

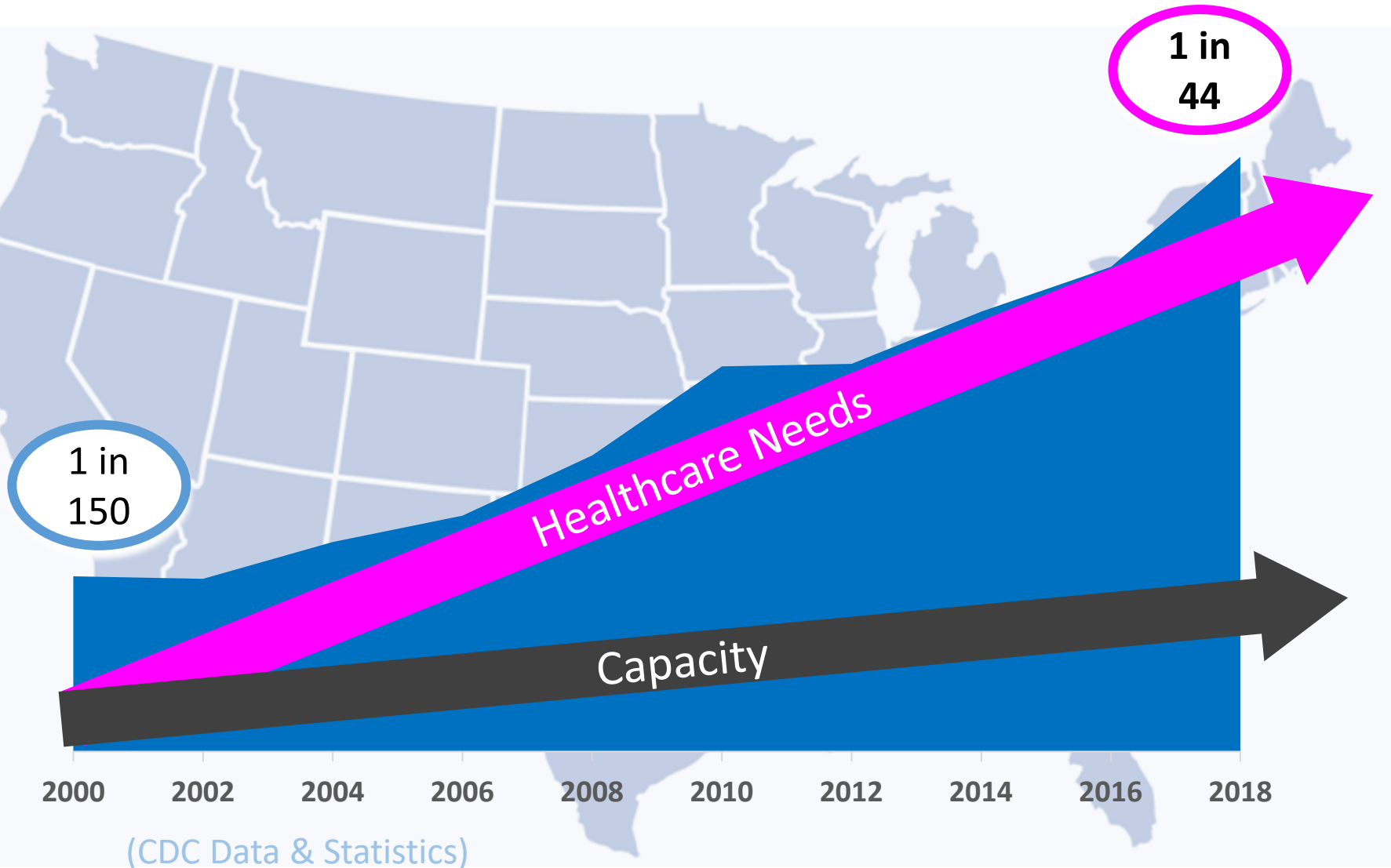
ECHO Autism for Primary Care

July 12, 2022

Micah Mazurek, PhD



Needs Outpacing Capacity



Autism prevalence has increased by **240%** in the past two decades

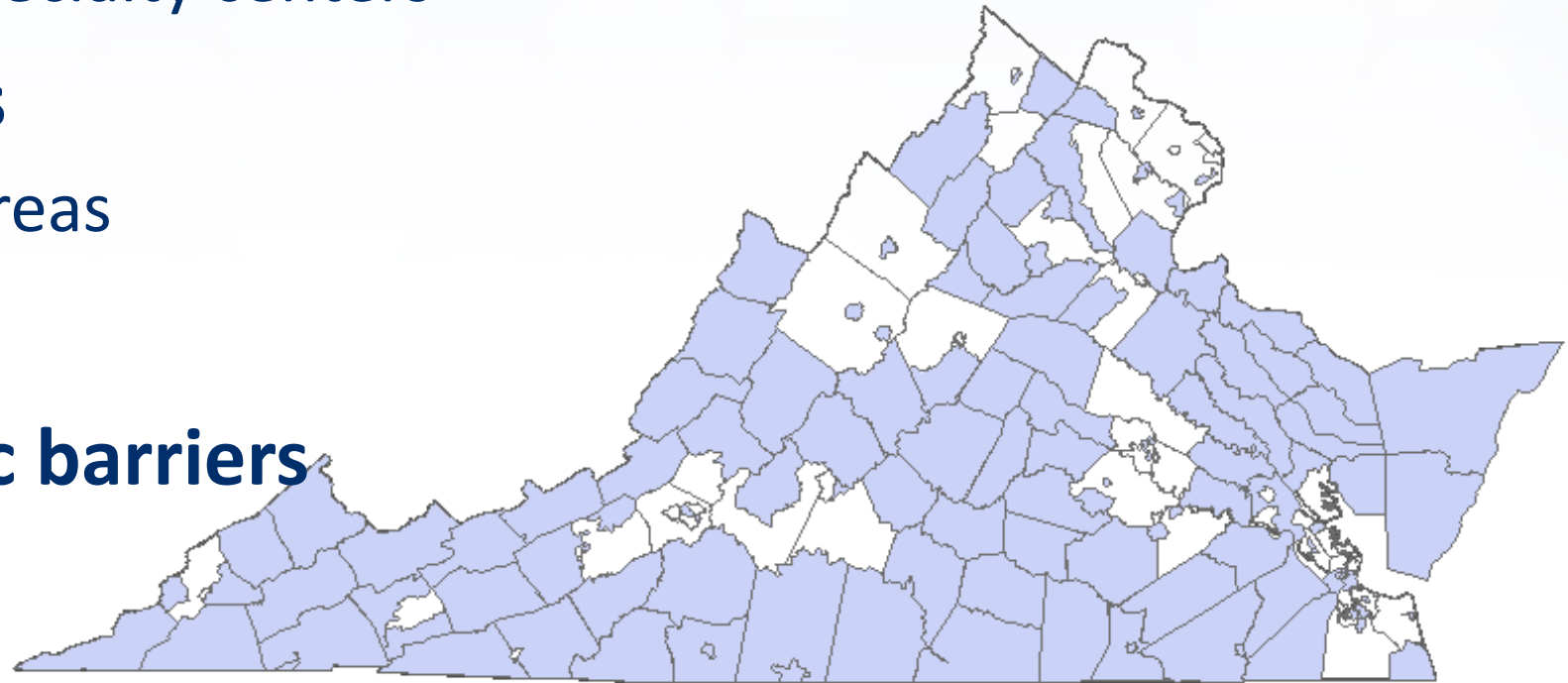
Unmet Healthcare Needs

- *Despite complex healthcare needs*, compared to children with other special healthcare conditions, children with ASD have:
 - **Greater unmet** healthcare needs
 - **Worse access** to coordinated, family-centered care
- Those from underserved populations face **even greater barriers**
- Those with co-occurring conditions also have **even worse** healthcare experiences and greater financial strain



Healthcare Barriers

- **Few providers with autism expertise**
 - Shortages of autism specialists in most communities
 - Long wait-lists at specialty centers
- **Geographic barriers**
 - Remote and rural areas
- **Financial barriers**
- **Cultural or linguistic barriers**



Solution?

Move Knowledge, Not People



Model Program: Project ECHO

- Extension for **C**ommunity **H**ealthcare **O**utcomes
- Developed at the University of New Mexico to improve outcomes for adults with hepatitis C
- Purpose:
 - Expand **local capacity** for treatment of common and complex conditions
 - **Improve access** for rural and underserved populations
 - **Train community-based** providers in best-practice care

