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HEALTHCARE EMERGENCY PREPAREDNESS
INFORMATION GATEWAY

Crisis Standards of Care and COVID-19: What's Working and What Isn't

December 3, 2020

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Moderator- Meghan Treber, MS
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Resources

- [ASPR TRACIE COVID-19 Page](#)
 - [COVID-19 Crisis Standards of Care Resources](#)
 - [COVID-19 Patient Surge and Scarce Resource Allocation](#)
- [ASPR TRACIE Crisis Standards of Care Topic Collection](#)
- [ASPR COVID-19 Page](#)
- [CDC COVID-19 Page](#)
- [Coronavirus.gov](#)

COVID-19 Patient Surge and Scarce Resource Allocation

<https://asprtracie.hhs.gov/covid-19-patient-surge>

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COVID-19 Patient Surge and Scarce Resource Allocation

The COVID-19 pandemic has forced many healthcare systems to adopt crisis practices that would normally be considered a compromise to usual standards of care. Strategies to address patient surge management and the allocation of scarce resources, such as Crisis Standards of Care (CSC) are policy, regulatory, and systems changes implemented when the duration of crisis care practices is prolonged. The resources on this page can help healthcare and emergency management planners prepare for surges of COVID-19 patients.

If you are a clinician treating a patient, please refer to the National Institutes of Health Coronavirus Disease 2019 (COVID-19) Treatment Guidelines. If you have tools, templates, or other resources to contribute to this toolkit, please contact our Assistance Center.

Search the Resource Library:

Page Sections

- Allocation of Scarce Resources
- Alternate Care Sites
- Crisis Standards of Care
- Immediate Bed Availability and Surge Capacity
- Patient Load Balancing

Allocation of Scarce Resources

Drug Shortages and Scarce Resources

Alternate Care Sites

Alternate Care Site Resources

- Alternate Care Sites (ACS) Sources of Additional Staff
- Alternative Care Sites-The Federal Experience in New York City
- COVID-19 Alternate Care Site Resources
- Baltimore Convention Center Field Hospital: One State's Experience during COVID-19
- Featured COVID-19 Alternate Care Site Resources
- Alternate Care Site (ACS) Toolkit: Third Edition

ACS Funding Summary: Establishment and Operationalization

- COVID-19 Alternate Care Strategies
- Funding Sources for the Establishment and Operationalization of Alternate Care Sites
- Healthcare Capacity Building: Alternate Care Sites and Federal Medical Stations
- Use of Telemedicine in Alternate Care Sites (Webinar)

Crisis Standards of Care

Crisis Standards of Care and Infectious Disease Planning

Crisis Standards of Care Topic Collection

COVID-19 Crisis Standards of Care Resources

Immediate Bed Availability and Surge Capacity

Considerations for the Use of Temporary Care Surge Sites for Managing Seasonal Patient Surge

COVID-19 Critical Care Surge Resources

COVID-19 Hospital Resource Compilation

Healthcare Coalition Infectious Disease Surge Annex Template

Hospital Intensive Care Unit (ICU) Surge Training Resources

Hospital Surge Capacity and Immediate Bed Availability

Patient Load Balancing

Considerations for Assessing Regional Patient Load-Balancing Effects during COVID-19

Critical Care Load-Balancing Operational Template

Medical Operations Coordination Cells Toolkit (First Edition)

Crisis Standards of Care: Lessons from New York City Hospitals' COVID-19 Experience

