are influenced by rapidly changing patient volumes and often reflect the prior experience of the provider.
- **3. Tertiary triage:** performed after or during the provision of definitive diagnostics and medical care (e.g. triage performed by critical care staff after intubation and mechanical ventilation with assessment of physiologic variables). Tertiary triage at a hospital setting includes prioritization of patients for ICU admission using pre-specified criteria, such as SOFA score.

Reactive and Proactive Triage

All three types of triage can be categorized as either Reactive or Proactive. Per the IOM:

- Reactive triage occurs in the early phases of the incident when less information regarding
 the incident is available to providers. Physicians and nurses make triage decisions based on
 their best judgment.
 - Factors to consider:
 - Time required to perform treatment,
 - Clinical skill requirements (i.e. how much physician/nursing expertise is required),
 - Treatment requirements (what are the resource requirements),
 - Prognosis of the injury.
 - o In general, as the number of victims increases, the triage process should prioritize the moderately injured that require lifesaving interventions that can be performed rapidly (e.g. chest tube, airway management, and tourniquet).
 - It is critical to re-evaluate patients as more resources arrive.
- Proactive (tertiary) triage may be required later in an incident that continues to overwhelm
 the health care system after initial stabilization and delivery of available resources. This
 occurs when the situation and resources have been established. Decisions revolve around
 whether resources can continue to be deployed given patient prognosis and availability of
 resources.

- Anticipation of the need for tertiary triage is an indicator for activation of the state CSC plan and development of state guidelines for clinical crisis care by the SDMAC and State Triage Committee.
- Before implementing proactive or tertiary triage, facilities must have firmly established triage processes and plans that take into consideration available evidence, resources, and has administrative backing of the facility (and where possible, the SDMAC.)
- Crisis standards of care guidelines will be developed and aligned by the STC in collaboration with hospital triage committees and disseminated to all hospitals in the event of activation of the CSC plan
- Proactive triage of resources should only occur when the following conditions are met and unless otherwise specified, the patient should continue to receive all other means of support. The patient should always have equitable access to medications to control pain and suffering to the degree possible, given the circumstances.
- Proactive triage conditions:
 - Critically limited resource(s) and infrastructure are identified.
 - Surge capacity is fully employed within health care facilities (and regionally) if capacity/space is the limited resource.
 - Maximum efforts to conserve, substitute, adapt, and re-use are insufficient if supplies are the limited resource.
 - Patient transfer or resource importation is not possible or will occur too late for bridging therapies (such as bag-valve ventilation or other temporizing measures) to be considered.
 - Necessary resources have been requested from local and regional health officials (as applicable).
 - A state of emergency has been declared, or other health powers (as applicable) have been activated.
 - Regional, state, and federal resources are insufficient or cannot meet demand.

A detailed <u>Health Care Facility Scarce Resource Decision Making Tree</u> is available through the Minnesota Department of Health.

Triage Committee

Each hospital should appoint a Triage Committee as described in Part A. These committees should work with HICS (Hospital Incident Command System) and the State Triage Committee to develop and implement criteria for the triage of critical resources.

If forming a Triage Committee is not feasible, institutions should assign a willing medical expert, such as an emergency physician, intensivist, or trauma surgeon, as the Triage Officer.

During CSC activation the Triage Officer's sole responsibility is triage, and the Triage Officer should not perform patient care while performing triage duties. Triage should occur according to CSC guidance and priorities. The Triage officer reports on space, staff, and supply needs to

the facility emergency operations center and works with incident command staff and Clinical Care Directors to determine incident specific thresholds.

Surge Capacity

Surge capacity is a measurable representation of ability to manage a sudden influx of patients. It is dependent on a well-functioning HICS structure and the variables of space, supplies, staff and special considerations. All health care facilities should have concrete plans on how they would expand their surge capacity and provide adequate training of health care personnel. Surge capacity is discussed in three main categories, each with special considerations: space, supplies, and staff.

Space

Intensive care units (ICU)

For planning purposes, ICU services should include the ability to provide cardiac monitoring, invasive monitoring, mechanical ventilation, and hemodynamic management.

Many facilities do not provide these services, although at a minimum, facilities should be able to provide initial resuscitation and management while awaiting transfer to another facility.

In certain situations, a health care facility that normally refers critically ill patients to other facilities may have to continue to provide care for hours to days longer than usual or may elect to provide ongoing critical care using transport ventilators and other resources. In these cases, critical care consultation should be obtained via phone or telemedicine to provide expert input on the care provided until transfer can be arranged or critical care is no longer required.

The American College of Chest Physicians has provided guidance documents on ICU surge published in 2014. The executive summary with all the suggestions can be found at <u>Introduction and Executive Summary Care of the Critically III and Injured during Pandemics and Disasters:</u>
CHEST Consensus Statement. Each of the sections has a supporting article (e.g. surge capacity logistics) with further details.

According to the key recommendations made by the American College of Chest Physicians, hospitals that provide inpatient critical care should be able to:

- Surge 20% of usual ICU capacity within hours of an incident;
- Surge 100% of usual ICU capacity within 24 hours using facility or regional HCC assets;
 and
- Surge 200% of usual ICU capacity within days using regional HCC, state, or federal assets.

In order to accomplish this, health care facilities providing ICU services should determine the additional space that can be used for ICU level care. Procedural and surgical areas including preand post-op care areas are likely targets as they may already have the monitoring equipment

necessary for critical care. Health care facilities may wish to create a grid for an ICU surge indicating the sequence/preference and numbers of beds (as well as additional supplies needed for those areas) to be used.

