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ARTICLE

A Beacon for Dark Times: Palliative Care Support During the Coronavirus Pandemic

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Palliative care physicians can provide critical expertise in communication and symptom management to help seriously ill patients in the coronavirus disease 2019 pandemic. However, with an existing shortage of palliative care specialists, the surge of Covid-19 cases in New York City required rapid expansion of palliative care services, particularly to emergency departments (EDs). In response to these needs, the Icahn School of Medicine at Mount Sinai developed and adapted a 24-7 PAlliaTive Care Help line (PATCH-24) with focused in-person ED supports to serve 873 of the sickest patients with Covid-19 over 4 weeks in late March and April 2020. The authors describe key principles and lessons learned from this process.

The pandemic of coronavirus disease 2019 has been accompanied by high levels of suffering. Patients experience unpredictable rapid health decline and symptoms such as dyspnea, anxiety, and isolation.[1,2] Families, who may themselves be sick, are unable to visit their loved ones due to infection-control policies and are often tasked with making difficult decisions about ventilators and resuscitation for patients with low likelihoods of survival.[3,4] Health care workers struggle with sustained high volumes of clinical work, emotional strains of witnessing death and severe illness, and fears for their own health and that of their families.[5,6]

Palliative care clinicians are uniquely equipped to address the suffering of Covid-19, especially in epicenters where the health system is particularly strained. Palliative care is a team-based specialty that provides an added layer of support for those with serious illness, with high-level communication and symptom management skills and a transdisciplinary approach to address physical, emotional, and existential suffering.[7] However, even under normal conditions, there is a significant shortage of palliative care clinicians.[8,9]

We developed a novel palliative care telephonic support line to extend the reach of palliative care as a critical component of a health system disaster response for Covid-19. We outline our initial conceptual approach, the rapid implementation of our 24-7 PAlliaTive Care Help line (PATCH-24), the real-time innovations and adjustments we made, and the core principles that we identified as essential to such an effort, all of which were fundamental to the success of this program.

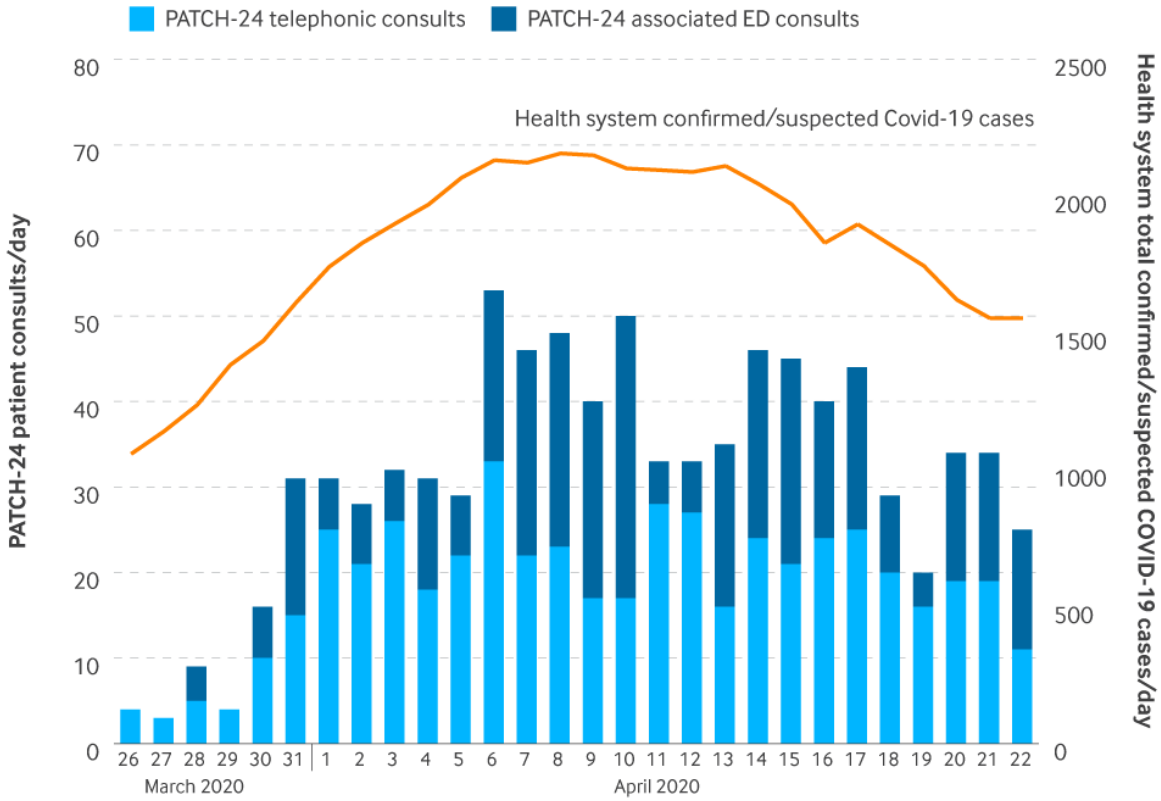
Program Description: Responsive, Round-the-Clock Support That Can Be Restructured Based on Call Volume

