**Addendum 4.1 – Sample hospital CSC plan**

Activation

A disaster has occurred that overwhelms X health care facility. Resources are inadequate to provide a usual standard of care. Resources are not rapidly available, and systematic adaptations must be made to provide the best care possible under the circumstances. Examples include:

Surge capacity is overwhelmed and patient care is being provided on cots or inadequate qualified staff are available

ICU capacity is overwhelmed due to a pandemic

Burn unit capacity is overwhelmed due to a massive fire/blast incident

Notifications

Hospital IC (Incident Commander) will notify Regional Health Care Preparedness Coordinator (RHPC) or on-call of situation (xxx) xxx-xxxx and attempt to obtain needed resources

If needs cannot be met in the region the RHPC will:

* + Notify Minnesota Department of Health (MDH) Center for Emergency Preparedness and Response
  + Notify other health care facilities in the X Regional Coalition of situation
  + Notify jurisdictional emergency management and public health
  + Establish Multi-Agency Coordination (MAC) including the above agencies to determine policy and information needs

Actions

**Short-Term strategies**: Short-term strategies to increase health care facility capacity should have be implemented. If the resource shortages can be quickly addressed (e.g., within hours to days) by these strategies crisis care may not be necessary or may be very brief:

Rapid discharge of emergency department and outpatients that can safely continue their care at home.

Rapid assessment and early discharge of inpatients (surge discharge)

Transfer of patients to other institutions in metro/state/adjoining states

Transfer of patients to alternate facilities (if they are available)–these may be permanent (long-term care facility) or temporary (alternate care site), or usual health care facilities in an adjacent region/state.

Cancellation of elective surgeries and procedures, with re-assignment of surgical staff and space (e.g., post-anesthesia care area, endoscopy suites).

Reduction of usual use of elective imaging, laboratory testing and other ancillary services.

Expansion of critical care capacity by placing select ventilated patients on monitored/stepdown beds, using pulse oximetry (with high/low rate alarms) in lieu of cardiac monitors, or relying on ventilator alarms (which should alert for disconnect, high pressure, and apnea) for ventilated patients, with spot oximetry checks.

Call-in of appropriate staff.

Changes in staff scheduling (e.g., may elect to change duration of shifts or alter staffing ratios – however, longer shift duration during an infectious event may be detrimental to staff who may not adhere to PPE recommendations when fatigued), or changes in staff assignments (all nurse educators work clinical shifts, etc.).

Changes in documentation requirements and release from administrative, teaching, and other responsibilities.

Request for supplemental staff from partner hospitals, clinics.

Conversion of single rooms to double rooms or double rooms to triple rooms if possible.

Designation of wards or areas of the facility that can be converted to negative pressure/isolated from rest of ventilation system for coalescing contagious patients.

Use of cots and beds in flat space areas (classrooms, gymnasiums, lobbies) within the health care facility for non-critical patient care.

Communication with staff and public, educate staff about specifics of incident and provide just-in-time training on specialty patient care (e.g., burns, highly contagious infections, toxic exposures). Develop web-based modes of communication and education for staff.

Provision of behavioral health support for patients and family members.

Provision of staff support including feeding, behavioral health support, family/pet support and access to supplies (gas, groceries, etc.).

**Long term strategies**: These are usually employed in a >24h incident which will continue to require a crisis standard of care due to pervasive region-wide demands on resources. A State declaration of emergency should occur; planning cycles will be implemented by the hospital incident commander. Strategies may include:

Staffing: in addition to usual staff sharing, medical reserve corps, Federal personnel, public health, and other personnel may be used as needed.

* + Determine need for non-employee assistance in the facility (e.g., provision of non-medical responsibilities, supervision by health care facility staff mentor, etc.).
  + Determine a preference list of providers (e.g., facility staff first, followed by local hospital staff, followed by clinic staff, out-of-state licensed staff, retired staff, EMS personnel, medical reserve corps, trainees, non-health care organization staff, military personnel assigned to the response, or lay volunteers that might assist the facility during an incident).
  + Determine need to use family members to provide patient care/feeding duties

