RURAL HEALTH CARE

Expanding Access Through Telemedicine
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RURAL HEALTH CARE

Expanding Access Through Telemedicine

Telemedicine can enhance access and improve the quality of care in rural communities. Expanded telemedicine services, in specialties as diverse as neurology, psychiatry, pediatrics, oncology, critical care, and nephrology, are helping rural hospitals compete with larger, urban care centers. This executive dialogue examines the current state of telemedicine and explores how rural organizations use telemedicine services to enhance patient-centered care and population health.
MODERATOR (Suzanna Hoppszallern, American Hospital Association). **How are your organizations using telemedicine and what kinds of services are effective?**

DAWN STAVOR (Baptist Health South Florida – Mariners Hospital): Mariners Hospital in Tavernier is one of two critical access hospitals in the Florida Keys that are part of Baptist Health South Florida. We have an e-ICU based in Coral Gables. We also have a mobile e-ICU cart for our emergency department because we have one physician on staff. We tend to see a lot of trauma because of our proximity to U.S. Highway 1, a dangerous stretch of highway. We have teleradiology at night, which we’ve had in place for a long time. And we have a service called Care On Demand that provides patients with access to physicians from any mobile device or personal computer 24/7.

I would like for us to branch out to provide access to more specialists because it’s a 75-mile, one-way trip to our bigger hospital. If patients need to see certain specialists, they have to drive. Our patient population is older, with about 55 percent on Medicare. And we don’t have any public transportation from the Keys to the mainland.

Fishermen’s Community Hospital, the other critical access hospital, is located about 50 miles south in Marathon. It was destroyed by Hurricane Irma and there are plans to rebuild. For those patients in need of specialist care, they have a 125-mile one-way trip. Expanding telemedicine services can go a long way toward supporting that community, as well as ours.

WILLIAM JACOBSEN (Carilion Clinic): Other than teleradiology, our use of telehealth is rather limited at this time. We are part of a large system in western Virginia, and our facilities range from a large 1,000 plus-bed academic medical center to small, rural facilities. My hospital — Carilion Franklin Memorial Hospital — is about a 40-minute drive from our flagship hospital in Roanoke. We have used teleradiology for over 10 years now and it has worked out well, and now we are starting programs in telepsychiatry in some of our primary care, psych clinics, and emergency departments as well as pediatrics for speech therapy and some teleneurology for both pediatrics and adults. We have a big need for spe-
specialists. My biggest need right now is telepsychiatry. We have a huge need in our region and it is affecting ED wait times. We need ways to get behavioral health patients back into the community or placed in beds. We have a difficult scenario in that all of our psych placement resources in the region are full much of the time, so we don’t have ready placement for our patients. The great benefit to telehealth is to keep what’s local, local. Beyond telepsych, I see us expanding to teleneurology and telenephrology. We do have a USDA grant to expand telepsych throughout our system, but it is for equipment only. One of the challenges we face is that we tried to do it all ourselves, but we don’t have the bench strength in our various professional departments to do it. In my emergency room, I need 24/7 access. We can’t just wait for one of our ‘hub’ psychiatrists to be free for consults with our patients.

LINDA BROCKWELL, R.N. (Wickenburg Community Hospital): We are a 19-bed, independent critical access hospital about 45 minutes from Phoenix. The closest facility is the Banner Del E Webb Medical Center. We currently provide telestroke services in partnership with the Mayo Clinic. We also have 24/7 teleradiology. And soon we’ll be adding telepharmacy. We recently entered into a relationship with Banner Del E Webb for remote telemetry monitoring of our inpatients. It’s not true telemedicine, but it provides the coverage we need to monitor patients 24/7. We’re looking at other services, including teleneurology, telenephrology and telepulmonology. Oncology is a big one, because we are so far removed from the major centers where patients have to go for chemotherapy. We’d like to provide chemotherapy, but we need an oncologist to do that.

WESLEY HOYT (Hutchinson Regional Healthcare System): We don’t employ physicians, so we are looking aggressively for ways to leverage telemedicine. For example, we are looking at using telemedicine to provide access to specialists to augment our hospitalist program. I’m a firm believer in telemedicine, because it allows us to bring health care to the population instead of bringing them to us. We are an hour outside of Wichita, and we are the biggest and most robust system between us and the Colorado border. If we don’t have what we need, they go somewhere else and we never get them back. We can’t afford not to provide certain services.

MODERATOR: You’ve discussed some of the challenges facing you. What other roadblocks are you encountering in launching and expanding these services?

HOYT: Regulatory requirements are a big challenge, especially providing services across state lines. There’s not a lot of portability in some aspects between telesolutions and where the physicians can and can’t practice medicine. Reimbursement is also a challenge. We know we need access to specialists, but we also need to consider whether we’ll take a loss or break even. That really becomes a critical question.

