

Incorporating Telemedicine as Part of COVID-19 Outbreak Response Systems

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The US CDC reported that as of March 18, 2020, the novel coronavirus disease (COVID-19) had spread throughout China and now every continent, with 191,127 confirmed cases and approximately 7807 deaths globally.¹ This includes confirmed cases reported in every state within the United States. With each infected person expected to infect 2 or 3 additional people,² as well as remaining uncertainty regarding the clinical spectrum of disease,³ COVID-19 threatens to overwhelm the US healthcare system within the coming months. Even currently, before COVID-19 infection rates reach high-risk levels in the United States, patients with mild respiratory symptoms are seeking COVID-19 confirmatory testing and clinical reassurance from providers, and employers are developing response plans that may include requiring sick employees to seek healthcare provider release before returning to work. Because of this mounting public urgency and currently uncontained spread, healthcare providers are already experiencing and must prepare for additional increased volumes of both sick and worried-well patients that could strain hospital care units and medical equipment supply chains. Healthcare provider disaster response policies and procedures should be revisited to incorporate telemedicine systems to address some of the unique challenges posed by infectious disease outbreaks such as COVID-19.

Telemedicine and COVID-19

Telemedicine platforms are ideal for managing several challenges facing healthcare systems in response to global infectious disease outbreaks. Implementing telemedicine systems focused on addressing the needs of low-acuity patients with disease exposure concerns, for example, can mitigate and prevent overcrowding in emergency departments, urgent care clinics, and primary care clinics while providing the reassurance and guidance that patients are seeking. Telemedicine can also be used to address the ongoing healthcare needs of patients with chronic illnesses to reduce in-person clinic visits. Such uses of telemedicine reduce human exposures (among healthcare workers and patients) to a range of infectious diseases and ensure that medical supplies are reserved for patients who need them.

TAKEAWAY POINTS

Healthcare providers should revisit disaster response policies to incorporate telemedicine systems to address some of the unique challenges posed by infectious disease outbreaks such as COVID-19.

- ▶ COVID-19 threatens to overwhelm the US healthcare system and supply chains.
- ▶ Telemedicine systems can be used to prevent overcrowding while preventing human exposures and facilitating high-quality care.
- ▶ State and federal laws and regulations have evolved in recent years, months, and days to facilitate greater reimbursement for and adoption of various telemedicine models, including those incorporating nonphysician providers.

Aside from addressing the needs of low-acuity patients, telemedicine can bring specialty care services to patients being cared for in areas without access to such care, both domestically and internationally. For example, reports indicate that COVID-19 mortality rates in populations in China that have low access to healthcare resources have exceeded mortality rates in areas of China with higher access.⁴ Telemedicine systems can significantly improve the triage, treatment, and coordination of care for patients with confirmed COVID-19, especially in low resource areas.

Given that telemedicine is poised to address several unique challenges posed by the COVID-19 outbreak, the CDC, as well as several state public health agencies and numerous industry associations, have indicated that telemedicine systems should be considered as part of healthcare provider coronavirus response systems.⁵⁻⁷ Even healthcare providers who have not yet adopted telemedicine capabilities should consider implementing narrowly designed systems to mitigate the expected increase in volumes of low-acuity patients seeking reassurance.

State, Federal, and International Telemedicine Laws

Historically, healthcare providers wishing to deliver clinical services through telemedicine faced myriad legal and regulatory challenges. These include issues such as multijurisdictional

licensure, credentialing bureaucracy, challenges with capturing reimbursement for services, and ensuring compliance with legal standards posed by multiple jurisdictions. However, state, federal, and international laws and regulations have, within the past months and years, been significantly relaxed to promote greater adoption and use of telemedicine and other digital health technologies to deliver clinical services.

Within the United States, both federal and state laws have evolved to facilitate more widespread use of telemedicine platforms. Legal and regulatory changes include expansion of telemedicine services reimbursement, relaxation of technology requirements, implementation of novel approaches to licensure and credentialing, and relaxation of supervision laws related to nonphysician providers. Specifically, for example, Medicare, Medicare Advantage, and Medicaid have increasingly expanded telemedicine reimbursement to include a broader array of services and patient care situations, and many states are adopting private payer legislation to facilitate or, in some cases, mandate private payer reimbursement for telemedicine services. Each of these changes has created a much more favorable environment for providers to adopt and implement telemedicine systems to deliver clinical services. In particular response to the COVID-19 outbreak, President Donald Trump signed into law the Coronavirus Preparedness and Response Supplemental Appropriations Act on March 6, 2020. The legislation includes \$8 billion in emergency funding for federal agencies to respond to the coronavirus outbreak, as well as authority for HHS to waive certain Medicare requirements to expand reimbursement for telehealth services temporarily during the coronavirus public health emergency.⁶ Several states have also temporarily waived certain licensure and other restrictions to permit greater utilization of telemedicine services during this public health crisis.⁸

The international legal and regulatory environment has also witnessed significant change to accommodate telemedicine technologies in recent years and months. Many European Union countries and countries in Asia have expanded laws and regulations to permit greater adoption of telemedicine systems, provided increased guidance on digital health technologies and cybersecurity expectations, and expanded reimbursement options. In Italy, for example, which has been heavily affected by the COVID-19 outbreak, all 20 Italian regions, as of 2018, have implemented telemedicine guidelines promulgated by the Italian Health Council in 2012 to facilitate greater use of telemedicine technologies throughout the country. Such measures will prove critical for increasing access to healthcare services for patients who are crowded out of brick-and-mortar healthcare facilities, located in low-resource areas, or too afraid to access brick-and-mortar services for fear of exposure.

Conclusions

A major focus of response efforts by governments and healthcare organizations globally is to prevent and contain the spread of COVID-19. But the current public urgency and uncontained spread necessitate systems to additionally prevent healthcare system overcrowding and depletion of medical supplies and resources. Telemedicine systems are ideal for mitigating overcrowding of hospitals and clinics by triaging low-acuity patients while also preventing additional unnecessary human exposures and promoting delivery of high-quality care. Because state, federal, and international laws and regulations have expanded in recent years, months, and weeks to accommodate greater adoption of telemedicine systems (especially during this public health crisis), healthcare providers are now better situated to consider implementing such systems. Although certain legal, regulatory, and reimbursement challenges remain, the COVID-19 outbreak may be the right impetus for lawmakers and regulatory agencies to promulgate further measures that facilitate more widespread adoption of telemedicine. ■

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