

Surge Space Checklist

Planning Pre-work

Operationalization:

Step 1: Determine the use of this unit (Med/Surg, Critical Care, Other)

In operationalizing a surge space, the first step is to decide the level of acuity or patient population that the surge space will accept. Different patients will have different needs in terms of staff, equipment, environment, and supply.

Additionally, special patient populations will require additional considerations. Some spaces will serve outpatients (i.e. Hemodialysis) and others will have high-risk security concerns (e.g. pediatrics, behavioral health).

Some examples of populations that will impact the space include:

- Pediatrics
- Geriatrics
- Infectious disease
- Behavioral health
- Hemodialysis
- Critical Care

Step 2: Locate space

Once the type of patient is identified, physical space needs to be identified in the facility for a surge unit. Considerations for the patient population should be taken in to account for identification of space. Once a location is identified, the following needs to occur:

- If the space is currently occupied by another department or unit, plans should be enacted to move them to another space. This must include all necessary equipment to ensure continuity of the department, if the department will remain operational.
- Space should be planned to have a clean utility room, a soiled utility room, and a supply room. Medication rooms are preferred, but not required.
- Space should have sinks for hand hygiene.
- Space should be provided for staff to do documentation.
- Space should be assessed for WiFi and connectivity. If WiFi or phone signal is unavailable, that will affect the space's functionality.

- For COVID patients ideally there should be negative air pressurization. The space must be risk-assessed HVAC capacity, temperature, airflow, and humidity.
- If possible, space should have an ante room for donning PPE as well as access to changing rooms and a shower near by when the space will house infectious patients (i.e. COVID-19)
- If possible, create a one-way flow for people and materials in/out of the unit. This is especially helpful in infectious disease units.

Step 3: Determine ability to occupy space

Once the space is identified, there is likely a number of environmental steps that need to be taken (i.e. Facilities department) to ensure the space is habitable for patient care:

- Plumbing: Inspect & Repair all water features (sinks, toilets, tubs etc.) and bring up to latest code requirements if needed,
- Medical Gases: Pressure Test & Repair All Vacuum, Medical Gas & Oxygen. Ensure supply is adequate for patient population (i.e. multiple outlets for critical care patients)
- Biomedical Equipment: Conduct Preventative Maintenance, replace batteries and repair parts as necessary, ensure patient lifts and Beds are in place
- Carpentry: Check and repair walls, doors, cabinets, and floors, ensure ceiling tiles are in place and clean.
- Paint: Fill holes, repair peeled paint, seal porous surfaces (sheetrock/wood)
- Electrical: Ensure lighting is adequate, light bulbs functional. Additional lights working. Power and Emergency power present and working. Load balanced for higher draw from equipment.
- Security: Hospital police to evaluate security risk and need for access. Ensure doors are locked appropriately and access is available (keys/codes) provided to unit

Step 4: Determine beds available for unit

Once space is physically ready, the beds need to be identified and created in the system to take patients. The number of beds (and type) will be critical to understand the additional needs of the unit. The beds must also be created in the Electronic Medical Record (EMR) or other supporting system to be integrated into patient care systems. The following will need to be done:

- Identify the number of beds and location name
- Create the location and beds in the system
- Identify the number of negative pressure or isolation rooms (Neg pressure)
- Identify the number of private and semi-private rooms
- Create criteria for admission to the unit

Step 5: Determine minimum equipment needed for unit

The following checklist should be pre-populated with the equipment needed for the surge unit based on the number of beds and acuity of the patient. If not enough of a specific item are available, planning considerations must be taken for resource allocation or from where the items will be moved.

