

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

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Mechanism:	PAR: HS08-270: Utilizing Health IT to Improve Health Care Quality Grant (R18)
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Summary Status as of:	December 2010

Target Population: Adults, Chronic Care*, Hepatitis C

Summary: This project builds on the work of a previous Agency for Healthcare Research and Quality-funded project, [Project ECHO: Extension for Community Healthcare Outcomes](#). 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 in site maintenance, VPN problems, and critical datafeed and reporting inadequacies.

To address these issues, Project ECHO will use an Internet-based clinical management system for patients undergoing treatment for hepatitis C virus (HCV). This will improve quality of care, and lead to greater knowledge sharing among health care providers for rural and underserved populations. The enhancements to the electronic disease management tool, 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 as a Web portal, the central identity for the HCV program, providing a single-access point for its 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 from TriCore Reference Laboratories (TriCore) will be uploaded automatically into patients' electronic health records.

The underlying iHealth architecture supports effective management of patient data across multiple provider organizations. The Web portals for patients will provide educational links, and allow patients to see their summary reports, facilitating better communication with their providers. The provider portal can be used to coordinate training activities and provide the tools for HCV treatment. These patient needs will be 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. **(Ongoing)**

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

2010 Activities: Many programming enhancements were completed including: improved screen flow with less mouse-clicking to access data; a home page dashboard to review and access common activities quickly; messaging system for e-mail, phone, and walk-ins; communication directly entered into chart and/or archived; improved readability of protocol summary and lab flow sheets; better entry of medication information with type-ahead lookup and single-click entry of information; a case presentation system to generate information for clinics easily; electronic documentation of recommendations are accessible via the patient's flow sheet; HCV summary reports to follow treatment over time; calculation of visit schedule; display of priority medications in all the hepatitis C tabs; display of previous presentations done for the patient; ability to add or remove patients to or from a presentation; ability to freeze or unfreeze clinics; and the ability to print patient HCV reports.

Beta testing of iHealth was conducted with nine ECHO HCV community participants, representing four ECHO partner health organizations and eight clinic locations. The pilot test was followed by a focus group to capture participants' comments on the iHealth disease management tool.

The team developed an electronic survey to query current participants of Project ECHO's HCV Telehealth Clinic. This survey asks ECHO clinicians and their teams about their thoughts on electronic medical records, disease management tools, and access to a Web-based portal for HCV patient information. Fifty-five surveys were sent out and 40, or 72.7 percent, were completed and returned to Project ECHO.

Project ECHO's database interface linking iHealth patients with TriCore's master patient index has been established. Effectiveness is being evaluated on the test server.

Grantee's Most Recent Self-Reported Quarterly Status (as of December 2010): The project is mostly on track and is meeting its aims on time, but funds are somewhat under-spent. This is a result of delays in fully staffing the project as well as conservation of funds in anticipation of a no-cost extension.

Preliminary Impact and Findings: The project does not have any findings to date.

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

* AHRQ Priority Population