Expanding the Reach of Intestinal Rehabilitation – ECHO for Intestinal Failure

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SBS Care is Disparate and Difficult for Patients

Intestinal Transplant Center

Intestinal “Rehab” Center

Map of United States showing locations of Intestinal Transplant Centers and Intestinal “Rehab” Centers.
Moving Knowledge Instead of People

https://echo.unm.edu/about-echo/model/
## Treatment Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>ECHO</th>
<th>UNMH</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>n = 261</td>
<td>n = 146</td>
<td></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>
<td>ns</td>
</tr>
</tbody>
</table>

*SVR=sustained viral response

Benefits to Rural Clinicians

- No cost CMEs and Nursing CEUs
- Professional interaction with colleagues with similar interest
  - Less isolation with improved recruitment and retention
- A mix of work and learning
- Access to specialty consultation with GI, hepatology, psychiatry, infectious diseases, addiction specialist, pharmacist, patient educator
### ECHO now reaching a breadth of areas

- Antimicrobial Stewardship
- Autism
- Behavioral Health
- Bone Health
- Cancer
- Cardiology
- Chronic Lung Disease
- Chronic Pain
- Crisis Intervention
- Diabetes and Endocrinology
- Education
- Geriatrics
- Good Health and Wellness in Indian Country
- Hepatitis
- High-Risk Pregnancy
- HIV/AIDS
- Infectious Disease
- Integrated Addictions & Psychiatry
- Laboratory Medicine
- LGBT Health
- Opioid Use Disorder
- Palliative Care
- Pediatrics
- Prison Peer Education
- Quality Improvement
- Rheumatology
- Sexually Transmitted Diseases
- Trauma-Informed Care
- Tuberculosis
The Expanding Capacity for Health Outcomes Act of 2019 (ECHO 2019 Act)

Introduced by Senators Schatz (D-HI), Kaine (D-VA), and Murkowski (R-AK)

Rural Health Challenges
Rural areas in the United States have many health care challenges, including access to care, especially specialty care, and higher rates of chronic diseases and potentially preventable deaths.\(^1\)

The ECHO 2019 Act increases access to health care services in rural areas and for medically underserved areas and populations through grants and technical assistance to evaluate, develop, and expand the use of technology-enabled collaborative learning and capacity building models.

Technology-enabled collaborative learning and capacity building models are distance health education models that connect specialists with other health care professionals through simultaneous interactive videoconferencing to facilitate case-based learning, disseminate best practices, and evaluate outcomes.

- These models have been shown to address important gaps in health care for underserved populations and improve health outcomes.\(^2\)
- The original model of this type, Project ECHO (Project Extension for Community Healthcare Outcomes) began in 2003 at the University of New Mexico to expand access to care for hepatitis C in rural New Mexico using interactive videoconferencing to link specialist teams ("hubs") with primary care providers ("spokes") in rural and underserved areas.
- The Project ECHO model and similar models now are used for a wide variety of disease conditions, including substance use disorder and mental health, across the United States and other countries.
New AMA Policy Supports Project ECHO, CPAP Telemedicine Programs

At its Annual Meeting this week, the American Medical Association adopted a new policy calling for increased implementation of telemedicine programs like Project ECHO and CPAP to boost access to resources for rural and remote care providers.

Source: ThinkStock
LIFT-ECHO Project to be launched May 2019

- ECHO Host at Mount Sinai Hospital, New York (ISMMS)
- Initial launch in the USA
- Fidelity to the original ECHO Model
- Supported by the ECHO Institute in Albuquerque, NM
- Expert medical Advisory Board

www.liftecho.org
Project Advisory Board

▶ Mount Sinai, New York **
  – Kishore Iyer – Principal Investigator
  – David Gutierrez – Technical Services
  – Marjorie Niesen Holtz – ECHO Coordinator

▶ Univ of Illinois, Chicago**
  – Kelly Tappenden, RD, PhD, Co-Investigator

▶ Rhode Island Hospital (Brown Univ)**
  – Marion Winkler, RD, PhD, Co-Investigator

▶ ASPEN**
  – Michelle Spangenburg, MS, RD, LDN (ASPEN)

▶ Oley Foundation**
  – Joan Bishop
  – Lisa Metzger

▶ Mayo Clinic Scottsdale
  – John DiBaise, MD

▶ Univ of Nashville
  – Doug Seidner, MD

▶ Optum Healthcare
  – Anthony Bonagura, MD, National Medical Director, Transplant & Complex Conditions

▶ Interlink Network Services/Kaiser Permanente
  – Ron Potts, MD, Chief Medical Officer, Interlink, Chief of Quality, Kaiser Transplant
Project Plan

▶ Tele-ECHO Clinics for Intestinal Failure
  – 2 Clinics per month; 1st and 3rd Tuesday afternoon
  – Each Clinic of about 60 min
  – Plan to discuss 1-2 cases per clinic
  – Short didactic
  – Develop a library
  – Provide free CE credits for participants (ASPEN > MD, RD, RN, Pharm D)

▶ Project Coordinator at Sinai
  – Will triage and coordinate cases
  – Cases to be presented to standard templates
  – Recommendations to presenter on completion

▶ NOTE: ECHO Clinic participation not open directly to patients
Strategy

► Funding
  – Seed Funding from:
    • Intestinal rehab program, Mount Sinai
    • Zealand Pharmaceuticals, Denmark
    • Oley Foundation
  – Plan to submit application for extramural grant funding

► Currently recruiting participating ‘spokes’
  – Clinicians at Home Care companies
  – Non-specialist physicians at medium sized-hospitals
    • Large community hospitals, smaller academic center

► Plan to study:
  – Participation and value to participants
  – Patient reported Quality of Life
  – Initial project for adult patients only, ? pediatrics
Approximately 100 participants in initial LIFT-ECHO sessions.
1. Recognizing intestinal failure – definition, types, clinical features, outcomes  
   Date: May 7, 2019 – Dr Douglas Seidner, MD, Vanderbilt University Medical Center

2. Prescribing PN 101 and transitioning to HPN  
   Date: May 21, 2019 – Dr Vanessa Kumpf, Pharm D, Vanderbilt University

3. Clinical and laboratory monitoring for PN  
   Date: June 4, 2019 – Dr Marion Winkler, PhD, RD, Rhode Island Hospital, Brown University, Rhode Island

4. Nutritional Management of Intestinal failure  
   Date: June 18, 2019 – speaker: Dr. Kelly Tappenden. PhD, RD

   NB: Note no meeting on July 2, due to CIRTA 2019 in Paris, and coming up to to July 4th

5. Medical management of intestinal failure  
   Date: July 16, 2019 – speaker: TBD

6. New growth factors in management of intestinal failure  
   Date: Aug 6, 2019 – speaker: Dr. Kelly Tappenden. PhD, RD

7. Surgery for intestinal failure  
   Date: Aug 20, 2019 – speaker: TBD

8. Indications and outcomes for intestinal transplant  
   Date: Sept 3, 2019 – speaker: TBD
What can you do to engage?

▶ Participate in the LIFT-ECHO Project
  – Commit to a *minimum* of 2 hours/month for 4 months ie 8hrs in 4 months
  – Consider submitting cases for presentation
  – Participate in case discussions
  – Engage & spread the word

▶ *AFTER initial module of 4 months (IF-101?)*
  – *Possible monthly ECHO-IF Clinic*
  – Drop-in ‘master-class’

*Are you a part of ECHO®? Check us out at [www.liftecho.org](http://www.liftecho.org)*

*Kishore.iyer@mountsinai.org*