TELEHEALTH

Check In

Shhhhhh! The Doctor's In.

Guide to Connecting Library Patrons to Better Health

Authored by:

CRAIG SETTLES
INDUSTRY ANALYST, SPEAKER, AUTHOR

Sponsored by:

ena

Community Broadband Snapshot Report ™

Table of Contents

Executive Summary

Libraries on the vanguard of transforming healthcare delivery, what is your library going to do in this moment when the federal government is committing over $7 billion to communities making a difference?

This guide lays out how to a) get to the heart of patrons' healthcare needs, b) create something that's never been done in your community before, and c) market your telehealth and broadband grant proposal.

More than video chats, **telehealth uses intranets and Internet networks to observe, diagnose, initiate or otherwise medically intervene, administer, monitor, record, and/or report on the continuum of care people receive when ill, injured, or wanting to stay well.**

I'll take this definition one step further and differentiate between 1) real-time telehealth, 2) store-and-forward telehealth, and 3) "passive" telehealth.

Real-time telehealth are activities happening "right here and now," often involving medical or healthcare professionals. In a library setting, a patron is video chatting with a doctor from a study room or other enclosed private space, or a traveling nurse sets up in a room to do hypertension screening with patrons and video conferencing with a doctor in another location should patrons have questions.

Store-and-forward telehealth is collecting medical data and sending it electronically to another site for later evaluation. Patrons who don't want to go over their data cap (limit) might use a library's Wi-Fi to send medical records, test results, or digital images. For maximum privacy and security, telehealth applications receive and send using HIPAA-compliant software.

In the context of this guide, "passive" telehealth refers to educational Web content, digital knowledgebases, and software applications that help us understand, prevent, treat, or recover from threats to our physical and mental health. Few entities are as competent as libraries for making knowledge easy to find and sort through.

Telehealth making a difference

There are at least five primary ways to impact healthcare delivery through telehealth at libraries:

1. **Reinventing the doctor office visit** – video consults for a variety of healthcare practices including observation, screening, gathering body data, data exchange, counseling
2. **Marrying chronic healthcare and home care** – libraries can check out Wi-Fi hotspots and laptops to patrons, plus add exciting, interactive Web content
3. **Aiding emergency response** – turning libraries into wireless way-stations to connect ambulance crews en route from rural homes to far-off hospitals
4. **Expanding mental health care** – in addition to the video consult, there can be interactive content, in-person group sessions, and meetings with social workers
5. **Improving senior care and aging in place** – another benefit of checking out portable hotspots

"If the overall strategy is to make telehealth a part of 21st-century cities and rural living, if it's part of our vision that 'Telehealth is the future of healthcare,' we're going to have to come up with lots of different ways to reach lots of different communities," said Francella Ochillo, Executive Director of Next Century Cities. Libraries supporting telehealth in laundromats, barbershops, and hairdressers is part of that strategy.

This guide lays out a straightforward needs assessment process so you get a representative portrait of how telehealth can benefit the community. Libraries reach out and touch virtually everyone in their communities across the entire economic spectrum, so it's quite exciting to imagine telehealth capabilities at work.

Healthcare professionals weigh in on how to get the maximum impact from telehealth technology in your library. The guide also gives you tips and pointers on getting the best from your IT investment. Not only does it address access to broadband but also broadband and telehealth adoption and training.

Ultimately, it takes funding to transform community dreams into reality. The guide offers insights into federal grant programs that fund libraries and telehealth: the FCC's E-rate program, the Institute for Museums and Library Services (IMLS), and Health & Human Services (HHS), plus links to other valuable resources that help you.

What's in your telehealth dreams?!
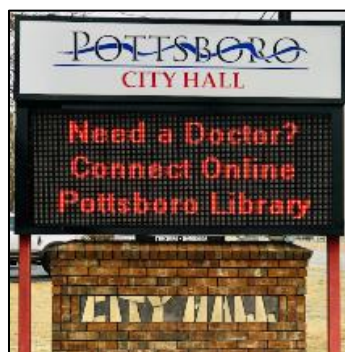
1. Groundwork for Success

A few libraries, such a Pottsboro Library in Texas, took baby steps as they've tested the waters for offering telehealth during the pandemic, and then went for it. Other libraries, buoyed by the technology's success in their communities, plan to seriously consider it once shutdowns for the pandemic are lifted.

Pioneering Pottsboro Library – Getting this party started

During the pandemic, Dianne Connery, Pottsboro Library's Rural Special Projects Librarian, was getting calls from patrons saying their doctors didn't want them coming to the office for appointments. She offered her office, the library's only separated room, for video consultations with patrons' doctors.

"We got some people needing behavioral health, weight loss management, and dermatology appointments," Connery said. "There were a couple of people with pregnancy issues and other conditions that made them vulnerable to COVID-19. Many of our patients don't have the Internet at home." She applied for and won a $20,000 grant from the Network of National Library of Medicine to launch a substantial telehealth program.

