For many Americans, inequitable access to reliable, high-speed internet connections—either because of where they live or how much they earn—is affecting their health, especially during the COVID-19 pandemic.
Nearly one-quarter of rural Americans say access to high-speed internet is a major problem in their location, according to a 2018 Pew Research Center survey “What Unites and Divides Urban, Suburban and Rural Communities.” Income is also a factor contributing to this country’s “digital divide.” According to a 2019 Pew Research Center report, 44% of lower-income adults (those with household incomes less than $30,000 a year) don’t have home broadband services. Nearly half (46%) of low-income Americans lack a computer, and 29% don’t own a smartphone (see “Engaging Government and Business Partners to Close the Digital Divide” at HealthcareExecutive.org/WebExtras).

The inability to access broadband connections (such as through cable modems, wireless, satellite and other technologies) means that many patients have yet to benefit from the wider availability of telemedicine “video visits” with physicians. They also may not have access to other telehealth services like remote monitoring at home using web-based or mobile devices that capture and deliver patient data in real time to clinicians at other locations.

Patients affected by the digital divide are also some of the country’s most vulnerable. Research published in a December 2019 Health Affairs article “Healthy People 2020: Rural Areas Lag In Achieving Targets For Major Causes Of Death” found that rates for seven leading causes of death were higher in rural than urban communities.

44% OF LOWER-INCOME ADULTS (those with household incomes less than $30,000 a year) don’t have home broadband services.
(Source: Pew Research Center)
Rural Providers: Making a Difference
Abby Sears, CEO at OCHIN, a nonprofit health IT organization that supports a growing network of health centers in underserved communities across the country, believes hospital and health system leaders can help address these technological and health inequities.

“To help close the digital divide, it’s imperative that hospital CEOs invest in innovative approaches to meet patients where they are,” Sears says. “That starts by enabling more patients to access high-quality primary care from the comfort and convenience of their own homes via telemedicine.”

Approximately 40% of OCHIN’s 20,000 provider members are located in rural areas. Following a rapid deployment of telehealth tools and resources at the start of the COVID-19 pandemic, these providers increased their video visits by tenfold from March 2020 to May 2020.

During this expansion, some OCHIN members developed innovative solutions to the lack of broadband in their area. One federally qualified health center in rural North Carolina set up Wi-Fi hotspots in the parking lot so patients could drive up and do a video visit in their cars using a recycled tablet.

In addition to OCHIN members, other organizations have developed innovative strategies to help close the digital divide in their communities. The following are some examples.

Screening Patients for Tech Capabilities
With the COVID-19 pandemic, many organizations have introduced virtual visits for the first time. This may require adding a new screening process to the workflow.

Case Study: Steele Memorial Medical Center, Salmon, Idaho
Steele Memorial Medical Center is an 18-bed critical access hospital and rural health clinic serving residents in

Shahida Fareed, PsyD, a clinical psychologist with Geisinger, uses telehealth to connect with her patients. Prior to the pandemic, Geisinger had been conducting only about 1,000 video visits with patients per month. At the height of the pandemic, the health system held about 2,000 video visits per day and 2,000 phone visits per day. Since Geisinger has reopened its facilities, that number has dropped to about 1,300 video visits and 1,200 telephone visits daily.
two counties and the surrounding areas. When clinicians began conducting telemedicine visits with primary care patients this past spring, they had difficulty streaming video because of the lack of bandwidth on some area networks. And, with many patients living in valleys outside the scenic mountain town where the hospital is based, satellite isn’t an option.

“At first, we were just wasting an hour of a doctor’s time each day trying to get through to somebody,” says Jeanine Gentry, FACHE, CEO. “So we had to go backwards and screen patients over the phone for that capability before we committed to do [video] visits with them.” They implemented a simple protocol: Schedulers would ask patients a list of questions about their capabilities to connect, and then a medical assistant or IT professional would do a test visit with the patient prior to the real visit with the clinician.

