



# Interdisciplinary Collaboration to Change Policy in Tele- Intervention

Joy Kearns, MS, CCC-SLP, LSLIS Cert. AVEEd.  
Director, BabyTalk Teletherapy Program  
Administrator, Weingarten Children's Center

Dylan K. Chan, MD, PhD, FAAP  
Director, Children's Communication Center  
AAP CA Chapter 1 Champion  
Early Hearing Detection and Intervention  
Assistant Professor  
Pediatric Otolaryngology-Head and Neck Surgery  
University of California, San Francisco

EHDI 2019  
Hyatt Regency O'Hare  
Tuesday, March 5, 4:20-4:45  
Malpensa



## Teletherapy to improve access to aural habilitation

- Can teletherapy address disparities in access to hearing health care?
- Creating a sustainable teletherapy program

## Changing policy to sustain teletherapy

- Getting in the door
- Making the argument
- Implementation
- Building on the future



## Teletherapy to improve access to aural habilitation

- Can teletherapy address disparities in access to hearing health care?
- Creating a sustainable teletherapy program

## Changing policy to sustain teletherapy

- Getting in the door
- Making the argument
- Implementation
- Building on the future

# Hearing Health Care Disparities

Race/ethnicity  
Language  
Culture  
Education  
Sex/gender  
Insurance status  
Geography  
Socioeconomic status

Demographic  
Disparities

D/HH Child

Clinical  
Attributes

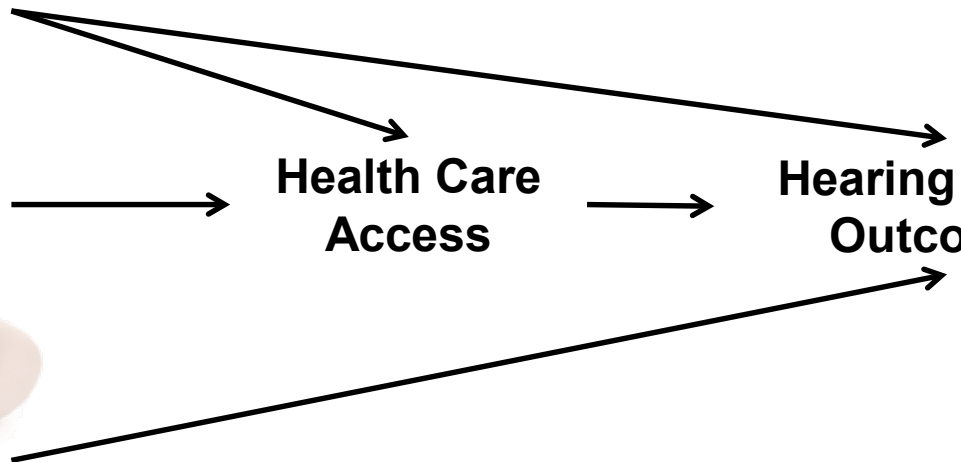
Hearing level  
Aided thresholds  
Etiology  
Anatomy  
Medical comorbidities  
Device optimization  
Surgery  
Medical management

Health Care  
Access

Hearing Health  
Outcomes

Timing of identification  
Timing of intervention  
Therapy utilization  
Health literacy  
Compliance

Hearing  
Speech/language  
Education  
Quality of Life





# Hearing health disparities **Access**

Distribution of trained providers with expertise working with children with hearing loss is uneven.



Counties with an accredited auditory-verbal (LSL) therapist

Similar pattern for any other specialization:

- Spanish language
- ASL



# Hearing Health Care Disparities

Race/ethnicity  
Language  
Culture  
Education  
Sex/gender  
Insurance status  
Geography  
Socioeconomic status

## Demographic Disparities

**D/HH Child**

**Clinical Attributes**

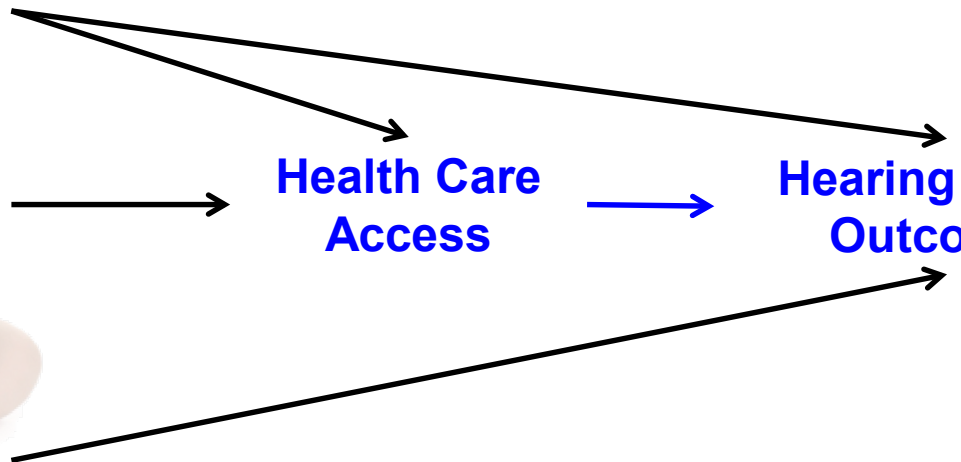
Hearing level  
Aided thresholds  
Etiology  
Anatomy  
Medical comorbidities  
Device optimization  
Surgery  
Medical management

