COVID-19 Preparedness Checklist:
Planning Considerations for Acute Care and Long-Term Care Populations

*Visit the NC AHEC Program website to assure that you have the most up-to-date document.

Healthcare administrators in acute care and long-term care facilities need preplanned strategies for managing the physical space, workforce skills, and patient care supplies needed for maximum response to the COVID-19 crisis. COVID-19 surge planning is defined as the simultaneous evaluation of the capacity, or present ability to manage an influx of COVID+ patients, of an organization and capability, or the higher level of ability that can be achieved with the development and application of strategies to maximize resources, of that organization.

Background
Surge planning for COVID+ patients requires administrators to evaluate capacity and capability in **space**, **skills**, and **supplies**, and then develop and apply **structures** to move current capacity to maximum capability. This document provides guidelines and resources to prepare organizations for an increase in patient volume in the wake of the COVID-19 pandemic.

Surge Planning Guidelines: Walk through each step below for space, skills, and supplies.

1. Evaluate capacity:
   - Inventory current space, skills, and supplies needed for patient care
2. Evaluate capability:
   - Identify amount of space, skills, and supplies needed for maximum patient care volume
3. Develop and apply structures:
   a. Recognize gaps in space, skills, and supplies
   b. Develop and apply structures that raise capacity to meet capability
      - Structures can either be physical (i.e. makeshift hospitals, dedicated COVID+ units, converted ICUs, supply carts) or organizational (i.e. policies, procedures, protocols)

I. Planning for Space

1. Evaluate capacity

- ❑ Review your hospital/facility emergency operations plan for information on immediate bed availability and patient surge strategies.
- ❑ Review thresholds and triggers for activating your emergency operation plan and your surge management strategies.
- ❑ Review inpatient surge activities (early discharge planning, opening already certified beds or units, and the use of remote locations).
- ❑ Review outpatient surge activities (use of tents or mobile facilities located on/within the hospital/facility's campus).

2. Evaluate capability

- ❑ Begin preplanning for use of alternate care strategies (telemedicine services, capacity of nurse triage lines, increased hours for outpatient clinics, alternate care sites etc.).
- ❑ Use available modeling to predict total number of beds needed to address the most likely and worse-case impending patient surge.
- ❑ Determine appropriate location for alternate care sites based on regulatory requirements (availability of 1135 waiver, availability of NC GS 131E 84 waiver).
- ❑ Consider local code authority for fire and building codes are consulted during planning efforts.
- ❑ Consider how to support necessary services for the alternate care site (generators, electrical access, lighting equipment etc.).

Based off recommendations from The Healthcare Preparedness Program's Considerations for Managing Medical Surge, accessed from https://www.ncems.org/pdf/MedicalSurgeStrategiesChecklist.pdf

- ❑ Consider appropriate heating/cooling and ventilation systems can be met.
  - Consider capability for negative pressure.
- ❑ Coordinate your plans with partner agencies (local emergency management, local emergency medical service agencies, local public health agencies, public safety answering points, other nearby hospital systems, outpatient clinics not part of the healthcare system, regional healthcare coalitions).

3. Develop and apply structures

- ❑ Consult the COVID-19 Focused Infection Control Survey for Acute and Continuing Care and Configuring ICUs in the COVID-19 Era
- ❑ Prepare a multi-phased approach to dedicating, and converting when needed, additional COVID+ patient care areas.
  - Prepare a "conversion schedule" so alternate sites know which will be adapted to care for COVID+ patients, critically ill patients, and acute care patients at each time/patient-load interval.
  - Identify sites that are most prepared, stocked, and organized to convert to COVID+ patient care, other critically ill patient care, acute patient care, and emergency patient care.
  - Assign alternate sites that will be converted ahead of time and convert as needed. In facilities, assure that COVID+ spaces are confined to specific floors, hallways, or even buildings.
- ❑ Identify dedicated hallways and elevators for transport of COVID+ patients from the ED/admission area to the COVID wards in order to reduce contamination and spread during transport and admission.
- ❑ Communicate with partners, agencies, and regulatory authorities when thresholds and triggers within your emergency operations plan have been met and alternate care strategies are being considered.
- ❑ Determine a security site plan that specifically addresses staff and patient safety and physical protection for the alternate care site.
- ❑ Determine a safety site plan (to include evacuation plan in case of emergency and how to maintain constant communications with the staff working in the alternate care site).
- ❑ Determine what hours of the day you will utilize the alternate care site.
- ❑ Determine how to handle traffic control issues related to the alternate care site to ensure Emergency vehicular access to the ED for patient drop off and emergency response vehicle access (e.g. police, fire, EMS) can be maintained.