Though planning for a 200% surge is daunting, most facilities will find adequate space that can be repurposed. Facilities should also document the specific additional logistical (staff and supply) needs that may be requested if required. This would primarily occur in a pandemic event, but also potentially in other scenarios where the health care facility cannot off-load patients rapidly (e.g. large-scale attack involving anthrax or botulinum, etc.) Few hospitals will have the ventilator and cardiac monitor resources to achieve a 100-200% surge, but understanding the needs and planning for them is critical to the ability to request the necessary assets in a timely manner from regional and Federal sources.

Inherent within the ICU surge plan is an understanding that the overall acuity at each respective healthcare facility will increase markedly and lower acuity patients may need to be discharged to outpatient care or referred to homecare, long-term care, or an alternate care site. This may necessitate changes in discharge protocols and health care facility policies about which types of patients can be cared for on which types of units.

Emergency Departments (ED)

A location, staff, and basic supplies (ideally packed in bins, pre-event) for overflow care of people with minor wounds, as well as one for family reunification should be planned.

Additionally, if there are clinics, supervised living facilities or nursing homes connected to or close to the health care facility, they should be included within the surge capacity plan. Upon activation of the EOP, the ED should be cleared to the degree possible by discharging, moving patients to inpatient beds, moving patients to observation areas, and moving stable patients back out to triage as rapidly as possible depending on available space. Inpatient units should be ready to accept patients to decompress the ED, bypassing usual processes.

Transfer of patients to other facilities can also assist with space creation. This may occur by ground or air and by many transportation options (ambulance, bus, private vehicle) as warranted by the situation. Although the hospital likely has established referral patterns, other options should be examined in a crisis and it should be understood that in a pervasive or catastrophic public health event, the ability to transfer patients could be limited.

Medical Surge Floor

Conventional beds should be filled and staffed to capacity. Health care facilities should identify which single rooms can accommodate an additional bed and keep adequate beds in supply to the degree possible to allow for double rooming. Adequate headers (oxygen, suction, electrical) and privacy curtains are important considerations when planning to double rooms. Additional observation beds, procedure areas, and flat spaces may be used. Health care facilities should maintain adequate cots (with egg-crate or other mattresses) to use in flat-space areas for crisis

care (also helpful for staff during blizzards and other situations). Patients should be carefully evaluated before being moved to these areas (normal mental status, low risk for pressure ulcers, not in isolation for infection control purposes etc.). A rapid discharge process should occur as soon as the EOP is activated. Charge nurses should identify patients that are appropriate for early discharge and move them to a discharge holding area or the hallway/unit waiting area for physician review. This can increase the availability of rooms rapidly. If not appropriate for discharge, the patients moved may be appropriate for cot-based care. When not needed for intensive care unit (ICU)-level care, pre- and post-op areas may be used for floor care as well if available. If use of surge areas or cot-based care are anticipated beyond the first 24 hours for inpatient care, GSHCC partners should be engaged to assist with accepting transfers and other support. If other health care facilities are also in a similar situation, the request for a Centers for Medicare and Medicaid Services (CMS) 1135 waiver should be considered to allow billing for patient care in these areas.

Supplies

The US supply chain has minimal ability to rapidly surge production, resulting in challenges to meeting the large or unexpected increases in demand that might occur during public health events. Therefore, without proper planning shortages of supplies are likely. When supplies are inadequate, the six core strategies discussed above should be employed and health care facilities should work with GSHCC to share supplies if possible.

Health care facilities should not operate in a silo and implement extreme (e.g. re-use, reallocation) strategies without consulting external partners (e.g. health system, GSHCC, state).

For most hospitals, concentrating on inexpensive but commonly needed supplies such as intravenous fluids, airway supplies, wound care supplies, and medications for analgesia and sedation will provide the highest return on investment when planning for disasters. Increasing par levels of selected medications and supplies can be critical to accommodate a surge in demand. Consideration should be given to placing beds, monitors, and ventilators that are going out of service into storage rather than selling them whenever possible, as these high-cost items are not likely to be available from vendors during an emergency or disaster. Depending on the institution, purchase of some of these items may be possible.

Medication shortages are common occurrences and allow health care facilities to practice crisis care strategies by using incident management frameworks and engaging SMEs (physicians in the specialty area, pharmacy staff, administration, and nursing) in the decision-making process as they cope with dynamic and multiple medication shortages.

When levels of supplies are inadequate, and the supply chain and GSHCC partners cannot provide relief, the health care facility's ICS Planning Section should convene appropriate SMEs to look at existing guidance and develop facility recommendations (note that this can also be done at the health system and regional level as needed). If broader resource challenges are present, the Planning Section or hospital Incident Commander may ask a Clinical Care

Committee to convene in order to assist with addressing service, supply, and staff practices. They can help to focus the facility resources on patient care and make recommendations for any necessary triage of services. For example, such a committee can assist with decisions like discontinuing provision of high-intensity services such as extracorporeal membrane oxygenation (ECMO) when the resource commitment is unsustainable. Detailed information about the membership and function of the Clinical Care Committee is available in the IOM/NAM 2012 document and in the template Crisis Care Facility Plan in Appendix 4.1. In an extreme situation, re-allocation of resources may be necessary (i.e. taking a resource from one patient to give to another).

Allocation of Scarce Resources

Allocation of resources will be dependent on the nature of the crisis and at which point along the continuum of care a healthcare facility is. It is always preferable to make proactive decisions in the allocation of resources, anticipate needs, and frequently reanalyze resource allocations as the situation evolves. The Minnesota Crisis Standards of Care provide a helpful standardized tool that can be referenced in developing EOPs at the facility level.

Staff

Please refer to section on <u>Healthcare Workforce</u> below.

Transfer Guidelines

If a hospital is overwhelmed and contingency surge capacity is met, then transfer to other instate hospitals may be necessary. Evacuation and/or transfer procedures must be initiated by HICS at impacted healthcare facilities. If in-state capacity to evacuate/ transfer patients is completely exhausted, transfer to facilities in other states should be considered.

