



# Connecting EHDI Data to Medical Homes Through an Integrated Data System

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**15 April 2014**

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## Rhode Island Department of Health



### **Disclosure:**

Neither I nor any member of my immediate family has a financial relationship or interest (currently or within the past 12 months) with any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients.

I do not intend to discuss an unapproved/investigative use of a commercial product/device.

# Thanks to Our Team...



Ellen Amore, Pauline Belmonte,  
Mike Berry, Elsbeth Brown,  
Tunisia Johnson, Richard Lupino,  
Fiordaliza Then, Rebecca Vargas,  
Betty Vohr

# Rhode Island EHDI statistics



	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>% Screened</b>	98.99	99.32	99.38
<b>% Referred - No final diagnosis</b>	32.26	35.92	43.59
<b>% Lost to follow-up</b>	18.28	20.42	18.8
<b>% eligible referred to Part C in EI</b>	100	100	100

<b># passed screen with risk factors</b>	866	798	891
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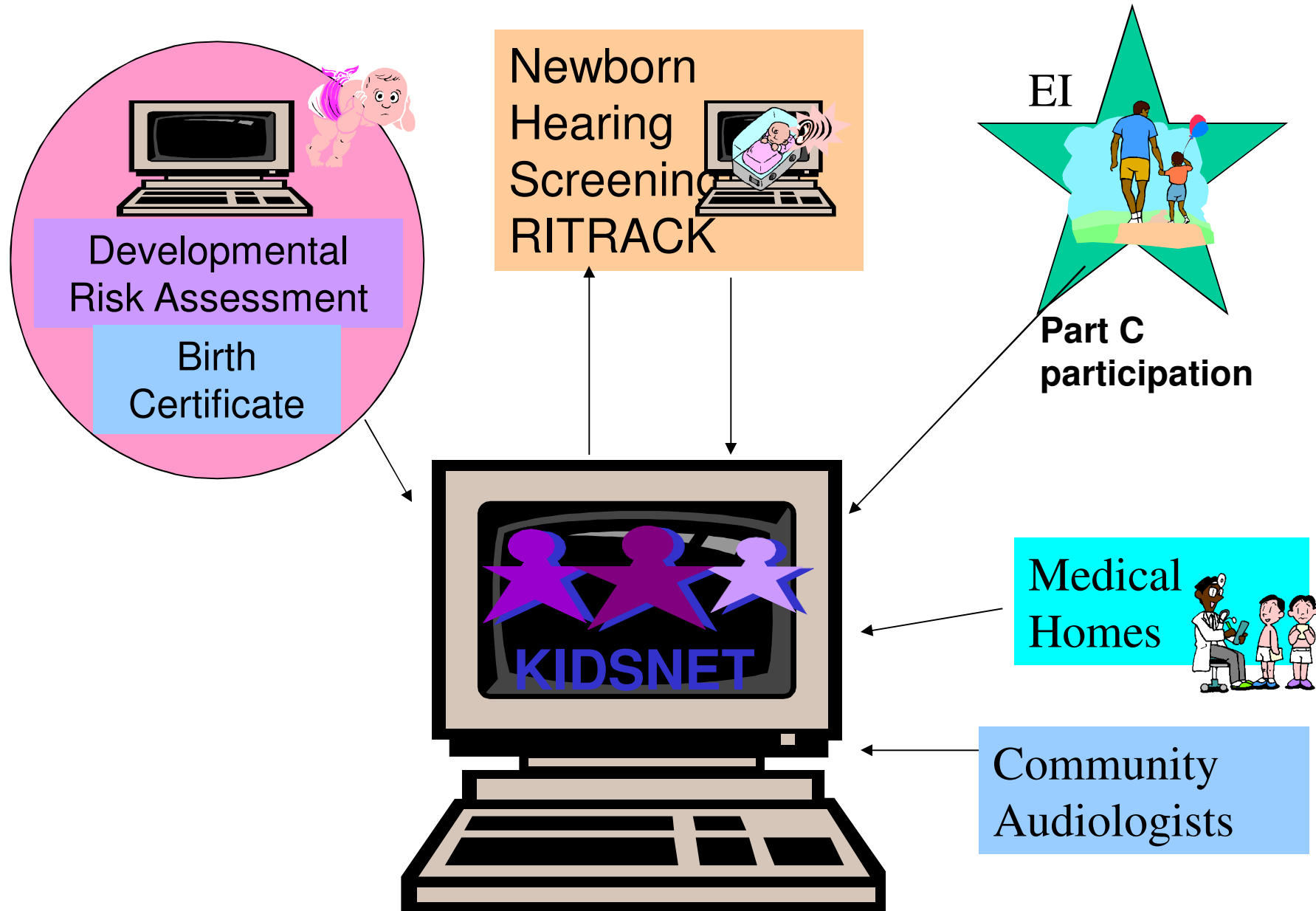
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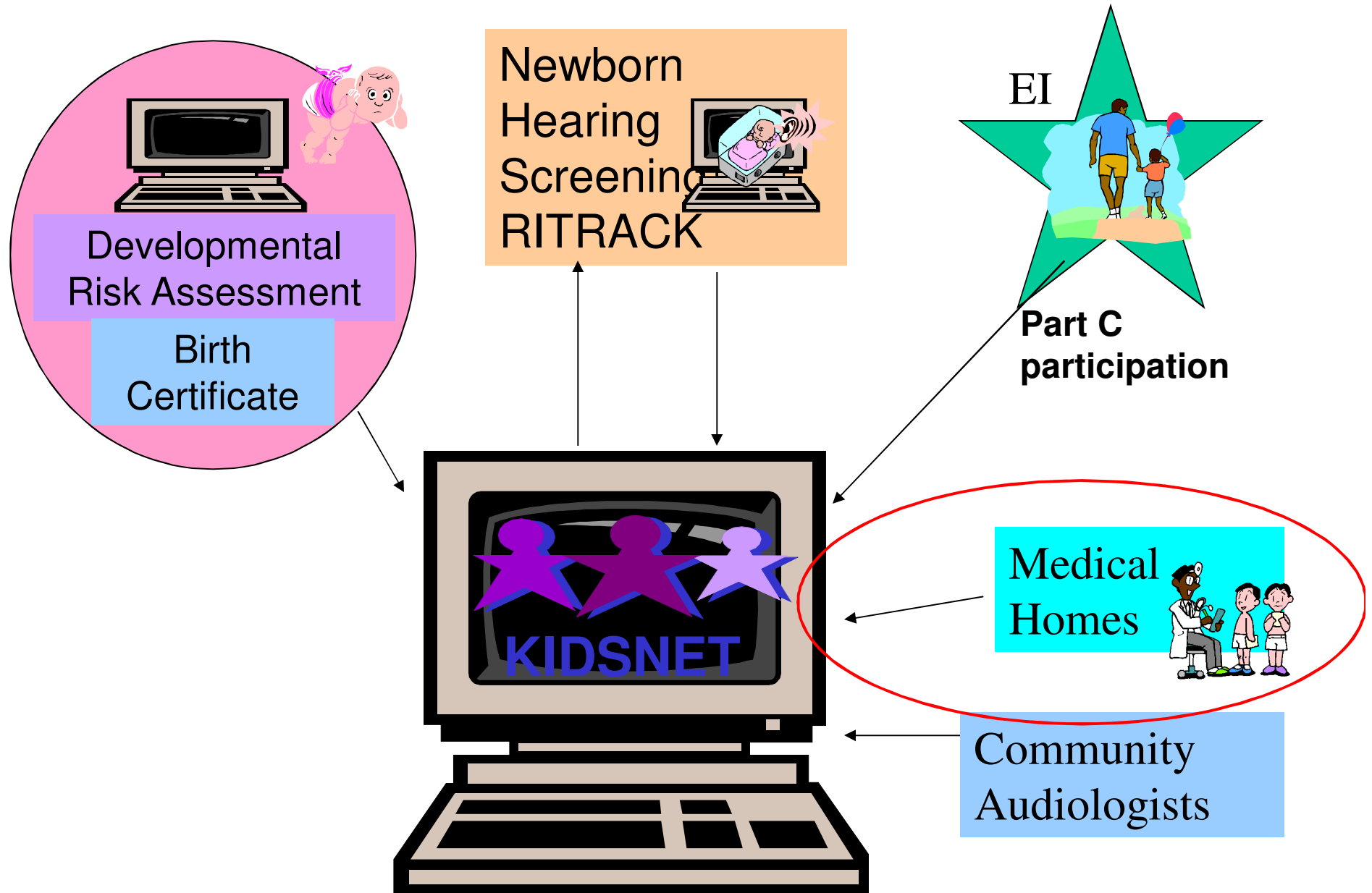
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# Newborn Hearing Screening Data Flow



