# Project ECHO® (Extension for Community Healthcare Outcomes)

## The ECHO Model™

Project ECHO® is a platform for practice-based education and training, service delivery, and outcomes research developed at the University of New Mexico (UNM). The model has four basic components:

1) **Technology** (multipoint videoconferencing and web-based collaboration tools) to leverage scarce healthcare resources and to establish and develop communities of practice and learning;

2) **Disease management model** focused on improving outcomes by reducing variation in processes of care and **sharing best practices**;

3) Employs **case-based learning** using a guided-practice model that encourages the collaborative management of patients between multi-disciplinary teams of providers and subject matter experts; and

4) **Monitors** outcomes using a web-based database that meets local privacy and data security regulations.

## Moving Knowledge, Not Patients

ECHO is **a flexible model**. This hub-and-spoke educational platform allows experts in any field to share their knowledge with providers in rural and underserved communities using cloud-based video teleconferencing to teach a need based curriculum and to discuss provider needs. These teleECHO™ clinic sessions help create **communities of practice and learning with a peer-to-peer emphasis**. Project ECHO strengthens the healthcare system by empowering front-line primary care providers to **do more, for more patients**. It can be adapted to many specialty fields in and outside medicine where there is a need to train people to address complex problems.

## Effectiveness of the ECHO Model

From 2003 to 2011, the effectiveness of the ECHO model was evaluated by assessing the impact on rural clinicians participating in teleECHO clinics. Impact measurements included effect on treatment rates, self-efficacy, and overall professional satisfaction. The results of this research were first published in Hepatology[1] in September 2010.

Patient outcomes were also evaluated via a prospective cohort study demonstrating that treatment for hepatitis C virus (HCV) using the ECHO model is as safe and effective as treatment at an academic medical center; the results were published in the *New England Journal of Medicine* in June 2011[2].

### Touching One Billion Lives by 2025

Today, Project ECHO has **over 50 hub replication partners globally**, with over **40 sites in the U.S.** and more than **20 programs operating in 12 countries** including Canada, Uruguay, Argentina, Mexico, Ireland, India, Vietnam, Northern Ireland, Jamaica, Brazil, and Namibia. Project ECHO addresses **over 40 complex care conditions** including HIV, TB, HCV, chronic pain, endocrinology including diabetes, addiction and psychiatry, epilepsy, and rheumatology. The model has expanded to **population health and continuous quality improvement**. In collaboration with the Institute of Healthcare Improvement a new teleECHO clinic™ will focus on quality and process improvement in Federally Qualified Health Clinics in the US with the support of nationally recognized quality improvement experts who will provide guidance to implement change. Worldwide, every week dozens of teleECHO clinic sessions engage thousands of providers in underserved areas.

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[1]Arora, S., Kalishman, S., et al.  *Expanding access to hepatitis C virus treatment—Extension for Community Healthcare Outcomes (ECHO) project: Disruptive innovation in specialty care.*  Hepatology.  Volume 52, Issue 3,  pages 1124–1133, September 2010

[2]Arora, S., et al.  *Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers.*
New England Journal of Medicine. 364;23.  June 9, 2011;

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## Planning Worksheet for the ECHO platform – Part I

**What is your organization's overall mission and what priority objectives might be met through a telementoring program like ECHO?**

**What are the primary clinical and public health mentoring needs that you are prioritizing?**

**What are the top 3 – 5 challenges your organization is trying to address?**

1.

2.

3.

4.

5.

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**How prevalent is the topic you are trying to address via ECHO?** _____

**Will all the cases be presented or just the difficult cases?  What is the criteria?**

**History** *(of your organization's programs)***:**

**What current resources do you plan to direct towards this effort?:**

**Should a steering committee be created to have input on:**

- The disease states chosen for the clinics

- The order in which to launch the clinics

- Other_____

  _____

**If so, who will be included on the steering committee and at what point in the planning process will they engage?**

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## Part II

**What will your multidisciplinary team (hub) look like?**

**Subject experts (as didactic presenters and clinic participants for recommendations)**

- ❏ Disease specialist
- ❏ Public Health Nurse
- ❏ Pharmacist
- ❏ Pediatrician
- ❏ Internist
- ❏ Gynecologist/Obstetrician
- ❏ Laboratory personnel

- ❏ Quality Improvement Expert
- ❏ Psychologist
- ❏ Psychiatrist
- ❏ Nutritionist
- ❏ Registered Nurse
- ❏ Case Manager

- ❏ Community Health Worker/Promotora
- ❏ Epidemiologist
- ❏ Expert in border health issues
- ❏ Other_____

**Where will your hub be located?** _____

**What kind of additional equipment will your hub need to conduct teleECHO™ sessions?**

- ❏ Computers/Laptops
- ❏ Webcam

- ❏ Speakers
- ❏ Large Display

**Staff for administrative tasks and technical assistance**

- ❏ Clinic Coordinator  (bilingual)
- ❏ IT Staff (bilingual)

- ❏ Medical TB Expert Interpreter
- ❏ Other _____

**Where will your spoke sites be located?**

- ❏ University clinics
- ❏ Correctional facilities
- ❏ Residency programs
- ❏ Federally Qualified Health Centers
- ❏ Private family practices or pediatrics clinics

- ❏ School Nurses
- ❏ Rehab facilities
- ❏ Schools for health professionals
- ❏ Other_____

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**Identify the spoke sites you want to recruit (about 8-25) and the champion at each site**

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

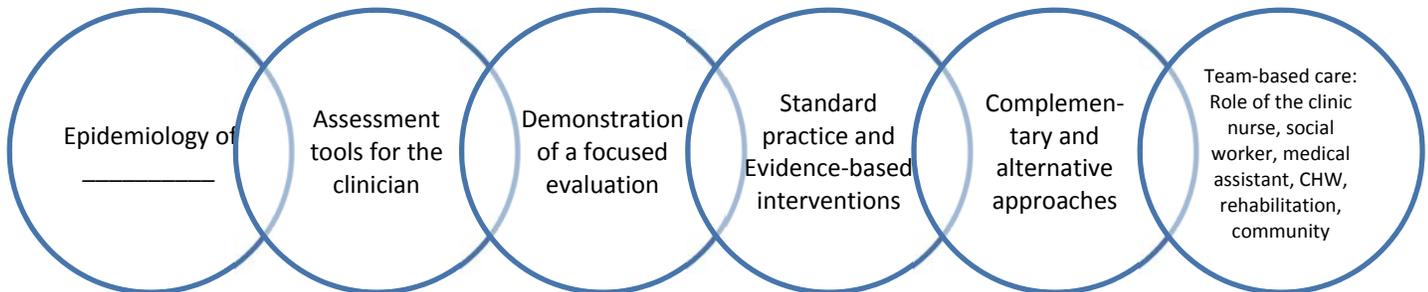**What types of providers will benefit from ECHO at the spoke sites?**

❑  Prescribing clinicians (physicians, NP or PA)

❑  Public Health Nurses

❑  Social workers

❑  Community Health Workers/Promotoras

❑  Pharmacists

❑  Clinical Nurses

❑  Students in the health professions

❑  Staff interested in becoming an ECHO Center of Excellence team

❑  Other _____

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**CURRICULUM DESIGN**

Besides case presentations, your targeted learners should be given the opportunity each week to benefit from didactics presented by experts in the field supported by references and contain three main learning objectives. Didactics are typically between 15-20 minutes in length with time for questions.  An ideal didactic curriculum will be interprofessional in scope and should follow a pattern similar to this:

Epidemiology of _____

Assessment tools for the clinician

Demonstration of a focused evaluation

Standard practice and Evidence-based interventions

Complemen-tary and alternative approaches

Team-based care: Role of the clinic nurse, social worker, medical assistant, CHW, rehabilitation, community

