

LAC+USC Medical Center Crowding Plan 2021-2023



Authors:

Chase Coffey, MD, MS
Associate Chief Medical Officer, Inpatient Services

Leticia Gehringer, RN
Clinical Nursing Director, Patient Flow

Christopher J. Celentano, MD
Medical Director, Office of Emergency Management

Jan Shoenberger, MD
Medical Director, Department of Emergency Medicine

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GLOSSARY

ACS	Alternate Care Site
ACU	Acute Care Unit (non-monitored inpatient ward)
ANDA	Assistant Nursing Director, Administration
ANM	Assistant Nurse Manager
ANO	Administrative Nursing Office
AOD	Administrative Officer of the Day
APFM	Acute [Care Unit] Patient Flow Manager
CBRNE	Chemical, Biological, Radiological, Nuclear, Explosive
CCO	Critical Care Officer [of the Day]
CMA	Continuously Monitored Area
CMO	Chief Medical Officer
CND	Clinical Nursing Director
CT	Clinic Tower or Computed Tomography (deduced from subject)
D&T or DNT	Diagnosis and Treatment Tower
D/C	Discharge
DEM	Department of Emergency Medicine
DHS	Department of Health Services
DRC	Disaster Resource Center
DWU	Discharge Waiting Unit
ED	Emergency Department
EFC	Emergency [Department] Flow Coordinator
EMS	Emergency Medical Services
EMSA	Emergency Medical Services Agency
ERP	Emergency Response Plan
FCP	Full Capacity Protocol
HCC	Hospital Command Center
HICS	Hospital Incident Command System
ICU	Intensive Care Unit
IP	Inpatient
IPT	Inpatient Tower
LAC	Los Angeles County
LAC+USC MC	Los Angeles County and University of Southern California Medical Center
MAC	Medical Alert Center (EMSA unit coordinating patient transfers in the county)
MCI	Mass Casualty Incident
MICN	Mobile Intensive Care Nurse
MOD	Medical Officer of the Day
NIMS	National Incident Management System
NM	Nurse Manager
NOD	Nursing Officer of the Day
OPD	Outpatient Department

OR	Operating Room
PAR	Post Anesthesia Room
PFM	Patient Flow Manager
UADC	Urgent Access and Diagnostic Center

CROWDING PLAN REVISIONS

Version	Revision	Net Effect
XXXX	The Crowding Plan revised and updated	Minor modifications. Plan approved for years 2022-2023.
2021-11-09	The Crowding Plan revised and updated	Minor modifications. Plan approved for years 2019-2021.
2009.05.01	The plan has been updated to address location and operational changes reflective of the new facility. The basic tenets of the plan are unchanged.	General update for new facility.
2008.11.13	Attachments: Discharge Worksheets updated for new facility.	Reference.
2008.07.10	p. ii: Glossary of terms inserted.	Reference.
	p. 5 (ED 3): Delineates ED staff duties.	Clarification.
	p. 5 (MC 2.a and b): Elaborated to clarify admission priority.	Clarification.
	p. 6 (MC 3.a): Inserted note regarding no change in existing policy with respect to intra-facility transfers.	Clarification.
	p. 6 (MC 4): Due to length, referred to the detailed policy rather than create duplicity. Added warning regarding misrepresentation of bed and patient status.	Brevity. Patient safety.
	p. 7 (e.iii.a): Reworded procedure for clarification.	Clarification.
	p. 6-7 (4): Changed order of subheadings.	None.
	p. 7 (5): Reworded and abbreviated list for sake of brevity.	None.
	p. 7 (5.a.iii): Added for emphasis.	None.
	p. 8 (4.a): Reworded for brevity.	None.
	p. 8 (7.a.ii): Reworded to clarify original intent.	For advanced emergency studies.
	p. 11 (DEM 1): Added intra-facility exceptions to diversion.	Clarification.
	p. 11 (DEM 2): Change charge nurse to EFC.	None.
	p. 11-12 (3): Bed Resource and Utilization/Orange Team inserted.	Orange Team developed to improved response when at "Overcrowded".
	p. 11-12: AOD, MOD, NOD duties removed to correlate with notification algorithm.	Not involved in response until "Severely Overcrowded".
	p. 13 (MC System): Changed order of subheadings.	None.
	p. 13 (MC 1.b): Changed notification procedure and response requirements for AOD, MOD, NOD.	Avoids unnecessary communication.
	p. 13 (MC 3): Removed exceptions and referred to Transfer Guidelines.	Clarification. Metro is not an exception.

