

## **STANDARDS OF CARE for NON CONVENTIONAL SURGE CAPACITY LEVEL Due to COVID 19 Pandemic**

As a healthcare provider and community leader, Seton Medical Center (SMC) and its staff shall make every effort to provide emergent and acute care services (safely and within the scope of its service) to the community during times of medical crisis. SMC shall work directly with the San Mateo County and neighboring hospitals to plan and coordinate medical disaster response, operations and recovery activities, during times of medical crisis.

The scope of the standards of care is to guide the hospital in identifying and responding effectively to any event that presents the potential for a large number of persons seeking emergent and/or acute medical assistance, at the location of the hospital, or the defined hospital zone, exceeding the conventional capacity of the hospital. The standard of care detailed below consists of a number of procedures designed to identify and respond to those situations. The standards of care is divided into three categories such as, conventional, contingent and category in accordance with definitions offered by California Pandemic Crisis Care Guidelines published on June 2020. The program is aimed to assure fulfillment of the medical needs of patients while being in compliance with applicable codes and regulations and through efficient use of resources. This standards of care will be complementing the hospital's current emergency operations plans.

### **DEFINITIONS:**

**Conventional:** Usual resources and level of care provided. For example, during a surge in patients, maximizing bed occupancy and calling in additional staff to assist.

**Contingency:** Provision of functionally equivalent care that may incur a small risk to patients. Care provided is adapted from usual practices. For example, boarding critical care patients in post-anesthesia care areas using less traditional, but appropriate resources.

**Crisis:** Disaster strategies used when demand forces choices that pose a significant risk to patients but is the best that can be offered under the circumstances. For example, cot-based care, severe staffing restrictions, or restrictions on use of certain medications or other resources.

**Indicator:** is a “measurement or predictor of change in demand for health care services or availability of resources. An example of an indicator is a report of several confirmed cases of COVID-19 in the community by the local health department.

**Trigger:** is a “decision point about adaptations to health care service delivery” that requires specific action.

## **BACKGROUND:**

In early fall of 2019, a novel influenza virus was detected in the United States. The virus exhibited twice the usual expected influenza mortality rate. As the case numbers increased, a nationwide pandemic was declared. The Centers for Disease Control and Prevention (CDC) identified the at-risk populations as school-aged children, middle-aged asthmatics, all smokers, and individuals greater than age 62 with underlying pulmonary disease. Definitive preventive and curative modalities are still under research, development, and implementation. The longstanding impact of the unprecedented pandemic forced the hospitals to exceed surge capacity levels, causing significant challenges on various resources. In responding to the challenges posed by the pandemic, SMC follows all national, state and local regulations and guidance and works in close relation with local public health department.

Indicator Category	Contingency	Crisis	Return Toward Conventional
Surveillance data	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Pandemic or epidemic (e.g., SARS Cov2 ) virus detected</li> <li><input type="checkbox"/> Regional/community emergency department (ED) volume, ED wait times/boarding times</li> <li><input type="checkbox"/> Regional/community hospital capacity or subset data, such as available intensive care unit (ICU) beds</li> </ul> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Receipt of health alert triggers group notification by receiving infection prevention personnel</li> <li><input type="checkbox"/> “Full capacity” plan initiated when ED wait times exceed 5 hours/day</li> </ul> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Communication/coordination with stakeholders/coalition partners</li> <li><input type="checkbox"/> Change hours, staffing, internal processes in accord with facility plans</li> <li><input type="checkbox"/> Assess predicted impact on institution</li> <li><input type="checkbox"/> Partial or full activation of incident command system/hospital command center</li> </ul>	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Epidemiologic projections will exceed resources available</li> </ul> <p><b>Crisis Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Epidemiology projections exceed surge capacity of facility for space or specific capability (e.g., critical care)—see below space and supply considerations, as triggers should be based on depletion of available resources</li> </ul>	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Surveillance streams show decline in active</li> <li><input type="checkbox"/> Improvement in regional/community ED volumes/wait times/boarding times</li> </ul> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Not specified for predictive data, will adjust based on specific actionable data</li> </ul> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Stand down incident management (scaled)</li> <li><input type="checkbox"/> Lengthen duration of planning cycles</li> <li><input type="checkbox"/> Reduce/deactivate regional information exchange</li> <li><input type="checkbox"/> Facility practices revert toward conventional</li> <li><input type="checkbox"/> Revert to normal system monitoring</li> </ul>
Staff/Workforce	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Increasing staff absenteeism</li> <li><input type="checkbox"/> Specialized staff needed (nurses) for incident patients</li> <li><input type="checkbox"/> Staff work action anticipated (e.g., strike)</li> <li><input type="checkbox"/> High patient census</li> <li><input type="checkbox"/> Staffing hours adjustment required to maintain coverage</li> <li><input type="checkbox"/> Staffing supervision model changes required to maintain coverage</li> </ul> <p><b>Triggers:</b></p>	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Increasing staff requirements in face of increasing demand</li> <li><input type="checkbox"/> Contingency spaces maximized</li> <li><input type="checkbox"/> Contingency staffing maximized</li> </ul> <p><b>Crisis Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Unable to safely increase staff to patient ratios or broaden supervisory responsibilities</li> </ul>	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Staff impact is reduced, schools back in session, damage to community mitigated</li> <li><input type="checkbox"/> Staff absenteeism reduced</li> <li><input type="checkbox"/> Specialty staff obtained or demand decreased</li> </ul> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Staff to patient ratios as per state law achieved on</li> </ul>