**Health Care Access**

Timing of identification  
Timing of intervention  
Therapy utilization  
Health literacy  
Compliance

**Hearing Health Outcomes**

Hearing  
Speech/language  
Education  
Quality of Life



# Hearing Health Care Disparities

Race/ethnicity  
Language  
Culture  
Education  
Sex/gender  
Insurance status  
Geography  
Socioeconomic status

## Demographic Disparities

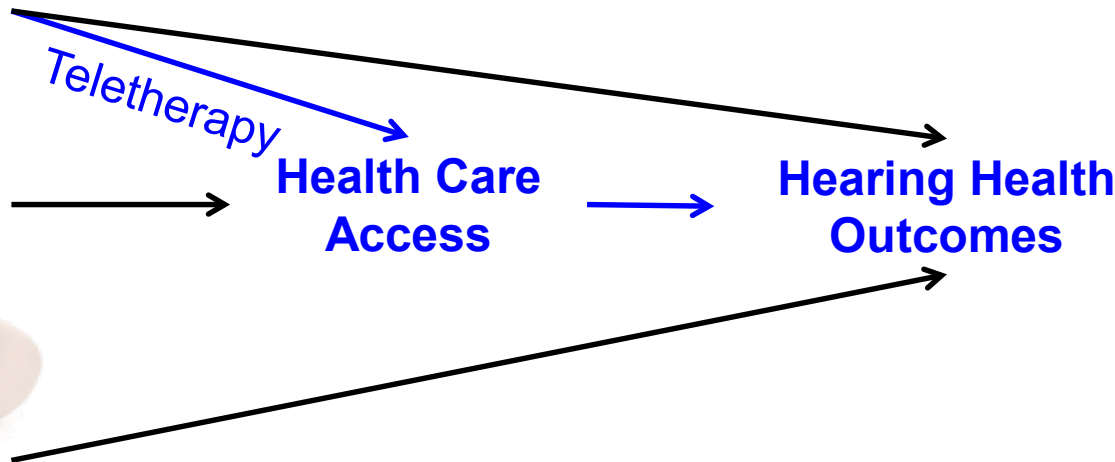
**D/HH Child**

## Clinical Attributes

Hearing level  
Aided thresholds  
Etiology  
Anatomy  
Medical comorbidities  
Device optimization  
Surgery  
Medical management

Timing of identification  
Timing of intervention  
Therapy utilization  
Health literacy  
Compliance

Hearing  
Speech/language  
Education  
Quality of Life









Teletherapy can be a means to improve access to linguistically-matched, culturally-competent, specialty-trained providers

What has been our experience/challenges in developing a sustainable teletherapy program?



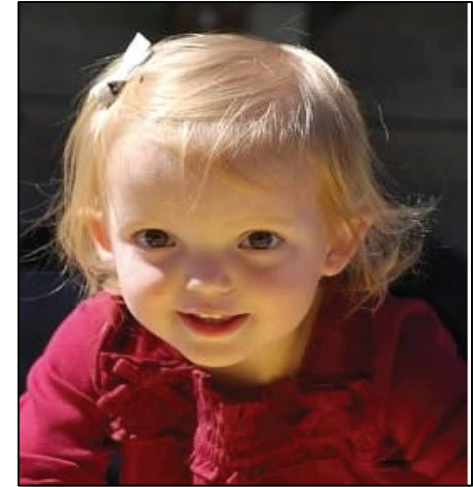
## Teletherapy to improve access to aural habilitation

- Can teletherapy address disparities in access to hearing health care?
- **Creating a sustainable teletherapy program**

## Changing policy to sustain teletherapy

- Getting in the door
- Making the argument
- Implementation
- Building on the future

# BabyTalk



**STANFORD**  
SCHOOL OF MEDICINE

*Stanford University Medical Center*

# BabyTalk

A cooperative offering between Weingarten Children's Center, an Option School/LSL Center of Excellence and Stanford University. Originally funded with “seed money”; a 3 year “start up” grant – the program was a test case for how telemedicine can make patient's lives easier, save money, and bring specialized medical care to underserved and remote communities.

