Patient Surge in Disasters:
A Hospital Toolkit for Expanding Resources in Emergencies

Intensive Care Unit
Capacity Expansion Tool
(ICUCET)

NYC
Health

Table of Contents

ICU Capacity Expansion Tool (ICUCET)
Guidance Document

INTRODUCTION & OVERVIEW

From infectious disease outbreaks to chemical spills, mass casualty scenarios have the potential of overwhelming Intensive Care Unit resources. Depending on the incident's severity and/or duration, your ICU(s) may need to consider expanding capacity (and rapidly) in order to cope with incident-related patient volume.

The ICUCET was developed as an all-hazards tool with a particular emphasis on helping hospital Intensive Care Units manage high patient volume through capacity expansion during a mass casualty incident such as an influenza pandemic.

The ICUCET planning and response activities and tools will challenge the emergency planner to create hospital-specific plans that will identify and support expansion areas within and (preferably) nearby their Intensive Care Unit(s).

PURPOSE

The ICUCET is designed to assist hospital administrators and emergency managers in preparing for and responding to unexpected increases in patient volume. The ICUCET follows the *Emergency Department Capacity Expansion Tool* (EDCET), the *Bed Surge Capacity Expansion Tool* (BSCET) and the *Rapid Discharge Tool* (RDT) in the New York City, Patient Surge in Disasters: A Hospital Toolkit for Expanding Resources in Emergencies.

OBJECTIVE

The objective of the ICUCET is to identify opportunities for the creation of additional staffed and supported critical care beds during the immediate and sustained phases of a public health emergency. For purposes of emergency planning and response, the ICUCET can be activated to both complement and run concurrent with any or all of the NYC DOHMH surge capacity tools, including EDCET, RDT and/or BSCET; or, the ICUCET can be used as a stand-alone tool when the increased patient demand is primarily for critical care inpatient beds.

AUDIENCE

Because a mass casualty incident can occur at any time, the *Intensive Care Unit Capacity Expansion Tool* offers a wide range of effective actions to increase surge capacity. This tool may be especially useful to hospital personnel in the following areas:

- Incident Command Center

- Critical Care Administration

- Critical Care Clinicians

- Off-hours Nursing Supervision / Hospital Administration

- Emergency Management

GUIDELINES FOR USE

The *ICUCET* is formatted as a quick reference guide for healthcare professionals. Each section of the tool is divided into columns which are defined as follows:

Action

An action is a set of planning or response activities that leads to increasing ICU capacity.

Phase

A phase is the period of time during which emergency preparedness or response activities occur. There are two ICU-specific phases in this tool:

- *Planning*: the preparatory time prior to an emergency incident.

- *Response*: the time directly after the occurrence of a mass casualty incident when the ICU(s) must immediately meet accelerated patient demand; and, the period directly following when patient volume continues to exceed the ICU(s)' ability to accommodate the increased number of patients.

Step(s)

Activities outlined within an *Action* that are intended to achieve one or more outcome(s).

Outcome(s)

The result(s) of a team's conducting an Action's steps and activities. The benefits of each outcome are summarized in comments in the *Outcome(s)* column. We recommend reading these comments before undertaking the action to determine what shape these benefits may take in your ICU(s).

ABBREVIATIONS

See *Patient Surge in Disasters: A Hospital Toolkit for Expanding Resources in Emergencies – Introduction and References* for keyword and abbreviation explanations.

SUMMARY DOCUMENTS

Summary Documents are provided on pages 8 and 15 to preview the planning and response sections (respectively) of the *Intensive Care Unit Capacity Expansion Tool* (ICUCET).

APPENDICES

To help surge capacity planners incorporate the planning and response components of the ICUCET into their emergency plans, the following appendices are attached:

- Appendices: Introduction (page 18)
- Appendix A: Facilities (page 19)
- Appendix B: Equipment & Supplies (page 23)
- Appendix C: Staffing Plan (page 26)

AUTHORSHIP

Many of the activities and recommendations contained in this tool were drawn from the *Promising Practices and Recommendations for Hospitals for Bed Utilization and Personnel,* Parts I & II (Surge Capacity Advisory Group, MediSys Health Network/Continuum Health Partners CBP, 2006), the New York City Department of Health and Mental Hygiene's Surge Capacity Planning Toolkit, the 2009/2010 DOHMH-sponsored Intensive Care Unit Capacity Expansion Project Survey of 44 participating hospitals, and in reviews of draft ICUCET templates conducted by Marie Dorsinville, PHN, NYC DOHMH, David Baksh, Queens Hospital Center, Ricardo Lopez , MD, Queens Hospital Center, Vikas Shah, MD, Kings County Hospital Center, Mayer Sagy, MD, Schneider Children's Hospital, Craig Simpkins, Long Island Jewish Medical Center, and Majella Venturanza, RN, St. Luke's-Roosevelt Hospital Center.