The hospital requesting transfer must contact SDMAC to apprise them of the situation. The SDMAC may intervene in bed management and inter-facility transfer if it becomes apparent that the system is not able to account for a discrepancy in bed availability.

SDMAC, working closely with GSHCC, may arrange resources/staff or local/interregional patient transfers sufficient to return to contingency care operations and/or activate alternate care sites, without overwhelming a secondary region.

Hospitals must identify patients for possible transfer and prioritize patients for evacuation based on the situation. Hospitals must create transfer patient lists for regional/federal use.

Alternative care sites

Sources: IOM 2009/2012, Minnesota Framework for Healthcare Facilities, Arizona CSC Guidelines

Alternate Care Sites (ACS) can provide overflow hospital capacity during a pervasive or catastrophic public health event. By providing care to less complex inpatients, an ACS can increase a hospital's capacity to care for higher acuity patients. A hospital may open an on-site ACS or a community site in conjunction with the regional public health network and MACE to staff and refer appropriate patients to the facility. Examples of some services available at an ACS include:

- Oxygen
- Intravenous fluids
- Medications
- Basic laboratory testing
- Palliative care

Emergency or critical care services are generally, not supported at an ACS. Health care services must also be available at community shelters including resources for those with chronic illness. An ACS should be implemented by GSHCC partners as part of a regional strategy to address incident demands and may include virtual as well as physical patient contact and interventions.

Out of Hospital Care

Source: Arizona CSC Guidelines

Context

During the CSC Response, healthcare access points across the state will need to adapt their practices to the overwhelming number of patients seeking care.

Goal

Out-of-hospital care will be an important part and will naturally expand operations to meet demand.

Definitions

Out of hospital care refers to the following types of healthcare access points

- Outpatient providers
- Clinics
- Surgical Centers
- Long-term care facilities
- Group homes and congregate settings

- Home care
- Family-based care systems

Outpatient Providers

During the CSC response, to ensure consistent care, the SDMAC will need to coordinate with hospital incident command groups and GSHCC to implement standards and to:

- Maintain situational awareness with all varieties of out-of-hospital providers
- Understand guideline creation will be an interactive and dynamic process with the provider community

The specific medical skills and the infrastructure and equipment available to out-of-hospital providers will be considered during a CSC response:

- Medical skills—may be used in their usual practice environment; in alternate care systems/ assignments (e.g., serving as members of the Medical Reserve Corps (MRC), answering patient hotlines); and perhaps even in their neighborhood/community settings.
- Infrastructure—practice environments may be adjusted to help meet the demands of an overwhelming incident. For example, clinic functions may be:
 - Expanded—using expanded hours, modifying care practices, and adjusting schedules to accommodate increased acute care (e.g., deferring elective appointments)
 - Repurposed—outpatient infrastructure may be repurposed during an incident as, for example, when a subspecialty clinic adjusts its hours or closes to enable the space to be used for acute care
- Referral and Routing—outpatient providers will stay informed of existing healthcare access points and can refer or route patients to higher acuity care as appropriate during a CSC response (IOM, 2012).

During a CSC response, the SDMAC will coordinate with the local and state health departments, and state-designated healthcare coalitions to:

- Maintain situational awareness, through medical boards and associations, with all types of providers to assess demand for healthcare and resource availability.
- Develop guidance and messaging on referring and routing higher acuity patients to available healthcare access points.
- Develop and implement guidance for various types of outpatient providers.

Clinics

During the CSC response, this category will include a wide variety of healthcare access points. These will include facilities licensed under <u>RSA 151:2</u> and those governed by Office of Professional Licensure and Certification (<u>OPLC</u>).

Clinics may include:

- Urgent care centers
- Federally qualified health clinics,
- Multi-specialty clinics
- Independently operated healthcare practitioners
- Clinics located in retail stores
- Pharmacies that provide basic medical screening
- Non-traditional providers: dentists, veterinarians, and others

During a CSC response, the SDMAC will coordinate with the local and state health departments, and state-designated healthcare coalitions to:

- Maintain situational awareness with all types of clinics through medical boards, NH Medical Association, OPLC and DHHS.
- Develop and implement CSC guidelines for clinics to expand hours of operation and repurpose space, staff, and supplies as appropriate.

Surgical Centers

Free standing and hospital-based ambulatory surgical centers may be repurposed to provide:

- Acute care
- Non ambulatory hospital overflow care, or
- Elective surgeries not possible at hospitals (during infectious disease incidents)

The specific mode of repurposing can be based on:

- Demands of the incident
- Specifics of the facility
- Needs of the community

The need for modified regulatory and licensure standards (e.g. changes in the scope of care) will need to be addressed in advance in the event that federal, state, or local government entities (such as public health) authorize the delivery of triaged care in these facilities.

During a CSC response, the SDMAC will coordinate with the local and state health departments, and state-designated healthcare coalitions to:

- Maintain situational awareness with all types of surgery and procedure centers through medical association partners.
- Develop and implement CSC guidelines for surgery and procedure centers.

Long-term care facilities

Many long-term care facilities have limited surge capacity to accommodate hospital discharges, although they should not be overlooked as a resource.

During CSC response long-term care facilities can:

- Implement Nursing Home Incident Command System (NHICS),
- Prepare to shelter in place (including without power) during a major incident,
- Modify patient care and referral policies

During a CSC response, the SDMAC will coordinate with the local and state health departments, and state-designated healthcare coalitions to:

- Maintain situational awareness with all types of long-term care facilities through medical association partners.
- Implement and/or develop CSC guidelines for long-term care.
- Consult with SEOC for Part 1135 waivers to be in place for waiver of Medicare regulations, which will facilitate the admission of new patients not necessarily requiring long-term care.

