How Telemedicine Can Bridge the Gaps in Hepatitis C Care

A team of researchers is studying how online video conferencing can put a virtual doctor into methadone clinics to deliver hep C treatment.

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When it comes to providing effective medical care to people with a serious condition like hepatitis C virus (HCV) infection, today's health care innovators are striving to fill in the cracks into which individuals in need of care and treatment may fall.

For the past few years, Andrew H. Talal, MD, MPH, a professor of medicine and hepatologist at University at Buffalo, State University of New York (SUNY), has been developing a program that uses videoconferencing to allow HCV-positive people to receive virtual appointments at methadone clinics with an off-site physician who can prescribe treatment for the virus.

Known as telemedicine, this marriage of modern technology and good old-fashioned health care is increasingly covered by insurance, especially in states with large rural populations burdened by the need to travel considerable distances to find a medical specialist.

Talal says the telemedicine system he's developed “is really the opportunity to virtually integrate medical treatment into the substance abuse treatment facility, as opposed to physical integration, which is much more difficult to accomplish.”

Individuals who attend methadone clinics, which provide treatment for addiction to opioids, namely heroin (methadone is one of a variety of opioid substitution therapies), are at particularly high risk of getting lost in the tangled maze of the U.S. health care system. And because injection drug users have high rates of both HCV as well as HIV, those living with either condition are in particular need of quality health care.

“In this case, hep C is a tool to overcome the medical disenfranchisement that exists in many of these places,” says Talal. “Because if you can treat hep C in this way, you can also treat other specialty conditions: HIV, diabetes, chronic heart disease, etc.”

Clewert Sylvester, MD, director of research and evaluation at Brooklyn-based START Treatment & Recovery Centers, which has a network of methadone clinics throughout New York City, says, “Often when you have a history of substance abuse you don’t get very good treatment [at outside
medical centers]. You get treatment, but there’s always that whispering afterward—that ‘Oh, you’re a heroin addict.’ It’s a big disincentive to seek care on the outside.”

According to Talal, HCV-positive individuals who receive addiction treatment at methadone clinics may have a considerable number of other conditions such as depression and anxiety. Such variables can effectively serve as barriers to finding care for the virus outside their methadone clinic.

START (not to be confused with the global START trial published in 2015 that found that treating HIV early is better than delaying) has partnered with Talal on a small pilot study to see how well a telemedicine program could provide hep C care through two of START’s methadone clinics. The study evaluated 32 people with HCV and ultimately used telemedicine to provide treatment for the virus to 18 (56 percent) of them. Talal provided the care himself, videoconferencing with each individual every two weeks throughout the process. To ensure its research would be applicable to real-world settings, Talal’s team went through standard channels to secure insurance coverage for the telemedicine sessions and the cost of the hep C drugs. Most of the participants were on Medicaid or Medicare, which is typical for people participating in opiate substitution programs.

In April, Talal presented findings from the study at the 51st International Liver Congress in Barcelona. All 18 of those treated for hep C achieved a sustained virologic response 12 weeks after completing therapy (SVR12, considered a cure).

The telemedicine program, which uses a secure videoconferencing system that ensures users’ privacy, boasted a lack of technical difficulties. Most important, those who participated in this high-tech, and highly convenient, means of receiving hep C treatment were increasingly pleased with the program. As time passed, they reported higher levels of satisfaction with receiving treatment at the methadone clinic rather than having to travel to see the doctor. They also said they’d recommend telemedicine to a friend and that their medical needs had been met.

“This is a group of people who feel forgotten,” says Heidi Nieves-McGrath, RN, a clinical research nurse coordinator at SUNY Buffalo who recently joined Talal’s research team. “The gratitude that they felt, that someone took an interest in them and addressed a specific medical need—they couldn’t say enough. Their stories were very emotional.”

In fact, word of mouth was so good, the researchers had to turn people away.

“The one thing about substance abuse is that in the old days when they were doing drugs, if they found where the good drugs were, they would always let their friends know the guy around the corner is the one with the good drugs,” says Sylvester. “In the same way, word has spread about what our program is doing and how well we’re doing.”

A new opportunity will soon open up for others in New York state to ride the telemedicine wave to a hep C cure. Talal and his research partners have received a $7 million award from the Patient-Centered Outcomes Research Institute (PCORI) for a five-year study of such a program. (Congress authorized PCORI in 2010 as a part of the Affordable Care Act legislation to fund research into
improvements to the health care system based on solid evidence.) The plan is to recruit a group of 624 individuals at a dozen methadone clinics across the state, including sites in urban, semi-urban, suburban and rural areas. The study will look at the success rate in curing hep C as well as participants’ satisfaction and how well they adhere to the HCV treatment regimen.

First, Talal and his colleagues will collect data on each methadone clinic as the staff there refers people with hep C to care for the virus according to standard procedure, effectively fashioning a control group for the study. Then, the clinics will start offering the on-site telemedicine program. In the end, the researchers will compare the two approaches to providing hep C treatment.

The ultimate goal is to establish a model that other methadone clinics around the country can follow as they seek to improve access to hep C treatment and other conditions that are common among individuals attending such clinics. Much of the development of these systems would likely have to occur on a state-by-state basis, since insurance reimbursement is governed at the state level. However, the telemedicine procedures and insurance reimbursement models could be shared between states. Additionally, the physician prescribing treatment for the virus needs to have privileges at both the site where he or she is conducting the telemedicine session and the clinic where the treatment is being received.