Substantive editing of this work was performed by William Lang, MS, an Administrative Consultant with an extensive background in hospital operations and emergency management.

ICU Capacity Expansion Tool
Summary Document - Planning

Introduction and Overview

In a mass casualty incident, there will most likely be an immediate and sustained demand for additional, available inpatient beds. Having determined that the two most effective methods for increasing bed capacity are **rapid discharge** and **capacity expansion,** the New York City Department of Health and Mental Hygiene (NYC DOHMH) developed *Patient Surge in Disasters: A Hospital Toolkit for Expanding Resources in Emergencies,* which includes: the Rapid Discharge Tool (RDT), the Bed Surge Capacity Expansion Tool (BSCET), the Emergency Department Capacity Expansion Tool (EDCET), and the Intensive Care Unit Capacity Expansion Tool (ICUCET).

The goal of the ICUCET is to offer participating New York City hospitals an effective tool that will enable them to maximize usage of existing intensive care space and to create additional intensive care capacity during a public health emergency. The Planning Document, pages 9-14, provides guidance on how to organize an *Intensive Care Unit Surge Team* (ICU-ST) in order to accomplish these critical activities most effectively; the Response Document, pages 15-17, offers a series of action steps that will accomplish desired capacity expansion outcomes. In both cases, all activity either derives from or reports to the ICU-ST - a group of healthcare professionals who are expert in emergency management and knowledgeable about critical care capacity expansion.

Facilities, equipment/supplies, and staffing tools (and formulas) presented in the ICUCET appendices should be carefully reviewed and customized to each hospital's specifications and requirements before use.
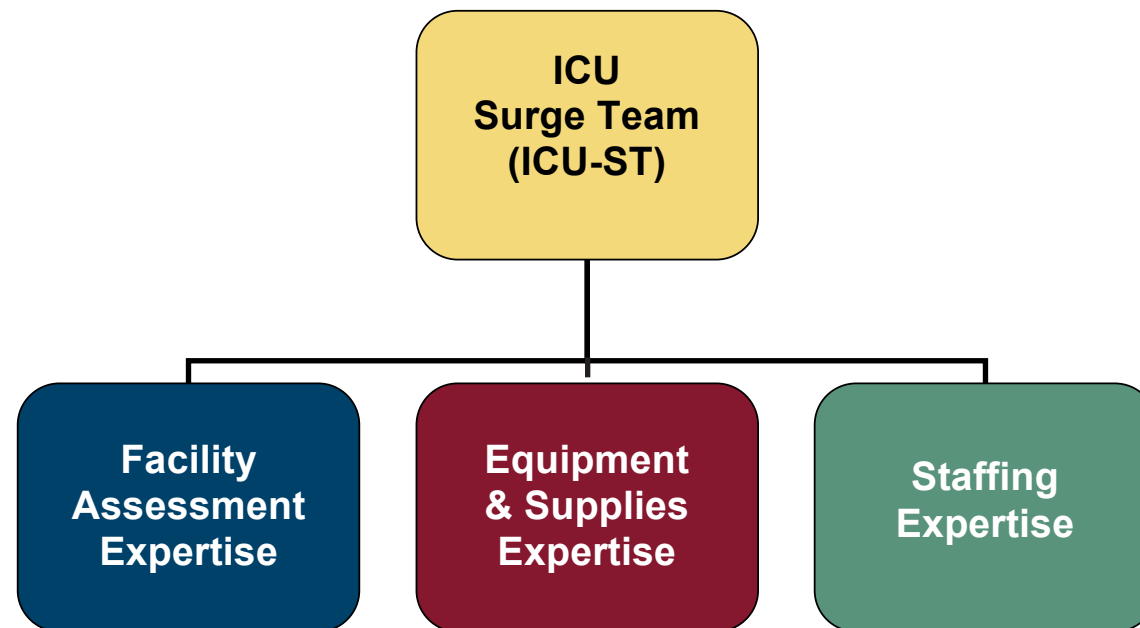
ICU Capacity Expansion Tool
Summary Document - Planning

Organization Structure

ICUCET work is overseen by the *ICU Surge Team* (ICU-ST). As illustrated in the graphic below, the ICU-ST's first task is to organize a core group of multidisciplinary subject matter experts to accomplish actions. Each expert is assigned the responsibility of producing a key element of the ICUCET. The following pages will introduce the Planning functions of the Intensive Care Unit *Capacity Expansion Tool* (ICUCET).

