

HPEC 2024 Oral Abstract for Innovations in Education

Title: *Building on Project ECHO® methods to develop capacity for hepatitis C elimination*

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Project ECHO: Hawai`i Learning Groups

Context

Hawaii has one of the highest rates of liver cancer incidence and mortality in the US, primarily caused by viral hepatitis. Safe and effective treatments exist to cure hepatitis C infection (HCV). Hawaii has a statewide goal aligned with a national initiative to eliminate HCV by 2030. Hawaii's island geography makes access to quality care difficult for isolated populations, including those in rural areas, incarcerated, or among people who use drugs.

Both local and national experience has identified treatment of hard to reach populations as a primary bottleneck in HCV elimination efforts. Hepatitis C is transmitted through blood-blood contact. Risk factors include injections overseas, blood transfusions prior to 1992, low hygiene tattoos, and injection drug use. Earlier screening efforts targeted "baby boomers" as at risk with many unaware of their chronic infection. Current recommendations are for one-time screening everyone over age 18 and anyone with ongoing risk factors. New infections are increasing among young people who use injection drugs.

Street medicine clinics and syringe exchanges are sites that connect with higher risk populations. These include the Hawai`i Health and Harm Reduction Center and Federally Qualified Health Centers, both of which have statewide locations but few providers treating HCV. Methadone clinics and prescribers of medications for opioid use disorder are contact points, but multiple barriers exist to robust screening and connection to care at these sites. The prison system represents an excellent opportunity to identify and treat those chronically infected and positively, programs are progressing in these Hawai`i locations to include these ECHO trainings.

The ECHO model was identified as a best practice to develop a localized network of treating providers using case-based, inter-disciplinary, collaborative learning with hepatitis experts. Along with case-based learning, the elements of the ECHO model are the promotion of best practices, measured outcomes, and leveraging technology.

We use video-conferencing to develop a sustainable hub-and-spoke program of mentorship and guided practice. The hub is composed of specialists and content experts, and the spokes are primary care providers and their teams. Project ECHO was an early adopter of the Zoom platform and post-Covid familiarity with remote meetings has lowered barriers to participation, even for under-resourced providers who can join with a cell phone or telephone line.

We recently completed a third series centered on hepatitis evaluation and treatment. In 2021, we produced a 16-week series focused on HCV; in 2022, 16-weeks focused on hepatitis B (HBV) and in 2023, 12-weeks focused on HCV.

Objectives:

Our goal is to build capacity for the evaluation and treatment of chronic HCV.

Description of Innovation:

We emphasize the primacy of case-based learning by typically starting each session with the patient case. Current sessions have 45 minutes for case presentation and discussion and 40 minutes for a didactic with Q&A. The program leads model inclusivity and a team-based approach to promote interdisciplinary learning.

A Case Presentation Form was designed to communicate clinical content and to focus discussions. It included those elements needed for insurance approval to prescribe HCV medicines in Hawaii.

A facilitation method is used that separates the patient background, history and physical exam from the expert recommendations. After the presentation, all participants are invited to ask questions to gain a deeper understanding of the patient’s case. The facilitator then summarizes this background and confirms the accuracy of the summary with the presenting provider. Then, the content experts and others are invited to provide recommendations regarding further evaluation and treatments. At the end, the expert recommendations are summarized to the group. This method fosters greater participation and helps level the roles among the group. The expression “All teach, all learn” becomes manifest in these discussions.

We are accredited to offer continuing education awards to physicians, nurses, pharmacists and social workers. We collect evaluation surveys after each session in REDCap and deliver a participant- and session- specific, printable CE certificate upon survey completion.

Presentation slides, references and resources are posted on the HLG webpages after each session to provide greater depth of learning for interested participants.

Evaluation of Innovation:

Average attendance increased over the 3 years to include providers from the Hawaii Dept of Public Safety prison system, Community Health Centers, pharmacies, drug treatment programs and insurance carriers.

	Individual Attendees
HCV ‘21	45
HBV ‘22	95
HCV ‘23	115

This year, the Medicaid Quest plans eliminated prior authorization requirements for prescribing direct-acting antiviral treatments for HCV and explicitly recognized the value of this HCV ECHO program therein.

From January 2021 through October 2023, we produced 44 clinics. Forty-six de-identified patients were presented and discussed. We had 1455 hours of attendance by 197 individuals. Fifty-nine physicians, 30 pharmacists, and 56 nurses participated from zip codes across all the Hawaiian Islands.

Through REDCap, we distributed pre- and post- series questionnaires. Twenty-six questions were grouped by Self-efficacy, Access, Clinical Benchmarks, Series Evaluation, and Comfort with practical practice goals like vaccination, screening, lab interpretation, and use of standing orders.

Of those non-faculty who completed the questionnaires:

	<i>Agreed or Strongly Agreed their participation reduced the need for travel for their patients</i>	
HCV '21	8/11	73%
HBV '22	30/37	81%
HCV '23	25/28	89%

	<i>Agreed or Strongly Agreed their prescribing practice will change as a result of what they learned</i>	
HCV '21	8/11	73%
HBV '22	24/37	65%
HCV '23	14/28	50%

	<i>Agreed or Strongly Agreed their referral pattern will change as a result of what they learned</i>	
HCV '21	7/11	64%
HBV '22	27/37	73%
HCV '23	19/28	68%

After participating in the 2023 HCV ECHO series, 68% of respondents agreed or strongly agreed with the statement: *“Compared to other providers, I can manage primary care liver problems very well”* compared to 36% before participating in the training(s) – a 32% increase.

Discussion/ Key Message:

It is always a challenge for busy clinicians to get time to put together a patient case for discussion. We modeled the process early in each series by working with a couple clinicians to prepare the first weeks' presentations. We emphasize a non-judgmental discussion space and confidentiality. For those few sessions when no one was able to come up with a patient case, we relied on a 3-4 minute video of a patient storyteller who shared their experience with hepatitis. These videos uniformly prompted stimulating and revealing discussions.

The program would be improved by having greater support among clinic leadership and insurance payors to provide the necessary time and resources for a clinician to prepare a

patient case presentation. This requires a recognition of the tradeoff of one or two patient appointment slots for building future capacity for specialty care.

These programs are under-resourced to provide an even deeper learning experience. The program would be improved by having recommendations for a presented case written up, reviewed and edited by the expert team and returned in a timely fashion to the presenting provider for their use in patient care.

The program would be improved by having the recorded videos reviewed, edited and posted for learners to re-visit.

The program would be improved by a more skilled analysis of pre- and post- participation outcome measures. A deeper connection to measured outcomes beyond those self-reported, such as lab and prescribing data, would be another significant step.

A program of mentorship and intentional education for primary care participants was shown to increase the capacity for the management and treatment of HCV. Ongoing efforts like these are essential to hepatitis C elimination plans in Hawai'i. Centering patients and provider experience by emphasizing case-sharing as the primary learning method has resulted in strong engagement. Participants reported changes in prescribing and referral practices, expressed improved confidence in managing liver conditions, and strong program satisfaction.

Target Audience:

Educators, primary care providers, pharmacists, health care systems, public health workforce

References:

National Elimination Plan: JAMA. 2023;329(15):1251-1252. doi:10.1001/jama.2023.3692

Hawai'i Elimination Plan: <https://www.hepfreehawaii.org/hep-free-2030>

HCV ECHO 2023 Resources: <https://www.hawaiilearning.org/hcv-2023-resources/>