Outcome Measures and You! How Your Data Can Assist in Planning a Program

Dawn Violetto, AuD and Megan Wernsman, AuD

Establishing Need

- Is there a need in the community?

- What is needed for the program to run?

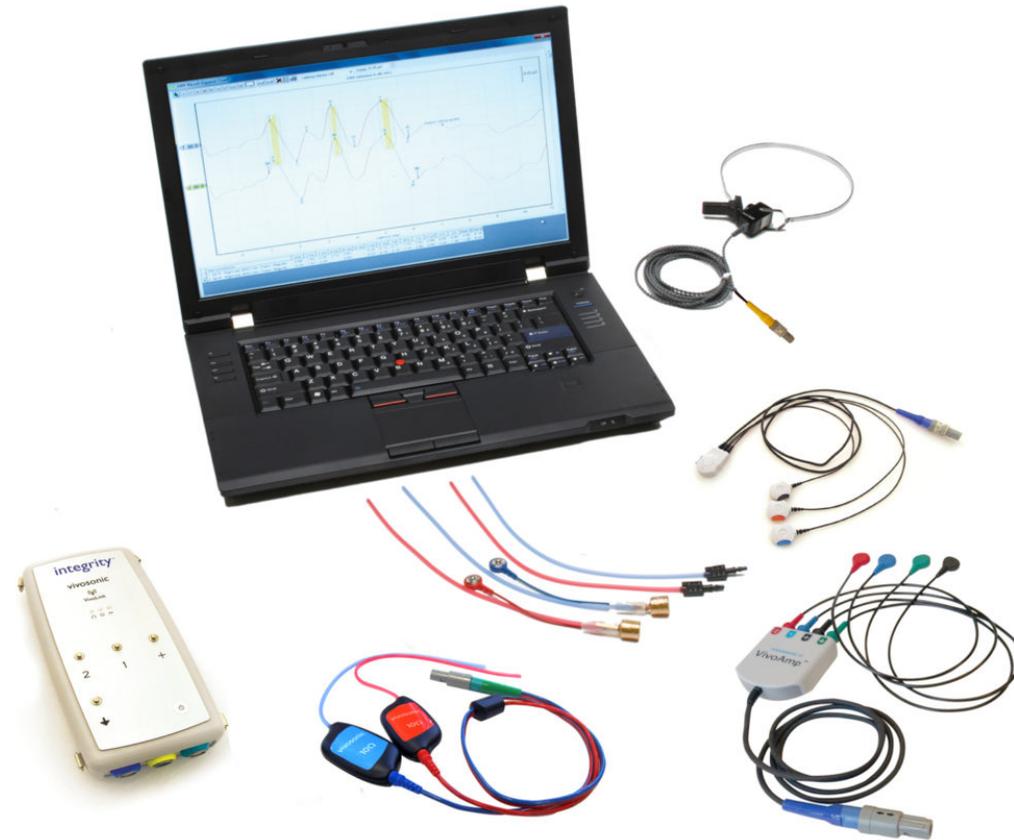- How do we make it run efficiently to meet goals?

Our PEHDI Program

- Contacted surrounding birthing hospitals to establish a need for ABR diagnostic Evaluations

- Met with supervisors and screeners of NBHS programs within surrounding hospitals to determine how to best handle referrals

- Sent direct mail postcards to physicians with 25 miles re: program twice over 6 months

Brick and Mortar Needs

- Equipment Needed

- Space Needed

- Staff Needed

Establishing Our PEHDI Program

- ABR protocol

- ABR scheduling
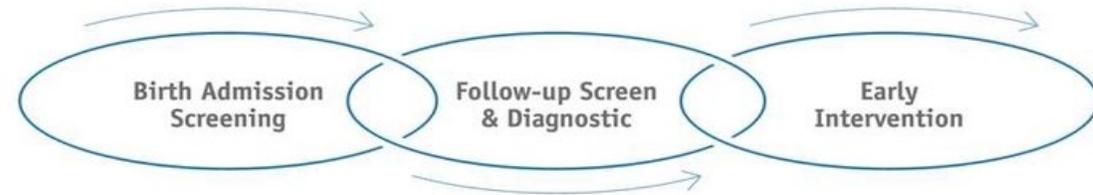
- Referral list post diagnosis of HL

