Hospital Operations Toolkit for COVID-19

Capacity:

Staffing

November 30, 2020

Staffing, particularly the availability of critical care nursing and respiratory therapy staff, has proved to be the major limiting factor to maximizing surge capacity. Staff are needed to care for the surge of COVID-19 patients in addition to their hospital's usual patient mix and maintain continuity of operations. Tragically, thousands of hospital staff have contracted COVID-19 – leading to hospitalization and death for many – and others are experiencing burnout due to the prolonged response under difficult circumstances, further adding to staffing pressures. Limited federal resources and high demand on national contract agencies for staff mean that states and facilities may face difficult challenges.
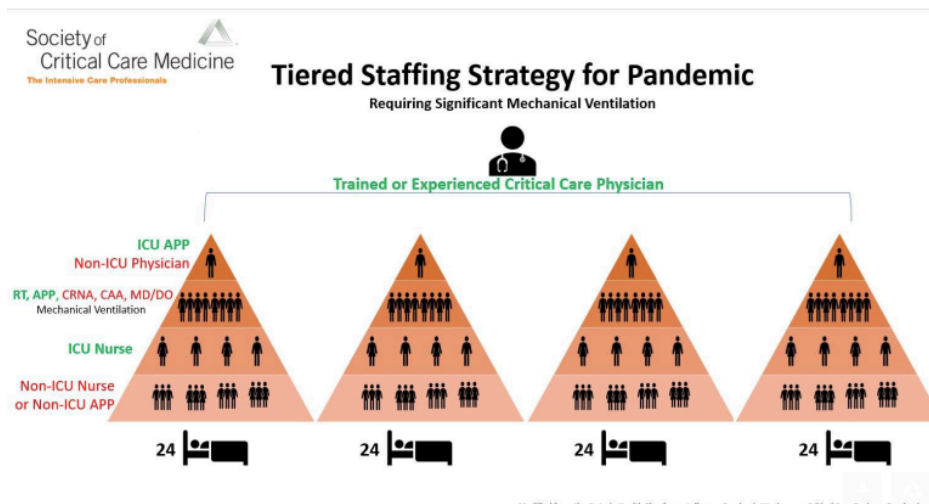
Surge Staffing Options

While clinical staff tend to be the focus, staffing shortfalls may be experienced across all hospital functions during the pandemic. For example, additional logistics staff may be needed to manage the increasingly complex supply chain or more environmental services personnel may be necessary to meet infection prevention requirements. Hospitals should assess all their critical functions and identify any projected staffing needs and ways to address them. Some of the surge staffing strategies hospitals can consider include:

- "Stepping up" – Train providers to step up to a level of care just above their usual under the supervision of a higher-level provider trained in that area.
    - Outpatient providers trained to provide floor/alternate care site general medical inpatient care, including orientation to medical records systems, medication administration procedures, etc.
    - General medical/surgical unit nurses to monitored unit care.
    - Monitored unit staff to intermediate care.
    - Intermediate care to intensive care.
- "Stepping over" – Orient providers with appropriate skill sets to a new environment.
    - Specialty staff provide general/intermediate care (e.g., orthopedic physician assistant becomes member of medical unit team).
    - Anesthesia staff provide critical care.
    - Pharmacists round with care team.

Refer to the Crisis Standards of Care section for additional considerations on when to employ these surge staffing strategies.

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- o Emergency medical services staff assist with triage.
  - o Respiratory therapists shift from home care to inpatient services.
  - o Outpatient dialysis staff provide inpatient renal replacement therapy care and support.
- Changing staffing ratios (e.g., 4:1 rather than 2:1 ratio for critically ill patients).
- Changing staffing model (e.g., specialty staff supervise more general providers who provide the majority of the bedside care). Figure 1 illustrates an example of this approach.
  - o Floor nurses could care for intensive care unit (ICU) patients 2:1 and have an ICU nurse supervise 10 ICU patients using a team nursing approach.
  - o A single critical care physician could supervise 4 hospitalists caring for 15 patients each.
  - o Traditional models of rounding could be modified to include telemedicine or different team composition to reduce the number of persons involved, their time commitment, and exposure risk.
  - o Special teams could be used to support proning, airway/vascular access, or case management of COVID-19 patients.
- Redeploying staff or shifting services.
  - o Set up a labor pool drawn from areas of the hospital or the health system, if applicable, with less demand. For example, outpatient clinic front desk coordinators could be redeployed to patient registration and screening or social workers, psychologists, and chaplains could be redeployed to provide patient and staff mental health services.
  - o Use telemedicine for consults and other staff support.
  - o Reduce the surge of patients arriving at the hospital through the use of call centers and remote technologies for patient screening, monitoring, and treatment.
  - o Direct patients to staffed sites established by response partners to address specific needs, such as COVID-19 testing locations, infusion centers for monoclonal antibody therapy, or isolation and rehabilitation facilities for those who have been discharged or do not require hospitalization.
  - o Ensure administrative and other staff can continue to work from home with appropriate technology, remote access to services, and attention to cybersecurity.
  - o For hospitals that are part of a larger health system, deploy staff from another facility within the system with less staffing demand.
- Acquiring additional staff through hiring, contracting, or the use of volunteers.

