

Intro to Project ECHO[®] KKI-NECT:

**The Kennedy Krieger Institute
*Network for Early Childhood Telehealth***



The Problem Nationally

The Demand

- **15% of U.S. children** (11 million) **have a disability**
- **11-20%** of U.S. children have a disorder of behavior or emotional development
- **30-40%** of children with developmental disabilities have co-occurring behavioral and emotional disorders

The Subspecialty Workforce

- **ABPN Board Certified:**
 - **2,062** Child Neurologists
 - **42** Neurodevelopmental Disability physicians
- **AAP Board Certified:**
 - **250** Neurodevelopmental Disability
 - About **800** Developmental and Behavioral physicians



Preparedness of the General Pediatric Workforce

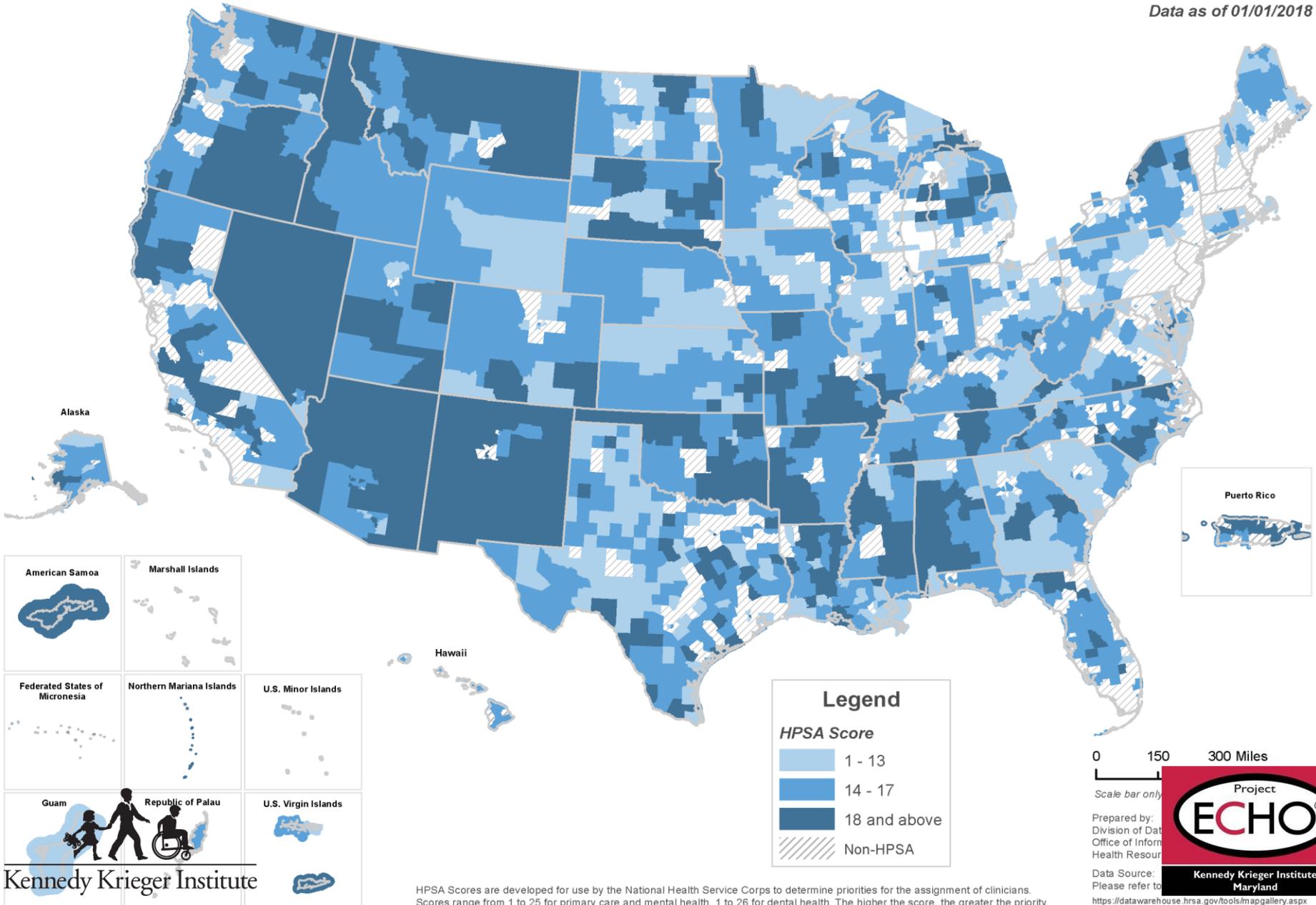
- Pediatric training program directors report that **training in development and behavior is insufficient to:**
 - satisfy competencies
 - manage mental health disorders
- Trainees confirm **lack of training, confidence, and time** for children with mental health disorders.
- **48%** of pediatricians **said additional training** in development and behavior **would have been helpful.**
- **Only 31%** of providers reported being **comfortable managing developmental and behavioral disorders** without a specialist.