Kelly, H. (2015, February 8.) Reaching deaf babies with implants, iPads and therapy. *CNN*. Retrieved from <http://money.cnn.com/2015/02/09/technology/ipads-deaf-kids-therapy/>

# WHY BABYTALK?

- Because only 6% of children who are D/HH in CA are receiving specialized services from the CA Schools for the Deaf (ASL) or an Option School (LSL).
- LSL certified providers and centers in only 12 of 58 (21%) CA counties with 31 of 51 (61%) in a single county (Los Angeles County).
- Because teletherapy improves access to linguistically-matched, culturally-competent, specialty-trained providers.



# BabyTalk



Parent-Coaching Model

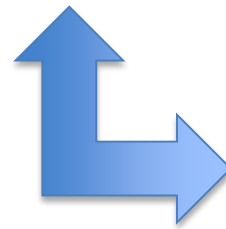
Birth to 3.5 years

Known hearing loss, using appropriate amplification

Consultative services too

Parent/child

iPad/FaceTime



Therapist

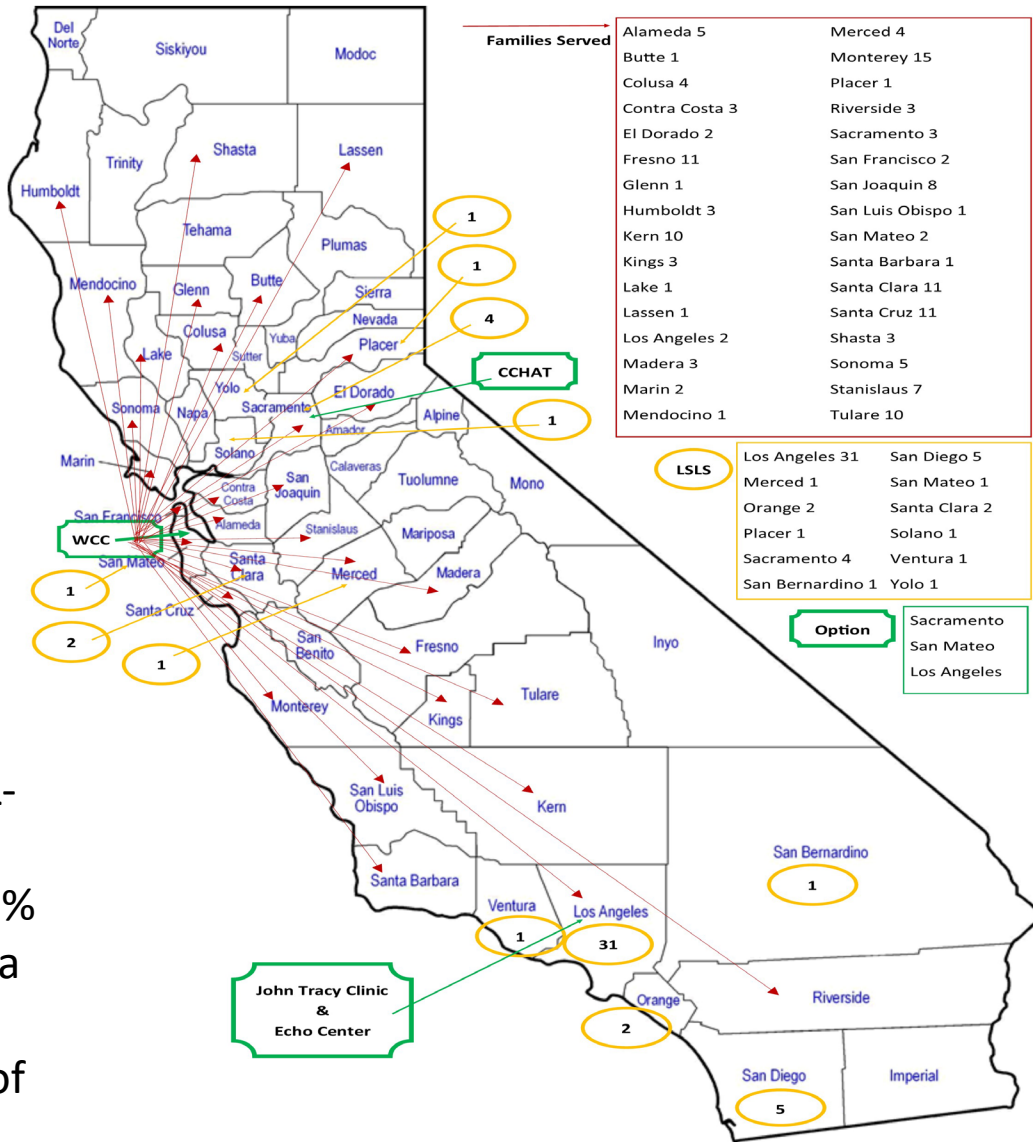


# BabyTalk

- BabyTalk is an “add on” to “usual care”, which in CA typically means in-person home visits from a local itinerant teacher of the D/HH or SLP Part C provider. We are finding that through the BabyTalk teleintervention program we can improve a family’s access to quality, specialized LSL services, thus addressing disparities in language outcomes.