Addressing Loss to Follow Up With Personnel

- Appointment is scheduled when the baby fails the NBHS (with the parents still there)
- CV information given to parents before they leave
- Parents are contacted by our assistant and paperwork is delivered to the family (paper or electronic)
- Family is contact the day before their appointment for a reminder

Meeting Expected Outcomes

Three Key Components of Early Hearing Detection & Intervention Programs

Birth Admission Screening

Follow-up Screen & Diagnostic

Early Intervention

- JCIH
  - NBHS by 1 month
  - Diagnostic hearing evaluation by 3 months
  - Intervention by 6 months
- Loss to follow up CV vs. State

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What Are We Tracking?

Spreadsheet

- – Name
- – Birthdate
- – Age at initial appointment
- – Age at diagnosis
- – Diagnosis
- – Type and Severity of Hearing Loss
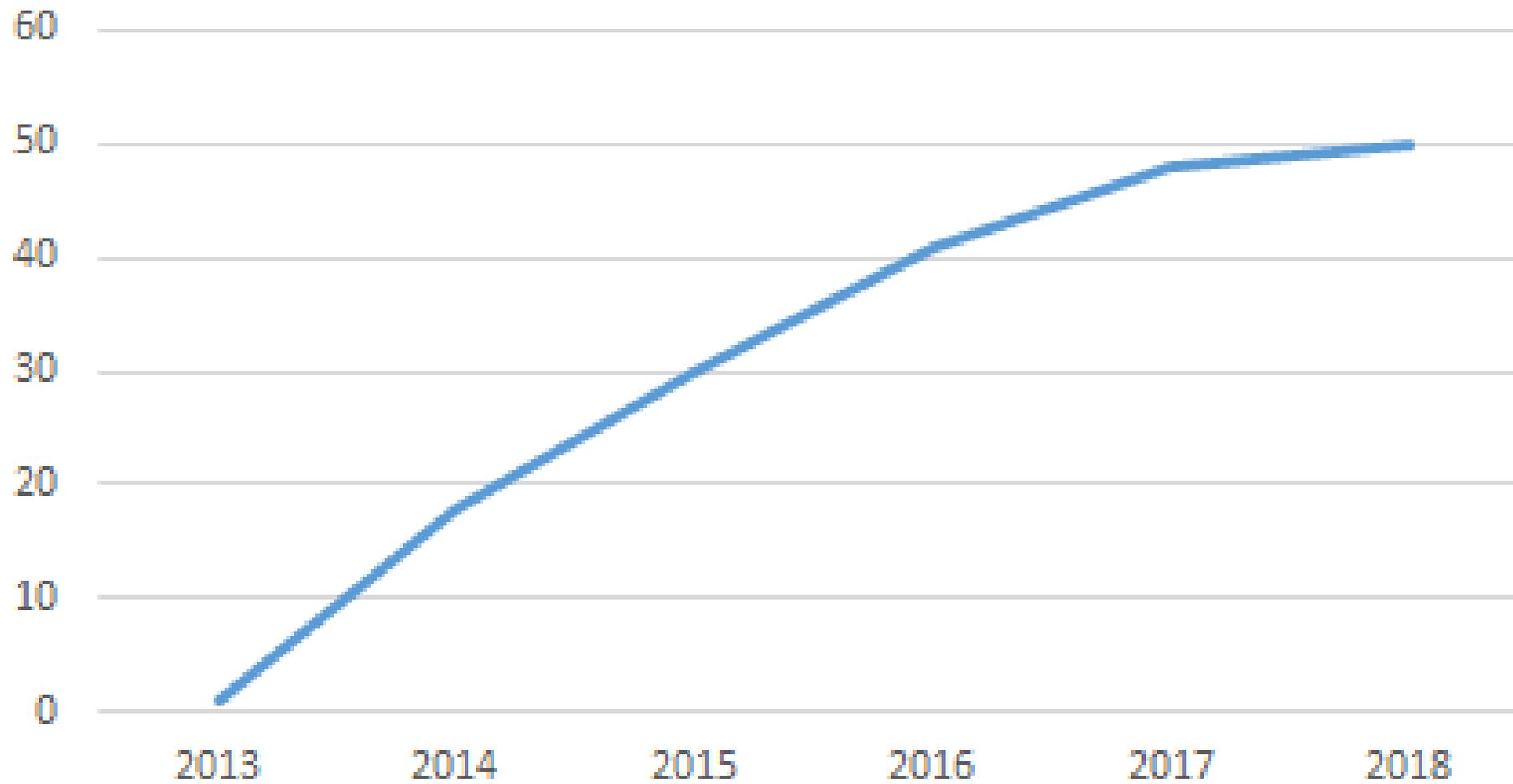- – Referral to EI
- – Fitted with Amplification (loaner vs personal)

