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The author reported no potential conflict of interest relevant to this article.

COVID-19 "You're gonna need a bigger boat"

Every family physician has experienced the onset of a bad flu season, when suddenly the phone starts ringing off the hook. As the family medicine lead physician for Cleveland Clinic Express Care Online (ECO)—specifically its on-demand virtual visit platform—I have been performing virtual visits as part of a small team of physicians and nurse practitioners for 5 years, and was capably seeing 5 to 15 patients in an afternoon across the 18 states in which I am licensed. Until recently, our Distance Health team collectively would perform between 3000 and 4000 virtual visits per month.

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On Saturday, March 14, 2020, we had the virtual visit equivalent of the phone ringing off the hook—to the point of breaking the phone. The ECO Medical Director, Matthew Faiman, MD, texted me to ask if I would be willing to sign on to the platform for a bit to help out with high volume—and whoosh, just by signing on, I had 20 patients waiting in the queue, with hundreds more trying to get a visit, all related to COVID-19. And patients who would normally leave a line if the wait time was more than 5 minutes were willing to stay online for more than 3 hours, if necessary, to consult with a provider.

After handling in excess of 38 patients that afternoon (some of whom were unfortunately dropped by the platform, which was overwhelmed by sheer volume), I did my best impression of Roy Scheider in *Jaws:* I emailed Matt, "You're gonna need a bigger boat."

How we got a bigger boat

As an early pioneer in telemedicine, Cleveland Clinic was well suited to quickly ramp up its use of virtual visits (both synchronous ECO visits, which occur in real time, and asynchronous e-Visits, in which the patient provides information via images, video, audio, or text file, to be evaluated and responded to by the provider within a specified timeframe). Even with a robust existing infrastructure, however, we faced challenges that necessitated a dynamic response.

The first step was to increase available personnel. Cleveland Clinic leadership immediately put out a call for volunteers to sign on to the on-demand platform, and more than 200 primary care physicians and advanced practice providers responded. We also dedicated an additional 30 full-time nurse practitioners to our ECO team of physicians, nurse practitioners, and physician assistants.

Daily live online training sessions were launched to walk staff through how to set

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up and conduct a virtual visit. As we navigated the day-to-day reality of increased virtual visits, our accumulated experience informed the development of what we refer to as a "distance health playbook." This single repository of information is accessible to all caregivers, and we also created a digital pocket card containing the most pertinent information from the playbook and automatically pushed it to all Cleveland Clinic–issued iPhones. Providers literally have what they need at their fingertips, no matter where they are when they "see" a patient.

The full playbook outlines how to adopt and ramp up telemedicine services. This includes details on clinician training, scheduling visits, coding for services provided during a telemedicine visit, and demonstrating empathy from a distance. There are also patient-facing resources on how to access various digital platforms, which may be handy for less tech-savvy patients. For example, if your patient does not already have FaceTime or Skype installed on his phone, or is not familiar with the use of such programs, the playbook includes specific instructions (with screencaps) that you can share.

While initially available only to Cleveland Clinic staff, the Cleveland Clinic Response to COVID-19 Digital Health Playbook is now accessible to the medical community at large via the Cleveland Clinic Web site (learn more at https://consultqd.clevelandclinic.org/cleveland-clinics-digital-health-playbook/) and a link from the US Department of Health and Human Services Web site.

What we accomplished

Within 1 week, providers who previously had little experience conducting virtual visits were helping out like seasoned professionals, and we were able to reduce wait times back to pre-COVID-19 levels while performing 8000 virtual visits in a single week. Those who were less fluent with virtual visits contributed by assessing the queue to identify patients who would be well handled with a telephone encounter; this helped to successfully meet patients' needs and alleviate the burden on the system.

The capacity to accommodate (more) remote visits became increasingly important when, as happened in many states, Ohio Governor Mike DeWine announced social-distancing measures and restriction of business in response to the growing surge of COVID-19 cases. This culminated in a stay-at-home order issued on March 22.

With care needs increasing, the early experience gained by our primary care teams was an invaluable asset as we transitioned patients who had upcoming in-person evaluation and management visits to virtual, phone, and e-Visits. Daily huddles were instituted to help with this process, and additional training materials and support tools were created and uploaded to an easily accessible online "toolkit."

When the volume of video visits overwhelmed the ECO platform, upgrades were made to accommodate increased bandwidth and traffic. Permission was also granted to utilize FaceTime and Google Duo for visits, provided patients gave consent (and in accordance with HIPAA COVID-19 guidelines), when and if a disconnection occurred due to volume overloads.

During the period from March 12 to March 24, more than 200 Cleveland Clinic primary care providers and APPs performed more than 54,000 digital and nontraditional encounters, serving more than 26,000 unique patients. By April 11, total outpatient visits at Cleveland Clinic had shifted from 2% remote (virtual or phone) to 75% remote.

What we learned

For medical practices currently grappling with telemedicine during the COVID-19 pandemic—many of whom may be starting from scratch as opposed to ramping up existing services—I offer the following "take-aways" from our recent experience:

Recognize that you are not alone in feeling overwhelmed in ramping up telemedicine. Our experience at Cleveland Clinic has shown that it only takes 5 to 10 virtual visits for most providers to gain comfort with the platforms.

Be innovative. There will be technical issues along the way; work with whatever platform is available: FaceTime, Google Duo, Doximity, Zoom, etc. The patient should be asked to consent to the use of these platforms.

Start with phone visits for patients who are technologically challenged.

Utilize existing techniques when you can. We are all developing our own innovative physical diagnosis techniques with video, but there are some evidence-based recommended techniques for use in special circumstances (eg, Ottawa ankle rules). Gaining familiarity with these and developing standard disease-specific documentation templates can be helpful.

Keep in mind that many systems were not designed to handle high volume, whether that means the platform itself or the workflow for providers. Problems require troubleshooting to determine whether the issue is related to the platform, user error, or design flaws, in order to provide the right solution in the right environment.

Even with our robust existing system, Cleveland Clinic required upgrades to accommodate the increased volume in virtual visits. By contrast, a physician in private practice may have purchased access to an entry-level system that was designed to work for occasional use but when asked to perform outside its design, simply cannot meet the needs of its client. Furthermore, small practices do not have an IT department on hand to address technical issues. This is why I would advise my family medicine colleagues to deal with the present need with a present solution: FaceTime, Google Duo, Zoom, and Doximity are low-cost options to get your feet wet if you have no prior experience with virtual visits.

As you get a better handle on your needs and capabilities, you will be better able to prepare for your future practice needs, including a more robust and HIPAA-compliant virtual visit platform. You will have built yourself that "bigger boat." JFP