

The Adolescence of Telehealth

Telehealth has moved from a novelty to a mainstream access point. But questions remain about the limits of its reach and effectiveness, and, most problematically, its reimbursement. October 29, 2017

Despite a catchy name, telehealth isn't exactly cutting-edge technology. Really, very few of the components needed to make it work are in the vanguard of innovation for either healthcare or technology.

But to think of telemedicine in healthcare as a technology story really misses the point. In fact, telehealth is more than that: It's critical and strategic.

Telehealth plays a key, if not starring, role in a continuing saga familiar to senior healthcare executives nationwide: the quest to meet the so-called triple aim of quality, access, and reduction of unit costs.

Bound up in its promise is greater efficiency, patient convenience, and, to a certain extent, competitive advantage.

Alleviating shortages

Many telemedicine strategies begin with the basic goal of providing patient services more efficiently to populations that are not in major towns and cities.

That's why much of telemedicine's growth has come not from major teaching hospitals and urban populations but from rural facilities that have trouble recruiting specialists to practice in their area, and thus face losses of patients who must often travel to more densely populated areas to access the care they need.

While many regional health systems are still doing well financially, the hospital concept, with all its fixed-cost infrastructure, is under a lot of pressure, for independent hospitals in particular.

That's true even if they are in locations with a desirable patient mix, says Greg Hagood, senior managing director with Evanston, Illinois–based middle market investment bank SOLIC Capital, who has worked on more than 50 healthcare-related M&A transactions in the past decade. Hospitals in secondary and rural markets face even more margin pressure.

"One area where they really struggle is in recruiting new docs," he says. "Either they have to overpay for specialists or partner with regional health systems, which means the higher-acuity volume they used to treat locally migrates to the large, centralized regional medical centers."

Investing in telehealth is one way to combat those losses. Rural hospitals can partner in areas such as telestroke, teleneurology, and even cardiology and psychiatry so that they can consult with top experts in the nation, while patients in many cases are able to get treatment close to home.

"[Hospitals] will eat the cost of the consult, but they get to keep the patient at the local site," says Hagood.

Reimbursement problems

Hagood references one of the bigger challenges for telemedicine adoption—low reimbursement, a key strategic pain point for both physician practices and health systems.

In closed ecosystems, where a health plan and health system are part of the same parent organization, most of telemedicine's reimbursement roadblocks are essentially eliminated.

In large part, that leads to proclamations such as Kaiser Permanente Chairman and CEO Bernard Tyson's, who boasted to a Salesforce.com conference in late 2016 that 52% of the health system's 2015 physician-patient interactions were done through various telemedicine modalities.

But most hospitals and health systems are far from the type of integration between payer and provider that Kaiser has.

Providers typically have to negotiate reimbursement from commercial payers, while traditional Medicare puts big restrictions on the type of services and the geographic location of patients in reimbursing for telehealth, and does not currently pay for remote patient monitoring.

Commercial and Medicare Advantage plans have more flexibility, but have generally been slow to adopt telehealth reimbursement, especially at levels that rival in-person visits. And state Medicaid regulations run the gamut from permissive to restrictive.

"Reimbursement is still a huge roadblock," says Hagood. In part because of this, for many organizations, especially standalone physician offices, there's "limited motivation to employ telehealth other than where you have a real overcapacity issue," he adds. "The office visit still has more revenue attached."

Some states have perverse restrictions on telehealth such as requiring patients to have had a previous office-based clinical relationship with consulting physicians.

The business case is still a huge limiting factor to the growth of telehealth, says Bill Manzie, administrative director of telehealth strategy with Memorial Healthcare System in Hollywood, Florida.



"One of the major barriers is still reimbursement," he says. "When developing a telehealth program that adds clinical value, you also need to look at the business side and see if it's sustainable. Starting a program that you may end up taking away in a year or six months because there's no funding for it puts a provider in a bad position."

To avoid starting a program that might be unsustainable, he says an imperfect solution is pilot programs in partnership with managed care companies, which Memorial utilizes as part of its telehealth strategy.

Florida's Medicaid program does reimburse for some telehealth services as well. He's confident issues with reimbursement will evolve quickly over the next couple of years, allowing these programs to become more permanent.

By then, "we'll see a completely different reimbursement model that includes telehealth, because [the pilots] will show value to health insurers in ways we have never thought of," he says.