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	p. 14 (4.a): Further delineation of responsibilities.	Clarification.
	p. 15: Section added for level “overview”.	Improved algorithm.
	p. 15 (DEM 1): Delineated criteria for closing to “Hard Diversion”.	Clarification of status.
	p. 16 (1, 2): Revised staffing per Unit-/Service-based ERP.	Each unit / service responsible for staff notification call-back plans.
	p. 20-25: PFM and hospital transfer protocol update.	Clarification.
2008.02.27	p. ii: Revision page added.	Reference.
	p. 6 (3.c, 3.d): Procedure reworded.	Clarification.
	p. 6 (4.a): “Times” reworded.	Clarification.
	p. 8 (7.a.ii): Reworded to clarify original intent.	Requires an attending (but not “final”) read.
	p. 13 (3.a.i): Further delineation, added “work-up and”.	Clarification.
	p. 14 (1.a., 1.b): Further delineation of parties to report to ANO.	Flexibility for CND/ANDA and NM/ANM.
	p. 14 (3.a.i): Added “and Hospitalists” for completeness and to correlate with p. 7 (4c).	Identifies responsible MD.
	p. 15, Space: Added “if indicated”.	Clarification.
	p. 15, Staff: Further defined rotations.	Clarification.
	p. 17(2.c): Removed “are” and added “will be...healthcare emergencies”.	Clarification.
	Attachments: added ward-specific Discharge Round Worksheets.	Improved access to worksheets for nursing staff.
2008.01.22	p. 3: Restored NEDOCS to the full 6 levels for scientific accuracy. Removed the subsequent paragraph explaining the [previously] modified NEDOCS.	None.
	p. 3 (par 4): Further delineation of notification.	Clarification.
	p. 9: “Extremely Busy” Level page inserted.	None.

SUBJECT:

The LAC+USC Medical Center Crowding Plan.

DEPARTMENTS:

All.

PURPOSE:

To establish a medical center-wide approach to accommodate a rapid escalation in the demand for healthcare services (aka “surge”) in order to effectively and appropriately accommodate patient needs, manage healthcare emergencies, and mitigate disasters.

POLICY:

The plan provides a methodology to maximize healthcare capabilities in response to patient influx by encompassing a continuity of operations from open hospital status, to full capacity, to overcrowding, and to surge capacity.

The plan is not an emergency operations plan. It is a daily operational plan, elements of which are an integral part of the overall emergency operation plan.

The plan uses an objective measure of Emergency Department and Hospital overcrowding that will automatically trigger a network response. The plan is designed for rapid notification to, and response by all LAC + USC Medical Center departments. When the plan is activated, no further administrative approval will be required since, as a LAC+USC MC Policy, administrative approval is inherent.

The plan incorporates new and existing operational policies and procedures to provide a cogent and complete reference tool. It references and abides by existing regulations, standards, and guidelines for healthcare surge and emergency (disaster) preparedness.

The plan provides suggested response guidelines to which all referenced individuals and departments involved in the response must adhere.

The plan is dynamic, as it designed to be updated, improved, and refined to best maximize the delivery of patient care through all levels of patient surge and fluxing hospital capacity.

POLICY REFERENCES:

CA DHS All Facilities Letter 04-28: Increased Patient Accommodations Due To Seasonal or Unexpected High Influx of Patients, California DHS.

CA DHS All Facilities Letter 05-04: Licensed Nurse-to-Patient Ratio, California DHS.

California Code and Regulations Title 22: 70809, 70217.

LAC DHS Facility Letter 11-10-03: Ref. No. 304, Guidelines for Acceptance of Emergency Department Transfers of Patients with an Emergency Medical Condition.

LAC DHS Facility Letter 11-20-03: Revised procedure for Transfer of Emergency Department Patients to County Operated Facilities.

