



## The Value of the Anesthesiologist-Intensivist During COVID-19

John C. Klick, MD, FCCP, FASE, FCCM

Dorothea S. Rosenberger, MD, PhD

Daniel R. Brown, MD, PhD, FCCM

Unlike in Europe and other parts of the world, the majority of physicians working as intensivists are not anesthesiologists. The ongoing COVID-19 pandemic has drawn renewed attention to the practice of critical care medicine and how anesthesiologists are uniquely suited to provide critical care services. The first intensive care units (ICUs) on the planet were established by anesthesiologists in Denmark at the time of the polio epidemic that ravaged Europe in the 1950s. Anesthesiologists quickly realized the advantages of positive pressure ventilation over the iron lung in the setting of acute respiratory failure (*Clin Med (Lond)* 2014;14:376-9).

Since the development of early ICUs, anesthesiologists have continued to make critical contributions to the growth of intensive care medicine. Anesthesiologists are recognized as experts in acute airway management and critical life-saving interventions. The high incidence of acute respiratory failure among patients with COVID-19 has placed a special emphasis on skilled airway management, and anesthesiologists have stepped up to fill the void.

Our skills at airway management have drawn the most attention from the lay press, including our ability to singlehandedly deal with its complications while limiting the spread of the virus. However, the anesthesiologist intensivist possesses a wide repertoire of skill and knowledge that makes us uniquely qualified to care for patients with COVID-19. It has become abundantly clear that COVID-19 is a multi-system disease and affects much more than just the respiratory system. The infected patient may present in shock, and some patients may die of refractory heart failure. Anesthesiologists are uniquely qualified to manage the patient in shock due to our proficiency with invasive monitoring, echocardiography, and vasoactive agents. Acute kidney injury is common, and placement of central venous dialysis lines with initiation of renal replacement therapy is often needed. Few other specialty backgrounds provide the skills



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needed for the intensivist to acutely manage multi-system organ failure as ours does (*Anaesthetist* March 2020).

Experience has shown us that intubated patients with COVID-19 can be extremely difficult to sedate appropriately, and numerous parts of the country have reported shortages of vital sedative drugs. As experts in the use of

anesthetic and sedative agents, anesthesiology intensivists are eminently qualified to manage these issues. The ASA Committee on Critical Care Medicine has published guidelines for alternative sedation strategies when standard sedative drugs are in short supply. In those institutions overrun by COVID-19 patients, there has been a need to convert operating rooms to ICUs and use anesthesia machine ventilators to sustain COVID-19 patients with respiratory failure. Under the direction of anesthesiologist intensivists, inhaled anesthetic agents have been used to adequately sedate these patients, freeing up valuable intravenous agents ([asahq.org/ventilators](http://asahq.org/ventilators)). No other critical care specialty has the knowledge and skill to manage these agents. The background training of general anesthesiologists is so strong in critical care that many non-critical care trained anesthesiologists have been drafted to care for patients in the ICUs. The Committee on Critical Care Medicine has recently published its CAESAR (COVID Activated Emergency Scaling of Anesthesiology Responsibilities) initiative to rapidly bring general anesthesiologists up to speed with the critical care issues rele-



**John C. Klick, MD, FCCP, FASE, FCCM**

Committee on Critical Care Medicine, Associate Professor of Anesthesiology, and Director of Perioperative Echocardiography, Department of Anesthesiology, Larner College of Medicine at the University of Vermont Medical Center, Burlington.



**Dorothea S. Rosenberger, MD, PhD**

Committee on Critical Care Medicine, and Professor of Anesthesiology and Critical Care Medicine, Department of Anesthesiology, University of Utah School of Medicine, Salt Lake City. She is also Diplomate, European Society of Anesthesiology and Intensive Care.



**Daniel R. Brown, MD, PhD, FCCM**

Committee on Critical Care Medicine, President, Society of Critical Care Anesthesiologists, Professor of Anesthesiology; Director, Independent Multidisciplinary Critical Care Practice; and Consultant, Mayo Clinic, Rochester, Minnesota.

vant to the care of COVID-19 patients (*Anesth Analg* 2020;131:365-77).

Anesthesiology intensivists also have extensive experience with extracorporeal membrane oxygenation (ECMO), are often heavily involved in cardiothoracic ICUs, and are experts on balancing anticoagulation with bleeding risk. This technology may prove lifesaving in the face of refractory ARDS or cardiogenic shock (*J Cardiothorac Vasc Anesth* 2020;34:1720-2).

With our vast array of skills and knowledge in the management of the acutely ill, anesthesiologists serve as an invaluable resource in the event of any unfortunate disaster. Our response to the COVID-19 pandemic is clear evidence. ■

### Make your voice heard

Drug shortages. The opioid epidemic. Surprise medical bills. These are just a few of the issues on which you can make a difference. Sign up with the ASA Grassroots Network now at [asahq.org/grassroots](http://asahq.org/grassroots).