- BabyTalk emphasizes collaboration with the child’s hearing healthcare team and the family’s local early intervention team members, because we are “in addition to” not “instead of”.



In contrast to the uneven geographic distribution of LSL-certified therapists/centers (only 21% of counties with 61% of therapists concentrated in a single county), BT families were distributed across 64% of CA counties.

# Teletherapy National Variability/Ch allenges

- Medical Model vs Educational Model – or BOTH – for Early Intervention?
- It's different in every state  
<https://www.asha.org/advocacy/state/>



**In CA, do families access these services through the educational or medical model?**

---

**Do IDEA Part C (IFSP) Services Pay for BabyTalk Teletherapy?**

RARELY. In the last 6 years only 3 children have had their BabyTalk services paid by their County/SELPA as part of their IFSP services, though MANY have asked.

# AB 415

## The Telehealth Advancement Act

### **Does private insurance pay for BabyTalk tele-speech therapy?**

Often – thanks to AB 415, The Telehealth Advancement Act, which recommends coverage for services that are provided via telehealth to the same degree as equivalent in-person services.

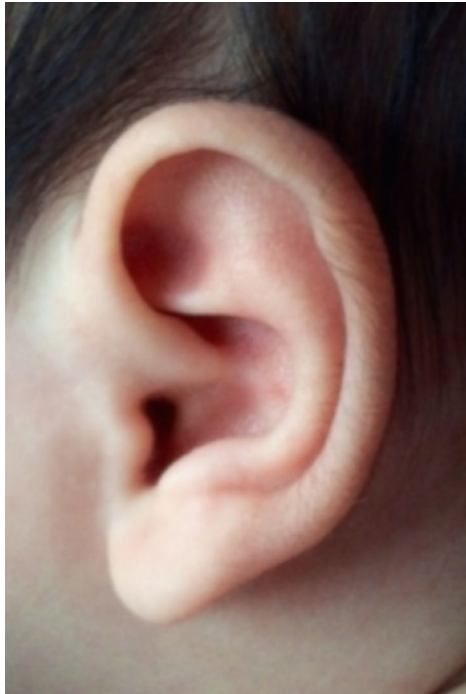
### **California Telepractice State Licensure Board Requirements**

California has a [policy](#) related to the use of telepractice for audiologists and speech-language pathologists.

*Telehealth is viewed as mode of delivery of health care services, not a separate form of practice. There are no legal prohibitions to using technology in the practice of speech-language pathology, audiology, or hearing aid dispensing, as long as the practice is done by a California licensed practitioner. Telehealth...typically involves the application of videoconferencing...The standard of care is the same whether the patient is seen in-person, through telehealth or other methods of electronically enabled health care.*

- <https://www.asha.org/Advocacy/state/info/CA/California-Telepractice-Requirements/>





## Teletherapy to improve access to aural habilitation

- Can teletherapy address disparities in access to hearing health care?
- Creating a sustainable teletherapy program

## Changing policy to sustain teletherapy

- **Getting in the door**
- Making the argument
- Implementation
- Building on the future

# Teletherapy Addressing Challenges



- How did we start the conversation with the folks at MediCal/CCS?
- What did they want to know?

# Making it Real in the Home!

<https://youtu.be/vbPSuxKUTIo>





## Teletherapy to improve access to aural habilitation

- Can teletherapy address disparities in access to hearing health care?
- Creating a sustainable teletherapy program

## Changing policy to sustain teletherapy

- Getting in the door
- **Making the argument**
- Implementation
- Building on the future

# Presentation of Evidence **Key Questions**



**Key question #1:** Are home-based intervention services (including speech therapy) equivalent to center-based services for DHH children?

**Key Question #2:** Are outcomes with speech-language teletherapy equivalent to those achieved with in-person therapy for DHH children?

**Key Question #3:** What is the role of speech teletherapy in addressing disparities in hearing health care?

# Presentation of Evidence **Key Questions**



**Key question #1:** Are home-based intervention services (including speech therapy) equivalent to center-based services for DHH children?

Key Question #2: Are outcomes with speech-language teletherapy equivalent to those achieved with in-person therapy for DHH children?

Key Question #3: What is the role of speech-language teletherapy in addressing disparities in hearing health care?



