

Virtual Care Adoption—Challenges and Opportunities From the Lens of Academic Primary Care Practitioners

Kathryn Teng, MD; Francesca Russo, BA; Stephanie Kanuch, MeD; Aleece Caron, PhD

ABSTRACT

Telehealth and virtual care quickly became important tools in caring for patients while the COVID-19 pandemic evolved. Telehealth implementation can increase affordability for patients, eliminate access barriers, and improve patient satisfaction. Multiple challenges to successful telehealth implementation have been documented in the literature and are generally categorized as structural barriers of the health system, clinical barriers of the provider, and patient-centered barriers. In this study, we sought to collect themes and observations about this rapid transition to telehealth from practicing primary care clinicians, with the goal of identifying opportunities to improve adoption of telehealth. Themes reported in this article emerged from physician and physician assistant fellows of 2 HRSA-funded grants: (1) Primary Care Training and Enhancement (PCTE) and (2) Primary Care Training and Enhancement Training Primary Care Champions (Champions). The PCTE participants consisted of 8 providers from The MetroHealth System (MHS). The Champions participants consisted of 20 providers from MHS and Federally Qualified Health Centers in Northeast Ohio and Michigan. Participants identified 5 major themes that affected telehealth delivery in an academic medical system: reimbursement and productivity; social determinants of health; privacy and environment of care concerns; teaching; and communication skills. Examples within each theme are provided along with an identified improvement opportunity. As we create solutions to address these challenges, our hope is to pool our experience with others so that we can collectively learn how to best evolve and improve the telehealth experience for all.

KEY WORDS: access, COVID-19, faculty development, primary care, telehealth

Telehealth and virtual care have quickly become important tools in caring for patients while the COVID-19 pandemic evolved.¹ Telehealth implementation can increase affordability for patients, eliminate access barriers, and improve patient satisfaction.¹ Telehealth offers feasible and cost-effective methods for delivering evidence-based

treatments to underserved populations and reduces transportation barriers, travel time, childcare coverage, and scheduling.²

Multiple challenges to successful telehealth implementation have been documented in the literature and are generally categorized as structural barriers of the health system, clinical barriers of the provider, and patient-centered barriers.³ Structural barriers include legal challenges related to state licensure and practice laws, credentialing, and liability concerns, telehealth service reimbursement, and costs of telehealth infrastructure.³ Clinical barriers include the development of the patient-provider relationship, concerns about standard of care, informed consent, privacy, and security. Patient-centered challenges include access to technology, and reliable broadband, patients' ability to use the technology, and loss of connectivity.¹

The experience at an academic medical center and safety-net hospital in Cleveland, Ohio, is demonstrative of the extraordinary shift to telehealth. On March 16, 2020, in response to the COVID-19 pandemic, we converted all primary care and low acuity urgent care visits to telehealth within a 48-hour time period. By

Author Affiliations: Department of Medicine (Dr Teng), Population Health Research Institute (Ms Kanuch and Dr Caron), The MetroHealth System (Ms Russo), Case Western Reserve University School of Medicine, Cleveland, Ohio.

Authors' Contributions: A.C. conceived idea and led manuscript development; A.C. and S.K. carried it out; K.T. contributed to case examples, assisted with analysis; F.R. assisted with analysis, contributed to case examples, assisted with final manuscript development and editing; and S.K. assisted with case examples and contributed to study design.

This work was funded by HRSA grants: T13HP318990100 and TOBHP28557.

Ethics approval and consent to participate: The MetroHealth Privacy Board reviewed the manuscript and approved it for submission.

The authors declare that they have no competing interests.

Correspondence: Aleece Caron, PhD, Population Health Research Institute, The MetroHealth System, Case Western Reserve University School of Medicine, 2500 MetroHealth Dr, Cleveland, OH 44109 (amh7@case.edu).

Copyright © 2022 Wolters Kluwer Health, Inc. All rights reserved.

DOI: 10.1097/PHH.0000000000001548

the end of March, the percentage of virtual visits at our institution skyrocketed by 35%. In April, 87.7% of primary care visits were via telehealth. This expansion has been sustained with telehealth appointments at our institution comprising 50% of total outpatient visits for the period from March 16, 2020, to July 31, 2020. Clinicians spend at least half of their scheduled clinic time performing telehealth visits and the remaining time performing in-person visits. This model has persisted and continues to be in use today. In this commentary, we described themes about this transformation from the perspective of primary care clinicians.

Themes reported in this article emerged from physician and physician assistant fellows of 2 HRSA-funded grants: (1) Primary Care Training and Enhancement (PCTE) and (2) Primary Care Training and Enhancement Training Primary Care Champions (Champions). Both of these grants use a multidisciplinary approach to improving training for primary care providers.

