

Providing Rapid Access to Care for Underserved Patients During the COVID-19 Pandemic

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Introduction

COVID-19 is altering the health care delivery landscape at a dizzying speed. With no widespread vaccine or effective treatment at the early stages of the pandemic, masking, physical distancing, and self-quarantine were the only available interventions. As such, hospitals and health care centers needed to create alternatives to in-person care.^{1,2} Like others, our institute needed to transition rapidly to telehealth (TH) (video and telephone visits), and like others, we faced many challenges that included structural barriers of the health system, clinical barriers of the physician, and patient-centered barriers. Structural barriers included lack of experience with video platforms and lack of flexibility with video platforms, as well as limited reimbursement for video and telephone visits. Clinical barriers included a lack of appropriate staff and workflows to support the completion of efficient and effective video and telephone visits. This paper will focus on patient-centered barriers associated with TH implementation. With Medicaid patients comprising 39% of our total patient population, patient-centered challenges such as access to technology, reliable broadband, patients' ability to use the technology, and loss of connectivity^{3,4} were substantial.

This commentary describes our hospital system's response to the COVID-19 pandemic and how we managed to rapidly transition to TH and provide seamless access for underserved patients.

Commentary

Beginning on March 16, 2020, in response to the COVID-19 pandemic, we transitioned 192 primary care nurse practitioners and physicians in the fields of internal medicine, family medicine, medicine-pediatrics, and geriatrics across our health system to predominately TH visits over a 48-hour period. In this paper, we describe this conversion in the primary care practices and how we sustained our TH visits at > 50% in subsequent months.

The MetroHealth System (MHS) is an academic teaching hospital system in Cleveland, Ohio, affiliated with Case Western Reserve University School of Medicine. MHS is organized into Service Lines, with the Adult Health & Wellness Service Line managing 192 Adult Primary Care (Family Medicine, Medicine-Pediatrics, and Internal Medicine) and Geriatric clinicians, delivering 353,776 patient visits per year, to more than 21 locations in the Cleveland area. MHS is the only public safety-net hospital in the Cleveland area, with 75% of its patients uninsured or covered by

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Kathryn Teng, MD, MBA, David Margolius, MD, and Kim Bauchens, MSN, conducted the project. Aleece Caron, PhD, led data analysis. Aleece Caron, PhD, and Kathryn Teng, MD, MBA, wrote the manuscript. Kim Bauchens, MSN, gathered data. All reviewed and approved final manuscript.

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Medicare or Medicaid. MHS utilizes the electronic health record system, Epic (version 2020 August) for its medical record documentation and billing. Within Epic, the MyChart program is used as the primary modality of communication between physicians and patients, via MyChart messaging and video platforms.

Prompted by the COVID-19 pandemic, MHS dramatically changed primary care delivery. From March to May 2019, the percentage of TH visits was less than 1%. The shift to TH mid-March 2020 shows an increase in TH to 35.9%. TH visit volumes shifted to 87.4% for the month of April 2020 although leveling to 58.4% in May 2020 when patients were allowed to return to the clinics for in-person care (Table 1). The goal of transitioning to TH was to minimize the number of patients coming into the office (thus reducing risk for virus transmission) although still providing the care and services needed. Concurrently, we reduced the number of physicians and staff physically present in our ambulatory clinics by allowing TH visits to be performed from home or other non-clinical spaces. Both efforts were important to comply with social distancing recommendations.