# Home-based **Early Intervention**



## **BEST PRACTICES FOR EARLY START FOR INFANTS AND TODDLERS WHO ARE DEAF OR HARD OF HEARING**

**Recommendations from the California Deaf and Hard of  
Hearing Early Start Workgroup**

**Project Funded by the Maternal and Child Health Bureau  
Universal Newborn Hearing Screening Grant**

**California Department of Education  
2005**

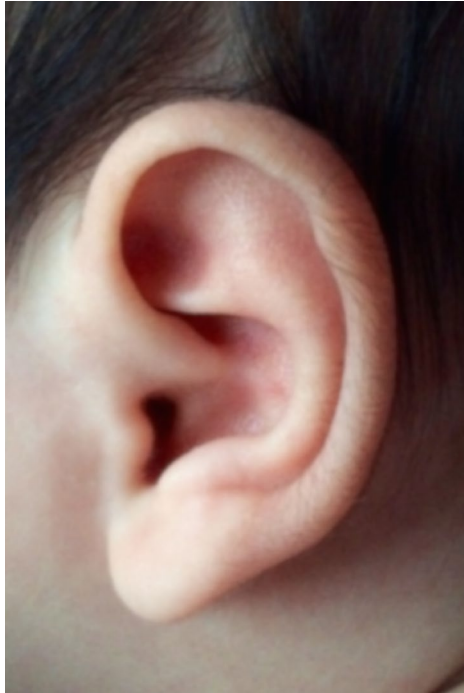
# Home-based **Early Intervention**

Family Centered Services. The parents are considered to be the child's primary teacher, such that the child is receiving communication experiences **in the natural environment** (i.e., everyday routines, relationships, activities, places and partnerships).

“To the extent possible, services for infants and toddlers who are DHH and their families **should be provided to promote natural environments**, with appropriate accommodations to ensure the infant or toddler has complete access to the language of the environment



# Home-based **Early Intervention**



American Academy  
of Pediatrics  
DEDICATED TO THE HEALTH OF ALL CHILDREN™



FROM THE AMERICAN ACADEMY OF PEDIATRICS

Guidance for the Clinician in  
Rendering Pediatric Care

CLINICAL REPORT

Early Intervention, IDEA Part C Services, and the  
Medical Home: Collaboration for Best Practice and Best  
Outcomes

“The most recent reauthorization of IDEA Part C  
in 2004 placed increasing importance on quality  
measures of outcome, **provision of services in the  
child’s natural environment...**”

Adams (2013), *Pediatrics*

# Presentation of Evidence **Key Questions**



Key question #1: Are home-based intervention services (including speech therapy) equivalent to center-based services for DHH children?

**Key Question #2:** Are outcomes with speech-language teletherapy equivalent to those achieved with in-person therapy for DHH children?

Key Question #3: What is the role of speech-language teletherapy in addressing disparities in hearing health care?

# Speech Therapy **In-person vs. Remote**

*Infants & Young Children*  
Vol. 30, No. 2, pp. 147-161  
Copyright © 2017 Wolters Kluwer Health, Inc. All rights reserved.

