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TECHNOLOGY TRANSFORMS HIV CARE

Telehealth is transforming access to quality care and treatment for people with HIV. This critical technology tool is defined as the use of electronic information and telecommunication technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health, and health administration.¹ Telemedicine, a subset of telehealth, provides clinical services remotely through patient–provider interactions.²

Telehealth has demonstrated its ability to increase access to quality health care, reduce patient travel to medical providers, and potentially reduce health care costs.^{3,4} Studies have shown that patients receiving direct telehealth care have achieved positive health outcomes as effectively as those receiving in-person care.⁵ People with HIV taking antiretroviral therapy (ART) achieved similar clinical responses to therapy, adherence to treatment, quality-of-life scores, and psychological and emotional status whether treated through telehealth or in person.⁶

Director's Note

Many people with HIV around the country have limited access to HIV care. Individuals living in rural areas may have to travel several hours to reach an HIV care provider, and even some people with HIV who live in more populous areas may not have access to HIV care providers. Telehealth helps to bridge that gap, in terms of both direct patient–provider contact and training local primary care providers to offer comprehensive HIV care. Telehealth reduces disparities faced by people with low incomes in areas with minimal HIV care infrastructure.

To keep pace with advances in technology and improve care delivery to hard-to-reach clients, the Health Resources and Services Administration's Ryan White HIV/AIDS Program (RWHAP) supports programs that supplement traditional HIV care with telehealth. Other RWHAP recipients provide or receive training in HIV care through telehealth to expand the HIV clinical workforce.

This issue of *CAREAction* shines a spotlight on two types of telehealth interventions and their advantages and challenges. The "Stories From the Field" included in this newsletter give a snapshot of telehealth in action and the power of this tool to provide quality patient care and, ultimately, to help end the HIV epidemic.

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Telehealth programs benefit Health Resources and Services Administration (HRSA) Ryan White HIV/AIDS Program (RWHAP) recipients and provide a critical tool to strengthen the federal [Ending the HIV Epidemic: A Plan for America](#) initiative.

In patient–provider telemedicine programs, patients interact directly with health care providers through live videoconferencing. Patients can connect with an HIV specialist from either the convenience of their own homes or a local community health facility where they might already receive primary care. Telehealth services are dependent on the resources and policies of the facility.

Provider–specialist telehealth programs involve telementoring sessions, in which primary care providers collaborate with multidisciplinary teams of specialists around individual patient cases, a format known as case-based learning. These live videoconference sessions serve patients by training primary care physicians on the necessary skills to provide HIV care and by providing guidance in managing the complexities often associated with HIV care. Studies show improved clinical outcomes among people with HIV, including adherence to ART, when clinicians with HIV experience and training provide care.⁷

CHALLENGES IN IMPLEMENTING TELEHEALTH PROGRAMS

Insurance reimbursement for telehealth services varies among states and can be subject to specific requirements. Medicare, for example, will reimburse only patients utilizing telemedicine services who live in

rural locations and attend videoconferences in an approved health care facility. In some states, physicians offering telehealth services must be licensed in the state where the patients are physically located during sessions. Some states require physicians to have an initial face-to-face session with patients before prescribing medicine. Telehealth programs must also satisfy cybersecurity protections by using encrypted and confidential videoconferencing systems that comply with the Health Insurance Portability and Accountability Act. Another potential challenge for organizations includes ensuring access to adequate videoconferencing systems to connect to remote sessions. Lack of patient access to digital devices and technology infrastructure, such as broadband internet, can also be a barrier to telehealth, especially among older HIV patients and those who are minorities, have a low income, or live in a rural area.