Patient Barriers to Subspecialty Care

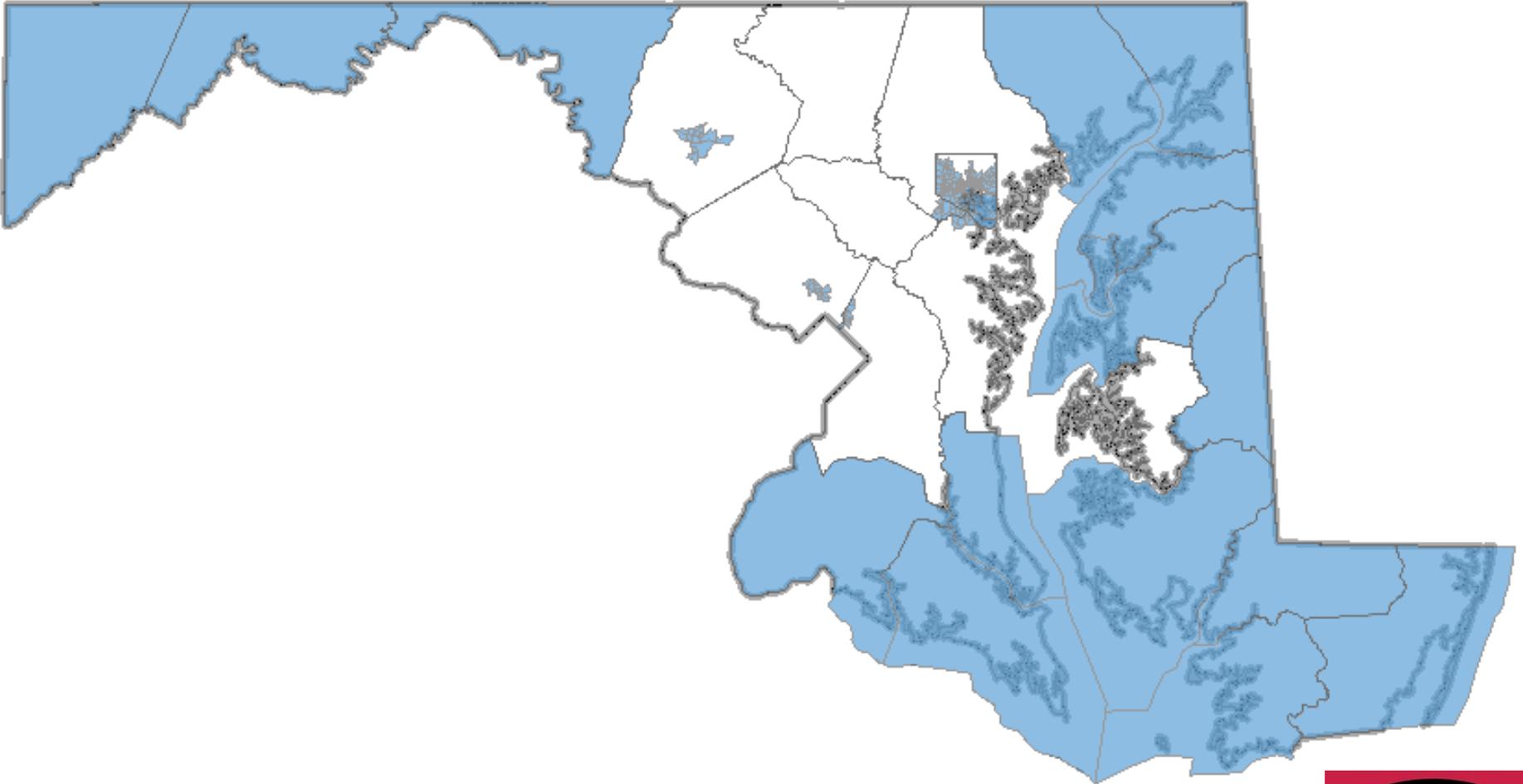
- Paucity of specialists
- **Waitlists**
- **Distance** to specialists
- **Cost** of travel and lodging
- Cost of missed work
- **Time** involved in coordinating care
- Insurance issues





