

PUBL 360: Social Policy and Inequity
Honors Option

Evaulation of Early Hearing Detection and Intervention

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Introduction

- Congenital hearing loss is one of the most common developmental disabilities, affecting approximately 2 infants per 1,000 live births in the United States (Grosse et al., 2017)

Problem Statement

Too many DHH children are being diagnosed too late, thus impacting their language development and academic outcomes.

Background

Pre-EHDI

- Average age of getting diagnosed with hearing loss: 4–5 years old (Schulman et al., 2010)
- Hearing screenings were not offered as routine care at the birth prior to the enactment
- Risks for delays in academic and language outcomes increase as later diagnosis (Humphries et al., 2012; Hall et al., 2017)

Legislation

The Children's Health of 2000

- Formal establishment of two federal agencies: Human Resources and Services Administration and Centers for Disease Control and Prevention
- HRSA and CDC authorize federal funding to support health-related activities
- Federal oversight and data collection



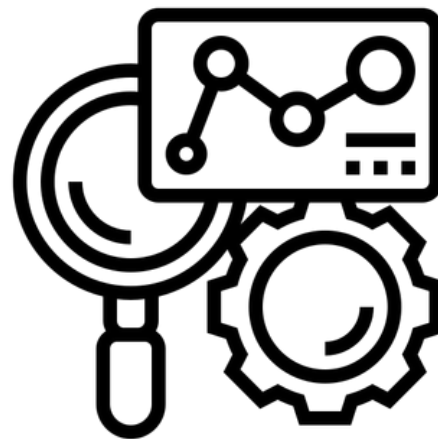
Financing the EHDI

The Children's Health of 2000

authorizes the following activities:



Screening &
Surveillance



Diagnostics
& Evaluation



Early
Intervention
Services



Tracking & Data
Management



Hearing
Aids



Professional
Training

Program Overview

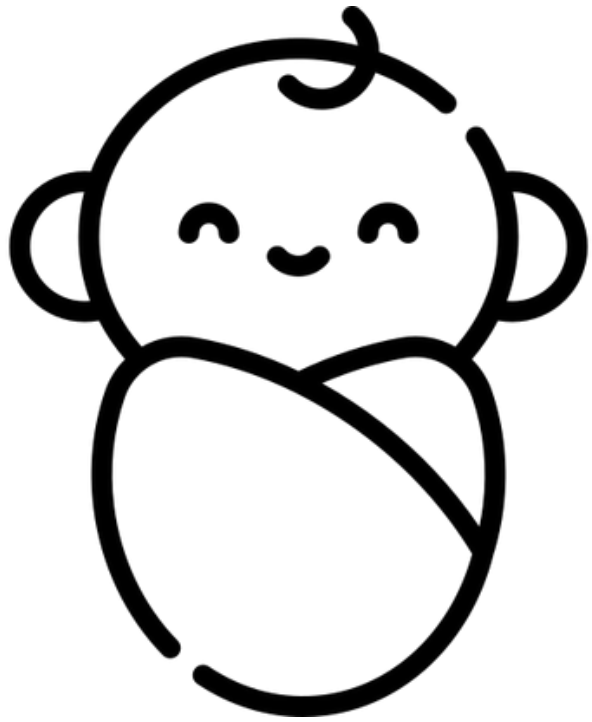
States are responsible for maintaining their state hearing screenings and early intervention services, while adhering to CDC's benchmarks

- Data tracking & Data Management
- Technology equipment
- Referrals
- Early Intervention Services

EHDI's benchmark timeline



Stakeholders



Newborns



Parents &
Families



Healthcare
Providers



Early
Intervention
Providers



Schools

Research Question

Does timely early-intervention enrollment before six months correspond to higher rates of DHH children meeting LEAD-K age-appropriate language expectations?

BUT...

