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COMMUNITY HEALTH CENTERS' TELEHEALTH PROMISING PRACTICES

Case Studies from the COVID-19 Pandemic

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NATIONAL ASSOCIATION OF Community Health Centers

NATIONAL CONSORTIUM OF TELEHEALTH RESOURCE CENTERS

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INTRODUCTION

Background

In 2020, nearly every healthcare provider had to develop a telehealth program to respond to contact and social distancing restrictions imposed as a result of the COVID-19 pandemic. Some had virtual care programs in place already, but many were "starting from scratch," and almost all had to develop programs that would work for most patients in a very short period of time.

Information on the response to the pandemic across the healthcare domain is still being compiled. What can be said as of this writing is that overall outpatient volume dropped by over 50% during the second half of March and through April 2020, with about half of the visits that did occur taking place through the use of some kind of telecommunications technology.[1] Many of these "telehealth" visits were conducted by telephone or "audio only" technology, a modality that had not previously been treated as a covered service in most instances.

Through the second half of 2020, healthcare clinics and providers gradually adjusted to using personal protective equipment and enforcing patient mask mandates onsite, allowing them to reopen their facilities and resume in-person services. Many telehealth programs and services remained in place, but at a reduced or decreasing volume relative to the peaks seen in April and May.[1]

Patient and provider responses to telehealth are still being evaluated, and probably will continue to be examined for years. Many stories have emerged of patients receiving urgently needed services via telehealth when they would otherwise not have been able to access them.[2] In addition, many stories have arisen about providers being highly satisfied with their ability to see and serve patients via telehealth, as well as high levels of satisfaction with the convenience of being able to provide services from home.[2]

Along with the unprecedented restrictions brought about by the pandemic came

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[1] Mehrotra, A., Chernew, M., Linetsky, D., Hatch, H., Cutler, D., & Schneider, E. C. (2021). *The Impact of COVID-19 on Outpatient Visits in 2020: Visits Remained Stable, Despite a Late Surge in Cases.* New York, NY: The Commonwealth Fund. Retrieved from https://www.commonwealthfund.org/publications/2021/feb/impact-covid-19-outpatient-visits-2020-visits-stable-despite-late-surge

[2] National Consortium of Telehealth Resource Centers (NCTRC). *Resources.* Retrieved from https://telehealthresourcecenter.org/resources/?s=&tax_type=category&tax_val=17&center_id=

unprecedented policy adjustments on the part of both public and private payers that allowed many, if not most, new telehealth services (including those provided via telephone) to be reimbursed. These flexibilities played a critical role in allowing for rapid adaptation among providers—many of whom had no previous experience with telehealth—and maintaining the service volumes and cash flows necessary to keep clinic doors open.

This document is an attempt to capture and share some of the challenges faced and lessons learned by a sampling of community health centers who responded to the pandemic by developing or expanding their telehealth programs to meet both general and specific needs that arose during the COVID-19 pandemic.

Purpose

The purpose of the following case studies is to highlight community health centers' promising practices and lessons learned through the process of successfully adopting or expanding telehealth services in response to the COVID-19 pandemic. The stories have both common and unique elements, as each community health center responded to a similar set of challenges with its own unique vision and mix of experiences, assets, and capacities.

These case studies include both rural and urban community health centers from around the country, and they cover several different types of telehealth programs, including primary care, behavioral health, dental, chronic disease management, home health, dietetics, paramedicine, and school-based clinics. Some of these community health centers have been offering telehealth services for years, and some are new to telehealth as of the start of the pandemic.

In these stories each health center shares the lessons they drew from their experiences in the hope that these lessons will benefit others facing similar challenges or looking to develop similar programs. Just as healthcare organizations differ, so too do the various stakeholders and staff members differ in their perspectives and learning styles. It is hoped that readers will readily recognize the value of a diverse set of experiences and perspectives and will be able to draw those lessons most suited to their own experiences and challenges.

Overview of Case Studies

LifeLong Medical Care (California)

LifeLong Medical Care started building the infrastructure for their telehealth program almost eight years ago, adding a small behavioral telehealth program several years later. Their challenge was to successfully scale up these services to a larger platform so that all patients could access care virtually. LifeLong has staff members specifically assigned to support patients participating in telehealth visits. This has significantly enhanced the process of accessing care for patients who are new to telehealth and may need extra assistance to get established. To further support this effort, LifeLong developed a library of resources and a telehealth informational website that has educational materials to help patients prepare for their telehealth visits.

LifeLong executives took on the responsibility of monitoring the rapidly changing telehealth reimbursement policies and regulations to ensure they were getting reimbursed properly for telehealth services. They plan to develop and maintain a hybrid model of telehealth and in-person services after the pandemic.

ARcare (Arkansas, Mississippi, Kentucky)

ARcare began offering virtual dietitian services in 2018. They drew on this experience to expand access to all patients and services at all 58 clinics during the early weeks of the pandemic. Telehealth was a significant part of ARcare's vision prior to the pandemic, equipping them with much of the knowledge and experience needed to expand so rapidly. They now also provide virtual primary care services to students, staff, and family members at 47 rural schools, and persons served by three different homeless shelters in their region.

Tri-Area Community Health (Virginia)

Tri-Area Community Health tells the story of their partnership with two other organizations to create a telehealth program aimed at improving the health of their patients with diabetes. Patients' average A1C levels dropped from 10.5 to 8.2 through participation in this program.

Broadband access was a significant challenge for this program, located in rural

western Virginia. They addressed this challenge, in part, by using glucose meters that could store patients' blood sugar readings and upload them to the cloud when a signal became available.

The team's long-term goal is to develop, evaluate, and share an affordable diabetic intervention program based on these initial efforts that is geared toward underserved, financially challenged diabetic patients who have difficulty accessing specialty services.

Kokua Kalihi Valley (Hawaii)

Kokua Kalihi Valley considered providing telehealth services prior to the COVID-19 pandemic but faced strict regulatory, reimbursement, and other barriers. The flexibilities allowed during the pandemic provided them an opportunity to implement telehealth services for the first time, and they are continuing to explore new ways to use telehealth to serve their patients after the pandemic.

Kokua Kalihi Valley faced some technology challenges during their rapid shift to telehealth at the beginning of the pandemic, including technology shortages and patients not having access to broadband. To address these, they provided staff training on how to conduct telehealth visits and emphasized the importance of keeping workflows as simple as possible for both patients and providers.

Telehealth helped improve access to care for Kokua Kalihi Valley's underserved patients by improving follow-up care and lowering their no-show rate by eliminating significant barriers to accessing follow-up care.

HealthLinc (Indiana)

During the beginning of the pandemic, HealthLinc was able to use the systems and workflows from their pre-established behavioral health and school-based telehealth programs to quickly transition the rest of their clinic to telehealth services. HealthLinc's tele-behavioral health program is a great example of the popular screening, brief intervention, and referral to treatment (SBIRT) approach to providing immediate and responsive behavioral health services to patients. In HealthLinc's school-based telehealth program, on-site nurses and medical assistants serve as the doctor's hands during telehealth visits, allowing providers to conduct virtual exams at local schools.

COVID accelerated HealthLinc's telehealth efforts, including a project to implement a paramedicine program. Through this program, paramedics visit patients' homes to draw blood samples, give COVID vaccines, and facilitate telehealth visits between HealthLinc patients and providers.

Finger Lakes Community Health (New York)

Prior to the pandemic, Finger Lakes Community Health had an extensive and successful program connecting external specialists to Finger Lakes sites. When COVID hit, providers were able to quickly expand these practices in order to see patients at home, work, or even in the clinic parking lot. Finger Lakes faced challenges with connectivity and technology, and they responded by creating tutorials to help patients learn how to use the telehealth video platform. They also created a brief survey to help patients check their system's technological compatibility. Patients could also call a specific phone number if they needed technical support for telehealth visits.

Finger Lakes Community Health found success with follow-up care, routine visits, behavioral health care, and dental care. They were also able to implement a school-based tele-dental and telebehavioral health program. They have also developed an outreach program sending community health workers to farmworker camps with telehealth equipment.

Caring Hands Healthcare Centers (Oklahoma)

Caring Hands Healthcare Centers had never used telehealth technology prior to COVID-19. Like many, they had to rapidly adapt to the pandemic by implementing and sustaining a wide range of telehealth services.

Caring Hands quickly found ways to provide acute, primary care, behavioral health, and home health services using a combination of video visits, phone calls, and drive-up services. In addition to enhancing access, telehealth also helped Caring Hands maximize staff resources.

Caring Hands found that almost all their patients had access to the technology necessary to participate in telehealth visits and that telehealth improved access to care for their patients. Although Caring Hands has transitioned back to seeing most of their patients in-person, the telehealth technology is in place if they

should ever need to deploy it extensively again. They also recognize that for them, telehealth continues to be the best option for providing care in some specific situations.

Ravenswood Family Health Center, UCI Family Health Center, and Petaluma Health Centers (California)

Three dental programs operating in three separate health centers in California found creative ways to provide dental healthcare to patients during the COVID-19 pandemic by using telehealth technology. Their ability to use telehealth to triage patients and provide treatment plans and referrals for acute dental problems helped these clinics reduce their in-person visits by half, saving their in-person visits only for necessary surgical procedures.

Ravenswood Family Health Center had been operating a teledentistry program for children for eight years prior to the pandemic. When the pandemic hit, they were able to rapidly leverage their teledentistry knowledge and experience to continue providing care to their patients. UCI Family Health Center had less experience and chose to focus in particular on engagement with pregnant women after they noticed this group of patients was more hesitant to seek dental care during the pandemic.