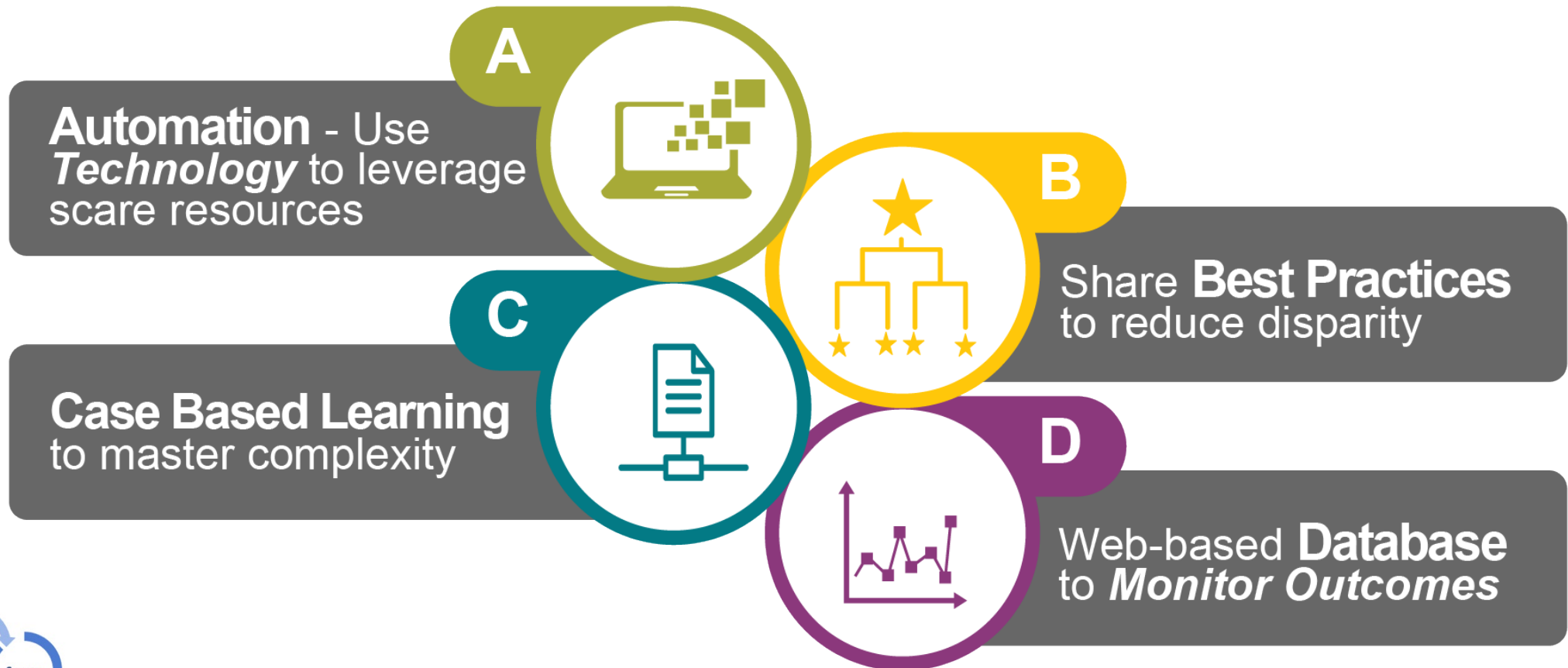


(Arora et al., 2010; Arora et al., 2011)



Project ECHO Model

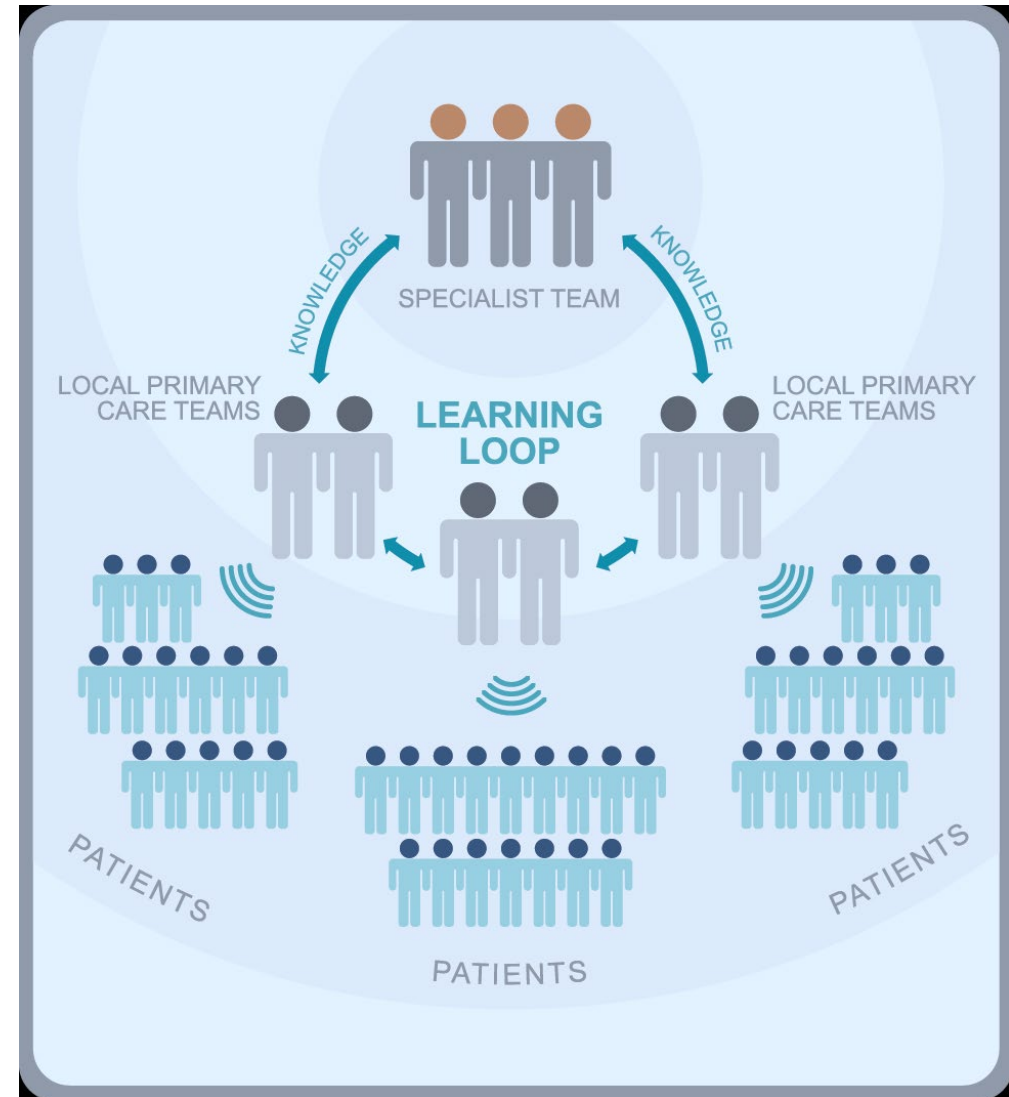
- Extension for **Community Healthcare Outcomes**



Project ECHO Model

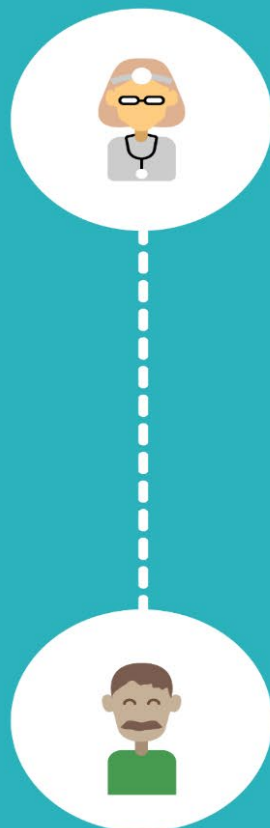


- Videoconferencing (Zoom)
- Expert Team Connects to Community Providers
- Case-Based Learning
- Didactics
- Learning Network



Telemedicine vs. ECHO

Traditional Telemedicine



TeleECHO™ Programs



Where to begin?

- **Who is best positioned to address a range of healthcare needs in local communities?**
- **Primary Care Providers (PCPs)**
 - Perfectly positioned for care that is:
 - Timely
 - Community-based
 - Culturally competent





ECHO Autism Pilot

Leda J. Sears Trust



• Interdisciplinary Expert Hub:

- Pediatrician
- Clinical Psychologist
- Child & Adolescent Psychiatrist
- Parent of child with autism
- Dietician
- Social Worker

• Spokes:

- Primary Care Providers
- Underserved areas



(Mazurek, Brown, Curran & Sohl, 2017)



ECHO Autism Pilot

- 6-month pilot
 - 2 ECHO Autism sessions per month for 6 months
 - 14 PCP participants (79% practicing in underserved area)

Specific focus on:

- **Screening & identification** of ASD symptoms
- **Managing medical & psychiatric co-occurring conditions**
- **Understanding resources**

ECHO Autism: A New Model for Training Primary Care Providers in Best-Practice Care for Children With Autism

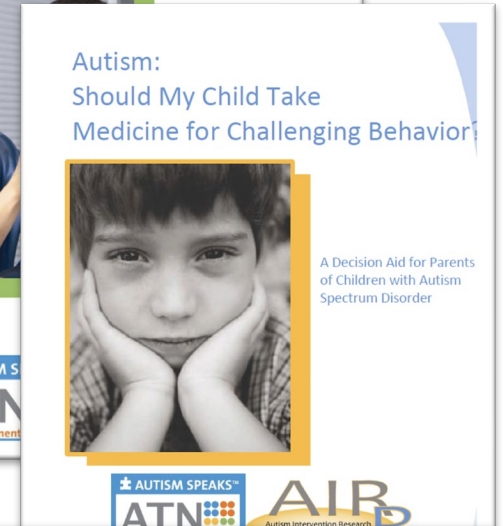
Micah O. Mazurek, PhD¹, Rachel Brown, MBBS¹,
Alicia Curran, BS¹, and Kristin Sohl, MD¹

Clinical Pediatrics
2017, Vol. 56(3) 247–256
© The Author(s) 2016
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0009922816648288
journals.sagepub.com/home/cpj



ECHO Autism Curriculum

1. Autism Overview
2. Screening & Referral
3. Community Resources
4. Family/Professional Partnerships
5. Behavioral Strategies
6. Special Education Process
7. Constipation Screening & Management
8. Sleep Problems Screening & Management
9. Anxiety Management
10. ADHD Management
11. Irritability/Aggression Management
12. Feeding Concerns & Pica



SUPPLEMENT ARTICLE

Evaluation, Diagnosis, and Treatment of Gastrointestinal Disorders in Individuals With ASDs: A Consensus Report