Just this September, a Florida state representative unveiled a bill that would implement most of the Florida Governor's Telehealth Advisory Council's recommendations (a 15-member council that includes the secretary of the Agency for Health Care Administration, and makes recommendations to help increase the use and accessibility of services provided via telehealth), which include requiring all state-licensed health plans (excluding Medicare) to provide coverage parity for telehealth, and to offer reimbursement for covered services provided via telehealth.

The legislation wouldn't force insurers to adopt new service lines or specialties, mandate fee-for-service arrangements, or hinder value-based payment programs, but it would allow insurers to negotiate telehealth-friendly contracts with providers.

Payers are getting on board with the value potential of telehealth too, he says.

"They are more open to working with healthcare facilities in developing meaningful programs," he says.

In Indiana, like in Florida, there are real business incentives and disincentives that must be overcome, says Ron Stiver, president, system clinical services, at IU Health in Indianapolis.

"State to state, there's a great deal of variety," he says, and the Medicare reimbursement level for an office visit is far greater than a similar telehealth interaction.

"When we're able to work with [a] health plan, we can solve those things internally, but as a society the reimbursement models have to catch up," Stiver says. "Our state legislature has been proactive in calling for parity in coverage for telemedicine, but it still needs to be negotiated with payers."

Though Stiver expects payer negotiations to yield successful models going forward, he believes IU Health is already creating that future by building telehealth models through its own IU Health Plans and its Next Generation ACO with CMS.

Stiver says he thinks other payers will be willing to negotiate similar arrangements with IU Health in the future.

Improving value

Some states have been proactive on telehealth reimbursement as both a public health and, perhaps more important, as an effective cost-saving tool.

States make their own rules for telemedicine Medicaid reimbursement, and reimbursement policies vary widely as a result.

Mississippi, which is largely rural, has become one of the leaders in reimbursing for telehealth through Medicaid, partly as a result of the strategic leadership vision that originated in 2003, and largely funded through a series of grants, at the University of Mississippi Medical Center in Jackson.

Michael Adcock, a nurse by training, is executive director for the UMMC's Center for Telehealth.

He was involved in the early days of telemedicine adoption in Mississippi in 2003 with what he calls a telemergency program started with three rural ERs, funded by a grant from the Bower Foundation.

"We had an issue in our state of small, often critical access, rural ERs not finding the board-certified staffing they needed, so many patients were getting transferred often to us or other tertiary ERs," he says.

This fueled a structural problem of ER overcrowding. "We realized that if they had support, they could keep many of these patients in the community."

After a four-year stint as a hospital chief operating officer in Louisiana beginning in 2009, Adcock returned to UMMC in 2015 to lead a much bigger telehealth program.

Though Mississippi is now a leader in legislative mandates regarding reimbursement parity for telehealth, it wasn't always that way.

Starting with the opening grant, much of UMMC's expansion was funded through a variety of individual grants, and some budgetary line items, that helped build a system that now has 17 rural ERs across the state outfitted with telehealth capabilities.

"What we're trying to do is a different move," he says. "Most big medical centers are trying to get as many patients as they can in their own medical center. We are trying to keep them as close to home as possible and keep them out of ours."



In Mississippi, patients living in 53 of the state's 82 counties have to drive more than 40 minutes to receive specialty healthcare.

Some patients can't or won't travel; therefore, they are not receiving the healthcare they need, Adcock says. While the travel distance may be unique to Mississippi and other rural states, even patients close to specialty care have difficulty traveling even short distances to access care.

That's why telehealth is important, he says.

"While other health systems may have a similar desire, there are not many who have developed the infrastructure to work with local providers to make this a reality," he says.

UMMC does have the advantage of legislative help in making sure the investments needed for telehealth deliver ROI. Depending on the state, that's not something other systems can necessarily count on.

SB 2209, passed in 2013, provides payment parity for telemedicine services, requiring health insurance plans to cover telemedicine services to the same extent that the services would be covered if they were provided through in-person consultation.

The consultation must be done via live two-way audiovisual connection.

"If it is done in that manner, we are able to bill for the consult and, therefore, will receive consultation revenue," says Adcock. "Due to our parity legislation, the revenue for telemedicine consults is the same as in person."

The move has benefited rural hospitals and their ERs.

Adcock says telehealth capabilities allow rural hospitals to save 20%–25% on staffing costs and gives them roughly a 20% increase in admissions, which can go a long way toward the financial viability of revenue- and staff-challenged rural hospitals in the state.

Outside of the acute care space, UMMC's telehealth capabilities reach more than 200 sites in 68 of the state's 82 counties.

