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COVID-19 Articles Fast Tracked Articles

National Outreach of Telepalliative Medicine Volunteers for a New York City Safety Net System COVID-19 Pandemic Response

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Abstract

The coronavirus disease 2019 surge in New York City created an increased demand for palliative care (PC) services. In staff-limited settings such as safety net systems, and amid growing reports of health care worker illness, leveraging help from less-affected areas around the country may provide an untapped source of support. A national social media outreach effort recruited 413 telepalliative medicine volunteers (TPMVs). After expedited credentialing and onboarding of 67 TPMVs, a two-week pilot was initiated in partnership with five public health hospitals without any previous existing telehealth structure. The volunteers completed 109 PC consults in the pilot period. Survey feedback from TPMVs and on-site PC providers was largely positive, with areas of improvement identified around electronic health record navigation and continuity of care. This was a successful, proof of concept, and quality improvement initiative leveraging TPMVs from across the nation for a PC pandemic response in a safety net system.

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Key Words
Palliative care, telehealth, COVID-19, pandemic response

Introduction

The first confirmed case of coronavirus disease 2019 (COVID-19) in New York City (NYC) occurred on March 1, 2020.\(^1\) Since then, the city became the unfortunate epicenter of the pandemic in the U.S., with more than 40,000 hospitalizations and 13,000 deaths, as of May 1, 2020.\(^1\) NYC Health and Hospitals (NYC H + H), the largest public health system in the U.S., was pivotal in its role to deliver care to the people of the city. Amidst the growing number of critically ill patients, a centralized response was mobilized for palliative care (PC).

Previously published models for COVID-19 response in PC included strategies from institutions

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that relied on high levels of staffing, which many safety-net health systems lack. Within our system, most hospitals had two or fewer full-time equivalents (FTEs), with some lacking any PC clinicians (Table 1). In staff-limited settings, and amid growing reports of health care worker illness and further reduction of staffing, leveraging help from less-affected areas around the country may provide an untapped source of support. Telepalliative medicine allows for consultative services from remote locations, limiting provider exposure and personal protective equipment use. As a part of the NYC H+H surge response, we rapidly developed a multihospital quality improvement strategy to support local PC efforts through sourcing of telepalliative medicine volunteers (TPMVs) from across the country.

Methods

NYC H+H is an urban safety-net health system with 11 hospitals and five postacute care facilities, serving more than 1.1 million patients yearly. The system-wide PC response began on March 30, 2020, with peak surge on April 9. Central office quality and safety team partnered with the system PC council and convened conference calls one to two times/week during the peak surge, centering on how to rapidly expand PC efforts. The call for external TPMVs was initiated on April 2 through social media outreach (Twitter and LinkedIn). Site visits or calls were made during a three-week period to each of the system’s hospitals and included discussion with various leads from PC, medicine, emergency medicine, critical care, as well as hospital executive leadership, to determine if and how TPMVs would be helpful for their site.

TPMVs who could volunteer for at least three shifts received expedited crosscredentialing at all acute care facilities, including remote access to the electronic health record (EHR) for documentation. The central coordinators developed a schedule for each site of one to two volunteers/day and modified coverage for weekends. Central coordinators relayed contact information and orientation materials via group electronic mail daily. Site leads reached out to volunteers daily to orient and coordinate consults. Brief surveys and verbal feedback were elicited from TPMVs after each shift. In addition, a survey was sent to site leads after the pilot period.

Results

Five hospitals agreed to participate. The other hospitals felt they had adequate staffing, either from internal staff redeployment or external in-person volunteers. Among participating hospitals, the dedicated FTE before the surge averaged 1.0 per site (range 0–2.0), with two sites having no existing PC service. In contrast, the hospitals that did not participate averaged 4.2 FTE per site (range 2.0–4.5), with three sites having additional fellows. Hospital capacity ranged from 213 to 627 beds (Table 1).

The external recruitment process enlisted 413 volunteers (150 physicians, 96 chaplains, 66 nurse practitioners, 39 nurses, 28 social workers, 15 medical students, 2 physician assistants, and 17 others). Sixty-four clinicians were emergency credentialed and onboarded for a 14-day pilot period, from April 15 to 28, 2020. A total of 109 consults were completed during this two-week period, staffed by 22 volunteers for more than 67 shifts, averaging 8.7 TPMV consults per day.

Twenty-eight postshift volunteer surveys were collected from 20 volunteers. Of all reported consults, most involved goals-of-care conversations (56%) and family updates (41%), followed in frequency by emotional support (39%), anticipatory guidance (24%), hospice placement (5%), and bereavement (5%). Consult types were not mutually exclusive, as survey respondents could choose multiple options. Critical care patients comprised most consults (60%), with the remainder of consults coming from medical-surgical units. TPMV feedback encompassed the following domains: communication, electronic medical record, familiarity with local policies, continuity of care, and workload (Table 2). Although feedback was largely positive, the most commonly received

### Table 1

| Hospital               | Bed Capacity | PC Staffing Before Surge (FTE) | TPMV Consults per Day |
|------------------------|--------------|-------------------------------|-----------------------|
| Coney Island           | 371          | 1.0 nurse and 1.0 physician    | 1.7                   |
| Jacobi                 | 457          | 1.5 nurse practitioner and 0.5 physician | 1.4 |
| Kings County           | 627          | 1.0 physician                 | 1.8                   |
| North Central Bronx    | 213          | 0                             | 0.9                   |
| Woodhull               | 329          | 0                             | 2.9                   |
| Total                  | 1988         | 1.0 nurse; 1.5 nurse practitioner; and 2.5 physician | 8.7 |

PC = palliative care; TPMV = telepalliative medicine volunteer; FTE = full-time equivalent.
constructive feedback included difficulty contacting the primary team, documenting in the EHR, coordinating social services, and following up on previously assigned consults. Workflow was rapidly modified in response to feedback through interventions such as disseminating local directories to TPMVs, providing an EHR documentation tip sheet, pairing TPMVs with site-based social workers when appropriate, and connecting TPMVs assigned to the same site on consecutive days to facilitate verbal handoff.

