



Attitudes, Knowledge and Practices of Physicians Related to EHDI

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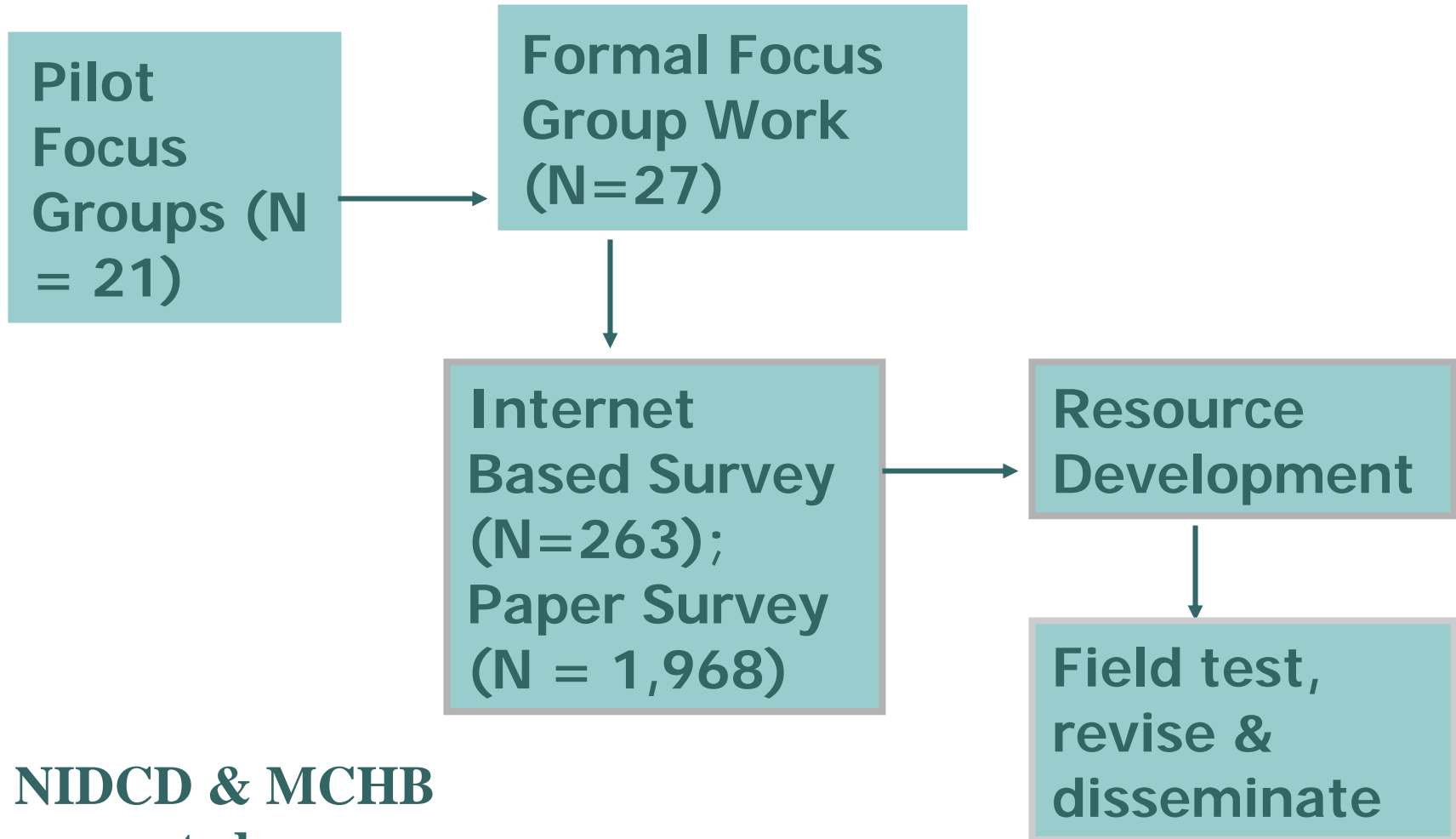
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Project with Pediatricians