The Petaluma Health Centers had not done teledentistry before the pandemic, so they used quality improvement methodologies to quickly design and implement a teledentistry program. Petaluma Health Centers started with one visit to test teledentistry, then continued to tweak the communication and workflow as they gradually expanded their clinic volume.

Table 1. Summary characteristics of the eight case studies included in this report.

Community Health Center	State(s)	TRC	Rural / Urban	Telehealth Experience	Telehealth Programs
LifeLong Medical Care	California	CTRC	Urban	Pre-COVID & During COVID	Behavioral health, primary care

ARCare	Arkansas, Mississippi, Kentucky	SCTRC	Both	Pre-COVID & During COVID	Dietetics, primary care, school-based, homeless initiative
Tri-Area Community Health	Virginia	MATRC	Rural	Pre-COVID & During COVID	Chronic disease management (diabetes)
Kokua Kalihi Valley	Hawaii	PBTRC	Urban	During COVID	Primary care
HealthLinc	Indiana	UMTRC	Both	Pre-COVID & During COVID	Behavioral health, school-based, paramedicine
Finger Lakes Community Health	New York	NETRC	Rural	Pre-COVID & During COVID	Primary care, behavioral health, dental, school-based, farmworkers
Caring Hands Healthcare Centers	Oklahoma	HTRC	Rural	During COVID	Primary care, behavioral health, home health
Ravenswood FHC, UCI FHC, Petaluma HC	California	CTRC	Urban	Pre-COVID (UCI) & During COVID (All)	Dental

Key Words

Telehealth, telemedicine, federally qualified health center, community health center, pandemic, COVID-19, promising practices, lessons learned

PLAYING THE LONG GAME

LifeLong Medical Care Focuses on Patient Needs While Laying Solid Foundation

As most healthcare providers have scrambled during the COVID-19 global pandemic to find the best ways to balance patient care, provider needs, financial considerations, and technology challenges, LifeLong Medical Care has steadily viewed these opportunities as part of the long game.

The organization began laying the groundwork for telehealth nearly eight years ago, and as the coronavirus vaccine now sweeps the country, LifeLong is focusing on its transition to a future that permanently includes telehealth services.

Laying the Groundwork

Years before anyone had ever heard of COVID-19, the team at LifeLong Medical Care was already building the infrastructure that would eventually help them respond better and faster to the global pandemic. LifeLong had been working with an electronics records platform and accommodating some remote employees eight years earlier.

"In addition, we were using telehealth in a very small behavioral health model before the pandemic for about two years," said Ryan Hensler, director of health IT at LifeLong. "Since that model already existed for us, we just had to scale it to a larger platform when COVID hit. I'm thankful for our past experiences."

Focused on Patients' Needs

"In the beginning, like everyone else, we were flying the airplane while we were building it," said David B. Vliet, chief executive officer at LifeLong. "Basically, providers were trying to conduct televisits by telephone or whatever modality they had and did it on the fly."

When patients needed services, they would call LifeLong's call center, which would determine how to proceed. "In the early days, there were so many people who

didn't know about what was happening with their health and what they should do in terms of quarantining and COVID in general," Vliet said. "Our call center really was the main portal for the organization. We were able to route our patients' questions and concerns to the necessary providers."

Multiple platforms were used, depending on the patients' comfort level and access, and initially included Doxy.me, Google, Zoom, Facetime, and EPIC. Behavioral health services were often conducted simply by phone. "Not all of our patients have enough bandwidth to handle a telehealth call or even a Zoom call," Vliet said.

Although LifeLong was open to using any technology patients were comfortable with in the beginning, they were concerned about long-term security. "Some of the HIPAA rules were lifted during the pandemic, but those regulations are going to come back," Hensler said. "We wanted to really bring our system down to two or three secure applications we could support in the long run." Currently, LifeLong is using Doxy.me and Zoom.

During this time, LifeLong executives were keeping a close eye on the rapidly changing regulations and reimbursement rules. "The state of California supports reimbursement for telehealth visits while the emergency declaration is in place," Vliet said. "We did quite a bit of work to ensure accuracy with our billing and tracking in order to understand how reimbursements would take place in this situation."

For example, when existing patients called in with general concerns around COVID, those phone calls now became reimbursable. "We were able to convert what would have been triage calls into actual reimbursable telehealth visits," Vliet said.

Dealing with Staff and Equipment Shortages

As LifeLong Medical Care dealt with patient care on one side of the equation, the organization was also struggling with provider and staff issues on the other.

Its critical call center that served as the hub of all activities faced some staffing shortages. "The reality was that it was extremely challenging to keep our capacity up because many folks who had childcare issues chose to take unemployment benefits in order to take care of their families during this time," Vliet said. "We had

to outsource a percentage of it. Even now, we're offering flexibility for families that need it."

In addition, LifeLong had to find or purchase enough laptops or tablets for providers and staff who were shifting to remote or home offices. "We really tried to get folks off of personal computers," Hensler said. "We didn't want them on personal computers or devices because they are very difficult to support. Fortunately, we were able to get some grants to help cover costs of needed equipment."

LifeLong had a partnership with OCHIN, a nonprofit healthcare innovation center, which facilitated a smooth transition for healthcare workers to work from home using OCHIN's platform.

"Within about a month, we had moved almost 800 people to working from home, which was probably the largest challenge," Hensler said. "Once we were able to get people up and running from their remote office or home space, the tools were quickly accessible to them."

Establishing Workflows

Once patients had a means to connect with providers and LifeLong staff was situated in remote or home locations, the organization began setting up workflows to facilitate telehealth visits. "We worked very closely with our clinical teams to develop some standardized workflows that allowed folks to quickly pick up on those and use them," Hensler said. "We sent weekly emails and notifications to brief people on the proper workflows and processes. As issues came up, we essentially addressed them in real time."

Helping Patients Get Connected

LifeLong Medical Care's telehealth services evolved as time went on. In the beginning, many providers and patients simply connected by phone to address healthcare needs. Since the organization had implemented the technology in previous years, it was already familiar to staff and providers, which made the transition a bit easier internally. As patients got more comfortable with virtual visits, LifeLong began asking if they were interested in video visits.

“At first, we put some processes in place to call patients an hour or two before, or even the day before, their video visit,” Hensler said. “It would help prepare them and explain how the visit was going to be conducted, as well as check to see if they needed help.”

Yui Nishiike, family nurse practitioner and deputy chief medical officer of clinical innovations at LifeLong, praised the medical assistance team in helping to get patients comfortable. “They might find that an elderly gentleman needs help with setting up Zoom,” Nishiike explained. “They might spend 30 minutes setting him up, so by the time the visit starts, he’s all ready.”

Later, LifeLong started building a library of resources, which could be e-mailed or shared with the patient prior to the visit. “We also just launched a telehealth website, which houses all the education materials and information so patients can review it all prior to their visit,” Hensler said.

Some of LifeLong’s clinics are located in underserved communities that have less access to technology. “We really approached it on a case-by-case basis,” Hensler said. “In some cases, if technology was a barrier, an intended video visit would be scaled down to a telephone visit. Some patients have access from home. Others used community areas like the library or other areas that provided Internet service and space.

“We're also working on opening up some exam or conference rooms at our clinic where patients come in and get escorted by staff to a room where they can connect with a provider who is at home,” Hensler continued.

LifeLong recently added a position called a virtual care representative, and this person will be solely responsible for supporting the patients participating in telehealth visits.

“This was a position that spawned off from our prior Patient Portal Specialist role,” Hensler explained. “With the adoption of telehealth and the newly introduced dependency of technology for the patient to conduct a virtual visit, we saw an immediate need for this type of role and support. Our virtual care representative will help patients get prepared for their visit in advance by assisting them with downloading Zoom or connecting through Doxy.me. The individual will also support our patient portal “My Chart,” which includes sign up and usage, advance visit questionnaires, result reviews, and communication with the care team. We

are excited about this role and see a lot of potential to improve both the patient and provider's overall telehealth experience."

Ongoing Training of Providers

LifeLong also works in an ongoing manner with providers. "Our telehealth coordinator reaches out to our provider base and asks them if they have conducted a video visit lately," Hensler said. "If they have, the coordinator finds out how it went and whether it could be improved with some of our training resources. If they haven't, we try to set up a training or Q&A session to help them get comfortable. Telehealth is here to stay, and we want a sustainable model for our providers. We're now looking at onboarding processes for new providers as well."

The Appointment Itself

LifeLong was able to integrate its MyChart portal with the well-known Zoom video conferencing system, which allowed providers to have access to patient information while connecting to patients on a platform they may have already used for work or school.

Both providers and patients had to get used to interacting virtually instead of in-person. The focus on both listening became even more important during a telehealth appointment.

"I think it's important to reinforce that reflective interviewing style where your patients repeat information back," Nishiike said. "I think it is a good thing to do in person as well, but that's especially important when you're more distant."

In addition, managing the appointment notes and action items that needed to follow were a bit of a challenge.

"Our medical assistant really helped to keep the consistency in the workflow," Nishiike said. "EPIC chat allowed sideline conversation, which allowed providers to write things down to come back to later or remind the assistant to take care of."

Even with these challenges, Nishiike sees tremendous value in telehealth. "My philosophy is that just about everything can be discussed on the telephone first,

maybe 80%. The 20% then needs to come in for the specific in-person procedure or specific exam."

Incorporating the Entire Organization

LifeLong Medical Care understood that the entire organization had to be on-board and included in the development of telehealth services. For example, it assigned a provider as a clinician champion who helped lead the telehealth efforts as well as a telehealth coordinator who helped manage existing workflows.

"We also put together a telehealth committee that is made up of different disciplines throughout the organization," Hensler said. "This was helpful to see the types of things that affected all those areas as well."