The library created and soundproofed a telehealth room within the structure, added monitors and good lighting, and enhanced the Internet connection with telehealth having its own access. In January 2021, they opened scheduling patrons two days a week. What is surprising is that, even though there are shortages of every type of healthcare professional, libraries have to market telehealth aggressively. "Build it and they will come" isn't going to work.

Connery said, "In the beginning you're going to have to do a lot of education and reminders to let people know that the service is available. Also, expect months of prep work before opening day because healthcare partners are quite exacting. Everything pertaining to telehealth has to be done in specified ways."

Chattanooga Public Library – Years ahead of the game

A few years before telehealth became the rockstar of technology, Chattanooga Public Library in Tennessee experienced a new dimension of telehealth – three dimensions, to be exact.

A design specialist for Signal Centers, a Chattanooga company which helps disabled people live full and independent lives, since 2014 has used the library's 3D printer to build prosthetics for his son as he grows. Library patron Ezra Reynolds returns regularly to make changes or to design replacements.

"Ezra was doing this for his son who was two years old, so the 3D printer didn't have to be a big machine," said Corinne Hill, Executive Director at the Chattanooga Public Library. "He worked in the prosthetic business so he was able to build his own files. As the manufacturers of this kind of equipment, it's super easy for them to develop files." Instead of $1,000 for them to build it, maybe it's $100 for the file. Then you just print it out.

Today, Chattanooga's library has laid the groundwork for telehealth. "We did vaccines in the building, we've done HIV testing here, and I'm adding a social worker on staff," said Hill. "A social worker can help where you need to get the care. Telehealth will not be a foreign concept. We'll work with the county and state health departments."

Delaware – The first state

Before COVID-19, Delaware's Program Director for the Telehealth and Device Learning initiative did a road show to almost all the state's libraries. Nick Martin explained to the managers what telehealth could look like in their libraries. "Little did I know that a few months later, we would enter into a global pandemic that really highlighted the importance of quality healthcare and broadband access," said Martin.

Prior to this, most of the libraries had social workers and everyone understood that there was a heavy need for healthcare access. When Martin came on board at Delaware Libraries, he explained, "My focus was on emerging technology as a whole including artificial intelligence and virtual reality." Many in telehealth understand these technologies are key to advancing telehealth.

Space is a common concern for libraries contemplating telehealth. "We needed standalone spots where patrons could go to access these basic health and human services," said Martin. "So we have wheelchair accessible kiosks that can hold two or three people, have HEPA filtration, UV sanitation, and are equipped with iPads that can access Skype, FaceTime, Zoom, and several telehealth-specific platforms."

The libraries have "navigators" (discussed later in the guide) that assist patrons getting set up with telehealth. Navigators have Chromebooks that can be loaned out for a week; My-Fi, which are portable hotspots; and can assist with scheduling appointments. Patients also can go online for assistance.

Indiana – The state of telehealth

"Our vision for telehealth and libraries really builds on previous experiences of both face-to-face initiatives and virtual programming," said Lucinda Nord, Executive Director of the Indiana Library Federation.

Since the 2010 Affordable Care Act, public libraries have been where residents meet with healthcare navigators to enroll in health coverage. In 2018, Indiana libraries piloted a Lawyers in Libraries program in which Central Indiana lawyers provided online legal information to residents in rural county libraries hours away. Suburban Indianapolis attorneys used Skype to meet with residents in libraries across eastern Indiana.

Nord states, "In 2020, many courts required virtual online attendance. Working with the Indiana Supreme Court and the Coalition for Court Access, librarians have learned effective virtual meeting skills that help us expedite telehealth work. Within weeks of the stay-at-home order in March 2020, we partnered with state agencies to train over 1,000 library employees to help residents apply for unemployment, SNAP, and health coverage."

These projects had librarians setting up spaces with high quality video and audio connections that may be used for telehealth appointments. For many, there also were transition costs for technology, sound baffling, and staff training. Libraries had to be creative to ensure patron privacy, as well as the sanitation of equipment and space.

"Indiana's public libraries are a critical partner in vaccine information distribution, scheduling, and registrations along with the Indiana Department of Family and Social Services Administration and the Indiana Department of Health," Nord said. "Since January, we trained 1,300 library employees on software apps and administrative processes."

Libraries Without Borders – This pilot really shines

Libraries Without Borders US (LWB US) wants to show you the future of libraries and the flipside of telehealth – it takes place in laundromats!

Executive Director Adam Echelman's team partnered with public libraries, particularly the New City and the Detroit Public Libraries. They built innovative, strong proofs of concept that can scale to a library citywide system, and even a state or a number of states' library systems. And voilà – the Wash & Learn initiative.

It's an example of the passive telehealth described earlier. It increases patrons' knowledge of health and related issues. Echelman said, "We install Wi-Fi in the laundromats. Patrons access a public computer with pre-loaded educational content including health issues that are prevalent in their community, whatever those issues might be." It's somewhat restricted browsing focused on topics that often involve health.

LWB US is successful because they take the services from public libraries, such as "story times" and digital literacy training, and scale them into the laundromat setting. Echelman believes the "typical" telehealth in the laundromat with video consults could work. It may take months to get people comfortable enough to send medical data such as blood pressure readings from a laundromat.

