Access the entire webinar series here:
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https://files.asprtracie.hhs.gov/documents/mass-cas-hospital-capacity-expansion-toolkit-demo--hick-bio.pdf

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Mass Casualty Hospital Capacity Expansion Toolkit Demonstration

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HEALTHCARE EMERGENCY PREPAREDNESS INFORMATION GATEWAY

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Mass Casualty Hospital Capacity Expansion Toolkit Demonstration

https://files.asprtracie.hhs.gov/documents/mass-casualty-hospital-capacity-expansion-toolkit.pdf

Why Use This Tool?

- Create scaled, prioritized specific space and operational expansion plans
- Ensure consistency of response
- Appropriately prioritize expansion (e.g., safest/easiest option first)
- Reflect these plans in a table format as a “one-pager” for quick reference by leaders during incidents that is not as:
  - Detailed and long as the EOP
  - Limited in scope as a department operations plan

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What Areas Are Covered?

- Emergency Department (ED) – Mass Casualty Incident (MCI)
- ED – HAZMAT
- Inpatient general medical/surgical
- Intensive Care Unit (ICU)

Note: Infectious disease expansion is *not* addressed as surge plans are variable based on transmission and are not considered no-notice

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ED Capacity Expansion: MCI

Initial priorities should include:

- Activating the hospital EOP and incident command based on information available. Include staff call-backs that are tailored to the incident type (and in larger facilities to the size of the incident).
- Advising patients awaiting care of the situation and that their care may be further delayed.
- Instituting perimeter and access controls depending on the situation (e.g., mass shooting vs. natural disaster) for the facility and/or campus.
- Clearing patient care areas (e.g., patient units, diagnostic units) and the ED as quickly as possible (e.g., by expediting discharges, moving ED patients awaiting inpatient beds/likely admits up to clinical unit hallways, and/or moving ambulatory patients to chairs to free up stretchers).
- Directing walking wounded to a low acuity triage/holding/minor treatment area that is close to the ED (with staff and supplies to evaluate and begin minor treatment).
- Having triage officer/team screen incoming ambulance and walk-in patients using triage tags or bands to indicate priority.
- Tracking patients using tags and a rapid registration process; include a process for tracking unidentified patients.
- In larger incidents, ensuring throughput, including from radiology/computed tomography (CT) to inpatient location, operating room (OR), post anesthesia care unit (PACU), or other designated "holding areas" to maintain "one-way" flow through the ED.
- Mobilizing predetermined supplemental equipment, supplies, medications, and personnel to ED/treatment areas.
- Ensuring the command center activates a family support area so that patient families and friends may be diverted there.

A completed ED Capacity Expansion: MCI template from a Level 1 trauma center is included in the Appendix as an example.

How to complete the template:

The template on the following page lists priority actions for EDs to consider when expanding capacity to handle an MCI. Users should:

1. Determine the number of casualties the hospital can manage under each level of operations and replace the "x" and "y" in the first row with that number.
2. Replace the considerations in the command, staffing, triage, and patient care rows with a brief description of the hospital's priority actions.