LAC DHS Reference No. 304: Guidelines for Acceptance of ED transfer of Patients with an Emergency Medical Condition.

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LAC DHS Reference No. 305: Guidelines for Acceptance of ED transfer of Patients without an Emergency Medical Condition.
LAC DHS Reference No. 306: Guidelines for Acceptance of Stable Inpatient Transfers.
LAC DHS Policy 373.1: Emergency Transfer Authorization County Code 2.76.53.
LAC DHS Policy 503: Guidelines for Hospitals Requesting Diversion of ALS Patients.
LAC DHS Policy 503.1: Hospital Diversion Request Requirements for ED Saturation.
LAC DHS Policy 911: Role of DHS Employees in the Event of an Emergency.
LAC+USC Medical Center Attending Staff Manual.
LAC+USC Medical Center Policy 134: Increased Patient Accommodations Due to High Influx of Patients.
LAC+USC Medical Center Policy 705: Transfer of Patients to LAC+USC Medical Center.
LAC+USC Medical Center Policy 705.1: Transfer of Patients from the Medical Center to Another Facility.
LAC+USC Medical Center Policy 706.1: Guidelines for Acceptance of Patients with an Emergency Medical Condition.
LAC+USC Medical Center Policy 706.2: Guidelines for Acceptance of Patients without an Emergency Medical Condition.
LAC+USC Medical Center Policy 706.3: Guidelines for Acceptance of Stable Inpatients to LAC+USC Medical Center.
LAC+USC Medical Center Pandemic Flu Plan: Plan for Management of Influx of People with Infectious Diseases.

DEFINITIONS:

Acute Care Unit (ACU): non-monitored inpatient ward beds, i.e. medical / surgical ward beds.

Disaster: an event that exceeds the capabilities of the response.

1. A disaster exists when need exceeds resources (Disaster = Needs > Resources).
2. A disaster exists when the number of patients and/or severity of illness or injury are such that normal daily operations are no longer possible.¹

ED Crowding: a situation in which the identified need for emergency services exceeds available resources for patient care in the ED.²

Healthcare Emergency: an unpredictable or unavoidable occurrence at unscheduled or unpredictable intervals relating to healthcare delivery requiring immediate medical interventions and care.³

Mass Casualty Incident (MCI): an event that exceeds the healthcare capabilities of the response. An MCI exists when healthcare needs exceed resources.¹

NEDOCS: National Emergency Department Overcrowding Study.

Surge: a sizeable increase in demand for resources compared with a baseline demand. Components include Influx (volume, rate), Event (type, scale, duration), and Resource Demand (consumption, degradation).

Surge Capacity: the maximum potential delivery of required resources either through augmentation or modification of resource management and allocation. Components include System (integrity), Space (size, quality), Staff (numbers, skill), and Supplies (volume, quality).

Surge Response Capability: the ability of Surge Capacity (the resources that can be made available) to accommodate the Surge (demand for resources).⁴

PROCEDURE:

A. Overcrowding Condition Assessment

LAC+USC MC uses NEDOCS, a nationally validated measurement of ED and hospital overcrowding, as the objective measure of emergency department and hospital overcrowding^{5 6 7 8 9 10}. Levels of overcrowding are determined by the “score” which is calculated using statistically significant variables.

The calculator is available at <http://emed.unm.edu/clinical/resources/nedocs.html>, and uses the equation:

$$\text{Score} = -20 + 85.8(c/a) + 600(f/b) + 13.4 (d) + 0.93(e) + 5.64 (g)$$

The institutional constants are: a) Number of ED Beds.
b) Number of Hospital Beds.

The situational variables are: c) Total Patients in the ED.
d) Number of Respirators in Use in the ED.
e) Longest Admit Time (in hours).
f) Total Admitted patients waiting in the ED.
g) Wait Time for the Last Patient Called (from triage).

