

eClinic: increasing use of telehealth as a risk reduction strategy during the covid-19 pandemic

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ABSTRACT

Prior to the covid-19 pandemic, telehealth was already being rapidly adopted nationally by healthcare systems. During the covid-19 pandemic, increased use of telehealth may be considered as a risk reduction strategy. Benefits of this strategy may be conferred to both patients and health providers.

TELEHEALTH: PAST AND PRESENT

Prior to the novel covid-19 pandemic, telehealth was being rapidly adopted nationally by healthcare systems for the purpose of providing remote care to patients.¹⁻³ This pattern was supported by the intent to improve hospital efficiency, increase patient and provider satisfaction, and improve patient access and reduce barriers to medical care.¹⁻⁴ Our group previously has also demonstrated that a surgical electronic clinic (eClinic) is a safe, high-quality, effective, and feasible mode for providing postoperative surgical care.⁴ These all remain important reasons for hospital systems to continue to use telehealth care. However, during the covid-19 pandemic, increased use of telehealth may confer additional benefits not frequently recognized and warrant further consideration among the medical community.⁵ In this opinion article, we highlight the use of telehealth platforms during the covid-19 pandemic as a worthwhile risk reduction strategy for both patients and providers.

RECOGNITION OF THE COVID-19 PANDEMIC AND SOCIAL DISTANCING STRATEGIES

In February of 2020, the WHO highlighted the novel covid-19 as the source of the current pandemic.⁶ After the initial outbreak in Wuhan, China, covid-19 has since spread to the USA, which is now experiencing a surge in covid-19-confirmed cases.⁶ In response to the rapid expansion of covid-19, the Center for Disease Control's (CDC) primary modes of disease prevention have been through limiting exposure and social distancing.⁶ Several institutions and businesses have since followed these recommendations by implementing virtual interactions. Similarly, some universities have implemented online classes. Several major sporting and social events across the USA have even been postponed or canceled. Unfortunately, due to concerns surrounding a lack of appropriate testing and the potential for asymptomatic transmission, unintentional exposures may still occur.⁶ To combat these problems, an eClinic platform could be employed by healthcare systems to provide excellent clinical

care of patients while reducing the risk of exposure for both patients and healthcare providers.

UNDERSTANDING ECLINIC AS A RISK REDUCTION STRATEGY FOR PROVIDERS AND PATIENTS

Despite the current concerns surrounding the covid-19 pandemic, healthcare workers heroically continue to provide care to their patients. As the virus continues to spread throughout the USA, active healthcare workers will face an increased risk of exposure to patients infected with covid-19. It is important to recognize that this pandemic is not the first time that healthcare workers have risked personal exposure to viral illness for patient care. For instance, this happens yearly for surgeons, nurses, and other critical care providers during the influenza season. With this increased risk of exposure, hospital systems often encourage or mandate yearly influenza vaccines for employees as a means of risk reduction. This pandemic, however, has an added layer of complexity as there is unfortunately no current covid-19 vaccine that can be provided to healthcare workers.⁶ Further compounded by concerns surrounding limited availability of personal protective equipment, providers face the dilemma of how to continue providing high-quality patient care while also reducing the risk of transmission to patients and others.

eClinic use offers the unique potential to allow providers to continue providing high-quality care and reduce risk of exposure and transmission from patient to provider and from patient to patient. It even extends to minimize transmission from provider to other providers, patients, and even their own families. Within the evolving covid-19 pandemic, increasing use of eClinics for patients who are covid-19 confirmed or suspected can be life-saving. Not only could this be used to manage these patients in the ambulatory setting, but also this could help offload the overwhelmed emergency services and first responders who are triaging and prioritizing critically ill patients. These eClinic strategies are clearly consistent with the CDC's recommendations.

In addition, the benefits of eClinics extend beyond covid-19-confirmed or suspected patients. Increased eClinic use should also be considered for non-covid-19 or asymptomatic patients to minimize risk to these patients. Furthermore, it should be highly considered for patients suspected to be at increased risk of developing severe signs and symptoms of covid-19. This includes those patients who have substantial comorbidities, live

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in nursing homes, are immunosuppressed, are aged 65 years and older, or are currently pregnant or breast feeding.⁶ If care for these patients can be triaged remotely, this will reduce risk exposure while seeking care, particularly at facilities that are treating patients with covid-19. These measures also confer decreased risk to providers who may unknowingly be exposed to patients with covid-19 who are asymptomatic or have not been tested. Therefore, this may help decrease the number of providers at risk of developing symptoms related to covid-19 infection.

Lastly, we also think the eClinic platform should be considered as a strategy to reintegrate medical providers who are deemed too high risk for COVID-19 exposure and are removed from direct patient contact. Rather than fully removing these crucial providers from the healthcare workforce, restructuring their involvement in an eClinic platform can allow them to continue to provide critically necessary patient care services without conferring risk to themselves or others.

CONCLUDING THOUGHTS

In conclusion, we believe that increased use of eClinic will reduce risk for both providers and patients while also allowing continued high-quality care to patients. If adopted, future studies should evaluate the impact of these efforts on transmission outcomes for patients and providers. Such information will educate our medical community regarding the efficacy of such strategies, even beyond the covid-19 pandemic.

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