Springfield-Greene County Library – Dabbling before the pandemic

The Missouri county library dabbled in health services before the pandemic. "One of our locations is downtown in an older Carnegie building, and organizations with health resources come in and use our community room," said Executive Director Regina Copper. "Social workers and some mental health counselors stop by occasionally to make themselves available to patrons."

Now administrators and staff are considering moving forward with telehealth. Some of the larger of the library's 10 branches have study rooms they can convert into telehealth rooms for patrons to interact with doctors. The smaller branches don't have study rooms.

"The library is concerned about privacy, so one thought is to build enclosed spaces that are soundproofed and have extra lighting and its own computer and Internet."

- Regina Cooper, Executive Director
  Springfield-Green County Library

Some prefer to buy rather than build, so pre-configured telehealth kiosks with room for two chairs and a desk or counter are an option. Telehealth software provided by potential healthcare partners can provide two-way video. In the library's larger branches, their telehealth setup might want to support medical assistants and various digital devices for testing and diagnostics.

But Springfield-Greene County Library's "home run" in the telehealth game is their program of loaning patrons portable Wi-Fi hotspots to deliver telehealth to patrons' homes. The hotspot automatically opens a Wi-Fi connection to the Internet. "We've written a grant to get laptops and hotspots to check out to people so they can receive healthcare from the privacy of their home," said Cooper.

2. Know Your Patrons

As libraries assess the needs for community broadband and telehealth within their communities, don't lose sight of the fact that these are symbiotic technologies uniting under a backdrop of great national need.

"I think there's a failure of imagination in some ways in the ability to see what libraries are doing today and what they could be doing tomorrow to build on our traditional competencies," said Larra Clark, Deputy Director of the Office for Information Technology Policy at the American Library Association (ALA). "When it comes to community broadband networks that have been built, we could have improved the impact of some of these investments if we had utilized the existing network of libraries. Libraries have a sense of place, a highly qualified staff, and a good technology infrastructure. Libraries can be mobilized in really powerful ways for this country."

Five years ago, [Clark expressed this sentiment](#) and most of the dozens of libraries interviewed in that report reinforced. Libraries today may be on the brink of a great mobilization to narrow the digital divide. The needs are there, and money is certainly available.

Of the 12 million urban homes disconnected from broadband, 75% are African-American and other people of color. COVID-19 laid bare the depth of our digital divide and left homes to pick up the slack. It also salted the gaping wound within our healthcare system – higher percentages of Black populations were getting the virus, were dying from it, and when we finally got the vaccine, lower percentages of African-Americans were getting vaccinated. Mercy!

Out-of-the-box thinking raises all boats

Libraries should recruit telehealth advocates from community government, nonprofits, and clergy to get behind telehealth at the library to give the program wings. Ware said, "One of the main challenges in urban areas is trying to get credibility and leverage with unofficial leaders who are already doing good there, influencers who people look up to, believe, and follow."

Ware had an experience as budget director of a novel program (Communicare) in the 1990s in New York City that used creativity to tackle a common inner city problem. As many as 50% of emergency room (ER) visits at healthcare facilities were for conditions that could have been prevented or treated earlier and more cost-effectively through primary care.

"We took over places or converted abandoned spaces in low-income communities, designed areas in them for a receptionist and other areas for doctors and exam rooms," Ware recalled. "Instead of an expensive ER visit, a person could go to one of these primary care centers, see a doctor, and come back for a follow-up. At that time, Communicare projects accepted all patients regardless of coverage."

Now take the same program and partner with libraries to provide interactive content and a combination of telehealth rooms and portable laptops/hotspots to deliver Communicare throughout the neighborhoods. Bring in the department of health to do weekend health fairs. Give your unofficial community leaders a role in the activities. Save $1,400 per ER visit.
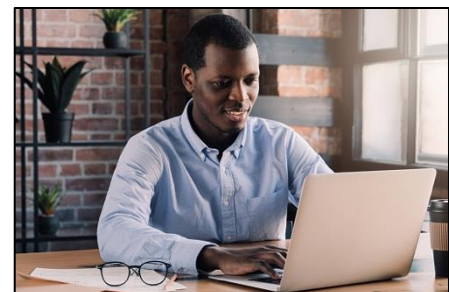
Watch your tongue

Francella Ochillo, Executive Director of Next Century Cities asked, "Do you have ambassadors, residents who are native Spanish speakers talking about telehealth? Maybe they're influencers online or maybe high profile government officials, local celebrities. I find that when we have people who are a part of a community saying, 'Hey, this is something that the Latino community needs to embrace,' often it makes it easier to get adoption."

While medical instructions in Spanish are helpful, remember that Hispanic audiences can consist of people who have lots of dialects of Spanish and people have different understandings of the meanings of certain words. "Is it helpful to have a health form in Spanish when I don't have somebody who's bilingual walking me through it?" asked Ochillo.