Group homes and congregate settings

These include:

- Large business operations,
- Group homes,
- Schools,
- Universities

During CSC response group homes and congregate setting can:

- Support dispensing or vaccination/prophylaxis services in conjunction with the local health department or health official
- Provide shelter or isolation for residents/students/staff
- Conduct referral and routing of patients

During a CSC response, the SDMAC will coordinate with the local and state health departments, and state-designated healthcare coalitions to:

- Establish and maintain situational awareness with group homes and congregate settings.
- Develop and implement CSC guidelines for group homes and congregate settings.

Home care

During CSC, the SDMAC should coordinate with home care/durable medical equipment vendors to prioritize their services based on the nature of an incident and be able to adjust plans as the incident changes over time.

These plans also should cover clients that are quarantined, isolated, or sheltering in place because of weather or other emergencies. All persons served by home agencies should have a personal emergency plan in case a crisis delays care delivery. Device-dependent persons should have a care plan in case of a system failure or power outage.

Emergency departments may be inundated with patients' chronic care needs when home care cannot be continued. Home care agencies should have individual triage guidelines based on their organization's clinical capabilities, staffing, and equipment capacity, to accept different types of patients in a crisis. Home care and durable medical equipment vendors will play a critical role in providing basic medical equipment to individuals and facilities across the healthcare community.

During a CSC response, the SDMAC will coordinate with the local and state health departments, and state-designated healthcare coalitions to:

- Establish and maintain situational awareness with home care and durable medical equipment vendors
- Develop and implement CSC guidelines for home care and durable medical equipment vendors.

Family-based care systems

Care is often provided by family members, domestic partners, or cohabitants.

Friends and family members provide basic care to people with a wide variety of conditions including:

- Behavioral health issues,
- Chronic diseases,
- End-of-life,
- Developmental disabilities, and
- Traumatic injuries

These non-clinical caregivers can play a key role in preventing the medical system from being overloaded by helping limit unnecessary visits to healthcare providers and ensuring at-risk people receive the most appropriate available care.

Public information messages should be disseminated statewide to inform the general public of available healthcare resources for homebound persons and other at-risk groups. Families and friends should be prepared for expanded responsibilities during a catastrophic incident.

The NH Choices for Independence waiver (CFI) provides home health care, home support and personal care, case management and assisted living services to seniors and adults with disabilities who meet eligibility requirements for placement in a nursing facility. Services also include adult medical day services, home health aide, homemaker, personal care, respite, supported employment, financial management services, adult family care, adult in-home services, and community. Utilization of this and other long term supports and services (LTSS) to offload the medical system should be considered.

Home and Community Based Services agencies such as the Bureau of Developmental Services' Area Agencies, Elderly and Adult Services Case Management Agencies, and Community Mental

Health Centers should develop contingency plans in coordination with their supervisory entities to prepare for augmentation and possible expansion of roles during a crisis.

During a CSC response, the SDMAC will coordinate with the local and state health departments and state-designated healthcare coalitions to:

• Develop public messaging for family/friend caregivers and coordinate dissemination with public information staff.

Emergency Medical Services

Sources: IOM 2009/2012, Arizona CSC Guidelines

Emergency Medical Services (EMS) will play a major role during a CSC response, linking patients in the outpatient environment to hospitals and the delivery of care. As first responders, EMS providers will have to adapt practices and standards of care to address the most difficult circumstances. During a CSC response, the SDMAC will issue guidance to EMS providers and authorities to ensure consistent care across the state and to assist EMS providers in dealing with an overwhelming number of patients.

It should also be recognized that much EMS activity in the United States is provided by volunteer staff in rural communities, where resources are often limited on a regular, ongoing basis.

In a CSC response, primary triage will be required to optimize healthcare resources and do the greatest good for the greatest number of patients. A variety of triage systems have been developed for use in emergencies and disasters. Triage protocols that should be considered during a NH CSC response include: SALT Triage, other MUCC compliant methods approved at the local level and the ADHS Alternate Triage, Treatment and Transport Guidelines for Pandemic Influenza. Depending on the situation, all or some of these triage methodologies may be used by first responders in a CSC response.

Palliative and Comfort Care

Sources: Arizona CSC Guidelines, New Mexico CSC Guidelines, MN scarce resource allocation, W.H.O. guidelines

Context

During CSC, decisions must be made to balance needs for lifesaving care for those in triage categories who will likely benefit from treatment, while providing comfort care to those for whom lifesaving care is likely futile. The SDMAC leadership will develop guidance for healthcare facilities and personnel, community responders, hospice providers, and other caregivers.

Goal

Guide the delivery of consistent, compassionate, and equitable palliative and comfort care across the state. At a minimum, comfort care services for victims will include relief of severe symptoms and providing comfort as people face end-of-life decisions. The delivery of palliative and comfort care will be adapted per the type and severity of the disaster.

Definitions

The intent of palliative and comfort care is to improve the quality of life for patients and their families who face problems associated with life-threatening illnesses and injuries, by preventing and relieving suffering, by means of early identification and treatment of pain and other, physical, psychosocial, and spiritual problems. (The following information is adapted from the World Health Organization (http://www.who.int/cancer/palliative/en/)

- Palliative care patients: individuals who may benefit from available curative therapies
- Comfort care patients: individuals for whom curative therapies are futile, given available resources; (comfort care encompasses hospice care)

Palliative and Comfort Care:

- Provide relief from pain and other distressing symptoms
- Affirm life and regard dying as a normal process
- Seek neither to hasten or postpone death
- Integrate the psychological and spiritual aspects of patient care
- Offer a support system to help patients live as actively as possible until death
- Offer a support system to help the family cope during the patient's illness and the family's bereavement
- When possible, uses a team approach to address the needs of patients and their families, including bereavement counselling, if indicated
- Enhance the quality of life and may positively influence the course of the illness or injury

Palliative and comfort care for children represents a special, albeit closely related, field to adult comfort care. In addition to the above considerations, the following apply to pediatric patients:

- Palliative and comfort care for children are the active total care of the child's body, mind, and spirit, and also involves giving support to the family.
- Palliative and comfort care begin when illness is diagnosed and continues regardless of whether or not a child receives treatment directed at the disease.
- Healthcare professionals should evaluate and alleviate a child's physical, psychological, and social distress.
- When possible, effective comfort care requires a broad multidisciplinary approach that includes the family and makes use of available community resources, even when resources are limited.

