ASPR TRACIE Technical Assistance Request

Request Receipt Date (by ASPR TRACIE): 10 July 2020
Response Date: 10 July 2020; Updated 4 February 2021
Type of TA Request: Complex

Request:

The requestor asked for training courses for non-intensive care unit (ICU) clinicians who may be pulled into working in an ICU during a COVID-19 hospital surge situation.

Response:

The ASPR TRACIE Team reviewed our existing resources, specifically: COVID-19 Healthcare System Operations Resources (refer to the Operational Modifications: COVID-19 section), COVID-19 Hospital Resources, COVID-19 Workforce Virtual Toolkit, and Hospital Surge Capacity and Immediate Bed Availability (not COVID-19 specific) Topic Collection. We also reached out to our Subject Matter Expert (SME) cadre members to gather feedback or related materials. All resources gathered are provided in this document.

Please refer to the Centers for Disease Control and Prevention's Coronavirus Disease 2019 webpage and the National Institutes of Health Coronavirus Disease 2019 (COVID-19) Treatment Guidelines for the most up-to-date guidance on COVID-19 outbreak management.

I. SME Comments

NOTE: These are direct quotes or paraphrased comments from emails and other correspondence provided by ASPR TRACIE SME Cadre members in response to this specific request and reflect their sentiments as of July 10, 2020. They do not necessarily express the views of ASPR or ASPR TRACIE.

NOTE: To provide context to the comments provided by the following SME, Project ECHO refers to the Extension for Community Health Outcomes initiative. For more information, please refer to the citation for the Project ECHO COVID-19 Clinical Rounds document located at the end of this document.

- In listening to clinicians with the most experience caring for COVID-19 patients during Project ECHO Clinical Rounds, I do not think there are "best practices" in this area yet.
- U.S. clinicians have had less than 6 months experience with the disease, and clinical practice is evolving/ changing daily based on experience. During every Clinical Rounds webinar, the Association of American Medical Colleges (AAMC) highlighted their clinical recommendations/ guidance repository and they noted that guidance is frequently

updated. Therefore, our experience with this has not been sufficient yet to lock us in to "best practices."

- As has been articulated by clinicians during the Clinical Rounds webinars, having humility with our approach to treatment and clinical operations is important. There are big shifts and important issues related to ventilatory support. We are just now gaining experience with Remdesivir/ Dexamethasone/ other steroids, etc. Other examples, as was pointed out during the Clinical Rounds webinar conducted on 7/9/2020, include crisis care principles; however, they were not sufficient to address the extraordinarily rapid need for decision making. Another example includes initial approaches to mental health support for healthcare providers at Mount Sinai in New York City that did not prove to work, and they had to go to "Plan B." The ability to adapt as we gain experience is key.
- To paraphrase a comment by an intensivist from Emory on an ECHO Clinical Rounds webinar: "Those clinicians who are using recommendations from a few weeks ago are way behind."

II. Select Resources

Allego. (2020). Ventilator Training Alliance.

This page includes information on the Ventilator Training Alliance, a mobile app with video tutorials, instruction manuals, and other training materials provided by manufacturers to inform use of ventilators during the COVID-19 pandemic. The free app for iOS and Android may be accessed from the page.

American Academy of Medical Colleges. (2020). COVID-19 Clinical Guidance Repository.

This resource compilation includes updated clinical treatment information from government, academic, and private sector sources.

American College of Chest Physicians. (2020). COVID-19: On-Demand e-Learning.

This web page provides links to free e-learning modules relevant to COVID-19, including: Acute Respiratory Distress Syndrome (ARDS), Hypoxemic Respiratory Failure, Pneumonia, and COVID-19 Rx: Treatment Simulations.

ASPR TRACIE. (2020). COVID-19 Clinical Experiences from the Field.

This ASPR TRACIE Technical Assistance response is a compilation of early reports and findings from published articles and clinical rounds presentations, webinars, and news articles on COVID-19.

ASPR TRACIE. (2020). Healthcare Facility Onboarding Checklist.

During a pandemic or other emergency, healthcare facilities face significant challenges to quickly onboard additional healthcare providers when hospital admissions and ICU occupancy increase rapidly. This onboarding checklist can ensure new employees are compliant with administrative requirements, familiar with the mission and culture of the hospital, and understand expectations.

CAESAR Project. (2020). COVID Activated Emergency Scaling of Anesthesiology Responsibilities (CAESAR) ICU. American Society of Anesthesiologists, Anesthesia Patient Safety Foundation, Society of Critical Care Anesthesiologists, and Society of Critical Care Medicine.

This resource page includes written and video educational materials related to managing COVID-19 patients. Resources are categorized under: ICU Ventilation and Pulmonary, ECMO, Gastrointestinal/Nutrition, Ethics, Renal/Fluids, Endocrine/Steroids, Musculoskeletal/Hematomology/Prophylaxis/ICU, Infectious Diseases, Cardiovascular, and Neurology.