Some people assume that residents of Hispanic communities like to "keep to themselves," a sort of self-isolation, as a reason for low broadband adoption. However, many Spanish-speaking residents feel Brown people can never assume that they have any sort of privacy, safety, or rights, even when they are natural born citizens.

A lot of Latino and Hispanic families come from countries that are traditionally suspicious of government. Technology can be seen as tools of the government so there's a natural suspicion.

Ochillo said, "When somebody says you 'self-isolate' that implies you intentionally withdrew from something. But there is no reason for you to be a part of a process that can be legitimately dangerous to you. When you don't know who is sharing your information, you don't understand the program or who's funding it, who gets access to the results, being leery is a matter of self preservation. You cannot in good faith participate in that digital-gathering process."

If you want to make people comfortable with telehealth, they need to see you in places where they are. And one of those places is where people shop. Salt Lake City and County Public Libraries in Utah has paid their dues.

Matt McLain, Associate Director for Community Engagement at Salt Lake County Library, said, "We've had a pretty good amount of success reaching Hispanic populations at their markets. The Rancho Market chains carry many of the products that people from Mexico, South America, and Central America buy. We have Asian markets out here too." Health initiatives are quite important with the church leadership in these communities.

3. In the Beginning, There Was the Needs Assessment – And It Was Good

"Ready! Fire! Aim!" is not a winning strategy for implementing community technology strategy. Smart libraries thoroughly analyze their communities' needs before pulling the technology trigger. First, assess what healthcare issues do patrons need to resolve. And then assess if telehealth and broadband can resolve them and at what cost. Libraries likely will spend less money, waste less time, and achieve superior results.

The diverse minority populations around Salt Lake City and County libraries would not patronize them. So the libraries went to town with an effective needs assessment. Community Faces of Utah (CFU) is a partnership of five minority community groups, University of Utah, and the Utah Department of Health. CFU and library representatives selected and funded Community Wellness Liaisons (CWL), one from each community.

Trish Hull, Library Manager at The Salt Lake County Library Services said, "The groups selected the CWLs who, along with the community leaders, met with us to describe their communities' health and wellness needs, and what each wanted from the library. They prioritized health issues, such as depression and suicide while others just need access to doctors and insurance."

End result? CWLs worked 20 hours a week splitting the time between the library and the community. From November 2019 to March 2020, the CWLs interacted with approximately 1,749 people, 55% of them being from the targeted communities.

"This is the first time we've been involved in a program when somebody actually came to us and asked, 'What do you want? What do you think is important?' instead saying, 'Oh, you guys need this and this, because the data says that's what you need.'"

Here's to your health

Determine what are good things about your community's health, and then assess the jurisdiction's health needs and problems thoroughly. Probably here is where a lot of the money, time, and effort of telehealth likely will be focused. This is where a lot of tangible healthcare and public dollars can be saved.

You want to look at the jurisdiction as a whole, but then examine the different segments. Certain illnesses and medical issues will be more prevalent depending on constituents' economics status, ethnicity, education, gender, and geographic location. How is the quality of healthcare and the quality of the access to healthcare.

After establishing an understanding of your jurisdictions' health issues, overlay that knowledge with the locations of where your libraries are. Draw on a map a circle one-mile around each library. Initially expect to generate a lot of telehealth visits from the people who live within that walking or short driving distance of the library.

Just ask them!

"What do you need?" "How can our services, or potential services, solve your health or wellness concerns?" "Are you more comfortable working with someone who looks like you?" Get to the heart of the matter – "Does it make sense for the library to provide access to telehealth?"

One-on-one meetings with your main community stakeholders, leaders, and elected officials should be first. This gives you a good feel for the potential political, marketing, and financial support from within the city's formal and informal leadership. This telehealth initiative needs all three.

Telehealth delivered by a city's top institution (libraries) makes this political, so best play the politics superbly. Also, it's going to take a serious marketing shove to get this initiative up and running quickly. Put those marketing ducks (influencers) in a row. Give more oomph to your grant proposals! Make community stakeholders and leaders your proposal allies and get yourself some of that FCC $7 billion.

Library staff can do a series of workshops divided into sections by communities, geographic boundaries, seniors, people with disabilities, and so forth. You can solicit feedback and ideas for specific telehealth services, health, healthcare and wellness goals, resources needed, and potential funding sources. Consider doing several town halls meetings in different locations.

A third activity can be a citywide or countywide survey to allow as many people as possible to add their opinions. This can gather a lot of feedback from constituents plus generate grassroots support, motivate people to volunteer, and might generate donations.

Considerations for rural libraries

Expect there to be differences when doing needs assessments for rural libraries. "I think rural libraries have a huge advantage because we are given such freedom to innovate, at least in my town," says Connery. "If it's not costing the city any money and we have grant money, we go for it."

That said, the desire to innovate can be stymied by caution. Maybe in a larger city library the librarians access to a dozen medical databases and know how to use them. Connery feels that in rural libraries "if someone comes in and says 'My son has leukemia. Can you help me find information?' some librarians aren't comfortable. Some training needs to happen."