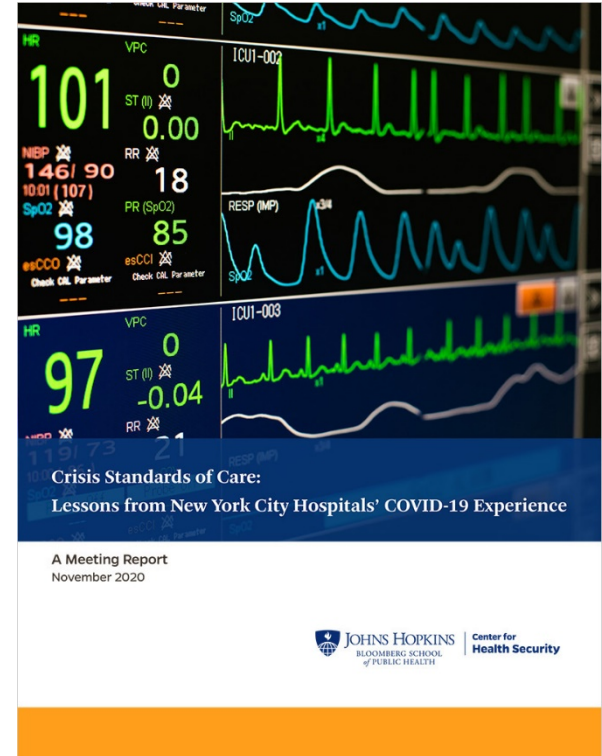
12/3/20

Eric Toner, MD



**Center for
Health Security**

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NYC Peak: April 3, 2020

- 1650 new hospital admissions/day
- Many reports of hospitals being overwhelmed, and **conventional standards of care** unable to be maintained
- HCWs forced to adjust in order to do the **most good for the greatest number**

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Crisis Standards of Care (CSC)

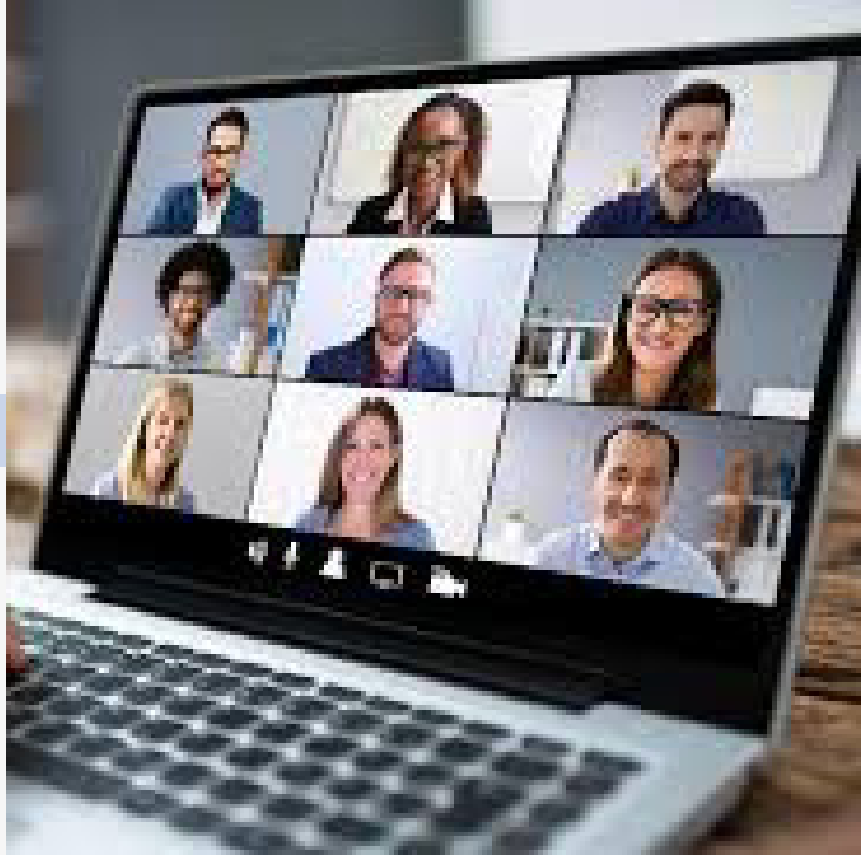
- **Standard of care:** “The level at which the average, **prudent provider** in a **given community** would practice. It is how similarly qualified practitioners would have managed the patient’s care under the same or **similar circumstances**.”
- **Crisis standard of care:** “A **substantial change** in usual healthcare operations and the level of care it is possible to deliver, which is made necessary by a **pervasive** (e.g., pandemic influenza) or **catastrophic** (e.g., earthquake, hurricane) disaster.”

