PROFILES IN INNOVATION

Sanjeev Arora, MD is creator and director of Project ECHO, an innovative model that leverages telehealth technologies to improve access to care for patients with complex and chronic conditions. He is also a professor of medicine in the Department of Internal Medicine at the University of New Mexico's Health Sciences Center.

ABOUT THE INNOVATOR

An expert in gastroenterology, Dr. Sanjeev Arora has used his experience providing specialty care to underserved patients in New Mexico to develop a new way to disseminate clinical knowledge from resource-rich areas to rural communities that lack specialist providers—and his model is now benefiting individuals across the country.

Having worked at the University of New Mexico (UNM) hospital for 19 years, Dr. Sanjeev Arora has seen many patients with complex needs, but his professional interests germinated many years earlier. Growing up in India with a father who worked to eradicate small pox and a mother who worked as an ob/gyn with disadvantaged populations, Dr. Arora witnessed from a young age the impact of bringing good health care to underserved communities. Following completion of medical school in India, and clinical training in the U.S., Dr. Arora focused his efforts on the prevention of gastrointestinal cancers and hepatitis C.

In 1993, Dr. Arora began working as section chief of gastroenterology and associate professor of medicine at UNM, where he provided care to many low-income patients with chronic conditions. A large number of these patients were diagnosed with hepatitis C, and faced numerous barriers that made regular care nearly impossible – including an eight-month wait for an appointment, the location of the hospital hundreds of miles from rural communities, and having to make as many as 12-18 visits during one course of treatment.

"Three factors converge to make the needs of complex patients different than those in the general population—first, is poverty, homelessness, and the like; second is social deprivation, or a lack of social supports in their lives; and third is chronic disease, including very high rates of behavioral health comorbidities."

While many of these rural settings had local health care centers, few had providers who were hepatitis C experts. Dr. Arora sought a better way to ensure that the nearly 30,000 New Mexicans with the disease had convenient access to specialty care by empowering rural providers to treat these patients in their own towns. In 2003, he started a pilot program to connect hospital-based hepatitis specialists to rural and prison-based primary care providers. Through telephone and video conferencing, specialists shared their clinical knowledge and expertise with community-based providers, and helped co-manage their patients.

Known as Project ECHO (Extension for Community Healthcare Outcomes), the initiative has expanded dramatically since this initial pilot. It has been proven to deliver care that is as safe and effective as services provided at an academic medical center, and has significantly increased professional satisfaction among rural primary care clinicians. Project ECHO now offers virtual clinics for 13 diseases and conditions, including HIV/AIDS, dementia, and complex care. Additionally, the team has developed training programs for community health workers, including a Prison Peer Educator Program that trains prisoners to educate their fellow inmates about infectious disease prevention.

Dr. Arora's innovation is now being replicated in other regions across the country. Project ECHO has a nationwide contract with the Department of Veterans Affairs, as well as an agreement with the Department of Defense to develop a global chronic pain management program for the U.S. Armed Forces. Next up, he is taking the program to the international arena – where it has attracted substantial attention – to improve care for people living with HIV/AIDS in rural India.

The Center for Health Care Strategies' Complex Care Innovation Lab, made possible by Kaiser Permanente Community Benefit, is bringing together leading innovators working to improve care for vulnerable populations with complex medical and social needs. Participants will explore new ways to advance complex care delivery at the local, state and national level. These profiles highlight Innovation Lab participants. For more information, visit www.chcs.org.

ABOUT THE INNOVATION

Project ECHO Complex Care Program

Program Description: The Complex Care Program, a new federally-funded UNM initiative, will use the Project ECHO model of multi-disciplinary consultations through weekly telehealth clinics to assist teams of providers in managing publicly-insured patients with socio-economic, behavioral, and medical needs. The project is creating Outpatient Intensivist Teams (OITs) to provide comprehensive care with the goals of improving care coordination and quality, and reducing costs.

Population: 5,000 publicly-insured patients with complex socio-economic, behavioral, and medical needs in New Mexico and Washington state.

Delivery Model: Based in primary care sites throughout the two states, each OIT will provide comprehensive care to 200-250 patients enrolled in the Complex Care Program. OITs are composed of: 1 nurse practitioner (lead), 1 registered nurse, 1 counselor, and 2 community health workers. These teams will receive support from specialists through the ECHO Complex Care Clinic, which will provide real-time, virtual access to hospital-based specialists who relay best practices and effective care management strategies, as well as help to co-manage teams' complex patients.

Financing: Project ECHO received an $8.5 million Health Care Innovation grant from the Center for Medicare & Medicaid Innovation for the implementation and evaluation of the Complex Care Program over the next three years. Support for the OITs will come from participating Medicaid managed care organizations, which will share the cost of the OITs in proportion to the number of beneficiaries served.

KEYS TO SUCCESS

The foundation of the Complex Care Program is the Project ECHO model, which has improved patient care and increased provider capacity in many underserved communities. Key success factors include:

1. **Using technology to leverage resources** that would otherwise be available only in academic medical centers;
2. **Sharing and implementing only best practices** that have been proven effective;
3. **Engaging in case-based learning** rather than just lectures, so that community-based provider teams become experts, and can manage patients in real-time through a guided practice model; and
4. **Diligently tracking outcomes** to identify success and gaps, and inform best practices.

Spotlight: ECHO Community Health Worker Training Program

To extend the medical knowledge transfer gained from Project ECHO further into rural communities, Dr. Arora and colleagues developed the ECHO Community Health Worker (CHW) training program. In developing the Project ECHO clinic for patients with diabetes, ECHO faculty learned that rural areas often lacked trained diabetes educators and nurses who could supplement the work of primary care physicians, and work with people in the community to manage their conditions. Since diabetes care involves extensive patient education, self-management, and behavior modification, it is nearly impossible to ensure that patients are getting what they need in a 15-minute visit. Diabetes educators and nurses are able to have in-depth meetings with patients, meet with them in their homes, and better understand how to tailor care to address each patient's unique situation.

To develop this workforce, Project ECHO designed a program to train clinic staff in managing patients with diabetes. Eligible trainees must have at least a high-school diploma, and may include medical assistants, community health workers, and others. Participants are brought to Albuquerque for a three-day intensive program that provides training in all aspects of diabetes care, including diet, exercise, foot exams, finger sticks, motivational interviewing, history taking, and more. Upon returning to their clinics, participants take part in weekly telehealth clinics with Project ECHO staff to continue learning and co-managing patients. The program has been expanded to include specialized CHW training in addiction and preventive care. Trained CHWs can partner with physicians in caring for patients with chronic conditions, and they also become experts in managing care for particular conditions.