“ED Beds” and “Hospital Beds” are the budgeted number of beds available for patient care. “Total Patients in the ED” does not include waiting room patients if not undergoing evaluation and treatment. The corresponding overcrowding condition is then interpreted as follows:

NEDOCS (Overcrowding Scale)						
Score	< 20	21-60	61-100	101-140	141-180	> 180
Condition	Not Busy	Busy	Extremely Busy	Overcrowded	Severely Overcrowded	Dangerously Overcrowded

As standard procedure, the ED will assess ED crowding every 2 hours and calculate a NEDOCS score. The score and corresponding condition will be updated and displayed on the LAC+USC intranet homepage. The LAC+USC MC Condition Response Matrix is driven by the degree of overcrowding. The MC will automatically respond with the appropriate intervention as described below.

Conditions that will supersede the calculator include a Medical, Trauma, or CBRNE Mass Casualty Incident or an Internal/External Disaster. In this case, “Code Triage” is declared. During a Code Triage, the MC will automatically operate in condition level BLACK until the Code Triage has resolved and the network has returned to baseline operations.

B. Overcrowding Condition Response Matrix

Each level corresponds to and necessitates an institutional response with respect to systems (i.e. functional and departmental operations), space (bed capacity, utilization, and conversion), staff (responsibilities and operations), and supplies. As the crowding increases, the degree of response escalates to prevent or mitigate further overcrowding and the consequences of such. Response guidelines will continue into the next level unless a change is specified.

The first level is Green (“Not Busy”). This level mandates standard operational procedures, elements of which are itemized to emphasize their importance in maximizing efficiency on a routine basis in order to improve ED and hospital throughput which will decrease the occurrence of ED and hospital overcrowding, and, ultimately, improve patient care. The second and third levels are Blue and Yellow (“Busy” and “Extremely Busy”, respectively). Since this is a large institution with significant capacity, little changes in the response matrix. The fourth, fifth and sixth levels (Orange, Red and Black, respectively) indicate more significant ED and Hospital overcrowding, and as such, require more aggressive interventions.

The following pages details the response.

**CONDITION GREEN: NOT BUSY
Response Matrix**

DEM RESPONSE

System

1. Standard operating procedures in effect.
2. ED Status: Open
 - a. ED Diversion Status: Open.
 - b. ED Transfer (non-EMTALA/lateral) Status: Open.
 - c. Base Station MICN will update ReddiNet as needed.
3. ED Flow Huddle:
 - a. During each Attending shift, the ED Attendings and Emergency Flow Coordinator (EFC) will meet to assess the staffing, patient load, and productivity of the areas. Patients and staff will be redistributed as appropriate. Assessment will continue throughout the shift.

Space, Staff, Supplies

1. Standard operating procedures in effect.

MEDICAL CENTER RESPONSE

System

1. Standard operating procedures in effect, including use of Teletracking or alternative patient tracking program in use by the Medical Center.
2. Administration:
 - a. Senior Leadership patient flow volume discussion occurs at 0900H at the Daily Dose
3. Admissions: Inpatient beds assigned per protocol.
 - a. No effect on scheduled admissions.
4. Patient Ownership and Responsibility
 - a. Once the admitting DEM Physician provides sign-out to the admitting team, the patient is the responsibility of the assigned team.
5. Transfers: follow *PFM Guidelines and Patient Transfer Protocols*
6. Inpatient and Specialty Service Operations: Follows standard Operations
 - a. Discharge Waiting Unit (DWU): To be used by inpatient services for all appropriate discharges,
7. Diagnostic Services Operations: Follows standard operations.

Space

1. Standard operating procedures in effect.

Staff

1. Standard operating procedures in effect for Medical Staff, Nursing Staff, Diagnostics Staff, and Ancillary Services Staff.

Supplies

1. Standard operating procedures in effect.

**CONDITION BLUE: BUSY
Response Matrix**

DEM RESPONSE

System

ED Status: Open

System, Space, Staff, Supplies

No interval change.

MEDICAL CENTER RESPONSE

System, Space, Staff, Supplies

No interval change.

**CONDITION YELLOW: EXTREMELY BUSY
Response Matrix**

DEM RESPONSE

System

ED Status: Open

System, Space, Staff, Supplies

No interval change.

MEDICAL CENTER RESPONSE

System, Space, Staff, Supplies

No interval change.