IOM. 2012. [Crisis Standards of Care](#).

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Purpose

10



- Convene ICU physicians from hospitals across New York City
- Frankly discuss their experiences with implementation of CSC
- Engage with CSC experts from outside NYC

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Approach

- The Johns Hopkins Center for Health Security, in collaboration with New York City Health + Hospitals, convened a virtual working group in October 2020
 - 15 NYC ICU directors
 - 3 CSC experts
- 4 hours of semi-structured, facilitated discussion
- Chatham house rules
- Thematic analysis of notes

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Themes that Emerged

- CSC plans did not align with the clinical realities
- The surge response was chaotic but often effective
- Interhospital collaboration was especially important
- Situational awareness of patient load and resource availability was a challenge for many clinicians
- Multiple CSC challenges existed, especially decision-making for triage or allocation of life-sustaining care
- Healthcare workers (HCW) were profoundly psychologically affected by dealing with CSC issues amid the extraordinary surge

Looking Ahead

- CSC planning must be more operational with more clinician involvement
- Clinicians must be taught that CSC involves making the best decision one can when in an unfamiliar situation that involves risk to the patient or provider
 - Not limited to ventilator triage or formal triage processes
- Revised CSC planning guidance is needed
- Clinicians and their legal advisors must resolve differences in understanding of legal aspects of CSC

Looking Ahead, *con't*

- In a crisis, a clear declaration is needed that a CSC context exists
 - At the hospital, hospital system, healthcare coalition, and jurisdictional levels
 - Specific clinical guidance about the scope of the declaration—which resources or processes it applies to
 - CSC plans must factor in that a timely declaration may not be made and include how to proceed without it
- Physician/hospital leaders need better situational awareness of patient load, resources, and changing guidance and policies,
 - They need to find effective ways to keep their staffs informed
 - Including both clinical and operational information-sharing among hospitals, across hospital systems, and across the city or state
- Triage decisions cannot wait for a cumbersome committee structure
 - Rapid decision processes must be developed that involve the treating physician as well as other physicians
 - Education is needed for those clinicians who are making such decisions and a process developed for them to engage another expert rapidly if possible

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Looking Ahead, *con't*

- Need clarity on difference between triage decisions that hospital clinicians make on busy days and the shift in thinking and practice that is involved in CSC
- Further education needed on the spectrum of crisis care from conventional → contingency → crisis
 - Should be practiced in exercises
- Future pandemic planning should be integrated with accepted ICU futility guidance
- Planning for critical staff shortages is a high priority
- Need to find ways to engage families in essential end-of-life discussions which is much more difficult when they are barred from hospital

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Must find ways to lessen the heavy emotional toll on HCWs caused by combined stress of the surge plus moral injury of CSC

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Read the Report

<https://www.centerforhealthsecurity.org/our-work/publications/crisis-standards-of-care-lessons-from-new-york-city-hospitals-covid-19-experience>

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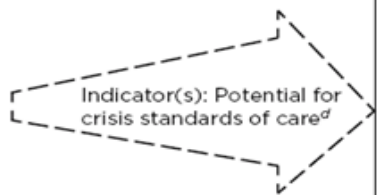
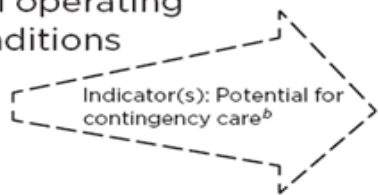


Incident demand/resource imbalance increases →
 Risk of morbidity/mortality to patient increases →
 ← Recovery

	Conventional	Contingency	Crisis
Space	Usual patient care space fully utilized	Patient care areas re-purposed (PACU, monitored units for ICU-level care)	Facility damaged/unsafe or non-patient care areas (classrooms, etc.) used for patient care
Staff	Usual staff called in and utilized	Staff extension (brief deferrals of non-emergent service, supervision of broader group of patients, change in responsibilities, documentation, etc.)	Trained staff unavailable or unable to adequately care for volume of patients even with extension techniques
Supplies	Cached and usual supplies used	Conservation, adaptation, and substitution of supplies with occasional re-use of select supplies	Critical supplies lacking, possible reallocation of life-sustaining resources
Standard of care	Usual care	Functionally equivalent care	Crisis standards of care ^a