The key to our rapid conversion to TH was a strategic decision to embrace telephone visits. This was a risky decision for the Institute because at the time, we were unsure about reimbursement for telephone visits, much less telephone visits performed from a non-clinical setting. However, we felt that access to telephone visits was essential for our patients. Being a safety-net hospital system, many of our patients do not have broadband internet or smart phones, and/or are uncomfortable with the technology. Many of these patients rely on local libraries to access the internet, and with COVID-19, access to library resources decreased substantially. According to the Federal Communications Commission, there are approximately 24 million Americans who lack access to broadband.⁵ Older adults are particularly disadvantaged, as approximately 51% of Americans 65 and older have broadband at home, only about 42% own a cell phone, and even fewer have a phone capable of streaming video.⁵ Additionally, older patients are often less comfortable with video-based TH as they are unfamiliar with the technology needed to access it.⁴ Cognitive and sensory impairments, prevalent in the older population, also inhibited our ability to provide seamless care via TH visits.^{6,7} Even for patients who are technologically savvy, our video platform was challenging to use. Although all MHS patients have access to MyChart, overall system utilization was less than 10%, which would

Year/Month	In-Person (%)	Telehealth (%)
March 2019	99.8	0.2
April 2019	99.8	0.2
May 2019	99.8	0.3
March 2020	64.1	35.9
April 2020	12.6	87.4
May 2020	41.6	58.4

Table 1: Distribution of In-person and Telehealth Visits 2019 compared with 2020

substantially limit our ability to successfully ramp up video visits.

We were fortunate that advocacy efforts from many health care systems including our own were successful in changing reimbursement for telephone visits during the pandemic. By April, reimbursement by third-party payers had evolved in 19 states that passed parity legislation to guarantee payment for TH services, and US Department of Health & Human Services waived enforcement of Health Insurance Portability and Accountability Act regulations to permit use of consumer audio and video communication for TH delivery.⁸ Video visits were reimbursed at similar levels to in-person visits, with reimbursement based mostly on complexity of medical decision making. Telephone visits were reimbursed based on time spent on the phone with the patient, regardless of medical complexity and decision making.

Although many other systems across the country invested millions of dollars to change their infrastructure for video capability, MHS chose the path of speed and ease of use by focusing on telephone visits in the early transition period. As such, MHS remained consistent to its mission — delivering high quality care, regardless of the ability to pay—and was able to change quickly.

How did we achieve such a successful conversion to telehealth in a short period of time?

THE RIGHT MULTI-DISCIPLINARY TEAM

The team that transformed primary care delivery included primary care operational leaders, nursing leaders, the director of our centralized call center, representatives from information technology, billing & compliance, legal, marketing & communications, and patient experience, led by the Vice President

of Telehealth. This team was responsible for creating solutions and troubleshooting on a daily basis. Important decisions that stemmed from this workgroup included:

- Communication systems and appropriate language to notify patients that their scheduled visits were being automatically converted or flipped to telephone visits
- Process for auto-conversion of in-person visits to telephone visits
- Education and triage by physicians to recommend that patients be flipped to telephone or video visits
- Development of tip sheets and prompts within Epic to train physicians on documentation and billing of telephone and video visits
- Facilitation of information technology needs for telephone visits (headsets for privacy) and video visits (iPads and iPhones)
- Creation of an Information Services (IS) Help Line for physicians to help them trouble-shoot in real time

DEVELOPMENT OF A COVID-19 HOTLINE

Under the leadership of primary care, a COVID-19 hotline was created for patients to call and speak with a doctor about exposure to COVID-19, symptoms, and available testing. The 24-hour hotline was managed by a voluntary pool of doctors via TH. These doctors were trained consistently so they could give the most up-to-date medical advice.

MHS paid the doctors \$500 per 12-hour shift, prorated for a 4-hour shift or \$8 per call to incentivize doctors to sign up for shifts; however, many doctors picked up a few patients whenever they could in order to help, regardless of pay. The development of such a hotline was important for several reasons. It allowed us to control the flow of information and ensure that the advice being provided about COVID-19 was accurate and up to date, and it enabled us to keep potential COVID-19 patients out of our clinics and at home unless they required more acute care, which reduced spread and transmission of the virus.

COMMUNICATION WITH PRIMARY CARE TEAMS

Keeping the approximately 200 primary care and geriatrics physicians informed, educated, and engaged in the rapid conversion to TH required frequent communication across a variety of modalities.