Catholic Health System. (2021). COVID-19 ICU Surge Uptraining Materials. (Contact askasprtracie@hhs.gov to request the training materials.)

This packet of resources was created to uptrain non-critical care nursing staff to manage critically ill COVID-19 patients.

Defense Health Agency (DHA). (2020). DHA Antimicrobial Stewardship App.

This web app provides guidance, algorithms for triage, treatment, and updated resource protocols related to COVID-19.

Denver Health. (2007). Project XTREME Respiratory Training. Agency for Healthcare Research and Quality.

This series of videos provides training to non-respiratory therapists on basic respiratory care and ventilator management to increase healthcare surge capacity during a mass casualty incident. The videos cover topics including infection control, terms and definitions, manual and mechanical ventilation, and airway maintenance and suctioning. The training is intended for non-respiratory health care providers to be cross-trained as extenders delivering care to adult patients.

Denver Health. (2007). Project XTREME: Model for Health Professionals' Cross-Training for Mass Casualty Respiratory Needs. Agency for Healthcare Research and Quality.

This document describes a project to cross-train non-respiratory therapists to provide basic respiratory care and ventilator management to provide surge staffing capacity during mass casualty incidents. The authors reviewed the literature and legal and regulatory requirements, identified competencies, developed a curriculum, pilot tested the training, conducted exercises, and provided recommendations.

Harvard University. (2020). Mechanical Ventilation for COVID-19. edX.

This online course prepares licensed non-intensive care unit clinicians to support hospital critical care teams. The course covers: principles and physiology of mechanical ventilation, initial ventilator setting and adjustments, troubleshooting the ventilator, and ventilating patients in special circumstances.

Marks, S., Edwards, S., and Jerge, E. (2020). Rapid Deployment of Critical Care Nurse Education During the COVID-19 Pandemic. Nurse Leader.

This study assessed the feedback of nurses about their participation in a rapidly deployed critical care education program in preparation for working in a COVID-19 designated facility.

Matos, R., Chung, K., et al. (2020). DoD COVID-19 Practice Management Guide: Clinical Management of COVID-19. U.S. Department of Defense.

These guidelines reflect the best information available to guide decision making in the management of COVID-19 patients. Included is information on screening and triage, infection prevention, specimen collection, clinical management, treatment options, telemedicine, emergency medical services, and ethical considerations. It also includes appendices with checklists, supply lists, algorithms, and other tools.

National Emerging Special Pathogens Training and Education Center, (2020). Just In Time Training.

This collection of resources provides training and job aids for numerous critical care and infectious disease management skills that may be new or require refresher training for healthcare providers.

North Carolina Area Health Education Centers Program. (2020). COVID-19 Workforce Surge Planning Playbook for Patients Requiring Critical or ICU Care.

This toolkit provides resources to surge critical care skills to respond to COVID-19 via a team-based care approach.

Project ECHO. (2021). HHS ASPR Clinical Rounds. The University of New Mexico School of Medicine.

The U.S. Department of Health and Human Services (HHS), Office of the Assistant Secretary for Preparedness and Response (ASPR), Project ECHO, National Emerging Special Pathogens Training and Education Center (NETEC), and other public-private partners host a national series of weekly clinical rounds. This peer-to-peer learning network focuses on critical care, emergency department, and emergency medical services patient care and operations. Videos and slides are available following each session.

Safe Airway Society. (2020). COVID-19 Resources.

This resource page includes several editable airway management infographics, a training video on tracheal intubation, and a consensus statement on airway management and tracheal intubation of adult COVID-19 patients.

Society of Critical Care Medicine. (2020). Critical Care for the Non-ICU Clinician.

These free, online modules provide training for non-intensive care unit clinicians to provide care during a surge of critically ill patients.

Society of Critical Care Medicine. Emergency Resources: COVID-19.

This web page includes several disaster/ emergency resources specifically for clinicians responding to disasters to include COVID-19.

U.S. Department of Health and Human Services (HHS), Office of the Assistant Secretary for Preparedness and Response (ASPR). Project ECHO COVID-19 Clinical Rounds.

This two-page flyer provides information on the Extension for Community Health Outcomes (known as Project ECHO). HHS ASPR, in collaboration with the NETEC, and Project ECHO, launched a series of three COVID-19 Clinical Rounds: 1) Critical Care: Lifesaving Treatment and Clinical Operations; 2) Emergency Department: Patient Care and Clinical Operations; and 3) EMS: Patient Care and Operations. The intent of the initiative is to create peer-to-peer learning networks where clinicians who have more experience treating patients with COVID-19 can share their challenges and successes with clinicians across the U.S. and the world.

Wolters Kluwer. (2020). Clinical Effectiveness COVID-19 Resources.

This resource compilation includes information from various sources for clinicians looking for COVID-19 clinical data.