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MEETING SUMMARY

Confronting COVID-19: Finding Hospital Capacity and Improving Patient Flow

A Webinar Series Hosted by PCORI for Hospitals and Health Systems

Part 6 – The Changing Role of Telehealth

May 5, 2020

Overview

Faced with a current or potential surge of COVID-19 patients, hospitals across the country are addressing enormous challenges to capacity and patient flow. Learning from clinicians, health system leaders, and operations management experts about how to manage capacity in real time can help health systems adapt to evolving circumstances surrounding the current pandemic.

On May 5, 2020, PCORI (the Patient-Centered Outcomes Research Institute) concluded its Confronting COVID-19 webinar series with "Part 6–The Changing Role of Telehealth." Telehealth has grown dramatically during the pandemic as clinicians use various platforms to consult with a wide variety of patients—patients who may have COVID-19 as well as patients with many other conditions. Federal and state authorities have temporarily lifted many regulatory restrictions on telehealth, and public and private insurers, in many instances, have increased reimbursement. Yet the rapid shifts have posed challenges even for systems that had previously created robust telehealth programs. During this webinar, clinicians in charge of two such programs shared promising practices that are emerging, as well as lessons learned, and discussed prospects for ongoing use and growth of telehealth during and after the current public health emergency.

The expert panel included the following individuals:

Speakers

- **Todd Czartoski, MD,** Chief Medical Technology Officer and Chief Executive of Telehealth, Providence St. Joseph Health
- **Judd Hollander, MD,** Senior Vice President for Healthcare Delivery Innovation, Thomas Jefferson University, and Associate Dean for Strategic Health Initiatives, Sidney Kimmel Medical College, Jefferson Health

Moderator

Susan Dentzer, Senior Policy Fellow, Duke-Margolis Center for Health Policy

Discussants

- **Ray Dorsey, MD,** David M. Levy Professor of Neurology and Director, Center for Health and Technology, University of Rochester Medical Center
- **Pat Rutherford,** Vice President, Institute for Healthcare Improvement

Webinar recordings are available at www.pcori.org/confronting-COVID-19.

The Changing Role of Telehealth

As with every aspect of this pandemic, the challenges of rapidly scaling up multiple forms of virtual care have been enormous, but, in the view of many individuals who have been practicing telehealth for a long time, the growth was long overdue. These proponents believe that the use of telehealth during the pandemic may constitute the ultimate proof of concept that telehealth can provide better access to high-quality health care at lower cost than conventional modes of healthcare delivery. At the same time, a major question is whether the federal and state regulatory environments and reimbursement from payers will be as permissive toward telehealth in the future as they have been during the current public health emergency.

Telehealth and clinical leaders from Providence St. Joseph Health and Jefferson Health described the expanded use of telehealth during the course of the pandemic and how the trend of using more virtual care could reshape healthcare delivery of the future. Providence, which is based in Washington State, is a nonprofit Catholic healthcare system, and the third largest nonprofit health system in the country. Providence operates 51 hospitals and more than 800 nonacute facilities and provides supportive housing and educational services across Alaska, California, Montana, New Mexico, Oregon, Texas, and Washington State. Thomas Jefferson University and Sidney Kimmel Medical College are affiliated with Jefferson Health, a multistate nonprofit health system consisting of 14 hospitals and multiple outpatient facilities. The flagship hospital is Thomas Jefferson University Hospital in Center City Philadelphia, Pennsylvania.

Telehealth Expansion amid COVID-19 Surge

Both Providence and Jefferson Health reported taking similar steps to rapidly expand telehealth volume and services in response to COVID-19.

Rapid scaling up of existing direct-to-consumer telehealth programs. Providence had previously made significant efforts to embrace telehealth, with volume doubling or tripling yearly for the past several years. However, the system saw an unprecedented surge in virtual visits beginning in early March, with the onset of the pandemic. For comparison, in 2019, the system conducted about 70,000 discrete video visits for the entire year; as of early May 2020, Providence was conducting well over 70,000 visits per week. Most of these visits were clinic visits that normally would have been face-to-face visits but were converted to phone calls and video visits during the pandemic. On March 24, Providence enabled more than 7,000 providers across the system to start delivering care virtually. For many of these providers, virtual visits were the only way to reach patients to provide primary and specialty care.

Jefferson has also had a virtual care program across the system for the past four years and in 2019 celebrated its 100,000th synchronous audio-video visit. The program still had room

for growth, but the program was relatively underutilized due to limitations on telehealth reimbursement. However, beginning in March, the program scaled up rapidly as the pandemic unfolded and, in effect, executed a three-year plan for expanding telehealth within a few days. For example, the system's direct-to-consumer, on-demand virtual care program, JeffConnect, which was usually staffed by Jefferson's emergency department (ED) physicians, saw a 20-fold increase in visits within one 24-hour period in March.