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                        ┌─────────────────┐
                        │      ICU        │
                        │   Surge Team    │
                        │    (ICU-ST)     │
                        └─────────────────┘
                                 │
          ┌──────────────────────┼──────────────────────┐
┌─────────────────┐   ┌─────────────────┐   ┌─────────────────┐
│    Facility     │   │   Equipment     │   │    Staffing     │
│   Assessment    │   │   & Supplies    │   │   Expertise     │
│    Expertise    │   │   Expertise     │   │                 │
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ICU Capacity Expansion Tool
Summary Document - Planning

Key Surge Planning Steps

1) **Create and convene** an ICU Surge Team (ICU-ST).

2) Using a *Facility Critical Needs Assessment Tool*, **evaluate possible expansion areas** *in and/*or *near the ICU(s) and how they will be used (i.e., adult, pediatric, respiratory, non-respiratory)*. **Create/update** *Facility Planning Needs Checklists* for each identified/selected expansion area. **Compile** results into a *Facility Expansion Catalog*.

3) Using an *Equipment and Supply Needs Assessment Guide,* **evaluate** what equipment & supplies will be needed in expansion areas. **Create** an *Equipment and Supply Checklist* for each identified/selected expansion area.

4) Using a *Staffing Needs Assessment Tool,* **determine** by category what additional professional and support staff will be needed in the expansion area(s). **Create** a list of possible activities for each professional and support group, and note if you would consider using MRC Volunteers where applicable.

5) **Update** hospital-specific *Policies & Procedures* to operationalize planning activities and considerations.

Hospitals are encouraged to customize the design and contents of ICUCET templates to meet their institutional needs

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Action	Phase	Step(s)	Outcome(s)

ONE
 	
⇨ Convene an **ICU Surge Team** (ICU-ST)
 	
  o Create and Convene ICU-ST
  o Distribute ICUCET to ICU-ST
  o Organize ICU-ST walk-through of possible expansion areas
 	
ICU-ST:
A core group of multidisciplinary clinical and administrative experts. ICU-ST is charged with organizing and directing activities related to capacity expansion in accordance with hospital policies and procedures. Membership expands according to emergent need, and should include HICS representation. ICU-ST leadership is provided by ICU Administrative and/or ICU Clinical management.
 	
ICU Surge Team (ICU-ST)
	Planning	1) Create and convene an ICU Surge Team (ICU-ST), comprising multidisciplinary management experts in areas such as:
		  o Facilities
		  o Equipment & Supplies
		  o Staffing
		  o ICU Operations (clinical/non-clinical)
		  o Emergency Management.
		
		2) Distribute ICUCET to Team members, noting facility, equipment/supplies and staffing templates, pages 20-27.
		
		3) Organize an ICU-ST walk-through of clinical and non-clinical areas to assess their suitability for temporary critical care expansion. Rank and document results. The following are suggestions for possible expansion into existing clinical areas:
		  o PACU
		  o Stepdown Unit
		  o OR Holding
		  o Cardiology Unit
		  o Ambulatory Surgery
		  o Cath Lab
		  o Surgical Unit
		  o Operating Rooms
		  o Endoscopy
		  o Respiratory Unit
		  o Medicine Unit
		  o Short Stay
		  o Neurology Unit
			⇨ ICU-ST provides a means to:
			  ▪ Determine accurate patient census and status changes in critical care areas.
			  ▪ Recommend expanding capacity into pre-identified clinical and non-clinical areas.
			  ▪ Oversee and monitor expanded capacity.
			
			⇨ A walk-through will help to:
			  ▪ Yield clinical expansion area possibilities.
			  ▪ Yield non-clinical expansion area possibilities.

Action	Phase	Step(s)	Outcome(s)

TWO
 	
⇨ Conduct a **Facility Review** of Possible ICU Expansion Areas
 	
   o Complete Facility Critical Needs Assessment tool
   o Create Facility Planning Needs Checklist(s)
   o Create Facility Expansion Catalog
 	
Facility Assessment
	Planning	1. Using the DOHMH-supplied *Facility Critical Needs Assessment* template (see page 20), ICU-ST members assess core facility requirements for possible expansion area(s).
		
		  a) As necessary, develop this template's list to suit Critical Care/hospital-specific planning needs. <u>Note</u>: these facility items should mirror the list found in the subsequent template, the *Facility Planning Needs Checklist*, so be certain to apply edits to <u>both</u> templates.
		
		2. Using the DOHMH-supplied *Facility Planning Needs Checklist* (see page 21), ICU-ST assesses the adequacy of <u>each</u> identified expansion area with regard to facility requirements and offerings. Indicate recommended use of space in the template's *Overall Assessment* section.
		
		3. Using the DOHMH-supplied *Facility Expansion Catalog* (see page 22), ICU-ST members compile a listing of <u>all</u> identified expansion areas along with their bed capacities and appropriateness of use for clinical activities.
			⇨ Completed *Facility Critical Needs Assessment* template provides a general guide to help emergency planners determine if/how specific expansion areas can be used for adult, pediatric, respiratory, and non-respiratory critical care patients.
			
