ECHO Autism

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Autism – Supply and Demand

Differences in behavior

Differences in social-communication

Anxiety
ADHD
Cognitive
Seizures
Sensory
Adaptive
GI
Sleep

Autism

1 in 68
5x
### Family Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is this autism?</td>
<td>Have you heard of this new treatment?</td>
</tr>
<tr>
<td>How can I get him to sleep?</td>
<td>I don’t know which way to turn!!</td>
</tr>
<tr>
<td>Will my child have a normal life?</td>
<td>Who do I listen to?</td>
</tr>
<tr>
<td>Why won’t my child eat?</td>
<td>I wonder if…</td>
</tr>
<tr>
<td>Am I doing enough for my child?</td>
<td>What about supplements?</td>
</tr>
<tr>
<td>This child did not come with instructions!!</td>
<td></td>
</tr>
<tr>
<td>Is it vaccines?</td>
<td></td>
</tr>
<tr>
<td>Why isn’t the school helping?</td>
<td></td>
</tr>
<tr>
<td>What therapies does he need?</td>
<td></td>
</tr>
<tr>
<td>What caused my child to have autism?</td>
<td></td>
</tr>
</tbody>
</table>

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### Primary Care Perspective

- Minimal training in autism and developmental disabilities
  - Total of 4 weeks exposure in pediatrics residency
  - Lack of confidence in recognizing and managing autism
  - Lack of time to efficiently care for children with autism

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### Autism Treatment Network

- Clinicians, Researchers and Parents
- Diagnosis and Treatment Guidelines
- Parent and Community Provider Toolkits
- Critical Research around autism and medical co-morbidities
Supply and Demand
- Rise in autism awareness
- Rise in referrals
- "Whole Care for the Whole Family"
- Primary Care readiness for ASD?
- Shortage of specialists

What if...
- Primary Care Providers were equipped to screen more thoroughly and could send more detailed referrals?
- Primary Care Providers took additional steps to help children while waiting for a formal diagnosis?
- Primary Care Providers felt more comfortable treating medical conditions in children with autism?
- Parents felt confident in going to their PCP for their autism and developmental questions?

Moving Knowledge, Not Patients
Extension for Community Healthcare Outcomes (ECHO)

- Consistent access to interdisciplinary team of experts through video conferencing
- Work through real cases together to share knowledge
  - All teach, all learn
- Evidence based recommendations provided
- Access to patient and parent education
- Network of like-minded providers
ECHO Autism Platform

ECHO Autism Clinic Framework

Clinic Flow
- Introductions
- Case Presentation
  - Clarifying Questions
  - Recommendations
- Brief Didactic
- Q & A
- Wrap Up
- Adjourn

ECHO Autism Hub Team

Curriculum
- What is ASD?
- While You Wait...
- Screening & Referral
- Sleep and Autism
- Irritability, Autism and Medication Use
- Constipation and Autism
- ADHD, Autism and Medication Use
- Anxiety, Autism and Medication Use
- Parent Support
- Resources – Local, State, Regional, and National
- Common Behavior Strategies in ASD, What is ABA?
- Feeding Issues in Autism
- What is an IEP?
ECHO Autism Benefits

- Shared Knowledge
- Access to specialists
- Network of providers
- No cost CME
- Reduces costs to families and insurer
- Improves access for families
- Maintenance of Certification Credit available

ECHO Autism

ECHO AUTISM PILOT STUDY

- 6-Month Pilot Study
- Twelve 2-hour ECHO Autism clinics
- 2 clinics per month
- Specific focus on:
  - Screening and Identification of ASD Symptoms
  - Management of Medical and Psychiatric Comorbidities


ECHO Autism

Improvement in Overall Self-Efficacy

Improvement in Overall Self-Efficacy
**Improvement in Self-Efficacy Subscales**

![Bar chart showing improvement in self-efficacy subcategories](image)

**Adherence to Autism Screening Guidelines**

- **Pre-Test:** 0%
- **Post-Test:** 70%

*Using ASD-specific screening tools at 100% of 18-month and 24-month well-child visits conducted over the prior 6-month period.

**Participant Satisfaction with ECHO Autism**

<table>
<thead>
<tr>
<th>Question</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in ECHO Autism improved my ability to care for children with autism in my practice</td>
<td>1.57</td>
<td>0.51</td>
</tr>
<tr>
<td>I learned best-practice care in autism through participation in ECHO Autism</td>
<td>1.50</td>
<td>0.52</td>
</tr>
<tr>
<td>I was able to connect with peers and colleagues through participation in ECHO Autism</td>
<td>1.57</td>
<td>0.51</td>
</tr>
<tr>
<td>ECHO Autism specialists provided guidance in managing children with autism</td>
<td>1.36</td>
<td>0.50</td>
</tr>
<tr>
<td>I respected the professional advice received from ECHO Autism experts</td>
<td>1.21</td>
<td>0.43</td>
</tr>
<tr>
<td>The didactic presentations enhanced my knowledge about autism</td>
<td>1.43</td>
<td>0.51</td>
</tr>
<tr>
<td>Discussions with other participants enhanced my knowledge about autism</td>
<td>1.64</td>
<td>0.63</td>
</tr>
<tr>
<td>Case-based learning increased my knowledge about autism</td>
<td>1.29</td>
<td>0.47</td>
</tr>
<tr>
<td>I have been satisfied with the technology associated with the ECHO Autism clinic</td>
<td>1.43</td>
<td>0.51</td>
</tr>
<tr>
<td>The technology for the ECHO Autism clinic functioned smoothly</td>
<td>1.50</td>
<td>0.65</td>
</tr>
</tbody>
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Pilot Conclusions

- ECHO Autism appears to be feasible, effective, and associated with high satisfaction among participants.
- PCPs demonstrated improvements in:
  - Self-efficacy in ASD screening and management
  - Adherence to AAP autism screening guidelines
  - Use of ASD-specific resources
- Knowledge and adherence to best-practice screening guidelines should foster earlier diagnoses
- PCP competence in managing co-morbid conditions should have beneficial effects on overall health and reduced health-care costs.

ECHO Autism in Missouri

- Participants – 964
- Unique # of individuals – 251
- Sessions held – 50
- CME hours – 406.5

Missouri Pilot \(\rightarrow\) Autism Treatment Network Replication Study
1. Arkansas Children’s Hospital  
2. Children’s Hospital of Philadelphia  
3. Cincinnati Children’s Hospital  
4. Holland Bloorview Kids Toronto, Canada  
5. Nationwide Children’s Hospital  
6. Lurie Center/Harvard  
7. UC Irvine  
8. University of Pittsburgh  
9. University of Rochester  
10. Vanderbilt University

ECHO Autism Clinical Partners

- University of Alaska with the Alaska Native Medical Center  
- University of New Mexico with the Indian Health Service (Navajo Nation)  
- University of Alabama Birmingham  
- Kippipeao Therapies – Nairobi Kenya

Join the ECHO movement

- Be part of reducing the waitlist, improving care and supporting families  
- Learn more at [www.echoautism.com](http://www.echoautism.com) or [www.showmeecho.com](http://www.showmeecho.com)

Come learn with us!!
ECHO Autism
www.echoautism.com
Bringing Best Practice Autism Care to Primary Care