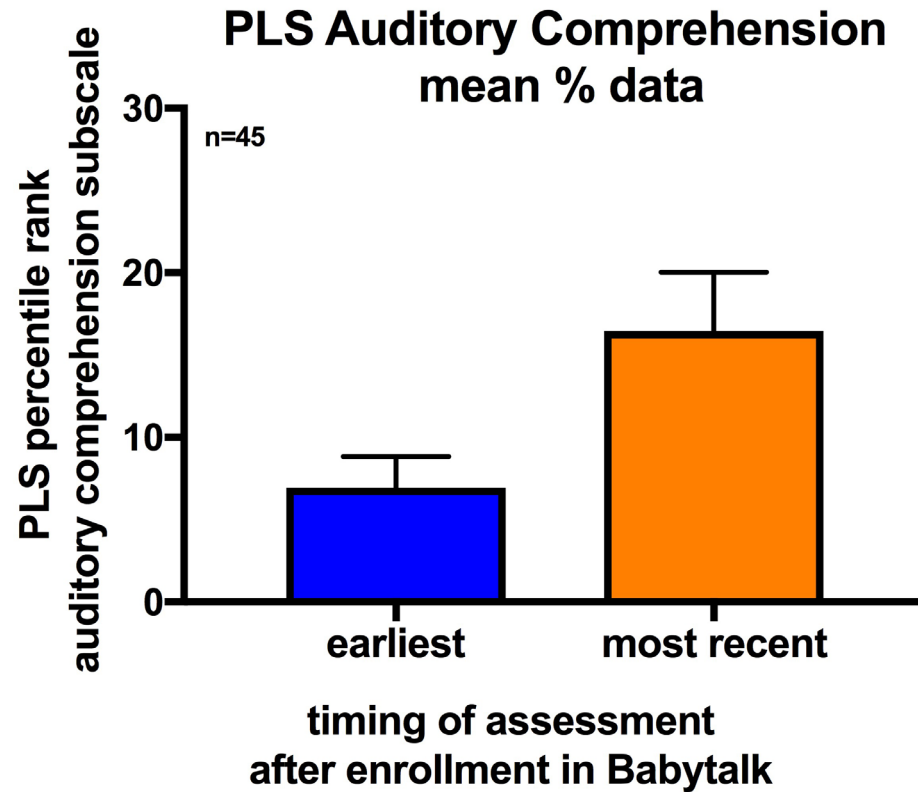


## A Multisite Study Evaluating the Benefits of Early Intervention via Telepractice

*Diane D. Bebl, MEd; Kristina Blaiser, PhD;  
Gina Cook, PhD; Tyson Barrett, BS;  
Catherine Callow-Heusser, PhD; Betsy Moog Brooks, MS;  
Pamela Dawson, MEd; Suzanne Quigley, PhD;  
Karl R. White, PhD*

“On average, families and children receiving services via telepractice had **at least the same if not better language outcomes and auditory skills** than children who received services solely through traditional in-person visits”