We utilized 3 primary modes of communication. First, we conducted phone huddles every Monday,

Wednesday, and Friday mornings at 7:00 AM before clinics started with clinic leadership. During these huddles, we addressed concerns and heard feedback from our clinical teams. Second, we sent out daily emails with any new decisions or workflows and answers to questions that had arisen at the morning phone huddles. Third, we created tip sheets posted to Epic that we used as the source of the most up-to-date information about workflows, billing, and documentation for TH visits. We implemented a peer-audit system in which every physician was asked to audit 10 charts of a peer physician for accuracy in billing and documentation specifically for TH. A passing score was > 80%. If a physician scored lower than 80%, we provided additional education and then re-audited until they achieved a passing score. We also established an IS Help Line to provide clinicians support with technical issues during the initial transition period. This Help Line was staffed during clinic business hours (Monday through Friday from 7:00 AM to 7:00 PM) and intended to address any clinician-facing questions about Epic functions related to documentation and billing for TH visits.

The goal of our programs was to create rapid and safe access to care for patients during the initial days of the COVID-19 pandemic. During the first 5 weeks of the COVID-19 hotline, the average daily call volume was approximately 150 calls. The remarkable response from our physicians to cover this hotline cannot be over-stated, as this was additional work on top of the physicians' regular work, caring for their own panels of primary care patients. During the initial 5 weeks of operation, 10,112 patients called the hotline (callers) and were evaluated by a registered nurse using standardized protocols. Of these callers, 4213 (42%) were referred for a physician TH visit (TH patients). The mean age of callers was 42 years; 67% were female, 51% white, and 46% were on Medicaid or uninsured (Table 2). In a previously published manuscript,⁸ our colleagues at MHS reported that most TH patients (79%) were advised to self-isolate at home, 14% were determined to be unlikely to have COVID-19, 3% were advised to seek emergency care, and 4% had miscellaneous other dispositions. A total of 287 (7%) patients had a subsequent emergency department visit, and 44 (1%) were hospitalized with a COVID-19 diagnosis. Of the callers, 482 (5%) had a COVID-19 test reported with 69 (14%) testing positive. Among patients advised to stay at home, 83% had no further face-to-face visits.⁹

The IS Help Line was staffed for 12-hour business days, Monday through Friday for 2 weeks. During

Characteristic	mean/%
Mean age	42 years
% Female	67
% White	51
% Medicaid or uninsured	46
% Referred for TH visit	42

Table 2: COVID-19 Hotline user demographics

TH = telehealth

these first 2 weeks, only 2 calls were received, and due to low use, the IS Help Line was suspended after week 2. The 2 calls were from physicians who needed help finding the tip sheets in Epic. Although physicians expressed desire to have the Help Line as a back-up resource, the low use of the Help Line was a reflection of the success of our other modes of communication with them. Most physicians seemed to understand the new workflows and how to find the information they needed for proper documentation and billing. For our reassurance, we conducted an audit of all primary care physicians to assess their ability to work from home and successfully perform remote TH. The results of the audit indicated that 80% of physicians were documenting and billing appropriately (100% accuracy), and the remaining 20% reached 100% accuracy by their second audit.

We also examined key patient experience metrics from National Research Corporation regarding perceptions of TH versus in-person visits. The custom survey questions closely resemble CAHPS® Clinician & Group Survey methodology.¹⁰ Patients who had an encounter with a MHS physician for a TH visit were included in the survey sample. If they did not have the encounter with the same physician in the past 9 months, and/or any MHS encounter in the past 2 weeks, they also received a survey.

The percent of surveys completed by visit type are shown in Table 3.

Overall, in-person and video visits resulted in a better perception of experience than telephone visits, as illustrated in Table 4, although overall experience with telephone visits was high and based on patient comments, the availability of telephone visits was appreciated. When we examined more than 1000 patient comments related to telephone visits, we identified a few themes and opportunities for improvement which included perceived ability to describe symptoms and understand instructions given, as well as reduced empathy and connection, especially with new physicians.