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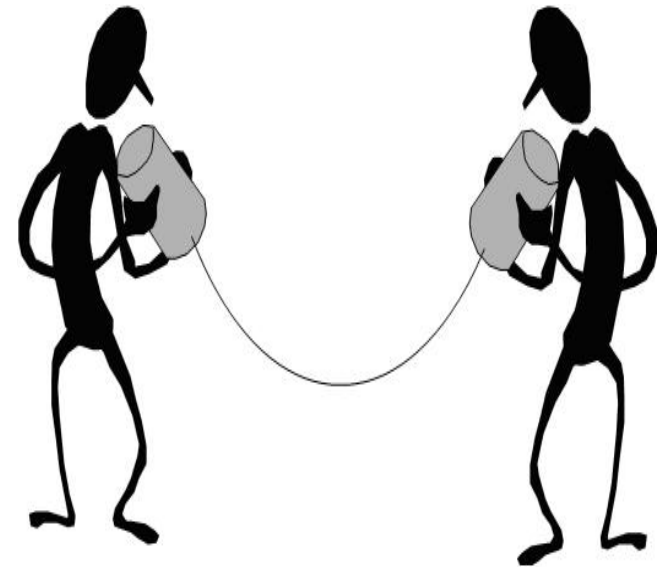
# Connect with Medical Homes



\*\*\* All healthcare providers who vaccinate children in Rhode Island are connected and report to KIDSNET

\*\*\* KIDSNET shares data daily with RITRACK, the newborn hearing screening database

\*\*\* How can Rhode Island build on that strength to improve EHDI loss to follow-up?





# What is KIDSNET?



✿✿✿ A Public Health Program –  
not an electronic medical record



✿✿✿ Facilitates the collection and appropriate sharing of health data by authorized users for the provision of timely and appropriate preventive health services and follow up

✿✿✿ Integrated Child Health Information System for maternal and child health programs

# KIDSNET Partner Programs



## 7 Universal:

- \*\*\* Newborn Developmental Risk
- \*\*\* Newborn Bloodspot Screening
- \*\*\* Newborn Hearing Assessment
- \*\*\* Immunization
- \*\*\* Childhood Lead Poisoning
- \*\*\* Vital Records
- \*\*\* Child Outreach\*\*

## 10 Targeted:

- \*\*\* WIC
- \*\*\* Early Intervention
- \*\*\* First Connections (Home Visiting)
- \*\*\* Birth Defects\*
- \*\*\* CEDARR\*\*
- \*\*\* Healthy Weight
- \*\*\* Asthma
- \*\*\* Early Childhood Developmental Screening
- \*\*\* Foster Care\*
- \*\*\* Head Start \*\*

\* No Web access \*\*in development

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# Hearing Assessment Screen

## Newborn Hearing Screening Results

Date Tested	Screen Type	Result
03/29/2004	OAE RIGHT EAR	PASS
03/29/2004	AABR LEFT EAR	FAIL AT 40
03/29/2004	AABR RIGHT EAR	DID NOT TEST
03/29/2004	OAE LEFT EAR	FAIL

Intended PCP: **Dr. Testa**  
Screening Result: **Refer**  
Audiological Recommendation: **DX-ABR**  
Risk Factors: **Low birth weight**

## Amplification

Date Of Hearing Aid Fitting:	Date Of Cochlear Implant Surgery:	<b>12/19/2007</b>
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## Detailed Audiological Diagnostic Information

Date Tested:	<b>08/27/2007</b>	Audiologist:	<b>Dr. Earya</b>
Diagnosis Left:	<b>NORMAL</b>	Diagnosis Right:	<b>SENSORINEURAL</b>
Degree Left:	<b>N/A</b>	Degree Right:	<b>PROFOUND</b>
Reason for Visit:			
Tests performed:	<b>TEOAE, Tympanometry, Behavioral Testing - VRA, IPSI Reflex</b>		
Audiological Recommendation:			
ICD9:			
Secondary ICD9:			



# Demographics

[printer-friendly version](#)

## Search

Enter KIDSNET ID:

[LookUp](#)

## Demographic Information - 04/10/2013 - [Click Here to Update Child](#)

Child Id: **6124286**    Medical Record:    Date Updated: **03/12/2013**  
Patient: **SNEEZY D ARAGOM**    Age: **4y 1m**  
Alias: **SNEEZY AL-1 D ARAGOM AL-1**  
Race: **WHITE (INCL. MEXICAN, PUERTO RICAN, OTHER CAUCASIAN)**    Ethnicity: **UNKNOWN**  
DOB: (hh:mm)    **02/22/2009 - 12:00 AM**    Gender: **FEMALE**  
Mother's Maiden Name: **ARAGOM**  
Hospital: **PAWTUCKET MEMORIAL**    Status: **ACTIVE**  
State of Birth: **RI**    Medicaid ID:  
Last Known Insurance: **RITE CARE-NEIGHBORHOOD HEALTH\***  
**Insurance status may not be current. Verify eligibility directly with the health plan.**

