Hospital Pediatric Surge Toolkit

NW Oregon Health Preparedness Organization

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About the Pediatric Surge Leadership Group

The Pediatric Surge Leadership Group (PSLG) is a chartered Work Group of the NW Oregon Health Preparedness Organization (HPO), the regional Health Care Coalition (HCC) serving emergency planning for health/medical needs in NW Oregon's six counties.
These counties are:

- Multnomah
- Clackamas
- Washington
- Columbia
- Tillamook
- Clatsop

For pediatric specialty care, hospitals in this region and across Oregon transfer children t o three institutions for tertiary and quaternary care. These institutions are:

- Doernbecher Children's Hospital at OHSU (Trauma & Medical)
- Randall Children's Hospital at Legacy Emanuel (Trauma & Medical)
- Providence St. Vincent Medical Center (Medical)

To support this multi-year planning effort, the PSLG was chartered in 2016 and the graphic below reflects its members and roles:

Purpose

This toolkit supports a hospital or health system enterprise through the process of planning inpatient surge situations to assist them with varying target capacity levels. We encourage users to look at this tool with flexibility for surging operations to support:

- A primarily pediatric medical emergency such as pandemic influenza causing patient overflow.
- A primarily pediatric trauma mass casualty event from either natural or human-made events.

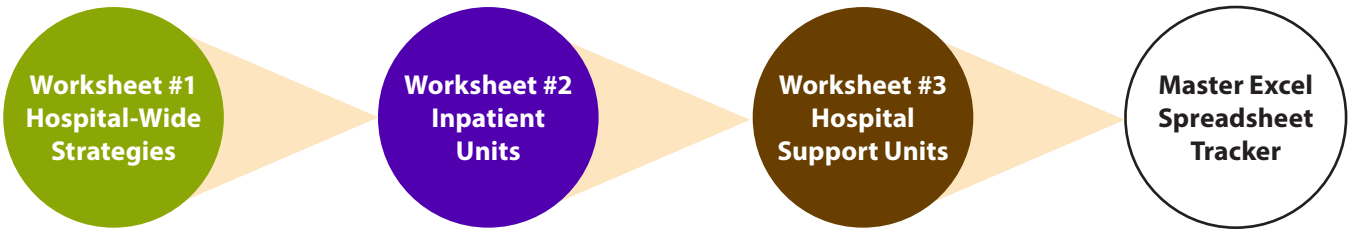
This toolkit, and its associated processes, can also help you plan medical and trauma scenarios for adults. However, we encourage you to consider your entire operational assets by identifying adult resources you can use to support pediatric surge situations and vice versa.

As you adapt this toolkit to your organization please note, the worksheets planning actions and considerations. You are encouraged to use your logo brand on these products as needed.

We have designed each component of this toolkit with a specific hospital team member in mind. The table below describes which toolkit element is designed for the most appropriate person(s) to complete each task.

Toolkit Element:	Target Audience/User:
Hospital-Wide Strategy Surge Worksheet	Emergency Manager/Hospital Administrator
Inpatient Unit Surge Planning Worksheet	Nursing Managers
Hospital Support Units Planning Worksheet	Hospital Administrators
Master Surge Planning Spreadsheet	Emergency Manager/Hospital Administrators

Recommended process for completing the toolkit:



Scope

This toolkit prepares a hospital to care for an increased volume of patients beyond your normal operations BEFORE an emergency event occurs, which makes the organization more resilient. It allows different operational elements of a hospital, such as leadership, inpatient units, and support units to develop plans that are in alignment with each other.

In an emergency response, the information contained in this toolkit will support your Hospital Command Center in the expansion of services when planning for a surge situation. It allows for thoughtful consideration to understand your hospital's opportunities, challenges, and supports prior to a disaster emergency. The toolkit contains instruction guides with examples, master spreadsheets, worksheets for hospital-wide strategies, and inpatient unit strategies to support your surge planning efforts.

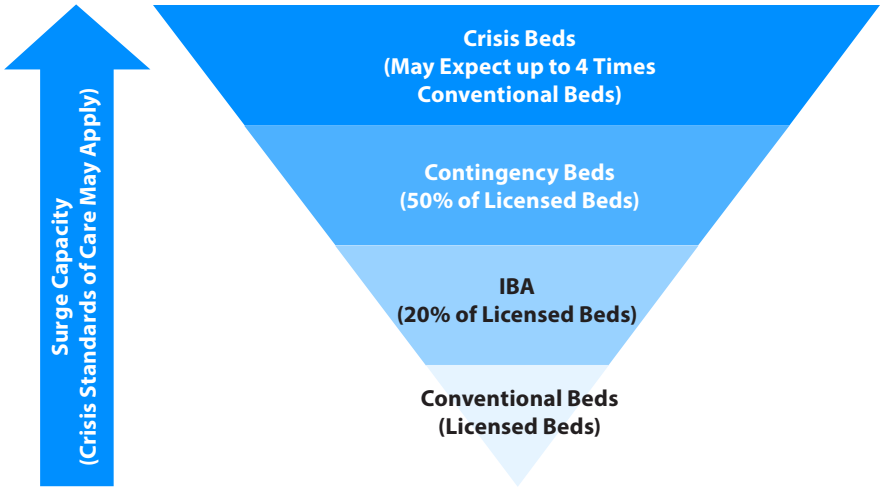
We recommend that Hospital Emergency Managers partner closely with their Emergency Committees that are required by accrediting organizations to complete this process. Because every component of the healthcare enterprise is impacted by emergencies and disasters and the planning group ideally represents its organizational diversity.

This toolkit supports planning for these surge tiers:

Conventional Bed	Immediate Bed Availability Level	Contingency Care Bed Level	Crisis Care Bed Level
Number of Licensed Beds	20% Expansion of Licensed Beds	50% Expansion of Licensed Beds	May Expect 4X Conventional Levels

This tier system of surge operations is evident throughout this toolkit because it anticipates a surge will change patient care environments. Therefore, the decisions and actions required by unit and hospital staff are altered from those made during conventional operations.

To best demonstrate this toolkit's utility, an example is provided that highlights process and planning considerations, actions, and potential collaborators to achieve a complete surge plan. To best show the planning outputs at the nursing and unit description levels, an example hospital is provided in the commentary before each worksheet.



Worksheet 1

Hospital-Wide Surge Strategy Worksheet

Hospital Emergency Managers use this worksheet to facilitate conversations and make decisions in partnership with Hospital Leadership. Many of the strategies and solutions identified in this document will inform the process of planning surge actions at the inpatient unit, and support services operations level. Thus, this worksheet should be completed before any others.

The three sections of this worksheet and their objectives are:

- **Space:** Increase the ability to maintain unit operations and/or take on additional patients by repurposing space to maximize efficiency
- **Staff:** Increase the ability to maintain staffing levels and/or expand the workforce to match situational requirements and needs
- **Stuff:** Ensure adequate supplies and equipment to support medical surge needs

Each section contains action steps the Hospital Emergency Manager identifies and assigns to the appropriate division/unit for completion. Full implementation is not necessary before beginning any unit or workgroup planning. However, understanding the strategies and steps toward implementation will help your direct patient care partners plan more accurately for varying levels of patient surge. In this document, we include an example scenario to best illustrate the functionality of this worksheet.

