

The Daily COVID-19 Clinical Huddle: Hope in a Time of ‘No Consults’

Background:

It was a Friday afternoon in early March of 2020 and the writing was on the wall. As leaders in the divisions of Hospital Medicine and Pulmonary and Critical Care Medicine at Mount Sinai Beth Israel, we gathered around a table in a small conference room – one of the last in-person meetings of that sort in memory - to strategize for what we knew was coming; what was already here. In New York City, the community spread of COVID-19 had already begun and it was just days before patients would arrive and crowd our ICUs and medical units, pushing our physical and emotional capacity to its limits. Paramount was the question of how we would scale up our staffing and more importantly, how we would support our staff in the face of so much clinical uncertainty.

As our hospital is part of the larger Mount Sinai Health System, there was already a team in place to handle the redeployment of physicians to Mount Sinai Beth Israel from both within the system and around the country. We were assured that per diem intensivists would be directed to support our ICUs and internists and other specialists would rotate as hospitalists to handle the volume on the general medical floors. Every specialty was also determining their individual approaches to consultation services, either continuing with traditional in-person consultations, performing tele-consults using iPads for patient communication or a combination of both. However, our major concern that Friday was that with all of our Pulmonary and Critical Care physicians deployed to ICU settings, how could we best perform pulmonary consultations for non-ICU patients when we knew that this volume would be rising exponentially?

This question is critical when we account for the nature of hospital. Hospitalists are now the primary drivers of care for hospitalized patients in our health system, a trend that is mirrored in the region as well as nationally¹. Trained in internal medicine, hospitalists are well versed in the care of patients with complex acute medical conditions and often function independently to manage multiple comorbidities. There is much variability among hospitalists in terms of reliance on specialty consultation and the jury remains out as to whether increased consultation results in better patient outcomes². Nevertheless, in large academic medical centers such as ours, hospitalists take comfort in knowing that consultative services are available, particularly for patients that are rapidly decompensating or have obscure ailments lacking evidence-based guidelines to inform treatment. Of course, all hospitalized patients with COVID-19 were bound to meet the latter of these criteria with many, unfortunately, meeting both. To add another layer of complexity, we were expecting an influx of non-hospitalists to staff the general medical floors – cardiologists, oncologists, internists, and even a pair of neurologists and one surgeon. How were we to ensure that our hospitalist and non-hospitalist physicians were supported during this unprecedented time? It was abundantly clear that staffing for a full pulmonology consult service would not be feasible if the surge of patients came as expected.

The Intervention:

A traditional pulmonary consultation involves a pulmonary medicine trained physician directly interviewing and examining a patient, offering the requesting physician official recommendations and documenting these recommendations in a billable record within the patient's electronic medical record. In lieu of the traditional pulmonary consultation we established a daily forum where non-ICU COVID-19 cases could be informally presented to a pulmonologist. We named these conferences "The Daily COVID-19 Clinical Huddle." They were hosted virtually on Zoom, Monday through Friday at 2 p.m. to optimally accommodate the presentation of both established and new cases admitted earlier in the morning. All attending physicians staffing the general medical floors, both hospitalists and redeployed non-hospitalists, were invited to join. Trainees and students were not included in these daily huddles. A Hospital Medicine faculty member moderated the discussion and one faculty member from the division of Pulmonary and Critical Care Medicine took time away from his or her duties in the ICU to join the call and hear case histories, review the electronic medical record and imaging, and offer recommendations. The hospitalists and non-hospitalist physicians were encouraged to present any and all cases during the huddle except those that were admitted to the step-down unit where intensivists were already co-managing patients with hospitalists. Importantly, medicine teams were informed that the daily huddle did not replace urgent consultation for the rapidly decompensating patient, and that those cases should be called in to the critical care consultation team immediately. Additionally, traditional pulmonary consultation would still be performed when requested, for example for patients with a new pleural effusion or lung mass. As there were no huddles on weekends, physicians were encouraged to seek critical care consultation for unstable patients and defer less urgent questions until Monday or reach out directly to the pulmonologist on call if appropriate.

