

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

As a healthcare provider and community leader, San Gabriel Medical Center (SGV) 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. SGV shall work directly with the LA County Emergency Medical Alert Center (MAC), neighboring hospitals and the LAC-USC Disaster Resource Center, City of San Gabriel, other surrounding cities and the AHMC hospitals if available, 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 crisis 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:

- 1. **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.
- 2. **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, cotbased care, severe staffing restrictions, or restrictions on use of certain medications or other resources.
- 4. **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.
- 5. **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, SGV follows all national, state and local regulations and guidance and works in close relation with local public health department.



indicator category	contingency		
Surveillance data	Indicators:	Indicators:	Indicators:
	Pandemic or epidemic (e.g., SARS Cov2	Epidemiologic projections will	Surveillance streams show
) virus detected	exceed resources available	decline in active
	Regional/community emergency department	Crisis Triggers:	Improvement in
	(ED) volume, ED wait times/boarding times	Epidemiology projections	regional/community ED
	Regional/community hospital capacity or	exceed surge capacity of facility	volumes/wait times/boarding
	subset data, such as available intensive care	for space or specific capability	times
	unit (ICU) beds	(e.g., critical care)—see below	Triggers:
	Triggers:	space and supply	Not specified for predictive
	Receipt of health alert triggers group	considerations, as triggers	data, will adjust based on
	notification by receiving infection prevention	should be based on depletion	specific actionable data
	personnel	of available resources	Tactics:
	"Full capacity" plan initiated when ED wait		Stand down incident
	times exceed 5 hours/day		management (scaled)
	Tactics:		Lengthen duration of planning
	Communication/coordination with		cycles
	stakeholders/coalition partners		Reduce/deactivate regional
	Change hours, staffing, internal processes in		information exchange
	accord with facility plans		Facility practices revert
	Assess predicted impact on institution		toward conventional
	Partial or full activation of incident command		Revert to normal system
	system/hospital command center		monitoring
Staff/Workforce	Indicators:	Indicators:	Indicators:
	Increasing staff absenteeism	Increasing staff requirements	Staff impact is reduced,
	Specialized staff needed (nurses) for	in face of increasing demand	schools back in session,
	incident patients	Contingency spaces maximized	damage to community
	Staff work action anticipated (e.g., strike)	Contingency staffing	mitigated
	High patient census	maximized	Staff absenteeism reduced
	Staffing hours adjustment required to	Crisis Triggers:	Specialty staff obtained or
	maintain coverage	Unable to safely increase	demand decreased
	□ Staffing supervision model changes required	staff to patient ratios or	Triggers:
	to maintain coverage	broaden supervisory	Staff to patient ratios as per
		responsibilities	state law achieved on

Crisis

Indicator Category

Contingency

Return Toward Conventional



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 10 % staff ill call rate prompts notification of emergency management group School closures across area trigger opening of staff day care Normal staff to patient ratios exceeded Specific staff expertise demands exceeded (e.g., nurses) Tactics: Assess likely impact on facility Hold staff Change hours, staffing patterns Change staff to patient ratios Specialty staff provide only specialty/ technical care, while other staff provide more general care Callback, obtain equivalent staff from coalition, hiring, administrative staff Change charting responsibilities Curtail nonessential staffing (cancel elective cases, specialty clinic visits, etc.) 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) 	 Lack of qualified staff for specific cares—especially those with high life- safety impact Tactics: Tailor responsibilities to expertise, diverting nontechnical or non- essential care to others 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.) Establish remote consultation of specialized services such as telemedicine, phone triage, etc., if possible Evacuate patients to other facilities with appropriate staff available 	medical floor Tactics: Shorten shift lengths Adjust staff to patient ratios toward normal Transition toward usual staff—releasing less qualified staff first Resume care routines Resume administrative duties
Indicators: Increased ED volumes Increased clinic/outpatient volumes 	Indicators:	Indicators: Favorable epidemiologic curves
 Increased clinic/outpatient volumes Increased inpatient census Increased pending admits/ED boarding 	contingency spaces maximized or near-maximized Escalating or sustained	 Curves Restoration of critical system function



San Gabriel Valley Medical Center

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-	Triggers:		demand on ED/outpatient		ED/outpatient volumes
	Inpatient census exceeds conventional beds		despite implementing		decreasing
	Damage to infrastructure		contingency strategies		ggers:
	Clinics unable to accommodate demand for		Damage to infrastructure		Patients able to be matched
	acute care		affecting critical systems		to appropriate areas for care
	>5 hours/day ED boarding time	Cri	sis Triggers:	Та	ctics:
	Electronic health record downtime		Contingency inpatient beds		Transitional movement of
	Telephone or Internet systems failures		maximized (may include		sickest patients back into
-	Tactics:		subset of ICU, burn,		ICU environment
	Expand hours of outpatient care		pediatrics, etc.)		Broaden admission criteria
	Open additional outpatient care space by		Contingency outpatient		Reduce/eliminate care in
	adjusting specialty clinic space/ times		adaptations inadequate to		nontraditional spaces (stop
	Provide "inpatient" care on pre-induction,		meet demand using		providing assessment/care
	post anesthesia care, other equivalent		equivalent spaces or		in non-patient care
	areas		strategies		areas/cot-based)
	Divert patients to clinics/other facilities		Damage to infrastructure		Shift toward normal hours
	Transfer patients to other facilities		affecting critical systems and		
	"Reverse triage" appropriate patients home		presenting a safety issue to		
	(with appropriate home care)		staff/patients		
	Implement downtime procedures for IT		ctics:		
	systems		Establish nontraditional		
			alternate care locations (e.g.,		
			auditorium, tents, conference		
			rooms), recognizing		
			governmental role in		
			authorizing waivers		
			"Reverse triage" stable		
			patients to these areas, move		
			stable ICU patients to		
			monitored bed areas (i.e.,		
			step-down units deliver ICU-		
		_	level care)		
			Consider other methods of		
			outpatient care, including		



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Supply consumption/use rates ventilators supplies Epidemiology of event predicts supply impact Anesthesia machines and other adaptive ventilation strategies in use Reduced caseload or demand for care and services Event epidemiology predicts ventilator or other specific resource shortages (e.g., pediatric equipment) Coalition/vendor lack of available critical supplies/medications Improved delivery of supplies Medication/vaccine supply limited Crisis Triggers: or other triage Consumption rates of personal protective equipment (PPE) unsustainable Inadequate ventilators (or other life- sustaining Triggers: Vendor shortages impact ability to provide normal resources Inadequate supplies of that require them Able to provide contin ventilation and critical strategies to all that r them Use nontraditional vendors Inadequate supplies of (including potential state/ federal sources) medications or supplies that conserve, substitute, or adapt functionally conserved or substituted for without risk of disability or Re-triage patients as resources become ava			 telephone treatment and prescribing Change admission criteria—manage as outpatients with support/early follow-up Evacuate patients to other facilities in the 	
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		equivalent resources, reuse il appropriate		
				reallocation and reuse to
process safer adaptive and				



Determine bridging therapies conservation strategies (bag-valve ventilation, etc.) □ Loosen restrictions on use of □ Coordinate care/triage supplies policies with coalition facilities (in no-notice event, this may not be possible) □ Triage access to life-saving resources (ventilators, blood products, specific medications) and reallocate as required to meet demand according to state/ regional consensus recommendations □ Restrict medications to select indications □ Restrict PPE to high-risk exposures (and/or permit PPE reuse) □ Reuse or reallocate resources when possible (benefit should outweigh risks of reuse; reallocate only when no alternatives.



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.