Guidance for Completing The Hospital-Wide Strategy Surge Worksheet:
To accommodate a patient surge, your institution will need to quickly know the number of beds and amount of space available on each unit. This worksheet helps Emergency Management personnel complete an assessment of potential surge spaces on each inpatient unit to assist their organization's surge capacity planning.

Definitions to know:

- **Non-Traditional Clinical Spaces:** Existing procedure/outpatient clinical areas that could accommodate inpatients if needed.
- **Non-Clinical Spaces:** Non-Clinical areas that could be used; these have pre-defined numbers so no surge number is needed.
- **Airborne Infection Isolation Rooms (AIIR):** Beds with negative airflow, providing respiratory isolation (may be included with other counts).

Example Hospital:
An academic safety net institution set on a campus in an urban area is licensed for 585 beds. It is designated as a Level I Adult Trauma Center and Level II Pediatric Trauma center. There is an adult emergency department and a pediatric emergency department.

The hospital has four critical care units (surgical, medical, pediatric, and neonatal), adult and pediatric acute care units (seven units), an adult and an adolescent inpatient psychiatric unit, an inpatient correctional care unit, and maternal services (women's care and labor and delivery). Primary and specialty care outpatient services are also part of the organization.

Example for Worksheet 1

Space Objective: Increase the Ability to Maintain Unit Operations and/or Take on Additional Patients by Repurposing How You Use Space				
Hospital Strategy	**Tasks to Achieve the Strategy**	**Person Assigned to Task**	**Target Date for Plan Completion**	**Actual Date of Plan Completion**
Identify areas of the hospital for surge capacity that are not part of an inpatient unit: · Non-Traditional Clinical Spaces · Non-Clinical Spaces · Airborne Infection Isolation Rooms (AIIR)	1. Locate a complete set of hospital floor plans. 2. Identify potential spaces for surge across the hospital for inpatient units.	Hospital Emergency Management Committee Facilities		
Assess the impact of behavioral health patients on surge operations	1. Assess current locations where Behavioral Health patients are managed and develop minimum criteria for safe alternatives for patients in order for Behavioral Health patients in order to free up medical beds. 2. Determine if your hospital will cohort Behavioral Health patients in alternative spaces and if so, what acuities are best to be cohorted? 3. Determine a strategy to rapidly assess and manage the Behavioral Health needs of patients generated by event.	Behavioral Health Social Work		

Example

Example for Worksheet 1

Space Objective:	Increase the Ability to Maintain Unit Operations and/or Take on Additional Patients by Repurposing How You Use Space			
Hospital Strategy	**Tasks to Achieve the Strategy**	**Person Assigned to Task**	**Target Date for Plan Completion**	**Actual Date of Plan Completion**
Shut off floor ventilation system to cohorts of infected patients	1. Identify which rooms serve as isolation rooms in routine operations. 2. Identify potential areas for cohorting infectious patients. 3. Compare proposed expansion options to ensure the ventilation can be turned off easily. 4. Develop SOP for expanding isolation and determine who has access to ventilation system, and who has the authority to expand this component of hospital operations.	Facilities Infection Control		
Use tents to create additional patient care areas	1. Determine if Medicaid 1135 waiver is in place or drafted. 2. Develop SOP for waiver creation/process/ submission. 3. Determine scope/level of care to provide at the tents. 4. Determine supply needs and storage requirements that matches the level of care planned at tents. 5. Determine tent locations on campus. 6. Determine staffing for tent care based on level. 7. Consider different scenarios for the use of tents (medical surge, mass casualty triage, pediatric use or adult use).	Emergency Management Emergency Department/Trauma Infection Control		

Example

Example for Worksheet 1

Staffing Objective: Increase the Ability to Maintain Staffing Levels and/or Expand the Workforce				
Hospital Strategy	**Tasks to Achieve the Strategy**	**Person Assigned to Task**	**Target Date for Plan Completion**	**Actual Date of Plan Completion**
Cross-train clinical staff on medical equipment	1. Identify pediatric equipment that is most used in the facility. 2. Prioritize what equipment is most critical for cross training. 3. Determine criteria for how someone is considered "cross trained". 4. Assess staff training gaps on prioritized equipment. 5. Develop training program to ensure skill building on prioritized equipment.	Nurse Educators Biomed/Health Information Technology Quality Assurance Continuing Education		
Contact nurse staffing agencies (registry) to assist with supplemental staffing needs	1. Obtain a list of staffing agencies used by the hospital and their 24/7 contact info. 2. Identify what skills you would ask for in the staffing request. 3. Review agency contracts for "disaster" staff support content. 4. Review labor contracts for "disaster" clause/ information. 5. Determine hospital staffing strategy in disasters; provide overtime to employees or increase use of agency staffing.	Finance Human Resources Nursing Administration Labor/Union Representative		

Example

Example for Worksheet 1

Staffing Objective: Increase the Ability to Maintain Staffing Levels and/or Expand the Workforce				
Hospital Strategy	**Tasks to Achieve the Strategy**	**Person Assigned to Task**	**Target Date for Plan Completion**	**Actual Date of Plan Completion**
Expand scope of practice (i.e. student nurse, medical students, military licensed staff)	1. Develop an understanding of scope of practice during routine operations for all members of medical/nursing staff. 2. Refer to the surge pyramid; determine which staff types can support IBA, Contingency, and Crisis levels of operations. 3. Develop Memorandum of Understanding with medical training/academic institutions to use students as surge support for key roles. 4. Develop precepting standards to support the use of students in a disaster/emergency setting. 5. Ensure rapid credentialing process and onboarding process for surge staffing. 6. Understand liability coverage for surge staffing in your facility. 7. Based on the care provided in various units, expand/change ratios to manage staffing. 8. Review your state's Crisis Standards of Care document to help inform these decisions.	Human Resources Legal Nursing Administration/CNO Medical Staffing Office/ CMO Labor/Union Representatives Regulatory/Quality Assurance Department		
Use of non-conventional staff (i.e., volunteers, paramedics, dentists, veterinarians, retired health professionals with an active license)	1. Determine what scenario for which would you use non-conventional staffing in your hospital. 2. Determine what the administrative burden will be to accept and manage non-conventional staff in your facility. 3. Disaster Medical Assistance Teams, State Strike Teams, Medical Reserve Corps/State Volunteer Registry. (Continued on Next Page)	Nursing Administration Medical Staffing Office Legal Regulatory Credentialing Human Resources		

Example

Example for Worksheet 1

Staffing Objective: Increase the Ability to Maintain Staffing Levels and/or Expand the Workforce				
Hospital Strategy	**Tasks to Achieve the Strategy**	**Person Assigned to Task**	**Target Date for Plan Completion**	**Actual Date of Plan Completion**
	4. Determine what caregiving duties a family member can do to relieve strain on nursing staff. 5. Determine the criteria for a non-conventional volunteer providing caregiving vs. non-caregiving duties. 6. Determine where non-caregiving volunteers best utilized in the operation?			
Develop procedures to accept and assign non-caregiving volunteers	1. Determine what roles best fit which volunteers. Consider all surge operations (e.g., parking, call center, child care, laundry, food service) and include them in planning. 2. Determine the administrative burden required to manage and oversee volunteers in your work area to determine appropriateness. 3. Identify supervision standards are required for each job. 4. Determine minimum standards for information required to serve as a volunteer in a disaster (e.g., will you use spontaneous volunteers or only pre-planned/clearanced sources). 5. Ensure this is incorporated into your facility Emergency Operations Plan.	Human Resources Support Services/ Ancillary Departments Departments that need help/would use volunteers		