Vliet added, "This committee helped create policies around providing equipment, infrastructure, report support, ergonomic assistance, productivity, and confidentiality procedures. We tried to support our providers as they moved away from in-person visits and provide the technology, training, and policies to support them."

It took LifeLong about three months before things started to settle down. "This was very new to both the patient side and the provider side," Hensler said. "Since we didn't furlough staff, we had the resources available to really support both the provider model and the patient model to carry out telehealth services and continue to care for our patients."

As a result, even during the pandemic the organization remained within 70 to 80 percent of its usual daily productivity with the exception of dental services, which took longer to understand and adjust to safe practices. Today, LifeLong is back to nearly pre-pandemic productivity levels across the board.

Complementary Technologies

LifeLong providers began using voice-recognition tools to help with notes and documentation. "Our providers usually had a no-show rate of about 20% for in-person visits," Hensler said. "That allowed providers time to catch up on notes. What we're finding in the telehealth world is that we have decreased our no-show rate because transportation is no longer a barrier. It's also much easier to stay on

time because patients aren't backing up in the waiting room." Voice recognition technology helps providers keep up with charting responsibilities.

LifeLong also began using Adobe Sign to manage paperwork and forms that had to be converted to remote management. "When the doors closed, paperwork still flowed, and I think that was the biggest gotcha," Hensler said.

Appreciating the Benefits and Challenges

Anytime a healthcare facility makes a sweeping change like the rapid adoption of telehealth as required by the pandemic, benefits and challenges arise. Although LifeLong providers do deal with new distractions during telehealth visits, they are often less disruptive when compared with in-person experiences.

"Distractions happen with in-person visits because people bring in their children or they get a phone call," Nishiike said. "Since the waiting time is gone, there are a lot fewer angry patients. You also eliminate things like an issue at the front desk, a scuffle in the waiting room, or difficulty finding parking. All those things affect the patient's mood. Now a lot of people are more relaxed because they're in their own environment."

The fact that many telehealth visits take place within the home can also provide additional information to providers. "Some providers were able to see what's going on in patients' homes during video visits," Vliet said. "They may have seen things like hoarding behavior or other things that tipped them off to the patient's physical or mental health status."

While telehealth works better in some patient populations, others can be more of a challenge.

"Some of my colleagues who see older patients, anyone with dementia, or patients who under-represent symptoms, would prefer to see them in person," Nishiike said. "Telehealth appointments are also difficult with kids because you really want to watch them interact with the world. Teens are the best on telehealth because they're so used to it. I've had some cool conversations with teens."

Looking Forward

As the COVID-19 vaccine rollout continues around the world, LifeLong is looking ahead to find ways to permanently incorporate telehealth services where they work best. The organization is currently doing some strategic work on the ideal hybrid model and what the right balance would look like between telehealth and in-person visits.

LifeLong Medical Care executives hope that regulations and reimbursements are still allowed post-pandemic. "We will have a real problem if telephone consults are no longer allowed," Vliet said. "As the vaccine rolls out, we hope to move more into a hybrid model. Our preference would be not to lose our full reimbursable rate for telehealth, but rather to be able to do both in a hybrid model where we can go back to some inpatient visits for things like pediatrics.

"This year has tested the primary care healthcare system," Vliet continued. "As a result, we now have more capacity to do things we weren't doing before. Telehealth was really just sort of a pipe dream for many folks before COVID, and now we are there. The way we do primary care in the future is likely to be completely altered as a result. Now, we have to really consider how we engage with patients in the future using different modalities and how reimbursements will work long term."

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SERVING THE UNDERSERVED

Telehealth Helps ARcare Extend Care to Rural Schools, the Homeless, and Others

For more than 30 years, ARcare has worked to provide comprehensive healthcare to patients throughout Arkansas, expanding to Kentucky and Mississippi in more recent years. The organization's original vision, to serve "the least, the last, and the lost," has been ARcare's foundation over the years, and today, telehealth technologies help the organization continue its mission even further.

ARcare has created telehealth programs to successfully serve those living in rural areas who have limited access to healthcare, including small communities, rural schools, and the marginalized and homeless. Although the organization has always tried to reach these populations, telehealth-based programs allow ARcare to reach more individuals, extend additional services, and work efficiently in a safer and more effective manner.

Virtual Dietician Services

ARcare began using telehealth technologies as early as 2018 when the organization saw a need arise for dietician services in the region.

"We have very few registered dieticians in our area, and we were losing too much patient time traveling from one location to another," explained Lauren Fields, chief nursing officer at ARcare. "We needed to find a better way to deal with the shortage."

ARcare had a partnership with the University of Arkansas for Medical Services (UAMS), and together, they worked to establish a telehealth program that would provide dietician services to all 58 clinics.

"Patients could go into their local clinic, which had copies of all the materials and food models onsite," Fields said. "The local staff would take the lead with telehealth and help patients get connected virtually with an ARcare dietician."

In some locations, such as Cotton Plant, Arkansas, this technology then allowed expansion of primary care services. "Our clinic in Cotton Plant, which serves a population of about 500 people, originally had a provider available two days a week," Fields explained. "Now, that clinic is open the remainder of the week by telehealth. We've doubled our patient census there."

The locally-based nurse has access to peripherals that allow the remote provider to conduct a telehealth exam, listening to heart tones, examining ears, and checking lung function from afar.

Expansion Into Schools

In 2019, ARcare team members attended a conference in Washington D.C. where they heard a speaker discuss how telehealth provided healthcare for students in schools.

"Most of these kids needed healthcare but couldn't get it in any other way," Fields said. "My colleague, Clint Shackelford, senior vice president of ARcare, and I scribbled out an initial plan to create a similar program on a napkin during our plane ride home."

Today, ARcare serves several rural schools in its region. Schools can either join the program using their own nurse, or they can pay a fee to have an ARcare nurse on-site as needed.

Although school nurses are able to take care of many run-of-the-mill student needs on their own, when a situation would arise requiring a physician, they now handle setting up the telehealth appointment and obtaining parental consent forms.

"Our schools might have anywhere from 300 students to 10,000 students," Fields said. "We might see one student a week or more than a dozen a day. We provide them with a laptop and all the peripherals they need. In some cases, the parents might choose to join the telehealth call from work or home through our HIPAA-compliant platform."

As telehealth appointment requests come into ARcare, the organization routes them to three providers assigned to school appointments. Although these providers also work in ARcare clinics and see patients face-to-face, they have lighter loads and know they are on call for telehealth appointments as needed.

"One thing that surprised us was that in the first week, about 50% of our utilization was by school staff, not the students," Fields said. "Teachers or staff who might have had a respiratory illness, had a UTI, or needed a medication refill could be connected to a provider during their prep period."

Devan English, ARcare's virtual nurse coordinator, shares the organization's partnership with the Hector school district. "That district is in the middle of nowhere," English said. "It's such a small town that it has one school, one pizza place, and a pharmacy that also sells guns.

"We started our partnership with Hector last year right before COVID," English continued. "It was when flu season started, and we were able to see eight to 12 students a day. We could provide flu and strep tests on site. For many of these families, the nearest provider is 30 to 45 minutes away."

In addition, ARcare also provided immunization services in the district, vaccinating roughly 30 students during its first outreach. "Many of these students are unable to otherwise get immunizations due to transportation issues," English said.

In many of these communities, the school-based clinics become the entire community's access to healthcare. "I'd say we serve mostly students, staff, and their families," English said. "But in a smaller community, everyone is family."

English recalls one grandmother who was caring for two ill children. She wanted both of them to be seen via telehealth, and then the provider was able to also check out the grandma who was ill as well.

According to Caroline Cody, virtual health program director, ARcare has 47 school-based telehealth programs in 12 school districts. "These are very rural areas," Cody said. "This may be the only care they receive. In fact, in Hector, the superintendent decided to keep the school-based clinic open during summer so we could keep seeing those kids."

Serving the Homeless and Marginalized

Over the years, ARcare has worked to serve the homeless and marginalized in the region. Pastor Paul Atkins of Canvas Community United Methodist Church in Little Rock, Arkansas, recalls the days that ARcare brought an RV onsite to serve his congregation and others in the community.

“About five or six years ago, ARcare would bring their RV once a week and park it outside our church to see walk-in patients,” Atkins said. “They’d see perhaps 20 patients a day. It was one of the ways that we tried to make those in our community feel welcomed and cared for. After a while, it became cost-prohibitive to bring the RV regularly.”

A couple of years ago, ARcare began an initiative to reach this population more efficiently using telehealth technology.

“We’ve seen a great need there and have served 700 patients in our homeless shelter initiative,” Cody said. “We send a telehealth nurse to three different homeless shelters or a church like Canvas once a week. These individuals can see a nurse, connect with a provider, and get some labs and tests done onsite. Over time, we’ve actually had many come back for follow-up appointments, so we’ve been able to make some headway with their treatment.”

Megan Brown, an ARcare telehealth nurse who works with the homeless initiative, shares her experience. “I know we have 10 regulars who follow-up on their labs and medication management,” she said. “They are starting to trust us, which is extremely difficult for the homeless. We have built a relationship with them.”

Fields added that the initiative provides more holistic care for the homeless. “We can see patients for primary care in one room, and then they can go to a second room and see a behavioral health professional on the same day,” Fields said.

Brown appreciates being able to meet the patients where they are at and provide at least some of the care they need.

“I have one patient who has a mental health disability,” Brown said. “If he does not take his medication, he can be violent and aggressive, so he is not allowed inside the building. I’m still able to take my iPad and meet him outside to provide treatment. I consider that a huge success because the alternative is this patient getting no help at all.”

