

April 1, 2020

Caring with Limited Resources during the COVID-19 Crisis: A Compilation of Resources for Your Team

The Issue

The novel coronavirus (COVID-19) pandemic is placing unprecedented demands on America's entire health care system. As the number of patients needing acute hospital care rapidly increases, hospitals may be challenged with significant shortages of staff and medical supplies such as personal protective equipment (PPE), hospital beds, medicines and medical devices such as ventilators.

America's hospitals are doing everything possible to enhance the availability of the vital tools and resources needed to care for patients during this pandemic. They are working with their suppliers to bolster their inventories as much as feasible. The AHA also is working with federal agencies and with Congress to bolster pandemic response resources, including advocating the use of the Defense Production Act and connecting manufacturers who can produce masks with hospitals and health systems through the "100 Million Mask Challenge." Hospitals also are working closely with their state and local governments to access the Strategic National Stockpile and, where available, state government stockpiles. Moreover, they are working to increase hospital bed availability through surge capacity and coordinating with governmental partners on temporary alternative hospital sites (e.g., dorms, tents).

However, at times during the pandemic, front-line clinicians and hospital leaders may face extraordinarily challenging decisions about how to deploy limited staff and resources. Consequently, hospitals and health systems have expressed interest in tools and resources to help them apply consistent approaches to making these difficult decisions that are consistent with their organization's values and their community needs.

What You Can Do

The AHA has attached a list of resources, tools and sample policies that hospital and clinical leaders may find helpful in developing their own organization's approach to caring for patients with limited resources or under crisis circumstances. In addition to resources related to clinical ethics and crisis standards of care, this compilation includes selected COVID-19 related protocols and educational tools from hospitals and specialty societies that grapple with challenging circumstances.

Please note that the tools listed do not necessarily reflect the views of the AHA, nor do they constitute clinical advice from the AHA. Rather, they are meant to assist hospitals and health systems in devising or refining their own approaches.

Hospitals and health systems are encouraged to:

- Share this update and compendium with your key clinical and administrative leaders, including your chief medical officer, chief nursing officer, general counsel and leaders from your emergency, pulmonary/critical care, palliative care, spiritual care, hospice and clinical ethics departments;
- Review existing organizational policies around ethics, end-of-life care and disaster response, and consider revisions; and
- Stay abreast of guidelines and requirements for crisis standards of care and clinical ethics from your state and local health authorities.

Further Questions

Contact Akin Demehin, director of policy at ademehin@aha.org, or Elisa Arespachaga, vice president of the AHA Physician Alliance, at elisa@aha.org.

COVID-19 RESOURCES

FOR YOUR CLINICAL TEAM

Below are resources for clinical teams as they prepare for and respond to COVID-19 in your community. For additional non-clinical resources, visit the American Hospital Association's [COVID-19 resource hub](#). Please note that the tools do not necessarily reflect the views of the AHA, nor do they constitute clinical advice from the AHA.

Ethical Guidance in the COVID-19 Era

American Medical Association | Guide: AMA Code of Medical Ethics: Guidance in a Pandemic

Highlights key guidance including physician responsibilities in disaster response and preparedness as well as the allocation of limited resources.

The Hastings Center | Report: Ethical Framework for Health Care Institutions Responding to Novel Coronavirus SARS-CoV-2 (COVID-19)

For use within a health care organization's preparedness work, supplementing public health and clinical practice guidance on COVID-19. It aims to help structure ongoing discussion of significant, foreseeable ethical concerns arising under contingency levels of care and potentially crisis standards of care.

The Center for Practical Bioethics | Resource Hub

Curated guidance on ethical considerations in pandemics, including allocation of scarce resources.

New England Journal of Medicine | Article: Fair Allocation of Scarce Medical Resources in the Time of COVID-19

New England Journal of Medicine | Perspective: The Toughest Triage – Allocating Ventilators in a Pandemic

Louisiana State Department of Health | Guide: State Hospital Crisis Standard of Care Guidelines in Disaster

Helps hospital and health system policymakers in determining local and regional policies in a disaster.

National Academies of Medicine | Perspective on Health Care Crisis Standards and COVID-19

Capacity Planning Tools

Penn Medicine | CHIME Tool

Assists hospitals with COVID-19 capacity planning.

Clinical Resources for Front-line Providers

American College of Physicians | Guide: COVID-19: A Physician's Guide + Resources

Provides front-line providers guidance on COVID-19 diagnosis, treatment and response.