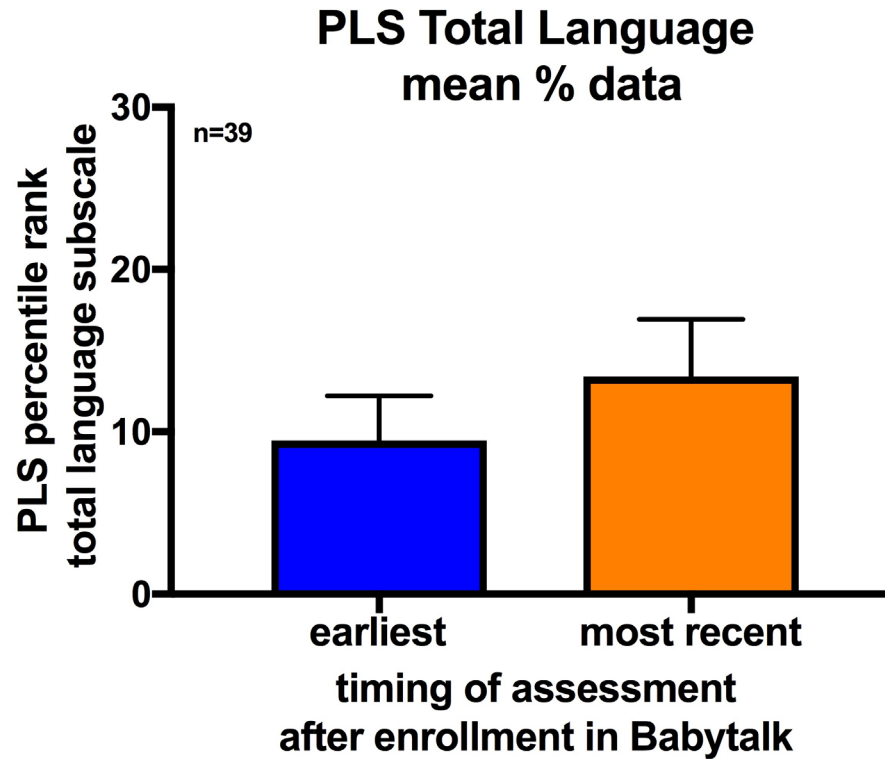
# Teletherapy **Baby Talk - Hearing**



Kearns and Fitzgerald, unpublished

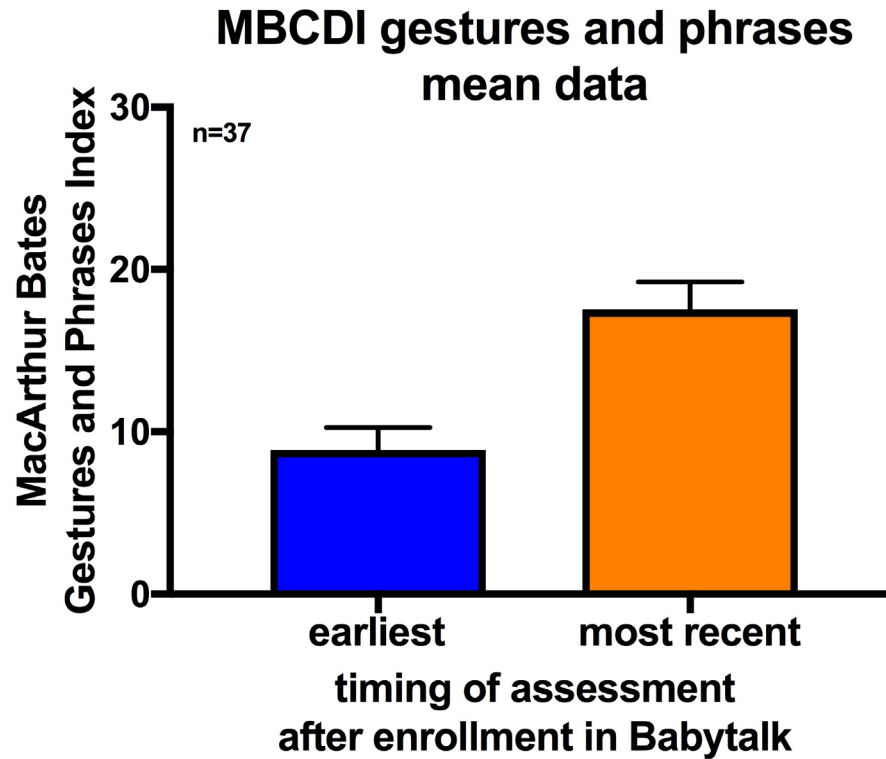


# Teletherapy **Baby Talk - Language**



Kearns and Fitzgerald, unpublished

# Teletherapy **Baby Talk - Communication**



Kearns and Fitzgerald, unpublished

# Presentation of Evidence **Key Questions**



Key question #1: Are home-based intervention services (including speech therapy) equivalent to center-based services for DHH children?

Key Question #2: Are outcomes with speech-language teletherapy equivalent to those achieved with in-person therapy for DHH children?

**Key Question #3:** What is the role of speech-language teletherapy in addressing disparities in hearing health care?

# Hearing health disparities **Access**

## REVIEW



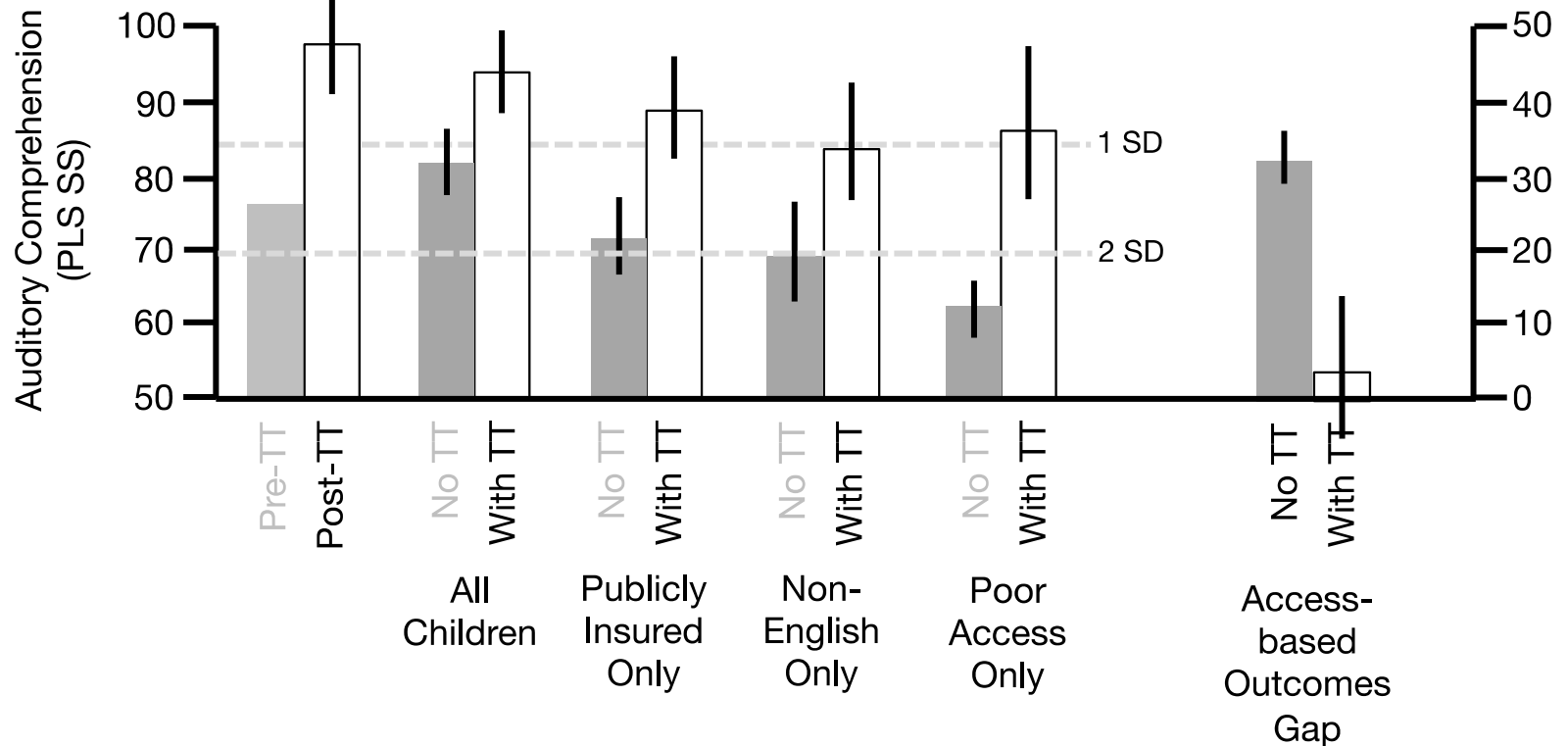
### **Disparities in access to pediatric hearing health care**