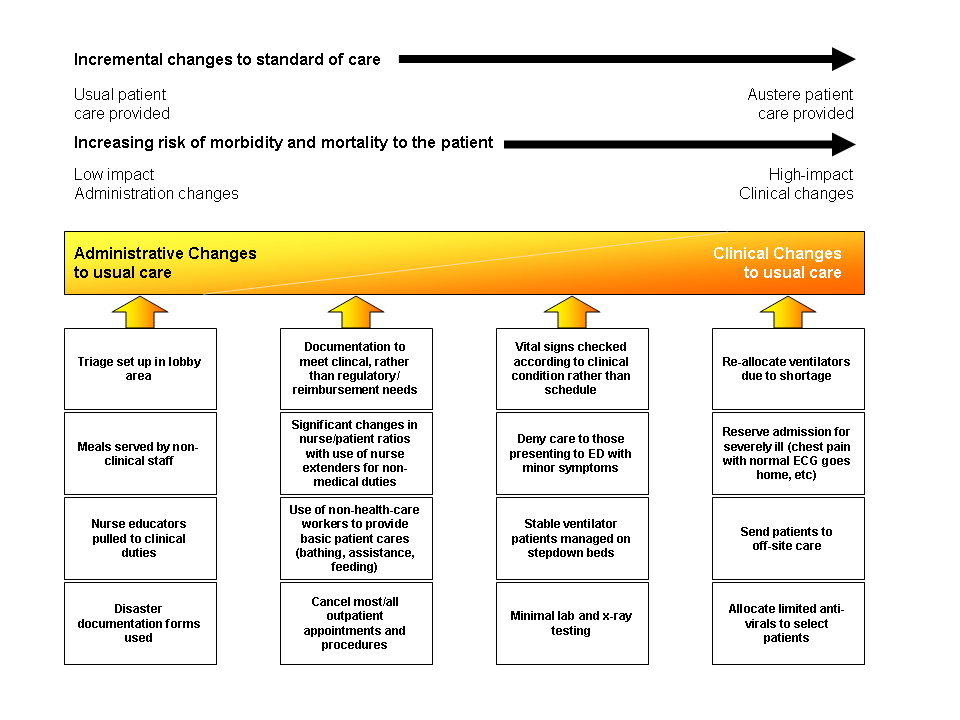
Facilitation of home-based care for a larger proportion of patients in cooperation with public health and homecare agencies.

Establish mobile or temporary evaluation and treatment facilities in the community to supplement usual clinic locations. These locations may also be used to screen those with mild symptoms when medications (e.g., anti-virals) are available for treatment.

Establish guidelines and public messaging directing potential patients how to evaluate symptoms and care for themselves at home, indications for seeking medical evaluation and treatment, whether evaluation and treatment for some conditions can safely be delayed, and locations of available care.

At this point, the IC must incorporate a structured assessment of health care facilities services and resources on a daily basis as part of the Incident Action Plan. The IC should examine the administrative and clinical adaptations needed each operational period based on the incident demands. Administrative, rather than clinical adaptations should be emphasized until no longer possible.

**Figure 4.1.1: AHRQ altered standard of care document image[[1]](#footnote-1)**



**Process for implementing crisis standard of care (see flowchart addendum 4.3)**

1. Incident commander recognizes that systematic clinical changes will be required to allocate scarce resources to those most likely to benefit.
2. Planning chief gathers any guidelines, epidemiologic information, resource information, and regional health care facility information and schedules meeting or conference call with IC and designees to clinical care committee.
3. Clinical care committee is convened by IC – membership may vary depending on incident and facility resources:
   * Health care administrator
   * Medical Director (Medical Care Director)
   * Health care attorney (if possible)
   * Infection Control (for infectious incident)
   * Infectious disease (for infectious incident)
   * Critical care
   * Emergency medicine
   * Pediatrics
   * Nursing supervisor
   * Respiratory care supervisor
   * Chair of ethics committee
   * Community representative (if possible – similar to Institutional Review Board role)
   * Ambulatory care (clinics)
   * Other – may include lab, radiology, bioelectronics, pharmacy, palliative care, burn staff, etc.
4. Clinical care committee reviews situation, outside guidance, and regional/state health care facility efforts and determines:
   * Methods to meet patient care needs (for example, use of non-invasive ventilation techniques, changes in medication administration techniques, use of oral medications and fluids instead of intravenous, etc.). These will generally be of limited value in correcting large demand/resource deficits, however. Use MDH scarce resource guidance (see Patient Care Strategies for Scarce Resource Situations).
   * Additional changes in staff responsibilities to allow specialized staff to re-distribute workload (for example, floor nurses provide basic ICU patient care while critical care nurses oversee these nurses and their patients) or would incorporate other health care providers, lay providers, or family members to provide assistance based on their skillset.
   * Mechanism for reassessment of local and regional health care facility efforts and strategies (e.g., assignment of liaison officer and establishment of regular communications loop with state Science Advisory Team and any regional entities).
   * Mechanism to summarize recommendations and changes and circulate to all staff and patients/families (concrete guidelines are important to provide clarity and reduce decision-making based upon emotional or subjective factors).
5. Committee reviews options for:

• Location of care (triage of patients to critical care, floor care, off-site care, home based on disease severity)

• Assignment of resources (which patients will receive resources in limited supply – ventilators, anti-toxin, etc., or which will not be offered such interventions when there are competing demands).