	MCI less than **x** casualties Minor surge addressed with available ED resources	MCI between **x-y** casualties Supplemental resources needed Challenging surge	MCI > **y** casualties All available resources needed Overwhelming surge
Command	• Describe process for limited command center activation.	• Describe staff and facility alerting process. • Describe scope of initial callbacks (e.g., numbers of RN/MD/support staff). • Describe clearing actions to open ED space. • List supplies (e.g., stretchers, wheelchairs, pharmacy, central, sterile dressings) automatically brought to ED. • Describe process for activation of the command center.	• Describe other expected inpatient actions to support ED (e.g., taking patients without report to inpatient hall beds). • Describe expected "one-way" flow through ED/radiology/CT to OR/PACU/inpatient areas.
Staffing	• Describe preparations for supplementation of staff. • Describe communication of incident to staff for their awareness and response. • Describe provider, nurse involvement and response.	• Describe distribution of staff in ED for supervision and care (for critical and non-critical care areas). • Describe sources of other staff from in and outside hospital to support ED/treatment area if needed. • Describe level of security for facility, staff, patients. •	• Describe additional staff callbacks or sources of staffing support including labor pool and external staff (e.g., other hospitals via MOA). • Describe staffing for alternate care/walking wounded area.
Triage	• Define expectations for triage officer/tagging.	• Describe location and staffing of triage for ambulance and walking patients. • Describe expected use of triage tags and initial treatment. • Describe patient tracking and record mechanism. • Describe triage of CT resources and radiology flow and reporting.	• Describe location(s) for triage/treatment of walking wounded in large numbers. • Describe secondary triage expectations (for OR or transport to other facility). • Describe how the ED will provide a patient report to OR or ICU.
Patient Care	• Describe any other than usual resources needed.	• Describe how usual spaces for patient care overflow (including ICU, OR, etc.) into other areas (and/or how those spaces [i.e., "Holding Areas"] are doubled up or increase capacity). • Describe any preparations for critical care outside usual areas.	• Describe minor injury overflow/treatment plan (clinics, other waiting areas, conference rooms). • Describe staffing and supply plan for alternate care/triage areas. • Describe expectations for paper charting particularly on minor injuries. • Describe contact for regional support available through coalition or other hospitals.

	MCI less than **10** serious casualties Minor surge addressed with available ED resources	MCI between **10-30** serious casualties Supplemental resources needed Challenging surge	MCI > **30** serious casualties All available resources needed Overwhelming surge
Command	• Operator contacted to notify Hospital EM Command Group. • ED department nursing and medical director notified. • ED Attending Physician directs ED. • Nursing supervisor assists with placements.	• ED physician contacts operator to declare MCI. • Automatic paging of all ED MD/APP/RN/HCA, OR/PACU staff, surgeons, blood bank, lab, rad, command group. • Clear ED beds (admits up without report, ambulatory to chairs). • Carts/WCs to ED. Pharmacy, Sterile Supply, Central Supply disaster carts/pulls to ED.	• Pending stable admits to inpatient halls, rapid d/c of ambulatory. • Activate same-day surgery area for minor/moderate injury overflow. • Activate main lobby area triage/treatment (use disaster bins) for minor injuries. • ED rapid triage to OR/PACU/Same Day Surgery after CT to avoid backups.
Staffing	• Rapid response team to ED. • Patient Transporters paged overhead to ED. • Page in-house on-call teams for ortho, trauma, neurosurgery, critical care to ED as required.	• ED Supervisor, pod leaders assign available/arriving staff for coverage. • OR/PACU supplemental staff. • Lead trauma surgeon determines OR priority as possible, delegates teams as available. • Command center activated	• Command Center activates additional page groups for medicine RN/MD, additional support staff, consider mutual aid based on event scope. • Request assistance from ortho/medicine clinic staff to ED as required. • Cancel meetings and classes
Triage	• No triage tags. • Consider a triage MD/RN to meet EMS to facilitate placement.	• Triage officers assigned to main entrance and ambulance deck. • Triage tags used – add EMR sticker to tag when registered. • Usual unidentified registration process.	• Lobby triage/treatment using tags/disaster paper charts for minor injury. • Prioritize OR cases with surgery team, provide temporizing procedures in ED as required.
Patient Care	• Usual resources.	• Triage/treatment area for "walking wounded." • Resuscitation area overflow to ortho bays, use "disaster kits" for initial critical care off cart as needed. • Secondary triage officer (trauma surgery or designee) prioritizes CT and OR. • Consider pushing walking wounded to clinics during open hours as appropriate. • Pre-induction for immediate OR cases, PACU holding for other criticals, same-day surgery for additional boarding (may need staff off-hours).	• Clinics open for walking wounded (including off-hours ortho/medicine activation). • Alternate care area supply carts from central supply deployed to same day surgery. • Paper charting for all minor injury patients, as required for critical care patients – leave on bed with patient. • Activate Metro Hospital Compact via duty officer for assistance with load-balancing/staff/transportation.