HPSA Scores are developed for use by the National Health Service Corps to determine priorities for the assignment of clinicians. Scores range from 1 to 25 for primary care and mental health, 1 to 26 for dental health. The higher the score, the greater the priority.

Mental Health Professional Shortage Areas - MD



Addressing Shortages in Maryland

- **In-office training** on developmental screening
- **Learning collaboratives**
- **Tele(phone)-consultation** through Maryland Behavioral Health Integration in Pediatric Primary Care (BHIPP)
- **Telemedicine** consultation/evaluation

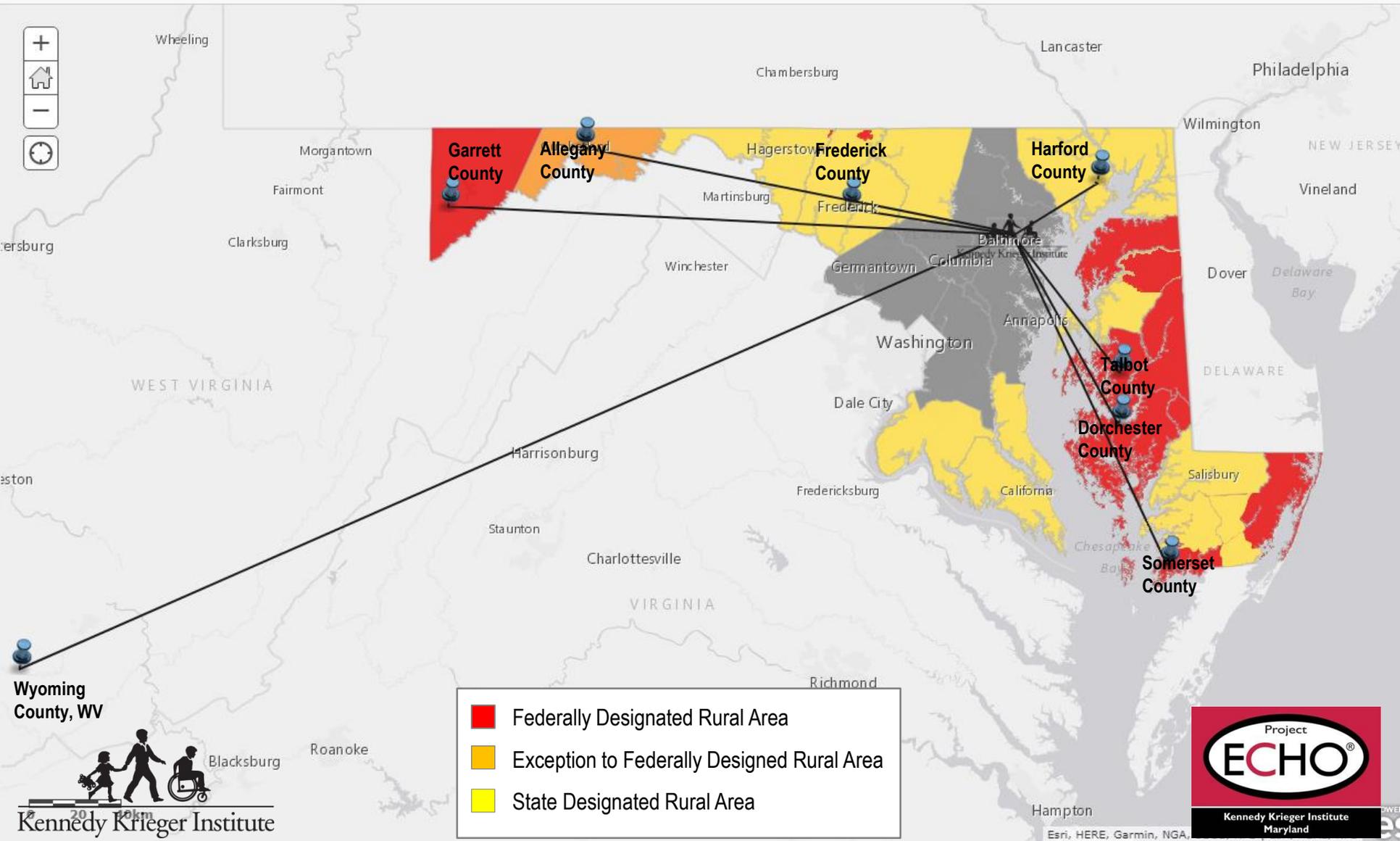


Lessons Learned

- Providing remote consultation is **neither optimal nor efficient.**
- Waitlists for telehealth and clinical care remain long.
- **It's time to move knowledge, not patients.**
- We can increase quality care for children with developmental, behavioral, and emotional disorders within the medical home by providing guided practice and mentorship.



KKI-NECT Community Partners



Demographic and Clinical Characteristics

- 63% male and 37% female
- Age range: **9 months to 11 years** ($M = 6$ years 5 months)

Type of Issue	Prevalence	
Any Developmental (D) Issue	69.2%	18
Any Behavioral (B) Issue	96.2%	25
Any Emotional (E) Issue	34.6%	9
Any D, B, E Comorbidity	69.2%	18



KKI Curriculum

At present, 12 chapters of the curriculum are underway:

- Anxiety
- ADHD
- Autism Spectrum Disorder
- Cerebral Palsy
- Fundamentals of Development
- Hearing and Vision Disorders
- IEP/IFSP and 504
- Intellectual Disability
- Learning Disability
- Preterm Birth Complications & Outcomes
- Speech and Language Disorders
- Trauma/ACEs

Fall Semester

DATE	TOPIC	LEVEL
9/20/17	Developmental and Behavioral Co-Morbidities	1
9/27/17	Is this Normal? Assessing Preschool Behavior	2
10/4/17	In-Home Behavioral Interventions for ADHD	3
10/11/17	In-Office Diagnosis of Autism	2
10/18/17	Is this Autism? Differential Diagnosis	2
10/25/17	Service Recommendations for Autism	3
11/1/17	In-Office Assessment of Preschool Anxiety	3
11/8/17	What is Trauma? Adverse Childhood Experiences	1
11/15/17	Developmental Delay: What to Do with Screens	2
11/22/17	Behavioral Interventions for Anxiety	4
11/29/17	The Child Who Does Not Speak	2
12/6/17	In-Office Assessment of Language	3
12/13/17	Behavioral Approaches to Sleep Disorders	2
12/20/17	Medical Approaches to Sleep Disorders	4