SUPPLEMENT ARTICLE

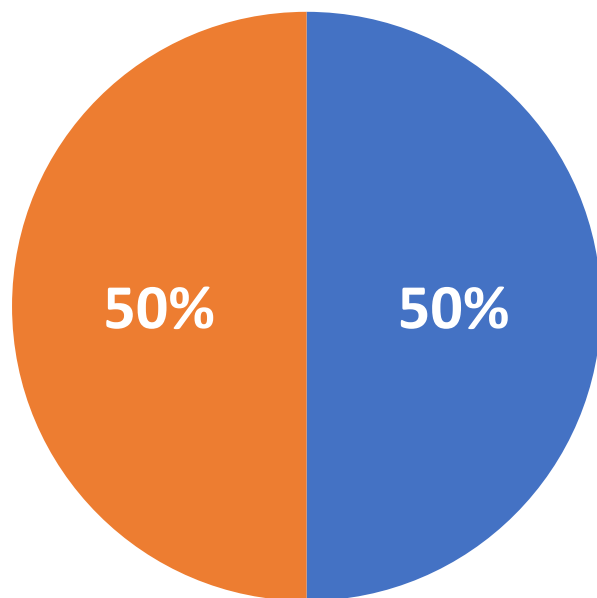
Clinical Practice Pathways for Evaluation and Medication Choice for Attention-Deficit/Hyperactivity Disorder Symptoms in Autism Spectrum Disorders

A Practice Pathway for the Identification, Evaluation, and Management of Insomnia in Children and Adolescents With Autism Spectrum Disorders

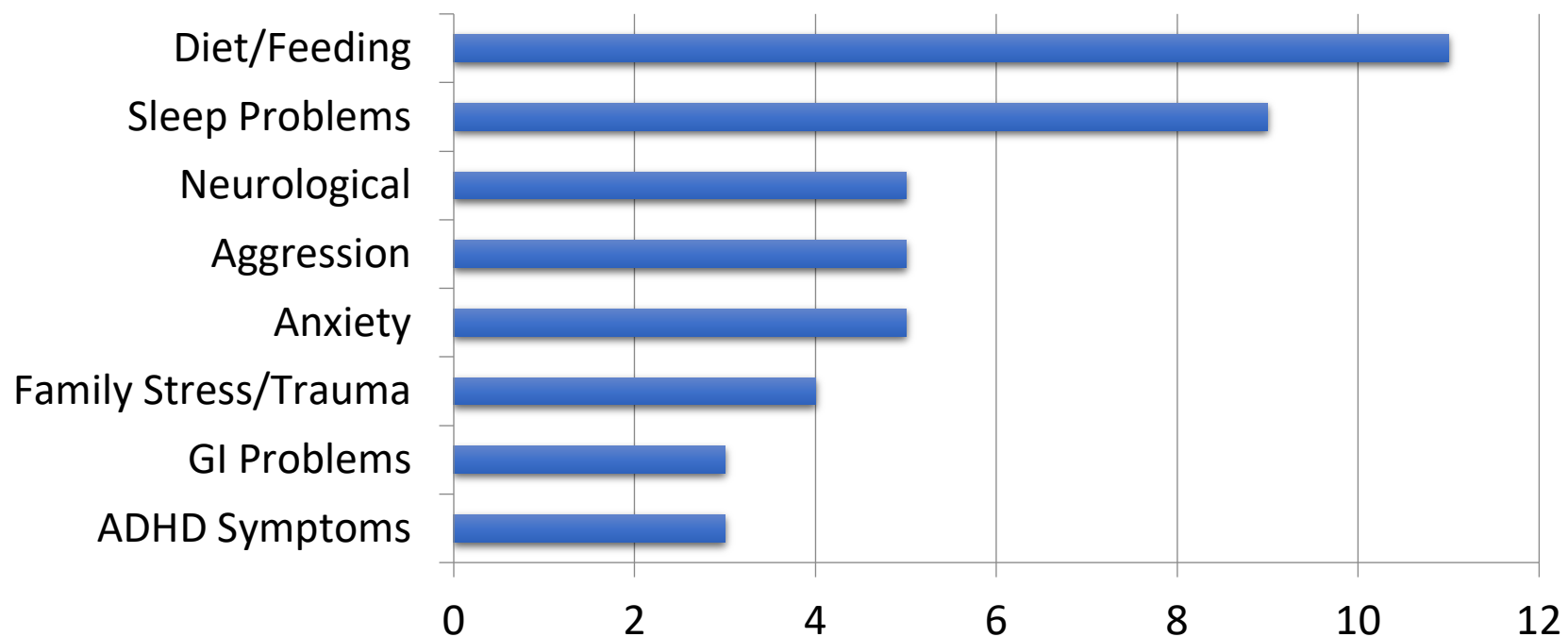
Cases Presented for Discussion

Primary Presenting Question

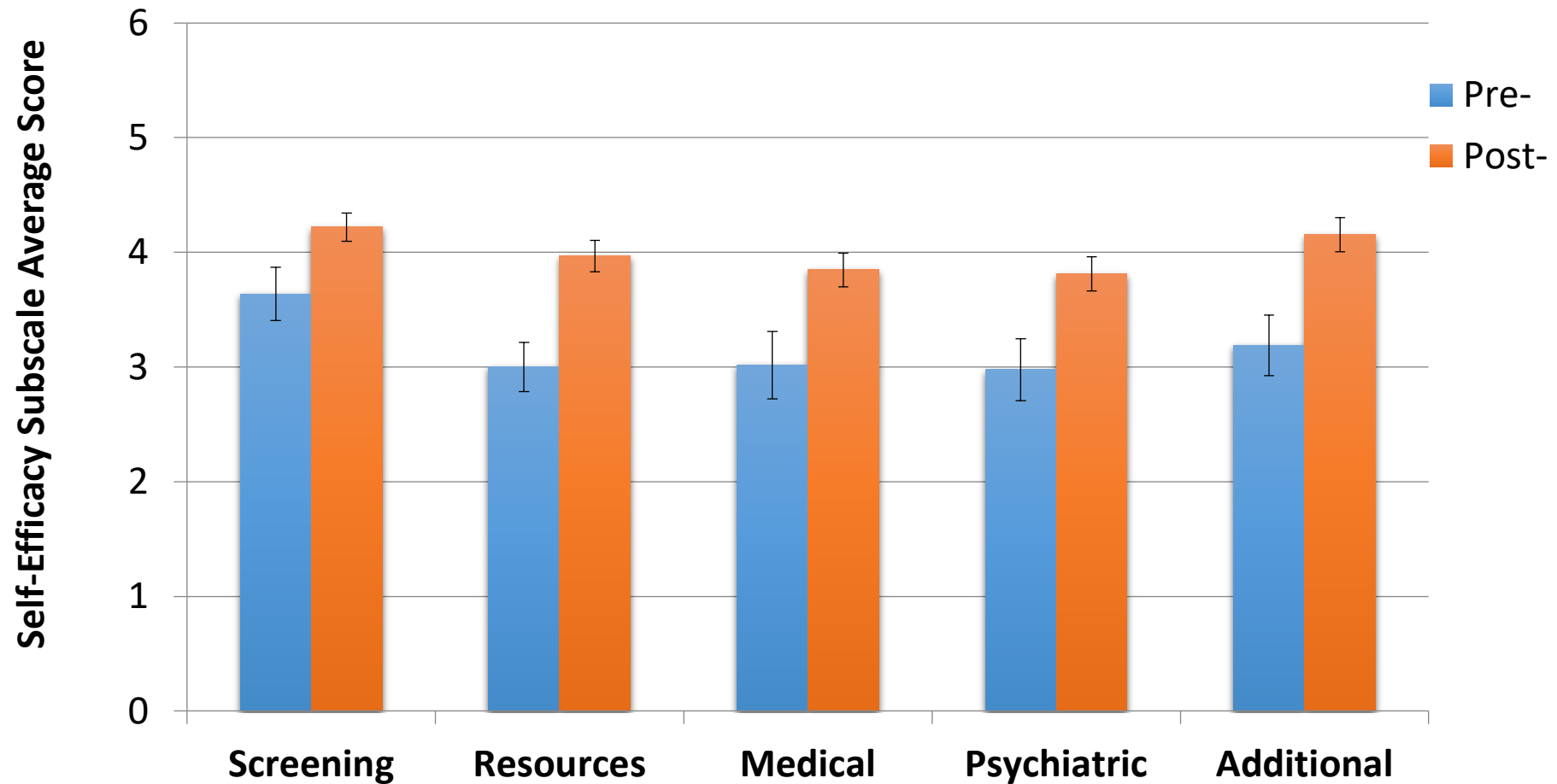
- Management of Co-Occurring Issues
- Screening/Identification



Most Common Problems Presented (Number of Cases)



Improvement in PCP Self-Efficacy



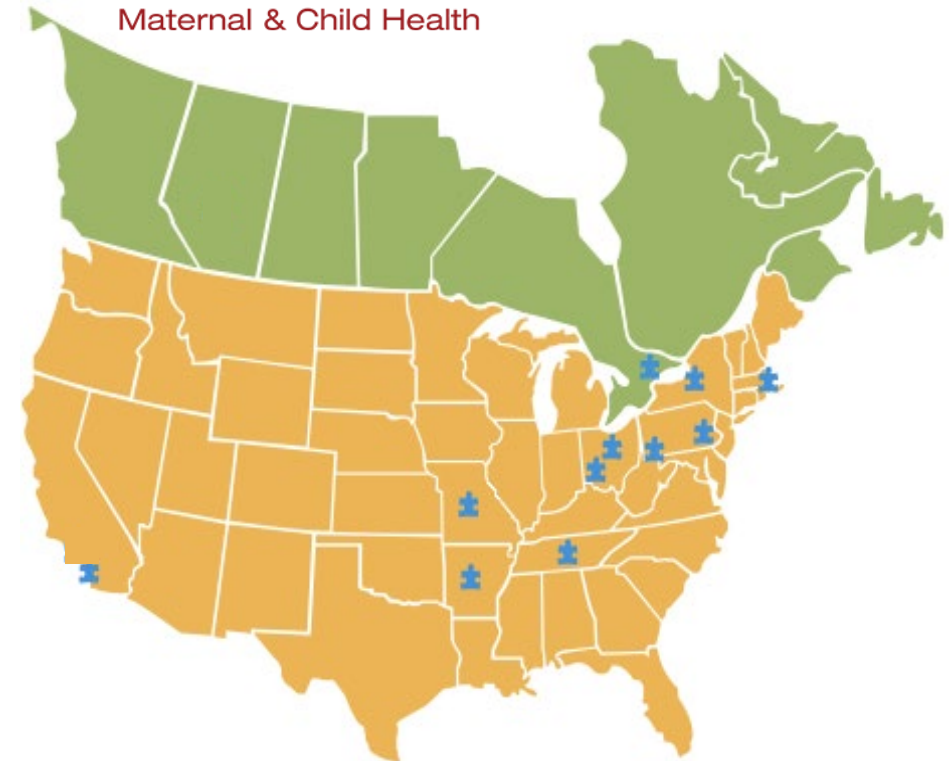
1 = No Confidence, 6 = Highly Confident/Expert



