LETTERS TO THE EDITOR

RESEARCH

Time-Critical Goals of Care in the Emergency Department During COVID-19: A Three-Stage Protocol

INTRODUCTION

Coronavirus disease 2019 (COVID-19) is a global pandemic, with New York holding the unenviable title of "epicenter" for COVID-19 in the United States. Given the extremely poor prognosis of critically ill COVID-19 patients who require mechanical ventilation, particularly the older patients or those with chronic comorbidities, ^{1,2} it has become imperative to clarify goals of care (GOC) in a timely fashion. The surge of critically ill COVID-19 patients in the emergency department (ED) prompted an increased demand for early identification of GOC and treatment preferences. Early GOC clarification may help avoid using scarce resources for patients who do not want them.

At our institution, we implemented an ED-based COVID-19 palliative care response team, focused on providing high-quality GOC conversations in time-critical situations.³ In this article, we discuss the specific challenges of time-critical, ED GOC conversations as they relate to the COVID-19 pandemic, as well as our experiences and approach.

CHALLENGES IN COVID-19

Challenges to effective communication in the context of the COVID-19 pandemic abound. Rapid and precipitous progression to respiratory failure is not uncommon, necessitating prompt GOC decision-making. Such rapid decline can be challenging for families to comprehend, particularly when unwitnessed due to strict no visitor policies. Without nonverbal communication, telephone conversations become more challenging as well. Additionally, it may be harder for ED clinicians, who are caring for higher volumes of much sicker patients, to find adequate time to identify family and engage in these sensitive conversations. Due to these challenges, patients likely to have poor outcomes could receive unwanted life-sustaining treatment, without fully clarifying GOC.

APPROACH IN GOC CONVERSATIONS

To mitigate family absence at bedside, videoconferencing should be attempted whenever possible. Our experience has demonstrated that this is tremendously helpful for

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families, not only allowing them to grasp how sick their loved one is, but also for providing much needed contact. Multiple communication guides specifically for COVID-19 GOC conversations are available. We incorporated COVID-19–specific language into our recently published "Three-Stage Protocol" and have successfully used this framework to navigate these difficult conversations (Figure 1). This approach was found to be useful for non–palliative care clinicians as well, including psychiatrists and ED clinicians, who received additional GOC training during the COVID-19 pandemic and provided positive feedback.

THREE-STAGE PROTOCOL

Stage 1 of the Three-Stage Protocol emphasizes sharing knowledge, more specifically sharing the prognosis. Incomplete and rapidly changing data in COVID-19 poses significant challenges for accurate prognostication. Therefore, when estimating prognosis, emphasizing functional status outcomes rather than focusing exclusively on survival data is particularly important (i.e., even if they were to survive a long course in the intensive care unit, such patients would likely become dependent and institutionalized from chronic critical illness^{8,9}). In sharing the prognosis, it is essential to use a clear and simple headline. After providing the prognostic statement, clinicians should anticipate a strong emotional reaction, which needs to be addressed before moving on.

Stage 2 emphasizes clarifying GOC and usually involves asking open-ended questions ("What is most important?"). However, in the setting COVID-19 infection, patients and families may be too overwhelmed by the sudden clinical deterioration to express their goals and values. In such circumstances, we suggest that clinicians ask more directed questions, such as, "What does he/she enjoy?" or "What makes him/her happy?," which may be easier to answer. This also helps families reframe their focus from "life or death" to quality of life for their loved one. After better understanding the patient's goals and values, we pivot to align this information with GOC recommendations.

In stage 3, the emphasis is on negotiating treatment options. Once GOC are clarified in stage 2, after getting permission, clinicians should make recommendations to achieve those GOC, rather than asking yes/no questions about specific treatments, such as intubation. Similar to Curtis et al, ¹⁰ we suggest utilizing informed assent when cardiopulmonary resuscitation (CPR) is unlikely to be beneficial and is not consistent with a patient's values or goals. However, we believe informed assent can be applied not only to CPR, but also to mechanical ventilation and other medical interventions, provided we assess and confirm the

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Stage 1: Sharing knowledge

- Estimate the prognosis with an emphasis on functional status

- "Once he/she gets a breathing tube and goes on a breathing machine, it is less likely he/she could ever come home."

- Share the prognosis using a clear and simple headline

- "If the COVID-19 infection gets worse, it would almost certainly take his/her life."



Stage 2: Clarifying goals of care

- Ask-open ended questions

- "What is most important?, What makes his/her life meaningful?, What are you most worried about?"

- Ask concrete questions

- "What does he/she enjoy?, What makes him/her happy?"
- "What would he/she think of this if he/she could be talking with us?"

- Pivot from personal goals and values to align those with goals of care

- "Based on what I'm hearing, staying independent and being with family at home are most important."



Stage 3: Negotiating treatment options

- Ask for permission

- "Would it be ok to make a recommendation? Based on what we just discussed, ..."