**How do we measure the
effectiveness of the program?**



99%^{today}

of children are screened
by 1 month, on average

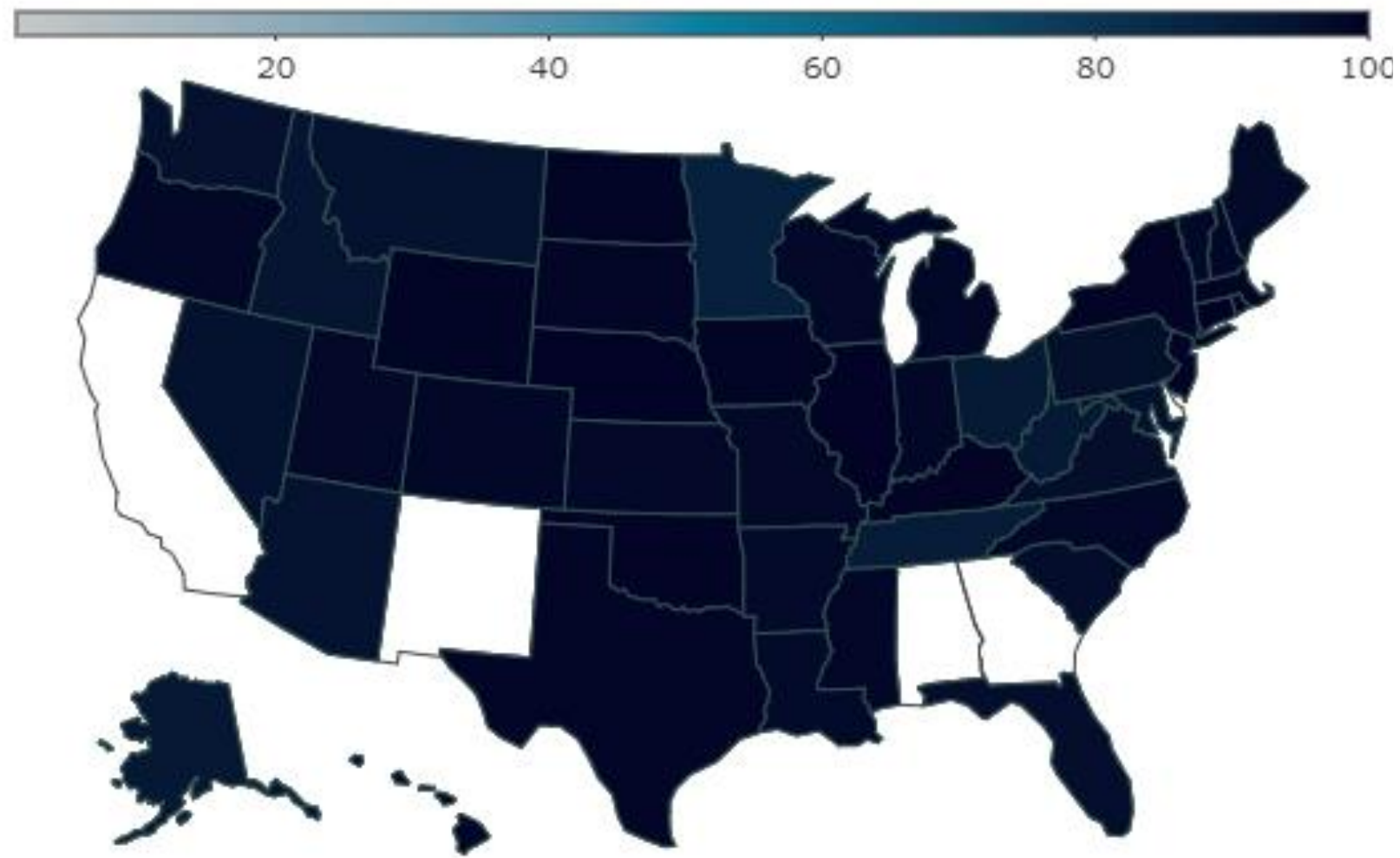


pre-EHDI

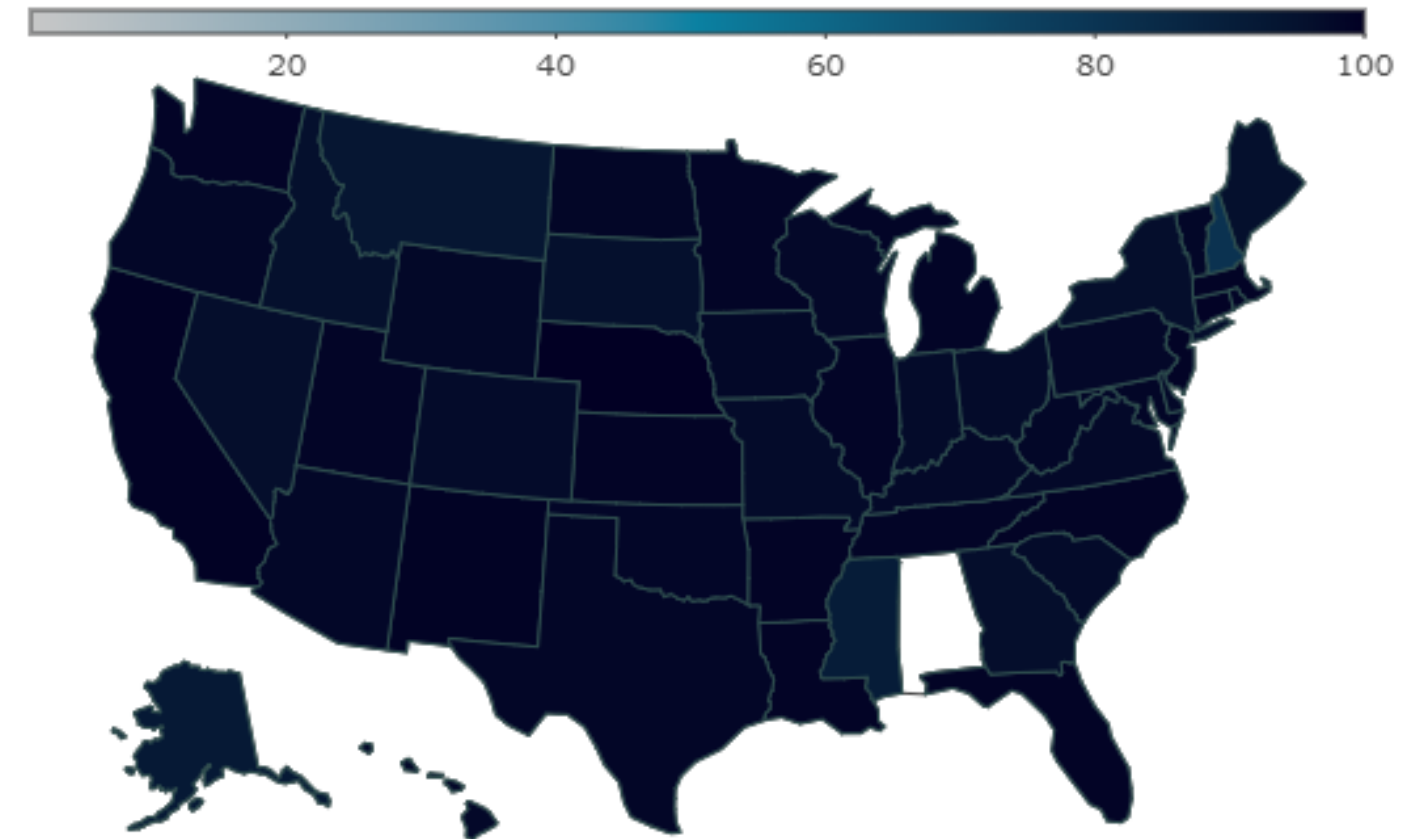
40%

of children diagnosed
screened by 1 month

Map showing Total Screened (%) in each state by year, 2007-2022



Map showing Total Screened (%) in each state by year, 2007-2022



Source: Center for Public Health Systems Science. (February 26, 2025). Early Hearing Detection and Intervention Data. <https://EHDIdata.wustl.edu>