USING TELEHEALTH TO IMPROVE HIV CARE

HRSA's RWHAP providers have been successfully incorporating telehealth into their programs. Through Part F funding, several RWHAP recipients participate in provider–specialist programs using the established Extension for Community Healthcare Outcomes (ECHO) model. Project ECHO was founded in 2003 at the University of New Mexico to provide telementoring education on hepatitis C virus (HCV) care to primary care providers across the state. Project ECHO's programs have expanded around the globe and now cover a plethora of diseases and conditions, including HIV. Each ECHO program contains a “hub” of specialist experts who telementor, train, and collaborate with community health clinics. Primary care providers seek consultation for changing patient ART regimens, evaluating acute symptoms and mental health concerns, and managing other clinical issues for which no specified guidelines exist.⁸ HRSA's RWHAP recipients, such as the Yale University School of Medicine's HIV/AIDS Care Program and the University of Texas Health Science Center at San Antonio (UT Health San Antonio), are using the Project ECHO model to train primary care providers in their regions. These programs are described in this issue's Stories From the Field.

Other RWHAP recipients have delivered telemedicine care directly to patients. Roper St. Francis Healthcare Ryan White Wellness Center in Charleston, South Carolina, connects clients in correctional facilities with health care providers through videoconferencing, negating the logistical and safety challenges of transporting inmates. Roper St. Francis also has installed a video link to its rural facility in Moncks Corner, South Carolina, eliminating a three-hour round trip for patients. Medical Advocacy and Outreach (MAO) of Alabama is using telehealth through HRSA's RWHAP Part C funding to expand primary care services in rural southern Alabama. One-fourth of its Montgomery clinic's patients are served through telemedicine. More than 90 percent of MAO's telehealth patients have reported being extremely satisfied with their telehealth services, and more than 95 percent of MAO patients with HIV receiving telemedicine achieved viral suppression.

Stories From the Field: Yale University School of Medicine HIV/AIDS Care Program

The Yale University School of Medicine's HIV/AIDS Care Program was established in 1984, leading the field in early research on understanding HIV transmission. The program has partnered with



community providers and AIDS services organizations for many years. Through funding from HRSA's Curing Hepatitis C among People of Color Living with HIV initiative, an RWHAP Special Projects of National Significance (SPNS) program, Yale has partnered with 12 multisite HIV care clinics and six substance use and syringe service clinics in Fairfield and New Haven counties and the city of New London in Connecticut, most of which are HRSA RWHAP-funded. The New Haven region has a significant impoverished and underserved population. A majority of the people with HIV that these clinics serve are Black/African American or Hispanic/Latino. The RWHAP clinics in the partnership provide key services for uninsured patients, including medical care and treatment, support services, food, housing, and emergency financial assistance. Under the SPNS, the clinics also serve people with HIV who are co-infected with HCV.

People with chronic HCV who also live with HIV tend to have worse clinical outcomes, such as end-stage liver disease or hepatocellular carcinoma, so researchers have identified people with HIV as a priority group in combatting the HCV epidemic. All people with HIV in the partnership's RWHAP clinics are tested for the HCV antibody and, if positive, for viral load indicating chronic HCV. These patients receive oral medications that are 95 percent curative for HCV within eight to 12 weeks.

“We focus on developing the best service delivery model, so that our patients can be effectively treated and managed for HIV and comorbid illnesses,” said Yale HIV/AIDS Care Program Director Dr. Merceditas Villanueva. To further these efforts, Yale and its partner clinics have joined the Project ECHO telementoring sessions run by Weitzman Institute in Middletown, Connecticut. Staff consult virtually about active patient cases on alternating Fridays using the Zoom videoconferencing platform. “We ask our clinics to present specific cases that are challenging or illustrative of issues related to HIV and hepatitis C management,” explained Dr. Villanueva. The Institute's multidisciplinary faculty provide didactic materials to educate the clinicians participating in the sessions and expand their knowledge base.

The participating clinicians are all frontline providers, ranging from novice to expert in treating patients with HCV. Dr. Villanueva reports that the provider feedback on the ECHO infrastructure has been very positive. Even Dr. Villanueva, herself a seasoned provider, has learned about the practical situations the patients face from the sessions. “The providers are satisfied that their specific questions are being answered,” she observed, “and they feel a sense of community even though they are not in the same room together.”