Family Demographics

- Birth

- Gender

- Where they live: town, county

- Ethnicity

- Family Income

Babies, Babies, Babies

- Total Diagnostic ABR's 197 scheduled
  - Male 107
  - Female 90

Our Data on Diagnosed Hearing Loss

- Total diagnosed with HL
  - 46
- Diagnosis rate of 23.3 %
  - Female 25 (54%)
  - Male 21 (45%)

Well Baby Traits

- 34 of babies diagnosed with HL were on the "well baby" service while in the hospital (73%)
    - 9 reported to develop jaundice
    - 6 babies reported family history of HL
    - 1 baby diagnosed with hydronephrosis (kidney swelling)
    - 1 had kidney infection
    - 1 diagnosed with CMV

NICU babies

- 12 babies diagnosed with HL were in the NICU (27%)
  - These babies almost always had multiple JCIH risk factors

Average Age of Diagnosis

- Average age of diagnosis and referral to EI
    - 6.9 weeks (range2-24 weeks)
    - 6.6 without 24 week baby

Type of Hearing Loss

- # of Unilateral Diagnosis
  - 17 (8.6%)
- # of Bilateral Diagnosis
  - 29 (14.7%)
- # with Middle Ear Dysfunction at first appointment
  - 65 (32%)

Devices

- Average age fitted with loaners
  – 5 months (4.2 months without outlier)
- Average age fitted with personal amplification
  – 8 months
- 3 received Cochlear Implants

Loss to Follow Up

Current IL State numbers for 2017 was 30%

Child's Voice shows:

1 in 2014 (5%)

1 in 2015 (3.2%)

2 in 2016 (5%)

3 in 2017 (6%)

