ECHO Autism

Extension for Community Healthcare Outcomes (ECHO) Autism

Helping pediatricians care for youth with ASD: New technology and how it is being used to teach primary care providers about ASD across New York State

Presented by:
Lisa Latten and Shane Lawson
Launched in 2003, Project ECHO grew out of one doctor’s vision. Sanjeev Arora, MD, a liver disease specialist at the University of New Mexico Health Sciences Center in Albuquerque, was frustrated that he could serve only a fraction of the HCV patients in his state who needed treatment. He wanted to serve as many patients with HCV as possible, so he created a free, virtual clinic and mentored community providers across New Mexico in how to treat the condition.

“Using a revolutionary model of telementoring, collaborative medical education and care management, Project ECHO empowers front-line primary care professionals to provide the right care, in the right place, at the right time.”
WHAT IS ECHO?
**Hub & Spoke Model** – ECHO provides front-line providers with the knowledge and support they need to care for complicated patients they would otherwise refer out. ECHO links expert specialist teams at an academic ‘hub’ with primary care providers in local communities – the ‘spokes’ of the model.
ECHO connects providers with specialists through ongoing, interactive, telementoring sessions.

- ECHO creates ongoing knowledge networks by linking primary care providers at numerous locations with a team of expert inter-disciplinary specialists, to mentor them to treat their patient cases.

- These specialist teams use low-cost, multi-point videoconferencing technology to conduct teleECHO clinics with community providers.

- Specialists serve as mentors, training community providers to provide care in clinical areas that previously were outside their expertise.
At the ECHO Clinic, the Hub Team of Specialists convenes at a single location and uses ZOOM videoconferencing technology to open the clinic.

Providers from spoke sites all over check into the clinic remotely from various locations to receive telementoring.
CREATION OF A KNOWLEDGE NETWORK AND LEARNING LOOPS
WHY ECHO?
THE UNDERSERVED PATIENTS

PROBLEM:
Underserved patients have limited access to quality specialist care for common complex conditions.

SOLUTION:
A model that expands access to care by leveraging telementoring and guided practice to build system capacity by empowering primary care providers to care for complex conditions at their local clinic.
WHY ECHO?
THE PRIMARY CARE PROVIDER

PROBLEM:
• Want to advance their skills, career, and professional relationships.
• Lack access to knowledge and training to provide specialty care for their patients.
• Providers often feel socially and professionally isolated.

SOLUTION:
• Providers engage in community with like-minded fellow providers and specialists from academic centers.
• Develop specialized knowledge.
• Provide specialty care for common complex conditions.
• Receive CME credits.

“Providers participating in ECHO in New Mexico felt their professional isolation diminish, professional satisfaction and self-efficacy for treating hepatitis C increase.”

WHY ECHO?
THE ECHO HUB/FQHC/COMMUNITY HEALTH CENTER

PROBLEM:
• Limited ability to provide specialty care for common complex conditions.
• Difficulties recruiting and retaining community providers.

SOLUTION:
• Primary care providers acquire new skills and competencies, expanding access to care.
• Primary care providers become part of a community of learners, increasing their professional satisfaction while their feelings of professional isolation decrease.

“Through ECHO, FQHCs have a way to expand access to care for complex chronic conditions and serve more patients, while keeping treatment dollars in the community. They also acquire a new tool for recruiting and retaining providers.”
HOW IS ECHO DIFFERENT FROM TELEMEDICINE?

Key Differences

• ECHO works to build expertise at the front lines of care to safely and effectively manage common complex conditions so that providers can meet the need for specialty care in their communities.

• ECHO is an ongoing learning network that is not merely consultative and does not develop a patient-provider relationship.

• The ECHO model uses “force multiplication” to exponentially increase workforce capacity through telementoring and guided practice.

LET’S PLAY A QUICK GAME!
LET’S PLAY A GAME!

Instructions:

A statement will appear on the screen.

Please read the statement and decide if it refers to teleECHO or Traditional Telemedicine.