- Beds – Physical type and location for the patients
- Environment of care needs: Curtains/Screens, Safes for patient valuables, laundry hampers, Garbage receptacles, Bio-hazard waste bins, sharps containers, Bedside commodes, Hand sanitizer stations, soap dispensers, paper towel dispensers, tray tables, iPad for family communication, Food refrigerator

- Biomedical equipment: monitors, vital sign machines, pulse oximeters, thermometer, defibrillator, suction equipment, glucometer, etc.
- Consumable materials
- Non-consumable materials
- Communication equipment: Telephones, patient call bells, walkie talkies or dry erase boards for staff communication, translation services
- IT Equipment: Computers, printers, rovers, scanners, mobile workstations
- Pharmacy Equipment: Medication storage system, refrigerator, medication carts, handling of narcotics, medications needed for the unit specifications.
- Linen needs including pars
- Downtime documents

Step 6: Determine staffing needed:

Most critical to opening a unit is ensuring that there are staff available to work in the unit. This must be completed before the unit can be opened and sustained. Staff may not be dedicated to the unit, but should be assigned and familiar with their roles in running the unit. Additionally, the use of in-house staff or temporary staff will affect the competency and familiarity with the facility and processes in place and should be taken into consideration. A best practice with additional staff would be to use a blend of in-house staff and temporary or deployed staff members to ensure that the continuity is maintained as best as possible. The following staff would be required to care for patients in a unit:

- Unit Leadership (Chief of Service, Director of Nursing)
- Physician Attendings
- Physician Residents
- Advanced Practice Practitioner
- Registered Nurses
- Patient Care Associates
- Clerical Staff
- Rehabilitation (Physical and Occupational Therapists)
- Respiratory Therapy
- Social Workers
- Housekeepers
- Other allied health professionals
- Infection Prevention

Step 7: Map out unit

Once equipment is identified and prepared, the space needs to be mapped and walked to ensure appropriate flow and everything is staged appropriately. Room numbers should be identified (if applicable) and communicated to the key stakeholders. At this step, verification of functionality is also done to be sure that items such as computers, printers, and phones are in working order. The following should be pre-mapped in the unit:

- Seating for personnel: MD/DO, APP, RN, PCA, Clerical staff, etc.
- Placement of IT equipment
- Placement of pharmacy equipment
- Location of a crash cart/defibrillator in case of a patient status declining
- Location and layout of supply rooms including consumables, non-consumables, and equipment, PPE

- If space is to be used for Special Pathogens or Infectious Diseases, identify hot/warm/cold zones and a one-way flow of traffic.
- Environmental scan of unit
 - # Private rooms (Neg pressure)
 - # Private rooms (regular)
 - # Semi-private rooms
 - # Shared rooms (# beds/room)

Policies & Protocols:

Units also need supporting policies and protocols to ensure that they can work appropriately. The following policies and protocols need to be created and communicated with staff in the area so that they can meet the needs of the patients. These are also items that need to be discussed and approved before the unit can be operationalized and will likely take time to prepare.

Determine patient admission criteria to unit for bed management – Not all surge units can support all patients. For example, an open unit may not be ideal for infectious disease patients. Clinical leadership must identify criteria for admission into the unit based on the capabilities. That can be made of either inclusive criteria (Patient must...) or exclusive criteria (Patient cannot...)

Movement of patients – A plan should be created and patients identified who would be brought to the unit. How patients will be transferred into the unit from other units, facilities

Supply Management and Delivery – Processes and schedules must be created for consumable supplies, non-consumable supplies, medication, linens, and equipment. These items are delivered to units on a normal basis and the departments must be engaged early to plan for increase in demand. Pars and schedules must be developed and worked into the hospital operations. This may also have staffing implications for the timely delivery when needed. Staff on the unit must also be familiarized with how to obtain more of items that they need throughout the day.

Environmental Services and Housekeeping Schedule and Protocol – To maintain Infection Control standards, the unit must be cleaned and sanitized appropriately including routine and terminal cleaning. This is even more important for infectious diseases. A housekeeping schedule and assignments must be created and staff informed of the assignment when it is available.

Delivery and Distribution of Nutrition – Patient nutrition is a critical component of their care. However, in some surge units, there can be difficulty delivering or keeping food on the unit. A refrigerator must be identified or an alternative space identified to support nutritional services. Additionally, the delivery of food and nutritionists must be built into rounds and schedule for delivery. Supplies must be increased to handle the higher patient volume, and accessibility of potable water for patients must be present to meet the patients' needs.