1. Committee summarizes recommendations for care for next operational period and determines meeting and review cycles for subsequent periods (eg: daily meeting, twice daily conference call, etc.) assuring that regional efforts at the MAC level or RHPC level are integrated into facility process/timelines.

1. Incident commander approves recommendations and integration into Incident Action Plan (IAP). Section chiefs and Command Staff briefed and PIO assures communications to all staff.

2. Information is disseminated to inpatient services, outpatient services, RHPC. Daily conference calls with RHPC involving critical care, infectious disease, command staff, as indicated by circumstances

Re-allocation of ventilators or other critical care or limited resources

1. Current inpatients, patients presenting to the health care facility, and their family members are given verbal and printed information - by the triage nurse in the ED with reinforcement by physician - explaining the situation and explaining that resources may have to be restricted or re-allocated, even once assigned, in order to provide the care to those that will most benefit. A contact point (phone extension) for responding to patient/family questions and concerns should also be included, as should spiritual support contact information.
2. Access controls should be implemented appropriate to the situation.
3. Assure behavioral health resources and appoint palliative care unit leader if needed.
4. Triage plan for each operational period:

a. Emergency department/Outpatient screening of patients (and denial of service to patients either too sick or too well to be benefited by evaluation/admission) based on current regional resources and regional/MDH guidance as well as facility resources.

b. Triage team – Two physicians from the affected discipline (usually two critical care or one critical care and one relevant specialty physician - infectious disease, burn surgeon, etc.) consider ventilator and other resource allocation decisions acting on data supplied by units/teams in concordance with MDH strategies (see appendix) and other evidence. (If ECMO is the resource in question one of the physicians should have ECMO expertise).

i. When two patients have essentially equal levels of illness/prognosis, a “first-come, first-served” policy should be used.

ii. When, according to guidelines or the triage team’s clinical experience, the prognosis is not equal, the patient with a substantially more favorable prognosis shall receive the resource.

iii. The triage team should ask for and receive whatever patient information is necessary to make a decision but should NOT consider subjective assessments of the quality of the patient’s life or value to society. (The treating physician should assure that the patient/family wishes to use the ventilator or other resources if they are available prior to asking the triage team for an opinion).

iv. Triage team should pass recommendations to the inpatient unit leader and document decision-making on templates in the affected patient(s) charts

v. Note that in some situations health care facility staff may participate on regional triage team on rotating basis.

1. The inpatient unit leader should maintain situational awareness of the facility. This individual should have access to:

a. ED and other outpatients waiting for beds (both floor and critical care units)

b. Inpatient bed status including pending transfers into/out of critical care areas.

c. Clinical status of patients by unit (i.e., improving: able to move to floor status or discharge or worsening: may require critical care or may not be eligible for continued treatment). This requires ongoing contact between the inpatient unit leader and the clinical units to assure that information is up to date and accurate so that good decisions can be made. The leader will work closely with the Triage Team to determine the best use of beds available

1. The process and rationale for resource assignment should be provided to the attending physician and family: Office of the Medical Director staff may act as messenger to the family as desired/necessary):

a. Grounds for the decision

b. An appeals process that allows a period of time (appropriate to the intervention being allocated – for ventilators 15 minutes) for the attending physician to request re-consideration of the decision if there is new objective information available that that patient’s prognosis is more favorable than determined by the triage team.

c. The resource allocation protocol and decisions should be reviewed by the clinical care committee and additional oversight physicians at set periods (e.g., every 24-48 hours) and as needed to assure the best evidence available is being used and that the decisions and the system are operating justly.

d. The inpatient areas supervisor and the attending physician will agree on the level of care required for the patient after the allocation decision is made – floor, intermediate, or ICU

e. Note: in most cases all means of available support should continue to be offered aside from the resource triaged, and should the patient improve or more resources become available they may re-qualify for a resource, unless decision expected to result in a non-survivable state (e.g., ventilator re-allocation).

f. Assure adequate symptom relief and comfort for all patients as possible based on the available resources

1. Altered Standards of Care in a Mass Casualty Event (Current as of April 2005), Retrieved from Agency for Healthcare Research and Quality, Available at [Appendix A, Expert Meeting on Mass Casualty Medical Care Participant List](https://archive.ahrq.gov/research/altstand/altstapa.htm). [↑](#footnote-ref-1)