The PCTE participants had been meeting in person prior to COVID-19, while the Champions had already been meeting via zoom (Project ECHO). In March, all didactics sessions were delivered remotely. Both of

these programs use a very interactive approach, with participant discussions around implementing what they are learning to their care delivery. It quickly became clear to project faculty and leadership that providers and their patients were struggling with transitioning to telehealth. We held sessions to specifically discuss issues around telehealth, and some participants presented cases around delivery of telehealth. The authors identified themes that emerged and developed a table of themes, with examples within, and then reviewed the themes with fellows and annotated accordingly.

The PCTE participants consisted of 8 providers from our institution. The Champions participants consisted of 20 providers from our institution and Federally Qualified Health Centers. Participants identified 5 major themes that affected telehealth delivery in an academic medical system (Table)

Theme 1: Reimbursement and Productivity Influence Adoption of Telehealth

Pre-COVID-19, we had very limited telehealth capabilities due to state restrictions and lack of reimbursement. In response to COVID-19, Medicare

TABLE
Emerging Themes in Telehealth Delivery

Care Delivery Clinical Medicine	Precepting	Technology	Social Issues	Billing/Compliance
Lose context of in-person visit	Teaching physical exams	Internet/phone outages	No family members included in visits to give provider additional information	Reimbursement for telehealth is changing
More difficult to obtain vitals	How to elicit information effectively—millennials are not used to talking on the phone	Need specific equipment (iPhone or iPad that is not supplied)	Released from jail—hard to connect with services	Quality indicators are more difficulty to extract
Loss of team-based care	Meeting ACGME requirements	Geriatric and other populations do not have or know how to use technology	Lack of housing	Providers unclear on how to bill
Language barriers/hearing impaired		Patient lack of phone/computer/Internet access	People are chattier/hard to end visit	Video visits are better for reimbursement, but many patients prefer phone
Patient thinks it is not a real visit		More difficult to obtain consent	Change fatigue for providers	
Difficult to assess patient privacy before conducting visit			PCPs are in caregiver role and have to go back to work with no childcare—no accommodations	

Abbreviation: PCP, primary care provider.

and Medicaid programs expanded coverage and reimbursement of telehealth services to promote care using a variety of virtual communication methods. Video visits are reimbursed at similar levels to in-person visits, with reimbursement based mostly on complexity of medical decision making. Telephone visits, however, were reimbursed on the basis of time spent on the phone with the patient and tend to generate less reimbursement than an in-person visit. The difference can be offset by increasing the amount of telephone visits performed or transitioning to higher performance of video visits, assuming there is enough demand for telephone visits. What we observed is that when COVID-19 cases dip, demand for in-person visits rises and demand for telehealth visits decrease. In the Cleveland area, our supply for telehealth visits has exceeded demand, with average wait time for a telehealth visit with own primary care provider no more than 1 week and the average wait time for an in-person visit with own primary care provider ranging from 3 to 8 weeks.

Providers are paid a base salary based on minimal productivity expectations and are eligible to earn incentive payment for productivity above the 60th percentile. This compensation model, coupled with the reimbursement differences between telephone visits and video or in-person visits, could incentivize physicians to prefer in-person or video visits.

From a patient standpoint, reimbursement may also drive or stall adoption of telehealth. Co-pays may be required of patients for both telehealth visits and in-person visits. Patients will need to weigh the value of a telehealth visit and decide whether the problem they want addressed can be adequately addressed by telehealth.

Opportunity: Advocate for appropriate reimbursement for telehealth visits and education regarding appropriate use of telehealth visits.

Theme 2: Social Determinants of Health Affect Adoption of Telehealth

We identified 3 patient populations most challenged in the adoption of telehealth—those of low socioeconomic status without access to the Internet and smartphone devices, those who are elderly and/or less adept at adopting new technology, and those currently or recently incarcerated. As the safety-net hospital system for Cuyahoga County, Ohio, we provide care to medically underserved patient populations and those in correctional facilities, as well as recently released. Many of our patients do not have broadband Internet, do not have a smartphone, and/or are uncomfortable with the technology. Many patients relied on local libraries to access the Internet, and with

COVID-19, access to library resources decreased substantially. Older adults are particularly disadvantaged, as approximately 51% of Americans 65 years and older have broadband at home, only about 42% own a cell phone, and even fewer have a phone capable of streaming video.⁴ In addition, older patients are often less comfortable with video-based telehealth as they are unfamiliar with the technology needed to access it. Cognitive and sensory impairments, prevalent in the older population, also inhibit our ability to provide seamless care via telehealth visits.⁵

Opportunity: Improve access, ease of use, and availability of technology for telehealth visits for all patients.

