Go to **MDedge.com/CHESTPhysician** for the latest news on the coronavirus pandemic.

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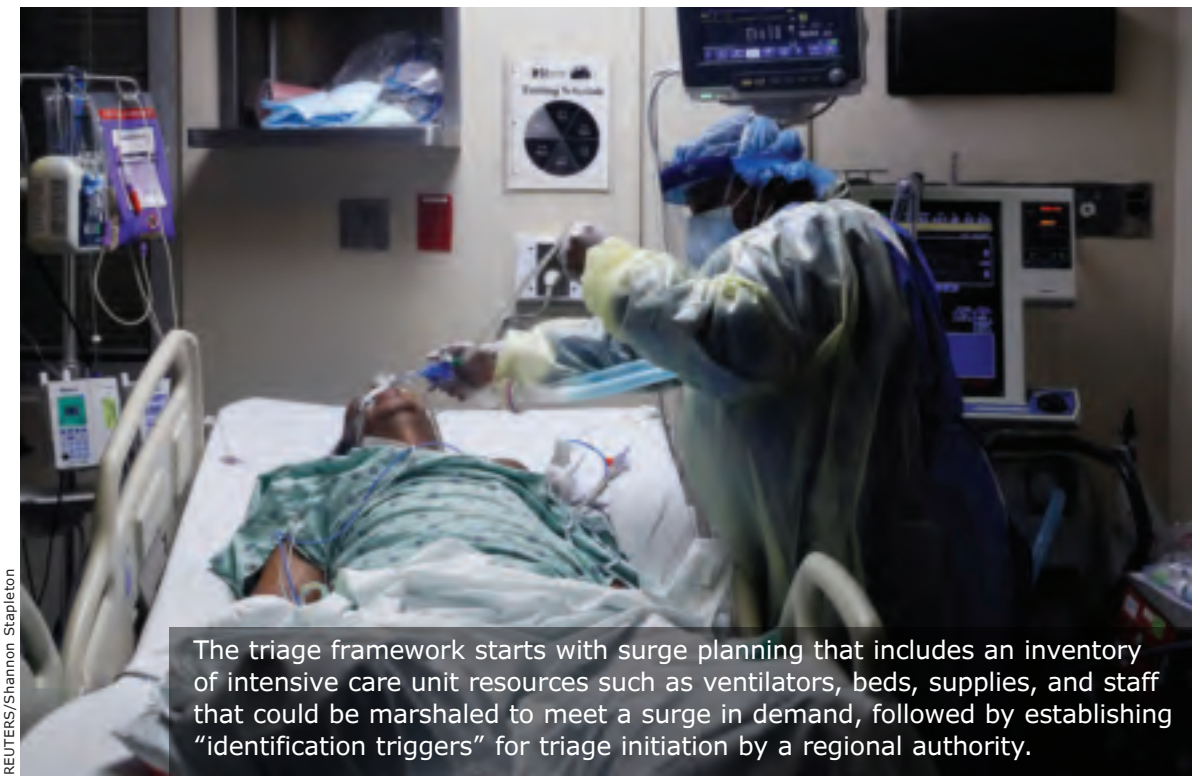

REUTERS/Shannon Stapleton

The triage framework starts with surge planning that includes an inventory of intensive care unit resources such as ventilators, beds, supplies, and staff that could be marshaled to meet a surge in demand, followed by establishing "identification triggers" for triage initiation by a regional authority.

COVID-19 critical care guidance includes resource triage plan

BY ANDREW D. BOWSER
MDedge News

While triage of critical care resources should be a rare event during the COVID-19 crisis, failing to prepare for the worst-case scenario could have serious consequences, according to authors of recent reports that offer advice on how to prepare for surges in demand.

Even modest numbers of critically ill COVID-19 patients have already rapidly overwhelmed existing hospital capacity in hard-hit areas including Italy, Spain, and New York City, said authors of an expert panel report released in CHEST.

"The ethical burden this places on hospitals, health systems, and society is enormous," said Ryan C. Maves, MD, FCCP, of the Naval Medical Center in San Diego, lead author of the expert panel report from the Task Force for Mass Critical Care and the American College of Chest Physicians (CHEST).

"Our hope is that a triage system can help us identify those patients with the greatest likelihood of benefiting from scarce critical care resources, including but not limited to mechanical ventilation, while still remembering our obligations to care for all patients as best we can under difficult circumstances," Dr. Maves said in an interview.

Triage decisions could be especially daunting for resource-intensive therapies such as extracorporeal membrane oxygenation (ECMO), as physicians may be forced to decide when and if to offer

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Concerns for clinicians over 65 grow during pandemic

BY ALICIA GALLEGOS
MDedge News

When Judith Salerno, MD, heard that New York was calling for volunteer clinicians to assist with the COVID-19 response, she didn't hesitate to sign up.

