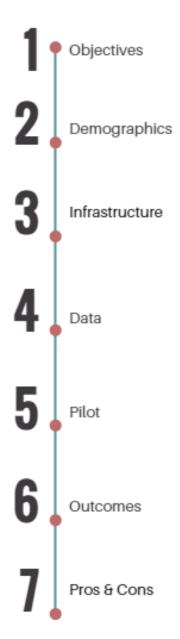
#### Utilizing Regional Educational (Early Intervention) Audiology Providers to Increase Timely Diagnosis for Iowa Infants

Presented by: Tammy O'Hollearn, IA EHDI Director Shalome Lynch, IA EHDI Follow-up Coordinator

17<sup>th</sup> Annual Early Hearing Detection and Intervention Meeting March 19, 2018



#### **OVERVIEW**







#### **OBJECTIVES**

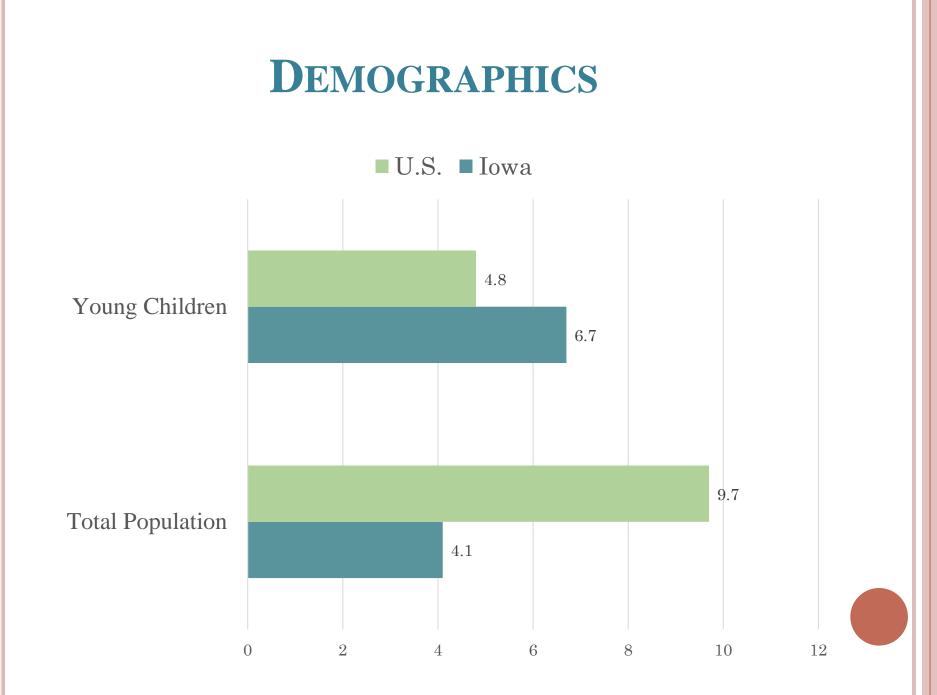
- Participants will be able to identify one successful strategy using regional educational audiologists to improve timely diagnosis.
- Participants will learn what type of training and support is needed to set up a successful partnership between an EHDI program and regional educational audiologists.
- Participants will learn the benefits of collaborating with regional educational audiologists to improve timely diagnosis.