Society of Critical Care Medicine

- **Guide: Surviving Sepsis Campaign COVID-19 Guidelines**
Manages critically ill adults with COVID-19 in the ICU.
- **Infographic: COVID-19 with Hypoxia**
- **Infographic: COVID-19 with ARDS Resource Guide**
- **Guide: COVID-19 ICU Preparedness Checklist**
Single-sheet resource with embedded links to related documents, videos and other tools.
- **Guide: Preparing Your ICU for Disaster Response**
Includes communications plans, how-to guide for building surge capacity, understanding ethical decision making and more.

American College of Cardiology | Resource Page: COVID-19 Guidance

Perspectives on treatment of COVID-19 and cardiovascular disease.

American Academy of Family Physicians | Checklist: Preparing Physician Offices for COVID-19 Treatment

American College of Radiology

- **Resource Page: COVID-19 Radiology-Specific Resources**
Helps radiology professionals make informed decisions during COVID-19.
- **Guidelines: Use of CT and Radiography for Suspected COVID-19 Infection**

Extracorporeal Life Support Organization | Resource Page: Use of ECMO to Support Patients with COVID-19 Resources

Includes guidelines, webinars and podcasts.

HHS | Guidance on Optimizing Ventilator Use during COVID-19 Pandemic (March 31)

NewYork Presbyterian | Guidelines for Airway Management of Suspected or Confirmed COVID-19 Patients (as of March 23)

Process for Using Intubation Bags for Suspected or Confirmed COVID-19 Patients (as of March 23)

Ventilator Sharing Protocol: Dual-Patient Ventilation with a Single Mechanical Ventilator for Use during Critical Ventilator Shortages

Communication and Palliative Care

Respecting Choices | Planning and Support Resources for COVID-19

Facilitates proactive discussions ahead of severe illness, including tools to support treatment decisions and planning guides.

Center to Advance Palliative Care | COVID-19 Toolkit

Crisis communication and symptom management protocols for all clinicians and tools to help palliative care teams address high levels of volume and stress during a crisis.

VitalTalk | Playbook: Practical Advice for Clinicians for Having Difficult Conversations About COVID-19

Licensing, Clinical Education Resources

The Federation of State Medical Boards | List: State Licensure Waivers in Response to COVID-19

NCSBN | List: Nursing Licensure Waivers in Response to COVID-19

ACGME | Framework for Graduate Medical Education During COVID-19

Includes GME operations suspended so organizations and faculty members can focus on the needs of patients.

ACCME | List: Continuing Education Resources on COVID-19

Additional Educational Resources

American College of Emergency Physicians | Courses

- Telemedicine
- Different types of ventilators, settings and management of patients on ventilators.
- Care of critical patients who require ICU care when the ICU is full.
- Respiratory therapy and the pathophysiology and pharmacological management of acute decompensated heart failure.

Society for Hospital Medicine | Courses

- Fluid Resuscitation in the Critically Ill
- Mechanical Ventilation Part I – The Basics
- Mechanical Ventilation Part II – Beyond the Basics
- Mechanical Ventilation Part III – ARDS

Society of Critical Care Medicine | Courses

- ICU Microcosm Within Disaster Medical Response
- Augmenting Critical Care Capacity During a Disaster
- Disaster Triage and Allocation of Scarce Resources
- Sustained Mechanical Ventilation Outside Traditional Intensive Care Units

Resources from the Field

Clinical Workflow and Policy Resources

- UW Medicine COVID-19 Resource Site
- University of KY Division of Infectious Diseases Division COVID-19 Resources
- Nebraska Medicine and the University of Nebraska Medical Center
- UCSF Medical Center

Well-being Resources Addressing Resilience

- Stanford Health
- Duke Health
- Center for the Study of Traumatic Stress

Hear From Your Colleagues – Podcasts From Physician Leaders

Feb. 26, 2020: AHA's Akin Demehin, director of policy, speaks to Colleen Kraft, M.D., associate professor in the Department of Medicine Division of Infectious Diseases at Emory University, about COVID-19.

March 19, 2020: Podcast with Priya Sampathkumar, M.D., consultant, Division of Infectious Diseases and associate professor of medicine, Mayo Clinic College of Medicine and Science, highlighting key planning lessons at Mayo in preparation for COVID-19.

March 19, 2020: Audio Interview: New Research on Possible Treatments for COVID-19.

March 19, 2020: Kaiser Permanente Executive Vice President Stephen M. Parodi, M.D. joins JAMA Editor Howard Bauchner, M.D. to discuss telemedicine, staffing revisions, equipment allocation planning, and more.