In addition, all five site leads completed a survey sent after the end of the pilot period, consisting of seven statements on a Likert scale and two open-ended questions regarding the initiative’s challenges and strengths. All respondents strongly agreed that advanced care planning discussions were needed at a higher rate during COVID-19 surge and that additional PC services were needed to meet the demand. In addition, all respondents agreed or strongly agreed that medical teams were receptive to working with TPMVs and that the benefits of the consultation service outweighed the time spent coordinating workflow and orienting new volunteers. Finally, all respondents reported an interest in leveraging this program for future surges.

**Discussion**

We successfully implemented a telepalliative medicine response within a large safety-net system without a pre-existing telehealth infrastructure. Within just 72 hours of the initial outreach, more than 400 volunteers enlisted, reflecting a rapid and robust response. Overall, volunteers and site leads were appreciative of this program and viewed it as a mutually beneficial partnership for current and future surges. To our knowledge, this is the first model to leverage external TPMVs from across the country for an institutional COVID-19 pandemic response. Although early in our operations, several concepts resonated through our process, which may aid other institutions in future efforts.

Changes to the credentialing and onboarding process were crucial to the program’s success. We began expedited disaster-level crosscredentialing across the facilities and ensured malpractice coverage. Remote EHR access and onboarding were simplified, and dedicated staff helped usher volunteers through this complex process and troubleshoot any issues instead of relying on already busy site leads. Altogether, our modified time for TPMVs to go live took three days, a dramatic improvement from the three-month process before the surge. We believe this program would not be feasible without the concerted interdepartmental effort from executive leadership, credentialing, human resources, ambulatory, and informatics to help streamline this cumbersome process.

Through a call for help from the city and state, there were a significant number of in-person volunteers available at the peak of the surge. For many

| Table 2: TPMV Feedback and Changes Made to Operations |
|-------------------------------------------------------|
| **Domain** | **Changes Made** |
| Communication | Encouraging use of Doximity Dialer application or Google Voice application to maintain TPMV privacy |
| Communication with patients/families | Instructing medical teams to make families aware of upcoming call from TPMVs |
| Communication with medical team | Providing site-specific/department/unit/service directories |
| Communication with site and central coordinators | Creating a daily group message connecting TPMVs with coordinators |
| EHR | Specifying correct EHR context in introductory electronic mail |
| EHR access/log-in | Creating a remote PC visit documentation template (dot phrase) |
| EHR documentation | Creating EHR tip sheet |
| Inconsistent location of patient/family contact information | Adding family contact information to handoff format |
| Site-specific logistics | Including all team members' roles and responsibilities in introductory electronic mail |
| Role of social work, nursing, and medical teams | Creating site-specific orientation manuals |
| Services available | Connecting TPMVs to on-site social workers |
| End-of-life policy or guidance | Providing contact information of previous day’s TPMVs to facilitate verbal handoff |
| Continuity | Allowing continuity of communication beyond formal consulting days |
| Sign-out process | Encouraging TPMVs to take shifts on consecutive days with the same hospital |
| TPMVs wanting to follow patients daily beyond shift | Reaching out to primary teams daily |
| Rapport building with families | Developing shared patient lists for potential contacts |

TPMV(s) = telepalliative medicine volunteer(s); EHR = electronic health record; PC = palliative care.
reasons, help on the ground is often preferred over remote, largely stemming from the ease and efficiency of communication. A physically present volunteer can naturally absorb conversations in between phone calls, and communication is augmented through facial and body expressions. However, remote volunteers offer unique advantages. They do not require the additional coordination of hotel, transportation, food, as well as logistical setups such as photo IDs, local orientations, immunization checks, or N-95 fit testing. They spared personal protective equipment use, a critical supply during the pandemic. In addition, and perhaps most importantly, TPMVs prevented unnecessary exposure of health care workers. Telemedicine should be considered a standard during this pandemic given the potential for health care worker harm.7

Certain limitations were noted. First, this was a two-week pilot study, with limited data for sustainability or continued need. However, as we continue to see many deaths, intensive care units well beyond capacity, and potential for subsequent surges, we anticipate the need to continue. In addition, as in-person volunteer numbers are expected to wane, the need for TPMV redeployment may increase. Second, this consult service was seldomly used in some sites. This was largely because of availability of in-person volunteers, and, as with any new consulting service, adoption required significant time and effort to spread the word, troubleshoot, and build trusting relationships among clinicians. The primary goal of this initiative was to support PC team efforts on the ground. Offloading any goals-of-care discussions from the PC or inpatient teams during a busy day of the pandemic surge was considered a victory. Third, we did not obtain direct feedback from the primary teams or patients regarding the quality of the consults. Finally, this program depended in part to the uplifting of certain regulations, including Health Insurance Portability and Accountability Act and the need for a New York medical license.8 We anticipate these regulatory changes to continue, but some TPMVs may come from within the state.

In summary, this was a proof of concept and pilot study harnessing a national source of PC clinicians for a pandemic response for our safety-net health system. Further study is needed to understand the continued need, sustainability, and optimal level of operations. In addition to increasing video communications, next steps can focus on upstream goals-of-care discussions, integrating automatic inpatient consults, and supporting ambulatory and postacute facilities. We anticipate this initiative to continue, and we hope this may serve as a model for other institutions during subsequent COVID-19 surges and other disaster events.

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