• Palliative and comfort care can be provided in acute care facilities, out-of-hospital care settings, alternate care sites, or in children's homes.

Palliative and Comfort Care in Hospitals and Acute Care Facilities

Resource optimization is a key strategy during CSC is to optimize resources at hospitals and acute care facilities. During the CSC response the SDMAC and GSHCC will coordinate with triage officers and emergency management staff at healthcare facilities for coordination and facilitation of:

- Transfer of existing and new palliative and comfort care patients to other healthcare facilities or home healthcare settings
- Engage hospice service providers to deploy comfort kits for home-based comfort care
- Develop guidance for healthcare professionals and facilities to deliver and continue consistent and equitable palliative and comfort care across the state
 - Assess the number of people needing comfort care vs. curative therapies
 - Assess available inventories, caches, stockpiles of comfort care medications to develop recommendations for allocating scare resources to palliative and comfort care patients.

Palliative and Comfort Care at Out-of-Hospital Facilities

Evaluating guidelines for comfort care in non-hospital settings that do not normally provide care to medical surge patients. During the CSC response the SDMAC will coordinate with healthcare coalition partners, including hospice agencies, to expand operations at long-term care and other facilities so they can:

- Take in patients from other facilities requiring palliative care and end-of-life care
- Assess both existing licensed in-patient beds and non-licensed emergency beds at alternate care sites

Palliative and Comfort Care at Alternate Care Sites and Systems

Alternate care sites may need to be activated and used to provide palliative and comfort care During the CSC response the SDMAC will coordinate between healthcare coalitions, including hospice agencies, state, and federal partners to:

 Assess sites which can include, but are not limited to, shelter-based care, federal medical stations, and casualty collection points.

Just-in-Time Training for Palliative and Comfort Care

Depending on the severity of the response, guidelines addressing shortages of key resources will be considered. In extreme conditions, these training guidelines may address the use of non-medical personnel in the delivery of comfort care, including helping a patient take their own medications.

Advanced Care Planning

During the CSC response, advanced care plans can become critically important for health care decision making. Advanced care documents should be assessed to ensure unwanted aggressive care is not performed. These documents can affect triage and resource allocation. The SDMAC will coordinate with healthcare providers in hospital, acute care facilities, and out-of-hospital facilities to assess and confirm existing advanced directive status of patient populations.

Psychosocial Support

During the CSC response, psychosocial support may be the only available source of comfort. All facilities will need to:

 Assess supply of behavioral health staff, including social workers, religious/spiritual advisors, other responders trained in psychological first aid.

Key Points

- 1. Develop plans to transfer expectant patients to palliative and comfort care sites.
- Assess available inventories, caches, and stockpiles of palliative and comfort care medications, and develop recommendations for allocating scarce resources to comfort care patients.
- 3. Leverage medical support at out-of-hospital healthcare facilities, including long-term care, surgical centers, clinics, etc.
- 4. Coordinate with ACS such as shelters, federal medical stations, etc.
- 5. Develop guidelines for just-in-time training for medical and non-medical personnel at healthcare access points to provide basic care (e.g., helping patients take their own medicines).
- 6. Integrate behavioral health, spiritual, and psychosocial support for casualties and providers.
- 7. Coordinate guidance for hospital triage officers and/or emergency responders.

Behavioral and Mental Health

Context

During crisis, behavioral health services will be an important component of health care that will be needed by many to cope with new and emerging psychosocial stressors. While psychological first aid and social support and assistance will play a large role in addressing these issues, incident specific risk communication strategies should be developed and disseminated to help those affected manage the stress of crisis and also direct those affected to additional resources as necessary.

Healthcare organizations, including acute care hospitals and community mental health centers, will be a vital piece of the state's response to crisis. Depending on the crisis, criteria for behavioral health inpatient admission and capacity of inpatient behavioral health care units are

likely to change. Furthermore, community resilience programs encouraging neighbor-to-neighbor and family-to-family outreach will need to be supported.

Goals

In a time of crisis when CSC are activated, the psychosocial impact of a crisis as well as the behavioral health of the public, emergency personnel, medical professionals, and those with serious mental illness must be considered. Efforts must be made to continue to provide quality and timely mental health care for all affected populations.

Criteria for Behavioral Health Admission

During activation of CSC, criteria for inpatient behavioral health admission should be revisited in order to determine whether criteria for admission should become stricter. Strict admission criteria would necessitate better coordination between hospitals and community mental health centers in order to manage those with less acute mental health needs by using community mental health care.

In the event of an outbreak of disease transmissible through proximity (such as an epidemic of an infectious disease), inpatient behavioral health units could be a site of transmission and morbidity. In this case, hospitals should consider reducing capacity of behavioral health units and limiting on-unit group sessions in order to accommodate social distancing. Discharge of patients should be coordinated with community mental health centers.

Capacity of Inpatient Behavioral Health Treatment Units

In times of crisis, the capacity of inpatient behavioral health treatment units may be reduced. In these scenarios, patients discharged from inpatient behavioral health treatment units or ED should be offered timely outpatient follow-up. To ensure that follow-up can be timely, hospitals, CMHCs, and outpatient mental health providers should consider using telephone or video-enabled devices to conduct these visits.