We initiated planning for our telephonic support line, PATCH-24, on Monday, March 23, 2020, and began receiving calls on Wednesday, March 26. We tracked call volume, PATCH-24–associated emergency department (ED) consults, and the caseload of Covid-19–positive or presumed positive patients within the Mount Sinai system (Figure 1).

FIGURE 1

Daily Volume of the PATCH-24 Telephonic Palliative Support Line and Associated ED Consults During the Covid-19 Pandemic.

The daily volume of the PATCH-24 telephonic palliative support line and associated ED consults rapidly grew to the peak of the pandemic in our health system and then began to decline.



Note: PATCH-24 telephonic consults were directly received by front-line physicians. PATCH-24 associated ED consults were referred by ED clinicians to an in-person PATCH-24 physician in the ED who called the patient's family.

Source: The authors

The call line was promoted through system-wide and departmental emails, fliers distributed by clinicians based at each site, and attendance at clinical rounds. These efforts were designed to emphasize the availability of and the high need for PATCH-24 in settings such as the ED and intensive care unit (ICU). The PATCH-24 acronym branded the line as distinct from traditional inpatient palliative care services. The line was available to six hospitals within the Mount Sinai Health System throughout New York City. The health system consists of a 1,100-bed quaternary care hospital, three 500- to 700-bed community and tertiary hospitals, two 200-bed community hospitals, and a temporary 70-bed field hospital (operated by a disaster relief group) that opened on April 1, 2020, to provide overflow capacity.

> *"The PATCH-24 call line provided a guiding light to improve patient care and support clinicians with 873 of the most difficult of cases over 4 weeks during the peak of the Covid-19 pandemic in New York City."*

Initially, the PATCH-24 line was staffed by two board-certified palliative medicine physicians who alternated 12 hour shifts to ensure prompt and expert response at all hours. Call line volume grew exponentially over the first week of the program: from 4 to 25 patient encounters over the first week before it stabilized as the health system reached peak volume of Covid admissions. As a result, responsiveness in the first week suffered as the physicians increasingly missed incoming calls while on the phone with families or other clinicians.

In response, two adaptive innovations were made to expand coverage while maintaining responsiveness. First, we created a backup pool of five physicians who were available to assist when multiple calls came in simultaneously. Second, we trained a cohort of medical students to receive and direct calls to the team of palliative care physicians. If another health system were to develop a similar system to support an estimated census of 200 additional severely ill patients, we would recommend staffing two full-time equivalent (FTE) (for day and night coverage) palliative care physicians, as well as four FTE physicians on staggered backup shifts to make calls as needed. We also utilized three medical students per day (working 4-hour shifts each) to triage phone calls.

In support of the effort, we find that six principles are indispensable for the PATCH-24 model.

Principle 1: Direct palliative clinician-to-family communication support is required in the highest-need settings.