	<ul style="list-style-type: none"> <li><input type="checkbox"/> 10 % staff ill call rate prompts notification of emergency management group</li> <li><input type="checkbox"/> School closures across area trigger opening of staff day care</li> <li><input type="checkbox"/> Normal staff to patient ratios exceeded</li> <li><input type="checkbox"/> Specific staff expertise demands exceeded (e.g., nurses)</li> </ul> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Assess likely impact on facility</li> <li><input type="checkbox"/> Hold staff</li> <li><input type="checkbox"/> Change hours, staffing patterns</li> <li><input type="checkbox"/> Change staff to patient ratios</li> <li><input type="checkbox"/> Specialty staff provide only specialty/ technical care, while other staff provide more general care</li> <li><input type="checkbox"/> Callback, obtain equivalent staff from coalition, hiring, administrative staff</li> <li><input type="checkbox"/> Change charting responsibilities</li> <li><input type="checkbox"/> Curtail nonessential staffing (cancel elective cases, specialty clinic visits, etc.)</li> <li><input type="checkbox"/> Provide support for staff (and their families as required) to help them continue to work and provide quality care (e.g., stress “immunization,” rest periods, housing support)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Lack of qualified staff for specific cares—especially those with high life- safety impact</li> </ul> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Tailor responsibilities to expertise, diverting nontechnical or non- essential care to others</li> <li><input type="checkbox"/> Recruit and credential staff from volunteer (Medical Reserve Corps [MRC], Emergency System for Advance Registration of Volunteer Health Professionals [ESAR-VHP]) or federal sources (Disaster Medical Assistance Team [DMAT], other National Disaster Medical System [NDMS] source, etc.)</li> <li><input type="checkbox"/> Establish remote consultation of specialized services such as</li> <li><input type="checkbox"/> telemedicine, phone triage, etc., if possible</li> <li><input type="checkbox"/> Evacuate patients to other facilities with appropriate staff available</li> </ul>	<p>medical floor</p> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Shorten shift lengths</li> <li><input type="checkbox"/> Adjust staff to patient ratios toward normal</li> <li><input type="checkbox"/> Transition toward usual staff—releasing less qualified staff first</li> <li><input type="checkbox"/> Resume care routines</li> <li><input type="checkbox"/> Resume administrative duties</li> </ul>
Space/Infrastructure	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Increased ED volumes</li> <li><input type="checkbox"/> Increased clinic/outpatient volumes</li> <li><input type="checkbox"/> Increased inpatient census</li> <li><input type="checkbox"/> Increased pending admits/ED boarding</li> </ul>	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Inpatient/outpatient contingency spaces maximized or near-maximized</li> <li><input type="checkbox"/> Escalating or sustained</li> </ul>	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Favorable epidemiologic curves</li> <li><input type="checkbox"/> Restoration of critical system function</li> </ul>