Example

Example for Worksheet 1

Staffing Objective: Increase the Ability to Maintain Staffing Levels and/or Expand the Workforce				
Hospital Strategy	**Tasks to Achieve the Strategy**	**Person Assigned to Task**	**Target Date for Plan Completion**	**Actual Date of Plan Completion**
Implement and/or develop just-in-time training for clinical staff that's normally assigned to non-direct patient care positions	1. Identify which administrative staff hold active nursing/medical licenses that could provide care in a surge environment. 2. Determine if clinical duties in an emergency is in their job description. 3. Develop SOP describing activation process/ request to activate these staff members. 4. Determine how these pre-identified staff maintain their skills outside of licensing requirements. 5. Identify how the hospital maintains their ability to provide care with minimal support. 6. Identify the critical skills they may need, including equipment use.	Nursing Administration Human Resources Medical Staff Regulatory		
Plan for dependent care for staff	1. Develop a Pediatric Safe Area plan for your facility. 2. Determine how to surge child care services to stay within the state mandated standards for child care. 3. Determine what additional space and supplies are needed to handle increased children in the child care area. 4. Develop messaging to emphasize personal preparedness planning for staff family care. (Hospital day care should be the last resort)	Emergency Management Committee Child Care Provider(s) Child Life Specialist Social Work Social Services		

Example

Example for Worksheet 1

Stuff Objective: Ensure Adequate Supplies and Equipment to Support Surge Needs				
Hospital Strategy	**Tasks to Achieve the Strategy**	**Person Assigned to Task**	**Target Date for Plan Completion**	**Actual Date of Plan Completion**
Provide vaccination and prophylaxis to healthcare staff and their family members as appropriate	In a bioterrorism event, hospitals need to provide medical countermeasures to staff and their families. 1. Determine if your hospital is connected with the local public health authority to serve as a "closed point of dispensing." If not, sign up. 2. Develop SOP for conducting a medical countermeasures dispensing campaign in your facility. 3. Determine agency policy and process if staff decline to take a countermeasure.	Employee Health Risk Management Pharmacy Human Resources Labor/Union Representatives		
Implement and/or develop return to work policies for employees who have recovered from the communicable illness and have immunity	1. Determine if an SOP exists. 2. Review and re-affirm the policy/process outlined in the SOP. 3. Conduct staff education on SOP and expectations.	Employee Health Infection Control		

Example

Example for Worksheet 1

Stuff Objective: Ensure Adequate Supplies and Equipment to Support Surge Needs				
Hospital Strategy	**Tasks to Achieve the Strategy**	**Person Assigned to Task**	**Target Date for Plan Completion**	**Actual Date of Plan Completion**
Prioritize care functions to maximize the use of resources within traditional standards of care (e.g., limit/reduce frequency of patient baths, etc.)	1. Develop an understanding of the routine operations standard of care. 2. Identify places to make resource conservation, based on risk information. 3. Understand use patterns (by unit) of PPE and other non-medical supplies. 4. Determine staff work that is a "must do" vs. "nice to do" and determine when/if changes to care functions need to communicated to nursing and other staff. 4. Determine if changes to standard of care requires regulatory relief (CMS waiver?). 5. Understand how families can fill in the gap in care/services.	Nursing Support Services Materials Management		
Notify vendors regarding needs and determine alternates to support keeping the supply chain intact. Significant focus on critical supplies/equipment (i.e. ventilators)	1. Notify vendors of the emergency event immediately. 2. Understand how your vendor can/is prioritizing your facility for resupply. 3. Work to diversify supply sourcing for both medical and non-medical supply vendors. 4. Identify vulnerabilities in supply chain for additional contracts (by supply type). 5. Determine prioritization criteria for critical supplies (which is most important - patient care, facility safety, etc.). (Continued on Next Page)	Materials Management Legal Facilities Management Finance		

Example

Example for Worksheet 1

Stuff Objective: Ensure Adequate Supplies and Equipment to Support Surge Needs				
Hospital Strategy	**Tasks to Achieve the Strategy**	**Person Assigned to Task**	**Target Date for Plan Completion**	**Actual Date of Plan Completion**
	6. Identify other agreements already in place with government? Determine activation/use process? 7. Consider non-traditional ways to obtain needed supplies.			
Request resources from local emergency management	1. Determine an internal threshold of when to request resources from County/City Emergency Management/Emergency Operations Center. 2. Understand the resource request process. 3. Determine alternate strategies if requests are not filled (or how to manage until they arrive). 4. Explore hospital mutual aid agreements/ healthcare coalition assistance to fill your gap.	Emergency Management Materials Management C-Suite/Executive Leadership		
Blanks to support tailoring by institutions				

Example

Example for Worksheet 1

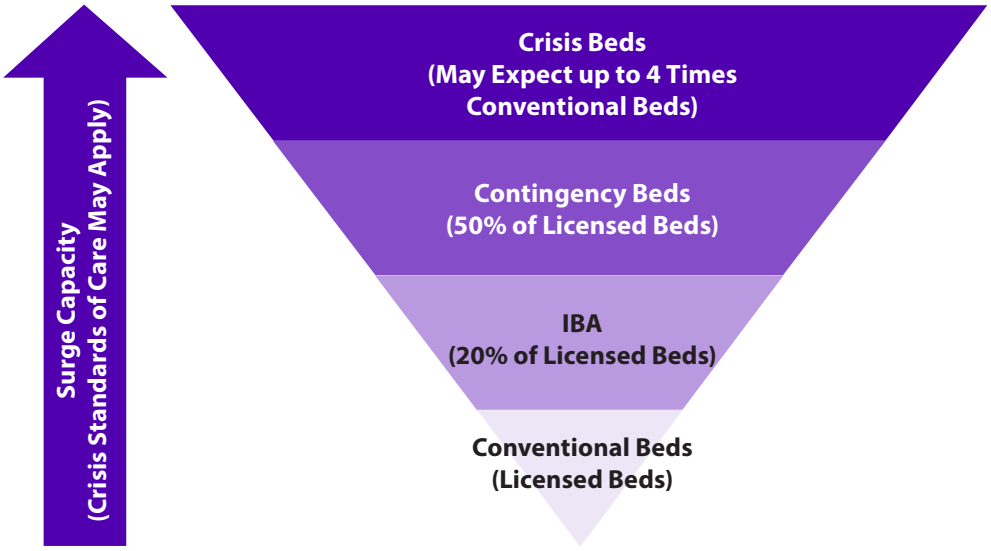
Stuff Objective: Ensure Adequate Supplies and Equipment to Support Surge Needs				
Hospital Strategy	**Tasks to Achieve the Strategy**	**Person Assigned to Task**	**Target Date for Plan Completion**	**Actual Date of Plan Completion**
Blanks to support tailoring by institutions				
Blanks to support tailoring by institutions				
Blanks to support tailoring by institutions				

Example

Worksheet 2

Inpatient Unit Surge Planning Worksheet:

Nursing Managers use this worksheet to facilitate conversations and decide on how their specific clinical unit will expand its ability to care for patients during a surge event. The following diagram details the benchmark approach for unit planners and managers.



