KKI-NECT: Preparing Providers for Tomorrow through Tele-Education on Neurodevelopmental and Mental Health Disorders

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Background

- Prevalence of pediatric neurodevelopmental and mental health disorders in U.S. children is now 15% and 11-20% respectively.
- Current estimates are one board certified pediatric subspecialist for every 100,000 U.S. children.
- Pediatric primary care clinicians (PPCCs) are increasingly tasked with identifying and managing pediatric neurodevelopmental and mental health disorders.
- Surveys of practicing pediatricians indicate that they lack the training, knowledge, and confidence to meet this need.
- Approaches to preparing the primary care workforce:
 - Expanding instruction at the training program level
 - Offering high quality continuing medical education
 - Arming primary care practices with integrated care models

Objective

Kennedy Krieger Institute's Network for Early Childhood Telehealth (KKI-NECT) was established to provide education and guided practice to PPCCs through case based learning and didactic presentations regarding neurodevelopmental and mental health disorders in early childhood.

Methods

KKI-NECT replicates the Project ECHO (Extension for Community Healthcare Outcomes) hub-and-spoke model.

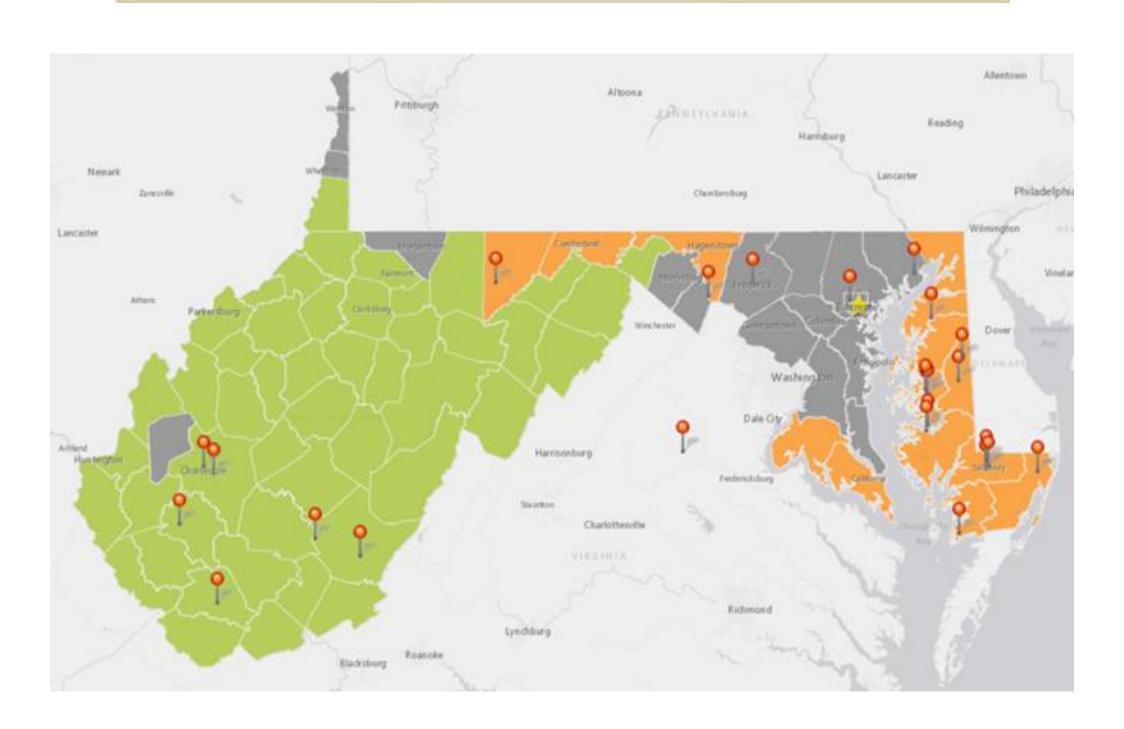
- Offers CME instruction to PPCCs in rural Maryland and West Virginia
- Weekly virtual clinics held by multipoint video-conferencing

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- Each one hour clinic combining a case presentation by a spoke member and didactic content aimed at guiding PPCC practice
- Didactic presentations based on a multidisciplinary, multilevel curriculum authored by KKI teaching faculty







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The Hub

- Behavior Psychologist
- Child and Adolescent Psychiatrist
- Developmental and Behavioral Pediatrics
- Neurodevelopmental Pediatricians
- Social Workers
- Research Assistant
- IT Specialists

The Spokes - Participants

52 Unique Participants from Maryland, Virginia, and West Virginia

- Pediatricians
- Family Practitioners
- Nurse Practitioners
- Physician Assistants
- Social workers

The Cases

52 Total Cases

- 71% Male
- 40% Medicaid
- 65% White
- 10% African American
- 10% Hispanic or Latino

- ADHD
- Anxiety
- Autism
- Developmental Delay
- Disruptive Behavior
- Genetics
- Trauma (ACES)

Sleep Disorders

Disorders

Speech and Language

Consequences of

Substance Exposure

The Didactics

ODD and OCD

Results:

- 74 KKI-NECT clinics have been held.
- All but 2 cases have been managed within the Medical Home.
- Didactic sessions have progressed from novice to advanced content.
- Statistically significant improvement shown in PPCC-rated knowledge and confidence surrounding identification and management of neurodevelopmental and mental health disorders.
- KKI-NECT provides an effective solution to expanding the pediatric subspecialty workforce, by expanding PPCC knowledge and confidence in these disorders through guided practice and mentorship.



KKI-NECT Team: