The ECHO Model: A platform for democratization of knowledge

Elizabeth Clewett PhD, MBA
Mission: To democratize medical knowledge and get best practice care to underserved people all over the world

Right Knowledge. Right Place. Right Time.

Supported by New Mexico Department of Health, Agency for Health Research and Quality, New Mexico Legislature, the Robert Wood Johnson Foundation, the GE Foundation, and the Helmsley Charitable Trust
Idea formulated by Dr. Sanjeev Arora to address HCV in New Mexico

28,000 infected in NM and, in 2004, less than 5% had been treated

- **Good News**
  - HCV is curable in 70% of cases

- **Bad News**
  - Chemotherapy-like regimen with severe side effects
  - No Primary Care Providers treating HCV
  - New Mexico is a large rural state; 32 of 33 counties are MUAs
  - Patients need to travel long distances

Goal of Project ECHO was to develop capacity to safely and effectively treat HCV in all areas of NM through telementoring of primary care clinicians
ECHO vs. Telemedicine

TeleECHO™ Clinic

- Expert hub team
- ECHO supports community based primary care teams
- Learners at spoke site

Traditional Telemedicine

- Specialist manages patient remotely
- Patients reached with specialty knowledge and expertise
Methods

Use Technology to leverage scarce resources

Share “best practices” to reduce disparities

Apply case-based learning to master complexity

Evaluate and Monitor Outcomes via web-based database

But Does It Work?

Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers

- Study Group: 16 Community-Based Primary Care Clinics
- Control: University of New Mexico (UNM) Liver Clinic
- Principle endpoint: sustained viral response – no detectable virus 6 months after completion of treatment

<table>
<thead>
<tr>
<th>Outcome</th>
<th>ECHO</th>
<th>UNM Liver Clinic</th>
<th>P-Value</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>N=261</td>
<td>N=146</td>
<td></td>
</tr>
<tr>
<td>Minority</td>
<td>68%</td>
<td>49%</td>
<td>P&lt;0.01</td>
</tr>
<tr>
<td>SVR* (Cure) Genotype 1</td>
<td>50%</td>
<td>46%</td>
<td>NS</td>
</tr>
<tr>
<td>SVR* (Cure) Genotype 2/3</td>
<td>70%</td>
<td>71%</td>
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*SVR = Sustained Viral Response

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<thead>
<tr>
<th>Selection Criteria</th>
<th>Examples</th>
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<tbody>
<tr>
<td>Common Diseases or conditions</td>
<td>Hepatitis C</td>
</tr>
<tr>
<td>Management is Complex</td>
<td>Diabetes and Endocrinology</td>
</tr>
<tr>
<td>Evolving Treatments and Medicines</td>
<td>HIV</td>
</tr>
<tr>
<td>High Societal Impact (Health and Economic)</td>
<td>Substance Use Disorders including Opioid addiction</td>
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<tr>
<td>Serious Outcomes of Untreated Disease</td>
<td>Psychiatry</td>
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<td>Improved Outcomes with Disease Management</td>
<td>Chronic Pain</td>
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<td>Tuberculosis</td>
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<td>Autism</td>
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<td>Palliative Care</td>
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Crisis Intervention Team (CIT)

• GOALS
  • increase officers’ abilities to respectfully and safely interact with persons with mental health and addictions to support officer job safety.
  • Reduce variability in training and responses.

PARTICIPANTS:
• Specialist team:
  • CIT detective, Psychiatrist, Social worker, Clinic coordinator
• Learners: Law enforcement organizations
  • First responders (fire/ems)
New Mexico Peer Education Program (NMPEP): Prisoner Health Is Community Health

Over 95% of incarcerated individuals will ultimately return to their communities, bringing with them the burden of their health needs.

Project ECHO® collaborates with the New Mexico Corrections Department, leveraging the ECHO model™ to make a powerful and lasting intervention in prisoner and prison community health.

The ECHO team trains incarcerated individuals to become peer educators, who increase their fellow-prisoners’ knowledge about the most common health conditions impacting prison populations: hepatitis C, HIV and other sexually transmitted infections, staph/MRSA infections, diabetes, and addiction.

NMPEP includes:
• 40-hour intensive training of peer educators within the prison site
• 10-hour health education training of other inmates by peer educators
• Monthly follow-up and training by the ECHO team to continue building skills and knowledge
• Monthly Project ECHO teleECHO™ clinics with ECHO staff and faculty, content experts, and peer educators from other prison sites

Since July 2009, NMPEP has trained 500 peer educators, who have led health classes and workshops for nearly 9,000 incarcerated individuals.

Peer educators gain self-efficacy, responsibility, and leadership skills, which carry over into their post-incarceration lives and the communities to which they return.

http://echo.unm.edu/        tel:(505)750-3246
Changing the World, Fast

NEW MEXICO
- Operating more than 25+ teleECHO clinics
- More than 300 community clinic sites

NATIONAL
- Operating in more than 30 states and growing
- More than 45 complex conditions

GLOBAL
- Operating in more than 16 countries and growing
- Goal of touching 1 billion lives by 2025

Key: US State Shading
- ECHO Impact
Key: ECHO Type
- ECHO Hub
- ECHO Superhub
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Replication Events

**Introduction**

- **90 Minute Video Conference with Dr. Arora**
- **Target Audience:** Anyone interested in ECHO
- **When:** Second Tuesday of every month

**Orientation**

- **1-Day On-Site Training in Albuquerque**
- **Target Audience:** Anyone interested in starting an ECHO but wanting to learn more
- **When:** Second Wednesday of every month

**Immersion**

- **3-Day On-Site Training in Albuquerque**
- **Target Audience:** Organizations ready to implement ECHO
- **When:** Second Wednesday – Friday of every month

http://echo.unm.edu/start-an-echo/orientation-events/
How to Join an ECHO project near you

Go to [http://echo.unm.edu](http://echo.unm.edu) Join an ECHO

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<thead>
<tr>
<th>ECHO Hub</th>
<th>ECHO Focus</th>
<th>Contact</th>
<th>Email</th>
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