Scope of practice

"We offer a little over 30 medical specialties doing the major parts of telehealth, including live video between patient and provider or provider and provider," Adcock says.

UMMC also offers radiology and cardiology imaging, ophthalmology, pathology, neurology, mental health, and most recently, dermatology, just to name a few of the more than 30 medical specialties available for consultation.

"In dermatology, it takes an average of six months to get a live appointment in this state," Adcock says.

Through telehealth, patients can access dermatology services, for example, with their local family practitioner.

If that physician sees something unusual, he or she can transfer images securely to UMMC specialists, who will read the images and report back to the local physician within 24 hours.

"If they see something really suspicious, we can get them to see a [dermatologist] quickly. This allows us to filter and triage those patients," Adcock says.

UMMC does not own the facilities that use its telemedicine capabilities, by and large. Of more than 220 sites of care that have telehealth capability with the academic medical center, only three are proprietary.

Recently, UMMC has developed remote patient-monitoring capabilities. Legislation also helps provide revenue for that program.

SB 2646, passed in 2014, requires reimbursement for remote patient-monitoring services for patients who have Mississippi-based insurance, which includes Medicaid and private insurance.

Legislation mandates the reimbursement rates.

Some such programs are for remote monitoring of patients in an ICU, for example, but "ours is more of a patient chronic condition monitoring program," Adcock says.

In its first six months of operation in the Mississippi Delta, the poorest area in the poorest state, the program recorded decreases in A1C levels, and discovered nine cases of diabetic retinopathy that would not have been found without the remote monitoring program.

"We calculated that we saved almost 10,000 miles of driving for these patients who were uncontrolled, and over the time period, we had zero admissions and zero ER visits, which amounted to \$339,000 in savings to Medicaid," Adcock says.

UMMC still uses grants to bolster its telehealth capabilities, though. It just received a million-dollar grant from the U.S. Department of Agriculture to build an after-hours clinic in the Delta town of Belzoni, which will include multispecialty telehealth capabilities.

"We still apply for grants mainly for equipment to set up in different clinic locations," he says.

Not every condition is appropriate for telehealth, of course. It's important that it add value to the clinician experience as well as the patient one, says Memorial's Manzie.

"It will not be successful if you just have a bunch of business people on the back end," he says. "You have to work with providers to develop a program that really adds value to that patient and physician experience, or else you'll just set yourself up for failure."

He likes to call it "upgrading healthcare."

For a more urban patient population, it's even more important to base business decisions on patient demand, he says, meaning the suitability for telehealth depends on the condition.

The health system's MemorialDocNow application, developed with partner American Well, would be appropriate only for less severe types of illnesses, such as flulike symptoms, sinus pain, coughing — the same symptoms that might send most patients to their primary care physician—or the ER.

The offering is intended not necessarily to replace in-person physician office visits, but ER visits.

"A large percentage of the community still goes to the ER for those types of visits," Manzie says.

That's why it's so important to work with physicians on what's appropriate for telehealth—not because most want to protect their turf, but because they can guide its proper use.

"We work directly with them because they tell my team what is appropriate to be seen through telehealth," Manzie says. "You wouldn't want a cardiologist on there to see a patient with chest pain, but he may follow up [remotely] with test results, or to make sure the patient is following up with their care plan, so they don't have to come back for a readmission."

Attitudes have changed

Physicians have started to recognize independently that technology associated with telehealth can potentially add value to the patient experience, Manzie says.

Now, they don't need as much convincing from hospital or health system leaders that telehealth can be a helpful addition to their capabilities.

"More of them are seeing the value of offering telehealth services for patients, both for efficiency and for clinical outcomes," says Manzie. "And patients are no longer seeing [telehealth] as a shortcut for providers but as a shortcut for their own lives."

Like many states, Florida doesn't have a standard definition for telehealth. Medical boards each have their own. That can lead to problems with the limits of the scope of practice in telehealth, especially as the state wades into regulating the practice of telehealth services of many types.

"There's a lack of standard regulations because we don't have legislation specific to telehealth, so there's no regulation other than those boards governing their own people," he says.

However, Manzie sees willingness in Florida to "cherry-pick" from regulations other states have pioneered, such as mandated reimbursement guidelines.

"It's something we're going to have to do," he says.

Telehealth changes how leaders at Memorial think strategically. With six hospitals, urgent care centers, and a pediatric hospital, telehealth lends itself to a "world of opportunities" for Memorial, Manzie says.