			⇨ Completed *Facility Planning Needs Checklist(s)* helps ICU-ST assess facility requirements and offerings for <u>each</u> identified expansion area, including maximum patient capacities and appropriateness of use for clinical activities.
			
			⇨ Completed *Facility Expansion Catalog* provides a quick-reference guide to selected areas for ICU expansion, including location information, patient capacities (seating/ stretchers), and appropriateness of use for clinical activities.

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Action	Phase	Step(s)	Outcome(s)
THREE ⇨ Determine **Equipment & Supply Needs** for Selected Expansion Areas. o Complete Equipment & Supply Needs Assessment Guide o Complete Equipment & Supply Checklist(s) **Equipment & Supplies**	**Planning**	1. Using the DOHMH-supplied *Equipment & Supply Needs Assessment Guide* template (see page 24), ICU-ST members determine equipment and supply needs for the activities that may occur in identified expansion areas. 　o As necessary, develop this template's list to suit Critical Care/hospital-specific planning needs. Note: these equip/supply items should mirror the list found in the subsequent template, the *Equipment & Supply Checklist*, so be certain to apply edits to both templates. 2. Using the DOHMH-supplied *Equipment & Supply Checklist* template (see page 25) determine if each ICU expansion area under review is adequately supplied and equipped. Also, note inventory amounts and storage locations of equipment and supplies for every identified ICU expansion area.	⇨ Completed *Equipment & Supply Needs Assessment Guide* will: ▪ Provide planners with an at-a-glance reference of what basic equipment and supplies are needed to support ICU expansion areas. ▪ Enable ICU(s)/Hospitals to order and inventory necessary basic equipment and supplies for critical care areas. ▪ Assist ICU Management in monitoring usage of equipment and supplies when expansion areas are activated. ⇨ Completed Equipment & Supply Checklist(s) will: ▪ Provide planners with a quick-reference guide to available or needed equipment and supplies for each expansion area. ▪ Assist with ongoing monitoring of equipment/supply levels during emergencies.

Action	Phase	Step(s)	Outcome(s)

FOUR
 	
⇨ Determine **Staffing Needs** for Selected Expansion Areas.
 	
   o Assess Staffing Needs
   o Complete Staffing Plan
 	
Staffing
	Planning	1. Using the DOHMH-supplied *Staffing Plan* template (see page 27), ICU-ST members assess how the selected expansion area(s) will need to be staffed.
		
		2. Complete Staffing Plans for <u>each</u> expansion area, noting:
		   o FTE requirements
		   o Tasks and Responsibilities
		   o MRC Volunteers
			⇨ Completed Staffing Tool provides planners with an overview of clinical and support staffing requirements for each ICU expansion area.

FIVE ⇨ Incorporate ICUCET Planning into **Hospital Policies & Procedures**. o Create/update internal Policies & Procedures	**Planning**	1. ICU-ST creates/updates internal Policies & Procedures to reflect ICU surge expansion planning into clinical and non-clinical areas.	⇨ Incorporating ICU capacity expansion activities into internal (departmental/ corporate) policies and procedures will provide a useful ongoing reference for staff, and a guide to help operationalize expansion planning elements in an emergency.

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ICU Capacity Expansion Tool
Summary Document - Response

Introduction and Overview

Whereas the *Planning* section of the ICUCET is concerned primarily with constructing an organizational structure around which the ICU Surge Team (ICU-ST) members can prepare and recommend key capacity expansion activities, the *Response* section deals with the actual implementation of those actions. In both cases, all activity either derives from or reports to the ICU-ST - a team of healthcare professionals that has expertise in emergency management and capacity expansion.

The following Response Document will introduce surge capacity planners to the Response functions of the *Intensive Care Unit Capacity Expansion Tool* (ICUCET).
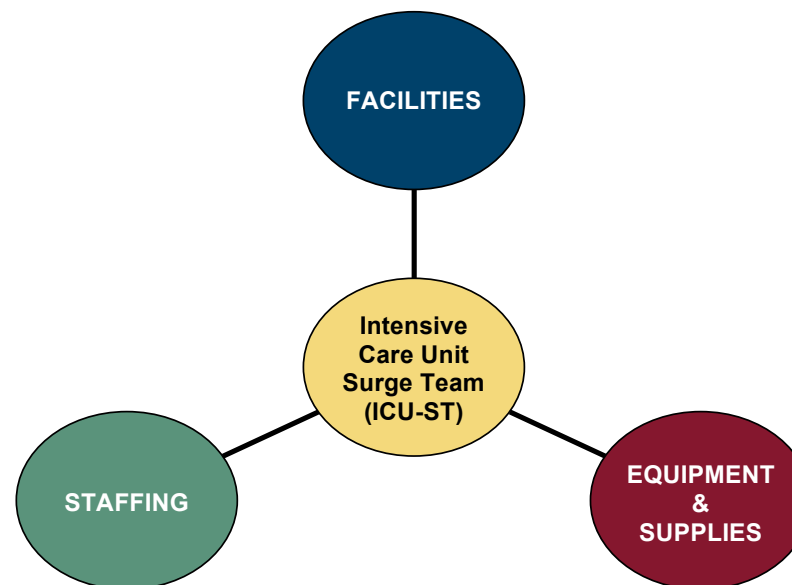
ICU Capacity Expansion Tool
Summary Document - Response