Diagnostic Testing and Radiological Studies – Testing and radiology are critical components of diagnosing and treating patients. In particular for infectious diseases such as COVID-19, special considerations will need to be assessed beforehand to ensure guidance and protocol is in place for a surge unit including delivery and storage. These may be critical for the inclusion/exclusion criteria for admission to the unit, or be a necessary component of the unit's function. Policies, protocols, and flow must be created to ensure that the unit can operate as efficiently as possible.

Signages and Posters: Infection Prevention and Control transmission-based precaution signs, hand hygiene and other visual cues are readily available.

Staff Education:

Staff deployed to the new unit have a number of items that they must receive. Just in Time Training, Tip Sheets, and other critical documents should be pre-made and placed on the unit prior to opening. Staff must be trained and oriented to the following:

- Infection Control education
- Unit specific information, such as locations, codes, phone numbers
- Critical phone numbers and information
- Safety information, such as security components, fire safety components, and evacuation procedures
- Schedules and escalation measures

Human Resources:

Not only do staffing levels need to be pre-determined, but a number of other staffing concerns must be addressed before the unit needs to be opened. The earlier this is contemplated and identified, the easier it is to involve stakeholders in the surge unit process and operationalize the space.

- Determine unit leaders and engage them in the planning process and checklist
- Determine staffing complement and proposed schedule for number of beds. Identify staffing ratios that maintain safety and meet available resources. This includes clinical and non-clinical roles
- Conduct on boarding and credentialing for staff (when applicable)
- Activate labor pool and assign staff from other areas to support the unit
- Orient staff to the unit (see Staff Education above)
- Identify other supporting services that will provide services to the space (e.g. security, spiritual support, maintenance, housekeeping, etc.)
- Other staff management considerations – IDs, security access, keys or access codes, parking, uniforms, etc.

Communication:

Communication must go out internally and externally to inform leaders and staff of the status and opening of units. Communication must start before the opening and when the unit opens. However, identifying the stakeholders and those who need to know is critical to the pre-work for any surge unit. Communication should align with a facility's communication plans and emergency operations plans.

Mass Notification Systems – If the facility has a mass notification system, either a full notification or smaller notification should be contemplated for informational purposes.

Communication to staff – Information should be sent out in writing to hospital staff using any means available to the facility.

Notification to Labor Union – In areas that have collective bargaining units, notification and engagement of the unions in the pre-planning process will allow for a seamless operationalization when a surge unit needs to be opened. Normal procedures should be followed to engage labor union partners.

Communication to Patients – If patients will be transferred, information should be provided to patients and families about the situation and surge units. This should be pre-crafted engaging patient experience units and guest relation departments.

Communication to Vendors and contracted support – Healthcare facilities use many external vendors and contracted supports to ensure operationalization. Engagement of these partners will help operationalize a surge unit. Oftentimes, these vendors may manage support services (e.g. construction, housekeeping) and may need to make accommodations to allow for the increased demand on their services.

Communication to External Entities – Oftentimes, depending on the jurisdiction, regulatory bodies may need to be informed of the surge unit, as well as local or state Department of Health. Referral partners would also need to be contemplated when surge units are made, such as how they interact with the healthcare facility (i.e. admissions).

SURGE UNIT CHECKLIST

Unit Name:
Use:
Current Condition:

	Contact	Responsible Party	Complete
Notification of Unit Mobilized (Everbridge/Alert us)			
CEO			
CMO			
CNO			
COO			
CFO			
Public Affairs			
Operations Center			
Pharmacy			
Pathology			
Environmental Services			
Biomedical Equipment			
IT			
Materials Management			
HR			
Emergency Management			
Respiratory Therapy			
Infection Control			
Hospital Police			
Anesthesiology			
Care Management			
Central Sterile			
Lab			
Patient Transport			
Radiology			
Social Work			
Linen			

Hours: 72-48h before unit open

Goal: Identification of staff and Arrival of unit Biomedical, IT, and Pharmacy needs