#### **DEMOGRAPHICS**

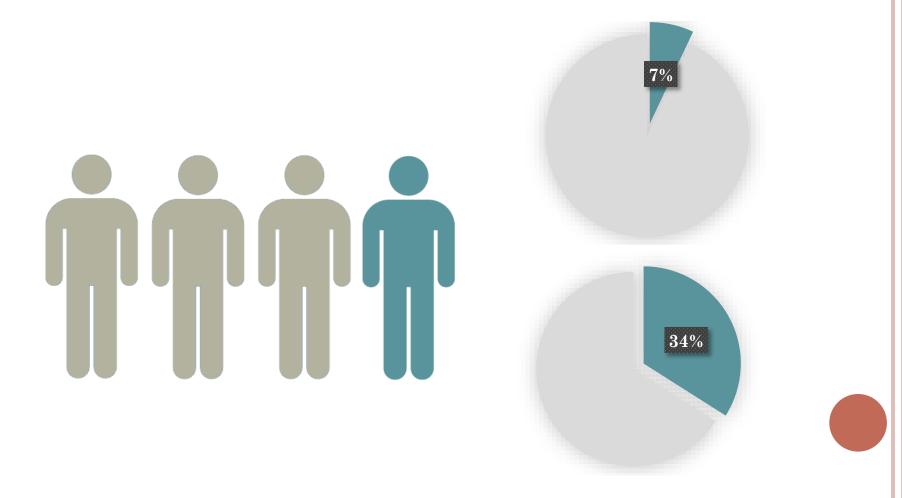


Capital: Des Moines Population: 3,090,416 Counties: 99 Birthing Hospitals: 72





Both single parenting and parental work involvement have risen dramatically over the past decades



### **IOWA EHDI INFRASTRUCTURE**

#### **EHDI** at IDPH

The Iowa EHDI program resides within the Iowa Dept. of Public Health (IDPH). The EHDI program is one of three newborn screening programs.

#### **EHDI** Law & Rules

Requires universal screening. Results must be reported within six days of the test for all children from birth to the age of three who receive screening, rescreening or diagnostic assessment.

#### **EHDI** Funding

Unfunded mandate supported by HRSA & CDC grants. Small amount of funding to supplement decreased federal funding to support bare minimum personnel (total of 2.5 staff).

#### **Birthing Facilities**

Iowa has few diagnostic providers and a large number of hospitals (72), many using OAE equipment. Because of this, state require a hearing re-screen. Following re-screen refer rate drops from 5% to 1-2%.

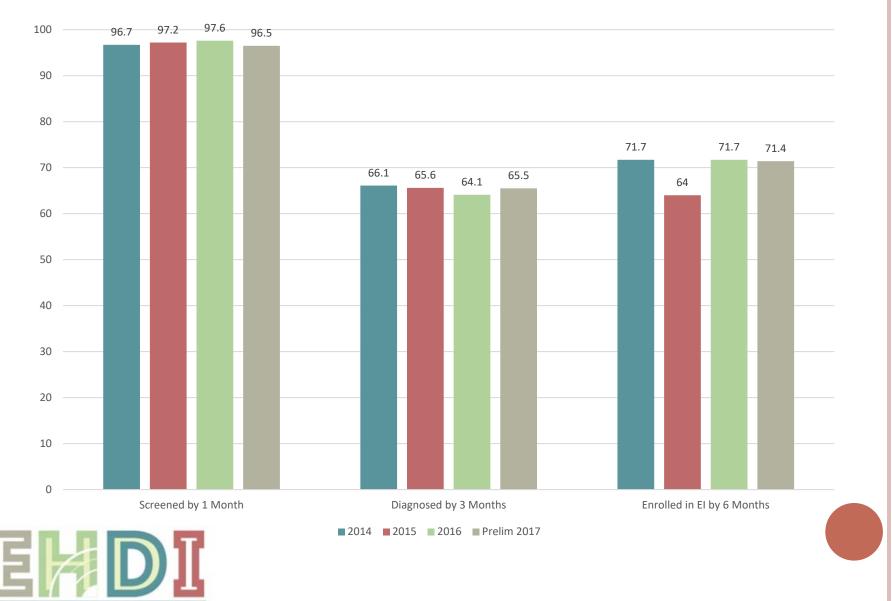
#### Audiologists

Eighty report results for children up to three years old. Five providers were added (four at regional educational settings providing Part C/B). These were trained to provide unsedated ABRs.

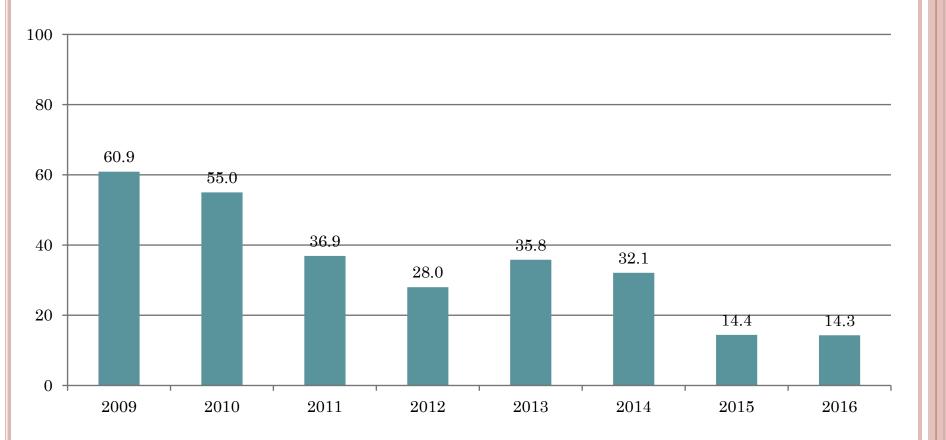
#### **Integrated Data System**

OZ Systems eSP<sup>™</sup> web-based data system contains NBS data including EHDI, Dried Blood Spot and Critical Congenital Heart Disease. System captures individualized data including EI, family support and follow up. Ability to make automated EI referrals through the system.

#### IOWA EHDI PROGRESS IN MEETING NATIONAL 1-3-6 GOALS



### LOST TO FOLLOW-UP/DOCUMENTATION





# WHO ARE THE EDUCATIONAL AUDIOLOGISTS IN IOWA?

"Work as educational partners with every public and accredited, nonpublic school in Iowa to improve the learning outcomes and well being of all students."

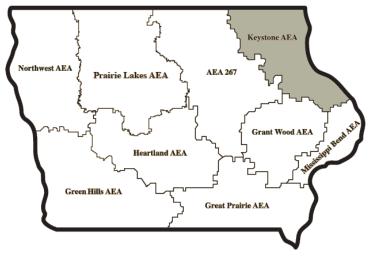
> lowa's Area Education Agencies

CHARGED WITH PROVIDING SERVICES AND SUPPORTS FOR CHILDREN BIRTH TO 21 IN NEED OF SPECIAL EDUCATION SERVICES (IDEA, PARTS C AND B).

> CONTRACT WITH PROFESSIONALS (AUDIOLOGISTS, SPEECH & LANGUAGE PATHOLOGISTS, OT, PT, ITINERANT TEACHERS, ETC.) TO PROVIDE SERVICES.

NINE REGIONAL PROGRAMS IN THE STATE

#### BACKGROUND





- TELE-AUDIOLOGY PILOT 2010-2014
- RURAL LOCATION IN NE IOWA
- PARTNERED WITH CHILDREN W/SPECIAL
- HEALTH CARE NEEDS PROGRAM



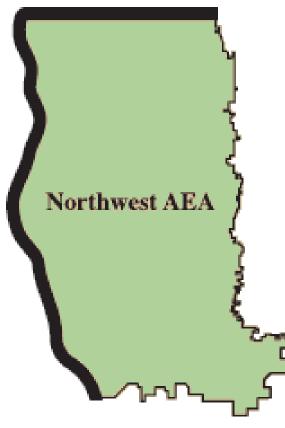
## UNSEDATED ABR PILOT BY EDUCATIONAL AUDIOLOGISTS

Advised by EHDI Advisory Committee, focus shifted to training regional educational audiologists to perform unsedated ABRs in their local communities. Educational audiologists already provide outpatient hearing screens, as needed, and serve as EI provider.

In-person training provided by EHDI audiologist. Ongoing coaching and support through email, phone calls and online meetings were also provided to answer any questions and ensure tests performed were interpreted correctly.

First pilot site was trained spring 2015. Families in this area would have to go to South Dakota for diagnostic testing leading to higher LFU/D. Audiologist met with local hospitals and practiced over summer. Unsedated ABR's started taking place fall 2015.