ECHO Autism Multisite Replication

- **10 Collaborating Sites**

- n =150 PCP participants
 - University of Arkansas for Medical Sciences
 - Children’s Hospital of Philadelphia
 - Cincinnati Children’s Hospital Medical Center
 - Lurie Center for Autism
 - Nationwide Children’s Hospital
 - University of Pittsburgh
 - University of Rochester
 - University of Toronto/Holland Bloorview Kids
 - University of California Irvine
 - Vanderbilt University Medical Center



Methods

- **Each site:**
 - Recruited 15 PCPs in underserved areas (**n=148 total**)
 - Conducted 12 ECHO Autism clinics over a 6-month period
- **Assessments were completed at 4 time points**
 - Chart Review
 - Knowledge Test
 - Self-Efficacy

JAMA Pediatrics | [Original Investigation](#)

Effectiveness of the Extension for Community Health Outcomes Model as Applied to Primary Care for Autism A Partial Stepped-Wedge Randomized Clinical Trial

Micah O. Mazurek, PhD; Robert A. Parker, ScD; James Chan, MA; Karen Kuhlthau, PhD; Kristin Sohl, MD; for the ECHO Autism Collaborative



Study Design

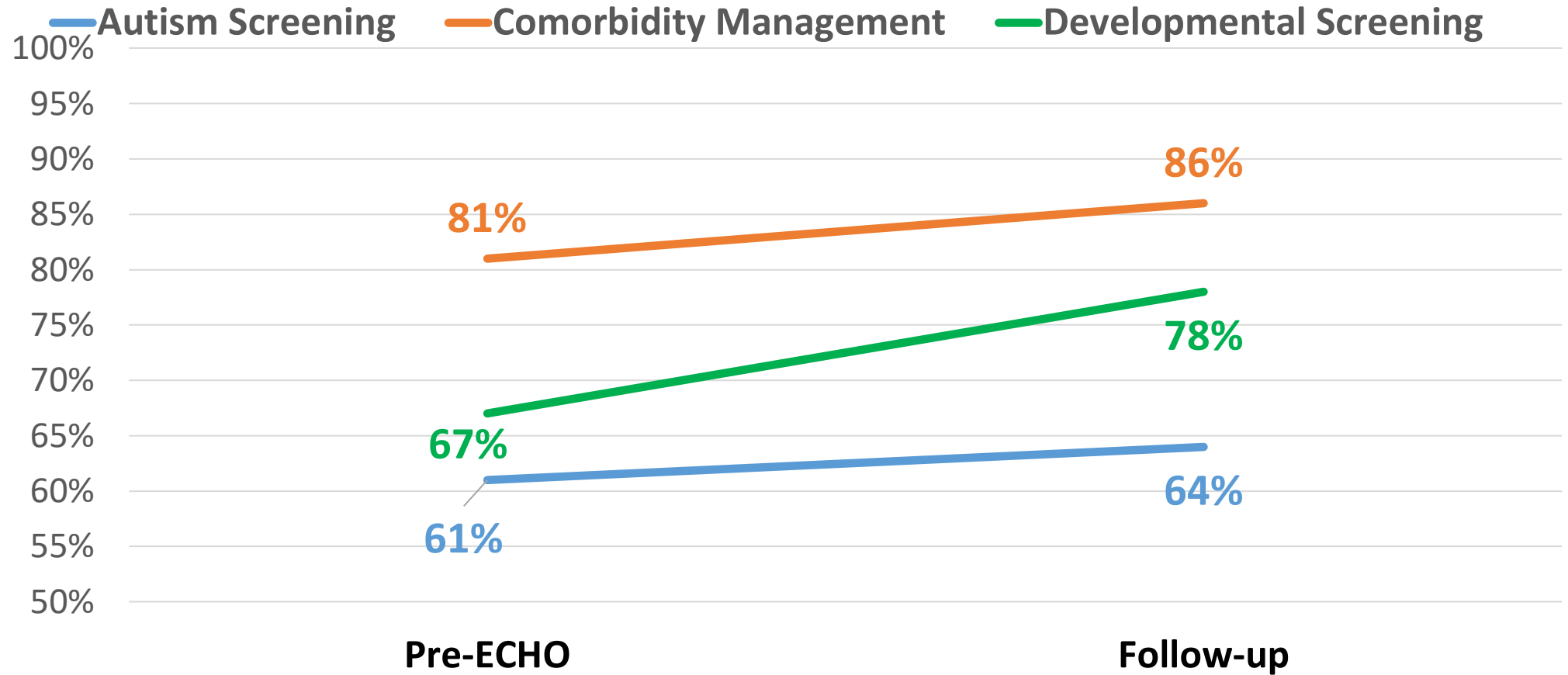
Partial Stepped-Wedge Randomized Trial

- 5 Cohorts
 - 2 Sites & 30 PCPs per cohort
 - Sites were randomized

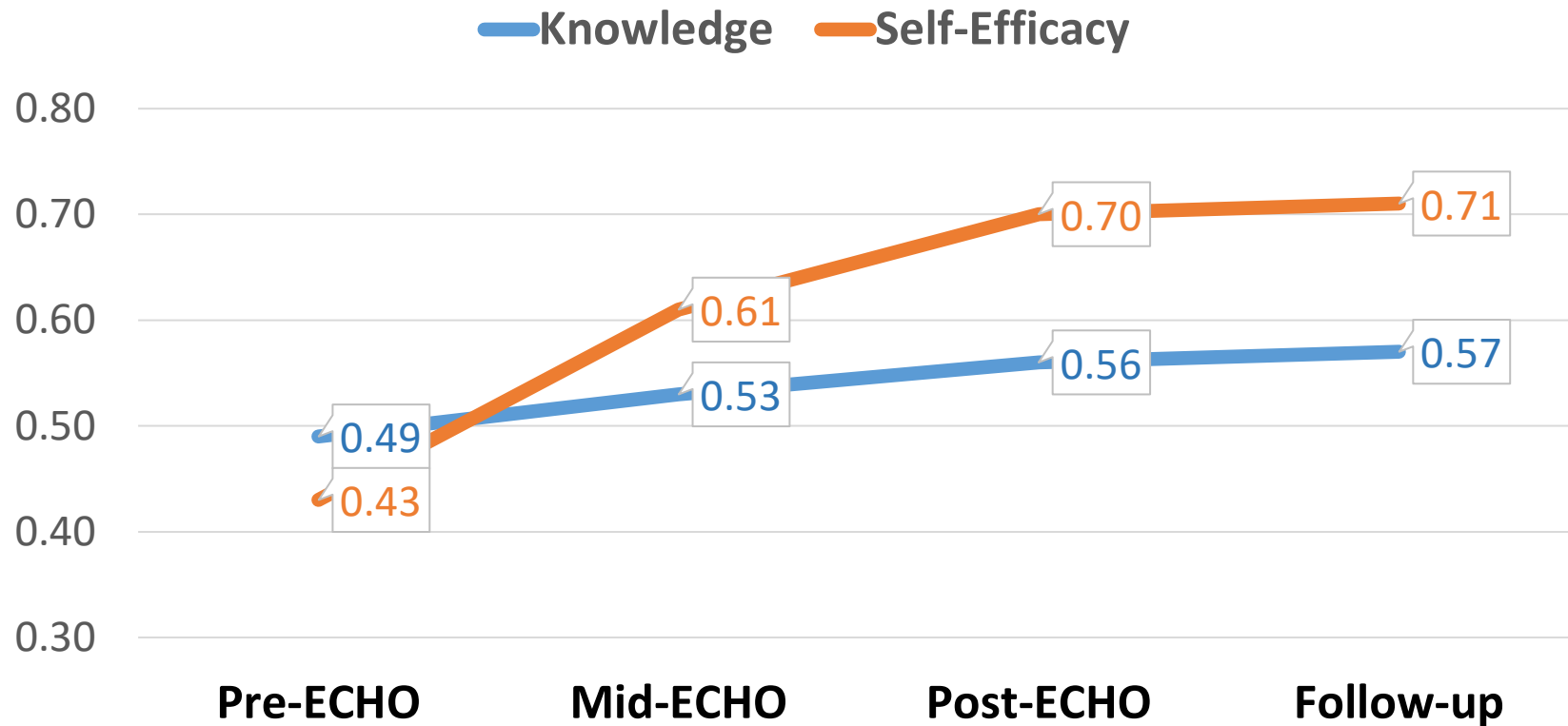
	12/1/16	3/1/17	6/1/17	9/1/17	12/1/17	3/1/18	6/1/18	9/1/18
Cohort 1: Arkansas CHOP	T1: ECHO Launch	T2: 3 mo Assessment	T3: 6 mo Assessment	T4: Final Assessment				
Cohort 2: Rochester Toronto		T1: ECHO Launch	T2: 3 mo Assessment	T3: 6 mo Assessment	T4: Final Assessment			
Cohort 3: Lurie Ctr Vanderbilt			T1: ECHO Launch	T2: 3 mo Assessment	T3: 6 mo Assessment	T4: Final Assessment		
Cohort 4: Pittsburgh UC Irvine				T1: ECHO Launch	T2: 3 mo Assessment	T3: 6 mo Assessment	T4: Final Assessment	
Cohort 5: Cincinnati Nationwide					T1: ECHO Launch	T2: 3 mo Assessment	T3: 6 mo Assessment	T4: Final Assessment