JACOBSEN: Reimbursement is a big issue. We are a Medicare Prospective Payment System hospital; we don’t have the advantage of cost-based reimbursement as does a critical access hospital, so I have to break even on this. If we can’t break even, it’s going to be difficult to do. There are a lot of compliance issues that go along with it as well. We have a robust compliance department that is working with us to try to make sure that we’re dotting all of the “i’s” and crossing all the “t’s” from a compliance perspective and working with our medical executive committees. Our physicians have to be credentialed at each of our facilities. We need to make sure that our bylaws are adjusted appropriately for telemedicine. But it’s all necessary work. Infrastructure’s not a problem.
With us, it’s more bench strength. We need the providers to be able to support this program if we are to do it ourselves. Provider supply is a big problem in our area.

**MODERATOR:** Linda, what about some of the challenges in your area?

**BROCKWELL:** One of my concerns, and it’s not really a challenge yet, is the equipment and the bandwidth needed to support telemedicine. We are on the slow end of that bandwidth curve, even though we are close to Phoenix.

Similar to what everyone else has said, I’m concerned about getting access to the appropriate specialists. I’ve surveyed our clinicians about what specialists we need access to, and they checked them all off the list. My survey was not meaningful. We’re working to identify the services we need, and then find the best approach to meeting those needs. One of our providers is passionate about home care and she makes home visits. Many of her patients are elderly, they live in a rural area and don’t have transportation. We see greater opportunity to get equipment out into patients’ homes and monitor their care more closely. That’s something that we’ll probably act upon rather quickly.

**HOYT:** Do these patients have the connectivity in their homes to make this work? That’s a problem for us. There are big pockets in our area that lack cell service, let alone cable, etc.

**BROCKWELL:** That’s one of the questions we are asking vendors in our conversations. We have poor cell service in some areas and the vendors say it won’t be a problem. We will provide patients with a plug-and-play device and that’s all they will need. We haven’t tested it yet, however.

**HAMMAD SHAH** *(SOC Telemed)*: Are the vendors also providing access to providers, or just the connectivity?

“We see greater opportunity to get equipment out into patients’ homes and monitor their care more closely.”

– Linda Brockwell, R.N.

Wickenburg Community Hospital
EXECUTIVE DIALOGUE

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**BROCKWELL:** It’s pretty much technology and there are a couple ways that works. It goes to a cloud where our providers can access the data. Or it goes directly to the provider. But, again, I don’t think physicians want to get pinged at 4 or 5 in the morning when their patients are checking their blood pressure or whatever it is.

**STAVOR:** We’re a feeder hospital, often sending patients to our larger hospitals. As a CAH, we’ve been fortunate enough to be cost-reimbursed. We’re not a burden to our system. That said, I would like to be able to keep more patients in the community. For me, one part of this is to get broader acceptance among my physicians. We want them to try and keep the patient in our facility and access specialty care, rather than transferring them to one of our other facilities. In some instances, we’ve transferred patients, only to have them discharged with no means of transportation to return home.

**SHAH:** Our clients constantly complain about unnecessary transfers. One of the uses of telemedicine is to evaluate a patient at a tertiary site to determine if he or she should be transferred or retained at the rural hospital. This has the potential to reduce transfers and free up time for specialists.

**HOYT:** We’re a stand-alone, nonprofit health care system. The larger systems have not expressed interest in us. I feel fortunate because it’s compelled us to innovate and develop a telemedicine strategy that is really geared to meeting our community’s needs. We’ve built a telemedicine program designed to meet the needs identified in our community health needs assessment. Many of the issues that we identified had to do with access to specialists. We have an older population and many of our patients do not want to go to the city for their care. And we have a subset of patients who don’t want to leave their homes to come to our facility for care. Some of them are farmers and they don’t want to leave the farm. As a result, we’re looking at ways to leverage the use of our emergency management system — which we run — and telemedicine. Connectivity is not an issue for us; I’m more concerned about security. Everybody has a cellphone. My concern is how we ensure a secure connection between the health system and the patient through cellular service. That’s one of the challenges we’re still facing.

**SHAH:** It’s interesting that you say that. You said you have telestroke, correct? Do you have general neurology support?

**HOYT:** Yes, we do. We have two neurologists in the community who provide general neurology support. But when it comes to stroke, time is of the essence. We need to start treatment right away.

**SHAH:** We have a platform that not only works on-demand in acute needs, but it also can work in post-acute care. It’s a secure platform and can work off of any device, including cellphone, iPad or laptop. Another thing to consider is to look for someone who can partner across various clinical areas. If you partner with one group for psychiatry and another for neurology, these relationships can lead to unnecessary complexity.

**MODERATOR:** A number of you have talked about your care coordination strategies and home health. What are you doing now or want to do in terms of care-coordination strategy and providing more access?