II. Planning for Skills

** Resources for surging workforce skills are available on the NC AHEC Program website.*

1. Evaluate capacity

- ❑ Inventory specialized care skills of internal health care workers.
- ❑ Inventory disaster preparedness, public health, and leadership skills of internal staff.

2. Evaluate capability

- ❑ Identify the specialized skills needed for mass patient care.
- ❑ Identify the specialized skills needed to lead surge planning and management team if not yet established (Surge Command Center).
- ❑ Identify gaps in essential patient care skills.
- ❑ Identify additional external workforce and coordinate with these partner agencies:
  - local emergency management
  - local emergency medical service agencies
  - local public health agencies
  - public safety answering points
  - other nearby hospital systems
  - outpatient clinics not part of the healthcare system
  - regional healthcare coalitions for additional, external workforce

- federal resources-DMATs, Public Health Service, VA
- temporary staffing agencies

❑ Evaluate current credentialing and licensure requirements at the facility and state levels.

❑ Evaluate the facility's ability to clean, disinfect, and provide food services to increased bed load with environmental engineering department.

3. Develop and apply structures

❑ Preplan for workforce surges across the continuum of care (critical care, acute care, primary care, long term care, assisted living, home-based care).

❑ Develop a Surge Command Center to centralize deployment decisions.

❑ Expedite credentialing processes and consult with the state about plans for relaxing of licensure to include providers with licenses in other states.

❑ Determine what types of patients will be served in alternate care sites.

❑ Determine how to staff and support the patients in alternate care sites.

- Consider the environmental limitations of each site and how this may affect staffing (e.g.: "Open-bedding" units - units with multiple beds in one room - require that staff members in the unit are fully donned while in the unit. This creates higher staff demands because the individual in the "open-bed" unit must be relieved regularly for basic needs, such as hydration, brief mental rest, using the restroom, pumping if breastfeeding, etc.).
- Consider keeping staff in their home units and cross-train when needed. Consistency reduces time needed to orient new staff to a new location, allowing for more efficient care.
- Consider implementing alternative precautions with staff members who may work secondary health care jobs.
- Staff each unit (or building, hallway) to limit movement in and out of COVID+ or possibly COVID+ patient rooms and rooms with patients unlikely to be COVID+.
- Provide face masks or shields to COVID+ patients in order to prevent spread during transport and hospital admission.
- Create policies that prevent cross-staffing units (or even buildings in facilities) with healthcare workers who work with immunocompromised or especially vulnerable patients and healthcare workers in direct care of COVID+ patients (e.g. Providers from oncology and transplant units should not cross-staff to dedicated COVID+ units; staff members in memory care should not cross-staff with assisted living or vice versa).
- Implement proactive strategies to prevent staff attrition and burnout.

❑ Develop policies to protect high risk patients and staff.

- High risk staff: Consider limiting exposure of pregnant clinicians from care of patients with COVID-19, particularly during high risk procedures that increase exposure. Evaluate other high-risk staff (those who are immunocompromised, have pulmonary disease, cardiovascular disease, or hypertension) to determine their risk of exposure and ability to wear the required personal protective equipment.
- High risk patients: Triage non-urgent and high-risk patient cases from confirmed COVID+ patients and clinicians involved in the care of COVID+ patients.

❑ Provide just-in-time training for reassigned, external, returning, and newly graduated workers to fulfill skills gaps.

❑ Identify evidenced-based resources for ongoing training and assure accessibility to staff.

❑ Create team-based care with a broad range of skills and assign to relevant patient care areas.

❑ Provide workforce support with virtual consultation hotlines.