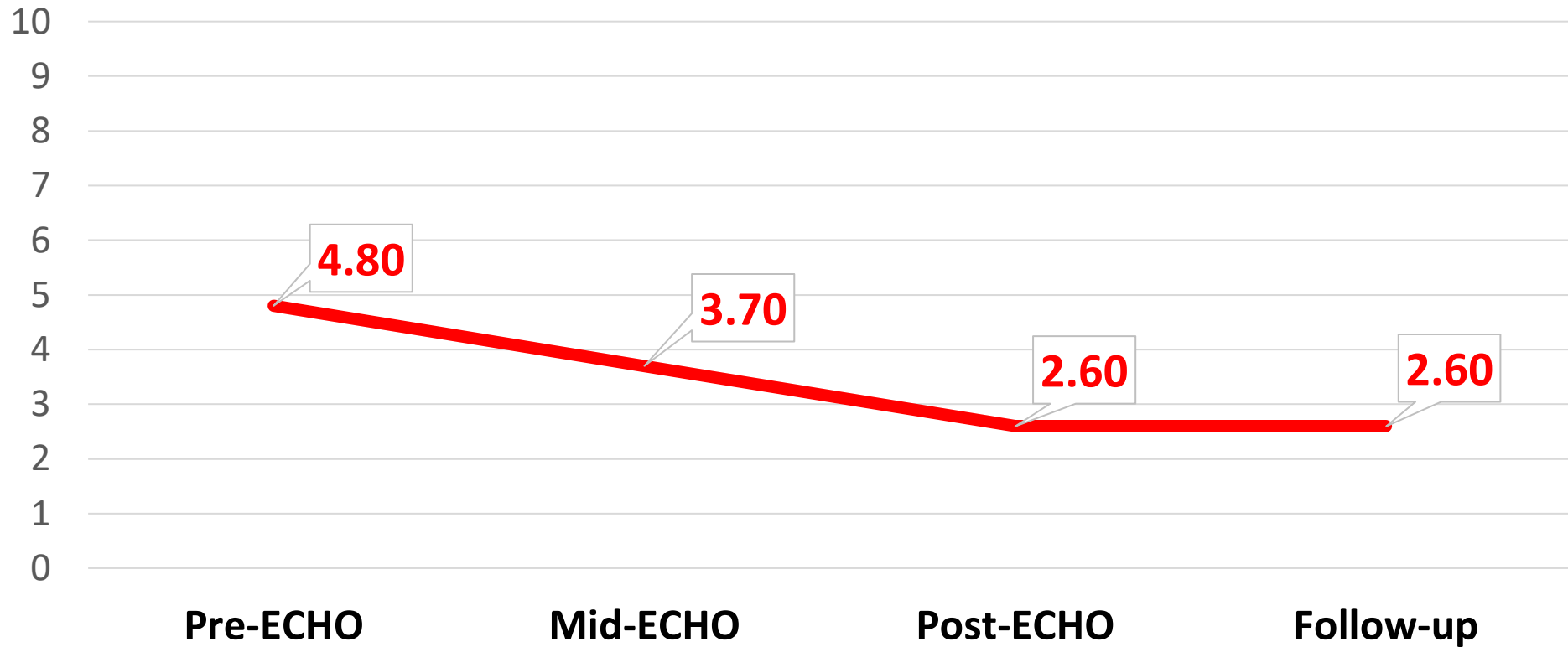
Results: Clinical Practice



Results: Knowledge & Self-Efficacy



Results: Barriers to Care



Next Steps: Virginia Autism LINKS

Leading Innovation through Navigation,
Knowledge and Supports



ECHO Autism Team



Beth Ellen Davis, MD, MPH
ECHO Hub Team
Developmental Behavioral
Pediatrics



Micah Mazurek, PhD
ECHO Hub Team
Psychology



Stephanie Tharp, MT
ECHO Hub Team
Family Navigation



Karen Orlando, MEd
ECHO Hub Team
Family Navigation



Jane Hilton, PhD, CCC-SLP
ECHO Hub Team
Speech-Language Pathology



Cecilia Margret, MD
ECHO Hub Team
Child & Adolescent
Psychiatry



Keith Page, MTS
ECHO Coordinator



Susan Lane, MS
Family Education &
Outreach Coordinator

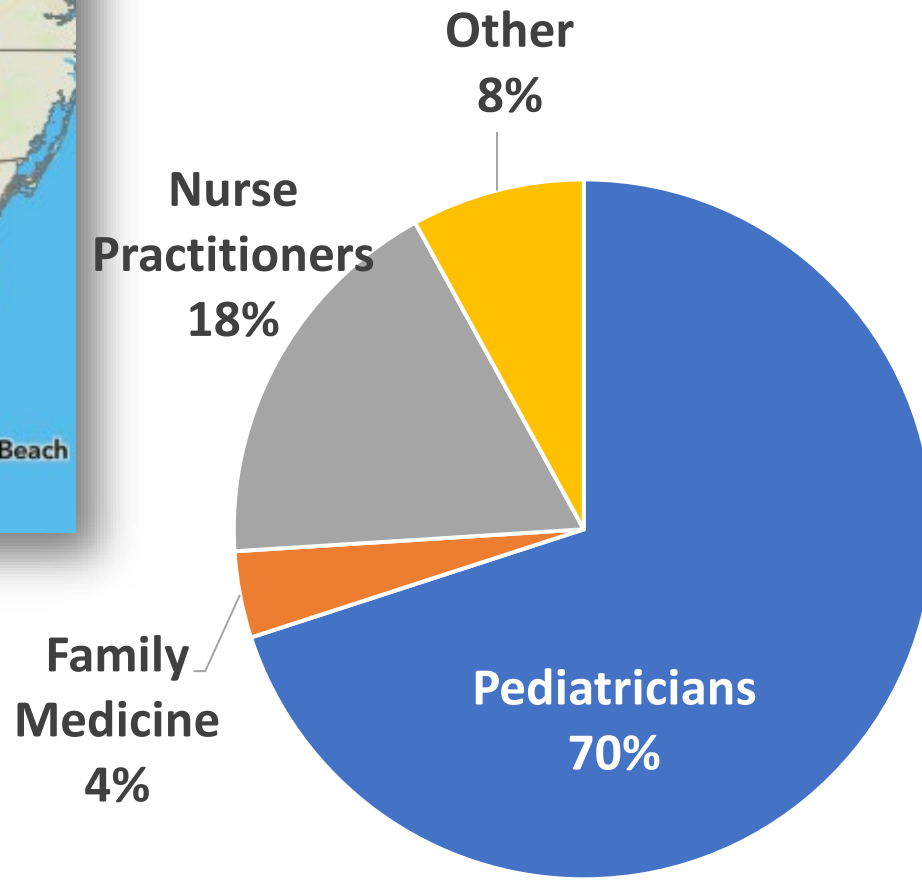
ECHO Autism PCP Participants

PCP Participants



3 Cohorts

52 PCPs to date



ECHO Autism Curricular Enhancements

- **Expanded Didactic Topics**

1. **Autism Overview**
2. **Developmental Screening**
3. **Autism Screening**
4. **Diagnostic Assessment**
5. **Early Intervention**
6. **Parent Support**
7. **Community Resources**
8. **Financial Resources**
9. **Successful Clinic Visits**
10. **Communication Strategies**
11. **Educational Supports**
12. **Behavioral Strategies**
13. **Managing ADHD**
14. **Managing Irritability**
15. **Managing Anxiety**
16. **Feeding Concerns/GI**
17. **Managing Sleep**
18. **Transition to Adulthood**

ECHO Autism Curricular Enhancements

- Family Navigation Integration
 - Direct support & care coordination

Your patients can contact Family Navigation directly..

call: (434) 962-6269

email: star-autism@virginia.edu

address: 417 Emmet St. S. PO Box 400267 / Charlottesville, VA 22904

Or you can make a referral for them..

fax: (434) 245-2043

Referrals can also be entered directly into this form:

- <https://bit.ly/UVASTAR>

DIAGNOSES AND SERVICES

Diagnoses - check all that apply:

- ASD
- Developmental Delay
- ADHD
- ADD
-

Current provider: VA-LINKS

Is this child/patient a referral?

Was a referral made by this provider?

Additional referral information:

Referral Form
UVA Autism LINKS Family Navigation Services

***Note:** For referrals, please follow your practice's procedures and policies regarding Release of Patient Protected Information in making this referral.

Date of referral: M-D-Y

Client/child first name:
* must provide value


Client/child last name:
* must provide value

Client/child goes by (optional):

Sex:
* must provide value

Expand

Submit



Why are you referring this patient/child for family navigation?

* must provide value

ECHO Autism Curricular Enhancements

- **Region-Specific Resources**
 - 1-Page Toolkits & Roadmaps
 - Regional Directories
 - Online Resource Directory

UNIVERSITY OF VIRGINIA Supporting Transformative Autism Research

NAVIGATING AUTISM Early Childhood and Beyond

Click on each icon below for more information

STAR AUTISM INITIATIVE

1. Learning about Milestones
2. Screening for Autism: Recommended screenings at your child's medical provider
3. Starting Intervention Services: If using Infant, Toddler Connection: Ages 0 to 3rd Birthday
4. Testing for Autism
5. Accepting an Autism Diagnosis
6. Discovering Help for My Family
7. Locating Therapies for My Child
8. Receiving School Services: Ages 2 and up*

Press PLAY to watch the AUTISM DRIVE navigation video

Version: March 2022

<https://tinyurl.com/AutismNavigatingEarly> *Special Education Eligibility Considerations

ROADMAP FOR AUTISM

Virginia

Adult Services

Medical Services

School Services

Parent Education: autismdrive.virginia.gov

Treatment & Therapies

Funding & Waivers

Diagnosis

Early Intervention

Case Management

ADVOCACY: KEEP RIGHT

Support Groups

STAR AUTISM INITIATIVE

<https://tinyurl.com/AutismLifeSpan>

Click on an underlined links or icons for more information

UNIVERSITY OF VIRGINIA EDUCATION

NAVIGATING AUTISM ONLINE INFORMATION

STAR AUTISM INITIATIVE

STATE & FEDERAL CONNECTIONS IN YOUR LOCAL COMMUNITIES

Click here to learn more about STAR Family Navigation

How to apply for **medicaid health insurance*** (not a waiver)

*A disability diagnosis does not guarantee medicaid health insurance.