**JACOBSEN:** Linda brought this up earlier. I’m intrigued by teleoncology. We have a nice chemotherapy unit at our facility. Until this year, it was...
manned one day a week. This year, it’s operating two days a week. It’s not the best use of our space to have it vacant for the remainder of the week. If we could do teleoncology, we could keep it running all week long. That would be huge for us. As far as care coordination, we do a pretty good job of that now. We’ve gone several years without a readmission penalty. We work very closely with our home care folks on providing more robust home monitoring. Unlike Wes, we do have connectivity challenges due to the mountains around us. A good example is my home. We have to stand in certain places in our house to get a cell signal. We’re constrained by physical cable and fiber optics. In markets like ours, where it’s mountainous, the infrastructure is a challenge. But from a care-coordination perspective, I’m open to looking at how telehealth could help us, but we do pretty good job with it already.

There is some reluctance by our more traditional providers on how they will communicate with their patients. Among other things, they are concerned about how they will establish, or maintain, relationships with patients they do not see. How do they effectively establish relationships with other providers if they do not work in the same location? From a care-coordination standpoint, working with the same group of physicians provides continuity and more person-to-person interaction.

HOYT: From our care-coordination perspective, we’re dealing with a huge behavioral health component. If we could harness telehealth to help with that, it would be extremely helpful. We need to provide health coaching and work to address the social determinants of health. We have patient navigators in our ED. Once a patient is medically screened and stabilized, the navigator works with him or her to obtain the services they need. And with so many people needing behavioral health services, telemedicine could help us to meet the community’s needs. It would be beneficial.

BROCKWELL: In terms of care coordination, I’m curious about others’ experiences with telepsychiatry. I’ve spoken with numerous organizations that provide telepsych services, but none make arrangements for hospitalization if it is deemed that a pa-
tient needs hospitalization. It falls on our ED staff to find a bed. And there are no beds in Arizona, so we end up boarding those patients in the ED for days. I’m not sure how useful the service actually is, given the amount of work that’s involved on our end. We have to take a room out of service and hope that we don’t have more than one patient who requires hospitalization at a time. We have an eight-bed ED. We are a Level IV trauma center; we see a fair amount of trauma because we’re the base hospital for the local ambulance service. They bring patients to us first. Holding psych patients is problematic. I’m looking for a solution where the telepsychiatrist is going to go the next step and have those contacts within the state and try to get placement.

HOYT: I agree with you. The process is problematic.

SHAH: How many patients really need that ongoing care?

BROCKWELL: I would say that most of the psychiatric patients we hold in the ED absolutely need to be hospitalized. We have counselors who see the patients, but it takes a huge amount of time to try to find placement.

SHAH: Everyone is struggling with effective placement of mental health patients. One of the reasons is that, by definition, telemedicine is run by remote groups. They don’t have the relationships in the local community to understand where the beds may be. Having said that, the other issue is that there aren’t enough beds. Even if an organization offered that kind of service, where would they place those patients? We have a larger issue in society that we need to deal with. State funds have all but dried up, and many states have closed inpatient behavioral health centers. And I can say that when we had the recession a while back, a lot of those state funds dried up. They weren’t able to financially support them. It’s a real challenge and I don’t think anybody has an effective solution today.

MODERATOR: How are your organizations engaging and educating patients? We’ve talked quite a bit about the provider relationships and the importance of having them function as part of a team. Are you seeing resistance among patients to using telemedicine services?

BROCKWELL: Our stroke patients really don’t have much of a say in the process because of the critical nature of their conditions. However, they do have to consent to it. But for the most part, there’s been no pushback from the patients or the families when we roll the cart in. They want the best care for their family members.

STAVOR: The biggest thing we have is the eICU. Our patients are totally impressed when their providers dial in and talk with them on camera. We do provide a great deal of education. We also engage with our county leadership. Every year, there’s a new group of leaders throughout the county who come in and tour our facility. They are always impressed by the eICU. And they also want patients to have the option to receive their care locally. The people who live in the Keys love it here, and they don’t want to travel to Miami for their care.

HOYT: That’s a really good point, Dawn. I don’t think anybody in any of our markets really wants to travel to the city for health care. They find it confusing and they don’t like it. Major medical centers are confusing. They would rather stay home.

MODERATOR: Does anybody figure the return on investment for transfers?
HOYT: We do an analysis on every transfer we send to Wichita to find out why. It’s often because we don’t have the capacity, or it requires a specialist who is not on call at that time. When you put patients at the center of the equation, the best place for them is the next level of care. It’s a balance. We may have the specialty within the community, but we can’t expect the physicians to be accessible around the clock. That’s a real struggle.