Normal operating conditions

Extreme operating conditions



Trigger(s):
Decision point for contingency care^c

Crisis care trigger(s):
Decision point for crisis standards of care^e

Key Points

- Too much emphasis on definitive triage (e.g., ventilators and “triage team”)
- “Bright lines” do not exist between contingency and crisis
- CSC exists at the bedside – decisions need to be made
- Avoid ad hoc decisions whenever possible
 - Elevate the issue
 - Reactive transition to proactive at facility/ coalition/ state level

Provider

- Knowledge
 - Current evidence
 - Ethical issues
 - Principles
 - Resources available
- Practice
 - Make decisions in usual scope of practice
 - Apply available policy to resource allocation decisions
 - Consult when decision not usual / no policy

Consultations
Conditions
Needs

Guidelines
Education
Resources
Clinical assistance

Facility / System

- Incident Command System
 - Recognizes / anticipates issues
 - Integrates clinical experts
 - Receives info from consultants/triage team
 - Develops system policy
 - Allocates resources
 - Public / provider messaging
- Knowledge
 - System status
 - State / Coalition status
 - Resource issues
- Policy
 - Clinical decision consultant available
 - Triage team available if needed
 - Clinical guidelines
 - Allocation policies (e.g. monoclonals, medications)
 - Surge policy – space, staffing expansion / models

Practices
Conditions
Needs

Guidelines
Education
Resources
Protection
Regulatory relief

Coalition / State

- Incident management / coordination
 - Recognizes / anticipates issues
 - Integrates clinical experts
 - Make resource requests to State / Federal
 - Provider/public messaging
- Knowledge
 - System status
 - State / facility status
 - Resource issues
 - Information / policy sharing
- Policy
 - Regional clinical decision consultant?
 - Regional triage team?
 - Guidance (clinical / non-clinical)
 - Strategies for allocation
 - Regional bed / transfer coordination (MOCC)?
- STATE only
 - Liability protection
 - Executive orders
 - Regulatory relief



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Planning

- Incremental plan for staffing
 - Who, when, how
- Changes to unit policies, flexibility of practices
- Clinical decision support for bedside providers
 - Whenever decisions put patient at significant risk and/or are outside usual clinical practice scope
- Expectation management – staff and public
- Systems response – resources, structures, response
- Understand state protections and process/ “declarations”
- Advise against ad hoc/ implicit triage decisions

Category	Conventional	Contingency	Crisis
Staff used	Usual staff on units	'Step over' staff with consistent training from other units (e.g. PACU to ICU)	'Step up' staff that do not usually care for patients of current acuity / requirements (e.g. intermediate or telemetry nursing to ICU)
Staffing ratios	Usual ratio nurse : patient	Ratio increase \leq 150% of usual (e.g. from 1:6 up to 1:9)	Ratio increase > 150%
Tiered staffing	No	No	Yes – less experienced staff supervised by normal unit staff in 'pyramid' model (e.g. medical/surgical nurses in ICU 1:2 with ICU nurse supervising three RN : 6 patients)
COVID-19 status	Quarantine / positives off work	Quarantined staff used for direct patient care	COVID + staff used for direct patient care
Volunteer / government providers utilized for direct patient care	No	No	Yes



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From the Health System/ Public Health Perspective: Information Sharing and Situational Awareness



Developing a “Care Traffic Control Center” (Kellermann/Halamka)