Inpatient unit planners will need access to the outcomes of the hospital-wide surge worksheet to assist them in developing a unit strategy for each section of the worksheet section.

The three sections of this worksheet and their objectives are:

- **Space:** Increase the ability to maintain unit operations and/or take on additional patients by repurposing space to maximize efficiency.
- **Staff:** Increase the ability to maintain staffing levels and/or expand the workforce to match situational needs.
- **Stuff:** Ensure adequate supplies and equipment to support medical surge needs.

Each section contains action steps the Nursing Manager identifies and assigns to appropriate staff for completion. Keep a copy of your worksheet and send another copy to your Emergency Manager once your planning is completed. The Emergency Manager will review your unit's worksheet once it is finished. Your team can continue implementing the work after submitting it to your Emergency Manager. In this document, we include an example scenario to best illustrate the functionality of the worksheet.

Guidance for Completing The Inpatient Unit Surge Planning Worksheet:

To accommodate a patient surge, your institution will need to quickly know the amount of beds and spaces available on each unit. This worksheet helps Emergency Nursing Managers complete an assessment of potential surge spaces on each inpatient unit to assist your organization's surge capacity planning.

Instructions for completion:

- Complete the worksheet below by detailing your unit's ability to provide surge capacity. The information will be gathered and collected by the emergency management personnel for the whole facility.
- This worksheet has been created for inpatient clinical units, but there could be additional surge capacity space available beyond these areas. The emergency management personnel at the facility will assess any areas that could be added to the Surge Planning Master.
- This assessment is the beginning of a unit-specific Emergency Operations Plan (EOP) that will be added to the EOP. Unit leadership will be asked to review this information at least annually.

Example Hospital:

An academic safety net institution set on a campus in an urban area; the hospital is licensed for 585 beds. It is designated as a Level I Adult Trauma Center and Level II Pediatric Trauma Center. There is an adult emergency department and a pediatric emergency department.

The hospital has four critical care units (surgical, medical, pediatric, and neonatal), adult and pediatric acute care units (7 units), an adult and an adolescent inpatient psychiatric unit, an inpatient correctional care unit, and maternal services (women's care and labor and delivery). Primary and specialty care outpatient services are also part of the organization.

Example Unit:

This unit is an acute care medical/surgical unit that cares for a wide range of patients. Patients may include cardiac rule-out, GI, renal, endocrine, rheumatology, and vast variety of other medical conditions. There is one nurse manager and one clinical nurse educator in leadership positions on the unit. The unit's nursing staffing includes RNs, APNs, and CNAs. Physician coverage is mostly provided by Hospitalists with some specialty consults as needed.

Example for Worksheet 2

Inpatient Unit Surge Planning Worksheet

SECTION I: SURGE CAPACITY PLANNING NUMBERS

As the Nursing Manager, calculate your unit's Surge Capacity Planning Numbers and enter those numbers into the worksheet below. Assume for this assessment that your unit will receive the same type of patients with the same acuity that you would care for on a normal day.

Conventional Beds: These are beds that are licensed, physically available, staffed, and occupied by a patient. Note that licensed beds may differ from the unit's average daily census. This difference may require a change to staffing levels prior to any type of surge event.

Immediate Bed Availability (IBA): IBA is the federal requirement to provide no less than 20% bed availability of staffed beds within four hours of a disaster. Identify areas where it is possible to provide care at a level functionally equivalent to usual care levels (used first).

Contingency Beds: These beds provide a unit with the ability to increase staffed beds up to 50% of the average daily census. Find areas where care could be provided when usual resources are overwhelmed (activated based on incident demands). Consider non-traditional clinical surge space and non-clinical surge spaces here.

Crisis Beds: Additional capacity up to the maximum number of patients that can be cared for on the unit may require Crisis Beds. Consider non-traditional clinical surge space and non-clinical surge spaces, and areas where care could be provided when usual resources are overwhelmed (activated based on incident demands).

Total #: Total of all beds that could be available on this unit.

Section I: Surge Capacity Planning Numbers					
Targets	**Conventional Beds (Licensed Beds)**	**IBA (20% of Licensed Beds)**	**Contingency Beds (50% of Licensed beds)**	**Crisis Beds (Max # of Patients)**	**TOTAL**
Numbers for this Unit	**22**	**5**	**11**	**10**	**48**

SECTION II: SPACE PLANNING

Hospital Strategy: Increase the ability to maintain unit operations and/or take on additional patients by repurposing the use of space.

Definitions:

Traditional Clinical Surge Space: The number of inpatient beds that can be added to a unit's staffed beds in spaces that provide the normal level of care for your patients.

Non-Traditional Clinical Surge Space: Procedure rooms or outpatient clinical areas that could accommodate inpatients if needed. These rooms may not be set up fully for inpatient care, but it's possible they could be converted or equipped for inpatient care if needed.

Non-Clinical Surge Space: Non-clinical areas that could be used to increase surge capacity. These areas may not be setup for any type of patient care, but they could be converted and equipped to manage inpatients if needed.

Airborne Infection Isolation Rooms (AIIR): Rooms with negative airflow that provide respiratory isolation (may be included with other counts).

Expanded Supply/Equipment Storage Space: Area that is not identified for patient care that maintains room temperature and/or has the ability to provide refrigeration of medical supplies if needed.

Expanded working areas: A space that can be used to accomplish tasks in support of a service area's mission. (For example, a pharmacy may need more compounding space, a laundry may need space for folding tables or additional machines, and a dietary may need extra food prep areas).

Personnel Rest Area: An area that is available in addition to traditional break room areas for staff to store personal items, prepare food, allow for hygiene needs, and rest. The personnel rest area manages the increased numbers of workers sharing limited break rooms.

Example for Worksheet 2

SECTION II: SPACE: Where Will You Put Extra Patients? (Acute Care/Medical/Surgical Unit - Not Critical Care)					
Targets	**Conventional Beds (Licensed Beds)**	**IBA (20% of Licensed Beds)**	**Contingency Beds (50% of Licensed Beds)**	**Crisis Beds (Max # of Patients)**	**TOTAL**
Numbers for this Unit	**22**	**5**	**11**	**10**	**48**
Traditional Clinical	N/A	Double patient rooms 310, 312, 314, 316, 318 (5)	Double patient rooms 311, 313, 315, 317, 319 (5)		10
Non-Traditional Clinical	N/A		2 dialysis rooms (324, 325) – 1 patient each (2)		2
Non-Clinical	N/A		Conference room 340A for 4 patients (4)	Conference room 340A for 10 more patients	14
Airborne Infection Isolation Rooms	Rooms 312, 314, 316, 318				
Additional Notes on Space	Conference room 340A can hold up to 16 patients. Staff and equipment would be needed to support patient care in this area. Average Daily Census is less than licensed beds – I would need additional staffing to reach our licensed bed capacity. All patient rooms on the unit are single rooms and can be doubled - there is oxygen, power, and med gas for 2 patients.				
Identify your preferred expanded supply spaces for your service area	The current supply room is room 320. Soiled Utility room is 322SU. There is no more room in either for more supplies. Increased supply deliveries from Materials Management would keep our current space full. The same for pharmaceuticals in the Pyxis. Additional supply carts can be added behind the nurses' station (open access) or in our break room (secure room). he nurse manager office and nurse educator office could be used for additional supply storage.				