What do you do when people genuinely feel they don't need broadband telehealth? Nord feels that, "In these small towns with sparse populations, residents often are aging, there's not a lot of young people or kids in college. These tend to be more farming and rural communities in our state. It's a real challenge to talk to some folks about broadband and Farmer Joe doesn't think he needs it."

4. Technology & Resources for Telehealth Access, Adoption

Libraries normally want to have as few barriers as possible to get to the general Internet. "Generally, when you walk into a library, they have open wireless," said Michael McKerley, CTO at ENA. "You look at your phone, see 'Settles Public Library,' click it, and join. It's an un-encrypted network for everybody to use, which is great. But for telehealth, libraries need that data traffic to be segmented and not be sniffable by hackers."

That segmentation may or may not require new broadband infrastructure, but it may need a network assessment. Even if you don't need new equipment, you might need a redesign. When telehealth connections start or respond from healthcare providers' side it is HIPAA compliant, so you have low chance of hacking or stolen data. Securing the library's network double downs on telehealth security.

Libraries need to ensure that they have adequate bandwidth for multiple audio and video streams. "That requires enterprise-level Internet access, not a consumer grade bandwidth," explained McKerley. "Whether wireless or fiber, the bandwidth needs to be synchronous, meaning equal download and upload speeds. The bandwidth needs to be low latency, low jitter, low packet loss, and have enough capacity to facilitate simultaneous video streams."

There'll be a hotspot in the old town tonight

A mobile hotspot is an ad hoc wireless access point that is created by a dedicated hardware device or a smartphone feature that shares the phone's cellular data. Libraries loan the units to their patrons for several weeks up to 6 to 12 months. They're extremely popular because the FCC lets libraries spend grant money for the devices plus they are incredibly easy to deploy. Libraries loan out tens of thousands of these units monthly.

"On the one hand, mobile hotspots are an incredible stopgap solution while we wait to build out broadband infrastructure," said Nord. "On the other hand, mobile hotspots are limited in quantity and reach, and should be considered only a stopgap solution."

Mobile hotspots are frequently loaned with long wait lists and new units are back-ordered. Be realistic in terms of their healthcare use. In general, the units are good for emergency care when a patron has a unit when a crisis or need hits. Hotspots are great for scheduled care, such as maternal health, mental health care, post operative care, and preventative healthcare and physical rehab.

The huge boost to the rate is timely given the high cost for providing mobile hotspots. Nord said, "Not only are there monthly service costs, but also maintenance and replacement costs. Some companies require payment for the unit and then a monthly service fee. Others simply require the monthly fee. Some libraries have actually discontinued use of mobile hotspots based on costs and loss rate."

Mobile hotspots do not work everywhere so do your homework. Where there isn't good cell phone service, these hotspots have trouble. "There are many hilly or remote areas of the state where mobile hotspots do not work," Nord added. "Some of the mobile hotspot vendors may overstate their coverage areas."

A relatively new element of wireless capability that can increase the number of rural homes that receive broadband coverage is Citizen Broadband Radio Spectrum (CBRS). Matt Larsen's Vistabeam Wireless ISP (WISP) believes at least 40 to 50% of a service area probably can be opened up if CBRS is available to WISPs.

"CBRS works really well for fixed wireless," Larsen said. "We have always had to turn away about half the customers that want our service because they're behind a tree or they don't have a line of sight. It's opened up another big chunk of customers within our current footprint."

Space – The final frontier for telehealth in the library

Discussions of telehealth invariably bring up the question, "Is there enough space?" Even the larger libraries, such as Boston Public Library in Massachusetts, are struggling with this issue.

Kurt Mansperger, CIO for the library, explained, "Our libraries don't offer private spaces. We were first looking at our business center and thinking about adding soundproofed pods that would be glass. It's a self-contained unit with a power source and USB. We're still studying it."

For this guide, kiosks are self-contained, fully-enclosed soundproof units that hold one or two chairs, a table, a computing device and screen, and a telehealth app. The units enable patrons to talk with healthcare professionals who can remotely observe patients, or medical assistants equipped with various digital diagnostic tools can go to kiosks.

Many providers could easily be connected to a kiosk network for a wide range of medical issues including various specialty types. Emily Fisher, a telehealth doctoral candidate working on a Virginia-based telehealth team, said, "The kiosk could be its own 'health system.' Different providers can be available during certain hours the kiosk is in use. Patients could view their medical records, which can be kept in a digital or cloud-based platform."

Katie Thomas, Sales Director for manufacturer Spinneybeck, said, "Know who's responsible for receiving and installing the unit, especially if you have small staff. ADA compliance is a must, so be sure the size gives you enough space for two people even if one of them is in a wheelchair, and the unit should be flush with the floor for easy wheelchair access."

Craig Keefner, Manager of Kiosk Manufacturer Association, suggests that libraries buy from established companies, and if possible, buy directly from manufacturers rather than a reseller. When libraries buy a kiosk, they should be buying a complete package – hardware, software, installation, shipping, and services.

After access, telehealth adoption?