❑ Assure workforce has necessary equipment to execute skills.

- Train additional personnel on location of supplies on units, on supply carts, within supply closets. These personnel can function as both re-stockers and "runners".
- Train additional personnel in PPE use, proper donning and doffing techniques, and in PPE conservation.

❏ Develop a plan for housing/sheltering staff who need to quarantine from household members who are at high risk.
- Consider working with local hotels to get wings to provide temporary housing.
- Frontline workers who are members of the American Nurses Association can reserve up to 7 free consecutive nights at Hilton hotels across the US.

❏ Determine the need to hire or outsource staff for the environmental engineering department.

III. Planning for Supplies

1. Evaluate capacity

❏ Inventory supplies most likely to be needed with the surge population.
- PPE: masks, hoods, booties, surgical caps, gloves, face shields. Request PPE from DHHS if needed.
- Medications: Respiratory medications, sedatives, analgesics, antibiotics, antivirals, antipsychotics, vasopressors, etc.
- Other patient care supplies: IV tubing, central line supplies, skin protectants, foley catheters, etc.

❏ Inventory technology and accessories needed to care for the surge population.
- Technology: ventilators, pyxis/medication distributing machines, supply carts, HEPA filters, tubing (intubation, ventilator tubing, etc.), IV pumps, computers or other resource access tools

2. Evaluate capability

❏ Use available modeling to estimate supplies needed to address the most likely and worse-case impending patient surge.

❏ Determine if adequate equipment and supplies for the alternate care site can be located/re-located from other spaces (beds, patient monitors, oxygen, crash cart, restrooms, handwashing stations with hot water at 105-120 degrees etc.).

3. Develop and apply structures

❏ Determine how to manage clean supplies and soiled supplies within the alternate care site.

❏ Prepare supplies and technology for distribution.

❏ Stock supply carts ahead of time and label for appropriate unit.
- Establish consistency of supply carts and closets on each unit by creating protocols for how supplies are stocked, e.g. supplies should be organized similarly on every cart, in every closet, on every unit.
- Assure each supply closet/cart is labelled.
- Take pictures of supply closet/cart organization for reference and easy re-stocking.

❏ Develop back-up plans for supply shortages.
- Work with pharmacists to formulate plans for alternative and second choice medications in the event of critical drug shortages.
- Prepare for shortages of cleaning supplies by identifying alternate cleaning solutions.
- Reference hospital ethics committee and published guidelines to prepare for ventilator triage and rationing of resources.
- Deploy or re-purpose additional technology for staff to access the electronic medical record and references in anticipation of computer shortages.

❏ Create protocols for efficiently repairing or replacing technologies.

❏ Determine a schedule for maintenance/engineering on-call.

- ❑ Adapt visitation policies limiting non-essential personnel. Allowing one visitor per COVID+ patient increases PPE consumption by 150%.
- ❑ Consider preparing staff to access references on mobile devices.
- ❑ Print physical, laminated copies of one-page guidelines and tip sheets for rapid references if computers become difficult to access.
    - Stock multiples of each document for staff easy access.
    - One-page resources/pocket references are available in the NC AHEC Program website.

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Revision history:

04/08
- Altered 5MinuteConsult instructions

04/09
- Planning for space, section 3, added *Identify dedicated hallways and elevators for transport of COVID+ patients from the ED to the COVID wards in order to reduce contamination and spread during transport and admission*
- Planning for skills, section 3, added *Provide face masks or shields to COVID+ patients in order to prevent spread during transport and hospital admission*

04/13
- Updated link for 5MinuteConsult
- Added ANA/Hilton hotel link to Section 2-3

04/16
- Updated link for 5MinuteConsult

04/17
- Added to Section III-1: Request PPE from DHHS if needed.
- Added to beginning: *Visit the NC AHEC Program website to assure that you have the most up-to-date document.

04/18
- Re-named document

04/27
- Added facility specific guidelines throughout the document.
- Added the COVID-19 Focused Infection Control Survey for Acute and Continuing Care to section I-3.

07.23
- Added new resource for ICU planning
- Removed 5 minute consult resource – subscription ended