Example

Example for Worksheet 2

SECTION II: SPACE: Where Will You Put Extra Patients?					
Targets	**Conventional Beds (Licensed Beds)**	**IBA (20% of Licensed Beds)**	**Contingency Beds (50% of Licensed Beds)**	**Crisis Beds (Max # of Patients)**	**TOTAL**
Numbers for this Unit	**22**	**5**	**11**	**10**	**48**
What capabilities should this space have based on what you would store (restricted access, refrigeration, shelving, power outlets)?	Restricted access would be preferable. Oxygen tanks need secure storage. Shelves would be best, but rolling supply carts would work for storage and access.				
Identify any preferred expanded working areas for your service area.	The nurses station could hold 2 more staff work stations if computers were provided. Physician work area could be shared with nursing staff (currently it is saved for residents and physicians). The nurse manager's office and nurse educator's office could be used for more staff work space. One more computer could be added in each office. Two more computers could be added to the staff break room for more work space.				
What capabilities should this space have based on what you would store (restricted access, refrigeration, shelving, power outlets?)	Computer, network access, full clinical applications, printer.				
Identify a space for a personnel rest area that is NOT your current break room	We do not have a space on the unit but there is a family consult room shared with another unit that could be used (room 348A). We will need additional space away from the unit for staff breaks.				
What capabilities should this space have? (microwaves, power, dimming lights, cots, table/chairs, showers)?	No public access, no windows into hallways for staff privacy, table, chairs, power, lockers, microwave, coffee pot, refrigerator. A TV would be nice.				

Example

Example for Worksheet 2

Hospital Objective: Increase the ability to maintain staffing levels and/or expand the workforce.

SECTION III: STAFF: What Staff do You Need to Care for Your Patients?					
Targets	**Conventional Beds (Licensed Beds)**	**IBA (20% of Licensed Beds)**	**Contingency Beds (50% of Licensed Beds)**	**Crisis Beds (Max # of Patients)**	**TOTAL**
Numbers for this Unit:	**22**	**5**	**11**	**10**	**48**
Staffing Ratio	4:1 on days 5:1 on nights	4:1 on days 5:1 on nights	6:1	8:1	N/A
Additional Nursing Staff Needed from Your Unit	N/A	None – we can support 5 more patients with current staffing levels on shift	2 Additional RNs	3 Additional RNs, 3 CNAs	5 RNs 3 CNAs
Additional Staff Needed from Other Units or Sources	N/A	None	None	6 RNs, 5 CNAs	6 RNs 5 CNAs
Additional Support	N/A		Pharmacy Staff, Housekeeping		

Example

Example for Worksheet 2

Hospital Objective: Increase the ability to maintain staffing levels and/or expand the workforce.

SECTION III: STAFF: What staff do you need to care for your patients?					
Targets	**Conventional Beds (Licensed Beds)**	**IBA (20% of Licensed Beds)**	**Contingency Beds (50% of Licensed Beds)**	**Crisis Beds (Max # of Patients)**	**TOTAL**
Numbers for this Unit	**22**	**5**	**11**	**10**	**48**

What are the **MINIMUM** clinical skills/ certifications requirements to care for your patients?	American Heart Association (AHA) Basic Life Support for Health Care Provider Certification/CPR. Active Registered Nurse (RN) License.
What are the **PREFERRED** clinical skills/certifications requirements needed to care for your patients?	Dialysis, wound care experience
What other units may have the skills to care for your unit's patients?	Any acute care or med/surg RN
How does Physician/Provider coverage change with increased patient numbers?	Consult with Medical Leadership regarding ratios of hospitalists to pt. increases.
Any additional staffing concerns?	Most of our staff live more than 30 minutes from the facility. There could be a time lag before more arrive to assist.

Example

Example for Worksheet 2

Optional: EXAMPLE STAFF CALL TREE

Each unit can use this optional staff call list if needed. It is made available for an emergency, and you can add as many additional lines as needed. This tool may not be needed if your institution has the ability to assess employee distance from your hospital, clinical role, and shift.

Potential Groupings to Consider:

Unit Management Staff

Department Staff Within 30 MINUTES of the Facility.

Department Staff Within 60 MINUTES of the Facility.

Department Staff More than 60 MINUTES from the Facility.

Name	Title	Status	Contact Numbers	How far away? (miles)	Contact Status		Arrival Time	Has Family Plan?	Needs Family Care		Incident Assignment
		FTE/PRN/ Union			Left Message	Received Message		Y/N	Y/N	How many? Ages?	
			H: C: W:								

Example

Example for Worksheet 2

Hospital Objective: Ensure adequate supplies and equipment are available to support surge needs.

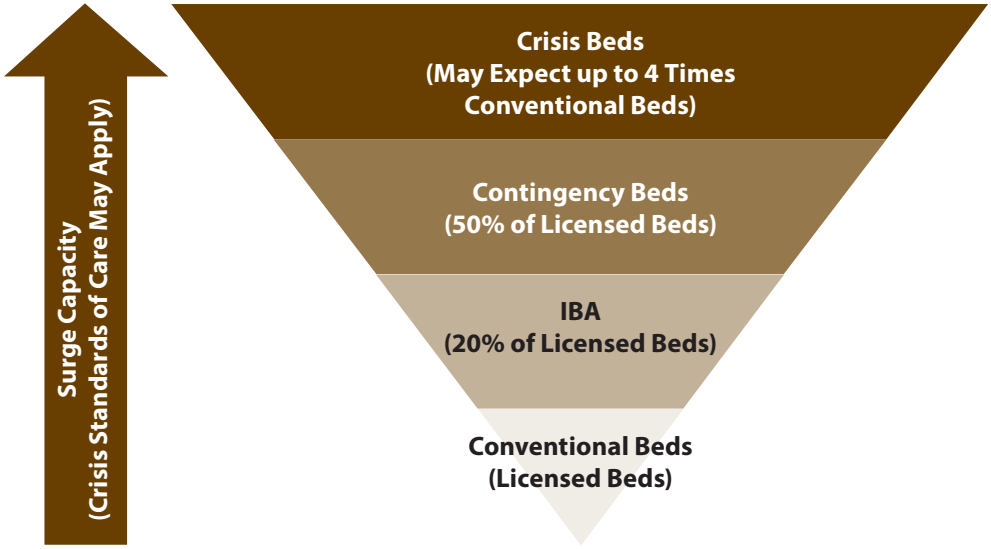
SECTION IV: STUFF: What Supplies/Equipment do You Need to Care for Your Patients in Addition to Your Day to Day Stock/Inventory?					
Targets	**Average Daily Census (Conventional)**	**IBA (20% ADC)**	**Contingency (50% ADC)**	**Crisis (Beds to Max License)**	**TOTAL**
Numbers for this Unit:	**22**	**5**	**11**	**10**	**48**
What critical supplies/ equipment will you need?		• 5 cots, sheets, blankets	• 11 cots, sheets, blankets • Crash cart	• 10 cots, sheets, blankets • Crash cart • Pyxis access • 1 sharps container	
What are the **MINIMUM** clinical skills/certifications requirements to care for your patients?	Use only one mask per patient, reduce waste. Inject fluids via syringe rather than hanging a bag. Limit change of linens. Limit patient bathing. Use of wet wipes for bathing instead of showers (or maybe showers instead of wet wipes).				
What are the **PREFERRED** clinical skills/certifications requirements to care for your patients?	Supply ordered daily, delivered next day.				
Additional concerns about supplies or equipment?	With more patients, we will use more supplies. More frequent deliveries to the unit would let us use our current space without expanding supply space. We see a variety of patients and our usage and needs vary each day. We see ortho-patients as well as medical patients (cardiac and GI mostly).				