What Happened:

The COVID-19 surge arrived in the third week of March 2020 and accounted for a doubling of our overall inpatient volume by mid-April. Intensive care unit beds nearly tripled from 24 pre-surge to 60, necessitating the opening of 3 additional units on scattered floors. A 31-bed step-down unit was also created for patients requiring non-invasive ventilation and was staffed by faculty hospitalists with direct intensivist support. A total of 47 external physicians and 12 intensivists were on-boarded over the course of 2 months to accommodate the clinical staffing needs. Critical care consultation and urgent pulmonary consultation was cross-covered by intensivists while assigned to ICU duty. As expected, faculty could not be spared to staff a dedicated pulmonary consult service during most of the surge. The Daily COVID-19 Clinical Huddles commenced on Friday, March 13 and concluded on Monday, May 4 after which traditional pulmonary consultation services resumed. Attendance ranged in the early days from 8 participants to over 30 at the peak of the surge with many physicians joining even when off-service to listen in on the conversation. The number of cases presented varied daily and no official log was kept. The most common topics addressed were modalities for oxygen delivery, steroid initiation, antibiotics, volume status management, anticoagulation and off-label or investigational drugs such as hydroxychloroquine and remdesivir. The decision to move a clinically declining patient to the step-down unit, a triage decision that did not require official critical care consultation, was often made during the clinical huddle.

Over time, the huddle evolved from solely being a case-by-case discourse to a more generalized forum to discuss the evolving treatment of COVID-19. As our health system released guidelines with regards to hydroxychloroquine, anticoagulation, and other treatments, the clinical huddle was utilized to educate and disseminate relevant information to front-line providers. It was also a safe space for vigorous debate about the emerging studies and data surrounding this novel disease. Discussions during the huddle were often followed by email correspondence between participants containing attachments and links to the primary literature.

Looking Back:

On the surface, the ‘Daily COVID-19 Clinical Huddles’ at Mount Sinai Beth Israel were a series of virtual meetings to facilitate ‘curbside’ pulmonary consultations. The value of curbside consultations has been widely contested in the literature³⁴⁵, although electronic consultations have been shown to be feasible and have value in the inpatient setting with the use of objective triggers⁶. The possible benefit of curbside consults during a time of severely constrained resources remains unknown. While we do not have objective data on how the informal consultations offered during our daily clinical huddles changed the management or outcomes of hospitalized COVID-19 patients at our institution, it is likely that informal consultation versus no consultation at all did in fact improve care. Moreover, the “Daily COVID-19 Clinical Huddles” ultimately provided more than a curbside consultation. Case histories that were presented by the Hospital Medicine staff to the consulting pulmonologist were augmented with a detailed review of laboratory abnormalities and imaging studies via a virtual screen-sharing platform. This lent itself to thoughtful discussions about the possible causes of precipitous declines in patients’ status, a feature that was all too common in the clinical course of patients admitted with COVID-19. The huddle also provided an opportunity to update colleagues on changes in treatment guidelines as evidence-based data became available. Finally, we believe that the daily clinical huddle fostered a sense of camaraderie, encouraged thinking as a team, and served as an intellectual and, at times, emotional sounding board for physicians encountering extraordinary circumstances.

To better understand attitudes and perceptions, we are undertaking a qualitative survey of the pulmonologists, hospitalists and non-hospitalists who participated in the huddles during the first COVID-19 surge at our institution. In the meantime however, we have great confidence in recommending clinical huddles as a best practice and next-best proxy for official consultations to any hospital system facing similarly strained resources during this challenging time.

¹ Wachter RM, Goldman L. Zero to 50,000 — the 20th anniversary of the hospitalist. *N Engl J Med* 2016;375(11):1009–11.

² Stevens JP, Hatfield LA, Nyweide DJ, Landon B. Association of Variation in Consultant Use Among Hospitalist Physicians With Outcomes Among Medicare Beneficiaries. *JAMA Netw Open*. 2020;3(2):e1921750. doi:10.1001/jamanetworkopen.2019.21750

³ Burden M, Sarcone E, Keniston A, Statland B, Taub JA, Allyn RL, Reid MB, Cervantes L, Frank MG, Scaletta N, Fung P, Chadaga SR, Mastalerz K, Maller N, Mascolo M, Zoucha J, Campbell J, Maher MP, Stella SA, Albert RK. Prospective comparison of curbside versus formal consultations. *J. Hosp. Med.*, 2013; 8: 31-35. <https://doi.org/10.1002/jhm.1983>

⁴ Kuo D, Gifford DR, Stein MD. Curbside Consultation Practices and Attitudes Among Primary Care Physicians and Medical Subspecialists. *JAMA*. 1998;280(10):905–909. doi:10.1001/jama.280.10.905

⁵ Cook DA, Sorensen KJ, Wilkinson JM. Value and process of curbside consultations in clinical practice: a grounded theory study. *Mayo Clinic Proceedings* 2014 May 1 (Vol. 89, No. 5, pp. 602-614). Elsevier.

⁶ Wachter RM, Judson TJ, Mourad M. Reimagining specialty consultation in the digital age: The potential role of targeted automatic electronic consultations. *JAMA*. 2019 Aug 6;322(5):399-400.