In 2015 the advocacy group National Digital Inclusion Alliance (NIDA) defined broadband adoption as daily access to the Internet:

- at speeds, quality, and capacity necessary to accomplish common tasks
- with the digital skills [training] necessary to fully participate online
- on a personal device and secure convenient network

By swapping in "equitable" for "daily," we now have a definition of telehealth adoption. The feds are moving to make money available for increasingly affordable access, but libraries and their allies must keep the spotlight on funding and resources to support telehealth adoption at the levels needed, especially by low-income urban and rural residents, seniors, and immigrants.

Community Tech Network (CTN) is working with the University of California, San Francisco, to provide telehealth training as part of a pilot. "They hired us to call patients a week before their visit and ask if they need help," said Kami Griffiths, Executive Director of CTN. "If they do, we train them to use Zoom or log into the hospital portal; 25% of the patients age 55 to 64 need help. Now we're starting on the older folks and we expect there to be a lot more needing help getting to telehealth."

If your library system covers a city or county and assumes that 15 to 20% of residents have low or no digital literacy skills, this may seem like a very small percentage. But that percentage gets larger in certain communities – constituents with general low literacy, older adults, immigrants, and those who lack of high school diplomas. Again, know your patrons.

"What happens if there isn't technical support when someone has a problem with an app?" asked Peter Caplan, the managing consultant for New York-based eHealth Systems & Solutions. "Who's training patients what to do if the Net has a glitch? During COVID, many doctors didn't fully understand how to properly do a virtual medical consult."

Griffiths advises libraries to keep it simple: "Say your telehealth room has five things in it and everyone needs to know how to use all five things. Prepare some kind of video or simple game app that everyone goes through so they know how to do those five." This helps their telehealth visit be more effective and enjoyable.

Let's go all in with digital navigators

Similar to how Salt Lake County Library address needs assessment by turning first to the community, likewise Salt Lake City Public Library turns to communities to form solutions to meet digital inclusion needs. Working with a grant from IMLS and in partnership with NDIA, the library is shaping model digital navigators for America.

Digital navigators assess Internet users' access to technology and baseline digital skills and advises on free or affordable solutions to meet their needs. "A lot of times they get the Internet

connection and then need to know how to do a task such as apply for a job online," said Shauna Edson, Digital Inclusion Coordinator for the library. "A digital navigator can help them and follow up to make sure they met their goals." There are three part-time navigators working in the library and three full-time navigators working in their community-based organization partners.

In March 2020, when the healthcare world could barely deliver telehealth to meet the surge, Edson's son became seriously ill. It was impossible to get him signed up for a telehealth visit. And she knew all the right levers to pull! Edson said, "That really opened my eyes. I asked myself, 'Is this something we need to be able to support people through, and what is the library's role in that?'"

The second half of this project is [creating a model that can be replicated](#) by libraries and community organizations across the country. "We're working on creating all the documents to help support this type of model in other organizations," reported Edson. "I believe there are some organizations focusing on this model just for telehealth support." Many states are getting on the navigator bandwagon and hopefully funding follows.

Getting libraries nationwide to coalesce around digital navigator playbook is genius. "Start bringing in your public libraries at the beginning of the telehealth conversation so communities can all work together to come up with solutions, standards, training, and targeted marketing," said Mary Danko, Library Director, Fletcher Free Library in Vermont.

Librarians and navigators have to figure things out quickly so they can try to stay ahead of telehealth's popularity. "Whether the endusers are librarians, doctors, patrons, or just the average person on the street, the part of telehealth platforms that face the public need to be designed for people who aren't tech savvy," Danko explained.

5. Partnerships Make the World Go 'round

"I recommend libraries doing anything related to health to look for partners," said Clark. "They don't have to figure this out all by themselves, other people have figured this out before us. There are real opportunities to marry the strengths of libraries with the strengths of community health providers, community networks, and health providers." Libraries are partnering with companies such as Blue Cross Blue Shield, and they're approaching the Biden Administration.

Smaller library systems are often an Internet hub for the community, a center of learning and information," observed McKerley. "It requires more and more advanced data communication systems and security to make sure that patrons' information, such as their telehealth data, is secure." Some libraries may not have that expertise to run new complex database systems.

Many libraries need an IT services partner. The broadband needs one or two branches are relatively easy to understand. But even the large library systems need help.

"Even the larger library systems may not need a service partner such as ENA, but they could need help at some point," said McKerley. "They have expertise on staff, but sometimes it's difficult for them to retain that expertise. To fill in those gaps in talent, make sure the service vendor is highly proficient in all aspects of technology infrastructure."

Look for vendors who want to be the library's partner not just a one-off supplier, a vendor that supports your mission and your community's mission. Provide a strict and robust Service Level Agreements (SLM). The library administration has to commit to holding your partners accountable.

In the state of Indiana, almost all of the city and county libraries are part of the Indiana State Library System. Local libraries get a lot of network services from ENA and technical support from the State Library itself for very specific systems such as the electronic card catalog system.

Without healthcare partners there is no telehealth

The spectrum of the healthcare ecosystem is available to participate with libraries once your digital ducks are in order.