At the time of this writing, clinicians at Steele Memorial Medical Center were conducting up to 10 virtual visits a week. Most patients who sign up to see their clinicians virtually are not in remote locations—they are residents in town who have the bandwidth but prefer the convenience of a virtual visit. “That’s OK, but it’s a different group than who we were intending to reach,” Gentry says. For this reason, it’s important that healthcare leaders not treat telehealth as a panacea to narrow the digital divide. “You need to be really clear and realistic about what telehealth can do and what it can’t do,” she says.

**Getting Clinicians the Right Tools**

Many healthcare organizations have equipped clinicians with the digital tools they need to care for patients, even those who lack high-speed internet access.

**Case Study: Geisinger Health System, Danville, Pa.**

For the past 10 years, Geisinger, an integrated health system with 13 hospitals serving more than 3 million consumers, has been the hub for telestroke services for remote EDs. They also have managed an e-ICU command center.

Yet, like most health systems, Geisinger had to rapidly expand its telemedicine services in response to COVID-19 (prior to the pandemic, Geisinger had been conducting only about 1,000 video visits with patients a month). “We would have planned for this and tried to roll it out over a year or two years to get to the level that we’re at now, but because of the crisis situation, there wasn’t any wiggle room,” says John Kravitz, CHCIO, corporate CIO.

At the beginning of the crisis, leaders deployed about 2,000 iPads to clinicians so they could conduct video visits with patients from their homes or offices. Sometimes, clinicians had to conduct telephone visits when patients lacked enough bandwidth to run the video-based telemedicine software. Now, when connectivity issues arise, they use a videoconferencing app that runs on fairly low bandwidth.

Today, clinicians from about 70 specialties, including nephrology, oncology and orthopaedics, are conducting telemedicine visits. This past spring, they held about

“To help close the digital divide, it’s imperative that hospital CEOs invest in innovative approaches to meet patients where they are.”

—Abby Sears, OCHIN
2,000 video visits a day and 2,000 phone visits per day. Since Geisinger has reopened its facilities, that number has dropped to about 1,300 video visits and 1,200 telephone visits daily.

Patients requesting virtual visits span age groups, which initially surprised leaders. “We have a lot of elderly patients who are very happy about using telemedicine on their mobile device,” says Kravitz, who is also the 2020 and 2021 chair of the College of Healthcare Information Management Executives board of trustees.

**Using Home Health to Bring Technology to Patients**

One solution to lack of broadband is sending nurses with laptops and cellular service to see patients in remote areas.

**Case Study: Northern Light Health, Brewer, Maine**

Prior to the pandemic, Northern Light Health, an integrated health system with 10 hospitals and 37 primary care locations across Maine, used telehealth for many applications, including electronic consultations to manage patients who have had strokes. They also provided remote endocrinology services at one hospital and offered virtual visits for many behavioral health services, including care for Medicaid patients with opioid use disorders.

However, lack of reliable internet access makes some services like remote patient monitoring more challenging in some parts of Maine, one of two states with the highest proportion of its population living in rural areas, according to U.S. Census Bureau data. “We can’t do remote patient monitoring if we can’t trust that the piece of equipment that is there with a medically fragile patient is going to be dependable all the time,” says Claire Deselle, vice president of applied innovation and performance improvement, and an ACHE member.

Some Maine residents do not even have good mobile coverage where they live. One way Northern Light Health is improving access for such patients is by...
sending home health nurses out to their homes. “That’s how serious this has become,” Deselle says. These nurses, who are equipped with laptops and cellular service, act as “telepresenters” during a televisit with a clinician, who remains in his or her office. During this type of visit, the clinician can see the patient through real-time video, and the nurse can get the patient’s vitals and serve as an extra set of hands, eyes and ears for the clinician.

As of early June, about 30% of Northern Light Health’s patient visits were conducted virtually, including for specialties like orthopaedics, cardiology and oncology. Some clinicians who believed that face-to-face visits were always better have changed their minds as the health system has expanded its virtual visits during the pandemic, Deselle says.