**CONDITION ORANGE: OVERCROWDED
Response Matrix**

DEM RESPONSE

System

ED Status: Consider closing to ED Sat, criteria based on EMS policy 503.1 (Hospital Diversion Request Requirements for Emergency Department Saturation)

Exceptions: Catalina Hyperbaric Chamber and the LAC+USC wards at Hawkins.

Patient Flow will update the ReddiNet as needed.

1. Admissions
 - a. The DEM Attendings and Patient Flow will prioritize admissions and submit this list to the Administrative Nursing Office (ANO) / Bed Control.
 - b. The ED MD will re-evaluate the level of care for all patients pending admission, especially if the level of care is preventing bed assignment due to unit capacity. If the inpatient team has assumed care, the ED provider will call the responsible team if an upgrade/downgrade seems appropriate. Patients waiting beds in the Telemetry or PCU units may be upgraded to the PCU or ICU if there is ICU capacity.
 - c. This list will be updated every 2 hours, at a minimum.
2. Transfers (Inter-Facility)
 - a. ED Utilization Review Nurse will encourage and assist in the transfer of appropriate ED admissions to the dedicated wards at Olive-View and Rancho Los Amigos Medical Centers per-arranged DHS agreements.
3. Psychiatric Patients
 - a. When the psych ED is full and medically cleared patients on psychiatric holds are boarding in the active ED areas, these patients may be cohorted in East to decompress the other areas. Cohorting of patients will be determined by the EFC in conjunction with Psych ED staff.

Space, Staff, Supplies

2. No interval change.

MEDICAL CENTER RESPONSE

System

- a. Admissions: Hospital will use all staffed inpatient beds (ACU and ICU) for patients awaiting admission.
2. Transfers (Inter-Facility)
 - a. The Inpatient Teams and Utilization Review will transfer patients to Olive-View and Rancho Los Amigos Medical Centers as appropriate and per pre-arranged DHS agreements.
 - b. Patient Flow Manager will work with the DHS Central Transfer Center (CTC) and DHS Medical Alert Center (MAC) to ensure all inbound transfers from outside facilities are medically appropriate and ensure that LAC+USC has bed capacity for these patients.

3. Bed Resource and Utilization

- a. The Bed Control Supervisor will:
 - i. Verify current status and update ORCHID every hour.
- b. The Chiefs of Clinical Services will:
 - i. Assure that inpatient teams have ordered and processed daily discharges at the beginning of the morning.
 - ii. Identify, remove and/or elevate to hospital leadership barriers to patient care and flow
- c. The ANDAs and NMs [business hours] or ANO and ANMs [after hours] will:
 - i. Assure that all inpatient beds and their occupancy are accounted.
 - ii. Assure that ORCHID and Teletrac king is appropriately updated and reconciled.
 - iii. Assure all eligible discharged patients are moved to the Discharge Waiting Unit
- d. The ANDAs, NMs, and EVS Supervisor [business hours] or the ANO, ANMs, and EVS Supervisor [after hours] will:
 - i. Assure that open beds are cleaned and ready for occupancy.
- e. The ANDAs, NMs, and ANO [business hours] or the ANO and ANMs [after hours] will:
 - i. Evaluate the status of beds closed due to administrative holds and re-open these beds as available.
- f. The House Supervisor, Bed Coordinator, ANDAs, NMs, and Bed Control [business hours] or the ANO, ANMs, and Bed Control [after hours] will:
 - i. Cohort appropriate specialty patients (e.g. gynecology/obstetrics) to open additional ward beds.

Space

1. No interval change.

Staff

1. The ANDAs and NMs [business hours] or the ANO and ANMs (after hours) will:
 - a. Evaluate staffing and take appropriate measures to assure that all units are maximally staffed.

Supplies

1. No interval change.

**CONDITION RED: SEVERELY OVERCROWDED
Response Matrix**

DEM RESPONSE

System

ED Status: Closed to ED Sat, criteria based on EMS policy 503.1 (Hospital Diversion Request Requirements for Emergency Department Saturation)

Exceptions: Catalina Hyperbaric Chamber, Hudson Urgent Care, Hubert Humphrey, and the LAC+USC wards at Hawkins/Ingleside.