Key Surge Response Steps

1) **Convene** ICU Surge Team (ICU-ST) and review completed *Facility Expansion Catalog*.

2) **Assure** readiness of selected expansion area(s) using completed *Facility Planning Needs Checklist(s).*

3) **Assess** current and anticipated need for equipment and supplies in selected expansion area(s) using completed *Equipment & Supply Checklist(s)*.

4) **Review** completed *Staffing Plan(s)* for selected expansion area(s).

5) **Keep** ICS and Hospital Administration informed regarding expansion activities and needs. **Refer** to Departmental/Hospital policies and procedures regarding expansion activities.

Action	Phase	Step(s)	Outcome(s)
ICU Surge Team (ICU-ST) **Facility Assessment** **Equipment & Supplies** **Staffing**	**Response**	1. **Convene** ICU-ST when need for expansion surfaces. Review completed *Facility Expansion Catalog* to weigh expansion options against patient volume and type of services needed. **Monitor** ongoing. 2. **Assure** readiness of selected expansion areas. Before activating expansion plans, use completed *Facility Planning Needs Checklist(s)* to help prepare areas for their intended use 3. **Assess** current and anticipated need for equipment and supplies in selected expansion areas. Use completed *Equipment & Supply Checklist(s)* for <u>each</u> area and closely monitor ongoing. 4. **Review** completed *Staffing Plan(s)* for selected expansion areas. Take necessary steps to provide adequate clinical and non-clinical staff coverage.	⇨ Response team selects critical care expansion area(s) from *Facility Expansion Catalog* to accommodate increase in patient volume. ⇨ Response team confirms each expansion area's readiness by referencing their respective *Facility Planning Needs Checklist(s)*. ⇨ Response team confirms adequacy of each expansion area's equipment and supply needs by referencing their respective *Equipment & Supply Checklist(s)*. ⇨ Response team uses expansion area's *Staffing Plan(s)* to request additional clinical and support staff.
Administrative	**Response**	o **Keep** ICS (if activated) informed regarding your expansion activities and needs. o **Keep** Hospital Administration fully informed of activities and needs. o **Refer** to Departmental/Hospital Policies and Procedures regarding expansion activities.	⇨ Close communication with emergency and administrative response authorities will result in greater levels of support for expansion activities.

ICU Capacity Expansion Tool
Appendices
Introduction

OVERVIEW

Appendices are included in the Intensive Care Unit Capacity Expansion Tool (ICUCET) to help emergency managers complete basic capacity expansion planning and response action steps with correlating tools and templates, all of which are customizable to Critical Care/Hospital-specific needs.

APPENDICES DEFINED

Using the "completed" templates in this section as a guide, *Appendices A through C* offer the emergency planner an organized way to identify and prepare expansion areas for critical care operations. Appendix **A** presents three (3) facility templates that can be used to assess possible expansion areas. Note that blank templates can be found in the accompanying ICUCET file (see bottom of this page). Appendix **B** follows with a set of two (2) Equipment and Supply templates. The first challenges planners to review and, if necessary, complete or customize a list of equipment and supplies that would be needed for staff to conduct clinical activities in the expansion areas. The second template acts as a check sheet to evaluate each area's needs against that list. Finally, Appendix **C** offers a *Staffing Plan* that will encourage planners to assess and capture staffing coverage, tasks and responsibilities, and MRC preferences for each expansion area under review.

Working spreadsheets of all ICUCET tools are downloadable at:
http://www.nyc.gov/html/doh//html/em/emergency-surge.shtml

ICU Capacity Expansion Tool
Appendix A
Facilities

Reminders when using non-clinical space…

o   The decision to occupy non-clinical space will take time to execute and will need to have decanting and relocation plans for services that are displaced during the public health emergency. This is a critical consideration if displaced services have the potential to impact business continuity.

o   Include in your planning a response plan for the removal of existing office furniture and supplies and the deployment of requisite equipment and supplies identified for the care of patients.