Spring Semester

DATE	TOPIC	LEVEL
1/10/18	Managing Stimulant Side Effects	4
1/17/18	Preventing Tantrums Among Children with Executive Functioning Deficits	4
1/24/18	Autism and Medical Comorbidities	3
1/31/18	Psychopharmacology and Autism	4
2/7/18	Autism and Mental Health Comorbidities	3
2/14/18	Etiological Work-Up for Autism	4
2/21/18	Approach to Complementary and Alternative Medicine (CAM)	3
2/28/18	CAMs in Autism Spectrum Disorder	4
3/7/18	Oppositional Defiant Disorder	2
3/14/18	Developmental Delay: Common Comorbidities	3
3/21/18	Longitudinal Follow-Up of Children with Intellectual Disability	4
3/28/18	Behavioral Disorders in Toddlers with Language Delay	4
4/4/18	Long-Term Risk Established by Early Language Delay	4
4/11/18	The Basics of Consent for Genetic Testing	3
4/18/18	Behavioral Phenotypes in Genetic Disorders	3
4/25/18	Obsessive-Compulsive Disorder	3

KKI-NECT Productivity to Date

- **41 KKI-NECT TeleECHO clinics** have been held
- **19 unique learners** (14 community clinicians, 3 community trainees, and 2 KKI clinicians) have participated
- **Total attendance of 209** (175 from community learners)
- Approximately **200 CME credits** have been earned
- **Total of >10,000 miles** (for 2-way travel) have been saved



Cohort I Retrospective Pre-Post Evaluations: Knowledge, Skills, and Practice

Domain	Mean Difference	T	Sig. (2-tailed)
Knowledge/Skills - Evaluation of Behavioral Concerns	1.400	2.45	0.005
Knowledge/Skills - Treatment of Behavioral Concerns	1.200	2.45	0.033
Confidence - Identifying Temper Tantrums	0.800	5.72	0.016
Confidence - Identifying Anxiety	1.400	3.21	0.025
Confidence - Identifying Psychotropic Med Needs	1.400	2.45	0.005
Confidence - Identifying Exposure to ACEs	1.200	3.21	0.033
Confidence - Identifying Parent-Child Relational Issues	1.000	2.45	0.034



Cohort I Feedback

“This has been an excellent experience for me so far, and I am so blessed and thankful that you all came knocking at my door!”

“This curriculum should be a requirement for any advance practice pediatric nurses.”

“When you asked me to participate, I was worried I wouldn’t be able to commit to an hour a week. It is now the hour I most look forward to in my work week.”



Cohort 2 Feedback

Sent: Friday, January 12, 2018 8:52 AM
To: Early Childhood Tele-Education
Subject: RE: KKI-NECT - Expanding viewership

Dear Janna,

I have come to really enjoy **the KKI-NECT program. I think it fits perfectly into the situation here on the Eastern Shore where there are few, and overloaded, mental health services.**

A couple of things:

1. I am getting along in age and will probably be retiring soon. Possibly next October. I feel a little guilty using your resources when they could be better applied to a younger caregiver.
2. Currently I am the Eastern Shore Representative for the Maryland Chapter of the American Academy of Pediatrics. **I would like to work on getting a wider participation of providers on the Eastern Shore in the program using the Chapter. I guess what I need from you is how many do you, Dr. Harrison and Dr. Leppert feel the course could accommodate. Trying to get providers to attend lectures is a thankless task (unless lunch is provided) but the program is definitely not a lecture per se. Give and take, personal feedback, and the views of other rural providers is extremely helpful. At the least it makes you feel like you are not alone in the world with the multiple roadblocks to delivering good mental health care as general pediatricians.**

I would appreciate any thoughts on this and will take it to the Executive Committee of the Chapter if you think this might be implemented.

Respectfully,





Kennedy Krieger Institute

Community Engagement Institute
A.K.A.