Patient Flow will update the ReddiNet as needed.

1. Admissions
 - a. The DEM Area Attendings and EFC will determine which admits are appropriate for *Full Capacity Protocol* beds (see specific protocols for criteria) and update the prioritized list for ICU beds. The ED ANM will submit this list to the ANO / Bed Control.
 - b. This list will be updated every 2 hours, at a minimum.
 - c. Patients waiting beds in the Telemetry or PCU units may be upgraded to the PCU or ICU if there is ICU capacity.
2. Transfers (Inter-Facility)
 - a. ED Utilization Review Nurse to coordinate with MAC for patient transfers out per County Code 2.76 (Emergency Transfer Authorization Guidelines).

Staff

1. DEM Residents on Call may be required to assist with direct patient care in the ED.
 - a. Threshold: incident-driven. Responsibility lies with the DEM Physician Team Leader.
 - b. The resident(s) will work their shift until operations return to baseline and in accordance with appropriate duty hours.
2. Urgent Care: The Urgent Care Director, if staffing/ capacity permits, will select low acuity, DHS responsible patients from the waiting room (post-MSE) for expedited evaluation.

Space, Supplies

1. Evaluate use of hallway beds for stable admissions:
 - a. The EFC and ED Attendings will work with ED Nursing to evaluate this option
2. ED Observation Unit:
 - a. ED OBS MD, EFC, SOD will evaluate the use of ED Observation Unit to allow Surgical Observation Unit (SOU) if the following criteria exist:
 - i. The SOU is full, AND
 - ii. There are patients in the ED awaiting transfer to the SOU, AND
 - iii. The ED Observation Unit has capacity

MEDICAL CENTER RESPONSE

System

1. ANO Bed Huddle Activation
 - a. The ANO will active the bed huddle

- b. Threshold: After hours (1700-0700) if crowding levels go to RED (Severely Overcrowded).
 - c. ACU/ICU ANMs reconcile all beds and patient status with the primary team then report to ANO.
 - d. EFC reconciles ICU and FCP Bed lists then reports to ANO.
 - e. EVS and Bed Control Shift Supervisor report to the ANO.
2. Hospital Leadership Engagement:
 - a. The ANO will contact Hospital leadership [business hours] and the AOD, MOD, and/or NOD [after hours] on an as needed basis to discuss administrative support and guidance.
 3. Transfers (Inter-Facility)
 - a. Patient Flow Coordinator will coordinate with hospital leadership if there is a critical bed shortage and consideration of closing to MAC transfers is needed
 - b. Patient Flow Manager will work with the DHS Central Transfer Center (CTC) and DHS Medical Alert Center (MAC) to ensure all inbound transfers from outside facilities are medically appropriate and ensure that LAC+USC has bed capacity for these patients, per County Code 2.76 (Emergency Transfer Authorization Guidelines).
 4. Inpatient Medical, Surgical, and Specialty Service Operations
 - a. Patient flow will coordinate with hospital and clinical service leadership to maximize discharges and patient flow
 - b. Clinical Service Chiefs will assure that inpatient teams have ordered and processed daily discharges at the beginning of the morning.

Staff

1. Diagnostic Services:
 - a. Radiology: The Radiology administrator and Chief of Radiology will ensure that all CT scanners are in operation and have appropriate staffing levels

Space, Supplies

1. No interval change.

CONDITION BLACK: DANGEROUSLY OVERCROWDED Response Matrix

Overview

1. This level can be reached due to a variety of factors and events including daily surge, an internal event, a mass casualty event, or catastrophe. Consequently, the response should be incident-driven, -- that is, the circumstances leading to this level and the degree of overcrowding should determine the response.
2. Hospital leadership will assess the situation and implement responses to the degree appropriate in order to mitigate the overcrowding.
 - a. To assist in this process, a filter will be put into place.
 - i. When Condition Black is reached, the Emergency [Department] Flow Coordinator will communicate this to the DEM Physician Team Leader and the Resus Attending.
 - ii. If the DEM Physician Team Leader determines that the overcrowding level is due to factors that can be dealt with by the ANO and continuing with processes in level RED, then the EFC will NOT contact the telephone office to broadcast the new level.
 - iii. If the DEM Physician Team Leader determines that the overcrowding level will require involvement of the AOD, MOD, NOD, and/or additional hospital leadership, then the EFC will contact the telephone office to broadcast level BLACK per the pre-determined algorithm.
3. Should the HCC be established, direction will proceed from that command per network policy.
4. The response matrix included in this section provides solutions that can be used when appropriate for a given event.

