Project ECHO: Hepatitis C Ambulatory Care Quality Improvement in New Mexico Through Health Information Technology

**Principal Investigator:** Arora, Sanjeev, M.D.

**Organization:** University of New Mexico

**Mechanism:** PAR: HS08-270: Utilizing Health Information Technology to Improve Health Care Quality Grant (R18)

**Grant Number:** R18 HS 018171

**Project Period:** July 2009 – July 2013

**AHRQ Funding Amount:** $1,199,696

**Summary:** This project builds on the work of Project ECHO: Extension for Community Healthcare Outcomes, which was previously funded by the Agency for Healthcare Research and Quality. Providers require access to patient-specific information to consult on cases, track patient progress, and evaluate clinical outcomes. At Project ECHO’s inception, community-based providers transmitted patient-specific information to specialists via a data management system. Data were entered and stored locally on a laptop, transmitted via a secure virtual private network (VPN), and maintained in a centralized Health Insurance Portability and Accountability Act-compliant structured query language database server to support both clinical and research activities. With Project ECHO’s rapid expansion, this type of data management proved inadequate because it presented numerous insurmountable barriers to site maintenance, VPN problems, and critical datafeed and reporting inadequacies.

To address these issues, Project ECHO will focus on the use of an Internet-based clinical management system for patients undergoing treatment for hepatitis C virus (HCV). This system will improve quality of care and lead to greater knowledge sharing among health care providers for rural and underserved populations. Enhancements are being made to the electronic disease management tool iHealth. iHealth and the clinical management system will standardize data collection, provide practice support, create a central data repository, and allow authorized personnel to view individual patient records. The iHealth tool will be accessed via a Web portal, the central identity for the HCV program, providing a single-access point for iHealth resources. The portal includes search tools that program personnel can use to extract data for monitoring data quality, profiling, quality improvement, and research. Laboratory data is being uploaded automatically into patients’ electronic health records.

The underlying iHealth architecture supports effective management of patient data across multiple provider organizations. Web portals for patients are providing educational links and allow patients to see their summary reports, facilitating better communication with their providers. The provider portal can provide tools for HCV treatment and coordinate training activities. Patient needs were assessed and determined via patient focus groups.

**Specific Aims:**

- Develop a disease management tool that will standardize data collection, provide practice support, create a central data repository, and allow authorized personnel to view individual patient records. *(Achieved)*
**Utilizing Health Information Technology (IT) to Improve Health Care Quality (R18)**

- Develop a Web portal that creates a central identity for the HCV program and provides a single-access point for its resources. *(Ongoing)*
- Create search tools that program personnel can use to extract data for monitoring data quality, profiling, quality improvement, and research. *(Achieved)*
- Develop a system that automatically uploads laboratory data from TriCore. *(Achieved)*
- Promote adoption of iHealth clinical management system. *(Achieved)*

**2012 Activities:** Patient focus groups were conducted and the patient portal prototype was developed. The team anticipated presenting the prototype before an HCV teleECHO clinic in spring 2013. Provider portal resources continued to be developed as informed by focus group findings. The treatment protocol was revised and made available with the summary report.

The team continued to train practices and promote the use of iHealth. Development of the Web portal was initiated. Dr. Arora is using 1-year a no-cost extension to develop additional portal resources and continue data collection. As last self-reported in the AHRQ Research Reporting System, project progress and activities are on track and budget spending is on target.

**Preliminary Impact and Findings:** The project has no findings to date.

**Target Population:** Adults, Chronic Care*, Hepatitis C

**Strategic Goal:** Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

**Business Goal:** Knowledge Creation

*This target population is one of AHRQ’s priority populations.*