The Yale HIV/AIDS Care Program considers the funding and program support from the RWHAP critical to guiding its model of continued quality care. In the region served by Yale and its partner clinics, 80–90 percent of people with HIV are virally suppressed. “That whole support engine from HRSA is why we do so well in treating this really difficult group of individuals,” emphasized Dr. Villanueva.

Stories From the Field: UT Health San Antonio

The University of Texas Health Science Center at San Antonio (UT Health San Antonio), part of the University of Texas (UT) System, serves patients across South Texas through more than 100 affiliated hospitals, clinics, and health care facilities. HRSA’s Curing Hepatitis C among People of Color Living with HIV initiative supports UT Health San Antonio’s TACKLE HIV/HCV program, or Targeted Access to Community Knowledge, Linkage to treatment, and Education for HIV/HCV in people of color. The TACKLE team includes about 15 UT Health San Antonio staff members and about 40 employees at the RWHAP clinics where TACKLE operates throughout South Texas. About three-fourths of the patients TACKLE serves are Hispanic/Latino. TACKLE integrates HCV care into HIV care, performs community outreach, educates community providers through ECHO, and provides support for substance misuse and depression among people with HIV. TACKLE is working to enhance acute HCV surveillance and has piloted Texas’s first chronic HCV surveillance program.

TACKLE principal investigator Dr. Wari Allison, who serves as both Assistant Professor in UT Health San Antonio’s Division of Infectious Diseases and the Medical Director of the San Antonio AIDS Foundation, has the perspective of having one foot in the academic world and one foot in the clinical world. “I’m passionate about reducing health disparities, increasing access to health care, and educating physicians and other primary providers,” said Dr. Allison. People in the southern United States are more likely to be diagnosed with HIV, and without accessing HIV care and treatment services, those diagnosed are more likely to die from HIV than people in other regions. South Texas has many socioeconomic and infrastructure-related health disparities, including such factors as the high rate of uninsured people in Texas—higher than any other state—and the difficulty of accessing specialty care. Although most TACKLE clinics are not rural, Dr. Allison defines them as remote because of such challenges; for example, Laredo is a city with more than 300,000 people but only one board-certified infectious disease physician.

These challenges make South Texas a prime location to implement Project ECHO’s model of telementoring community providers through discussing active patient cases. “ECHO is really about building up those community-based clinics,” said Ms. Andrea Rochat, a senior research coordinator for UT Health San Antonio’s Center for Research to Advance Community Health (ReACH). TACKLE staff spent an entire year planning the details and procedures involved in starting a new ECHO program before implementing the videoconferencing sessions, which Dr. Allison emphasized as critical to the program’s success.

UT Health San Antonio refers to its ECHO program as a “learning network” to emphasize the knowledge that the community clinicians bring to the conference. “ECHO sessions are very lively and energetic,” shared Ms. Julie Parish Johnson, a ReACH senior research coordinator. “ECHO has given me an opportunity to increase

skills in developing and disseminating an education program and facilitating conversations with partnering sites.” Although Project ECHO emphasizes monitoring patient and provider outcomes, UT Health San Antonio also evaluates its process. Dr. Allison explained that process evaluation will help inform the sustainability and replicability of ECHO to provide access to quality HCV care for people with HIV. The program will disseminate results and lessons learned from ECHO and TACKLE’s other efforts to clinicians, researchers, and policymakers.

TACKLE has developed an additional telehealth component—an English/Spanish app that educates users about HIV and HCV. Program staff disseminate the app both to newly diagnosed patients and to the public at outreach events. It quizzes patients on their understanding of coinfection, treatment, and risk factors and provides valuable de-identified data back to the case navigators. “The app gives a real teachable moment to the patient in that moment of diagnosis,” explained Ms. Rochat.

The UT System has established the UT Virtual Health Network to increase collaboration among all of its institutions that use provider–patient telehealth. Other UT System health researchers have shown an interest in expanding ECHO for HIV, HCV, and other diseases. “There’s a lot of room for growth for ECHO within Texas,” Dr. Allison noted, “and that’s exciting.”

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