DEM RESPONSE

System

1. ED Status:
 - a. If due to Internal Disaster, the MAC is to be notified that hospital is on full diversion (BLS and ALS).
 - b. If due to a Mass Casualty Incident (MCI), "Code Triage" is in effect. Prepare to receive mass casualties as per MCI policy.
 - c. MCI Policy
 - i. **Trauma MCI:** DEM Policy is to accept 10 Immediate (Critical) and 20 Delayed victims, at a minimum, when being polled by the MAC. The LAC EMS Policy requires each Trauma Center to receive at least 6 victims.
 - ii. **Burns MCI:** the LAC EMS Policy requires each Trauma Center to receive at least 12 Burn victims.
 - iii. **Pediatric MCI:** LAC Pediatric Surge Plan requests that the hospital accepts 15 pediatric ward and 15 pediatric ICU level patients.
2. Determine if activating the *DEM Emergency Response Plan (DEM ERP)* is appropriate.
3. Triage
 - a. Triage of specialty-appropriate and stable patients directly to ENT, OMF, Ophthalmology care areas (i.e., IPT 7G), and L&D (IPT 3C).
 - b. MCI Triage protocols per #1 above.
 - c. Surge Capacity Infection Control Triage per Pandemic Flu Plan and #1.
4. The Pediatric ED will take all patients under the age of 21, including patients from Juvenile Detention

Space

1. Activate ACS's per Medical Center Response below

Staff

1. If established, emergency treatment ACS's to be staffed by the ED and/or have staff provided by the HCC.
2. DEM Residents on Call, on Elective (non-ED) Rotation, or on Administrative Rotation may be required to assist with direct patient care in the ED. The DEM Physician Team Leader will decide whether additional physician staffing in the DEM will be of benefit.
 - a. The Attendings will determine the appropriate area to assign the resident.
 - b. Off-duty residents will respond as indicated in the DEM ERP.
3. Area Charge RN will use HIPAA bridge to call in additional RNs to maximize staffing

Supplies

1. Refer to DEM ERP.

MEDICAL CENTER RESPONSE

System

1. Administration (CMO, CNO, COO, CEO, and others as needed) may take the following actions, if necessary
 - a. Activate the HICS and establish the HCC
 - b. Implement the Medical Center Emergency Response Plan
 - c. The Command Staff will determine what actions are appropriate given the event.
2. Units/Services
 - a. Implement respective Unit/Service-based ERPs.
 - b. DRC Field Hospital for negative pressure isolation. 40 bed capacity.
 - c. Contact Facilities Management.

Space

1. Inpatient Surgery (D&T 5A-C)
 - a. Cancel non-emergent cases, if necessary, as determined by Medical Center leadership and the LAC+USC Chief of Surgery
2. Outpatient Surgery (CT 5C)
 - a. Cancel elective outpatient surgeries, if necessary, as determined by Medical Center leadership and the LAC+USC Chief of Surgery
3. Special Procedures - Cath, GI, GU, Bronch (D&T 4C) and IR (D&T 3)
 - a. Cancel non-emergent cases, if necessary, as determined by Medical Center leadership and the LAC+USC Chiefs of Cardiology, Gastroenterology, Pulmonology, Urology, and others.
4. Surge capacity expansion of ACU's
 - a. Medical Center leadership (CMO, CNO, COO, CEO, and others as needed) may consider for catastrophic surge.
 - b. May require the retroactive flexing of OSHPD standards and State regulations.
 - c. May require retroactive state notification.
 - d. Note: During catastrophic surge, staff is limited. Establishing alternate care sites will deplete already limited staff. Increasing capacity in existing patient care areas is more appropriate for staff and patient safety.
5. Alternate Care Sites (ACS)
 - a. The HCC will be responsible for evaluating the feasibility of opening ACS's.