Example

Worksheet 3

Hospital Support Units Planning Worksheet

This worksheet is for Area Managers to facilitate conversations and decide how their specific service area will expand its ability to care for patients during a surge event. In order for a hospital operation to increase its available number of beds to care for sick or injured people, patient support units must increase capacities to meet demand. The following diagram details the benchmark approach for unit planners and managers.



The inpatient unit plans and the hospital wide strategy worksheets should be made available to your service area planner to help inform the planning process. There may be planning assumptions in the inpatient unit worksheets that your service area will want to either clarify, realign, or validate in order to strategize your area's surge plan.

The three sections of this worksheet and their objectives are:

- **Space:** Increase the ability to maintain unit operations and/or take on additional patients by repurposing space to maximize efficiency.
- **Staff:** Increase the ability to maintain staffing levels and/or expand the workforce to match situational needs.
- **Stuff:** Ensure adequate supplies and equipment to support medical surge needs.

Each section contains action steps the Area Manager identifies and assigns to the appropriate staff for completion. Keep a copy of your worksheet and send another to your Emergency Manager after planning is completed. The Emergency Manager will then review your unit's worksheet and address any duplication across the hospital's entire operation.

Your team can continue implementing the work after submitting it to your Emergency Manager. In this document, we include an example scenario to best illustrate the functionality of the worksheet.

Guidance for Completing Worksheet:

To accommodate a patient surge, your institution will need to quickly know the amount of beds and spaces available on each unit. This worksheet is intended to help Emergency Management personnel at your organization with completing an assessment of potential surge spaces on each inpatient unit to assist with surge capacity planning.

Instructions for Completion:

- Complete the worksheet below with your work area's ability to support patient surge at varying levels. The information will be gathered and collated by the emergency management personnel for the whole facility.
- Inpatient units will determine any expanded patient care spaces available. However, if your unit requires extra space to accommodate supplies, equipment, or personnel please identify the space in your planning so it can be accounted for hospital wide.
- The information provided here will be shared with inpatient units and hospital executives. It will be incorporated into a master hospital plan for future surge events and placed in the hospital's Emergency Operations Plan (EOP).
  - Understand that this tool can be used multiple times to describe different surge events and your services area's level of response. For example, a primarily pediatric trauma event will require staffing and materials that looks different than an adult infectious disease. In the case of an adult event, pediatric staff may be able to treat adults and vice versa, depending on the situation.

Example Hospital:

An academic safety net institution set on a campus in an urban area; the hospital is licensed for 585 beds. It is designated as a Level I Adult Trauma Center and Level II Pediatric Trauma Center. There is an adult emergency department and a pediatric emergency department.

The hospital has four critical care units (surgical, medical, pediatric, and neonatal), adult and pediatric acute care units (7 units), an adult and an adolescent inpatient psychiatric unit, an inpatient correctional care unit, and maternal services (women's care and labor and delivery). Primary and specialty care outpatient services are also part of the organization.

Example Support Unit:

A Respiratory Therapy unit serving a 585 bed facility that contains both adult and pediatric acute, critical, and specialty care. The RT unit has 26 RTs and six of those support and pediatric needs. The on-call staff are available with 24 hours notice. They provide diagnostic testing and patient therapies. They have a common break/rest area with lockers and equipment supply storage in the basement of the hospital

Example for Worksheet 3

Hospital Support Units Planning Worksheet

SECTION IA: SURGE STAFFING PLANNING NUMBERS

Calculate your unit's Surge Capacity Planning Numbers and enter those numbers into the worksheet below. Assume for this assessment that your unit will receive the same type of patients with the same acuity that you would care for on a normal day.

- **Average Daily Staffing Levels:** The average number of staff working in your unit for routine operations. This is typically in proportion to the average daily census of staffed beds in the inpatient units.
- **Conventional (Licensed) Staffing Levels:** The staffing numbers required to provide routine care to patients in the hospital with conventional bed levels if the inpatient environment needs beds that are licensed, physically available, staffed, and occupied by a patient.

(**Note**: Licensed beds may differ from the unit's average daily census. This difference may require a change to staffing levels prior to any type of surge event occurs.)

- **Immediate Staffing Surge:** The level of staffing above your daily or conventional levels needed to provide care or services to inpatients in support of a hospital surge for Immediate Bed Availability (IBA). IBA is a federal requirement that inpatient hospital units should be able to increase the number of beds by no less than 20% of staffed beds within four hours of an occurring disaster.
- **Contingency Staffing Surge:** The level of staffing above your IBA levels that is needed to provide care or services to inpatients in support of a hospital surge for a 50% increase in beds based on licensed levels.
- **Crisis Staffing Surge:** The level of staffing above your Contingency levels that allows for the maximum number of patients that can be cared for on a unit.

Note: You may need to know the patient counts of IBA for each inpatient unit you support to determine your support unit's staffing levels. Place the projections as your staffing goal, and not as a reflection of the human resources you have. Doing this will identify your surge staffing gaps and assist you in developing strategies for managing any gaps that may occur. Additionally, hospital executives may change standards of care to accommodate contingency and crisis surge strategies in a disaster.

Example for Worksheet 3

Section I: Surge Staffing Planning Numbers:					
Service Area	**Average Daily Staffing**	**Conventional Staffing Levels**	**IBA Level Staffing**	**Contingency Level Staffing**	**Crisis Level Staffing**
Respiratory therapy	**22 Adult RTs** **6 Pediatric RTs**	**30 Adult RTs** **7 Pediatric RTs**	**36 Adult RTs** **8 Pediatric RTs**	**45 Adult RTs** **11 Pediatric RTs**	**Based on Inpatient Unit Maximum Bed Estimates**
Process notes	(No change in standards of care)	Care is routine, but increased patient volumes. No changes in standards of care.	Likely need standards of care changes to manage staffing assignments/ratios and modify care/treatment plans due to staffing or supply challenges.		

Example

Example for Worksheet 3

Hospital Objective: Increase the ability to maintain staffing levels and/or expand the workforce.