Theme 3: Privacy in the Telehealth Visit Identified as a Concern

One advantage of telehealth is the flexibility for patients to receive telehealth services in the comfort of their homes or anywhere of their choosing.⁶ Unfortunately, sometimes patients may choose to conduct these visits at work, in the car, or in public venues, making it more difficult for them to focus on the visit, disclose private information, or hear the voice on the other end. Patients in correctional facilities often do not have access to phone or video technology in a private space. On the provider side, there are inconsistent practices in regard to where and how telehealth visits are conducted. Many of our providers work in shared offices where noise and traffic are not ideal. Some use headphones or earbuds; others do not. Some wear a whitecoat; others do not. There is opportunity to create a standardized expectation around the environment of a telehealth visit.

Opportunity: Set the right environment for telehealth visits.

Theme 4: Teaching Physician-Learners in a Remote Telehealth Environment Presents Unique Challenges

Traditionally, residents see patients in the clinic setting and present their findings to an attending physician. The attending physician will then see the patient with the resident, confirm relevant history and examination findings, and together, they will develop a plan and discuss teaching points. With COVID-19, about 50% of our primary care resident clinic visits were converted to telehealth visits, and many residents were asked to conduct these visits from home. In the traditional model, attending physicians were colocated with resident physicians so that correct teaching ratios were adhered to. Since March 16, residents and attendings have been working remotely part of the

time, and although precepting ratios are still in effect, for visits conducted via telehealth, residents have the option to forgo formal precepting and can instead simply forward the chart to the attending to sign at a later time. While this process is efficient and aligned with goals to reduce spread of COVID-19, we are concerned that there are missed opportunities for teaching. These missed opportunities may be clinical, or they may be in communication skills. More specifically, it has been observed that resident physicians, while adept at texting and social media, are not as comfortable with eliciting information effectively on the phone. With resident physicians conducting telehealth visits remotely, the opportunities for teaching our resident learners at the bedside have decreased. Whether this translates into poorer clinical acumen or decision making has yet to be determined.

Opportunity: Transform teaching for telehealth visits to include virtual platforms for preceptors and residents to communicate.

Theme 5: Unique Communication Skills Are Needed for Telehealth Visits

Good communication skills are correlated with higher patient satisfaction, and we suspect that this will be the case for telehealth visits as well.⁶ Some communication skills should translate from in-person visits to telehealth visits—concepts of agenda setting, asking open-ended questions, teach-back methods. There is an art to the phone conversation, without visual cues, to conduct a visit with the right cadence, the right amount of pause and silence, the right way to

ask a question in order to best engage the other participant, leaving ample time for open-ended questions. Development of communication skills training for all providers who may be less experienced with phone communication in general will likely be important for patient satisfaction with telehealth.⁷

Opportunity: Educate on specific communication skills for telehealth visits.

Telehealth has provided important benefits including flexibility and improved access. It is highly likely that telehealth is here to stay, and we must embrace it and improve on the experience for providers and patients. As we create solutions to address these challenges, our hope is to pool our experience with others so that we can collectively learn how to best evolve and improve the telehealth experience for all.

References

1. Wamsley CE, Kramer A, Kenkel JM, Amirlak B. Trends and challenges of telehealth in an academic institution: the unforeseen benefits of the COVID-19 global pandemic. *Aesthet Surg J*. 2021; 41(1):109-118.
2. American Hospital Association. Fact sheet: telehealth. <https://www.aha.org/system/files/2019-02/fact-sheet-telehealth-2-4-19.pdf>. Accessed July 18, 2019.
3. Burke BL, Hall RW. Telemedicine: pediatric applications. *Pediatrics*. 2015;136(1):e293-e308.
4. Traube DE, Cederbaum JA, Taylor A, Naish L, Rau A. Telehealth training and provider experience of delivering behavioral health services. *J Behav Health Serv Res*. 2021;48(1):93-102.
5. Wijesooriya NR, Mishra V, Brand PL, Rubin BK. COVID-19 and telehealth, education, and research adaptations. *Paediatr Respir Rev*. 2020;35:38-42.
6. Woodall T, Ramage M, LaBruyere JT, McLean W, Tak CR. Telemedicine services during COVID-19: considerations for medically underserved populations. *J Rural Health*. 2021;37(1):231-234.
7. Lee NT. *Public Policy Can Improve Older Adults' Access to Technology*. Washington, DC: The Brookings Institution; 2017.