2007

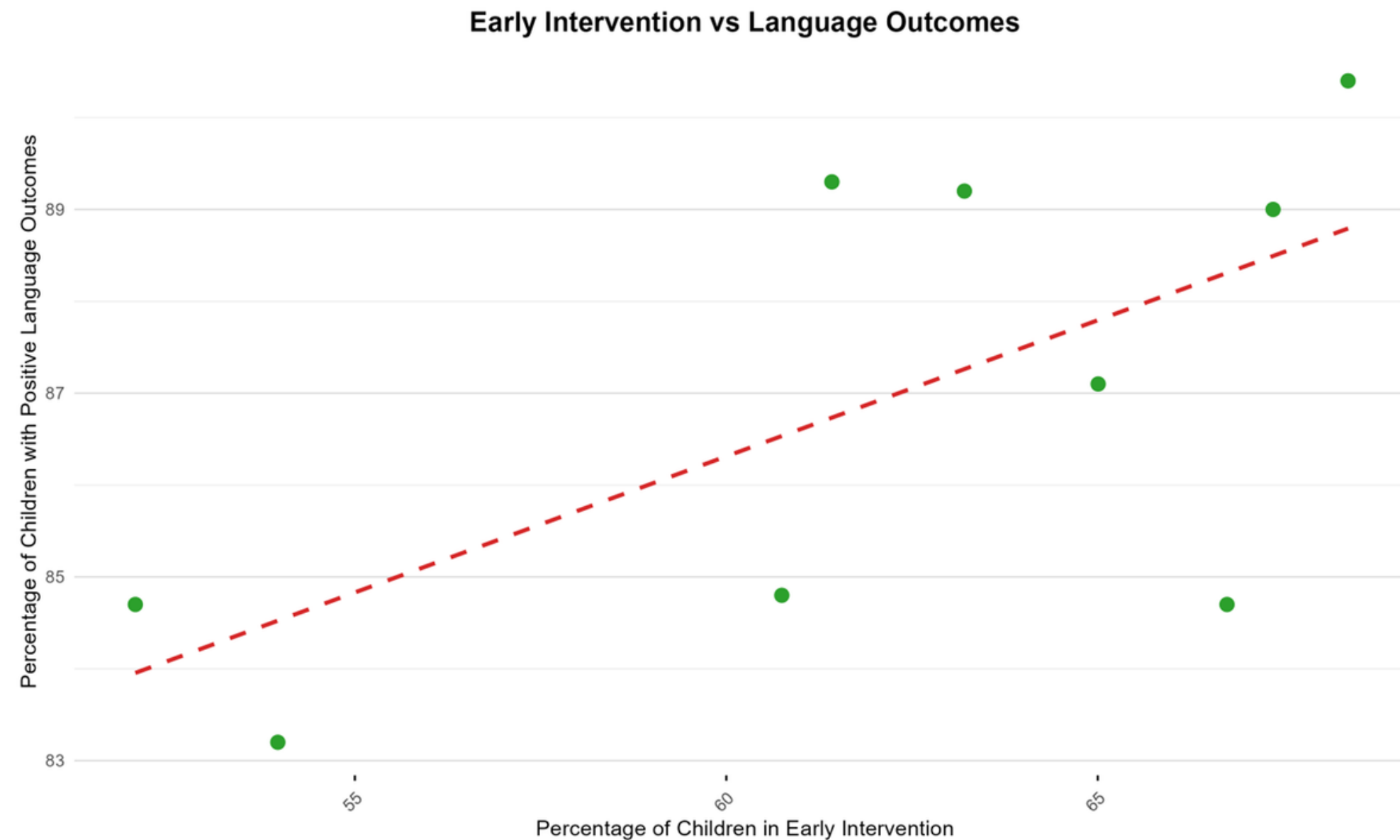


2022

LEAD-K: Language Equality and Acquisition for Deaf Kids

- Tracks DHH children's language progress by administering assessments and family interviews
- Helps teachers to identify the gaps and trends

EARLY INTERVENTION = HIGHER ACADEMIC OUTCOMES

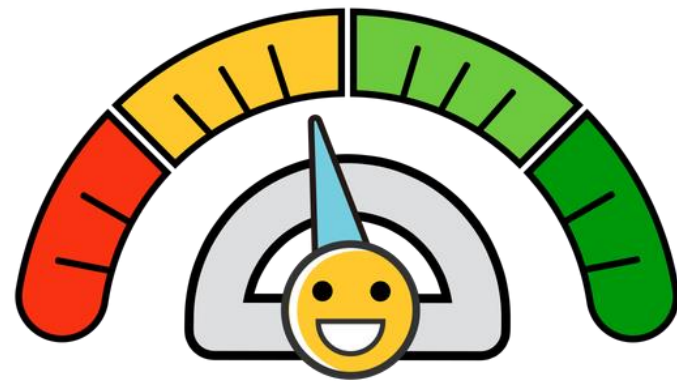


POLICY IMPLICATIONS

- 1. LACK OF DATA STANDARDIZATION (Alam et al., 2016)**
- 2. WEAK COMMUNICATION BETWEEN HEALTHCARE PROVIDERS AND EI PROVIDERS (Cree et al., 2025)**
- 3. BARRIERS TO ACCESSING EI SERVICES IN LOWER SES AREAS (Werfel et al., 2025; Cree et al., 2025)**
- 4. CURRENT EHDI SYSTEMS EMPHASIZE THE MEDICAL MODEL OF HEARING LOSS**
- 5. LACK OF TRAINING FOR HEALTHCARE PROVIDER**

EVAULATION

EFFICIENCY



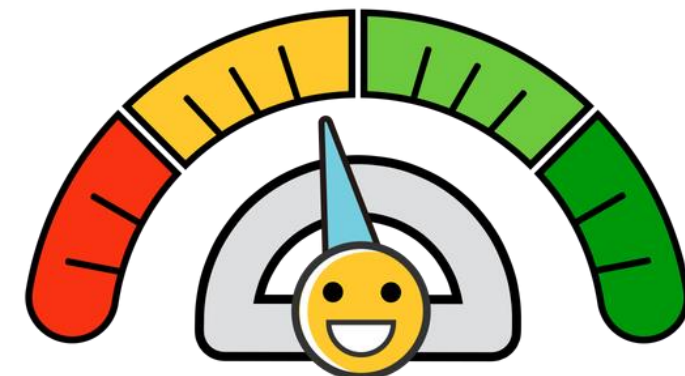
EQUITY



EFFECTIVENESS



ADMINISTRATIVE FEASIBILITY



FUTURE PROPOSALS

- 1. CENTRALIZED DATA INFRASTRUCTURE**
- 2. DESIGN LANGUAGE-CENTRIC EDHI SYSTEMS**
- 3. STANDARDIZED DATA REPORTING AND PRACTICES**

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