Brown also works at Our House, a homeless shelter for the working, which provides a career center and daycare as well. ARcare offers its services there including mass COVID testing, other labs, and healthcare services. “I had one patient that we saw at Our House for a substance use disorder,” Brown said. “He’s doing better now and actually started volunteering at Canvas Community Church to serve meals there.”

Besides offering both primary care and behavioral care services to the homeless and marginalized, the organization provides some basic education, as well. "We had one patient at Canvas that had high blood sugar readings," Brown recalls. "It can be difficult because the homeless just eat what they can get a hold of. However, we still provide education about what type of food is better for you, even on the street. This individual was able to drop his blood sugar levels as a result of better choices."

Atkins sees the ARcare team as sharing the same values and goals as Canvas Community Church. "They care about our friends the way we care about them," he said. "They offer respect, love, and compassion. We had one woman who was hard of hearing, and the ARcare team listened to her; they made a connection. She was able to get the hearing apparatus she needed.

"Patients like her and others get the care they need at ARcare to live a better life," Atkins continued. "That's very important to us."

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INNOVATIVE DIABETES PROGRAM RELIES ON TELEHEALTH

Tri-Area Community Health's Cooperative Partnership Changes Lives of Patients with Uncontrolled Diabetes

More than 10% of Americans have diabetes with an estimated 1.5 million new cases diagnosed every year, according to the American Diabetes Association. It's a well-known fact that diabetes is a major healthcare problem in the United States, costing $327 billion in direct medical costs and reduced productivity.

A team consisting of a semi-retired University of Virginia (UVA) endocrinologist and nurses from Tri-Area Community Health and the Martinsville Henry Coalition for Health and Wellness has stepped in to help. By using several technological tools including telehealth platforms, they have worked together to create a program that has helped patients with uncontrolled diabetes make significant improvements to their overall health.

Rebooting the Endocrinologist

When Dr. Richard Santen, an endocrinologist at UVA, neared retirement age, he didn't want to completely stop serving patients. In his search to find a way to stay involved and give back to those in need, he approached Tri-Area Community Health and the Martinsville Henry Coalition for Health and Wellness to see if they might together find a way to use telehealth, glucose meters, and other medical technologies to serve patients with uncontrolled diabetes.

Over the next several months, these organizations began referring patients to Dr. Santen who would conduct a one-hour video telehealth appointment to establish care, conduct an exam, and order necessary labs. After that, Dr. Santen would follow-up personally with each patient by telephone every week for six months to ensure they were adhering to their plan of care.

"We've cared for 150 patients in the first phase, and our patients have gone from an average A1C of 10.5 to 8.2," Dr. Santen said. "We've achieved real success in

helping them get their diabetes under better control. The secret is not so much my expertise, but the personal contact I'm making. They either report their blood sugar readings to me on the phone or we use a glucose meter that sends their readings through the cloud. This is my focus in retirement."

Dr. Santen also sees his effort as a program that can be duplicated in other areas of the country, utilizing retired endocrinologists who want to continue part-time work. He's published a paper on Elsevier entitled "Re-booting After Retirement: Novel approach using telemedicine to solve the work-force gap in diabetes management."

"I think many endocrinologists get tired of playing golf and traveling a few years into retirement, and they want to find a way to do some work without being tied to a clinic," Dr. Santen reflects. "There is a significant shortage in endocrinologists, and telemedicine can help retired providers see diabetic patients from anywhere in the world. They can choose to do something like this for three hours a week or 40 hours a week. They can do it from Paris or San Francisco. It's an opportunity for them to give back the information they've learned over the years to really help others."

Overcoming Broadband Challenges

One of the first challenges that the team had to face was the lack of broadband access in areas of Virginia.

"Tri-Area is in the rural remote mountains of southwest Virginia where broadband access is always an issue," said Howard Chapman, director of programs and development at Tri-Area. "Although Tri-Area has an established link with UVA for telehealth appointments, trying to determine how home monitoring tools might work or not work was a challenge.

"We started with a survey to see what speed most patients had access to; many had to be on their porch to use a cell phone," Chapman continued. "Dr. Santen actually drove out, brought his cell phone, and physically checked where signals were."

Since the signals were weak, Dr. Santen selected a glucose monitoring meter that would store a patient's blood sugar readings when they were out of range. Once they were on the highway or in a clinic with a signal, all that data would be

uploaded in sequential order to the cloud for Dr. Santen to access during his check-in calls.

Initial Program Serves Challenging Patients

Dr. Santen began the initial program working with Tri-Area in Laurel Fork, Virginia. "In this area, household incomes are low and patients are financially challenged," he said. "Many have disabilities, and many are obese. I wanted to work with this difficult group intensively in hopes of making a major impact."

Once Tri-Area providers referred patients to Dr. Santen, he would do a complete history, conduct a physical exam, order labs, and review data through a telehealth visit. Carla Horton, registered nurse and health educator, would help facilitate the visit at the Laurel Fork clinic, connecting with Dr. Santen in his Charlottesville office.

"When Dr. Santen comes in to meet with the patients, he has all the records already," Horton said. "We go over them in case we need to pull anything. We can do a digital retinography scan here, which can be read at UVA."

Although Horton had been a nurse for 33 years, she was inspired to become a certified diabetic care and education specialist after working with Dr. Santen since 2016. "Many diabetics just need some basic education," Horton explained. "Whether they are in a pre-diabetic A1C range or had diabetes for years, many want to be educated and get some support." Horton receives referrals from providers and can meet with patients right after their doctor's appointment to provide that support. She sometimes provides that education to Dr. Santen's patients as well.

"Carla is spectacular," Dr. Santen said. "She manages all the lab orders I need and helps with medication changes through Tri-Area providers. Without Carla helping with those steps, this would be much more difficult."

Soon, Dr. Santen began working with the Martinsville Henry Coalition for Health and Wellness and Bland County Community Health Center but became quickly overwhelmed. Eventually, he scaled back to only Tri-Area and the Henry Coalition.

"There are no endocrinologists in close proximity to these clinics," Dr. Santen said. "My philosophy was that in six months, I could train patients to manage

medications, insulin, diet, and weight reduction with intensive involvement. After that, they could continue on their own."

Dr. Santen followed up with a small subset of patients at three months and six months after the program's conclusion. "What we found was that the group's average A1C was about the same at those checkpoints as when they finished the program," he said. "About 50% continued to get even better on their own while the other 50% got a little worse, but no one went back to their initial A1C levels. We were excited that the program was successful."

Second Study Focuses on Nutrition Education

In April 2021, the team began a second study focused on the nutritional component of diabetes management.

"During our first study, one of our patients was reporting that she was eating very little," Dr. Santen said. "However, one of our team members saw her at a local McDonald's with a table full of food. It just shows you that nutritional education is really critical."

Dr. Santen worked to secure a grant that will allow the patients participating in the second study to obtain meals for six months from Nutrisystem. "They have a well-designed diabetic diet, which allows women to consume 1,200 calories a day with two snacks and men 1,500 calories a day with three snacks," he explained. "However, in very obese patients, we may be dropping caloric intake from 3,000 calories to 1,200 calories, which puts them in danger of hypoglycemia. To create a safety net, we'll be using a continuous glucose monitor for the first 10 days that will measure their blood sugar every five minutes and transmit that information to their cell phone. They need to call us if their blood sugar drops too drastically."

After the initial 10 days, the team will move to finger stick monitoring as well as tracking vitals like weight and blood pressure. "We have three patients enrolled at this time," Horton said. "Once patients are out of danger of hypoglycemia, we'll have them do the finger stick test four times a day. We'll track that along with blood pressure and weight during the study."

In addition, Dr. Santen is exploring Glytec insulin management software. "This company has developed an algorithm that can look at blood sugar and other vital signs and determine the needed amount of insulin. This type of technology makes

it possible to scale this program so that non-professionals can also participate in serving diabetic patients."

The second study will incorporate a larger educational component by providing iPads to participants, which will be pre-loaded with four educational sessions. "We'll ask patients to watch these two-hour sessions at two weeks, six weeks, eight weeks, and 12 weeks," Dr. Santen said. "We're also using a research nutritionist who will be conducting a telemedicine session with each patient at the beginning, middle, and end of the study."

The team plans to meet with participants at the one year anniversary of completion and at 18 months to see if they have continued their healthier lifestyles.

A Pre-Packaged Affordable Solution

The team's long-term goal is to create a prepackaged diabetic intervention program based on these initial efforts that could be easily implemented at healthcare facilities around the country.

"We'd like this to be a package at a fixed cost," Dr. Santen said. "Federally funded centers around the country could use this packaged price tool to get their patients' diabetes under control. That's the long-term goal. We're designing this for the underserved, financially challenged patients who live in areas where there are few doctors and no specialists. It's for them."

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PANDEMIC ACCELERATES TELEHEALTH SOLUTIONS

Kokua Kalihi Valley Improves Care and Access to Underserved Population As a Result

Like most healthcare facilities, the leadership, providers, and staff at Kokua Kalihi Valley had thought about telehealth solutions before the pandemic. However, strict regulations, the inability to bill for telehealth services, and the complexity of implementation were barriers to action.

"The pandemic did provide an opportunity to implement telemedicine for us," said Dr. Nathan Tan, associate medical director at Kokua Kalihi Valley. "Now, we can see that it is really powerful and beneficial to our clients. Without COVID, I think the timeline for implementation would have been much longer at our clinic, if at all. I think we've come to really love it. It's not an exclusive way to take care of our patients, but it's a really important tool to add into the mix."

Early Technology Challenges

During the early months of COVID, Kokua Kalihi Valley staff was trying to figure out the best way to care for their clients while keeping both their staff and patients as safe as possible. "We were trying to minimize the number of clients coming into our facilities as much as possible, especially during those early stages of COVID," said Jared Christenot, quality officer at Kokua Kalihi Valley.