BROCKWELL: We transfer a lot of our patients out of the ED, because we don’t have the specialists to manage their care in the hospital. One of the issues we have is getting those patients back. If they need long-term care, we have the Swing Bed program [designed to provide high-level services for patients with rehabilitation needs that extend beyond an acute hospital stay]. But it’s like pulling teeth to get those patients back to our facility.

Eighty-five percent of our population is on Medicare. Many of their spouses, or significant others, have trouble driving at night or they don’t drive. And a part of healing is the family experience and having your family and friends come to visit. When our patients are down in the valley hospitals, it’s difficult for friends and family to get there. We have really good relationships with those hospitals, but they want the patients kept in their system rather than return them to us. So that’s one of the issues that we’re trying to work on.

HOYT: Another ROI for us is nonmonetary. We want people in our community to vouch for us. Word of mouth is essential. We need people to understand that we’re an important part of the community. We’re about to complete an ICU expansion. We’ll have 18 beds. But within the past year, we’ve had two pulmonologists retire and another expected to retire this year. We’re going from three pulmonologists to zero. As we recruit physicians, they want to know about quality of life.

And if they don’t have backup, it’s hard to convince them that they won’t be overwhelmed. The ROI for us isn’t just about the dollars and cents. It’s about quality of life and how we can give that intensivist a break. How do we let them know that they will have backup coverage? That’s a key question. The younger intensivists are much more comfortable with a distributed network of providers they can leverage. ROI is money, but it’s also intangibles.

SHAH: That’s an important point. We talk about telemedicine as something that can have a financial benefit, right? Several of you brought up another benefit, which is that folks don’t want to be transported out of their community. Especially when patients aren’t feeling well, to take them a couple of hours away to a hub hospital is not an easy experience for them.

As Wes noted, telemedicine can serve as a recruitment tool. Telemedicine can help to support gaps in coverage so providers can have a better quality of life. It can provide support during overnight shifts. Physicians get sick, too. They take vacations. Your organizations need to have backup in place. Many organizations have used telemedicine as a recruitment and retention tool. It’s just something that we don’t talk about often enough.

HOYT: We won’t lose other physicians because we don’t have enough support. It also addresses perceptions because the community often perceives that there’s better care in the city. If you can bring it locally, that does a lot to strengthen your posture within a small community. Big city care in a small town.

JACOBSEN: When I talk about that at civic groups and other locations within our region, I hear con-
concerns over the cost of care. If we do that midlevel business locally, we can do it at far lower cost and also keep money within the community.

**SHAH:** There are different models of telemedicine, and each provides different ROI. The eICU, for example, can operate under a bunker-type model that provides constant monitoring with clinical staff in a remote bunker who watch all of the different monitors and review data. They help to anticipate if there will be an acute need. The other model is an on-demand model. It’s less capital-intensive. For this model, intensivists are called in when a change in a patient’s condition is detected. The patients are not monitored remotely 24/7. There is a cost advantage to this model, and I would argue that there is no negative impact to the quality of care.

**MODERATOR:** What are the critical success factors for telemedicine in rural health care?

**HOYT:** Acceptance and buy-in by clinicians, nursing staff and your community. That really is critical. The community, in particular, has to have faith and confidence that it will work.

**STAVOR:** Reimbursement is essential and, perhaps, easier credentialing for physicians.

**JACOBSEN:** Wes alluded to this earlier when he was talking about the community health needs assessment. Success depends on identifying the key needs in the community and then determining how to provide services in a sustainable manner.

**BROCKWELL:** Our discussion today has largely been from a hospital perspective. If we looked at it from a consumer perspective, consumers have so many more options today than they did before. They can go into some drug stores now, see a nurse practitioner and pay $50 for the visit. That’s huge for consumers. It’s convenient and relatively inexpensive. What’s going to impact the consumer is also going to impact hospitals. We have to keep that in mind.

**SHAH:** As Dawn said, reimbursement is important. It’s not going to go up, right? I think there is a good deal of support in Congress now that we have data to support the theory that the effective use of telemedicine can reduce the overall cost of care. We really do need legislative support and consensus around this, because telemedicine really can help.

### KEY FINDINGS

1. Telemedicine provides effective, convenient care for patients, enabling them to remain in their community for services. Once patients leave the community for health care, it can be a challenge to get them to come back for other services.

2. Telemedicine can serve as a recruitment and retention tool for physicians. Telemedicine services provide backup support, enhancing work-life balance in areas with physician shortages.

3. Reimbursement and credentialing remain top challenges to expanding telemedicine services.
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SOC enables organizations to enrich their care models and touch more lives by supplying healthcare teams with industry-leading solutions that drive improved clinical care, patient outcomes, and organizational health. The company was the first provider of acute clinical telemedicine services to earn The Joint Commission’s Gold Seal of Approval and has maintained that accreditation every year since inception.