ED Capacity Expansion: HAZMAT

Initial priorities should include:

- Contacting public safety (i.e., HAZMAT team, fire rescue) for additional information about the incident (know who/how to call).
- Activating the hospital EOP and incident command based on information available. Include subject matter experts related to the incident type to help with the organization's response to the incident. Include staff call-backs that are tailored to the incident type.
- Establishing access controls to prevent walk-in contamination; consider shelter-in-place issues if the incident affects the hospital itself.
- Obtaining chemical information/toxidrome information and contacting poison center (may access online and printed toxicology references as well).
- Preparing the decontamination area in proportion to expected needs (by in-house trained staff).
- Donning of chemical PPE by initial staff as required per initial incident information from EMS/public safety.
- Calling back, replacing, and/or requesting additional staff (e.g., from other healthcare facilities, the fire department, etc.) to support decontamination operations as needed/available.
- Moving "dry decon"/redress kits to the decon area in case the victims do not need wet decontamination but need clothing control (e.g., chlorine or other gas exposure) or demand for wet decon exceeds resources available.
- Tracking/securing patients and belongings.
- Considering/screening for radiation depending on incident (and have appropriate support planned from radiation safety officer, etc.).
- Activating CHEMPACK plan if facility/community has access and situation warrants.
- Rechecking patients prior to entry into the hospital to ensure contaminates have been sufficiently removed.
- Notifying local water treatment authority when situation warrants when runoff enters storm/sanitary sewer systems.
- Notifying vendor for hazardous waste management assistance if situation warrants (e.g., heavy metals, radiation, contaminated water disposal, etc.).

Note that there are *many* requirements for decontamination operations; the capacity template only provides an overview of how to accommodate surge demands.

A completed ED Capacity Expansion: HAZMAT template is included in the Appendix as an example.

How to complete the template:
The template on the following page lists priority actions for EDs to consider when expanding their capacity depending on the scale of the HAZMAT incident. Users should:

1. Determine the number of casualties their hospital can manage under each level of operations and replace the "x, y, and z" in the first row with that number.
2. Replace the considerations in the notifications, staffing, holding area, and decontamination model rows with a brief description of their hospital's priority actions.

	HAZMAT - Small **x-y** number of patients (e.g., <10) Incident manageable with resources available	**HAZMAT - Medium** **y-z** number of patients (e.g., 10-50) Incident manageable with selected resources called in	**HAZMAT Major** **>z** (e.g., > 50 patients) Incident requiring a major facility and community level response
Notifications	• Describe internal and any external notifications (e.g., ED staff, admin staff, security). • Describe notification and mobilization of decon trained personnel.	• Describe internal and external notifications (e.g., team members, administrative staff, security). • Describe any hospital-level alerts or access controls.	• Describe facility and community alerting.
Staffing	• Describe who fulfills decon unit leader position and who provides decon (up to 4-person team).	• Describe who fulfills decon unit leader and assistant roles (4-8 persons depending on size of facility).	• Describe contingency staffing and who supplements, including external agency personnel if needed (e.g., fire, mutual aid). • Describe who performs triage on patients.
Holding Area	• Describe holding area unless none is needed.	• For inclement weather, describe the plan for pre-decontamination holding/assessment area.	• Describe alternate large holding/assessment locations (which may be in community). • Describe dry decon resources to allow clothing control.
Decontamination Model	• Describe triage process to determine decon priorities. • Outline hazard info gathering and sharing. • Discuss inclement weather decon alternatives. • Describe management of limited numbers of ambulatory or non-ambulatory patients (e.g., shower, hose station, backboard/drainage tray). • Describe wash water containment strategies. • Describe process/resources for victim clothing/belonging control, storage, and tracking. • List basic information about accommodations or special needs (pediatrics, mobility impaired, service animals). • Describe management of deceased patient.	• Describe resources available for "dry decon" (e.g., redress kit/trash bag decon). • Describe expanded process/resources for victim clothing/belonging control, storage, and tracking. • Describe additional "wet" decon resources available on-site or from community. • Describe threshold for letting wash water down the drain and notifications required. • Outline plan for when decon equipment is becoming depleted. • Describe management of multiple deceased.	• Describe contingency resources plus available community/regional resources to support hospital. • Describe how non-ambulatory patients are prioritized for wet decon and how those operations are expanded.