At the same time, Kokua Kalihi Valley faced some technology challenges to rapidly implement telehealth.

"Our environment was mostly virtual desktops, which required getting external microphones and cameras as well as laptops and tablets for our staff to use," said Christenot. "Most clients were using their smartphones when we first started. We wanted very straightforward technology that was easy to use for our staff and also, on the flip side, for our client base."

Since many of the HIPAA-related restrictions were lifted through the federal government's emergency order, Kokua Kalihi Valley was able to meet their clients on platforms that were most comfortable to them.

"We were trying to meet the needs of our clients, including using the different technologies that were available to them," Christenot said. "We offered the whole realm of how we could connect with them, whether it be by phone, Facebook Messenger, or Zoom."

At the same time, the clinic's client base frequently faced internet access and broadband issues in the area. "I think there's a lot of work to do in terms of access to connectivity and internet equality in our community," Christenot said.

Training Focused on Simplicity and Medical Assistants

Although Kokua Kalihi Valley provided training for its entire staff, they soon realized that the medical assistants played a vital role in implementing a successful telehealth technology offering. The staff also realized the importance of simplicity.

"We provided some training for all of our providers and care staff after selecting our preferred methods," Christenot said. "That included training in UpDox, which is a HIPAA-compliant telehealth platform, and Zoom. We walked them through what a typical process would look like, including set-up and backgrounds."

Simplicity soon became a top priority in telehealth implementation workflows. "I think the more complications that you create in an environment, the more stress you put on the staff, especially considering the current pandemic and all of the stress that comes with that," Christenot said. "We were trying to alleviate that, especially on the client side, by doing telehealth as simply as possible."

Another reason for needing simplicity was the fact that the clinic outsources some IT services. "We run a very lean model here," Christenot said. "We contract out some IT services, so we have in-house help only twice a week here. We really needed to rely on our staff and end users to be able to troubleshoot and navigate on their own."

Kokua Kalihi Valley focused the majority of its training on its medical assistants. "We provided very focused training for this group and even did one-on-one sessions," Christenot said. "We talked about all the things that can go wrong on

the client side so that they would be able to handle most of the troubleshooting with our clients."

For example, an assistant might need to explain what a text message is over the phone and send a link that needs to be clicked on within 15 minutes to help the client get connected.

Supportive Leadership, Internal Culture Key to Success

One thing that was clear was the willingness of the staff, providers, and leadership at Kokua Kalihi Valley to come up with a solution during the pandemic to care for its patients.

"I thought our leadership was really supportive, and I think that was really helpful," Dr. Tan said. "They made it a priority." Once the staff had support from the top ranks of the organization, they began garnering the support from all the front-line providers and employees.

"Identifying a provider champion who could model behavior, share challenges, and help spread best practices was key for us," Christenot said. Christenot added the importance of the underlying culture at Kokua Kalihi Valley and how it played an important role in the program's success.

"I think our culture is very open to change to face new circumstances," Christenot said. "Our staff was enthusiastic about moving to this new way of providing care and just kind of ran with it. We tried to provide different options and solutions and then we were open to hearing feedback."

Besides resulting in better care for Kokua Kalihi Valley clients, this supportive culture and leadership resulted in no lay-offs during the pandemic.

"We also have collaborative leaders who help secure staff buy-in and move projects forward," Christenot said. "It came down to how we're going to best serve our community. For example, our dental department closed down for a couple of months, and that staff was redeployed to help provide outreach to clients, helping to assess overall needs and finding food and financial resources for them. We didn't lay anyone off. Everyone needs support right now, and it's really important that we provide that."

Improving Access to Underserved Patients

Since Kokua Kalihi Valley serves a broad community that often faces language, income, transportation, and other challenges, telehealth became a way for providers to improve access to healthcare for this underserved population.

“Even when we were able to see clients in person, communication could be difficult,” Dr. Tan said. “We have a large percentage of clients who don't speak English as their first language or any English at all.” In addition, many clients could not get time off from work, faced transportation issues, or had other obligations that kept them from getting the healthcare they needed.

”We have about a one-third no-show rate historically in the clinic, but I think telehealth has encouraged more patients to come to appointments, especially with the added social difficulties during the pandemic,” Dr. Tan said.

“I have a female patient in her mid-thirties who has insulin-dependent diabetes,” Dr. Tan added. “She works full-time and she takes care of her family so there's very little time for her to take care of herself. Prior to the pandemic, she wasn't following through with her care. We would see her sporadically, maybe once or twice a year or so. Sometimes, she wouldn't show up. With telemedicine, she could take a break during work to make time for her appointment. She’s made some progress in controlling her diabetes. I think that was a real success.”

Although language barriers continued to be somewhat of a challenge in delivering virtual care, in addition to technology challenges, Kokua Kalihi Valley was able to use its translators as well as tap client family members for help.

“It was helpful to find a family member who spoke English,” Dr. Tan said. “Often, a teenager or a young adult who had their own phone could help navigate the system. We also used our medical assistants, our interpreters, and other support as time went on.”

On the whole, Dr. Tan believes that telehealth can deliver a wealth of benefits for providers and patients. “For me, personally, I have been able to see more patients and have better follow-up with them,” Dr. Tan said. “I can see them in their home environment, and my patients enjoyed being able to feel safe, yet continue to get medical care. I believe it has improved care for my patients.”

Christenot agrees about the hidden benefits of seeing patients in their own space. “We’ve been able to get a different view of our clients, whether it's seeing them in

a home or even what background they choose," Christenot said. "I think it's helped our client care teams create a stronger connection with individuals and eliminates some barriers that exist when clients physically come into the office. There are power dynamics with a client coming into an exam room, seeing a doctor, being in a strange space and not in their home. I think our clients can speak more freely about the challenges that they're having and are a little bit more truthful and comfortable with our providers."

Future Plans

Kokua Kalihi Valley sees telehealth as here to stay and will be exploring more ways to use the technology to serve its clients in the future.

"We'll be looking at more robust tools for our telehealth platform," Christenot said. Technology such as blood pressure self-monitoring machines, chronic care management tools, and better screening equipment are some areas of interest.

In addition, Christenot expects the organization to look for ways to help staff build new skill sets and continue learning more about the technology available. "Fine-tuning things like bedside manner from a virtual standpoint will also be important," Christenot said. "We'll be part of a learning network that will help us identify training areas, our weaknesses, and how to move forward."

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STEPPING UP TO THE CHALLENGE

Past Telehealth Experience Helps HealthLinc Ramp Up Quickly During Pandemic

When COVID-19 hit in early 2020, HealthLinc, a community health center based in Indiana, was able to rapidly step up to the challenge. "Many providers were completely shutting down during this time, and patients couldn't be treated for anything," said Melissa Mitchell, chief operating officer at HealthLinc. "We were able to get a large chunk of our telehealth services up and running within two weeks because we had many of the systems and workflows in place for our behavioral medicine and school-based telehealth programs. During COVID, we could translate that experience to help everyone."

Virtual Visits Support SBIRT Treatment

Before the pandemic began, HealthLinc had already implemented a telehealth component within its behavioral health service offerings. The health center used the screening, brief intervention, and referral to treatment (SBIRT) approach in its eleven clinics as a wrap-around service to clinical providers.

With funds from an Access Increases in Mental Health and Substance Abuse Services (AIMS) grant, HealthLinc was able to provide behavioral health services to patients as soon as they were needed.

"If patients come in for any reason and it's clear they are suffering from a behavioral health issue as well, it is our intent to not let them leave without some sort of intervention," Mitchell explained. "For example, if someone comes in for diabetic treatment and is suffering from depression, we'll attempt to have them seen immediately onsite with our behavioral health specialist, but if they are busy or unavailable, we can schedule a brief telehealth intervention with one of our available social workers at another location to make an immediate impact."

School-Based Telehealth Appointments Extend Care

HealthLinc has also established a school-based program prior to COVID. By allowing schools to connect to providers when a student requires healthcare services, HealthLinc helped keep those children from missing more instruction.

"We have one rural school in the program," Mitchell said. "Although they didn't have the demand to justify placing a full-time healthcare professional on-site, we wanted them to have access."

As a result, HealthLinc partnered with these schools. A school nurse or medical assistant is located at the school and can manage run-of-the-mill student needs. In addition, this individual could also run common tests for strep throat, urinary tract infections, or the flu and serve as the provider's hands during a telehealth visit.

"The medical assistants have access to digital cameras, stethoscopes, blood pressure gauges, and otoscopes so that the provider can easily perform a virtual exam right at the school," Mitchell said.

Extending Experience During COVID

Both HealthLinc's experience in its behavioral health and school-based telehealth programs helped position them well for the global pandemic. "We knew what could be accomplished through telemedicine, where we could offer services, and where it wouldn't fit as well," Mitchell said.

By April 2020, HealthLinc had set up a direct-to-patient model using Zoom video conferencing, specifically for potential COVID cases. "We knew we could treat symptomatic COVID cases remotely and use drive-through testing stations," Mitchell explained. "That meant we didn't have to shut down the rest of our services. Those patients who required non-COVID medical care could come in and be safer."

In addition, HealthLinc was also aware of the areas where patients tended to be more uncomfortable, and the staff could address those concerns. "We could provide the needed patient education about secure connections and devices," Mitchell said. "Zoom allowed us to have a great deal of flexibility; it tended to play better with the devices that patients already had at home."

Building a Paramedicine Program

Before the pandemic, HealthLinc's CEO, Beth Wrobel, had already started talking about initiating research on paramedicine and what that might look like in the future. "COVID accelerated that effort and prompted us to find a way to use paramedicine during the pandemic," said Christina Serrano, strategy and compliance program manager at HealthLinc.