From March through early May, Jefferson added other providers, such as advanced practice nurses, to its JeffConnect service. In addition, clinicians who had been quarantined or isolated due to potential exposure to COVID-19 were shifted to JeffConnect so that they could continue to work from home. This action helped the system to maintain its workforce and keep providers engaged while in quarantine or isolation.

Like other healthcare systems, total visit volume at Jefferson has declined amid the pandemic. As of early May 2020, ED volume had dropped by 55%, and the system had closed five urgent care centers. However, of the visits that continued during the pandemic, about 90 percent were accomplished via telehealth.

Screening and testing for COVID-19. For possible COVID-positive patients, Providence adapted a triage, test, treat model of care with telehealth in each phase. The system worked with Microsoft to develop a chatbot on its website that served as a remote screening tool for people worried that they might have possible COVID-19 symptoms. Patients who screened positive for symptoms could then have a virtual consult with a clinician if they needed one and then get a referral to one of several drive-through testing centers that Providence had created.

Similarly, in mid-March, Jefferson advised patients that they should not go to doctors' offices or urgent care clinics or hospital EDs unless they were severely ill but should first access virtual care for screening. Jefferson also created a chatbot to help screen patients and connected patients to clinicians for a virtual consultation if needed. Clinicians could then order viral testing directly and schedule patients for the tests at one of the system's drive-through testing centers.

Acute care telehealth. Providence had been conducting telehealth within acute care for many years, through such services as tele-ICU, tele-stroke, and tele-hospitalist visits; it also had tele-SNF (for skilled nursing services) in place for years. To help maintain safety and preserve personal protective equipment, the system added new approaches, such as distributing computer tablets across treatment wards so that clinicians could consult with patients remotely and patients could also communicate remotely with friends and family members.

Jefferson rapidly expanded its tele-intake program in its ED. Remote providers assessed patients within an average of 9 minutes and directed patients to needed tests or care, such as x-ray or labs, or to an examination room, if needed. These actions greatly improved

throughput in the ED and sharply cut back on the number of patients who left the ED without being seen by a clinician. Jefferson also expanded its existing virtual rounds program, which allows patients in the hospital to have their family members, wherever they are, participate in clinical rounds by phone, tablet, or computer. Under the enhanced system, iPads with a web-based dashboard were placed in the rooms of every hospitalized COVID-positive patient and person under investigation. Both families and clinicians could communicate with patients, facilitating communication among all parties. Because COVID-19 is such an isolating illness, this program has helped patients with COVID maintain human contact and, thus, has been well received.

Home and community care. As of early May 2020, Providence had enrolled more than 2,500 patients in a COVID at-home remote monitoring program; of these patients, more than 800 had tested positive for COVID-19. To keep these patients out of the hospital if possible, with the aid of pulse oximeters and thermometers to measure fever, providers monitored patients at home. Providence's providers were equipped with secure texting and the ability to conduct video visits with these patients. The system had also built smart algorithms to guide decision making and enable providers to distinguish sicker patients and streamline referrals back to hospital EDs as needed.

Behavioral telehealth support for staff. Before the pandemic struck, Providence had launched a behavioral health concierge program for its 120,000 employees and their family members, including clinicians and other caregiving staff, to use on demand when they needed support. The service received about 90 visits in July, but, during the pandemic, visits rose to more than 400 per month. Of more than 2,000 visits to date, more than 20% were among physicians—a usage rate that Providence deems a sign of the service's success.

Addressing Challenges

Regulatory Barriers

Navigating inconsistent federal and state restrictions regarding telehealth. Even with various regulatory and payment restrictions broadly lifted at the federal level during the public health emergency, for example, regarding the use of telehealth platforms that do not comply with federal healthcare privacy law (HIPAA), most states have their own telemedicine regulations that may still be enforced. Providence and Jefferson are working to make sure that providers are using telehealth platforms that meet criteria for telemedicine before, during, and after the pandemic so that patients can engage with providers across the care continuum in a secure, private, standardized, and consistent way.

Virtual Care Training and Support for Staff

Preparing staff for telehealth delivery. Both Providence and Jefferson used a centralized team of telehealth experts and online training tools (how-to videos, playbooks) to demonstrate the telehealth functionality and support providers as they transitioned to

virtual care. Providence used a train-the-trainer approach to facilitate training of more than 800 clinics within a week.

Interest in telehealth surged among Jefferson clinicians in March, and its team was able to quickly roll out several educational and web-based training modules that it had developed previously to quickly get more than 1,000 clinicians up to speed.