Visit Type	March (%)	April (%)	May (%)
In-Person	69.0	62.3	69.0
Video	0.5	2.3	1.3
Telephone	30.5	75.7	36.4
Total	100.0	100.0	100.0

Table 3: Percent of surveys completed by visit type

Visit Type	March (%)	April (%)	May (%)
In-Person	93.1	92.8	93.1
Video	90.5	97.3	98.5
Telephone	90.3	92.6	91.0
All Visits	92.1	92.5	92.4

Table 4: Likelihood to recommend physician by visit type March-May 2020

Patients preferred in-person visits when meeting a new physician. Patient satisfaction with follow-up visits over the phone and via video improved in April and May, although satisfaction with the in-person follow-up visits decreased slightly during the same time period, as illustrated in Table 5.

Challenges and Lessons Learned

As our organization moved past the early days of the pandemic and realized that TH would become a mainstay of care delivery going forward, we identified several challenges that needed to be addressed. These included development of support staff workflows for TH visits, environmental and privacy concerns, and gaps in care. We created a workgroup to create ideal workflows for TH visits. The design included pre-visit questionnaires and post-visit discharge follow-up scheduling that would mirror in-person care, but due to the need for our support staff to assist with hospital operations and health screens at our clinical sites, we were unable to implement these workflows. We anticipate that

Visit Type and Modality	March (%)	April (%)	May (%)
IN-PERSON Follow-up	94.0	93.5	93.0
IN-PERSON New Patient	91.4	90.3	91.0
PHONE Follow-up	90.3	93.4	92.4
PHONE New Patient	N/A	89.4	88.7
VIDEO Follow-up	90.5	96.6	98.0
VIDEO New Patient	N/A	100.0	100.0

Table 5: Patient satisfaction by visit type and modality March-May 2020

as staffing support increases to pre-pandemic levels, we will implement these workflows. With regard to privacy and environmental concerns, our organization preferred that TH visits be conducted on site (rather than in the home environment), but our office and examination room spaces were not properly equipped for TH. Our examination rooms did not have phones or computers with video capability, and in the spirit of team-based care, many of our physician office spaces were shared spaces that did not allow for noise control or privacy during a video visit. We have accordingly provided phones and headsets to physicians who needed them and shared iPad devices for each clinic to use during video visits. We have also provided screens for privacy and created TH hub office space in various locations for those physicians who do not have office space otherwise conducive to TH visits.

As we approach the two-year anniversary of the pandemic, we are most concerned about trends regarding care gaps. Our system referral completion rate dropped from a baseline of 51.3% in 2019 to 38.1% in 2020 and is currently 30.9% thus far in 2021. We also saw a slight decrease in HbA1c completion, but saw the gap close in the last 2 months of 2020 as we made it an organizational priority to close this gap. We feel these trends are related to delays in care (patients wanting to postpone specialty appointments and procedures) related to the pandemic, as well as reduced access for in-person care in specialties and primary care.

Conclusion

In our experience, the successful rapid conversion to TH was made possible by establishing the right multi-disciplinary working team, developing a COVID-19 hotline, and creating frequent & varied communication methods for care teams. Our success has been a result of our ability to bring varied individual experiences and expertise to the team, and our strategic decision to focus our initial efforts on telephone visits. Telephone visits provided the needed access to underserved and elderly patients throughout the early pandemic and enabled us to keep sick patients at home with no negative effect on patient experience. However, the challenges that we needed to work

through regarding clinical workflows, technology, and privacy for TH visits were certainly present. In addition, we noted a negative impact on referral completions, reflecting delays and reduced access to care. We anticipate that as more patients feel comfortable resuming in-person care, we will find an equilibrium between supply and demand for TH visits. We still have much to learn about the appropriate use of TH visits and how to enhance the TH experience for both patients and physicians.

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