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The Silver Lining for Health Care During and After the Pandemic



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The health care crisis imposed by the coronavirus disease 2019 (COVID-19) pandemic has handed health care systems around the world challenges of a magnitude never seen before. At the outset of the pandemic, many hospitals were overwhelmed by the numbers of COVID-19 patients—at times exceeding their capacities to provide safe care. For this reason, many institutions including the Mayo Clinic initially halted nonurgent elective medical and surgical care during the pandemic. This disrupted care for patients without COVID-19 and caused major fiscal challenges for many health care institutions, but it also resulted in immediate and innovative measures to counter the pandemic. Nothing health care systems could have done would have changed the pandemic's initial impact on society, and certainly the resultant innovations are not worth the cost of the pandemic by any measure. However, those of us in health care are seeing early elements of unprecedented collaborative and accelerated innovations in health care across the world.

We must acknowledge that our system of health care before COVID-19 was imperfect and well past the inflection point for needed change. However, our inability to make inroads in the needed changes had been impeded by excuses of cultural and regulatory status quo. The COVID-19 pandemic has disrupted that status quo and created a volatile, uncertain, complex, and ambiguous¹ environment that is ripe for innovation, acceleration, and implementation of needed changes which will benefit patients and providers.

REGULATORY LIMITATIONS

The relationship between regulatory rules and innovation is complex, with regulation

occasionally inspiring but most often limiting innovation.² In health care, our system strongly favors maintaining the status quo. Existing regulatory barriers and payor reimbursement are often major limitations to advancement of innovative models of care delivery. In response to the COVID-19 pandemic, the Centers for Medicare & Medicaid Services expanded telemedicine reimbursements and relaxed regulatory exposure from the Health Insurance Portability and Accountability Act. States have eased licensure and credentialing requirements, allowing for rapid allocation of provider resources to COVID-19 hot spots. The US Food and Drug Administration has provided needed regulatory relief through emergency use authorization to speed the availability of innovative diagnostic testing and novel medical therapies, including remdesivir.³ These multiple regulatory changes have created an environment that has shifted the health care innovation framework from its historic incremental model to a phase of radical innovation.² Whether this relaxed regulatory environment will persist in the post-COVID-19 era is uncertain. However, many of the innovations in testing, treatment, and care delivery implemented now will become durable solutions that will benefit our patients and health care systems long after the COVID-19 pandemic has ended.

VIRTUAL AND DIGITAL SOLUTIONS

Before COVID-19, health care systems were slow to adopt widely available virtual and digital solutions to care delivery for a variety of regulatory and cultural reasons. The need to deliver excellent care while keeping patients and staff safe in a shelter-in-place environment has disrupted the traditional in-person model of health care.⁴ Providers

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who have long believed that in-person visits were the most efficient and best way to care for patients are now recognizing the benefits of virtual visits and are receptive to providing care through this new model. Our patients who are ill, immobile, or inconvenienced by the need to schedule and be present for appointments that demand hours of their time in exchange for minutes of in-person time with a rushed provider have rapidly embraced virtual care as a favorable substitute.

The uptake of virtual visit care or telemedicine visits is unprecedented. In April 2020, Mayo Clinic outpatient practices accelerated virtual care appointments to occupy most scheduled visits. While virtual visits were initially best used as a replacement for established care, innovative models are now using virtual visits to improve triage and appointment scheduling and to deliver mental health and wellness care. In the inpatient setting, virtual visits are allowing for reduced use of personal protective equipment (PPE) and protecting providers from possible exposures during care of COVID-19 patients. Patients in rural hospitals now have timely access to specialty expertise not physically present in their communities. The ability to deliver expert consultative care will undoubtedly change the rural health care landscape and potentially improve diagnostic and treatment delivery, mitigate transfer to tertiary centers, and measurably benefit length of stay, cost of care, and morbidity and mortality. Given the current crisis of too few providers in rural communities, these innovative changes towards virtual care are essential.

The cultural shift to acceptance of telemedicine as an excellent alternate to in-person care, the relaxing of state licensure requirements for telemedicine, and the presence of fair reimbursement provide so many advantages for patients, providers, and our health system that we likely will not return to usual models after this pandemic.

HEALTH CARE INFRASTRUCTURE

Shortages of ventilators and PPE have been described and publicized since the onset of the COVID-19 pandemic. The infrastructure

that supports the continuous availability of essential equipment—the supply chain—has faced unprecedented challenges. We have been challenged to ensure adequate PPE, viral transport media, and nasal swabs for testing; cleaning supplies; alcohol-based hand sanitizer; medications; and medical supplies. The pandemic has created a new understanding of the value of a secure supply chain infrastructure as a key component for health care delivery.

In retrospect, the medical supply chain has been at risk for some time. Shortages of essential medications had become so common across hospitals that Mayo Clinic partnered with seven other organizations in 2018 to create Civica Rx, a not-for-profit company that helps patients by ensuring continuous supplies of lifesaving generic medications at low cost.⁵ It is unlikely that health care will ever return to an international model of single suppliers for PPE and other essential goods or bargaining with suppliers for the lowest price. We were fortunate that we acted on lessons from the Ebola crisis and invested in a PPE reserve securement strategy. The list of essential supplies organizations choose to store and the need to develop redundant supply chain sources will ultimately make our health care system much better prepared for the next crisis.

CONCLUSION

The COVID-19 pandemic has helped organizations reconnect with their values and focus on essentials of delivering health care. The crisis caused by the pandemic has relaxed traditional barriers to health care innovation: regulations, reimbursements, and market-share competition. The resulting environment of collaboration and accelerated innovation in health care across the world will translate to enduring benefits for our patients. Perhaps that is the silver lining.

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