	HAZMAT - small **<10** patients Incident manageable with resources available	**HAZMAT - medium** **10-50** patients Selected resources called in	**HAZMAT major** **>50** patients Major facility and community level response required
Notifications	• Overhead page in ED "DECON plan activated." • Notify Security to implement access controls and monitor entrances. • Call Fire Dispatch at xxx-xxx-xxxx for further information on incident. • Contact Poison Control with exposure/chemical info.	• Activate "ED Decon Team" group page. • Activate Hospital EM group page. • Notify Hospital Safety Dept.	• Request FD decon trailer from fire dispatch to supplement personnel/equipment (may need regional mutual aid).
Staffing	• Charge RN prepares post-decon area. • Decon RN on roster assumes ED Decon Leader position. • Healthcare assistants appointed as required.	• ED Decon team page summons additional team members. • Consider MCI activation to support care of the seriously ill as needed. • Monitor staff duties and time in suits; goal is rotate every 20-30 min.	• Appoint pre-decon triage officer in appropriate PPE (RN or MD). • Request additional fire dept. mutual aid to support decon operations.
Holding Area	• None needed.	• Contact Metro Transit at xxx-xxx-xxxx to obtain bus for sheltering pre-decon if needed. • Consider holding in EMS units until capacity for non-ambulatory is ready.	• Consider busing minor exposures to X high school for decon. • Send adequate dry decon kits with buses. • Consider alternate holding area (e.g., garage).
Decontamination Model	• Separate out and prioritize non-ambulatory. • Assist ambulatory with clothing bagging/tagging. • Supervise/perform soap/water wash – lukewarm water. • Non-ambulatory – contain washwater from drainage tray in barrel. • Showers – contain runoff in tubs under shower stall (curtain stays in tub). • Use "dry decon kit" tags and bags to maintain accountability of belongings. • Plastic baskets for very small children, keep parents/children together if possible. Place fall risk in WC, assist to stand when washing back/chair. • Refer to wall outside decon room for full plan/contingencies.	• Distribute "dry decon" kits to each ambulatory person, use bag/tags. • Perform wet decon based on patient exposure/substance. • Consider CHEMPACK activation if cholinergic toxidrome (external 911). • Request additional belongings barrels from Facility Services x-xxxx. • Use roller system for non-ambulatory decon – allow washwater down drain. • Do not contain washwater from showers. • Notify State Duty Officer of washwater down sanitary sewer at xxx-xxx-xxxx.	• Wet decon only for non-ambulatory/significantly ill. • Bring BVM units and O2 tanks to decon room entrance for possible use in warm zone. • Use sawhorses and backboards to expand wet decon stations. • Use outside hose bibs to expand wet decon stations in addition to existing systems (key located in cabinet X). • Obtain additional towels from Laundry.

Inpatient Capacity Expansion

One of the challenges of managing patient surge is the availability of beds. Having adequate beds in supply or rapidly available (and not through common vendors to multiple area hospitals) is as important to effective care expansion as identifying available space. This template addresses *space* expansion – depending on the spaces used or repurposed, staff may or may not need to be assigned to those areas to support the expansion.

Initial priorities should include:

- Gaining situational awareness (e.g., how many casualties have presented/are expected? Assume that at least half of casualties will arrive in the first hour).
- Determining number of available beds/staffing.
- Using the templates to determine priorities for bed and staff expansion.
- Initiating staff call-backs as needed.
- Assessing patients initially cleared from the ED.
- Assessing patients for possible early discharge/transfer to lower level of care on units.
- Suspending administrative activities such as meetings and training.
- Suspending non-emergency procedures.
- Having operations section chief (or inpatient area manager) determine whether discharge holding areas will be needed.
- Obtaining needed stretchers, beds, and wheelchairs.
- Creating or activating "shadow beds" (hidden beds in the EMR that can be activated when a room is doubled, or change PACU beds to ICU bed types, for example).