	Contact	Responsible Party	Complete
Placement of Patient Beds + Mattresses: - Number: - Current Location:			
Placement of Biomedical Equipment			
Vital Signs Machines: - Number: - Current Location:			
Pulse Oximeters: - Number: - Current Location:			
Thermometers - Number: - Current Location:			
Bedside Cardiac Monitors: - Number: - Current Location:			

	Contact	Responsible Party	Complete
Glucometer - Number: - Current Location:			
Weighing Scale - Number: - Current Location:			
EKG Machine - Number: - Current Location:			
Ophthalmoscope - Number: - Current Location:			
Otoscope - Number: - Current Location:			
Suction Regulators - Number: - Current Location:			
Oxygen cylinders - Number: 5 - Current Location:			

	Contact	Responsible Party	Complete
Placement of IT Equipment			
Computers - Number: - Current Location:			
Work Station on Wheels - Number: - Current Location:			
Computer Printers - Number: - Current Location:			
Document Scanner - Number: - Current Location:			
Label printers - Number: - Current Location:			

	Contact	Responsible Party	Complete
Patient Scanners - Number: - Current Location:			
Patient Rovers - Number: - Current Location:			
Placement of Communication Equipment			
Phones - Number: - Current Location:			
Interpreter Phone/Service			
Placement of Pharmacy Equipment			
Pyxis - Number: - Current Location:			
Medication Cart - Number: - Current Location:			
Code Cart - Number: - Current Location:			

	Contact	Responsible Party	Complete
Placement of staff chairs - Number: - Current Location:			
Identification of Staff for Unit			
Nursing Staff			
Provider staff			
Clerical Staff			
Respiratory staff			

Hours: 48-24h before unit opens

Goal: Arrival of environmental needs and protocols distributed

	Contact	Responsible Party	Complete
Posting of Signage (Patient Bill of rights) - Number: - Current Location:			
Environmental Needs/Furniture			
Curtains - Number: - Current Location:			
Safe for patient valuables - Number: - Current Location:			

	Contact	Responsible Party	Complete
Patient chairs - Number: - Current Location:			
Laundry Hampers - Number: - Current Location:			
Garbage Receptacles: - Number: - Current Location:			
Red Garbage Receptacles - Number: - Current Location:			
Sharps Containers - Number: - Current Location:			
Pharmacy Waste Bins (Blue/Black) - Number: - Current Location:			
Placement of Confidential Paper Bin - Number: - Current Location:			

	Contact	Responsible Party	Complete
Bedside Commodes - Number: - Current Location:			
Hand Sanitizer Stations - Number: - Current Location:			
Disinfecting Wipes - Number: - Current Location:			
PPE Cart - Number: - Current Location:			
Blood Pressure Machine - Number: - Current Location:			
Placement of Call Bells - Number: - Current Location:			

	Contact	Responsible Party	Complete
Overbed Tables - Number: - Current Location:			
iPads for family communication - Number:			
Identify Ice/Water Machine for Unit			
Arrival of materials from Blue Bin			
Communication of new protocols/procedures to staff			
Biomed check of equipment			
IT to confirm connectivity of equipment			
Creation of a Contact Sheet for Unit including phone numbers, leadership and staff information			
HIM to Turn on beds in EPIC and Other Platforms			
Hospital Police to Configure Swipe and/or Key Access			

Hours: < 24 hours to unit open
Goal: Final items/notification of opening

	Contact	Responsible Party	Complete
Infection Control Education			
Identification of patient to be moved into unit			
Arrival of linen			
Arrival of paper products/ Office Supplies			
Stocking of patient and staff bathrooms			
Downtime Forms Assignment Forms Educational Documents Current Location:			
Final walkthrough and sign off from: Infection Control EVS Supervisor Facilities Supervisor Hospital Police			IC: ____ EVS: ____ FM: ____ HP: ____
Welcome meeting to unit staff, publish schedules for clinical and support services.			
Isolation signs and holders			