Figure 1. Courtesy of Society of Critical Care Medicine

Tiered Staffing Strategy for Pandemic
Requiring Significant Mechanical Ventilation

Modified from the Ontario Health Plan for an Influenza Pandemic Workgroup. *Critical Care During a Pandemic.*

Figure 2 Note: *In the crisis model presented here, a physician who is trained or experienced in critical care and who regularly manages ICU patients, oversees the care of four groups of 24 patients each. A non-ICU physician (eg, anesthesiologist, pulmonologist, hospitalist), who ideally has some ICU training but who does not regularly perform ICU care, is inserted at the top of each triangle. This non-ICU physician extends the trained or experienced critical care physician's knowledge, while working alongside APPs who regularly care for ICU patients. Similarly, to augment the ability to mechanically ventilate more patients, experienced ICU respiratory therapists and APPs are amplified by adding clinicians such as physicians (either MD or DO), nurse-anesthetists, and certified anesthesiologist assistants who are experienced in managing patients' ventilation needs*

Resources Related to Surge Staffing Options

- American Society of Anesthesiologists: COVID Activated Emergency Scaling of Anesthesiology Responsibilities (CAESAR) ICU
- American Society of Health-System Pharmacists: Patient Surge Management During a Pandemic: Toolkit for Hospital and Health System Pharmacy
- ASPR:
  - Medical Assistance
  - The Emergency System for Advance Registration of Volunteer Health Professionals
- ASPR TRACIE:
  - COVID-19: Healthcare System Operations Strategies and Experiences
  - Staff Absenteeism Resources
- Centers for Disease Control and Prevention: Strategies to Mitigate Healthcare Personnel Staffing Shortages
- American Society of Nephrology: Scarce Resources Roundtable Report and Hot Spot Resources
- COVID Staffing Project: Staffing Tools
- COVID-19 Health Care Resilience Taskforce:
  - Staffing Playbook: Actions to Address Healthcare Worker (HCW) Shortages during COVID-19
  - Strategies for Managing a Surge in Healthcare Provider Demand

- Envision Physician Services: Emergency Physician and Midlevel Surge Capacity Protocol (ED & IPS)
- Federal Emergency Management Agency: Medical Staffing Requests Advisory
- Healthcare Resilience Task Force: COVID-19 Workforce Virtual Toolkit: Resources for Healthcare Decision-Makers Responding to COVID-19 Workforce Concerns
- Hick, J.: Critical Care Planning – COVID-19 Quick Notes
- Institute for Healthcare Improvement: Hospital Preparedness for a COVID-19 Surge: Assessment Tool
- Kaiser Permanente Northern California: COVID-19 Hospital Surge Playbook
- Martland, A., Huffines, M., and Henry, K.: Surge Priority Planning: Critical Care Staffing and Nursing Considerations
- National Emerging Special Pathogens Training and Education Center: Workforce Innovation: How to Reassign, Redeploy, and Leverage Advanced Practice Providers and Staff During the COVID-19 Pandemic
- The National Academies of Sciences, Engineering, and Medicine:
  - How Can Hospitals Overcome Staffing and Supply Shortages Amid COVID-19 Surges?
  - Rapid Expert Consultation on Staffing Considerations for Crisis Standards of Care for the COVID-19 Pandemic
- North Carolina Area Health Education Centers Program: COVID-19 Workforce Surge Planning Playbook for Patients Requiring Critical or ICU Care
- Society of Critical Care Medicine: Critical Care for the Non-ICU Clinician

Licensing/Credentialing

Hospitals should know how to navigate complex licensing and credentialing issues associated with surge staffing. Issues to consider include:

- Understanding state-specific options for use of out-of-state providers.
- Understanding state-specific professional licensing requirements for providing telehealth alternatives to out-of-state patients who would typically travel to your hospital for their care or treatment.
- Understanding waivers and other options to use caregivers in non-traditional roles (e.g., using an athletic trainer for a healthcare assistant, supervising medical and allied health care students).
- Establishing mutual aid agreements within your health system, including staffing thresholds.
- Establishing healthcare coalition mutual aid agreements for staffing. Include the use of Medical Reserve Corps volunteers and set thresholds and preferences for the use of those volunteers.
- Establishing a fast-track review and approval process for volunteers.
- Understanding that onboarding and staff management policies are critical to success.
  - Provide mentoring/supervision of employees new to the work area.
  - Determine safe responsibilities/scope of practice.

- o Troubleshoot access and orientation to the electronic health record (EHR) to avoid issues.
- o Establish a "fast-track" human resources process for vetting and onboarding staff according to need and origin (i.e., a practicing provider in the same job category from a facility in the same state should require minimal vetting).