- Make a recommendation based on the agreed-upon goals

- "We <u>would recommend</u> continuing treatment of pneumonia, but we <u>would not recommend</u> a breathing machine if he/she gets worse."

- Informed assent

- "We will not use a breathing machine or chest compressions. Does that make sense? What questions do you have?"

Figure 1. Three-Stage Protocol for goals of care conversations during the coronavirus disease 2019 (COVID-19) pandemic.

patient's and/or family's understanding, and create space for objection.

CONCLUSION

The COVID-19 pandemic poses significant challenges to having effective, time-critical GOC conversations. To overcome this, we propose a simple communication approach that allows clinicians to quickly share the clinical picture, rapidly and effectively assess the patient's values, and make a goal-concordant recommendation. Although palliative care specialists should continue to assist when feasible, all clinicians should be prepared to initiate these difficult conversations and ensure that we are providing goal-concordant care during this crisis.

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Adapting a Hospital-at-Home Care Model to Respond to New York City's COVID-19 Crisis

The COVID-19 pandemic has strained hospital capacity and increased the risk of nosocomial infection worldwide. Surging demand for providers' time and shortages of personal protective equipment (PPE) threaten care quality and safety. Yet decades before COVID-19, the hospital-at-home (HaH) model, which brings inpatient-level care to the patient's home emerged to tackle such challenges. Research demonstrates HaH exceeds usual hospital outcomes while improving the patient experience.^{2,3} Our own HaH program has treated approximately 1,000 patients since 2014 and is no exception.^{4,5}

As hospital care becomes precarious or even unavailable, COVID-19 brings new urgency to the HaH mandate and highlights how this care model is uniquely positioned to respond to the pandemic. We describe our experience adapting HaH care from March 19 to April 18, during the peak of the COVID-19 pandemic, at two hospitals in New York City.

METHODS

To relieve bed shortages from COVID-19, we augmented our HaH program, in which patients select home inpatient care instead of the hospital, with the Completing Hospitalization at Home (CHaH) model. CHaH permits patients already admitted to the hospital, and with ongoing hospital-level care needs, to complete their inpatient care at home. We developed CHaH in 2 weeks, collaborating with health system leadership, its legal team, a private home care partner, and the hospital pharmacy. Our team worked with inpatient clinicians and case managers to identify hospitalized patients with ongoing inpatient needs (such as intravenous medication) but not needing procedures or imaging unavailable at home (eg, computed tomography scans). Our hospitals billed insurers for a standard inpatient stay as per

the admission's Diagnosis Related Group (DRG) and reimbursed the CHaH program a portion of that DRG payment, using the state's emergency regulations to facilitate inclusion of all insurances.

Following pilot testing in patients without confirmed COVID-19, we expanded the program to include patients with COVID-19 infection, either as their primary diagnosis or an incidental condition. Initially, we required patients with COVID-19 to be aged 65 and younger, afebrile for 48 hours or longer, and 8 days or longer since symptom onset, with improving inflammatory serologies. To prevent disease transmission, we excluded immunocompromised patients and those requiring extensive assistance with activities of daily living. However, 2 weeks after accepting COVID-19 patients, we waived these age and functional status criteria to expand care to older adults and/or those with increased care needs. We made this decision due to the higher risk of hospitalization-associated complications such as delirium and falls in this vulnerable population, and in response to the demographics of referrals to our service. Patients received twice daily in-person visits from nurses and daily telehealth visits from nurse practitioners or physicians.

RESULTS

We admitted 24 patients in total; 12 were COVID positive. Among persons without COVID, the most common diagnosis was pneumonia. The mean length of stay (excluding the hospital) was 3.1 days, representing 75 potentially averted hospital days overall. Further details of the patients' attributes and outcomes appear in Table 1.

Three patients did not complete CHaH care at home. The first, a 60-year-old man, developed acute fever and hypoxia on CHaH day 5, subsequently tested positive for COVID-19 at the hospital, and died from respiratory failure. The second, an 81-year-old woman with confirmed COVID-19, developed new hypoxia once home and returned to the hospital, but she was subsequently readmitted to CHaH care with oxygen support. The third, a 62-year-old man who tested negative for COVID-19, declined all care after arriving home and was discharged from CHaH against our advice, but he did not return to the hospital.

DISCUSSION

Our experience suggests that the CHaH model can viably care for inpatients both with and without COVID-19 in

Table 1 Clinical Characteristics of Patients Admitted to the CHaH Program

| Total N | 24 patients |
|--|-----------------------------------|
| Mean age (SD) | 60.8 y (16.5) |
| Sex (%) | 10 female (42%); 14 male (58%) |
| Mean CHaH length of stay (SD) | 3.1 days (1.3) |
| Admitted for COVID-19 disease specifically (%) | 12 (50) |
| Escalation of care (%) | 2 (8.3) |

Abbreviations: CHaH, Completing Hospitalization at Home; SD, standard deviation.