Although Dr. Salerno, 68, has held administrative, research, and policy roles for 25 years, she has kept her medical license active and always found ways to squeeze some clinical work into her busy schedule.

"I have what I could consider 'rusty' clinical skills, but pretty good clinical judgment," said Dr. Salerno, president of the New York Academy of Medicine. "I thought in this situation that I could resurrect and hone those skills, even if it was just taking care of routine patients and working on a team, there was a lot of good I can do."

Dr. Salerno is among 80,000 health care professionals who have volunteered to work temporarily in New York during the COVID-19 pandemic as of March 31, 2020, according to New York state officials. In mid-March, New

Over 65 // *continued on page 8*

INSIDE HIGHLIGHT

NEWS FROM CHEST

FROM THE EVP/CEO

How CHEST is helping to flatten the curve

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Dear Readers: It is unlikely to surprise you that the majority of this issue of *CHEST Physician* is dedicated to the coronavirus pandemic. What may surprise you is that this was given much consideration prior to implementation. The rate at which our understanding of this virus, how it spreads, and how it is best managed is growing rapidly, so that today's information may be quickly out of date, making it a challenge to finalize a publication almost a month before it finds its way into readers' hands. That said, we at *CHEST Physician* thought it inappropriate to focus on anything other than what is clearly the greatest public health crisis of our time.

So, as you peruse these pages, note that all data herein were current as of their writing in late April. And please, above all else, stay safe.

David A. Schulman, MD, FCCP, Editor in Chief

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Plan for fair and equitable triage

// continued from page 1

such support after demand outstrips a hospital's ability to provide it.

"ECMO requires a lot of specialized capability to initiate on a patient, and then, it requires a lot of specialized capability to maintain and do safely," said Steven P. Keller, MD, of the division of emergency critical care medicine in the department of emergency medicien at Brigham and Women's Hospital and Harvard Medical School, both in Boston.

Dr. Maves

Dr. Keller

Those resource requirements can present a challenge to health care systems already overtaxed by COVID-19, according to Dr. Keller, coauthor of a guidance document in Annals of the American Thoracic Society. The guidance suggests a pandemic approach to ECMO response that's tiered depending on the intensity of the surge over usual hospital volumes.

Mild surges call for a focus on increasing ECMO capacity, while a moderate surge may indicate a need to focus on allocating scarce resources, and a major surge may signal the need to limit or defer use of scarce resources, according to the guidance.

"If your health care system is stretched from a resource standpoint, at what point do you say, 'we don't even have the capability to even safely do ECMO, and so, perhaps we should not even be offering the support'?" Dr. Keller said.

Critical care guidance

The guidance from the Task Force for Mass Critical Care and CHEST offers nine specific actions that authors suggest as part of a framework for communities to establish the infrastructure needed to triage critical care resources and "equitably" meet the needs of the largest number of COVID-19 patients. "It is the goal of the task force to minimize the need for allocation of scarce resources as much as possible," the authors stated.

The framework starts with surge planning that includes an inventory of intensive care unit resources such as ventilators, beds, supplies, and staff that could be marshaled to meet a surge in demand, followed by establishing "identification triggers" for triage initiation by a regional authority, should clinical demand reach a crisis stage.

Next is preparing the triage system, which includes creating a committee at the regional level, identifying members of tertiary triage teams and the support structures they will need, and preparing and distributing training materials.

Agreeing on a triage protocol is important to ensure equitable targeting of resources, and how to allocate limited life-sustaining measures needs to be considered, the panel wrote. They also recommend adaptations to the standards of care such as modification of end-of-life care policies; support for health care workers, family, and the public; and consideration of pediatric issues including transport, concentration of care at specific centers, and potential increases in age thresholds to accommodate surges.

Barriers to triage?

When asked about potential barriers to rolling out a triage plan, Dr. Maves said the first is acknowledging the possible need for such a plan: "It is a difficult concept for most in critical care to accept – the idea that we may not be able to provide an individual patient with interventions that we consider routine," he said.

Beyond acknowledgment of need, other potential barriers to successful implementation include the limited evidence base to support development of these protocols, as well as the need to address public trust.

"If a triage system is perceived as unjust or biased, or if people think that triage favors or excludes certain groups unfairly, it will undermine any system," Dr. Maves said.

Dr. Maves and coauthors reported that some of the authors of their guidance are U.S government employees or military service members, and that their opinions and assertions do not reflect the official views or position of those institutions. Dr. Keller reported no disclosures related to the ECMO guidance.

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SOURCES: Maves RC et al. Chest. 2020 Apr 11. pii: S0012-3692(20)30691-7. doi: 10.1016/j.chest.2020.03.063; Seethara R, Keller SP. Ann Am Thorac Soc. 2020 Apr 15. doi: 10.1513/AnnalsATS.202003-233PS.