Resources Related to Licensing/Credentialing

- American College of Emergency Physicians: ACEP COVID-19 Field Guide
- ASPR TRACIE: Healthcare Facility Onboarding Checklist
- COVID-19 Health Care Resilience Taskforce: Strategies for Managing a Surge in Healthcare Provider Demand
- Healthcare Resilience Task Force: COVID-19 Workforce Virtual Toolkit: Resources for Healthcare Decision-Makers Responding to COVID-19 Workforce Concerns

Training

Regular and just-in-time training are necessary for staff and patient safety and efficient hospital operations. Staff should understand their responsibilities, be familiar with their working environment, supplies, and equipment, and be updated as policies, processes, and protocols change. Topics to include in training and continually reinforce include:

- Unit onboarding and standard work for staff new to the work area.
- Mentor/supervisor responsibilities in establishing the amount of autonomy new staff have and a graded process for escalation of responsibility.
- Orientation to new equipment.
- EHR "stops," order sets, or "best practice" flags when new orders or medications are involved.
- Competency assessments for operating specific new equipment.
- Competency assessments for the use of personal protective equipment.
- Quality indicators and a process for training effectiveness and corrective action plans.

Resources Related to Staff Training

- ASPR TRACIE:
  - o Healthcare Facility Onboarding Checklist
  - o Hospital Intensive Care Unit (ICU) Surge Training Resources
- Emory Healthcare: CRRT ICU Education Cards
- Healthcare Resilience Task Force: COVID-19 Workforce Virtual Toolkit: Resources for Healthcare Decision-Makers Responding to COVID-19 Workforce Concerns
- North Carolina Area Health Education Centers Program: COVID-19 Workforce Surge Planning Playbook for Patients Requiring Critical or ICU Care
- Society of Critical Care Medicine: Critical Care for the Non-ICU Clinician

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Staff Safety/Personal Preparedness

Staff safety and well-being are essential to continued operations and effective patient care. Hospitals should ensure support for staff, potentially including:

- Regular messaging appropriate to the stage of the response that ensures situational awareness and communication of policy and procedure changes.
- Resilience-building programs and Psychological First Aid as needed.
- "Buddy" assignments (i.e., coworkers designated to check in on each other at regular intervals).
- Appropriate breaks and respite (and safe locations to support doing so).
- Encouragement and recognition of staff efforts (e.g., lives saved and patients discharged).
- Regular rounding or other high visibility presence by senior hospital leadership, safety, and emergency management staff to instill confidence, allay staff fears, and reinforce desired staff behaviors.
- Hazard pay or other incentives.
- Childcare support.
- Temporary housing for those concerned about exposing household members.
- Transportation support for those reliant on public transit or other commuting methods that may have been altered by the pandemic.
- Other incentives such as food or meal delivery to homes or discount programs.

> Additional information about protecting staff from COVID-19 transmission risks is available in the Administrative Controls and Personal Protective Equipment sections.

The increase in regular personal protective equipment use can also lead to adverse effects on users. Hospitals should work with their infection prevention specialists to address individual staff issues such as mask dermatitis.

Hospitals should also update their staff line of duty death plan to ensure it reflects the current pandemic and the effects on staff of losing a colleague to COVID-19.

Resources Related to Staff Safety

- American College of Emergency Physicians: ACEP COVID-19 Field Guide
- American Society of Nephrology: Mental Health Resources
- ASPR TRACIE:
  - COVID-19 Behavioral Health Resources
  - Disaster Behavioral Health Self Care for Healthcare Workers Modules
  - Mini Modules to Relieve Stress for Healthcare Workers Responding to COVID-19
  - Responder Safety and Health Topic Collection
  - Speaker Series: COVID-19 Healthcare Professional Stress and Resilience
  - Speaker Series: Healthcare Operations During the COVID-19 Pandemic
  - Speaker Series: Maintaining Healthcare Safety During the COVID-19 Pandemic

- Centers for Disease Control and Prevention (CDC): Preparedness Tools for Healthcare Professionals and Facilities Responding to Coronavirus (COVID-19)
- Center for the Study of Traumatic Stress: Sustaining the Well-Being of Healthcare Personnel during Coronavirus and Other Infectious Disease Outbreaks
- Cleveland Clinic: Caregivers
- COVID-19 Healthcare Resilience Task Force:
  - Health Promotion to Enhance Healthcare Worker Performance During COVID-19
  - Preventing and Addressing Moral Injury Affecting Healthcare Workers During the COVID-10 Pandemic
- Hackensack Meridian Health: Team Member Info
- Healthcare Resilience Task Force: COVID-19 Workforce Virtual Toolkit: Resources for Healthcare Decision-Makers Responding to COVID-19 Workforce Concerns
- Institute for Healthcare Improvement: Hospital Preparedness for a COVID-19 Surge: Assessment Tool
- Intermountain Healthcare: Caregiver Updates
- Martland, A., Huffines, M., and Henry, K.: Surge Priority Planning: Critical Care Staffing and Nursing Considerations
- Mount Sinai: COVID-19 Staff Resources
- National Center for PTSD: Moral Injury
- North Carolina Area Health Education Centers Program: COVID-19 Workforce Surge Planning Playbook for Patients Requiring Critical or ICU Care
- The Ohio State University College of Medicine: Brief Emotional Support Team Training
- University of California San Francisco: COVID Related Staff and Provider Support

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