Raise your hand at the appropriate time to indicate whether you think the statement falls into the category of “teleECHO” or the category of “Traditional Telemedicine.”

READY?...HERE WE GO!
STATEMENT #1

“Is an educational model.”

teleECHO or Traditional Telemedicine
## LET’S PLAY A GAME!

<table>
<thead>
<tr>
<th>teleECHO</th>
<th>Traditional Telemedicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Is an educational model.</td>
<td>• Is a model for patient care.</td>
</tr>
</tbody>
</table>

**ONWARD TO THE NEXT STATEMENT!**
STATEMENT #2

“Uses technology that allows the specialist to remotely diagnose and treat the patient.”

teleECHO or Traditional Telemedicine
# LET’S PLAY A GAME!

<table>
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<td>• Uses technology to leverage scarce resources and create knowledge networks of community providers in underserved areas.</td>
<td>• Uses technology that allows the specialist to remotely diagnose and treat the patient.</td>
</tr>
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</table>

**ONWARD TO THE LAST STATEMENT!**
STATEMENT #3

“The primary care provider retains care of their patients.”

teleECHO or Traditional Telemedicine
**LET’S PLAY A GAME!**

<table>
<thead>
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<td>• Uses technology that allows the specialist to remotely diagnose and treat the patient.</td>
</tr>
<tr>
<td>• The primary care provider retains care of their patients.</td>
<td>• The specialist assumes care of the patient.</td>
</tr>
</tbody>
</table>

Both teleECHO and Traditional telemedicine can be beneficial to underserved communities!
ECHO AT THE UNIVERSITY OF ROCHESTER

- URMC has applied the ECHO Model to support general psychiatry, geriatric mental health and dementia care, palliative care, eating disorders, and more!

- We are currently conducting a research study in the Division of Developmental and Behavioral Pediatrics to assess the effectiveness of the ECHO model applied to the care and treatment of families affected by autism spectrum disorder (ASD) in underserved communities.

- The ECHO Autism study is being implemented by the Autism Treatment Network with funding from Autism Speaks and Autism Intervention Research on Physical Health (AIR-P).

To learn more about Project ECHO at URMC, visit: http://www.urmc.rochester.edu/project-echo
ECHO AUTISM AT THE UNIVERSITY OF ROCHESTER

- The Developmental and Behavioral Pediatrics Clinic at URMC is our high volume clinical services home.

- The DBP Clinic offers a multitude of services and programs from evaluation and diagnosis to our feeding challenges program.

- ECHO Autism aims to empower primary care providers in underserved communities to provide front line care to children and families affected by autism spectrum disorder in their local communities.

To learn more about the Developmental and Behavior Pediatrics Clinic at URMC, visit: https://www.urmc.rochester.edu/childrens-hospital/developmental-disabilities.aspx
ECHO AUTISM

This study is being conducted across 10 sites of the Autism Treatment Network:

- Children’s Hospital of Philadelphia
- Lurie Center for Autism
- University of Pittsburgh Medical Center
- University of Rochester
- Cincinnati Children’s Hospital Medical Center
- Nationwide Children’s Hospital
- Arkansas Children’s Hospital/UAMS
- Vanderbilt University Medical Center
- The Center for Autism & Neurodevelopmental Disorders at UC Irvine
- Holland Bloorview Kids Rehabilitation Hospital
- Thompson Center for Autism & Neurodevelopmental Disorders at the University of Missouri

To learn more, visit: www.echoautism.com

The Autism Treatment Network has received funding through Autism Speaks and HRSA (AIR-P) to conduct a study to evaluate the effectiveness of the ECHO model as it relates to care of children with autism spectrum disorder.
OUR ECHO HUB TEAM

**Specialist Team**

**Autism Lead Specialist** – Susan Hyman, MD  
**Clinical Psychologist** – Ken Shamlian, PsyD  
**Clinical Dietician** – Brianne Schmidt, RD  
**Family Navigator** – Lisa Luxemberg, LMSW  
**Parent Expert** – Lisa Latten, MS Ed

