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## Emergency Forum

### NOVEL USE OF TELEPALLIATIVE CARE IN A NEW YORK CITY EMERGENCY DEPARTMENT DURING THE COVID-19 PANDEMIC

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**Abstract—Background:** Coronavirus-2 (COVID-19) is a global pandemic. As of August 21, mortality from COVID-19 has reached almost 200,000 people, with the United States leading the globe in levels of morbidity and mortality. Large volumes of high-acuity patients, particularly those of advanced age and with chronic comorbidities, have significantly increased the need for palliative care resources beyond usual capacity. More specifically, COVID-19 has changed the way we approach patient and family member interactions. **Discussion:** Concern for nosocomial spread of this infection has resulted in strict visitation restrictions that have left many patients to face this illness, make difficult decisions, and even die, alone in the hospital. To meet the needs of COVID patients, services such as Emergency Medicine and Palliative Care have responded rapidly by adopting novel ways of practicing medicine. We describe the use of telepalliative medicine (TM) implemented in an emergency department (ED) setting to allow family members the ability to interact with their loved ones during critical illness, and even during the end of life. Use of this technology has helped facilitate goals of care discussions, in addition to providing contact and closure for both patients and their loved ones. **Conclusion:** We describe our rapid and ongoing implementation of TM consultation for our ED patients and discuss lessons learned and recommendations for others considering similar care models. © 2020 Elsevier Inc. All rights reserved.

**Keywords—COVID-19; palliative care; telemedicine**

#### BACKGROUND

Coronavirus-2 (COVID-19) is a global pandemic, with the United States leading in total number of cases as well as mortality rates (1). Concern for nosocomial spread of this infection has resulted in strict visitation restrictions that have left many patients to face this illness, make difficult decisions, and even die, alone in the hospital. Given an unprecedented volume of high-acuity patients, palliative care resources have been stretched beyond usual capacity (2). To ensure that care provided in the midst of this crisis is aligned with the wishes of patients and their families, emergency physicians (EPs) are now, more than ever, encouraged to have early goals-of-care (GOC) conversations in the emergency department (ED). Having these discussions with patients and families in an emergency setting is already challenging; due to COVID-19 restrictions, the challenge is further exacerbated by the absence of physical contact and limitations on family visitation. However, virtual solutions have the ability to bridge these new barriers to care.

TM has recently increased in use, particularly video-based services administered in outpatient and home-

based settings (3,4). Associated with reductions in mortality, hospital admission, and improvement in quality of life, TM allows for improved access to palliative medicine (3–6). In one study of the use of TM in chronic obstructive pulmonary disease patients, all participants “expressed a high level of satisfaction about the project, in particular the quality of assistance ... the service reduced their fear of abandonment, sense of isolation” (7). An analysis of systematic reviews of TM found that patients, providers, and families considered TM beneficial in regards to clinical effectiveness, cost benefits and savings, and increased quality of care and communication (8). Further studies have examined the use of TM in other settings, including inpatient wards, during the COVID-19 epidemic (9).

Although telemedicine has been broadly adopted and found to be an effective mode of care delivery in a variety of settings, including palliative care, to date there has been limited discussion regarding implementation within the ED setting (10). Here, we describe our efforts to implement TM during the COVID-19 pandemic in an ED located in the global epicenter of the crisis: New York City.

### APPLICATIONS OF TM IN THE ED

Given increased need for palliative care medicine while limiting personal protective equipment use and provider exposure, Columbia University Irving Medical Center’s ED implemented TM services to supplement in-person consultation. A COVID-19 palliative care team comprised of an attending physician, social worker, registered nurse, and a hospital chaplain was available in person 12 h a day during the week, and by phone or TM consultation overnight and on weekends. Considering the high demand of GOC discussions during the COVID-19 pandemic, the availability of palliative care team members to come in person was supplemented by EPs utilizing TM to enhance remote communication. The potential benefits/applications of TM within the context of palliative care are diverse and include:

1. Use of TM by EPs and palliative care to converse with family members. All members of a patient’s care team had the option of using TM via designated iPhones and iPad tablets to clarify GOC or in cases where stated GOC did not align with expected prognosis, as well as help with symptom management for patients at the end of life. Integral to effective GOC conversations is an understanding of patient illness severity, which is often conveyed by practitioners to families who are physically at bedside. The use of video

communication allowed family members to visually see their loved ones, an important step toward understanding prognosis to clarify GOC. TM was also beneficial to use prior to key interventions such as intubation, allowing patients to see or speak to family members prior to being sedated for potentially long periods of time. TM can also be used to reassure families that their loved ones are well cared for and not in extremis if the choice is made to pursue less invasive measures such as comfort.

2. Remote palliative care consults. TM was instrumental in allowing our COVID-19 palliative care team to conduct remote consults, especially during off hours, most notably on the weekends and overnight shifts. This allowed for reduced exposure and decreased infection risk, while still maintaining high-quality care.
3. Shortening the gap of social distancing. TM also provided a means for family contact and, in some cases, closure for critically ill patients. It allowed patients to connect with their loved ones—even those located remotely—at the end of life. The secondary psychological effects of social distancing on patients and their family members have not been described yet, but the concept of dying alone with the absence of physical contact has caused much anxiety and distress for all those involved, even for the EP. Allowing family members this critical moment, despite it being through TM, can help shorten the gap COVID-19 has placed on patients and their loved ones.

### CONSIDERATIONS

There are limitations with using TM for GOC discussions in the ED setting. To address security and Health Insurance Portability and Accountability Act violation concerns, we advocate for the use of secured and encrypted designated devices rather than personal technology. This allows for communication when patients or families may not have personal access to devices with video capability. To enhance communication, the utilized technology should integrate with audio interpreter services when translation is needed. Most important is ensuring that reception or internet connection is uninterrupted with clear audio during any remote interaction. Prior studies show that technological issues can lead to decreased patient satisfaction, harming interpersonal connection (11).

To effectively provide palliative care and facilitate GOC conversations through the use of TM, the need for further protocols must be considered. Although there

has been growth of telemedicine services, there is a lack of robust evidence regarding outcomes from the clinical application of telemedicine in palliative care, let alone TM in the ED (8,12). Further studies need to examine measuring the effects of palliative care interventions on patient and family comfort, satisfaction, and physiological and emotional status. Most importantly, this must be an interdisciplinary approach in coordination with palliative care teams and EPs.

### CONCLUSION

The COVID-19 pandemic allows us the unique opportunity to redesign the way palliative care is deployed in the ED. Patients are often unable to see or touch their loved ones during critical illness. Combined with decreased provider interaction, due to visitor and personal protective equipment restrictions, families and patients may feel helpless or abandoned during their time of greatest need. However, even with physical distancing, emotional and social connection is still possible. TM allows palliative care providers and EPs to enhance communication with family members who are not physically present, all while ensuring they are protected from COVID-19. It provides a viable means of communication, particularly for GOC conversations and end-of-life support in the ED. Despite the lack of evidence for using telemedicine in this capacity, we advocate for its consideration, in coordination with established protocols, and with palliative care team involvement, when feasible. Future work is needed to establish protocols, evaluate efficacy, and improve the delivery of TM interventions in the ED.

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