Section IB: Staffing Strategies					
Respiratory Therapy Staffing Targets	**Average Daily Staffing**	**Conventional Staffing Levels**	**IBA Level Staffing**	**Contingency Level Staffing**	**Crisis Level Staffing**
	22 Adult RTs 6 Pediatric RTs	**30 Adult RTs 7 Pediatric RTs**	**36 Adult RTs 8 Pediatric RTs**	**45 Adult RTs 11 Pediatric RTs**	**Based on Inpatient Unit Maximum Bed Estimates**
Describe the factors that determine staffing for your service area and how they change in each level of surge					
Staffing ratios	***4:1 Adult 2:1 Peds***	***4:1 Adult 2:1 Peds***	***5:1 Adult 3:1 Peds***	***8:1 Adult 5:1 Peds***	***N/A***
Additional staff needed from your unit	*N/A*	*6 more Adult RT 1 more Pediatric RT (this is manageable with current on-call staff)*		*Consider outreaching to RT schools in the area for emergency credentialing to support contingency operations*	*Consider RT students in support of crisis operations*
Additional staff dependencies for your service area from other units/sources:	*N/A*	*6 more Adult RT 1 more Pediatric RT (This needs to be fast, look at staff barriers to reporting and use of agency)*	*9 more Adult RTs 3 more Pediatric RTs (consider emergency staffing from other parts of the state or partner hospitals)*		

Example

Example for Worksheet 3

Section IB: Staffing Strategies					
Respiratory Therapy Staffing Targets	**Average Daily Staffing**	**Conventional Staffing Levels**	**IBA Level Staffing**	**Contingency Level Staffing**	**Crisis Level Staffing**
	22 Adult RTs 6 Pediatric RTs	**30 Adult RTs 7 Pediatric RTs**	**36 Adult RTs 8 Pediatric RTs**	**45 Adult RTs 11 Pediatric RTs**	**Based on Inpatient Unit Maximum Bed Estimates**
Describe the factors that determine staffing for your service area and how they change in each level of surge					
Staffing ratios:	***4:1 Adult 2:1 Peds***	***4:1 Adult 2:1 Peds***	***5:1 Adult 3:1 Peds***	***8:1 Adult 5:1 Peds***	***N/A***
Additional support staff needed:	*N/A*	*N/A*	*Human Resources, Credentialing*	*Human Resources, Credentialing, Pharmacy staff, Housekeeping*	*Human Resources Credentialing Regulatory/Quality Assurance*
What are the **MINIMUM** clinical skills/certifications requirements to care for your various patient types?			CRT or RRT		
What are the **PREFERRED** clinical skills/certifications requirements to care for your various patients?			Neonatal- Pediatrics credential Critical Care - Adults		
What other units may have the skills to care for your unit's patients?					
How does Physician/Provider oversight change with increased patient care volumes in your unit?			No		
Any additional staffing concerns			Ratios may need to be adjusted for oversight of student RTs if in crisis level staffing.		

Example

SECTION II: SPACE

Hospital Strategy: Increase the ability to maintain unit operations and/or take on additional patients by repurposing the use of space.

Definitions:

Expanded Supply/Equipment Storage Space: A space that is not identified for patient care that maintains room temperature and/or has the ability to provide refrigeration of medical supplies if needed.

Expanded Working Areas: Space that can be used to accomplish tasks in support of a service area's mission. (For example, a pharmacy may need more compounding space, a laundry may need space for folding tables or additional machines, and a dietary unit may need extra food prep areas.)

Personnel Rest Area: Space that is available in addition to traditional break room areas for staff to store personal items, prepare food, allow for hygiene needs, and rest. This space manages the increased numbers of workers sharing limited break rooms.

Example for Worksheet 3

Section II: SPACE: Where Will You Store Things and Expand Your Operations?					
Respiratory Therapy Staffing Targets	**Average Daily Staffing**	**Conventional Staffing Levels**	**IBA Level Staffing**	**Contingency Level Staffing**	**Crisis Level Staffing**
	22 Adult RTs 6 Pediatric RTs	**30 Adult RTs 7 Pediatric RTs**	**36 Adult RTs 8 Pediatric RTs**	**45 Adult RTs 11 Pediatric RTs**	**Based on Inpatient Unit Maximum Bed Estimates**
Increase the ability to maintain unit operations and/or take on additional patients by repurposing the use of space.					
Identify your preferred expanded supply spaces for your service area	Conference Room near 6 West.				
What capabilities should this space have based on what you would store (restricted access, refrigeration, shelving, power outlets)?	Shelving, power outlet/charging stations, medical gas storage.				
Identify any preferred expanded working areas for your service area:	None needed.				
What capabilities should this space have based on what you would store (restricted access, refrigeration, shelving, power outlets)?	N/A				
Identify a space for a personnel rest area that is NOT your current break room	Unsure of options, please assist.				
What capabilities should this space have (microwaves, power, dimming lights, cots, table/chairs, showers)?					

Example

Example for Worksheet 3

Optional: EXAMPLE STAFF CALL TREE

Each unit can use this optional staff call list if needed. It is made available for an emergency, and you can add as many additional lines as needed. This tool may not be needed if your institution has the ability to assess employee distance from your hospital, clinical role, and shift.

Potential Groupings to consider:

Unit Management Staff

Department Staff within 30 MINUTES of the facility.

Department Staff within 60 MINUTES of the facility.

Department Staff more than 60 MINUTES of the facility.

Name	Title	Status	Contact Numbers	How far away? (miles)	Contact Status		Arrival Time	Has Family Plan?	Needs Family Care		Incident Assignment
		FTE/PRN/ Union			Left Message	Received Message		Y/N	Y/N	How many? Ages?	
			H: C: W:								

Example for Worksheet 3

Stuff Objective: Ensure adequate supplies and equipment are available to support surge needs.

SECTION IV: STUFF: What Supplies/Equipment do you Need to Care for Your Patients in Addition to Day to Day Stock/Inventory?					
Respiratory Therapy Staffing Targets	**Average Daily Staffing**	**Conventional Staffing Levels**	**IBA Level Staffing**	**Contingency Level Staffing**	**Crisis Level Staffing**
	22 Adult RTs 6 Pediatric RTs	**30 Adult RTs 7 Pediatric RTs**	**36 Adult RTs 8 Pediatric RTs**	**45 Adult RTs 11 Pediatric RTs**	**? (based on Unit Projections)**
What critical supplies/equipment will you need in your area to provide patient care or support patient care needs?	Suction machines, BiPAP Oxygen Nebulizers Oxygen concentrators Spirometers Tracheostomy supplies Air Purifiers	Same materials as Average Daily Staffing, just increase the volume	Same materials as Average Daily Staffing, just increase the volume	Same materials as Average Daily Staffing, just increase the volume	Same materials as Average Daily Staffing, just increase the volume
What are some strategies you could implement to conserve supplies?			Mask reuse; open to technical advice from materials management or vendors.		
How do you get more supplies to your unit?			Central Materials Management continually stocks common items and staff can access as needed. BioMed rotation of machinery. Pharmacy fills pyxis for any RT medications.		
Additional concerns about supplies/equipment?			If we are running low on a critical supply or equipment, how to do we request more?		

Example

Overview of Master Surge Planning Spreadsheet

This Microsoft Excel spreadsheet is the master "holding tank" for all the information gathered through the worksheet process from hospital leadership, inpatient nurse managers, and support area managers. In the Microsoft Excel document, you will see multiple tabs as described below. The Emergency Manager is tasked, in partnership with your Emergency Preparedness Committee, to review any submitted information. They will identify any conflicting plans and resolve them across the entire hospital enterprise.