A completed Inpatient Capacity Expansion template is included in the Appendix as an example.

How to complete the template:

The template on the following page lists priority actions for hospitals to consider when expanding their inpatient capacity depending on the scale of the patient surge. Hospitals should accommodate space expansion demands within the timeframe shown, progressing from conventional to contingency, then crisis as required. Users should:

1. Determine the number of casualties their hospital can manage under each level of operations and replace the "x" number of beds or "%" capacity with that number.
2. Replace the considerations with a brief description of their hospital's priority actions over time.

Time (hours)	**Conventional** Additional **X** beds or **%** capacity needed (e.g., <10%)	**Contingency** Additional **Y** beds or **%** capacity needed (e.g., 10-25%)	**Crisis Care** Additional **X** beds or **%** capacity needed (e.g., > 25%)
0-2 hours	Document processes to: • Fill available staffed beds. • Postpone/hold non-emergency procedures if operative capacity or additional beds needed. • Call back additional staff. • Begin "surge discharge" as required.	• Describe use of pre-induction/recovery areas including operative and procedural areas (e.g., same day surgery, GI, procedural). • Describe handoff and evaluation process for patients initially moved from the ED.	• Describe process for movement of more stable patients to hall beds to make room for incoming. • Describe flat-space areas that can be rapidly adapted for clinical care (e.g., family waiting areas, conference rooms). • List options for patient transfer to reduce demand.
2-4 hours	• Document overflow of inpatient care to rapidly accessible areas such as observation areas. • List specific rooms/units that easily convert from private to semi-private and whether there are med gas panels/headers for two. • Document sources of stretchers, reclining chairs, and additional beds (number and storage location) to fill these rooms.	• Describe use of other spaces that can be leveraged for rapid use, particularly for trauma care. • Describe assessment and transfer process to shift the "least ill" patients from ICU to intermediate/ monitored care, from monitored to floor, etc. • List number and location of additional monitors/telemetry that can be used for patient monitoring on units that do not otherwise support that level of care. • Describe any additional spaces (e.g., rehabilitation) that can accommodate inpatients.	• Describe set-up process for alternate care site on-campus (e.g., space, staffing, supplies). • Describe staff re-deployment to focus all staffing on inpatient care (tiered staffing model, non-traditional staffing of units, deploy outpatient/surgical staff to inpatient).
4-12 hours	• List other private rooms that may be doubled with additional effort. • Describe how to obtain additional beds. • Describe additional options for staffing support to cover these areas.	• Describe process for working with other hospitals in the area to load-balance or transfer.	• Describe process to mobilize community alternate care sites if needed – coordinate with healthcare coalition/ jurisdiction. • Describe Medical Operations Coordination Center (MOCC)/patient transfer process.
12-24 hours	• Define process for continued evaluation of operative cases	• List other rooms that can be converted to semi-private from private or accommodate additional patients in lounge chairs or beds	• Describe process to transfer patients to other hospitals, and/or alternate care site, (e.g., via National Disaster Medical System).