Cover Virginia: Connecting Virginians to Affordable Health Insurance

Checking eligibility - <https://www.coverva.org/en/screening-tool>

Application through Cover VA - <https://www.coverva.org/en/apply>

How to apply for the **CCC+ waiver**

Some locales have different state departments handle their CCC+ waiver applications. It's either VDH or DSS and sometimes they separate child and adult applications between VDH and DSS.

INFO about the CCC+ waiver

Contact VDH - Virginia Department of Health: <https://www.vdh.virginia.gov/health-department-locator/>

Contact DSS - Virginia Department of Social Services: <https://www.dss.virginia.gov/localagency/index.cgi>

How to apply for the **DD waiver**

Call your local CSB (Community Service Board) or BHA (Behavioral Health Authority) and ask for the Intake Coordinator for the DD (Developmentally Delayed) waiver. They will schedule a screening for your child or individual in need.

INFO about the DD waiver

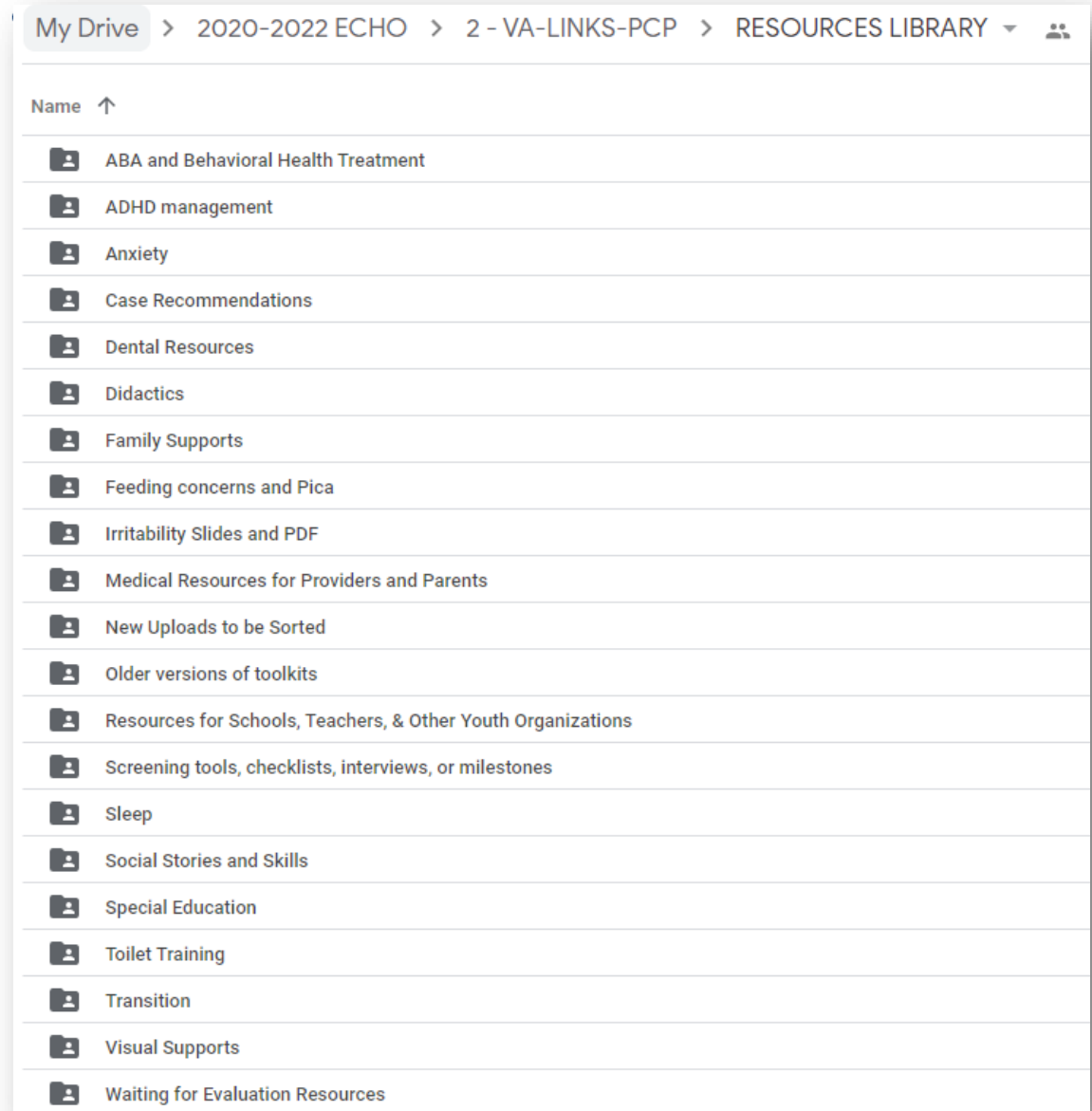
Contact your CSB through DBHDS - Department of Behavioral Health and Developmental Services: <https://dbhds.virginia.gov/community-services-boards-csbs/>

UNIVERSITY OF VIRGINIA Supporting Transformative Autism Research

UNIVERSITY OF VIRGINIA Supporting Transformative Autism Research

ECHO Autism Curricular Enhancements

- **ECHO Resource Library**
 - Didactic Slides
 - Case Recommendations
 - Practical Tools
 - Articles
 - Guidelines
 - Measures
 - Resources for Families



ECHO Autism Curricular Enhancements

AUTISM DRIVE ABOUT AUTISM DRIVE CURRENT STUDIES FIND RESOURCES WEBINARS JOIN US SIGN IN

Learn how to use the Resource Directory ▶

Find Autism Resources

Type a search term and/or use filters below 🔍

Filter by Topic 📁 Filter by Age 👤 Filter by Language 🌐

ALL RESOURCES LOCAL SERVICES ONLINE INFORMATION EVENTS AND TRAINING

Sort By: Distance

Showing 1-20 of 1868 results

Mom's Night Out

Updated Apr 9, 2020 -

Mom's Night Out is a group for mothers of kids with special needs that meets the third Wednesday of every month to socialize. Look for the table with the vase of flowers on it. For more information contact jnnyrd@yahoo.com

▶ **VIEW LOCATION DETAILS (0.2 MI)**

Using Map's Center Limit results to map

Map showing resource locations in the Southwest Virginia region, including McGanaysville, Wolfstown, Pratts, Stanfield, Quince, Ruessville, Somerset, Barbourville, Gordonsville, Keswick, and Zion.

Learning Network/QI Integration

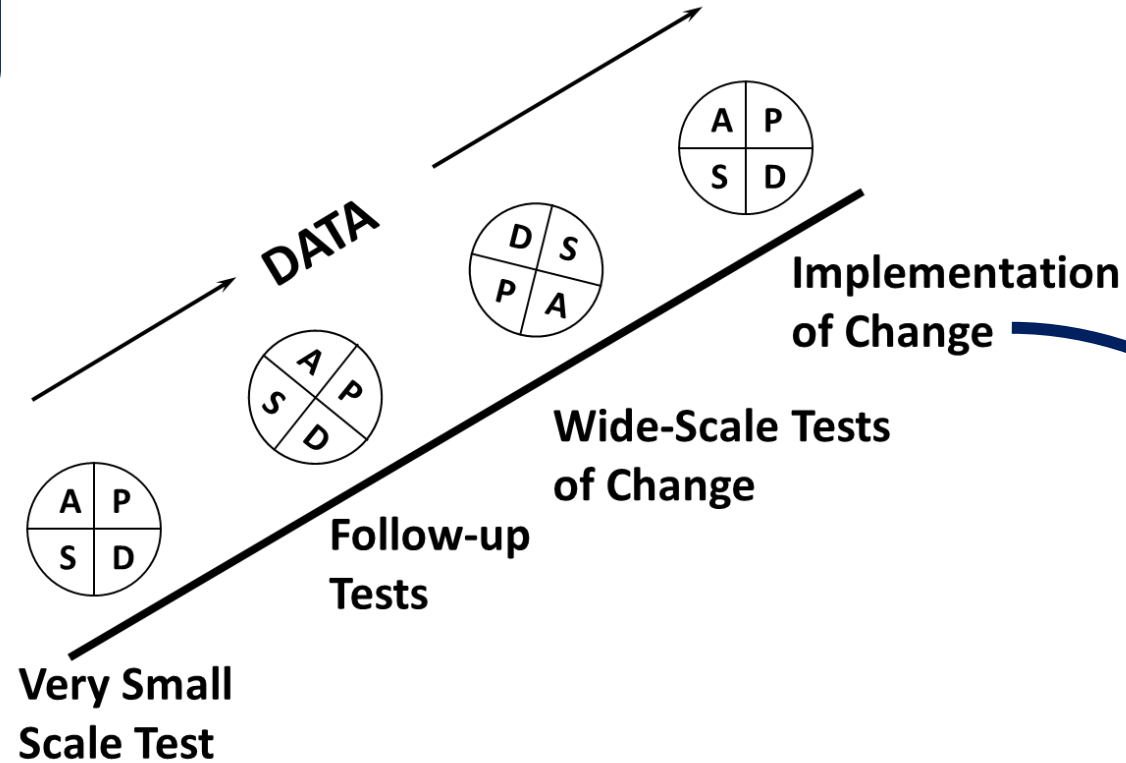
Aim: Improving Screening & Referral

Hub Team

Participants

Learning Sessions
(every 4th session)

- Supports:**
- Learning Session
 - Hub Team Access
 - Bi-Monthly Reports
 - Bi-Monthly Data