# UNSEDATED ABR PILOT BY EDUCATIONAL AUDIOLOGISTS





Fifteen diagnostic tests performed

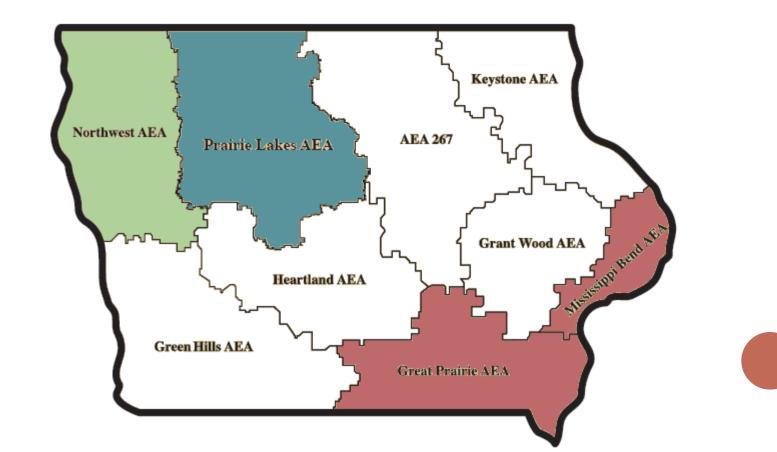
# 2 children were identified with a hearing loss

one mild unilateral hearing loss one moderate bilateral hearing loss

#### 13 NORMAL HEARING OR TRANSIENT CONDUCTIVE HEARING LOSS

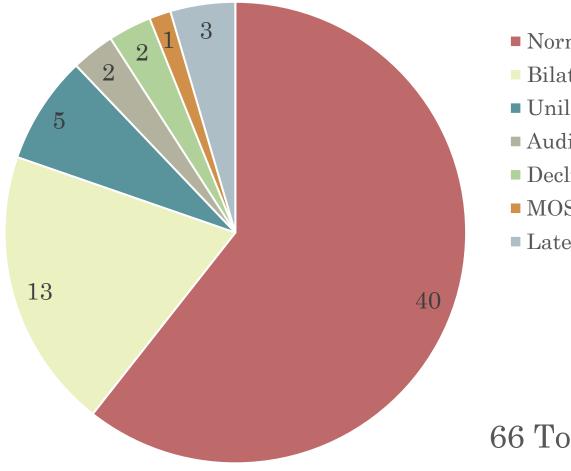
### **PILOT EXPANDED**

- Pilot expansion was approved and funding was received in fall 2016
- Remaining educational audiologists were contacted to gather interest
- Second pilot site was trained in winter of 2016
- Two additional sites were trained in May 2017



### **PILOT OUTCOMES**

First year one provider; Second year three additional providers 



- Normal/Transient
- Bilateral Hearing Loss
- Unilateral Hearing Loss
- Auditory Neuropathy
- Declined Testing
- MOS
- Late Onset

#### 66 Total Referrals

### **PILOT OUTCOMES**

Timing for three of the four educational audiology providers:

- Out of 66 referrals, 12 we have no timing data
  - 9 not shared by educational audiologists
  - 3 late onset hearing loss
- For the 54, we have timing data for:
  - Out of 54, 42 (78%) were diagnosed under 90 days
- 91% GOT IN a timely manner or scheduled for a timely appointment, but because they had to be seen again or the family cancelled/no show, only 78% WERE DIAGNOSED under 90 days.

#### **LESSONS LEARNED**

- Only 1 child lost in pilot
- Timely assessments
- Family served by local provider
- Family travel time reduced from 1.5-2 hours to 30 minutes or less
- Service currently provided free of charge with the opportunity to bill
- If result is normal, does not need to travel for more management
- Coaching/training provided by pediatric audiologists

- Family is served by an audiologist, who can counsel about management and local resources
- Majority of children seen in less than 45 days, but may not have been diagnosed in less than 90 days. (needed more than one assessment, no shows)
- Educational audiologists have been great at asking questions and thinking through results and recommendations
- Audiologist employed by provider of Part C services so timely referral for EI, when needed



### **LESSONS LEARNED**

- May be cost prohibitive with decreased funding (sustainability)
- Coaching takes some time in the beginning until audiologists have about 8 ABRs completed, then minimal
- Providers may not refer to the regional audiologists as they refer within their health system or known provider
- More outreach to hospitals about the availability of the educational audiologists





# **Questions?**



# **Iowa EHDI Contacts**

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