Time (hours)	**Conventional** Additional **<30** beds needed	**Contingency** Additional **30-50** beds needed	**Crisis Care** More than **50** beds needed
0-2 hours	• Fill available staffed beds. • Hold non-emergency procedures. • Call back additional staff within 15min of hospital (page back proximity group). • Begin "surge discharge" as required. ○ Units evaluate current patients for discharge. ○ Move ready for discharge to hallways or discharge holding areas as needed.	• Clear main OR pre-induction and PACU (6/8 beds). • Clear same-day surgery pre-induction and Phase 1 recovery (12 beds). • Clear GI recovery (6 beds). • Clear IR/cardiac cath recovery (4 beds). • RRT staff to main OR, send pool staff or adjust ratios on MED units to support other area staff. • Pull all admin to clinical as possible, charge RN on units have patients assigned.	• Move stable patients into hall in recliners and on transport carts. • Adapt Physical Therapy treatment areas to outpatient/temp inpatient care (8).
2-4 hours	• Staff obtained for unstaffed beds from callbacks adding 1 RN per 3-4 patients ideally. • Convert to semi-private (20): ○ 10 rooms on MED 1 ○ 6 rooms on Surgery 2 ○ 4 rooms on PEDS • Obtain beds from storage lower level 1. • Discharge holding area activated in PT gym area.	• Transfer patients down from ICU to intermediate, intermediate to tele, tele to remote, etc. • Open same day Phase 2. • Add 25 monitors in storage to MED 2/3 beds and activate on remote tele system. • Consider transfer of inpatients to rehab unit temporarily.	• Alternate care inpatient area in X conference area (20 beds) – cots/temp beds from storage until regular beds obtained from vendors. AC pull list and carts from Central Supply. • Re-deploy staff to provide appropriate coverage including tiered staffing/supervisory staffing. • Clinic staff deployed to alternate care area.
4-12 hours	• Increase staffing by 1RN/3-4 beds added from pool. • Temporary curtains to double rooms on: ○ 6 rooms MED2 ○ 4 rooms on Cardiac 1 ○ 6 rooms on Cardiac 2	• Ensure Metro Hospital Coalition activation for transfers if possible.	• Consider mutual aid staffing from coalition, patient transfers, activation of community alternate care site if applicable. • Consider temporary oxygen system set-up in alternate care area.
12-24 hours	• Determine which non-emergency procedures can be scheduled based on bed availability. • Consider transfers to avoid contingency.	• Post-discharge holding area in PT gym. • Convert sleep lab (4) and pulmonary lab (4) to inpatient.	• Support care in other non-hospital locations via telemedicine, homecare, other methods to free up hospital space. • Consider temporary walls in conference rooms, additional temporary oxygen lines to facilitate privacy and additional care areas.

ICU Capacity Expansion

The American College of Chest Physicians Mass Critical Care guidance suggests a 20% capacity expansion within the first six hours, 100% expansion within 24 hours, and a 200% expansion within 48-72 hours following an MCI. Defining the space and staffing needed to meet these benchmarks is critical to an effective response. For example, to use a certain unit as critical care space (instead of medical/surgical floor care), the unit would need a specific number of nurses and portable monitors. Considering how ICU care overflows from designated ICUs into intermediate, monitored, pre/post-operative, or procedural areas and which of those are safest and best suited is also key to ensuring safe and expedited care expansion. As a quick reference, this template does not include key additional considerations such as pharmacy support for additional critical care that should be addressed through planning.

Examining pre- and post-procedure space, procedure rooms, monitored/intermediate care units, and ability to place more than one patient in a "room" are the traditional components of augmenting critical care. Inventory of ventilators and other respiratory support equipment, and portable multivariable monitors is also important as it is difficult to expand critical care "space" (or expand monitored care to usually unmonitored areas) without those specific resources. Developing "shadow ICU beds" in your electronic health record for any unit that may provide critical care may be helpful, as the charting and linking of monitor information is not the same in the PACU as in the ICU, for example. Being able to switch those beds in the system to ICU beds can also help ensure the ability to chart and place orders effectively.

Initial priorities should include:

- Determining scope of potential ICU expansion.
- Assigning critical care leader position to liaison with or answer to operations chief.
- Assigning a clinical/medical director lead to triage of ICU admissions/transfers (i.e., determine which patients are best served on which units) and act as liaison/technical advisor to incident command.
- Determining available staff and space resources (and available monitors and other supplies needed to convert space to a higher level of care).
- Initiating staff call-backs.
- Developing "bump lists" for ICU and stepdown/intermediate care and preparing to move those patients.
- Determining staffing support for initial ICU expansion area (e.g., call-back staff, PACU, procedural staff, anesthesia).
- Determining which staffing model to implement, e.g., changes in shift length or ratios, "tiered" supervision, or team nursing with ICU staff supporting/supervising PACU nurses.
- Preparing for potential activation of crisis standards of care plan for resource triage decisions.
- Initiating crisis documentation plan for MDs/advanced practice providers and nursing when needed.