Virtual Care Training and Support for Patients

Preparing patients and caregivers to engage in telehealth. With many patients accessing telehealth for the first time, telehealth leaders at both Providence and Jefferson believed that it was important to set patients' expectations ahead of time and to take extra steps to ensure that the visits would go as well as possible. Thus, both systems scheduled pre-visit check-ins to test the technology and help patients become comfortable using it. Providence's telehealth functionality is linked to its Epic electronic health record with an encrypted version of Zoom that patients can access through MyChart, Epic's patient portal. However, many patients had to be walked through these steps ahead of time to ensure that visits would proceed successfully.

Jefferson also posted training videos on its public-facing website for patients and sent emails in advance of visits to walk patients through the process. The system holds two daily meetings with its internet technology teams to address issues and improve patient experience. Jefferson has also worked with its telehealth platform vendor to simplify the product for use by patients. Although occasional call failures in telemedicine proved frustrating for doctors and patients, clinical leaders at Jefferson noted that the failure rate of any virtual visits during the pandemic has been well below the standard 30% patient no-show or cancellation rates for in-person visits; that metric alone constitutes a success.

Both systems noted that patient satisfaction with telehealth had been extremely high prior to and during the pandemic. Jefferson's surveys indicated that more than 80% of patients reported that they had recommended telehealth visits to a friend within 10 days of their initial visit. Providence reported a net promoter score for its video visit services that is consistently in the 80s, a rate substantially above historical patient satisfaction scores.

Conducting physical exams virtually. Both panelists acknowledged that long-standing physician beliefs that examinations must be done in person are difficult to change but discussed the ways that their programs have engaged patients, caregivers, and providers to optimize virtual exams.

Providence provides two types of telehealth visits. In acute care settings, typically for consults with tele-hospitalists or specialists, nurses are trained to facilitate aspects of in-person exams using peripheral devices such as Bluetooth stethoscopes. For virtual visits conducted directly with patients, exams are more limited, with providers directing patients and caregivers through the process and relying primarily on visual cues to decipher what

patients need. Despite the inability to perform certain exams, such as listening to the lungs or undertaking an abdominal assessment, the amount of actionable information that can be gleaned from the ability to see the patient, even remotely, and to gain information about their homes and other surroundings should not be undervalued.

Jefferson's approach focuses on identifying the right next step, if not the right diagnosis, during a virtual visit. In the same way that an ED physician may not know a diagnosis immediately and may need additional lab tests or consultation to reach a conclusion, a clinician conducting a telehealth visit may be unable to make a diagnosis immediately. What is more important is that patients gain access to a provider via telehealth more quickly than they would if they traveled to the hospital. During the virtual visit, the provider can assess the patients' needs, call an ambulance, and streamline the patients' care upon arrival at the hospital. Having a structured approach to the physical exam and working with caregivers to help communicate problems have enabled the diagnosis of appendicitis, spinal cord compression, and ruptured ectopic pregnancies via virtual exams.

Supporting patients with special circumstances or needs. Both health systems have embedded existing translation and interpreter services within their telehealth platforms to support patients who speak languages other than English. For patients with cognitive impairment, hearing loss, or other special circumstances, staff have been trained to identify such needs in advance, when possible, and to refer patients and caregivers to alternative forms of care as needed. At Providence, only about 1% of patients have been unable to receive a virtual visit, meaning that Providence providers have been able to help almost every patient who uses the service.

Lessons Learned

Invest in telehealth because it is here to stay. Although more work is needed to determine the structures that best support telehealth delivery in various settings (hospitals, skilled nursing facilities or clinics), health systems have demonstrated during the pandemic that telehealth can improve care access and quality and lower costs. Health systems reported no known adverse outcomes from expanded telehealth, acknowledging that these issues had not been studied carefully in randomized clinical trials, for example. They recommended that other health systems that have not previously made large investments in telehealth position themselves for a post-COVID future that reflects the current paradigm shift toward enhanced virtual care, particularly as patients express their desire for greater care comfort and convenience.

Document evidence on the safety and efficacy of virtual care. As demand for telehealth increases, health systems are encouraged to measure and document clinical, financial, and patient-reported outcomes to generate additional proof of efficacy. In particular, as telehealth is integrated into specialty care, it will be important for health systems to develop the evidence about virtual care when compared to standard care within

each specialty. With greater evidence of telehealth's safety and efficacy may come greater opportunity to reshape healthcare delivery in lasting and meaningful ways.

Integrate telehealth within an overarching strategy. Before implementing any telehealth program, health systems should first identify the problems they want to solve and then develop strategies for solving those problems. Systems can then consult with their internal information systems divisions and external telemedicine experts to select specific telehealth platforms and build telehealth into their overall strategies. Before identifying vendors for telehealth platforms, however, health systems should be sure to outline specifications to help make sure the selected platform will produce desired results.

Take advantage of existing networks and resources to support implementation. The ATA or American Telemedicine Association and the Health Resources and Services Administration's Telehealth Resource Centers offer helpful resources for health systems that are just getting started in telehealth.