"So knowing telehealth is on an upward trajectory and gaining traction, we don't want to start programs only after the state says you can get reimbursed," he says. "If you wait for the state, you'll be behind the game."

But unless the rules define reimbursement, aren't health systems still at the mercy of the payer in finding acceptable revenue streams to fund the investment and its return?

That's correct to some extent, Manzie says, but "reimbursement is not the only win here.

Creating programs that have other clinical quality indicators as the success measuring stick creates an alternative ROI story."

To that point, he says, hospitals should not consider themselves only in the business of treating sick patients.

Instead, they are also in the business of trying to keep patients healthy. For that reason, telehealth should be viewed as a cost avoidance or cost savings model.

So Manzie spends lots of time educating the physician community on defining telehealth and potential programs to work out the details.

He meets regularly with various physician councils, planning up front with them on the appropriate patient or condition for telehealth, and the protocols.

He says that's where agreement can be reached on parameters where telehealth is appropriate, but it's also where the educational component can be employed with practitioners.

"My biggest recommendation would be to educate as much as possible. Educating the providers on [telehealth's possibilities] is equally as important as educating the community," he says. "The value of telehealth is going to be different for each person that telehealth touches."

IU Health, which also partners with American Well for on-demand telehealth services, says those visits get as much scrutiny from a quality perspective as any in-person visit or treatment.

"We audit those, because physicians need to feel comfortable with the model too," says Stiver.

IU Health also offers virtual complex care — typically for home health patients, but now expanded to patients who may not meet home health admission criteria, but who may benefit, such as patients with congestive heart failure.

"We have really good buy-in from our physicians, but they are rightfully protective of our brand and the quality of care associated with that brand," Stiver says. "We have very few skeptics, but we just want be thoughtful and move at [an] appropriate pace."

It's about efficiency

IU Health is building a large replacement regional hospital in Bloomington. It's in the early stages of planning, but it will be a much different facility than what exists today because of the new technologies incorporated, including telehealth capabilities.

The academic medical center in downtown Indianapolis already has agreements with 20 hospitals in the \$6.23 billion (operating revenue) system to provide specialty services — many of which are via telehealth — at some of those hospitals that have difficulty recruiting certain specialties.

Stiver says the detailed designs of the new building are not yet finalized, but there will be fewer inpatient rooms and the facility will be more technologically enabled to leverage the benefits of telemedicine not only in the new hospital but across the region.

"We can deliver the same care without having docs on the road all the time," Stiver says.

While admitting that telehealth is a difficult term to pin down, it's a big part of IU Health's strategy of becoming more efficient.

"It really spans a broad spectrum of services, and we think of it in four buckets," he says.

In bucket one are the core, on-demand and scheduled video visits with which it partners with American Well.

Another bucket is kind of the hub-and-spoke concept, in which, for example, pediatric dermatologists might hold virtual clinics from Indianapolis, or where they might see pediatric patients in Evansville online. There's also the partnership with Schneck Medical Center in rural Seymour, Indiana, which offers access to a nephrologist 24/7 for the purposes of virtual consults.

"Another one I call virtual complex care," says Stiver, which offers care that is based in the home, including visits to help manage chronic obstructive pulmonary disease, CHF, diabetes, or multiple complex chronic conditions, through home monitoring devices such as blood pressure cuffs, scales, and other diagnostic tools.

Those help keep patients out of the hospital, and represent bucket number three.

The last bucket is what Stiver calls e-acute, which would include remote monitoring of ICUs by specialists in other locations. IU Health does not have that capability at the moment, but is evaluating it.

"We're at an inflection point," he says. "We've made a ton of progress, but there's so much more opportunity in front of us, it's hard to peg it with confidence where we are."

One issue is the flip side of efficiency. IU Health has its own health plan, but as it migrates toward more of a population health model, it still gets a lot of reimbursement in a fee-for-service manner.

"If you're becoming more efficient, you're taking revenue from somewhere, but you're also doing what you're supposed to do and taking care of the community better," he says. "And we shouldn't think about the hospital being in the business of taking care of patients when they're sick but taking care of patients before they get sick. I know we're maybe not getting reimbursed as much, but at the end of the day we're doing what's right for the patient."

The innovator's dilemma

And that's the crux of the innovator's dilemma, as coined by author Clayton Christensen, who describes the promise and pitfalls new technologies bring to industries (even healthcare) that cause established patterns to fail when they are unsuccessful in picking the right timing on innovation. Telehealth poses that problem to healthcare.