Tab 1:
Facility Space Planning Assessment:

This tab is the master location for all information regarding the number of beds available in various units throughout your facility. The information sources are the worksheets completed by your unit's inpatient Nursing Managers.

Your Microsoft Excel document has an example illustrating how the worksheet information populates in the worksheet..

FACILITY SPACE PLANNING ASSESSMENT

Hospital Name: | **Date of Completion:**

Instructions: Facility Surge Assessment can be used by the emergency management coordinator to identify and record existing and potential inpatient beds and maximum inpatient bed capacities in all clinical and non-clinical areas of the hospital.

SURGE 1: TRADITIONAL CLINICAL

Unit Name					
Adult ICU / Critical Care	**Conventional**	**IBA**	**Contingency**	**Crisis**	**Total**
					0
					0
					0
					0
					0
					0
Total Adult ICU/Critical Care Beds	0	0	0	0	**0**
Adult Medical / Surgical Beds	**Conventional**	**IBA**	**Contingency**	**Crisis**	**Total**
					0
					0
					0
					0
					0
					0
					0
					0
Total Med/Surge Beds	0	0	0	0	**0**
Burn Beds	**Conventional**	**IBA**	**Contingency**	**Crisis**	**Total**
					0
					0
					0
Total Burn Beds	0	0	0	0	**0**
Pediatric ICU / Neonatal ICU	**Conventional**	**IBA**	**Contingency**	**Crisis**	**Total**
					0
					0
					0
Total PICU/NICU Beds	0	0	0	0	**0**
Pediatrics	**Conventional**	**IBA**	**Contingency**	**Crisis**	**Total**
					0
					0
Total Pediatrics Beds	0	0	0	0	**0**
Psychiatric	**Conventional**	**IBA**	**Contingency**	**Crisis**	**Total**
Total Psych Beds	0	0	0	0	**0**
Other Inpatient Units	**Conventional**	**IBA**	**Contingency**	**Crisis**	**Total**
Total Other Inpatient Beds	0	0	0	0	**0**
SURGE 1 TOTALS (INPATIENT)	0	0	0	0	**0**

SURGE 2: NON-TRADITIONAL CLINICAL

Unit / Room Number	Beds
SURGE 2 TOTAL	**0**

SURGE 3: NON-CLINICAL

Unit / Room Number	Beds
SURGE 3 TOTAL	0

SURGE 4: AIIR BEDS

Unit / Room Numbers	Beds
SURGE 4 TOTAL	**0**

EMERGENCY DEPARTMENT

Area	Beds
ED - Adults	
ED - Peds	
Fast Track	
Urgent Care	
ED TOTAL	**0**

Example

Tab 2: Facility Expansion Assessment:

In the course of inpatient unit surge planning, non-clinical or non-traditional spaces are considered for their usefulness in the expansion of patient care. This spreadsheet assesses characteristics of proposed spaces identified, information about the intended patient type, and staffing needs to make an area equipped for clinical care.

FACILITY EXPANSION ASSESSMENT

for Capacity Expansion into Non-Traditional & Non-Clinical Space

	FACILITY ASSESSMENT													PATIENT CARE		STAFFING NEEDS								
Expansion Area	Bathrooms	Emergency Power	HVAC	Medical Gases	Negative Pressure	Sinks	Ventilators	Patient Access	IT / Communications	24/7 Access	Workspace	Other:	Other:	What type of patients can be cared for in this space?	How many?	Physicians	Mid-Levels (PA, NP, APN)	Registered Nurses	CNAs	Unit Clerk	Respiratory Therapy	Pharmacist	Other:	Other:
Surge 2: Non-Traditional Clinical Space																								
Non-Traditional Totals															0	0	0	0	0	0	0	0	0	0
Surge 3: Non-Clinical Space																								
Non-Clinical Space Totals															0	0	0	0	0	0	0	0	0	0

Example

Tab 3: Facility Staff Assessment:

Each unit needs to determine how it will best use a hospital's staff to care for the maximum number of patients. This assessment lists a unit's baseline staffing ratio, and what its ratios expand to for surges at Initial Bed Availability Levels, Contingency Level Care, and Crisis Level Care. It also provides a place to articulate minimum skills/certifications needed to care for patients in a unit, and their preferred requirements. Identifying the needs of physician/ provider coverage in multiple scenarios informs the medical officers on how to develop supportive policy, revise standards of care, and manage resources appropriately. Units able to take additional patients are identified here as well.

FACILITY STAFF ASSESSMENT

Unit Name	Staffing Ratio	IBA Staffing Ratio	Contingency Staffing Ratio	Crisis Staffing Ratio	MINIMUM Skills / Certification for Patient Care	PREFERRED Skills / Certifications for Patient Care	Other Units for Patient Care	Physician / Provider Coverage Needs	Additional Staffing Concerns
Adult ICU / Critical Care									
Adult Medical / Surgical									
Burn									
Pediatric ICU / Neonatal ICU									
Pediatrics									
Psychiatric									
Other Inpatient Units									

Example

Tab 4: Facility Supply Assessment:

This assessment divides which supplies are critical and preferred for each level of facility surge that may occur. Unit Managers will identify critical supplies, strategies on how to manage challenging inventory levels, and address concerns regarding necessary products. For example, assess alternate methods of providing treatment, older versions of equipment, or changes to the standards of care for a supply to be used.

FACILITY SUPPLY ASSESSMENT

Instructions:

Unit Name	Critical Supplies / Equipment needed for IBA:	Critical Supplies / Equipment Needed for Contingency:	Critical Supplies / Equipment Needed for Crisis:	Unit Conservation Strategies:	Additional Concerns about Supplies / Equipment:
Adult ICU / Critical Care					
Adult Medical / Surgical					
Burn					
Pediatric ICU / Neonatal ICU					
Pediatrics					
Psychiatric					
Other Inpatient Units					

Example

Tab 5: Unit and Supply Equipment and Supply Expansion:

Managers list potential equipment needed to expand care to non-traditional or nonclinical spaces by providing an inventory summary. For each proposed space in Tab 2, a supply expansion list should be developed and placed in Tab 5.

EQUIPMENT AND SUPPLY EXPANSION CHECKLIST

for Capacity Expansion into Non-Traditional & Non-Clinical Space

Instructions:

Expansion Area & Location:				
Maximum Surge Capacity:			**Patient Type:**	
	Adequate Supply?	**Additional Needed**	**Storage Location**	**Notes**
BP Machines				
Cardiac Monitors - Portable/Adult				
Cardiac Monitors - Portable/Peds				
Communication Equipment				
Crash Cart				
Cribs				
Dialysis Machines				
Documents				
Food Refrigerators				
Hand Cleaner				
HEPA Unit - Portable				
Infusion Pumps				
IV Poles / Pumps				
Linens (Clean & Soiled)				
Medication Refrigerators				
Patient Gowns				
PCA Pumps				
Peritoneal Dialysis Kits				
Personal Protective Equipment (PPE)				
Pharmaceuticals				
Portable 0_2				
Portable Suction				
Portable X-ray				
Pulse Oximeter				
Regulated Waste Container				
Sharps Container				
Slit Lamp				
Stretchers				
Supply Carts				
Telemetry Boxes				
Thermometers				
Ventilators - Portable/Adult				
Ventilators - Portable/Peds				
Wheelchairs				

Example

Acknowledgments

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