Community and Outpatient Mental Health

During events necessitating activation of CSC, outpatient mental health services and community mental health centers will be important resources serving the needs of those living in our state. Outpatient mental health providers should be proactive in providing information for the crisis lines of the state community mental health centers. Those taking crisis calls will be instrumental in triaging, steering those in most acute need towards the nearest ED and coordinating services for those with less acute needs. Outpatient mental health providers and hospitals should coordinate services with the community mental health center in their region.

Key Points

- Public messaging and guidelines for healthcare and behavioral health practitioners regarding the behavioral impact on the general population should be developed
- Guidelines for healthcare workers, behavioral health practitioners, and first responders regarding the behavioral health impact on the responder community should be developed

- Mental health care for people with serious mental illness and individuals receiving treatment (including medication) for substance dependency should be continued, guidelines should be developed to support this continuing care
- Psychological first aid adapted specifically for community resilience/social support
 enhancement in a CSC context should be deployed for use by the general public, health care
 workers, and those involved in the disaster response
- Criteria for inpatient behavioral health admission should be revisited during times when CSC is activated, and discharges should be coordinated with community mental health centers
- Outpatient mental health services and hospitals should coordinate with community mental health centers who can be instrumental in the triaging of patients in need of mental health care

Sources: IOM 2009/2012, Minnesota Framework for Healthcare Facilities, Arizona CSC

Additional Resources:

Public Health Emergency: Disaster Behavioral Health

SAMHSA: Disaster Preparedness, Response, and Recovery

CDC: Coping with a Disaster or Traumatic Event--Response Resources for Leaders

WHO: Mental Health in Emergencies

Pediatrics

Source: Arizona CSC Plan

Considerations for the SDMAC and Hospitals:

- 1. Communication: Messaging and communication will need to be modified for pediatric patients, especially those who are non-verbal.
- 2. Personal Protective Equipment (PPE): Masks, gloves, gowns, and other PPE may frighten pediatric patients. Pediatric sizes of masks and other types of PPE should also be available.
- 3. Decontamination: Children may need to be decontaminated with or by adult family members/caregivers. Tepid (98.6° F) water will be needed because children are more prone to hypothermia.
- 4. Mental Health: Children have unique psychological needs and may be prone to fear and panic.
- 5. Evacuation/Transfer: Please refer to the Transfer Guidelines portion of the In-Hospital Care section above. Out-of-state transfer will be a last resort.
- 6. Reunification: Hospital reception sites will be set up at hospitals to assist families seeking information about missing loved ones.

7. Pediatric Space, Staff, and Supplies: When possible, pediatric patients should be brought to pediatric acute healthcare facilities. If evacuation or transfer is not possible, healthcare professionals will have to use available resources until transfer is possible.

Healthcare Workforce

Quarantine

When the CSC is activated due to an outbreak of a contagious infectious disease, protocols need to be in place to provide guidelines for when staff members are exposed to an infectious patient and may need to be quarantined. This will often vary based on the incubation period of the infectious agent. Because of their often extensive and close contact with vulnerable individuals in healthcare settings, a conservative approach to the monitoring of health care workers and their restriction from work after an exposure is crucial in order to quickly identify early symptoms and prevent transmission.

Health care workers who have an exposure should seek guidance from their health care facility's occupational medicine department. Recommendations on need and duration of quarantine will vary by the cause of an infectious disease outbreak but should be based on guidance from the CDC and state public health bodies. If health care workers remain without symptoms and fulfil the criteria of their quarantine, appropriate advice on return to work should be provided to them.

Scope of Practice

Scope of clinical practice is defined as the extent of a licensed healthcare professional's ability to provide service consistent with their competence, license, certification, and privileges. Most healthcare professional's scopes of practice are delineated by rules and regulations describing range of responsibilities. During disasters and emergencies, modification of the scope of practice for health professionals to meet increased demand for service is expected.

In the setting of a health care crisis, facility disaster plans should optimize the availability of all health care professions, particularly those serving in front-line roles. The use of reserve staff or sharing health care workers with other institutions may also be necessary at times.

While health care workers should not be asked to perform outside their scope of practice (e.g. a nurse would not be asked to perform surgery), workers should be prepared to be assigned to additional roles outside their normal everyday duties.

Workers being assigned to new duties or roles may still require additional training or refresher instruction if they do not regularly perform this activity. If a modified scope of practice is required, the facility needs to offer appropriate training prior to the worker performing these duties. Just-in-time training can be used in this circumstance to ensure workers have the appropriate skills in these settings.

Trainees and Supervision

Ensuring ongoing patient safety during a crisis through trainee supervision remains important. However, considerations to allow for trainees in any health profession to play a larger role in crisis response efforts can be made. As an example, medical and nursing students can be given additional responsibilities based on their training prior to the crisis commencing.

For trainee physicians, additional responsibilities can be delegated to them, if sufficient supervision by an attending physician occurs. Trainees may also be able to practice at other facilities, while still receiving supervision from a physician at that facility. Advanced practice providers such as APRNs and PAs, as well as pharmacists, can also be given additional responsibilities, in line with the scope of practice issues discussed previously.

Licensed RNs who have met requirements to perform procedures defined by the state's nursing board may be able to perform these in facilities where they have privileges.

Other Licensing Considerations

In times of crisis, consideration should be given to allowing out-of-state, licensed healthcare professionals in good standing to be called on to practice, if permitted by the OPLC. Consideration should also be given to adding recently lapsed licensed professionals (in good standing otherwise) and recently retired professionals to the workforce under guidance from the state licensing entities. appropriate authorities.

Staff Support

Staff shortages are expected to be a challenge during a crisis. Provision of support to help enable staff to continue to perform their clinical duties is important. Some key areas to address include ensuring access to childcare, ensuring staff are protected with appropriate PPE, and providing housing if needed for on-duty staff.