**Through the process of ECHO telementoring, participants will demonstrate these competencies:**
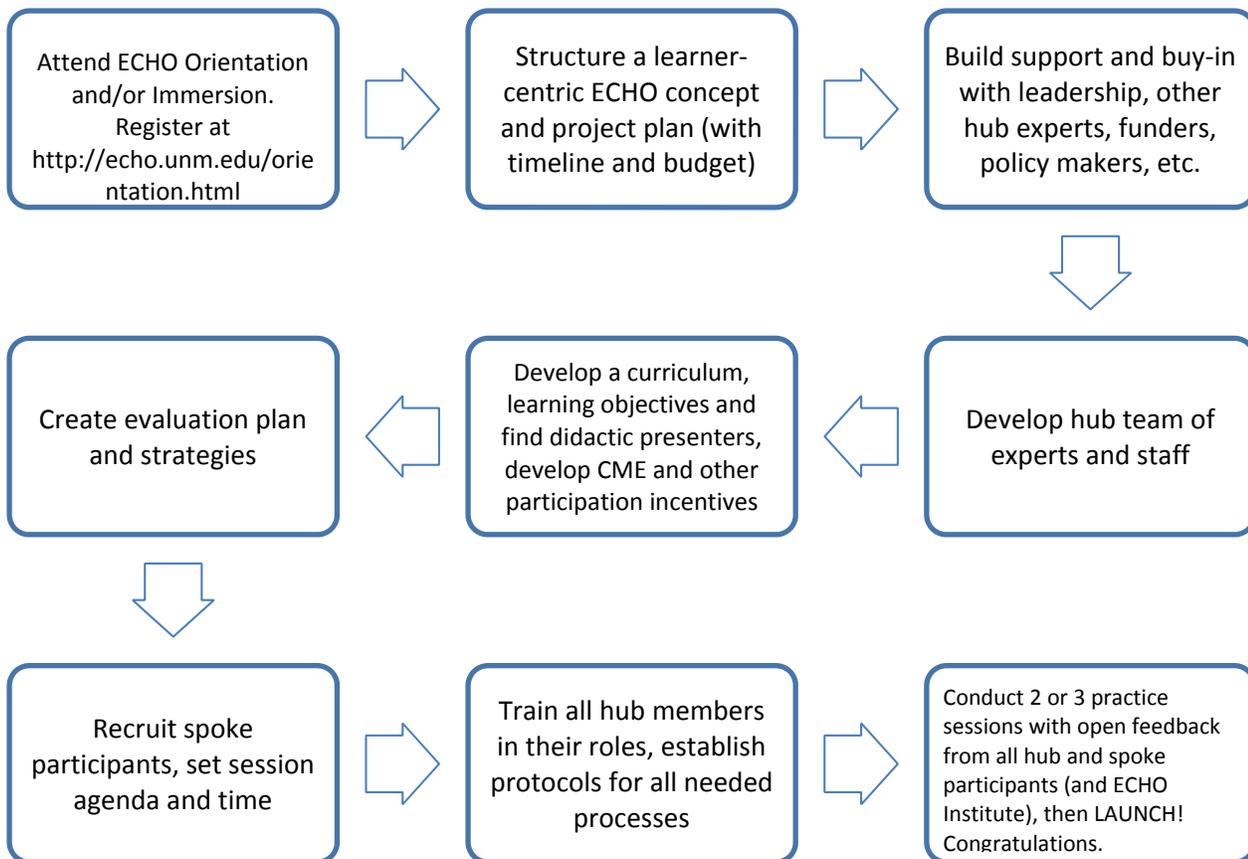
**1.**

**2.**

**3.**

**4.**

**5.**

**Evaluation:  How will you measure improvement in the above competencies?  Consider clinical outcomes and as well as training.  Do you have the data on treatment completion?**

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**Will you offer Continuing Medical Education credits (CME) or other incentives for participation and who will provide them (which institution)?**

**Next Steps:**

| | | |
|---|---|---|
| Attend ECHO Orientation and/or Immersion. Register at http://echo.unm.edu/orientation.html | Structure a learner-centric ECHO concept and project plan (with timeline and budget) | Build support and buy-in with leadership, other hub experts, funders, policy makers, etc. |
| Create evaluation plan and strategies | Develop a curriculum, learning objectives and find didactic presenters, develop CME and other participation incentives | Develop hub team of experts and staff |
| Recruit spoke participants, set session agenda and time | Train all hub members in their roles, establish protocols for all needed processes | Conduct 2 or 3 practice sessions with open feedback from all hub and spoke participants (and ECHO Institute), then LAUNCH! Congratulations. |

**Notes**

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