"Partnerships could include public organizations such departments of health, federally qualified health centers [FQHCs], and nonprofits that deliver health to those that are uninsured," said William Payne of Franciscan St. James Health/Specialty Physicians. "Of course the individual medical doctors and independent medical groups will be interested, as well as hospitals and their providers and health systems."

The key to any partnership agreement is clearly defining the roles. The library is going to do A, B, and C, and the health system or doctor is going to do X, Y, and Z. Payne, who also heads a telehealth company, advised, "Be sure the proper safeguards are all in place including a

Business Associates Agreement. This document says that the two parties are sharing certain information that will be protected to the standards that are operational in healthcare." It sets up how things get handled in a contractual way between the library and the healthcare entity.

Make sure to do your research and determine if there are any CVS or Walgreens chain pharmacies, especially those that have walk-in clinics as part of their operations. In the ideal healthcare partnership with libraries, the healthcare partner can digitally prescribe medications that patrons can easily get filled.

Consider partnering with specialists based on patrons' demographics of your patrons. Certain types of medical conditions are more conducive to telehealth in a library setting than others, such as geriatrics, maternal health, dermatology and even eye care as new digital device roll out.

Spoken and unspoken communications

Aside from the quality of the broadband connection, the quality of the video screen and the video service makes a big difference in the effectiveness of the telehealth visit. That means the lighting in the library room and kiosks has to be right. Don't skimp on your lighting!
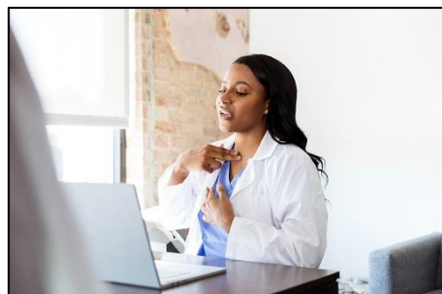
At the outset of visits, patients like to fill the screen with their head and shoulders. However, for the clinician, "There's a lot of things I'm not picking up," said Jessica Maack Rengal, Senior Vice President of Clinical Innovation at University of North Texas Health Science Center. "Clinicians have to re-train how to grab those pieces of information through a camera such as anxiety and skin color." Libraries can give patrons a couple of tips on how to help clinicians out.

Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. "That is a tremendous issue across the board nationally," said Rangel. "Even when we send people home with medical literature, we write at such a high level with regard to the words that we choose that people just dismiss the education altogether."

Most healthcare information is written at a 10th grade level and sometimes higher. The average person reads at an 8th grade level, though 20% are below a 5th grade reading level. What are you as a librarian going to do? [Learn how to design health websites and digital health info tools](#) for those who don't have strong literacy or health literacy skills using this HHS guide.

It's the little things

It's imperative that libraries and healthcare partners have realistic expectations of broadband and telehealth outcomes. Dr. Robert Wack, Chief Medical Information Officer at Frederick Regional Health System, said, "If the healthcare partner doesn't have employees dedicated to this effort, it doesn't matter what the technology's capabilities are."

"And there are variables that limit access to healthcare, such as the social determinants of health or ethnicity, none of which broadband can fix."

- Dr. Robert Wack,
  Chief Medical Information Officer
  Frederick Regional Health System

You might want to limit certain types of medical disciplines. Pediatric patients may want to schedule hours when there's typically few patrons while mental health and psychiatric treatment may be ideal anytime. "If the library telehealth area is a tight space, that could be a problem for geriatric patients because they often bring along people to assist them," advised Wack.

Consider the habits, idiosyncrasies, and limitations of low-income, disabled, and elderly patrons. Some may not have insurance or be able to pay using credit or debit cards. Telehealth in the library is a great community service, but you are adding a "Waiting Room" environment. Make ample preparation to make a welcome smooth.

"Occasionally patrons may be slow moving because of recent medical procedures or surgeries, so consider that when you're selecting your room or kiosk locations," said Wack. "Also, a lot of the people needing telehealth or a broadband connection at the library may not be computer savvy, so they might need help navigating the app or the device."

Aside from the quality of the broadband connection, the quality of the video screen and the video service makes a big difference in the effectiveness of the telehealth visit. That means the lighting in the library room and kiosks has to be right. Don't skimp on your lighting!

6. The Dash for Cash

2021 is special. It's the year of the $1.9 trillion American Rescue Plan Act (ARPA). Additional to the usual $4 billion available in the Fall E-rate program, ARPA is giving the FCC another immediate $7.1 billion as an Emergency Connectivity Fund directly to the E-rate program with the directive of "Get this money out the door as soon as possible!"

ARPA also includes $360 billion in funding that will go 60% to states and 40% directly to local governments and tribal governments," reported Doug Dawson, President of CCG Consulting. "Another $135 million will be flowed through the National Endowment for the Arts and Humanities…At least 60% of this funding is designated for grants to libraries."

To tackle the issue of affordability, the FCC started the Emergency Broadband Benefit (EBB) of $3.2 billion, which will be available until expended or until six months after the COVID-19 emergency declaration expires. The EBB provides eligible low-income households with a monthly $50 discount for broadband service from participating providers, as well as a one-time $100 discount on an Internet-enabled device.