Efforts should be made to reduce the risk of staff burnout. All staff should have access to information on contingency plans for managing the crisis, to allow staff to assess how this will impact them. Shifts should be scheduled with appropriate redundancy in a way that avoids fatigue, especially if a crisis continues over a prolonged period. Supports should be made available to staff who are experiencing burnout.

Exhibit B: Ethical Framework

Overview

The healthcare system may fail if overwhelmed by those requiring critical medical care due to a public health crisis or disaster. Should this happen, everyone will suffer the consequences of a healthcare system systemic failure from patients and their families to public health and healthcare professionals. Physicians and healthcare systems may be faced with making "extraordinary" decisions as to which patients get treated, how patients are treated, allocation and use of limited medical resources, rather than patient preferences and goals.

"The principles of humanitarianism explicitly require both saving lives and prevention and alleviation of human suffering as essential parts of a humanitarian healthcare response. The consequences of humanitarian crises vary greatly depending of the causes, location, and vulnerability of the population they affect, but the consequences often include extensive loss of life and physical, psychological, social and spiritual suffering on a massive scale." (Coronavirus: Extraordinary Decisions for Italian Doctors, The Atlantic)

"An ethically sound framework for health care during public health emergencies must balance the patient-centered duty of care—the focus of clinical ethics under normal conditions—with public-focused duties to promote equality of persons and equity in distribution of risks and benefits in society—the focus of public health ethics. Because physicians, nurses, and other clinicians are trained to care for individuals, the shift from patient-centered practice to patient care guided by public health considerations creates great tension, especially for clinicians unaccustomed to working under crisis conditions with scarce resources." (Berlinger et al)

The IOM 2012 report highlights that "... groups that are most at risk before a disaster are those most vulnerable during a disaster. Ethically and clinically sound planning will aim to secure equivalent resources and fair protections for these at-risk groups. (In addition) some health care professionals' question whether they can maintain core professional values and behaviors in the context of a disaster." (Hanfling et al)

Enabling the healthcare system, public health, and medical professionals to respond to a public health crisis of such magnitude requires an ethical framework to provide care and allocate medical resources in a fair, accountable, transparent, and open manner to ensure the public's trust and confidence.

Ethical Commitments

Pursue common good in ways that:

• Are accountable, transparent and worthy of trust; decision makers answerable for their actions and inactions, decisional process open to scrutiny, and publicly accessible;

- Promote solidarity and mutual responsibility;
- Respond to needs respectfully, fairly, effectively and efficiently;
- Assure a duty to care obligations to patients and health care professionals.

NH DHHS is committed to helping protect the health and well-being of the community, and to ensuring fair and responsible stewardship of limited resources. This extends to the duty to provide and adhere to a defined ethical framework in preparing for and responding to public health emergencies and disasters. To appropriately respond to a catastrophic disaster in which resources are overwhelmed, the needs of the greater community generally must rise above the needs of any single individual, and there may be circumstances in which resources should be diverted from patients with a lower likelihood of benefit to those with a greater likelihood to benefit. In making such resource allocation decisions, healthcare professionals will be faced with trying to balance several integrated elements: their accustomed, well-established standards of practice; professional codes of ethics; the primacy of principles such as beneficence, non-maleficence, justice and autonomy; concern for one's own personal and family safety; and the demands of working in an extremely stressful environment where there are too many ill or injured and too few resources.

The people of New Hampshire are best served by addressing early on and forthrightly the complex ethical concerns surrounding planning and response to such a public health crisis and disaster, and by establishing ethically acceptable standards that can be universally applied. This Plan follows an ethical framework, which values the normative principles of ethical decision-making including a person's right to self-determination and the healthcare provider's obligations to beneficence, non-maleficence and justice. This Plan is especially concerned with the principle of justice, as it is intended to facilitate fair decision-making when healthcare professionals and others face the inevitable reckoning, in the midst of a catastrophic public health crisis or disaster, with the dilemma of very limited or unavailable resources in the face of critical human needs.

Ultimately, allocation of limited resources should support achieving the greatest measurable benefit for the greatest possible number of persons over the long run. Where resources are scarce or otherwise limited, all therapies that might usually be available may not be appropriate for some patients, yet other curative and/or comfort care treatments should still be provided. There is also an ethical duty to maximize preparedness efforts and adopt prevention strategies that will minimize the scarcity of resources and the need to ration resources at a later time during a public health crisis or disaster. The CSC Plan and CSC clinical guidelines are based upon several ethical principles that have been recognized as central to a just process for allocating limited resources during catastrophic public health emergencies or disasters.

Justice (fairness and equity) – Every healthcare provider should attempt to be fair to all those who are affected by the public health crisis or disaster, without regard to factors such as age,

race, ethnicity, socioeconomic status, sexual orientation, disability, citizenship, ability to pay, or religion that are not medically relevant.

Rationing of Care and Scarce Resources – Medical care and resources may become limited and in short supply during a public health crisis or disaster.

- Rationing should be based on the following: risk of mortality and serious morbidity; likelihood of good or acceptable response to resource; risk of transmitting infection; irreplaceability of key workers.
- Rationing should <u>NOT</u> be based on the following: age, race, ethnicity, socioeconomic status, sexual orientation, disability, citizenship, ability to pay, or religion; age as a criterion in and of itself (this does not limit consideration of a patient's age in clinical prognostication); first-come, first-served; judgments that people have greater quality of life than others; predictions about baseline life expectancy (i.e., life expectancy if the patient were not facing the pervasive or catastrophic public health even related crisis), unless the patient is imminently and irreversibly dying, because rationing based on such baseline predictions would exacerbate health disparities; judgments that some people have greater "social value" than others.
- When the supply is inadequate to serve all similarly prioritized people then use a random process to allocate resources.

Transparency – Openness and public accessibility in the decision-making process.

Respect for Persons – Upholding personal autonomy, privacy, dignity, and bodily integrity; honesty and truth-telling.