*Matthew L. Bush, Michael R. Kaufman, and Beth N. McNulty*

“Telemedicine can also be **utilized to address unmet need for speech therapy services** [33]. Delivery of remote speech therapy is **highly acceptable to parents** [72,73], and the **outcomes are comparable with in-person therapy** [74,75].”



# Teletherapy Addressing Disparities



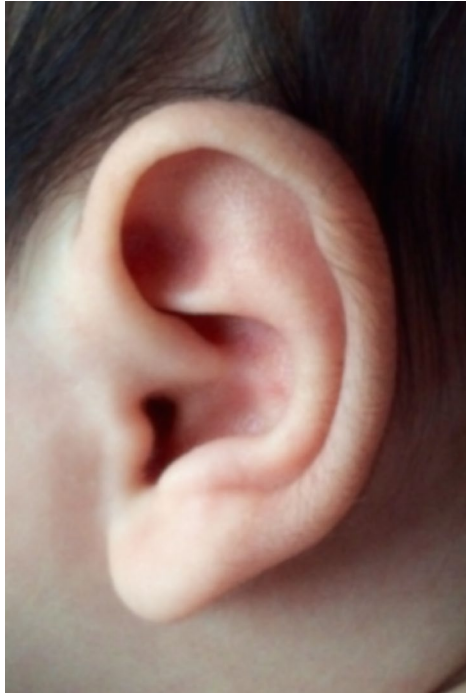
Retrospective data with significant confounders

Could teletherapy be effective at reducing hearing health care disparities?

# Summary Teletherapy



- The preponderance of evidence suggests that **home-based speech-language teletherapy has at least equivalent, if not better, efficacy to in-person therapy**
- There is considerable potential for **teletherapy to reduce disparities in outcomes in California**
- **We recommend that home-based speech-language teletherapy be an equivalent covered benefit to in-person speech therapy under CCS SAR 04 for DHH children.**



## Teletherapy to improve access to aural habilitation

- Can teletherapy address disparities in access to hearing health care?
- Challenges to creating a sustainable teletherapy program

## Changing policy to sustain teletherapy

- Getting in the door
- Making the argument
- **Implementation**
- Building on the future





# Teletherapy Implementation

Challenges in implementation...

- Insurance contracts
- MediCal/CCS credentialing
- Who pays the shortfall?
- Exploring models for ongoing collaboration (partnering of non-profits and larger health care centers)

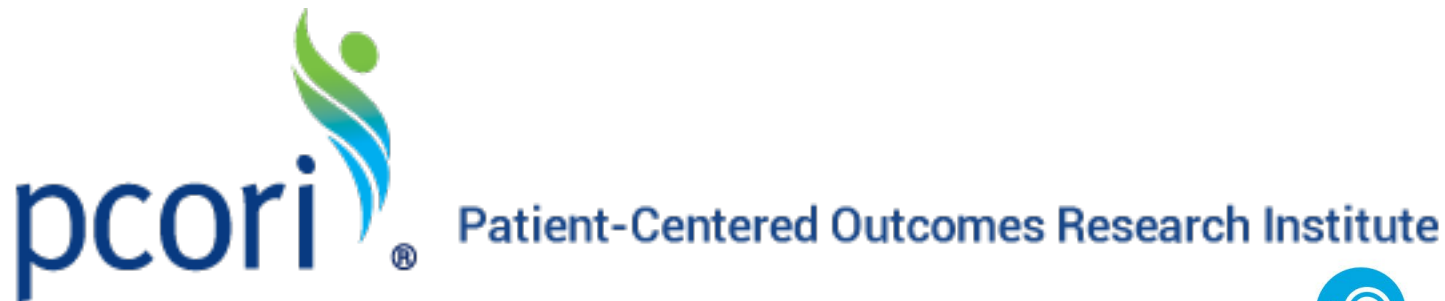


## Teletherapy to improve access to aural habilitation

- Can teletherapy address disparities in access to hearing health care?
- Challenges to creating a sustainable teletherapy program

## Changing policy to sustain teletherapy

- Getting in the door
- Making the argument
- Implementation
- **Building on the future**



Patient-centered outcomes  
Stakeholder advisory group  
Real-life comparative effectiveness trial  
Does supplemental speech-language teletherapy  
reduce disparities in hearing health care?



## Discussion