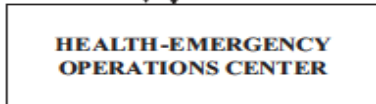
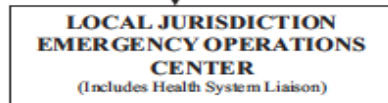
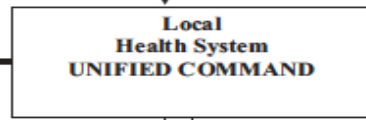
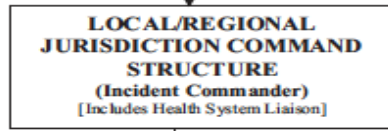
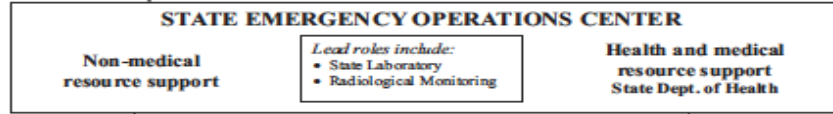
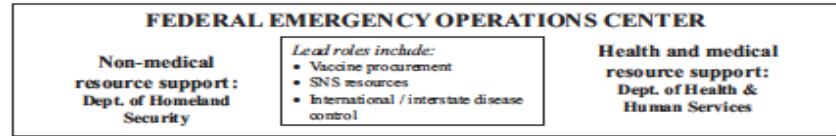
- “Load balance” to achieve the best possible outcomes for most
 - Beds
 - Staff
 - Key resources
 - Strategies for care

GOAL: Consistency



Partnership with an HEOC affords the ICS the opportunity to be operationally effective during pandemics. HEOC, health-related emergency operations center; ICS, incident command system; SNS, Strategic National Stockpile.¹³

STRATEGIC LEVEL



OPERATIONS LEVEL

- FUNCTIONS:**
- Coordination
 - Communication
 - Information: Collaboration, Analysis & Dissemination
 - Resource Management

- FUNCTIONS:**
- Situational awareness, Surveillance & Compliance
 - Surge Resource & Triage-management
 - Inter-HEOC, Risk Communications, Just-in-time Training
 - Health Maintenance & Recovery

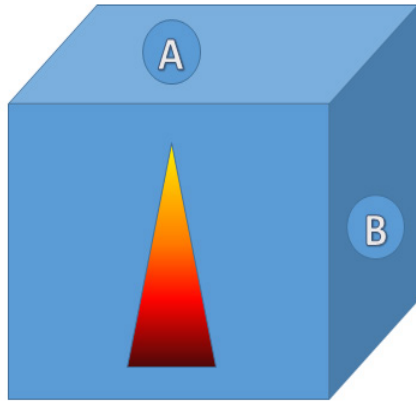
52 y.o.	Wound Infection	2
33 y.o.	Shortness of Breath	2
72 y.o.	Chest Pain; Abdominal Pain; Emesis; Shor...	2
40 y.o.	Loss of Consciousness; Generalized weak...	2
60 y.o.	Shortness of Breath; Cough; Fever	2
72 y.o.	Hyperglycemia, Cough	2
69 y.o.	Shortness of Breath	2
69 y.o.	Shortness of Breath	2
63 y.o.	Fever; Pneumonia	2
70 y.o.	Shortness of Breath; Cough	2
71 y.o.	Fall; Shortness of Breath	3
71 y.o.	Shortness of Breath; Cough	1
71 y.o.	Shortness of Breath	2
71 y.o.	Chest Pain; Palpitations; Hypertension	2
71 y.o.	Chest Pain; Shortness of Breath	3
71 y.o.	Pre-Eclampsia (PIH)	2
71 y.o.	Shortness of Breath; Palpitations	2
71 y.o.	Shortness of Breath	2
71 y.o.	Cough; Shortness of Breath	2

Sharing Good Ideas, Clinical Expertise and Available Resources

- Establish consistent policies (share expertise)
- Provide a mechanism to obtain critical care consultation for assistance with care decisions
- Coordinate resource requests to the state and federal partners
- Promote coordinated decisions that reflect the healthcare system – not solely the individual provider

GOAL: Consistency

Avoid the "Dilemma of the Cube" (Dorn/Marcus)



FDNY command viewpoint



NYPD command viewpoint

Question & Answer



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