COMPLETION STEPS

1. Conduct an ICU Surge Team (ICU-ST) walk-through of possible critical care expansion areas (see Planning Document, page 11). Using a blank *Facility Critical Needs Assessment Tool* template (see downloadable link on page 18), determine what facility considerations are essential to the clinical activities that will be conducted in expansion area(s). An example of a completed assessment tools is provided on the next page. Customize the template as appropriate to your Critical Care/Hospital-specific needs/requirements.
2. Before working on the next tool (the *Facility Planning Needs Checklist*), be certain that any changes made to the *Assessment Tool* list are carried over to the *Facility Planning Needs Checklist* so that both tools' lists mirror each other.
3. Then use the *Facility Planning Needs Checklist* template(s) to assess the adequacy of each identified expansion area, indicating your recommendation for which patient groups (e.g., Adult Non-Respiratory) that space is best suited. An example of a completed checklist is provided on page 21. Copy and create new forms as needed.
4. Next, catalog your selected expansion area(s) in the Facility Expansion Catalog on page 22 (example given).

NYC DOHMH SURGE CAPACITY EXPANSION TOOL				
1. Facility Critical Needs Assessment Tool for **Critical Care Capacity Expansion**				
ABC Hospital				
	ADULT Respiratory	**ADULT Non-Respiratory**	**PEDS Respiratory**	**PEDS Non-Respiratory**	**Notes**
Adaptability/Conversion of Space	*	*	*	*	
Bathrooms / Hand Washing Availability	*	*	*	*	
Central Station Monitoring	*		*		
Communication / IT Ports	*	*	*	*	
Emergency Power	*	*	*	*	
HVAC Considerations	*	*	*	*	
Medical Gases	*	*	*	*	
Monitors	*	*	*	*	
Negative Pressure	*		*		
Stretcher Accessible	*	*	*	*	
Utilities (incl Power Outlets)	*	*	*	*	
Suction	*		*		
Work Space	*	*	*	*	

2. Facility Planning Needs Checklist for **Critical Care Capacity Expansion**				
ABC Hospital				
Expansion Area & Location: Unit 12C (decommissioned meg/surg unit)				
Maximum Capacity: 14 beds				
Name / Title of Assessor: Joan Smith, DN			**Date:** 3/15/12	

	Need	Do NOT Need	N/A		Notes
Adaptability/Conversion of Space		*			
Bathrooms / Hand Washing Availability		*			
Central Station Monitoring			*		
Communication / IT Ports	*				call IT to connect, ext. 7690
Emergency Power		*			
HVAC Considerations		*			
Medical Gases	*				Call Engineering, ext. 3874; else req portable
Monitors	*				req portable monitors, ext. 7724
Negative Pressure		*			Note: 12C-3A & 4A neg pressure
Stretcher Accessible		*			
Utilities (incl Power Outlets)		*			
Suction	*				call Engineering; else req portable
Work Space		*			

Note: Overall Assessment	**ADULT Respiratory**	**ADULT Non-Respiratory**	**PEDS Respiratory**	**PEDS Non-Respiratory**	
This Space can be used for:	*	*	*	*	

NYC DOHMH SURGE CAPACITY EXPANSION TOOL

3. Facility Expansion Catalog
for Critical Care Capacity Expansion

Date: 3/15/12

ABC Hospital		ICU Capacity Expansion			
EXPANSION AREA		ADULT Respiratory	ADULT Non-Respiratory	PEDS Respiratory	PEDS Non-Respiratory
	# of Beds				
Unit 12C	14	X	X	X	X
Total	**14**				

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ICU Capacity Expansion Tool
Appendix B
Equipment & Supplies

Strategies & Tactics - Equipment & Supplies

o   Equipment and supply par levels should be developed for identified capacity expansion areas, either to supplement current supplies that are routinely utilized in the area, or as separate lists.
o   Plan for providing the clinical function in the space for a protracted time period.
o   Consider generic, fully-stocked disaster carts for use at any location.
o   Identify existing equipment and supply resources that are already available in the space. Make sure to assess whether these resources will be removed by the function that is being displaced.
o   Determine the potential sources of necessary equipment and supplies:
    •   Operational inventory, disaster stockpile, MOU (delayed delivery)

COMPLETION STEPS

1.   Use the *Equipment & Supply Needs Assessment Guide* to determine what equipment and supplies are required to support the different clinical activities that will occur in expansion areas. An example is provided on the next page. Customize the template as appropriate to your Critical Care/Hospital-specific needs.
2.   Before working on the next tool (the *Equipment & Supply Checklist*), be certain that any changes made to the *Assessment Guide* list are carried over to the *Equipment & Checklist* so that both tools' lists mirror each other.
3.   Then complete an *Equipment & Supply Checklist* template for <u>each</u> selected expansion area. An example is provided on page 25.

