



Using telehealth to fight infectious disease

By David Levine | April 6, 2017

Ronald Cobbley woke up with a stiff neck. It got worse and worse, so he went to the emergency department at Intermountain Riverton Hospital in Riverton, Utah. He was diagnosed with a staph infection in his collarbone and admitted. Surgery followed. Nothing unusual about his story.

Until, that is, he was sitting in his hospital bed watching TV. The screen blinked, and his program was replaced by the smiling face of Todd J. Vento, M.D., the medical director of Intermountain Healthcare's Infectious Diseases Telehealth program.

"It was odd at first," says Cobbley, 74, of South Jordan, Utah. "I had never met him before."

Odder still, says Cobbley, was when "he was able to use this softball-shaped gizmo that hangs off the television to focus in on my wife and I, and look at where the operation had been performed."

Telehealth, in general, can facilitate traits that athenahealth researchers have identified as key to achieving excellence in quality care: Rapid access to clinicians, multiple channels for connecting to patients, and a focus on the patient experience.

But Vento's virtual visit — conducted from Intermountain Medical Center in Salt Lake City, 25 miles from Riverton — was also an example of a specific medical need that virtual technology seems tailor-made to fill.

Building a telehealth team

Intermountain's program, which launched last October, was the brainchild of Edward Stenehjem, M.D., another infectious disease specialist at the Utah-based health system. Stenehjem recognized the dangers of inappropriate antibiotic prescribing and the challenge of managing infectious diseases in remote areas.

"72 percent of all hospitals have less than 200 beds, and the majority of these hospitals do not have access to antibiotic stewardship programs or infectious diseases physicians," Stenehjem wrote in a blog post.

So he formed a team that includes Vento and an infectious disease pharmacist. Team members visit the hospitals in person to set up antimicrobial stewardship teams. Then, using a two-way audio-

visual connection, they provide full telehealth consultation services to four community hospitals in the Intermountain system, staffing a telehealth hotline for clinicians.

“We call back, get the history, and offer our advice,” Vento says. “We can do a formal consult, meet the patient in the room virtually, look at the data, and provide targeted infectious disease recommendations, so the patient doesn’t have to be transferred to another facility.”

Through electronic records, the Intermountain team monitors antibiotic usage and issues alerts at each facility when necessary, Vento says, and can suggest an infectious disease consult when a particular condition arises.

“It’s a push and pull system,” Vento says.

Intermountain has 16 small, rural hospitals in its 22-hospital system, and hopes to connect all of them to the service by the end of 2017, Vento says. It may then offer the service to non-system hospitals in the area as well.

Physicians at the community hospitals say they like the support.

“It has been a great addition to patient care,” says Takiko May, M.D., a hospitalist at Logan Regional Hospital. “We used to have ‘curbside consults,’ but those resulted in limited information. Now the specialists are formally involved in patient care. They can peer in the chart and get history we might not have shared.”

When one of her patients had a staph infection in her blood, Vento recommended an antibiotic other than the one she would have chosen.

“He looked at the sum total of her presentation and felt this was a better option for her,” May says. “It was also a once-a-day dosage instead of three times a day, which in terms of care and cost is huge.”

Cobbley, meanwhile, has been treated by Vento two or three times after a relapse and a second operation. And he has overcome the “oddity” of being checked over by a remote-controlled gizmo.

“It was neat,” Cobbley says. “And it was really nice to have him look at me and discuss things.”

David Levine is a regular contributor to athenaInsight.



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