"At a minimum, we know libraries will want to have the information handy to respond to any requests," said Clark. "We likely will have libraries participating in a range of awareness and promotion activities to let their communities know about the opportunity and sharing information."

E-rate – The belle of the ball

Everyone wants to dance with the FCC but the complexity of the E-rate application process could leave a bunch of suitors locked outside. In small libraries that have just two or three full-time staff, few have the expertise to overcome the complexity.

"The American Library Association and many other library organizations asked the FCC to streamline E-rate to eliminate the hoops and hurdles so it's easy for smaller libraries to apply," said Bob Bocher, Senior Policy Fellow at the American Library Association.

E-rate allows and encourages cooperation between libraries and schools through forming a consortium for applications. So schools and libraries could team together on a bid for telehealth and broadband, or just telehealth, if a library system and a school district have deployed sufficient broadband.

Bocher advocates cooperation and maybe driving down prices. "In my state of Wisconsin, we have a large statewide application that includes over 600 libraries and schools on our state network," said Bocher. "This truly benefits a library because they don't have to individually apply. They just sign a form letter saying they allow the state of Wisconsin to apply on their behalf." Other states have similar processes.

Institute of Museum and Library Services (IMLS)

This federal agency is dedicated to creating a nation where museums and libraries work together to transform the lives of individuals and communities. ARPA has been quite rewarding for IMLS, which received its biggest federal allocation of funds in its 25-year history.

Editor Gary Price reported in INFOdocket about the $200 million allocation that IMLS received. "Of the $200 million for IMLS, $178 million is allocated for the Library Services and Technology Act (LSTA) and will go to state library administrative agencies on a population-based formula, with a $2 million state minimum. State libraries will distribute ARPA funding to local libraries according to state priorities, to maintain and enhance library operations and services."

There are less rules and regulations on using that IMLS money than there is in the E-rate program, and there's a fairly substantial amount of money there. Bocher noted, "The one caveat is that the Children's Internet Protection Act applies to IMLS funds and so all public-facing computers have to have filters against porn materials." Some libraries are intensely anti-filtering.

Creation orientation draws dollar!

People use the problem-solving approach often when they want something go away. "Our broadband sucks!" "We need to make digital disparity disappear." Trying to solve the problem can get contentious. The problem might not even get fixed. Or the original problem comes back when the money runs out.

In the creation orientation, you create something that didn't exist before. That goal is what you sell to agencies that make your goal a reality. Your creation generates excitement, a different way of thinking about tasks that create a transformative library project. Pottsboro raised $20,000 to become a role model among Texas libraries.

Creating a strong goal rallies your library staff, your city, and funding groups because everyone wants to be part of something new and transformative. They want to contribute to this creation and they want to bask in the glow of the community accomplishment. Many people can lay fiber, but it's a special kind of project that transforms healthcare.

You can take creation orientation to the bank. Connery and library volunteers figured out that doing innovative projects brought them attention. If they wrote proposals that involved something daring and innovative, the library was more likely to get funding. So they started writing more and more grant proposals.

7. Conclusion

The worst of the pandemic may have passed us, but the drive to get a majority of people online doing telehealth has just begun. Most people still look at telehealth as solely video consults with healthcare professionals. That's ok. People are at least recognizing telehealth because of direct personal experience in their own lives or anecdotally on social media and so forth.

The pandemic definitely has not been kind to libraries as some are just now starting to get their services re-engaged. Telehealth is starting to get more of their attention.

Libraries are a trusted source. "They have access to authoritative health resources, so they might assist with services that go beyond what the telehealth provider would be willing to do," said Henry Stokes, Library Technology Consultant at Texas State Library and Archives. "You have consumer health information, digital literacy help, and the telehealth visit. It's really beneficial to have that in one place.

"A lot of libraries right now are struggling to keep their head above water with everything that's going on," said Stokes. "But as we move forward and they see their peers push telehealth initiatives, we'll see health become prominently featured in libraries. Telehealth is such a great fit!"

What's in your telehealth dreams?!

Guide author

Saved from a stroke by telehealth, Craig Settles pays it forward by uniting community broadband teams and healthcare stakeholders through telehealth initiatives. Mr. Settles built his reputation by helping community broadband improve economic development, healthcare, education, and local government. He hosts the Gigabit Nation talk show. Follow him on Twitter – @cjsettles101.

Mr. Settles' consulting services, on-site works, reports, and books help community leaders and stakeholders leverage broadband as an economic driver. He's a nationally known and respected thought leader. Mr. Settles gets communities to ask the right questions so they find the best answers for their digital needs. Email today for more information: craig@cjspeaks.com.

About our sponsor

ENA delivers transformative technology solutions supported by exceptional customer care. Since 1996, we have worked with our customers to design and engineer high-capacity and future-ready connectivity, communication, cloud, security, and data analytics solutions. For more information, please visit www.ena.com, call 866-615-1101, or email info@ena.com.