Spread

Holding Gains

- Maintenance of Certification (MOC) Part 4 Credit



ECHO Autism QI SMART Aims

- Increase percentage of patients receiving developmental and autism screening at 18- and 24-month well-child-visits to 90%
- Increase referrals of high-risk screens to early intervention (at 18- and 24-month visits)

Collecting & Submitting Data

- **During each reporting period:**
 - Coordinator sends instructions and a link to an online form
 - PCP Practice reviews charts from 18- and 24-month well-child visits (**within 30-day period*)

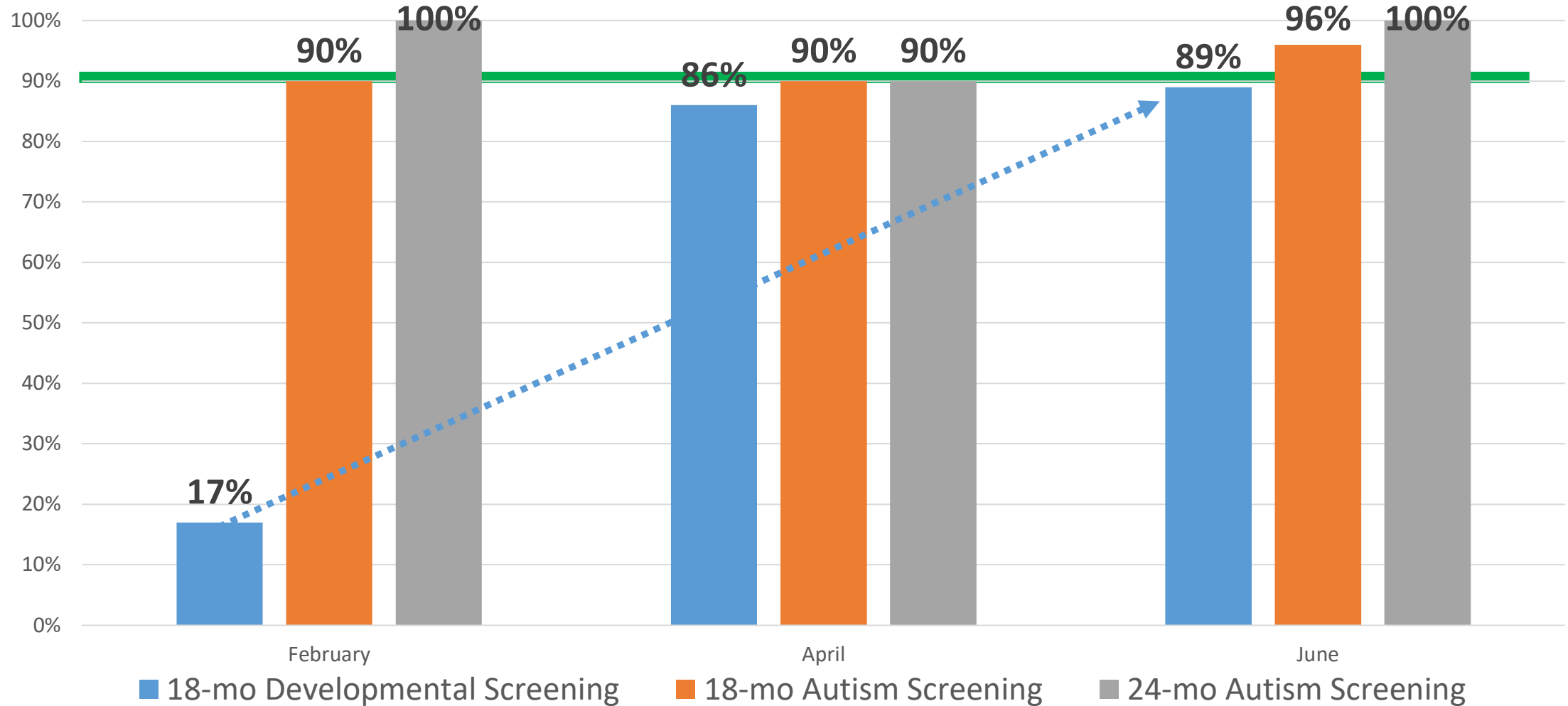
Chart Review Period	Due Date for Completion	ECHO Learning Session
*February 1 st - March 1 st	June 15th	
April 1 st – May 1 st	June 15th	July 6
June 1 st - July 1 st	August 15th	September 7
August 1 st - September 1 st	October 15th	November 2
October 1 st - November 1 st	December 15th	January 4
December 1 st - January 1 st	February 15th	March 1



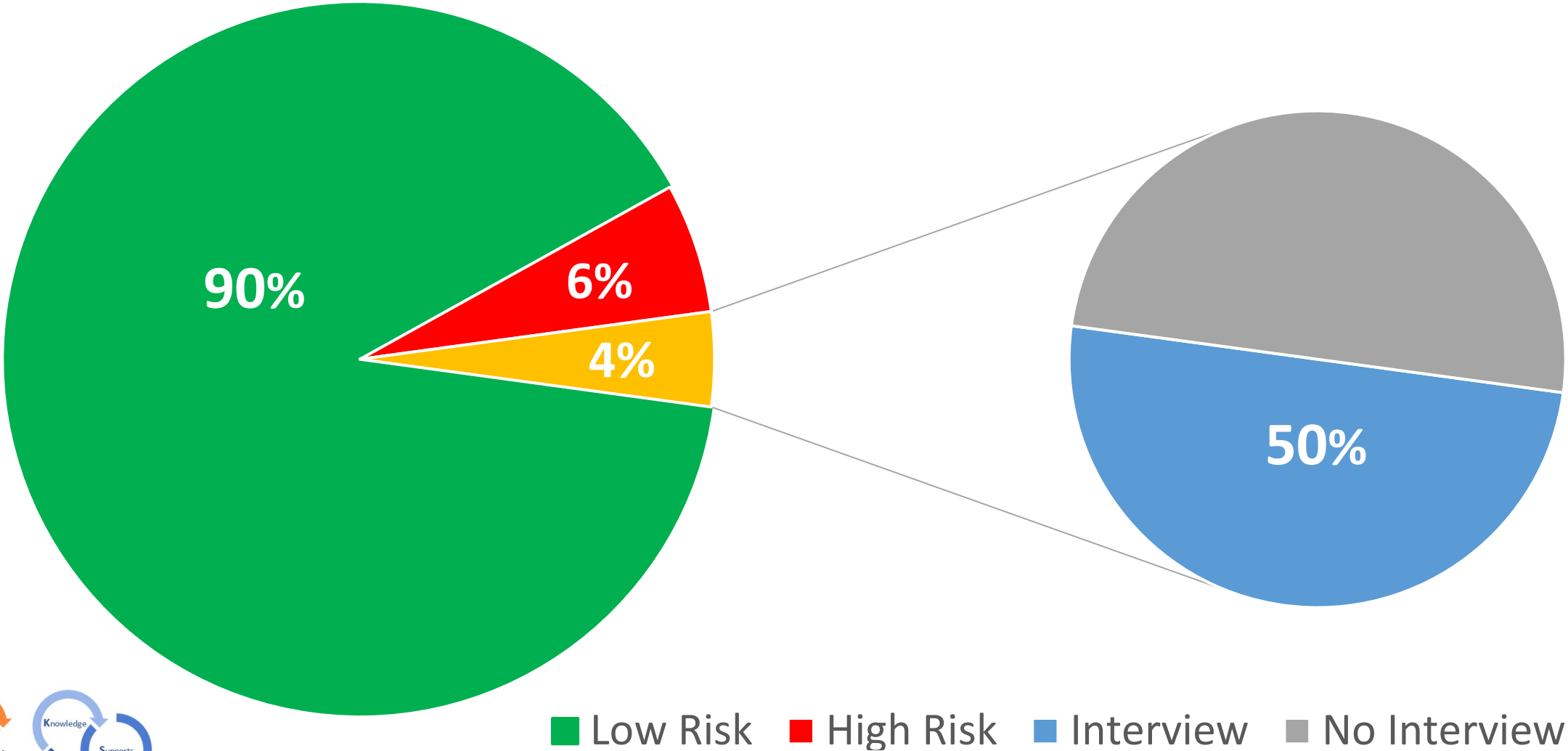
Chart Review Data

- **Number of 18-month well-child visits**
 - # receiving **general developmental screening**
 - # receiving **autism screening**
 - # of high-risk (MCHAT scores of ≥ 8)
 - # of moderate-risk (MCHAT scores of 3-7)
 - # receiving *follow-up interview*
 - # who failed screen (≥ 2) after *follow-up interview*
 - # **referred** to early intervention for any reason
- **Number of 24-month well-child visits**
 - *Same metrics as above (*except developmental screening)*