Initially, the intended purpose of PATCH-24 was to coach frontline clinician teams in communication and symptom management. During the first week of operations, however, it became apparent that this approach was insufficient as the Covid-19 pandemic surged. Physicians in the ED did not have time to receive coaching and conduct goals-of-care discussions with families, while simultaneously handling high volumes of Covid-19 patients with acute clinical needs. Calls frequently came from clinicians who had been redeployed from their primary departments to care for Covid-19 patients in the hospital and needed help conducting complex goals-of-care discussions. We quickly changed PATCH-24 from teleconsultation (physician-to-physician) to direct telemedicine (palliative medicine clinician-to-family) to better align with hospital workflow and meet clinical needs.

Changing to a telemedicine role required our palliative physicians to adopt new practices as they could not be physically present at patients' bedsides and were under considerable time pressures due both to patient volume and the speed at which decisions needed to be made. Scripts were developed by our department's communication experts in collaboration with colleagues from the VitalTalk communication program for use in commonly encountered Covid-19 situations.[10]

PATCH-24 physicians were required to attend roughly 2 hours of virtual training that focused both on PATCH-24 procedures and communication using the newly developed scripts. The scripts included scenarios such as patients in the ED at high risk of intubation and low likelihood of survival, mechanically ventilated patients in intensive care units with progressive multi-organ failure, or decision-making regarding an ICU transfer for patients on a regular floor whose clinical conditions were rapidly deteriorating. Customized electronic health record note templates reflected this standardized language to facilitate rapid charting and promote best practices in peer-to-peer communication.

Principle 2: Monitoring call line volume can guide targeted palliative care supports to hot spots.

Medical student phone operators kept daily logs of calls, including the hospital and unit of the caller; these records were reviewed during daily shift-change huddles at 9 a.m. and 9 p.m. This allowed us to identify the clinical sites of highest need. For example, we found that one community hospital without an inpatient palliative care team had a consistently high call volume.

In response, we designated an on-site palliative care physician whose physical presence facilitated better collaboration. This allowed for enhanced palliative care support at that site and led to earlier consults. Prior to Covid-19, another one of our hospitals relied upon telephone coverage during the weekend rather than on-site palliative care coverage. During the New York City surge, weekend call volume at this hospital become so high — 19 consults on one Sunday — that on-site weekend coverage was instituted.

Principle 3: Hot spots gone cold may indicate areas that are overwhelmed.

While the ED at our main hospital had been the source of the majority of calls initially, on day 3 of PATCH-24 operations, no calls were received from the EDs despite rising patient volume. Discussions with ED and health system leadership revealed that the volume of critically ill patients arriving to the ED had precipitously increased, making it now impossible for ED physicians to make time to call PATCH-24.

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In response, we physically embedded one of the PATCH-24 palliative care physicians into the Covid acute resuscitation bay of the EDs during their busiest hours. This in-person presence in the fast-paced ED allowed for close collaboration in real time, where that palliative physician could simultaneously meet with patients and families while the ED physicians triaged and stabilized

patients. It allowed closer integration of PATCH-24 into the ED, with the in-person palliative physician at times requesting the PATCH-24 physician to assist with calling families. Ultimately, this in-person presence led to increased utilization of the PATCH-24 line by the ED during hours when a palliative clinician was not physically present.

Principle 4: Staffing expansion presents logistical training challenges.

Although our palliative care program is one of the largest in the country in number of faculty and fellows, at the peak of the surge, our staffing could not accommodate the number of patients being referred. To address the needs of patients and families, we contacted palliative care physicians practicing in regions less impacted by the Covid-19 pandemic; they had asked if they could be of assistance and we accepted the offer. Under Covid-19 emergency procedures established by New York state and the Mount Sinai Health System, we credentialed these individuals as temporary Mount Sinai faculty and trained them to assist on the PATCH-24 call line.