Serrano worked with HealthLinc's five counties to discuss the idea and secure grant funding. "We have built great relationships with our communities in the past, so when COVID started, we were able to go to them for assistance," Serrano explained. "Some of them even came to us to ask how they could help.

"In this case, we explained the background of the paramedicine project and they were very generous and accommodating," she added. HealthLinc began working with InHealth, a paramedic company that operates in the same five counties, in October 2020 when the pandemic was at its peak in the area. As of February 2021, the paramedicine program has served 120 patients.

Paramedicine Program Benefits

"We learned early on that our most fragile senior patient populations were not tech savvy and were most likely to need regular lab and blood work," Mitchell said. "Through this program, paramedics would visit the homes of our elderly patients to draw blood, give COVID vaccines, or facilitate telehealth visits with providers."

If HealthLinc providers have patients they want to see in this manner, they simply provide a referral and the paramedics schedule the appointment. "For example, if an elderly patient needs a medication refill that requires an exam, we'd send out a paramedic with all the information," Mitchell said. "The paramedic helps connect them to the provider."

Several HealthLinc providers have used the service, and it has benefited both the providers and the patients. "I have an elderly female patient who suffered from a stroke and is now being cared for by her daughter," said Dr. Debra Zack, a HealthLinc provider. "When paramedicine became available, this patient was on my short list for an appointment. Now, I can see this patient through paramedicine regularly without needing her daughter to take off work or bring her later in the evening when the patient is not typically feeling her best. This

patient was so happy when I offered the service and has had two follow-up appointments since."

Jennifer Evans, a nurse practitioner with HealthLinc, also shared the impact of paramedicine on one of her patients. "One of my patients has multiple medical conditions that prevent him from being mobile. His elderly mother is caring for him. With paramedicine, his mother no longer needs to worry about how to get her son to his appointments, especially in and out of the car and house. This removes a huge burden for the patient's mother, and she is very grateful."

In addition to being able to provide expected healthcare services, the program also helped alert HealthLinc to other patient needs.

"Once you go into people's homes, you get so much more information about them," Mitchell said. "We can see other social determinants of health. For example, we've noticed that they don't have enough food or the right kinds of food or sufficient housing. That gives us the opportunity to suggest additional resources. Perhaps we'd get them in touch with a food bank or set up a nutritionist visit. It allows us to better care for the whole person."

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OVERCOMING BARRIERS WITH TRAINING AND SUPPORT

Finger Lakes Community Health Helps Providers, Staff, and Patients Succeed with Telehealth

The Finger Lakes Region sits in the central part of upstate New York, where patients and providers are often few and far between. In addition to the rural nature of the area, hills and valleys make internet and broadband access even more spotty than in other rural parts of the country. Such challenges made implementing telehealth technologies during COVID-19 a bit more difficult for Finger Lakes Community Health, but the staff stepped up to the challenge by applying experience, implementing extensive training, normalizing the use of technology, and finding creative solutions.

Health Center to Health Center Telehealth Experience Lays Foundation

Due to the rural nature of Finger Lakes Community Health's patient population and the shortage of specialists in the area, the organization had already implemented telehealth technologies to connect each of its health centers to one another. This allowed patients to physically go to the nearest health center and connect virtually to a specialist or provider located at a different facility.

"Before COVID, we had been using telehealth technology to connect with external specialists and to connect our health centers internally, so if somebody shows up at one of our sites and I'm here in Geneva, I can see them through a telehealth visit," said Dr. Jose Canario, chief medical officer at Finger Lakes Community Health. "A nurse at the other location can use peripherals that are connected to our telehealth equipment so I can look in the ears, nose, and mouth, and listen to the heart and lungs from afar."

As a result, many of Finger Lakes Community Health's patients were already familiar with the equipment and telehealth services offered, and staff were comfortable using the technology.

"Our health centers already had technology in place in our exam rooms, and our providers had computers with cameras," said Sirene Garcia, Chief Innovation Officer at Finger Lakes Community Health. "We didn't need to scramble to get equipment. We also had dedicated staff that helped the providers, the nursing team, and the patients acclimate to the platforms. Our staff had been doing telehealth for some time so there was a comfort level for folks. They already had an awareness and understanding of the process, so they were able to help support the other providers or other members who needed help with telehealth."

This familiarity provided an excellent foundation for the start of the pandemic. "When COVID hit, we were able to quickly adapt these practices to see patients in their home, at their workplace, or in the parking lot to reduce potential COVID exposure," Dr. Canario said. "One of the major positives that came out of COVID was that we were now able to see patients where it was more convenient for them. If they're not feeling well, we can see them at the house. Instead of having to take time off work, they were able to just step out for 15 minutes on a break. If individuals had transportation issues, especially in our rural area, they could still receive care."

Re-Imagining IT Support and Training

Like many other community health centers, Finger Lakes Community Health had to figure out the best way to transition patients, providers, and staff to telehealth technology effectively and efficiently. Although the organization had a full IT department, they were busy keeping the organization running remotely during the pandemic and had little spare time to help patients with telehealth visits. To address these issues, Finger Lakes Community Health took a multi-pronged approach.

First, the IT department developed tutorials for each operating system to help patients learn how to use the telehealth video platform. They also created an initial five-question survey for any patient who wanted to try telehealth to check for technological compatibility.

"When a patient said they wanted to have a telehealth visit, we would first go through a list of five questions with them," said Casey Castner, telehealth operations coordinator at Finger Lakes Community Health. "The questions were designed to ask patients about their technological capacity in an accessible way.

We had patients who stated they wanted a telehealth visit, to then find out they only had access to a landline phone. We were careful to phrase questions in a particular way. We couldn't ask if they had enough broadband to support a video call. Instead, we had to ask whether they could stream Netflix or YouTube videos in their home. We also had to find out if they had a Wi-Fi connection or an adequate data plan. We found that asking these questions ahead of time reduced a great deal of frustration for patients and providers."

If patients had what they needed to participate in a telehealth visit, they could then call a specific phone number if they needed technical support. This number directed their call to five individuals well-versed in the telehealth platform to support patients in setting up telehealth appointments. This relieved the IT department, which was busy trying to keep the entire organization up and running with the sudden increase in remote workers within the organization. It also eliminated the need for the call center to take patient calls regarding the telehealth technology.

Finger Lakes Community Health then worked to ensure that its providers and other staff members were competent in all aspects of telehealth. In order to accomplish this goal, the organization set up an extensive four-hour orientation program.

"As part of our onboarding process, all staff involved with telehealth participate in this orientation program," Castner said. "We cover the history of the program, what services we offer, how to use the equipment, and how to telepresent, as well as how to document, code, and schedule."

The final piece of the training and education puzzle was to normalize video conferencing as much as possible among both providers and staff.

"We incentivized video conferencing," Garcia said. "In fact, it got to the point where our staff felt comfortable leaving for a two-week vacation and adding a third week of remote work from that location. We also tried to show our staff that if they had a really good employee whose family needed to move to California, they could still keep that employee using this technology. We wanted to make video conferencing an everyday occurrence."

Clinical Successes

Although Finger Lakes Community Health still faces challenges, particularly with connectivity issues, the organization has experienced many successes with telehealth technology applications.

"We found that many follow-up or routine visits worked well with telehealth, such as monitoring of hypertension or lipids," Dr. Canario said. "It also worked really well for things such as depression, anxiety, and ADHD visits. Most of those visits revolved around asking questions, delving into how they're feeling, and checking on their medications. Our behavioral health no-show rate really went down."

According to Mary Zelazny, CEO at Finger Lakes Community Health, the no-show rate for behavioral health visits dropped to 14% once telehealth appointments were in place, compared with a 35% no-show rate before the pandemic. In addition to improving behavioral health care, Finger Lakes was also able to broaden their dental service offerings through telehealth.

"In New York state, it is required to have both the hygiene visit and dental exam during the same visit," Zelazny explained. "Now we can have our dentists provide exams to multiple sites and cover more hygienists than if they were only offering in-person visits. The hygienist uses a special video camera so the dentist can perform the exam remotely. It's a way for us to increase access to care and be able to offer more services."

In addition, Finger Lakes Community Health was able to facilitate a successful school-based dental program and behavioral health program using telehealth technologies.

Many young children seen at the school sites had major dental issues that required extensive care provided at a large pediatric dental surgery facility in Rochester, New York. However, all the initial meetings, dental consultations, and pre-operation tasks could be done via telehealth.

"The kids and the families were able to meet with their providers virtually before they traveled to Rochester for all the surgeries," Zelazny said. "It eliminated the fear of the unknown in going up to a big city facility and resulted in nearly 900 kids with completed treatment plans."

A third area of success for Finger Lakes Community Health was in treating their farmworker patients. "We send our community health workers out with a full

range of equipment to go to farmworker camps," Zelazny said. "If they see someone who needs further care, they can set up their equipment and call the provider to take a look. It's a better way to care for farmworkers who don't have the language skills and won't get paid if they miss work. It's a lot better for us to go to them and provide care. We can keep them engaged and ensure that they get some health care. They are here to work and send money home to their families; they won't go to the doctor. We can see them at night, and we use technology to bridge that divide."

Castner explained that Finger Lakes did some connectivity mapping to address broadband issues early on with this incamp program. "We use the hotspot on a smartphone," Castner said. "When the community health workers were initially out and about, we would have them touch base with us and do a video call with somebody on my team, and we would map what the connectivity was like at each of these camps. We've identified specific areas in each of the camps where there's the best connectivity for future visits."