For a truly integrated health system, telehealth offers vast potential improvements, from a population health perspective, to delivering high-value care.

From a business perspective, it can also help create partnerships with community hospitals that are outside the system, and open up alliances that would have been difficult without it.

But as an industry in transition to a population health model, determining what to roll out when can be a careerlimiting decision.

"In some cases, it does cut revenue streams," says Stiver, "but our fundamental belief is that we are moving to a value-based world, and you can't wait for that to occur before you build out your capabilities."

Pace and scale matter in situations that require investment, he admits.

"While we are aggressively building out new capabilities today, we are moving at a deliberate pace and on a safe scale when rolling these out," he says.

Doing so allows IU Health to learn and refine along the way, and to also keep a careful eye on how the environment is evolving from a regulatory and reimbursement perspective, he adds.

The rollout strategy

In the early stages of a telehealth rollout strategy, much of it is vendor partnership driven in a direct-toconsumer sense.

MDLIVE, American Well, and other groups offer all the expertise needed if not necessarily the physician relationship-building—necessary to turn a telehealth strategy on much more quickly than even a large health system could do alone. These are important because of speed, says UMMC's Adcock.

USE OF THIRD-PARTY CONTRACTED PHYSICIANS AND TELEMEDICINE



Given its experience level, when UMMC evaluates a new program, it defines the clinical need, lets clinicians and other providers come up with a clinical solution that works, "and we wrap technology around it," he says.

"We've been successful working with different groups providing technology, but it's not a one-size-fits-all proposition," he says. "We use whoever is best able to meet our needs and our patients' needs. We're not interested in working with a vendor and using just what they offer in their catalogue."

An example of choosing the right technology by looking at the clinical need would be in mental health, Adcock says.

Adults receiving mental health consultations are generally sitting in one location having a conversation with their provider.

Therefore, there is no need for a telehealth cart with far-end camera control, only a webcam and monitor.

However, with pediatric mental health, it is important for the provider to have far-end camera control due to the fact that pediatric patients frequently move around the room.

Knowing UMMC's long experience in many facets of telehealth, other health systems often visit to learn from UMMC, but when Adcock questions them about what they want to do with telehealth, he says they often respond with a version of "We want to be just like you."

"That's not the right answer," he says. "You have to start with the issues and then look at how telehealth can help. If you start it because it's cool to have, your likelihood of success is zero."

Given the migration of healthcare toward a more outpatient-oriented business generally, telehealth is becoming a must-have, not only because of that shift but because there's a growing shortage of providers.

"You have to be as efficient as possible, and the tech is out there to do it," says Adcock. "The main thing to remember is that telehealth is not a profit center. It's about making sure we're providing care to as many as possible as efficiently as possible."

A healthcare entity that wants to use telehealth needs to look at not just revenue, but also cost savings and cost avoidance, Adcock says.

Telehealth can help decrease the overall cost of care and should be calculated into the ROI.

That said, it does ultimately have to pay for itself in some way.

Adcock says it is even reasonable to think telehealth could be a profit center – under the right circumstances.

"Our program operates with patient-generated revenue. While we are still actively pursuing grant funds, they are generally used to fund equipment at the away sites," he says. "Given the right reimbursement legislation or contracting with managed care payers, telehealth can generate enough revenue to sustain a program."

Manzie echoes this point.

"There's legislation saying there might be an opportunity to expand outpatient services to hold patients for 72 hours—that just shows you where the mindset is in trying to change healthcare and make it more efficient,"

Manzie says. "When more patients and physicians are educated on the value of telehealth, you'll see a steep incline on utilization."

He predicts even more companies will offer new technologies that will move patients further away from face-toface care, but he's not sure what success ultimately looks like, especially for legacy organizations such as hospitals and health systems.

He is sure that they can't afford to ignore the trend, however.

"For me, [success] looks like organizations using telehealth as their normal way of delivering healthcare together with tech that's innovative and useful to the patient on an everyday basis," he says.

But what percentage of practice ultimately will be done outside of face-to-face interaction? No one knows for sure, Stiver says.

"We've thrown around some different numbers, but there's nothing definitive. The idea is that telemedicine is eventually not looked at as a separate offering, but how we do what we do."

"We are still very much in early stages throughout the country," Adcock says. "Right now [telehealth] is a buzzterm, but when we get to true maturity, it will simply be how healthcare is delivered. There will be some visits using technology and some in person, but people won't distinguish the two. It won't be a term anymore."

###