A completed ICU Capacity Expansion template is included in the Appendix as an example.

How to complete the template:
Hospitals can use the ICU Capacity Expansion template to indicate where and how they plan to expand their critical care capacity depending on the scope of the incident as follows:

Location	Timeframe	# of Beds Available	Action	# of Additional Monitors needed	# of Additional Staff needed	Beds needed to double rooms	Notes
ICU 1	Immediate		Maximize ICU capacity				Transfer stable non-ventilated patients not requiring active critical care support
ICU 2	Immediate		Maximize ICU capacity				Transfer stable non-ventilated patients not requiring active critical care support
ICU 3	Immediate		Maximize ICU capacity				Transfer stable non-ventilated patients not requiring active critical care support
Pre/Post Operative OR	Immediate		Board/provide ICU care				
Pre/Post Procedure 1	Immediate		Board/provide ICU care				Carts? Post-op chairs? Other needs?
Pre/Post Procedure 2	2-4h		Board/provide ICU care				
Intermediate care	4-6h		Place beds, monitors, staff				Move intermediate care patients down to monitored/tele
Procedure rooms (GI, IR, etc.)	2h		Board/provide ICU care				Temporary use
Monitored units	2h		Board/provide ICU care				List monitored units (e.g., 3 South, 10 beds)
ORs	2h		Board/provide ICU care				Temporary use
Telemetry unit	2h		ICU-level care on unit (% of rooms)				Move usual telemetry to remote tele or floor
Other areas	x hours		Crisis ICU level care				List other areas that could be used for crisis ICU care

Location	Timeframe	# of Beds Available	Action	# of Additional Monitors needed	# of Additional Staff needed	Beds needed to double rooms	Notes
ICU 1	Immediate	x/12	Maximize ICU capacity	0	1 RN if doubling	3 (Rm 2,3,4)	Transfer stable non-ventilated patients not requiring active critical care support
ICU 2	Immediate	x/12	Maximize ICU capacity	0	1 RN if doubling	3 (Rm 2,4,6)	Transfer stable non-ventilated patients not requiring active critical care support
ICU 3	Immediate	x/12	Maximize ICU capacity	0	2 RN if doubling	6 (Rm 1,3,4,5,8,9)	Transfer stable non-ventilated patients not requiring active critical care support
Pre/Post Operative OR	Immediate	x/8 (16)	Board/provide ICU care	8 for doubling	1 MD, 3 RN if doubling	Double bays (8) to 16 total	EPIC team to activate "shadow" beds in all PACU/pre-op areas
Pre/Post Procedure 1	Immediate	x/6 (12)	Board/provide ICU care	6 for doubling	1 MD, 2 RN if doubling	Double bays (6) to 12 total	Need to assure adequate carts for doubled bays – will need double staff if off-hours
Pre/Post Procedure 2	2-4h	x/8	Board/provide ICU care	0	1 MD, 3 RN	None	Staff needed are if off-hours
Intermediate care	4-6h	x/15 (20)	Place beds, monitors, staff	0	0	5 (Rm 1,4,6,8,9)	Move intermediate care patients down to monitored/tele
Procedure recovery IR	2h	4-6	Board/provide ICU care	4-6	1 MD, 2 RN	None – 6 max headers	Temporary use
Monitored units	2h – 6h	24 (30)	Board/provide ICU care	6	3 MD, 6-12 RN	6	Three doubles on 1South, 3 doubles on 3South. Tiered staffing 1 ICU RN : 3-4 monitored unit staff
ORs	2h	10	Board/provide ICU care	0	2 MD, 4 RN	2 beds each in OR 1,2,5,6	Temporary use – use neuro/ortho rooms primary
Telemetry unit	2h – 6h	12	ICU-level care on unit (% of rooms)	0	1 MD, 4 RN	2 (Rm 10,12)	Move usual telemetry to remote tele or floor
Sleep lab	6h	4	Crisis ICU level care	4	1 MD, 1-2 RN	None	No tele connection possible – direct monitor

Contact ASPR TRACIE

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