“There are times when telehealth actually is as good, maybe even better, for some stratification of patients,” she says.

Learning From the Leaders
The previous case studies demonstrate how healthcare organizations are improving access to care in rural and underserved areas. The following are additional tactics to help close the digital divide.

Get help navigating the fragmented sources of funding available. Because nearly half of rural hospitals operate at a loss, many don’t have the financial resources to hire informaticists to help them expand broadband access to their communities, says Brock Slabach, FACHE, senior vice president of member services at the National Rural Health Association.

This includes staff who understand the complex process of applying for broadband funding through the Federal Communications Commission’s Universal Service Fund or Rural Health Care Program, and then getting broadband circuits and other technology installed in their area.

The Coronavirus Aid, Relief and Economic Security Act included $200 million in additional funding to support the FCC’s telehealth initiatives.

Slabach recommends that healthcare executives reach out to their regional, federally funded telehealth resource center, which offers technical support and education to help provider organizations connect to high-speed, medical grade broadband networks.

These centers also provide subsidies (when available) and help with grant writing, telehealth implementation and project management.

A list of centers is available from the National Consortium of Telehealth Resource Centers (telehealthresourcecenter.org). OCHIN manages California’s center.

Slabach also suggests that healthcare executives contact their state office of rural health for best practices that can be replicated in their areas.

CHIME also offers resources to help leaders understand the FCC’s telehealth programs and implement telehealth at chimecentral.org.
Consider workflow. Northern Light Health designed its telemedicine programs to closely mimic clinicians’ normal workflows. To do this, Deselle created a graphical flowchart that broke down a normal, face-to-face visit from start to finish and then made minor adjustments to accommodate the realities of a virtual visit.

“COVID might be accelerating the transformation to much more consumer-oriented care.”

—Brock Slabach, FACHE, NRHA

Train and support clinicians using a variety of approaches. At Steele Memorial Medical Center, a nurse informaticist trained clinicians on how to conduct virtual visits.

Some of Northern Light Health’s physicians created short videos on how to deliver care virtually, including mock telemedicine visits, to train other clinicians.

Geisinger created a separate IT service desk staffed by five people around the clock to answer physicians’ questions about the telemedicine and videoconferencing tools.

Give patients the support they need. Northern Light Health has a help desk with call center staff who can coach patients on how to use the videoconferencing software on various devices. The day before a virtual visit, the help desk staff will proactively contact the patient and do a trial run that takes less than 15 minutes.

Fighting for Permanent Payment Changes Post COVID-19

All of the organizations highlighted here plan to make virtual visits available for the long term. Beyond improving access, these expanded services could also help bend the cost curve by offering a less expensive care model than face-to-face care when used with the right patients, OCHIN’s Sears says.

This is especially important as hospitals and health systems enter value-based payment models like bundled payments. “Some of our organizations that are taking on risk are some of the first ones to transition to virtual care,” she says.

One factor that will certainly speed adoption of these services is payment parity, which allows provider organizations to receive comparable payments for telehealth and in-person services. Temporary rule changes promoting payment parity during the pandemic have helped support the recent expansion of virtual care.

“That took those barriers out of the picture for us and allowed telemedicine to really shine as the tool that it is for lower acuity patients,” says Geisinger’s Kravitz.

At the time of this writing, lawmakers in both chambers of Congress had outlined legislation that would continue to dismantle barriers to telehealth. The proposed changes would extend some of the flexibilities beyond the public health emergency. Some states like Idaho and Colorado have also made permanent rule changes to expand access to telehealth.

NRHA’s Slabach believes that “COVID might be accelerating the transformation to much more consumer-oriented care.” By doing so, the current crisis could help bring about an important change that would help close the digital divide.

Laura Hegwer is a freelance writer and editor based in Lake Bluff, Ill.