## Provider History

Current PCP: **TEST PEDIATRIC PRACTICE**    Imm Labels: **N**

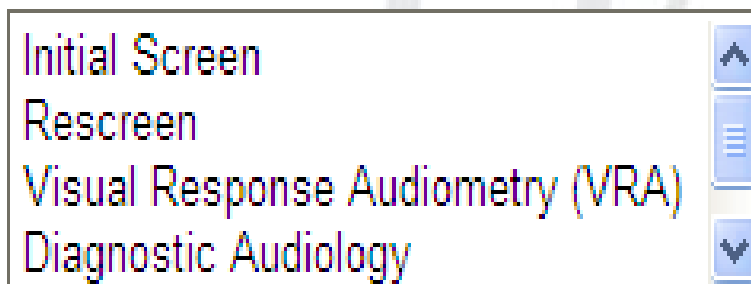
# Reports for PCPs



- ✿✿✿ EHDI follow-up recommendations can be linked to the primary care provider using the last provider to report an immunization to KIDSNET
- ✿✿✿ Printed report from RITRACK mailed quarterly
- ✿✿✿ On-line report in KIDSNET for providers to run their own report



To select multiple newborn hearing screening categories, hold the "CTRL" key down while clicking on the desired groups. Selecting no groups will run the report for all listed categories.



A screenshot of a dropdown menu with a white background and a thin black border. The menu is open, showing four options: "Initial Screen", "Rescreen", "Visual Response Audiometry (VRA)", and "Diagnostic Audiology". To the right of the text are three blue buttons: an upward-pointing arrow, a list icon (three horizontal lines), and a downward-pointing arrow.

- Only children born in Rhode Island will appear on this report.
- Making no selection below will run the report for all children, ages birth to three years old, assigned to your practice.
- Individuals listed on the report need immediate follow-up or audiological data has not been reported to KIDSNET.

Date of Birth: From:  /  /  / (mm/dd/yyyy)

To:  /  /  / (mm/dd/yyyy)

Or...

Age From:  months

**For example:** FROM 5 months UP TO 7 months includes all children 5 and 6



# Practice Reports-Newborn Hearing Screening Follow-up



Report Criteria: Wednesday, February 26, 2014 07:16:24 AM

Provider Id: 34567

Practice: TEST PEDIATRIC PRACTICE

All Children up to age 3 years reported (not including children who have had a 3rd birthday)

Follow-up Categories Selected: Initial Screen, Rescreen, Visual Response Audiometry (VRA), Diagnostic Audiology, Diagnostic ABR

## Newborn Hearing Screening Follow-up Report.

A list of patients in your practice who need follow-up from newborn hearing screening.

Child Name	Date Of Birth	KIDSNET Id	Service Needed	Reason not screened
1. Child 1	08/10/2013	52338	Visual Response Audiometry	
2. Child 2	04/12/2103	51954	Visual Response Audiometry	
3. Child 3	01/24/2013	51751	Diagnostic Audiology	
4. Child 4	03/07/2013	46481	Diagnostic ABR	
5. Child 5	12/15/2013	52286	Rescreen	
6. Child 6	06/12/2013	54342	Visual Response Audiometry	
7. Child 7	05/19/2013	48675	Visual Response Audiometry	
8. Child 8	11/29/2013	55404	Initial Screen	Refusal

# Impact on Loss to Follow-up



☆☆☆ Quarterly mailed report

☆☆☆ Anecdotal reports from audiologists of an increase in calls for appointments

☆☆☆ On-line report in KIDSNET for providers to run their own report

☆☆☆ Too early to tell – programming has just been released to production



# Audiology visits for infants who passed with risk factors



<b>Year of Birth</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b># infants</b>	866	798	891
<b># with at least one documented audiology visit</b>	440	364	392
<b>% with at least one documented audiology visit</b>	51%	46%	44%

# The “jury is still out”

☆☆ Many initiatives to reduce loss to follow-up have been put in place

☆☆ Many audiologists do not report

☆☆ Small numbers make percentages fluctuate wildly



☆☆ Plan, Do, Study, Act (PDSA) cycles will help shed light by looking intensely at a few provider offices



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