Average Screening Rates: Periods 1-3

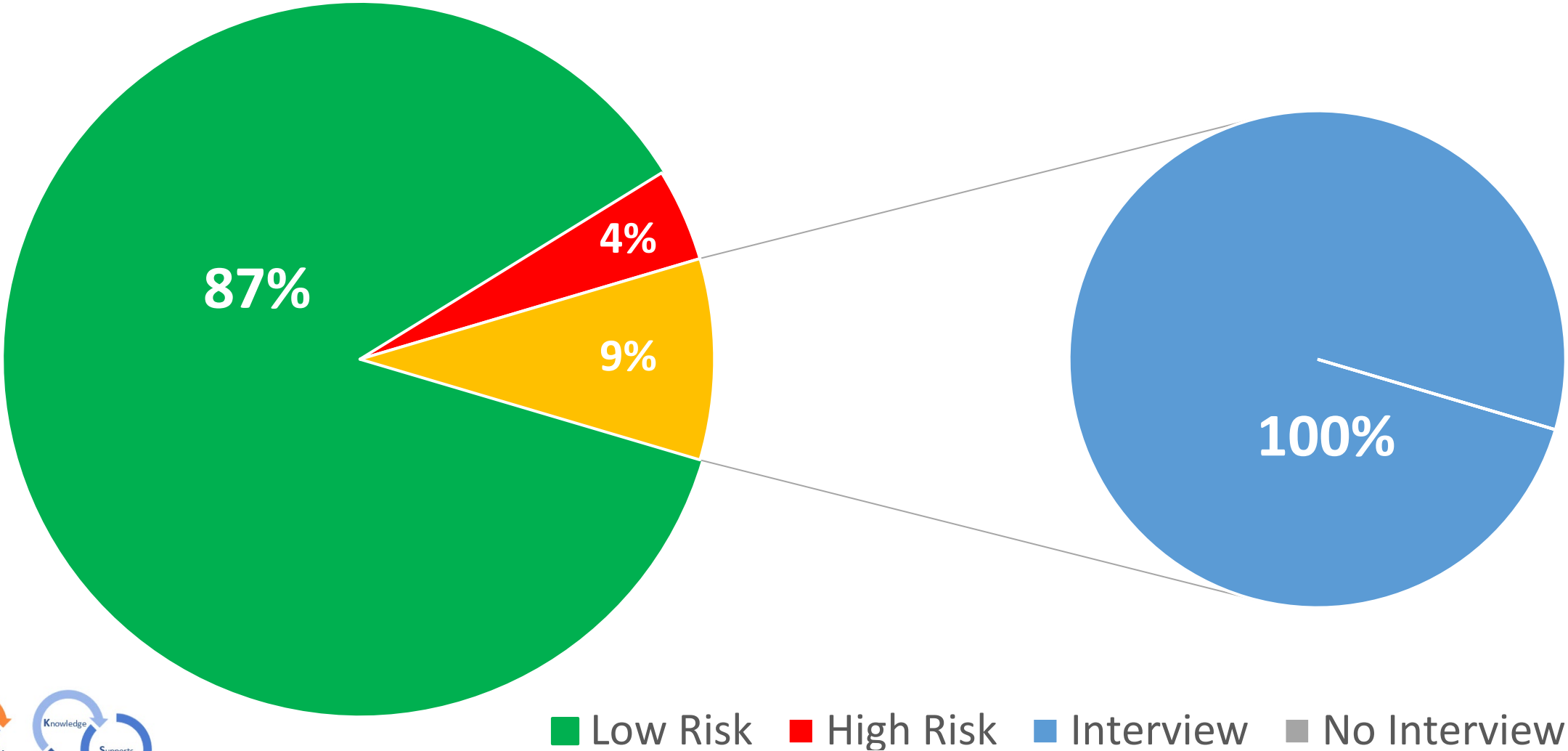


M-CHAT-R Practice Patterns: Period 1



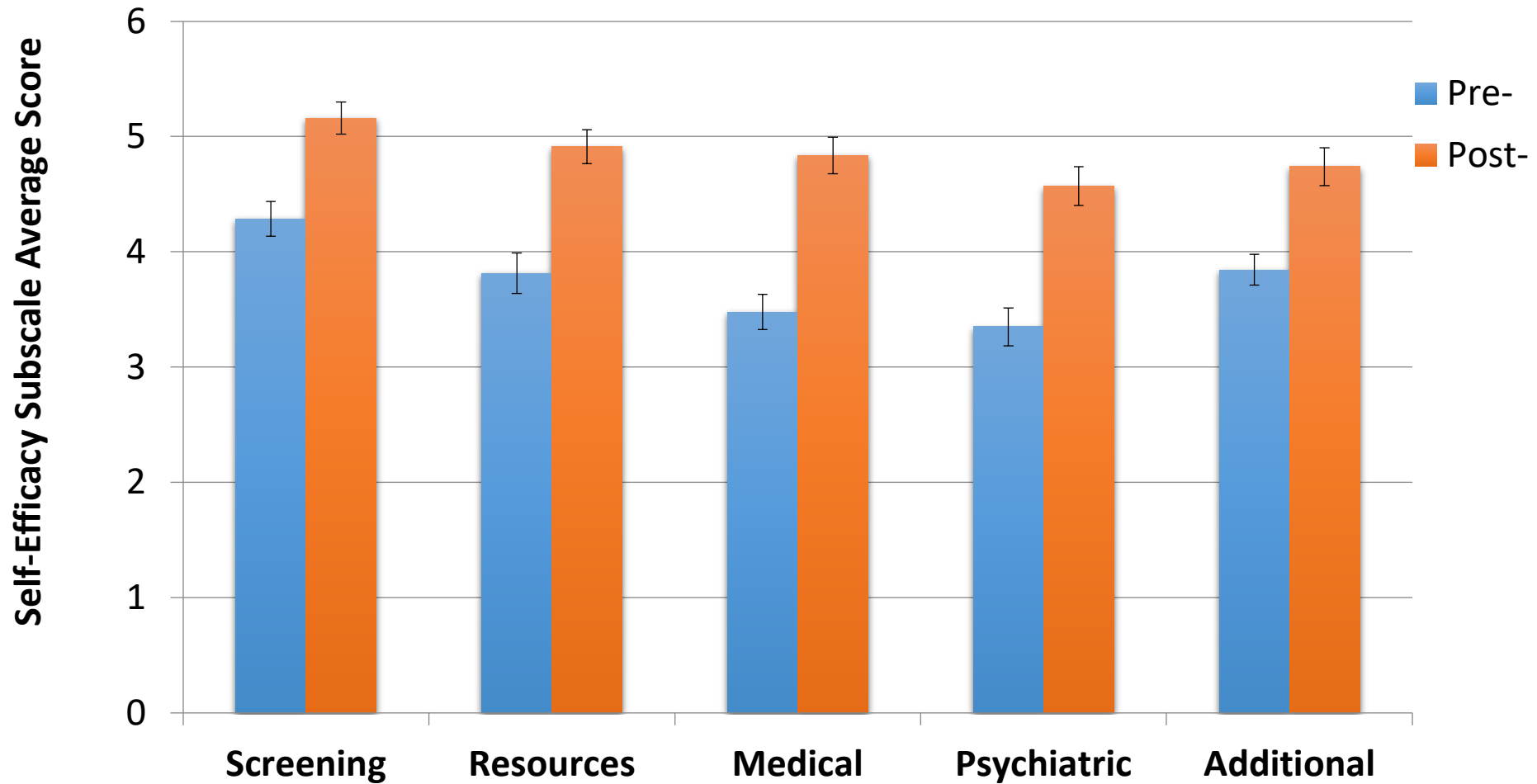
■ Low Risk ■ High Risk ■ Interview ■ No Interview

M-CHAT-R Practice Patterns: Period 3



■ Low Risk ■ High Risk ■ Interview ■ No Interview

Improvement in PCP Self-Efficacy (Cohorts 1 & 2)

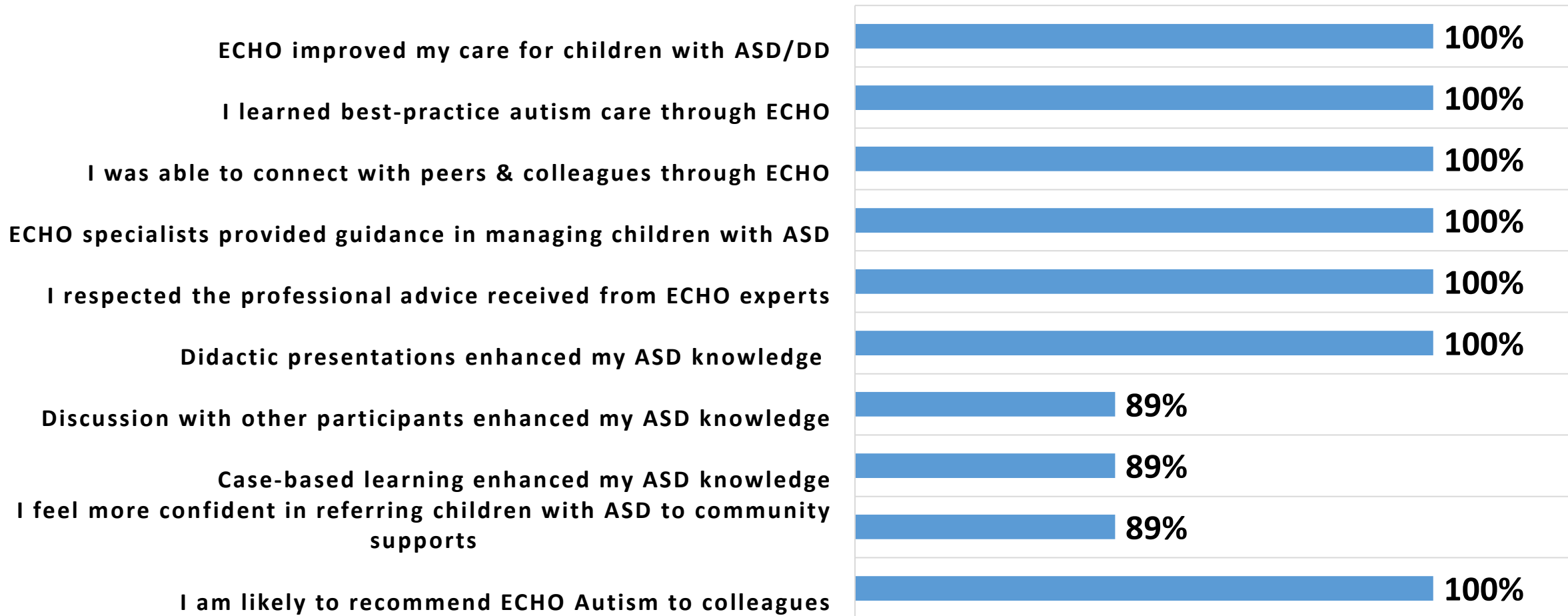


1 = No Confidence, 6 = Highly Confident/Expert



PCP Participant Satisfaction

Percent of Participants indicating “Strongly Agree” *(on a 5-point scale)*



Thank You

