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PII: S0735-6757(20)30231-X

DOI: <https://doi.org/10.1016/j.ajem.2020.04.003>

Reference: YAJEM 158874

To appear in: *American Journal of Emergency Medicine*

Received date: 27 March 2020

Accepted date: 4 April 2020

Please cite this article as: A. Elkbuli, H. Ehrlich and M. McKenney, The effective use of telemedicine to save lives and maintain structure in a healthcare system: Current response to COVID-1, *American Journal of Emergency Medicine* (2020), <https://doi.org/10.1016/j.ajem.2020.04.003>

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The Effective Use of Telemedicine to Save Lives and Maintain Structure in a Healthcare System: Current Response to COVID-19

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Word count = 764

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Throughout the response to the COVID19 crisis, many healthcare institutions have increased their use of telecommunications. From medical schools to residency programs, from patient interactions at home to those in quarantine, virtual communication is providing a safe way to continue with our responsibilities during this pandemic. According to POTUS (17 March 2020), telemedicine, with lessened HIPAA regulations, is now an approved method of communication between physicians and patients for those with Medicare.¹ Telemedicine provides protection to both the physician and patient, preventing possible spread of COVID-19 while allowing for continued patient care. It is now vital to make practical, effective use of telecommunications to stabilize the healthcare system.

Recently, medical schools have transferred their curriculum to continue online. With the AAMC recommending a “temporary suspension of medical students’ participation in any activities that involve patient(s)” virtual education allows for continued development, while still adhering to social distancing.^{2,3} Web conferencing has features such as audio-video, screen sharing, large login capacities and chat functions, allowing students and educators to maintain their regular teaching schedule.³ The use of telecommunications is indispensable to disseminate knowledge and scientific updates and to swiftly overcome the disruptions in scientific conferences and meetings.

Telecommunication and virtual learning can provide medical education and training for those with adjusted or challenging schedules due to the demands of the pandemic.^{3,4} Virtual learning not only can be but should be utilized for morning report, sign-out, M&M, and communicating with staff in high risk areas without fear of increasing risk of COVID-19 exposure. Social distancing does not need to be at the expense of effective communication, which itself is fundamental to address this crisis efficiently and effectively.

Physicians can employ virtual communication with patients in the form of telemedicine.⁴ Telemedicine allows interactions with patients while adhering to social distancing. Patients at risk, may benefit from staying at home, reducing exposure to others, while receiving medical care. Elderly populations have more medical conditions/comorbidities thus requiring increased doctor visits. With telemedicine, elderly patients can continue their care, lowering their non-emergent office visits. It is essential to employ all modes of reducing transmission and telemedicine allows this without compromising care.

Those in isolation can communicate with the healthcare team, reducing the times a team member has to cross into the isolation zone in full PPE. Telemedicine could be used effectively to monitor obstetrics and provide maternal care with minimal risk of exposure.⁵ Telemedicine could allow providers to triage patients, lessening the burden on Emergency Departments. Emergency care providers, therefore, can ascertain which patients need immediate care or intervention versus going to an urgent care clinic, office follow-up, or local testing center for COVID-19 for those with flu-like symptoms.⁶

The impact of telecommunication goes beyond patient care. The result of this global pandemic includes the closing of schools and childcare centers. The lack of childcare for healthcare workers can result in severe disruption in the healthcare workforce. Without childcare, healthcare teams are further reduced which strains the healthcare system.⁶ To combat this, many institutions set up online forums for healthcare workers to find childcare. Our ability to control this pandemic relies on the strength and availability of our healthcare teams. If our team members are unable to employ proper childcare, then there is less healthcare workers to provide patient care and therefore there is a decreased fighting force.

Though telemedicine has many advantages, there remains a few obvious drawbacks, including patient access to technology, the potential of missed findings on exam, and HIPAA regulations. Many advancements have been made to modify smart devices to be used as smart stethoscopes, otoscopes and take high definition photographs for physician assessment.^{3,7} Still, there is something about physically examining a patient with reassuring hands.

The COVID-19 pandemic has created the immediate need for alternate routes of communication. From both the educational and patient care aspects, hospitals and training programs must utilize telecommunications to continue to provide the highest standard of patient care throughout the pandemic. Virtual communication is essential to maintain the connections between the healthcare workforce throughout the nation, especially with teams and patients within hot spots. It is crucial to share all of the precautionary and treatment measures for COVID-19 to minimize exposure and employ best practices for better outcomes.

Telecommunications during the COVID-19 pandemic will provide a foundation for those across all levels of the healthcare system to continue with their respective responsibilities, lessening the adverse impacts of the current state of affairs and help with flattening the COVID-19 pandemic curve. We must take appropriate actions and precautionary measures now, administratively, educationally, and clinically, to prevent avoidable adverse outcomes including unnecessary deaths.

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