**ECHO Autism Production and Support Team**

**ATN Site Coordinator** – Shane Lawson  
**Technical Director** – Keith Stein  
**Data Manager** – Samantha Hochheimer
We have recruited primary care providers from 15 different “spoke” sites in NYS:

- Monroe County: 7 spoke sites
- Steuben County: 2 spoke sites
- Chemung County: 1 spoke site
- Ontario County: 1 spoke site
- Ostego County: 1 spoke site
- Livingston County: 2 spoke sites
- Jefferson County: 1 spoke site
## ECHO AUTISM CLINICS
### ANATOMY OF AN ECHO CLINIC

<table>
<thead>
<tr>
<th>Time Allotment</th>
<th>Procedure</th>
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<tbody>
<tr>
<td>15 minutes</td>
<td>Introductions &amp; Announcements</td>
</tr>
<tr>
<td>30 minutes</td>
<td>Case Presentation No. 1</td>
</tr>
<tr>
<td>25 minutes</td>
<td>Didactic Presentation</td>
</tr>
<tr>
<td>30 minutes</td>
<td>Case Presentation No. 2</td>
</tr>
<tr>
<td>20 minutes</td>
<td>Wrap-Up/Q&amp;A</td>
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</tbody>
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The Rochester site holds its ECHO Autism clinics on the 1st and 3rd Fridays of each month from 11:30AM to 1:30PM.
## ECHO AUTISM CLINICS

### ECHO AUTISM CURRICULUM

<table>
<thead>
<tr>
<th>Date</th>
<th>Presentation Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/3/2017</td>
<td>What is Autism?</td>
<td>Susan Hyman, MD</td>
</tr>
<tr>
<td>3/17/2017</td>
<td>Screening, Referral, and Common Medical Concerns</td>
<td>Susan Hyman, MD</td>
</tr>
<tr>
<td>4/7/2017</td>
<td>Sleep and Autism</td>
<td>Ken Shamlian, PsyD</td>
</tr>
<tr>
<td>4/21/2017</td>
<td>Irritability, Autism, and Medication Use</td>
<td>Susan Hyman, MD</td>
</tr>
<tr>
<td>5/5/2017</td>
<td>Constipation and Autism</td>
<td>Brianne Schmidt, RD</td>
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<tr>
<td>5/19/2017</td>
<td>ADHD, Autism, and Medication Use</td>
<td>Susan Hyman, MD</td>
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<tr>
<td>6/2/2017</td>
<td>Anxiety, Autism, and Medication Use</td>
<td>Ken Shamlian, PsyD</td>
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<tr>
<td>6/16/2017</td>
<td>Supporting Parents</td>
<td>Lisa Latten, MS Ed</td>
</tr>
<tr>
<td>7/7/2017</td>
<td>Resources – Local, State, Regional, and National</td>
<td>Lisa Luxemberg, LMSW</td>
</tr>
<tr>
<td>7/21/2017</td>
<td>Common Behavior Strategies in Autism: What is ABA?</td>
<td>Ken Shamlian, MS Ed</td>
</tr>
<tr>
<td>8/4/2017</td>
<td>Feeding Issues in Autism</td>
<td>Brianne Schmidt, RD</td>
</tr>
<tr>
<td>8/18/2017</td>
<td>What is IEP?</td>
<td>Lisa Latten, MS Ed</td>
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</tbody>
</table>
To learn more about Project ECHO from UNM:
http://echo.unm.edu/

To learn more about ATN and ECHO Autism:
http://www.echoautism.com

To learn more about Project ECHO at URMC:
http://www.urmc.rochester.edu/project-echo

To learn more about the Developmental and Behavioral Pediatrics Clinic at URMC:
https://www.urmc.rochester.edu/childrens-hospital/developmental-disabilities.aspx
QUESTIONS?

Thank you!