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- i. DRC Field Hospital:
 1. Activate DRC Field Hospital Plan as necessary (EMS Protocol in progress).
 2. Capacity 40 beds.
 3. Note: less useful given increased staffing requirements.

Staff

1. Hospital Staff Responsibilities:
 - a. Staffing (Administrative, Medical, Nursing, and Ancillary): Medical Center leadership will ensure adequate staffing of the medical center by holding over, and/or calling in staff as needs dictate per their Unit/Service-based Emergency Response Plan for a healthcare emergency. Reference DHS Policy 911.
2. Medical Staff Responsibilities: The CMO will ensure that:
 - a. All patients will be admitted to the appropriate service as before.
 - b. All efforts will be dedicated to patient care activities including, but not limited to:
 - i. New and existing patient evaluation and treatment.
 - ii. Coordinate and assist in the patient care activities of nursing and support staff as required.
 - iii. Coordinate and assist in obtaining necessary ancillary / diagnostic studies, consults, procedures, etc.
 - iv. Coordinate and assist in patient discharge and discharge planning
 - c. Clinical services and their leadership may require the residents not currently at LAC+USC MC to assist with admissions and direct patient care.
 - i. Such thresholds and call-back system should be addressed in the each of the respective Service-based Emergency Response Plans.
 - d. Consult Services will round with their attending and provide expedited recommendations, particularly around discharges, within 2 hours of Condition Black
3. Navy Trauma Training Center (NTTC) Personnel:
 - a. If NTTC personnel are available and are not currently on shift, a request will be made to have them report to the ED Subcommand Post for assignments.
 - b. During a Trauma Surge, the NTTC Operating Room Team is capable of staffing an additional OR and assisting in SICU patient care.

Supplies

1. Supplies
 - a. Refer to DEM and Medical Center ERP (available in the disaster supplies are 500 military cots, field shelters, isolation equipment, and caches of pharmaceuticals, medical, and surgical supplies and equipment).

- ¹ Basic Disaster Life Support Provider Manual, v. 2.5. American Medical Association 2004.
- ² American College of Emergency Physicians (ACEP) . *Policy Statement on Crowding*. American College of Emergency Physicians, April 2019. Available at: <https://www.acep.org/globalassets/new-pdfs/policy-statements/crowding.pdf>
- ³ California Code of Regulations (CCR), Title 22, 70217: Nursing Service Staff.
- ⁴ Kelen GD, McCarthy ML. The Science of Surge. *Acad Emerg Med* 2006; 13(11):1089-1094.
- ⁵ Bernstein SL, et. al. AAEM Position Statement on Emergency Department Crowding. American Academy of Emergency Medicine. July 2006. Available at www.aaem.org/positionstatements/crowding.php. Accessed July 15, 2007.
- ⁶ Choi, HS, Lee KW. Analysis of Overcrowding in a Local Emergency Department using National Emergency Department Overcrowding Scale (NEDOCS). *J Korean Soc Emerg Med* 2006 Oct; 17(5):377384.
- ⁷ Weiss SJ, Ernst AA, Nick TG. Comparison of the National Emergency Department Overcrowding Scale and the Emergency Department Work Index for Quantifying Emergency Department Overcrowding. *Acad Emerg Med* 2006; 13(5):513-8.
- ⁸ Weiss SJ, Derlet R, Arndahl J, et al. Estimating the Degree of Emergency Department Overcrowding in Academic Medical Centers. Results from the National ED Crowding Study (NEDOCS). *Acad Emerg Med* 2004; 11:38–50.
- ⁹ Jones SS, Allen TL, Flottesch, TJ, Welch SJ. An Independent Evaluation of Four Quantitative Emergency Department Crowding Scales. *Acad Emerg. Med* 2006; 13(11):1204 - 1211.
- ¹⁰ Weiss, SJ, Ernst AA, Derlet R, King R, Bair A, Nick TG. Relationship Between the National ED Overcrowding Scale and the Number of Patients Who Leave Without Being Seen in an Academic ED. *Am Journal of Emerg Med.* 2005; 23(3):288-294.