Project ECHO: Extension for Community Healthcare Outcomes Through Telemedicine



To help address rural residents' problems in accessing specialty care for complex conditions, Project ECHO—Extension for Community Healthcare Outcomes—connects urban specialists with rural practitioners through the Internet. Based at the University of New Mexico (UNM), the project goes beyond many telemedicine projects, not only enabling patients to be treated long-distance but also honing the ability of rural practitioners, i.e., primary care physicians, nurse practitioners, physician assistants, and pharmacists, to provide specialty care for chronic and potentially debilitating conditions. Through one-to-many videoconferencing, clinicians hone their clinical skills and share a deepened, interconnected professional community.

In New Mexico, hepatitis C is a prevalent and costly condition that often leads to death if untreated. This ground-breaking project improved access to care for 4,000 rural residents with hepatitis C through provision of telemedicine care at 21 rural telemedicine facilities, 16 community centers, and 7 department of corrections facilities. Over time, these researchers have expanded this telemedicine model to address other potentially debilitating conditions requiring specialty care within the State of New Mexico. On a regular weekly schedule, specialists at UNM teach and provide medical care through 2-hour telemedicine clinics to the full set of locations shown in Table 1. The process works well for providers: 84 percent of surveyed providers said that access not only to medical experts but also to specialists in behavioral and mental health was helpful.

TABLE 1. TYPES OF CONDITIONS AND NUMBERS OF FACILITIES USING PROJECT ECHO TELEMEDICINE MODEL FOR IMPROVED HEALTH CARE TREATMENT

Condition	Number of Facilities
Original Focus:	
Hepatitis C	21
Expanded to These Conditions and Facilities:	
Asthma/Pulmonary	16
Child, Adolescent, and Family Psychia	try ^a 32
Child, Adolescent Psychology ²	14
Chronic Pain/Headache	9
Diabetes/Cardiovascular Risk Reducti	on 19
High-Risk Pregnancy	21
HIV/AIDS	17
Integrated Addiction/Psychiatry	14
Medical Ethics	7
Occupational Medicine	5
Pediatric Obesity	43
Psychotherapy	4
Rheumatology	11

^a Both types of telemedicine clinics address child and adolescent mental health issues; however, the psychiatry clinics work with rural physicians who may prescribe psychiatric medications, whereas the psychology clinics work with nonphysician staff to provide effective psychological counseling.

The project is expanding far beyond New Mexico. In June 2007, the project was selected by Changemakers in partnership with RWJF as a winner of their international search for Disruptive Innovations in Healthcare – New Models, and work is under way to bring the model to the University of Washington, University of Chicago, and several universities in India.

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