1 in 2018 (2%)
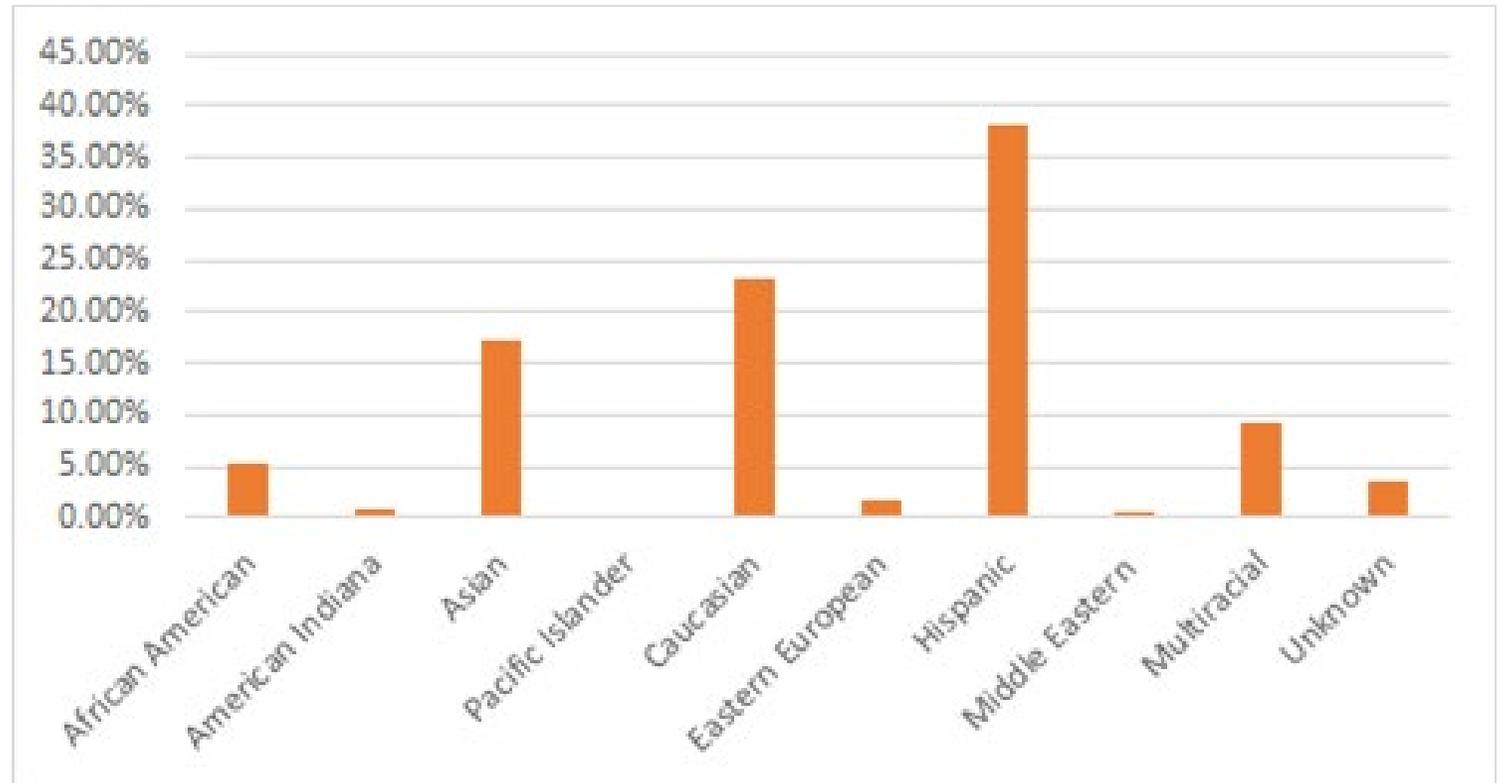
8 over course of program (4%)