	<p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Inpatient census exceeds conventional beds</li> <li><input type="checkbox"/> Damage to infrastructure</li> <li><input type="checkbox"/> Clinics unable to accommodate demand for acute care</li> <li><input type="checkbox"/> &gt;5 hours/day ED boarding time</li> <li><input type="checkbox"/> Electronic health record downtime</li> <li><input type="checkbox"/> Telephone or Internet systems failures</li> </ul> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Expand hours of outpatient care</li> <li><input type="checkbox"/> Open additional outpatient care space by adjusting specialty clinic space/ times</li> <li><input type="checkbox"/> Provide “inpatient” care on pre-induction, post anesthesia care, other equivalent areas</li> <li><input type="checkbox"/> Divert patients to clinics/other facilities</li> <li><input type="checkbox"/> Transfer patients to other facilities</li> <li><input type="checkbox"/> “Reverse triage” appropriate patients home (with appropriate home care)</li> <li><input type="checkbox"/> Implement downtime procedures for IT systems</li> </ul>	<p>demand on ED/outpatient despite implementing contingency strategies</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Damage to infrastructure affecting critical systems</li> </ul> <p><b>Crisis Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Contingency inpatient beds maximized</li> <li><input type="checkbox"/> Contingency outpatient adaptations inadequate to meet demand using equivalent spaces or strategies</li> <li><input type="checkbox"/> Damage to infrastructure affecting critical systems and presenting a safety issue to staff/patients</li> </ul> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Establish nontraditional alternate care locations (e.g., auditorium, tents, conference rooms), recognizing governmental role in authorizing waivers</li> <li><input type="checkbox"/> “Reverse triage” stable patients to these areas, move stable ICU patients to monitored bed areas (i.e., step-down units deliver ICU-level care)</li> <li><input type="checkbox"/> Consider other methods of outpatient care, including</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> ED/outpatient volumes decreasing</li> </ul> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Patients able to be matched to appropriate areas for care</li> </ul> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Transitional movement of sickest patients back into ICU environment</li> <li><input type="checkbox"/> Broaden admission criteria</li> <li><input type="checkbox"/> Reduce/eliminate care in nontraditional spaces (stop providing assessment/care in non-patient care areas/cot-based)</li> <li><input type="checkbox"/> Shift toward normal hours</li> </ul>
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		<p>telephone treatment and prescribing</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Change admission criteria—manage as outpatients with support/early follow-up</li> <li><input type="checkbox"/> Evacuate patients to other facilities in the region/state/nation that have appropriate capabilities and capacity</li> </ul>	
Supplies	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Vendor supply or delivery disruption</li> <li><input type="checkbox"/> Supply consumption/use rates</li> <li><input type="checkbox"/> Epidemiology of event predicts supply impact</li> </ul> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Event epidemiology predicts ventilator or other specific resource shortages (e.g., pediatric equipment)</li> <li><input type="checkbox"/> Medication/vaccine supply limited</li> <li><input type="checkbox"/> Consumption rates of personal protective equipment (PPE) unsustainable</li> <li><input type="checkbox"/> Vendor shortages impact ability to provide normal resources</li> </ul> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Use nontraditional vendors</li> <li><input type="checkbox"/> Obtain from coalition facilities/ stockpiles (including potential state/ federal sources)</li> <li><input type="checkbox"/> Conserve, substitute, or adapt functionally equivalent resources; reuse if appropriate</li> </ul>	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Coalition lack of available ventilators</li> <li><input type="checkbox"/> Anesthesia machines and other adaptive ventilation strategies in use</li> <li><input type="checkbox"/> Coalition/vendor lack of available critical supplies/medications</li> </ul> <p><b>Crisis Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Inadequate ventilators (or other life- sustaining technology) for all patients that require them</li> <li><input type="checkbox"/> Inadequate supplies of medications or supplies that cannot be effectively conserved or substituted for without risk of disability or death without treatment</li> </ul> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Implement triage team/clinical care committee process</li> </ul>	<p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Reduced use of PPE or other supplies</li> <li><input type="checkbox"/> Reduced caseload or demand for care and services</li> <li><input type="checkbox"/> Improved delivery of supplies</li> <li><input type="checkbox"/> Reduced need for ventilator or other triage</li> </ul> <p><b>Triggers:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Able to provide contingency ventilation and critical care strategies to all that require them</li> </ul> <p><b>Tactics:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Re-triage patients as resources become available</li> <li><input type="checkbox"/> Broaden indications for interventions as conditions improve.</li> <li><input type="checkbox"/> Transition back from reallocation and reuse to safer adaptive and</li> </ul>

		<ul style="list-style-type: none"> <li><input type="checkbox"/> Determine bridging therapies (bag- valve ventilation, etc.)</li> <li><input type="checkbox"/> Coordinate care/triage policies with coalition facilities (in no-notice event, this may not be possible)</li> <li><input type="checkbox"/> Triage access to life-saving resources (ventilators, blood products, specific medications) and reallocate as required to meet demand according to state/ regional consensus recommendations</li> <li><input type="checkbox"/> Restrict medications to select indications</li> <li><input type="checkbox"/> Restrict PPE to high-risk exposures (and/or permit PPE reuse)</li> <li><input type="checkbox"/> Reuse or reallocate resources when possible (benefit should outweigh risks of reuse; reallocate only when no alternatives.</li> </ul>	<p>conservation strategies</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Loosen restrictions on use of supplies</li> </ul>
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## REFERENCES:

Hanfling, D. Hick, J. & Stroud, C. (2013) Editors; Committee on Crisis Standards of Care: A Toolkit for indicators and Triggers; Board on Health Sciences Policy; Institute of Medicine, "Crisis Standards of Care: A Toolkit for Indicators and Triggers" (the National Academies Press)

Hick, J. L. Hanfling, D. & Cantrill, S. V. (2012). Allocating Scarce Resources in Disasters: Emergency Department Principles. *Annals of Emergency Medicine*, 59(3), p 178.