Beneficence – Preserving the welfare of others through affirmative acts to promote public wellbeing and save lives.

Non-maleficence – Duty not to harm others (e.g., by transmitting disease).

Participatory (inclusiveness) – Planners and decision-makers should engage the community, public health and healthcare providers, and crisis management agencies during the development of CSC, which can encourage greater understanding, clarity, and trust when CSC implementation is required.

Proportionality – Any reduction in the quality of care provided should be commensurate with the degree of crisis and the degree of scarcity of resources.

Solidarity – When limited available resources are unable to meet everyone's needs, all people should consider the greater good of the entire community.

Duty to Care – Healthcare professionals have a duty to provide care. Fundamental norms of good care carry over from conventional standards during a crisis situation. Patients should be provided the best possible care given available resources. Patient care plans should be based on

the CSC plan and explained to patients and their families throughout the process in which care decisions are made. Patients should not be abandoned. The Healthcare professionals must be supported so that they can maintain their core professional values and behaviors in the context of the public health crisis or disaster. (IOM, 2012)

Reciprocity – Those who face disproportionate burdens or greater risks for the benefit of the community in public health emergencies will receive additional support. Fairness requires society to protect those who take on risk on behalf of the public. Providers' duty to care for patients may be limited in situations that pose imminent danger to them.

Privacy and Individual Liberty – During a public health crisis or disaster, altered standards may also be necessary concerning privacy requirements and individual liberties. With respect to privacy, for example, the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule, 45 C.F.R. Part 164, protects confidential patient information by requiring strict adherence to rules concerning when release of patient information is appropriate. HIPAA allows for the release of protected health information in certain circumstances generally related to treatment, payment, or healthcare operations. Ordinarily, the ethical responsibilities of healthcare professionals would be to ensure a patient's privacy.

Traditional liberty interests may also be modified in deference to the need to abate harm during the crisis. Any decisions that impede upon the community's liberties should be proportional to the need to protect the public's health and should not exceed what is necessary to address the actual level of risk to or critical needs of the community. A common example of restraint against one's liberty is the closing of public gathering places, i.e., social distancing, in an effort to stop the spread of disease.

Ethical Objectives

Pursue the population's health by:

- Reducing mortality and serious morbidity from the public health crisis; and
- Reducing mortality and serious morbidity from disruption to basic health care, public health, public safety and other critical infrastructures.

Planning must address the needs of individuals in the communities with injuries or illnesses that are directly related to the public health crisis or disaster. Planning must also attend to health needs related to the impact of the disaster on critical infrastructures as well as consideration of how to fairly and effectively manage more routine health care needs in the context of a disaster that overwhelms the health care system. These related needs also include concerns about public health consequences of disaster on critical services other than health care, including clean water, reliable power, sanitation services, etc.

References and Resources

The following references and resources were instrumental in the drafting of this plan.

Institute of Medicine 2009. *Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: A Letter Report*. Washington, DC: The National Academies Press. https://doi.org/10.17226/12749.

Institute of Medicine 2012. *Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response: Volume 1: Introduction and CSC Framework*. Washington, DC: The National Academies Press. https://doi.org/10.17226/13351.

Institute of Medicine 2013. *Crisis Standards of Care: A Toolkit for Indicators and Triggers*. Washington, DC: The National Academies Press. https://doi.org/10.17226/18338.

Christian MD, Sprung CL, King MA, Dichter JR, Kissoon N, Devereaux AV, Gomersall CD; Task Force for Mass Critical Care; Task Force for Mass Critical Care. *Triage: care of the critically ill and injured during pandemics and disasters: CHEST consensus statement.* Chest. 2014 Oct;146(4 Suppl):e61S-74S. doi: 10.1378/chest.14-0736.

Daugherty Biddison EL, Faden R, Gwon HS, et al. Too Many Patients... A Framework to Guide Statewide Allocation of Scarce Mechanical Ventilation During Disasters. *CHEST*. 2019;155(4):848-854.

New York State Task Force on Life and the Law 2015. *Ventilator Allocation Guidelines*. https://www.health.ny.gov/regulations/task_force/reports_publications/docs/ventilator_guide lines.pdf

Minnesota Department of Health. *Crisis Standards of Care*. Updated 2/25/2020. Accessed 3/22/2020. https://www.health.state.mn.us/communities/ep/surge/crisis/index.html

Arizona Department of Health. *Crisis Standards of Care Plan*. Updated 2018. Accessed 3/22/2020. https://www.azdhs.gov/documents/preparedness/emergency-preparedness/response-plans/azcsc-plan.pdf

State of Michigan, Department of Community Health, Office of Public Health
Preparedness. (2012). <u>Guidelines for Ethical Allocation of Scarce Medical Resources and Services</u>
<u>During Public Health Emergencies in Michigan.</u> Accessed 3/22/2020.

ASPR TRACIE. https://asprtracie.hhs.gov

Chin ET, Huynh BQ, Lo NC, Hastie T, Basu S. *Healthcare worker absenteeism, child care costs, and COVID-19 school closures: a simulation analysis.* Pre-print downloaded Mar 23 from https://doi.org/10.1101/2020.03.19.20039404

Centers for Disease Control and Prevention 2020. *Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare*

Setting to Patients with Coronavirus Disease (COVID-19). https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

Association of State and Territorial Health Officials. *ASTHO Scope of Practice Toolkit: Scope of Practice Issues in Public Health Emergencies.*

https://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Scope-of-Practice-Toolkit/Scope-of-Practice-Issues-in-Public-Health-Emergencies-Fact-Sheet/

New Hampshire State Emergency Operations Center. *New Hampshire Emergency Support Function (ESF) Quicksheets.*

https://www.nh.gov/safety/divisions/hsem/documents/ESFQuicksheets.pdf