Future Planning of the Program Using Data

- Looking at scheduling
  - Booking out one to two months
  - Are we staying compliant with JCIH standards
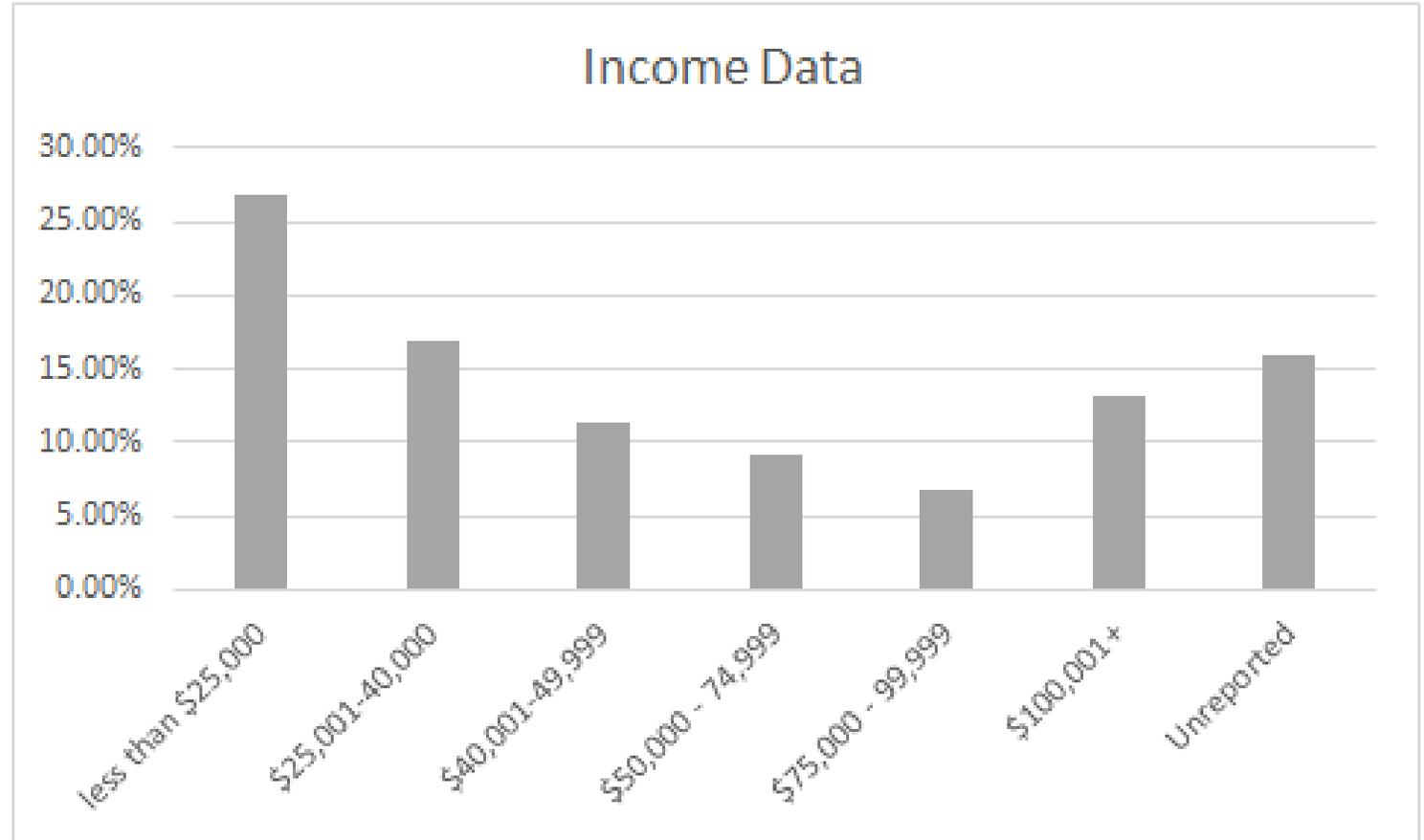 - Hiring another employee for part time/full time based on need

Ethnicity Data For PEHDI

African American	5.45%
American Indiana	0.91%
Asian	17.27%
Pacific Islander	0.00%
Caucasian	23.18%
Eastern European	1.82%
Hispanic	38.18%
Middle Eastern	0.45%
Multiracial	9.09%
Unknown	3.64%

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Economic Data re: Demographics

less than $25,000	26.82%
$25,001-40,000	16.82%
$40,001-49,999	11.36%
$50,000 - 74,999	9.09%
$75,000 - 99,999	6.82%
$100,001+	13.18%
Unreported	15.91%

Income Data

Reimbursement Data

	Medicaid	Private Ins
ABR	$72.88	$138 to $418
OAE' full	$59.35	$16.68 - $42.35
Tymps and Reflexes	$14.79	$15.20 to $17.97

Cost per day of Audiology $557.77

Planning For The Future

- Funding and payer mix
- Interpreter Service
- Cultural Competency training
- Expanding Services/Staff/Space/Equipment
- How can we improve?
  - Initiating Quality Assessments to Families

Photos/Pictures Credit:

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