During peak weeks of the pandemic, these volunteer faculty joined the pool of backup PATCH-24 physician staff to handle surges in call volume over the day as well as to allow for department faculty to take much needed shift breaks. Backup faculty were trained in communication skills as described above as well as in PATCH-24 operations and practices.

Although we developed detailed protocols that described variations in documentation, processes, and culture across hospital sites, nuances of cultural and electronic health record differences across sites posed significant challenges for volunteers to learn. In response to this issue, we identified a backup physician from our health system who was available to both serve as a sounding board for difficult cases as well as assist volunteer physicians with navigating the multiple system hospitals.

Principle 5: The call line supports clinicians as well as patients and families.

It became clear soon after the call line opened that clinicians calling for assistance were often fatigued and overwhelmed. One hospitalist calling for symptom management advice late at night for a patient with comfort-focused goals but persistent dyspnea began to cry while explaining the patient's clinical history. What would start as a clinical question would frequently reveal itself to be distress about a dying patient's isolation in the hospital, away from family.

> *"The role of PATCH-24 in not just caring for patients, but also in supporting clinicians in this extraordinarily difficult work became a prominent feature of the line. Palliative care physicians staffing the line provided empathic listening and encouragement for frontline clinicians."*

The role of PATCH-24 in not just caring for patients, but also in supporting clinicians in this extraordinarily difficult work became a prominent feature of the line. Palliative care physicians staffing the line provided empathic listening and encouragement for frontline clinicians. They arranged for video visits with family, chaplaincy calls, child life specialists, art therapy support, and mindfulness coaching for families to not only support patients and families, but also to help distressed clinicians see the range of care that can be delivered even when death is imminent.

When practical, PATCH-24 attendings coached colleagues through symptom management and family meetings to support trainees and clinicians practicing in new roles. In one example, a team of subspecialists practicing outside their field listened in as the palliative care physician led a family update and expressed that they felt empowered to lead similar calls. Among the PATCH-24 team, morning and evening huddles to review call numbers and troubleshoot issues that arose were also useful times to support each other and maintain camaraderie in the face of this emotionally difficult work.

Principle 6: The call line is ideal for crisis response, but not continuity.

As call line volume and the number of palliative care physicians staffing PATCH-24 grew, managing follow-up after calls and integrating with in-patient palliative care teams became more challenging. We emphasized that our call line did not automatically follow patients, and encouraged teams to call us again if assistance is needed, reinforcing this in our documentation. We were cautious to not necessarily promise follow-up to family, and instead provided appropriate phone numbers so that they could contact the patient's unit and their clinical teams. We refined our workflows and integration with the available inpatient palliative care teams for patients who required in-person follow-up.

For future times of surge and iterations of the PATCH-24 line beyond Covid-19, we plan on developing workflows that could accommodate PATCH-24 follow-up.

The Challenges Ahead

Finally, as call volume has begun to slowly decrease, we are faced with new challenges of integrating with existing palliative care infrastructure while maintaining the critical elements of 24-7 availability and responsiveness to pockets of our health system that lack a palliative care presence. This involves nuanced, hospital-specific work to partner with our palliative care colleagues and integrate into diverse hospital and practice cultures across the health system. In addition, we continue to seek opportunities to teach skills in symptom management and communication to all frontline clinicians across the system through online learning, coaching, and collaborative family meetings.

The PATCH-24 call line provided a guiding light to improve patient care and support clinicians with 873 of the most difficult of cases over 4 weeks during the peak of the Covid-19 pandemic in New York City. The structure of the call line allowed us to rapidly extend specialist palliative care across the health system, and was helpful in prioritizing allocation of inpatient palliative care resources. This approach is useful for hospital systems both responding to Covid-19 and for those looking

to expand the presence of palliative care beyond what is possible with a traditional inpatient consulting team. As we look to the future, while we hope to never again have to respond to the degree of suffering our community has experienced, we are comforted that we are well equipped to do so.

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Disclosures: Claire Ankuda, Christopher Woodrell, Sean Morrison, and Emily Chai have nothing to disclose. Diane Meier is the Director of the Center to Advance Palliative Care.

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