Similar to finding creative solutions with the farmworker population, Finger Lakes continues to search for ways to deal with the broadband issues in its service areas. "We also have an office space in one of our locations in Perry where we set up a telehealth kiosk so patients can go to that location if they can't connect from home," Castner explained. "We're looking into setting up Wi-Fi hotspots at each of our sites so if a patient wants to be seen via telehealth and they have a device to be seen but no connectivity, they can connect to our Wi-Fi at that site and they can see a provider that way."

Future Plans

Finger Lakes Community Health is in the process of transitioning from Zoom to a platform called Ignite, which will allow them to integrate better with their electronic medical records as well as incorporate interpreters and other team members more easily into patient visits.

"I think telehealth is here to stay," Castner said. "There's always a use case for telehealth. Younger generations are used to technology and prefer the convenience it provides. Middle-aged folks are deep in family and career responsibilities; they have a lot going on, so telehealth appeals to them. The elderly population might not want to leave their homes or might not be able to

leave their house due to weather, lack of transportation, or mobility issues. Telehealth is versatile; it hits all of those use cases. It's definitely sticking around."

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FROM AN ABSTRACT IDEA TO A NECESSARY TOOL

Pandemic Forces Caring Hands Healthcare Centers to Tap Telehealth Technology to Serve Patients

It's interesting how many ideas in the abstract seem completely unworkable until organizations find themselves in a position of being forced to change and adapt. That's what happened when it came to Caring Hands Healthcare Centers and its implementation of telehealth.

"Before COVID, we had had the conversation about trying to get telehealth off the ground," said Lyndi Church, chief operations officer at Caring Hands Healthcare Centers in Oklahoma. "We were all struggling with the concept as well as the equipment; we just couldn't seem to grasp the whole thing."

When the pandemic went into full swing in the spring of 2020 and the state government instituted shelter-at-home orders, Caring Hands was forced to make the switch with all the other organizations and businesses in the state.

Phase One: Moving Patients to Zoom

"Within the first week of the state's shutdown, we had started working with Zoom as our first platform for taking care of our patients," Church said. "It was the fastest way to get started. We got a license for each provider and switched every scheduled patient to a video call in order to meet up with them. We worked out all the kinks and difficulties in those first several hundred visits."

According to Stacy Scroggins, physician assistant at Caring Hands, "Patients were so worried about coming in, especially at the beginning. They knew they had to be seen and wanted to be seen, but they didn't want to go to the ER." Telehealth gave them a safe way to receive care.

The Caring Hands community didn't have its first positive COVID case until nearly April, so the initial telehealth appointments revolved mostly around caring for patients with acute health conditions or those who needed medication refills.

Providers were able to care for patients through a combination of video visits, phone calls, and drive-up services.

"Once we got through the initial two or three-week lockdown, things opened up for a couple of months," Church said. Although some patients returned to in-person visits, Caring Hands was still seeing about 30% to 40% of its patients through telehealth.

"The surprising part about implementing telemedicine for us was that almost everyone had access, especially if they just got a link to click," Scroggins said. "I was initially surprised at how much we could do over telemedicine. In fact, there were things we did over a video visit that we didn't do in the office. For example, we might ask hypertension patients to show us their blood pressure cuff and how they have been taking their readings. We might see that they are doing it wrong and show them how to take it more accurately. We did some problem-solving with them."

In addition, being able to see patients in their own home environment opened the door for more specific conversation and education.

"I had one patient with severe COPD who would always talk about how hard it was to get to her bedroom," Scroggins recalls. "During a video call, I saw stairs in the background and realized that her bedroom was upstairs. We then talked about some sort of accommodation and things like whether her oxygen was accessible while she was sleeping."

Phase Two: Moving Staff Online

Since the pandemic was not prevalent in the area until later in the spring, Caring Hands had set up care teams within its clinics that originally met in person. "For the first few months, our staff stayed healthy," Church explained. "We could set up our care teams with a provider, a nurse, and a medical assistant in the same room, and they'd all be together while connecting with patients. That worked well as they could easily feed off one another and coordinate during appointments."

However, when staff started getting COVID in September, it spread quickly through the clinic. "We had several clinical staff all go down together," Church recalls. "It spread like wildfire, so we moved our staff online to try to prevent others from getting sick."

By this time, Caring Hands had switched from Zoom to Otto, a HIPAA-compliant telehealth platform that could integrate with the organization's electronic health records system. However, they were still using some phone calls and Zoom meetings as needed.

"Our nurses were at home, our doctors were at home, and our patients were on the screen," Church said. "Again, we had to work out kinks on the fly. Some patients were not tech savvy or had a bad internet connection. Sometimes we'd start on Zoom, and after a few minutes, we'd lose the connection and have to use a phone call to finish.

"It was interesting to me how quickly we could deviate from norm and still be comfortable and competent," Church continued. "We just had to do what we had to do to take care of our patients."

Phase Three: Effective Applications

Once Caring Hands had set up its technology and workflow processes, the organization found more and more ways to use telehealth to care for patients.

"When patients called for an initial appointment, our front office staff would walk them through the process," Church said. "We'd send them instructions, and most patients could manage. Some had internet access problems, which was probably the biggest barrier. Anytime we made a change, we tried to test the system, but we often had to just troubleshoot as we went along."

Caring Hands quickly found ways to provide routine and acute care through telehealth. "For example, if a patient had a UTI, we could do the majority of the visit by telehealth and then the individual could drop a urine sample at our drive-through service," Church said. "For COVID cases, we'd talk with them through telehealth and then just swab their nose at their car to limit exposure."

Providers were able to conduct telehealth appointments to help patients manage their medication refills as well as chronic diseases. For elderly patients, telehealth technologies were used in concert with home health organizations.

"Telehealth was instrumental in helping us care for our home health patients; some of whom live an hour away from us," Church said. "If our provider just wanted to lay eyes on a wound or check in on a patient, we could do that with telehealth."

Since Caring Hands runs three clinic locations, telehealth also helped the organization maximize its staff resources. "For a while, we kept minimal staff at our other clinics," Church said. "We might have a nurse and front office staff available there to take vitals and do labs, but when patients came in, they could use telehealth to connect to a provider at our main site."

The same was true with behavioral health services, which Caring Hands used to offer in person on a rotating basis through its clinics. "Before COVID, our mental health providers would spend a half a day each week at our other clinics," Church said. "We switched that to Zoom so our patients and providers didn't have to drive. We also did a group session online."

A group of patients that Scroggins was particularly concerned about was her medication assisted treatment patients. "We had to make sure our opioid use disorder patients were still receiving needed care," she explained. "I spent a lot of time listening to webinars and trying to learn how to use telehealth to care for these patients. We figured out how to do pill counts virtually, and we'd have them come in for their weekly drug screen. They were still able to get their medications as well as participate in both individual and group behavioral medicine services. There was no interruption in treatment."

Phase Four: Future Uses

Although Caring Hands has moved back to seeing many of its patients in-person, the telehealth technology is now in place if it should be needed again in the future. "I think it will be seasonal like during next year's flu season or if COVID returns," Church said. "Both our patients and providers prefer in-person care. However, in some situations, telehealth visits will be the best option. I'm glad we've got the option if we need it."

Scroggins hopes that telehealth services are here to stay. "With COVID, we all sort of had to jump into it," she said. "However, I think telehealth really does improve access to care. Many of our older patients live in rural areas and it's hard for them to come in. If we can check on them through telehealth every week and have them come in monthly, I think we can keep a closer eye on them and make sure they are taking their medications and are not experiencing any additional problems. Telehealth has been a game changer."

Church reflects back to the days before the pandemic. “Looking back to before COVID, we didn’t think we’d ever get telehealth off the ground,” she said. “We really didn’t even entertain the thought of seriously doing it, but when your patients need care, you figure out a way. For us, telehealth became the way through the pandemic.”

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DELIVERING SAFE DENTAL CARE AND INNOVATION

California Dentists Use Teledentistry to Maintain Access to Essential Services for Vulnerable Populations During the Pandemic

Throughout the pandemic, the media has covered drive-up COVID testing services as well as the shift to many new telehealth offerings. These help deliver acute and chronic medical care to patients in creative and contactless ways.

The public has heard less, however, about how the field of dentistry has utilized telehealth technology to provide continuity of care during this pandemic. In some areas, dental health centers led the way in delivering innovative solutions to provide both emergency and preventive care.

Three dental programs operating in three separate health centers based in California found creative ways to do just that. Each focused on high quality patient care, mimicking in-person workflows as much as possible, and sharing lessons learned with one another so that other dental patients would benefit. These are their stories.

Focusing on Pregnant Women's Dental Needs

When COVID swept through California in early 2020, the UCI Family Health Center completely shut down during the initial lockdown days.

"When we started getting messages about toothaches and other dental problems, we initially tried to do phone visits," explained Dr. Radha Wuppalapati, senior dentist at UCI Family Health Center in Santa Ana, California. "It was apparent that we couldn't diagnose via the phone only, so we moved to teledentistry visits in April 2020. We were trying to provide access to care to prevent patients ending up in the ER. This innovative approach of doing video visits helped us achieve this goal."

Although the UCI Family Health Center's system started as a triage system to take care of patients and provide access to care, Dr. Wuppalapati began to notice that one specific group of patients was not seeking care at all.

"Our pregnant patients, usually referred from our obstetrics clinic, were not coming in," Dr. Wuppalapati said. "I reached out to those referring nurse practitioners, and they validated my observations. Some pregnant patients were having dental issues, but they were apprehensive about coming in."

Although the teledentistry program at UCI Family Health Center was available for all patients, they noticed it was particularly helpful for this subgroup of pregnant patients needing dental care.