NYC DOHMH SURGE CAPACITY EXPANSION TOOL			
ABC Hospital			
1. Equipment & Supply Needs Assessment Guide for **Critical Care Capacity Expansion**			
	ADULT Respiratory	**ADULT Non-Respiratory**	**PEDS Respiratory**	**PEDS Non-Respiratory**
---	---	---	---	---
BP Machines	*	*	*	*
Cardiac Monitors/EKG (portable/stationary)	*	*	*	*
Communication Equipment (phones, IT ports)	*	*	*	*
Crash Cart	*	*	*	*
Documents (downtime/back-up)	*	*	*	*
Hand Cleaner	*	*	*	*
HEPA Unit (portable/stationary)	*	*	*	*
Information Technology	*	*	*	*
IV Poles / Pumps	*	*	*	*
Linens (incl pt gowns, scrubs)	*	*	*	*
Medication (incident-specfic)	*	*	*	*
0_2 (portable/stationary)	*	*	*	*
PCA Pumps	*	*	*	*
Personal Protective Equip (PPE)	*	*	*	*
Pulse Oximeter (hand-held)	*	*	*	*
Refrigerator (medication)	*	*	*	*
Refrigerator (patient food)	*	*	*	*
Regulated Waste Container	*	*	*	*
Sharps Container	*	*	*	*
Stretchers		*		*
Suction (portable/stationary)	*		*	
Supply Carts	*	*	*	*
Thermometers	*	*	*	*
Ventilators (portable/stationary)	*		*	
Wheelchairs		*		*
X-Ray (portable)	*	*	*	*

NYC DOHMH SURGE CAPACITY EXPANSION TOOL					
2. Equipment & Supply Checklist for **Critical Care Capacity Expansion**					
ABC Hospital					
Unit / Expansion Area & Location: Unit 12C (decommissioned med/surg unit)					
Maximum Capacity: 14 beds					
Name / Title of Assessor: Joan Smith, DN					**Date:** 3/15/12

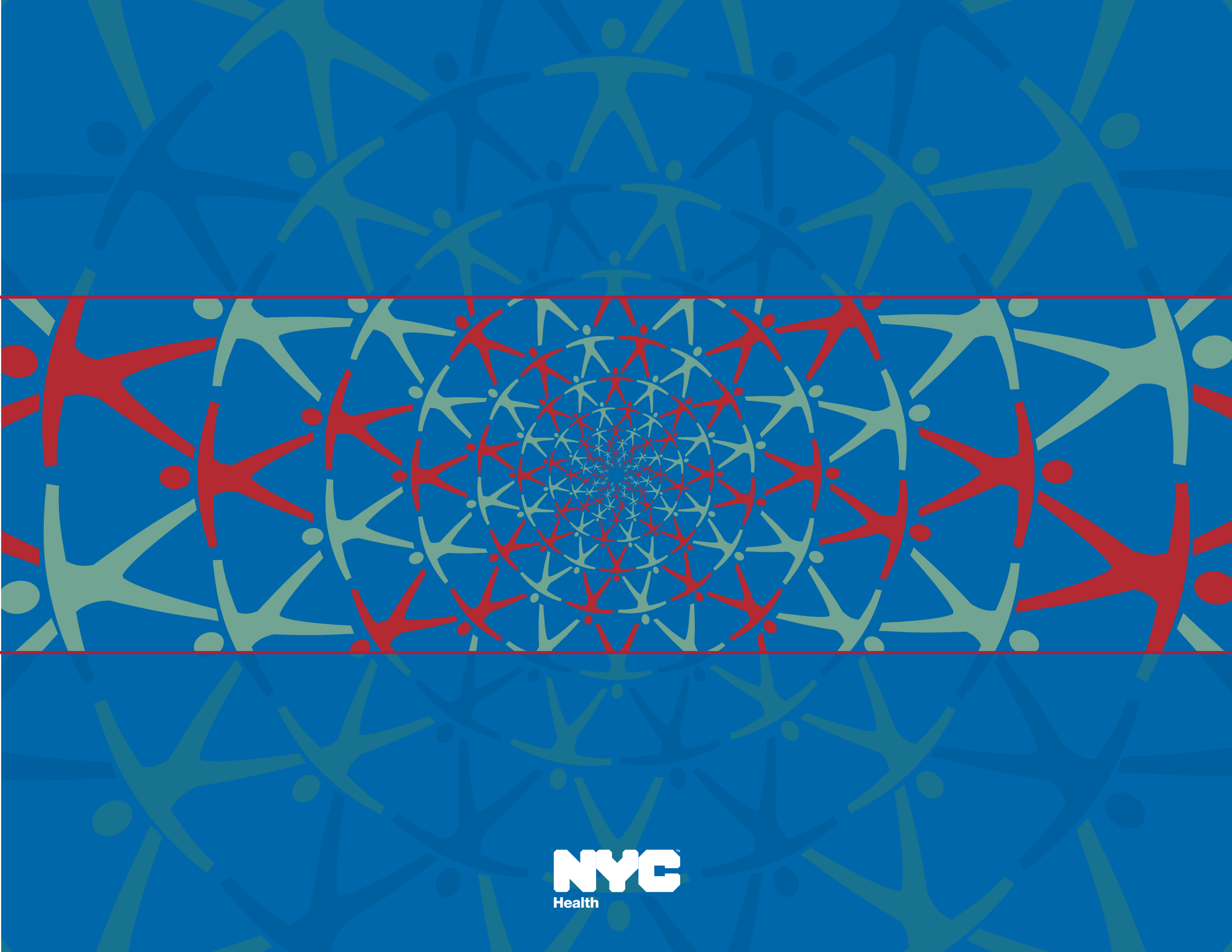|	Have It	Need It	N/A	Quantity	Storage Location	Notes
BP Machines	*					
Cardiac Monitors/EKG (portable/stationary)		*		2		Call Biomed Eng, ext 3519
Communication Equipment (Phones, IT Ports)	*					
Crash Cart	*				12C storage rm	
Documents (downtime/back-up)	*					
Hand Cleaner	*					
HEPA Unit (portable/stationary)		*		3		Call Biomed Eng, ext 3519
Information Technology	*					
IV Poles / Pumps	*				12C storage rm	
Linens (incl pt gowns, scrubs)		*				Call Linen Services, ext. 4949
Medication (incident-specific)		*				Call Phamacy, ext 3319
0_2 (portable/stationary)		*			3K	Call Resp Therapy, ext 2200
PCA Pumps		*		5		Call Pharmacy, ext 3319
Personal Protective Equip (PPE)		*				Call Infection Control, ext 2727
Pulse Oximeter (hand-held)	*					
Refrigerator (medication)	*				nsg stn	
Refrigerator (patient food)	*				nsg stn	
Regulated Waste Container	*				on floor	
Sharps Container	*				on floor/in rms	
Stretchers		*				Call IP Transport as needed, ext 2221
Suction (portable/stationary)	*					Call Resp Therapy, ext 2200
Supply Carts	*					
Thermometers	*				12C locker	
Ventilators (portable/stationary)	*			3		Call Resp Therapy, ext 2200 to arrange
Wheelchairs		*				Call IP Transport as needed, ext 2221
X-Ray (portable)		*		1		Call Radiology, ext 7759 to arrange

