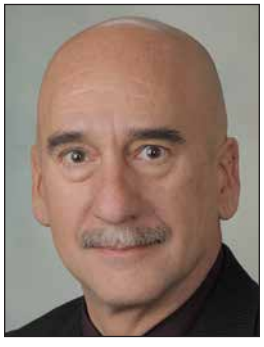
A New Model for National Emergency Medical Care

Denis Cortese



Curtiss Cook

Denis A. Cortese and
Curtiss B. Cook

The current US healthcare "system" is not meeting the needs of patients or society. This is not a novel conclusion, but the need for change has been made much more salient by covid-19.

What is the biggest lesson of the pandemic? The US healthcare delivery system, social systems, and federal agencies were simply not ready: they were ill equipped and unprepared to work together. The parlous state of these systems has been known, and ignored, for years. The covid-19 pandemic must force improvements.

Lessons Not Learned

Over the past 2 decades, the US emergency response system has been repeatedly tested by a series of emerging infectious diseases (e.g., SARS1 and avian influenza H5N1 in the early 2000s, swine flu H3N2 in 2008, MERS, Ebola, Zika) and three serious flu seasons in 2017–20.

These events provided multiple opportunities to evaluate and improve national readiness for "the big one." Covid-19 emerged as the big one and exposed multiple vulnerabilities in the US healthcare delivery infrastructure.

Denis Cortese (NAM) is Foundation Professor and director of the Center for Healthcare Delivery and Policy at Arizona State University, and emeritus president and CEO of the Mayo Clinic. Curtiss Cook is a professor of medicine and chair of the Division of Endocrinology at Mayo Clinic Arizona.

Moreover, when self-limited natural disasters (e.g., hurricanes, wildfires) are superimposed on a prolonged event such as a pandemic, the system becomes further strained.

Any lessons learned from the earlier events were either forgotten or went unheeded. Lack of a robust national public health system; the absence of an effective supply chain for personal protective equipment, medical equipment, and testing supplies; and contradictory messaging leading to low compliance with risk mitigation strategies (e.g., mask wearing, physical distancing) all exacerbated the pandemic and its impacts.

Problematic Payment Models

Medical facilities were required to preserve hospital beds to accommodate anticipated surges in hospital admissions, thus reducing access for patients who required ongoing care for other health conditions. Consequently, many delivery systems sustained substantial financial losses due to fee-for-service payment models. These financial losses affected healthcare workers with layoffs and furloughs—just when they were most needed.

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Lacking a reserve medical corps, the hardest-hit geographic areas depended on volunteer medics (some coming out of retirement) or agencies that provide temporary medical help to both augment staffing and to backfill for healthcare workers sidelined with covid-19 infections themselves. However, with widespread infection rates, even this is not possible as healthcare workers need to stay and support their home facilities and competition for a limited supply of temporary heathcare workers has increased.

The covid-19 pandemic has shown starkly that the existing fee-for-service structures serve neither patients, healthcare delivery organizations, nor the public health. When the nation gets hit by a pandemic an effective healthcare system should play an important role in maintaining economic stability, and vice versa. Although there are non-healthcare-related economic tools to help stabilize the economy, there are no such tools to stabilize the US healthcare infrastructure. The financial impacts have been evident in the fee-for-service environment.

Is it possible that prepaid, capitated healthcare delivery systems fared better? The answer will emerge in time. Regardless of the healthcare payment models, it is essential to simultaneously ensure both the economic viability of the organizations that provide care and the effectiveness of the medical workforce in order to safeguard the health and welfare of patients.

Indeed, there's much more to learn and reflect on from the global covid-19 pandemic.

A Civilian National Emergency Medical System

We envision a new model of preparedness and response to medical emergencies and crises to ensure a constant state of readiness. It's based on the different, sometimes competing, simultaneous roles of civilian healthcare organizations: (1) provide care for those affected by the emergency; (2) provide ongoing care for regular patients; and (3) maintain a healthy workforce.

We propose a Civilian National Emergency Medical System (CNEMS), a collective of civilian US healthcare organizations that would collaborate with local, state, federal, and nongovernmental organizations to provide a broad spectrum of medical capabilities as needed. Its roles and responsibilities would include the following:

- Create an integrated, seamless civilian national emergency medical response system.
- Recruit, train, and retain a rapidly deployable force of medical professionals to support onsite needs of victims of natural disasters, epidemics, and other national emergencies.
- Identify treatment facilities with advanced capabilities to support onsite and remote medical care for complex and highest-risk cases.
- Identify gaps in care delivery and coordinate delivery of medical relief operations.
- Create innovative strategies in medical response to natural disasters, epidemics, and other national emergencies.
- Collect and analyze data on processes of care to ensure the highest levels of safety and outcomes for victims

of natural disasters, epidemics, and other national emergencies.

- Operate at the national, regional, or local level as needed.

The CNEMS would involve a tripartite structure of facilities, personnel, and logistics under a unified civilian command and control. It would operate in the civilian sector, coordinating with governmental and nongovernmental organizations.

New Mission, Vision, Leadership, Collaboration

Unlike most natural disasters, the response to a pandemic requires a system that is capable of sustaining operations over a prolonged period. Covid-19 showed that it is time to get serious about preparedness and readiness at both national and regional levels. A new vision and mission of readiness will require organizational, operational, and people skills to develop effective levels of cooperation, coordination, and policy.

What is different from the current national incident response system is that the CNEMS would draw from the civilian healthcare workforce and institutions and would remain in a state of ready reserve to augment existing national response systems. It would enable the civilian healthcare sector to deploy its capabilities and expertise in the field in the event of a national emergency. Delivery systems would work with group purchasing organizations and supply chain service companies that would provide logistical capabilities.

This change will require bold leadership and collaboration from the civilian healthcare sector. Complex systems require evolving mindsets—counter to current ways of thinking about how to deliver and be reimbursed for health care in the United States. Unity of effort will be required, putting aside traditional competition between healthcare delivery systems in favor of meeting a common challenge. A CNEMS is one potential means of achieving an effective, coordinated response to the current and any future event.