"Our nurse practitioners started asking dental-related questions during the patients' prenatal in-person or telehealth obstetrics appointments," Dr. Wuppalapati explained. "If patients had issues, they'd be referred to us, and we'd reach out to them to explain the importance of dental care during pregnancy. We'd walk them through our EPIC MyChart, provide additional education, and help them download Zoom. When a patient had difficulty with MyChart sign up, I would do the visits through Zoom. Someone from my team would call the patient before the appointment to remind them."

During those virtual teledentistry visits, Dr. Wuppalapati would go through the patient's medical history and dental issues, diagnose any issues, and set SMART goals. "We could finish all the talking during the teledentistry visit. We could decide on a plan of care, whether we could save the tooth or if the patient needed a referral to an oral surgeon. I could fax any information for referrals so that everything was in place and the patient could simply just go in and get the procedure done. This was a big hit with the patients, as they could get the care they needed without any delay."

Prior to the teledentistry program implementation, this process would typically take two in-person visits. By shifting all the talking and background work to the virtual platform, UCI Family Health Center was able to eliminate more than 50% of the in-person contact. This was needed in the pandemic.

"Before COVID, that first in-person visit was all the talking, where we'd gather patient history, provide the diagnosis, reach out to referral providers, and secure medical clearance for x-rays," Dr. Wuppalapati said. "All of that could now be taken care of before the in-person visit. In fact, we even reduced the wait time of

the actual treatment appointment. They could come right in and start immediately."

As a result of the program, UCI Family Health Center noticed that patients were much more comfortable coming in for their actual treatments. They understood their dental issues and had accurate expectations of what would happen when they came in for the actual procedure. This has resulted in a zero no-show rate for the in-person visit after the teledentistry visits.

Dr. Wuppalapati shares one recent example of the positive difference teledentistry has made for her patients. "I had one obstetrics patient who was due in two weeks," she explained. "She had a toothache, and I conducted a teledentistry appointment. It was clear she needed a referral to an oral surgeon for an extraction. I prescribed some medication and made that referral right away. She had the appointment with the oral surgeon two days later, and the issue was taken care of before she got too close to her due date. Telehealth allowed us to treat her so quickly. It's really been a game changer."

Pre-pandemic Virtual Dentistry Model Jumpstarts COVID Response

At the Ravenswood Family Health Center in East Palo Alto, California, the providers were not strangers to teledentistry. In fact, eight years prior, the center had started a virtual dentistry program to care for preschool children, those with special needs, and children visiting community centers for social services.

"As part of that program, we'd have a hygienist on site with the children, taking pictures, providing fluoride treatments, doing screenings, and taking x-rays," explained Yogita Butani Thakur, chief dental officer at Ravenswood Family Health Center. "They would connect to me as the remote dentist, and I could suggest treatment options during a virtual visit. We also did medical and dental integration where an assistant would bring in a dentist for a remote appointment during a well-child visit."

As soon as COVID began and schools and clinics shut down, Ravenswood Family Health Center was able to quickly convert its teledentistry knowledge and experience to provide continuity of care.

"We had all these patients in our care, and we suddenly couldn't see them," Dr. Thakur said. "At first, we provided only emergency care. However, we did call all

our families to let them know we were still here and they could reach out if they needed us.

"When we were in the schools, we'd bring the kids toothbrush kits, and for some of them, the only time they brushed their teeth was in school," Dr. Thakur continued. "So we started sending these toothbrush packages to their homes. We also started doing fluoride treatments when kids came in for vaccinations."

Ravenswood Family Health Center used teledentistry technology to triage patients and screen for true emergencies. "Since we had all this experience under our belt, we were able to pivot in many different ways," Dr. Thakur said. "We did what we needed to do to keep our patients at home and out of the ER. We could virtually assess whether they needed to be seen and what they needed to be seen for. We could minimize their in-person wait time by informing the providers exactly what treatment they needed when they came in."

Dr. Thakur explained that one common issue for parents was a child whose permanent tooth was coming in without the baby tooth falling out. "We could teach the parents how to deal with that at home," she said. "They didn't need to come in; we could manage that by telehealth."

In addition, Ravenswood Family Health Center also shifted follow-up, post-operative appointments to telehealth as well as treatment of soft tissue lesions. As parents expressed the need for siblings to receive dental care, the center began sending fluoride and oral kits home with families. "We could do a risk assessment and nutritional education virtually, and then we could teach the parents to apply the fluoride varnish at home," Dr. Thakur said.

"For us, teledentistry allowed us to save on personal protective equipment, especially during the early days, and keep social distance between our staff and patients," she continued. "Patients could be in their own surroundings and virtually see us from work, home, or school. It also helped us increase our capacity at the clinic so we could take care of more patients who needed us."

Rapid Innovation Needed to Mimic In-Person Workflows

Unlike Ravenswood Family Health Center, the Petaluma Health Centers in Petaluma, California, had not done teledentistry before the pandemic. As a result, they learned from best practices and used quality improvement methodologies,

such as the model for improvement, to rapidly design and implement the teledentistry program.

Petaluma Health Centers operates three locations, caring for roughly 11,000 patients of all ages. On March 16, the centers closed their doors to everything except emergency care. "We did our best to divert as many emergency room and operating room patients away from the hospitals to save those resources for COVID patients," said Dr. Ramona English, chief dental officer at Petaluma Health Centers. "We were also trying to social distance and save personal protective equipment."

Dr. English pointed out that their clinics often operated with a very high concentration of people for in-person visits, and their larger site was closed for three months at the beginning of the pandemic. "We didn't want to let our staff go, and we wanted to find ways for people to work from home," she said. "On the medical side, telehealth was becoming more popular, and so there was this growing expectation and requests from patients for teledentistry."

"In addition, hundreds of patients were becoming overdue for care daily," she continued. "At the time, we thought COVID would be a sprint, but it stretched out to be this marathon. We had this backlog of patients. Cavities were growing. Everyone was grinding and breaking their teeth from rising stress levels."

Petaluma Health Centers started with one visit to test teledentistry, tweaking the communication and workflow. The aim of providers from the beginning was to conduct synchronous video visits between the patient, the dentist, and the assistant. "It's been a period of learning and discovery," Dr. English said. "We had to learn to work within the limits of policy and reimbursement, and we had to teach patients new technologies, how to prepare for video visits, how to take intraoral photos with a smartphone, and how to self-administer care."

The ability to use telehealth to triage patients and provide treatment plans or referrals for acute dental problems has helped Petaluma Health Centers reduce their in-person visits, directing the health history, information gathering step to a virtual visit and ensuring that patients received definitive surgical care during the in-person visit. "It's very expensive to provide care in the dental chair," Dr. English said. "It's like an operating room, and it's been great to be able to just use that dental chair only for actual surgical treatments. Not all emergencies are true emergencies, either. We prescribe medication, do specialty referrals, manage chronic diseases, and do risk assessments very well virtually. We also needed to

meet the patients where they were. Not everyone could come into the clinic, and teledentistry allowed us to expand the reach of the dental home and reduce oral health inequities."

According to Dr. English, the innovation Petaluma Health Centers is most proud of are video visits for patients up to age five. "During these visits, in addition to addressing parents' concerns, patients receive a self-care package in the mail," she explained. "Parents provide intraoral photos of their child's teeth, demonstrate toothbrushing and apply fluoride varnish with the dentist's guidance. They discuss home care habits and routines, nutrition, set self management goals, and become informed and engaged partners in their children's oral health."

The centers have also found that providers have more meaningful conversations via teledentistry. "Usually, the entire family and all caregivers are going to be there," Dr. English said. "We can give one consistent message to everyone, which means patient-centered care for the whole family in their environment. For example, we've found that kids are often more comfortable with their parents doing the fluoride treatment. I've had some that do better with their parents during video visits than with us in the clinic. For other patients, having a video visit serves as a warm handoff that reduces fear of the dentist and makes it more likely for the patient to show up in the clinic for their follow-up."

Dr. English concluded, "During the pandemic teledentistry has evolved as a new service line, another tool in the dental toolbox that can reduce health inequities and the cost of care while maintaining access to high quality, evidence-based, minimally invasive and patient-centered care. Will policy and payment follow?"

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CONCLUSIONS

These community health centers show, by their experience and innovation, the tremendous wealth of talent and other resources community health centers possess and point us toward some of the possibilities for the future. Though they faced a variety of challenges and brought different collections of resources to bear, each showed in its own way how telehealth technologies were, and can be, used to address access to care and patient engagement needs. The promising practices these stories represent are meant to be both practical for current emulation and instructive for those interested in developing them further.

It is interesting to note that, for those health centers already doing telehealth, the pandemic did not require fundamental changes in their telehealth strategies and methods. Adaptations certainly had to be made, especially when smaller, limited telehealth programs had to expand to ensure access for a broader range of services across the whole gamut of primary care, mental health, and dental care. This required expanding the knowledge base of leadership and staff, introduction and adoption of new technology tools, development of new policies and processes, and expansion of training, both for staff and patients. But at a fundamental level, telehealth functioned—and is best used—as a tool to overcome specific kinds of barriers to healthcare access. This is especially relevant now given that the pandemic, though unprecedented in many ways, functioned as a new and more universal barrier to healthcare access. In its application as a tool for overcoming this barrier, the "superpower" of telehealth shone through in its ability to reach patients where they were and address these unprecedented, but not fundamentally different, healthcare access needs.

As community health centers look to the future for what may be coming next in the domain of telehealth, the collaborators who came together to produce this volume hope that these stories of dedication, resilience, and practical innovation will help ground us all in an understanding of the diverse needs community health centers seek to address. We also hope these stories inspire us all to continue to find new and better ways to use all the tools at our disposal to effectively address these needs during the remainder of the pandemic and beyond.