ICU Capacity Expansion Tool
Appendix C
Staffing Plan

COMPLETION STEPS

1. Use the *Staffing Plan* template to determine coverage needs (clinical and support) in each of the selected expansion areas. An example is provided on the next page. Customize the template as appropriate to your Critical Care/Hospital-specific needs.

2. Consider and document tasks and responsibilities for each category of staff, FTE requirements per shift (on- and off-hours), and whether or not you would consider using a Medical Reserve Corps volunteer to assume those responsibilities (where applicable).

NYC DOHMH SURGE CAPACITY EXPANSION TOOL

1. Staffing Plan
for **Critical Care Capacity Expansion**

ABC Hospital

Unit / Expansion Area & Location: Unit 12C (decommissioned med/surg unit)
Maximum Capacity: 14 beds
Name / Title: Joan Smith, DN | **Date:** 3/15/12

Professional Category	FTEs Required per Day Shift (M-F)	FTEs Required per Off-Hours Shift	Tasks & Responsibilities	MRC Volunteer Acceptable (Y/N)?	Notes
Physician - Attending	1.00	1.00	Acute Patient Care; Practice under Emergency Preparedness Standards.	Y	
Physician - Resident	2.00	1.00	Acute Patient Care; Practice under Emergency Preparedness Standards.	Y	
Physician - Assistant	0.00	0.00	Acute Patient Care; Practice under Emergency Preparedness Standards.	Y	
Nurse - Practitioner	1.00	0.00	Acute Patient Care; Practice under Emergency Preparedness Standards.	Y	
Nurse - RN	2.00	2.00	Acute Patient Care; Assist Head Nurse	Y	
Nurse - LPN	0.00	0.00	Activities of Daily Living (ADL); Ancillary Services	Y	
Ancillary - Respiratory Theapist	0.50	0.50	Respiratory Rx; Ancillary Services; Respiratory Care; Assisting with Treatments	Y	
Ancillary - Nurse's Aide	2.00	2.00	ADL; Ancillary Services; Assisting Nursing Function	Y	
Ancillary - Clerk	1.00	1.00	Administrative	Y	
Ancillary - Registrar	1.00	1.00	Patient Tracking; Patient Registration	Y	
Ancillary - EMT/P	n/a	n/a	N/A		