**NIDCD & MCHB
supported**



Methods

- Designed survey based on focus groups and internet responses
- Field tested survey at medical society meetings; developed Spanish version
- Invited state EHDI coordinators to participate
- Mailed survey & cover letter; reminder postcard 2 weeks later



Survey Question Examples

- Attitudes:

- Do you think NHS causes parents undue anxiety or concern?
- Do you believe UNHS is worth what it costs?
- Please list any concerns you have about NHS, diagnosis and intervention.



Survey Questions Examples

- Practices:

- Approximately how many children with permanent hearing loss (EXCLUDING OTITIS MEDIA) have you had in your practice over the past 3 years?
- List any specialists to whom you routinely refer the family of a child with permanent hearing loss (list the types of specialists).

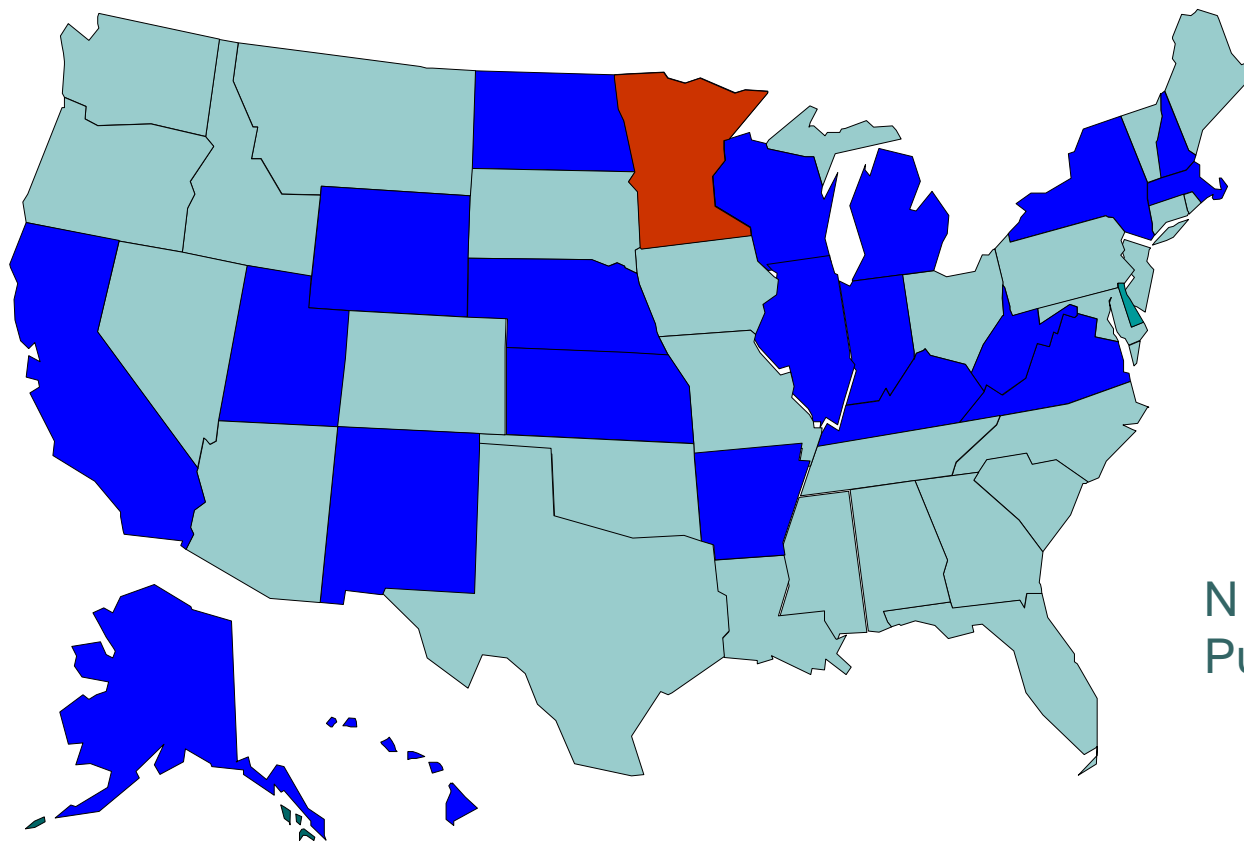


Survey Question Examples

- Knowledge:

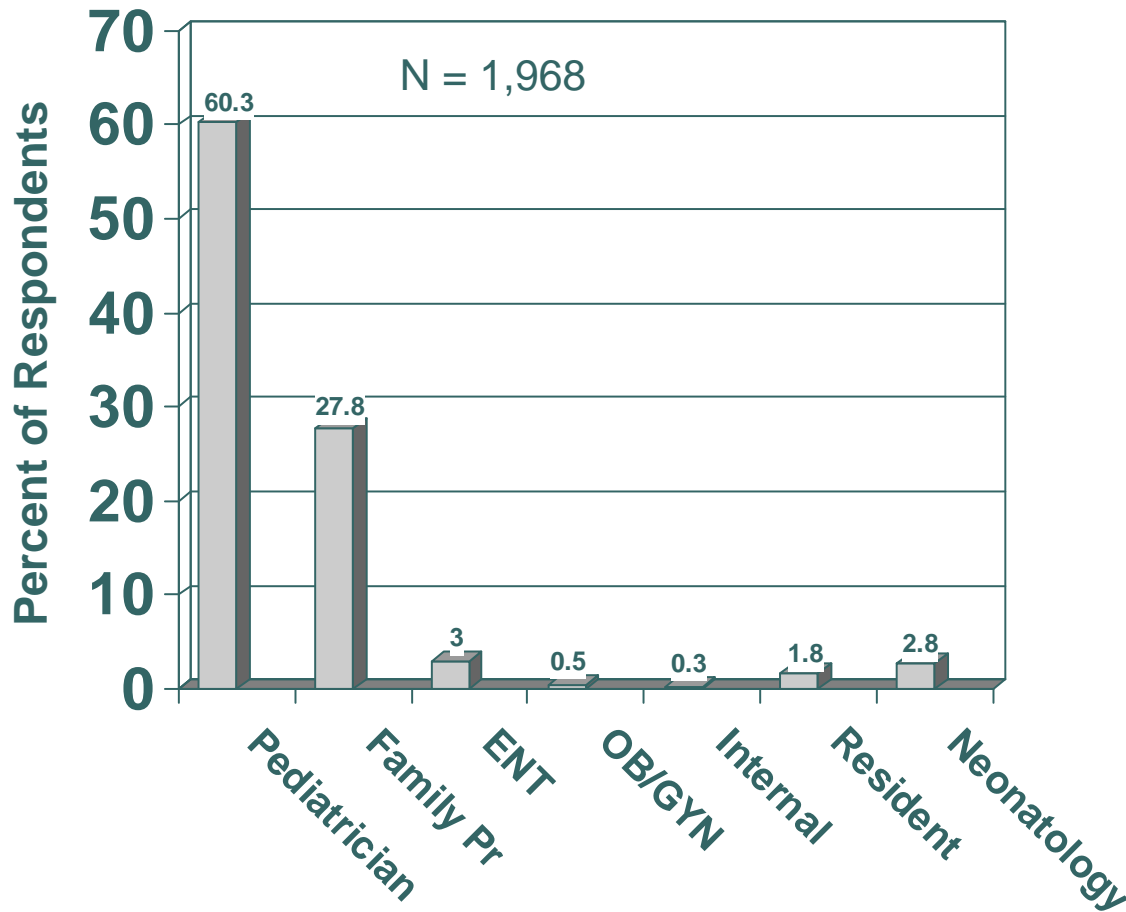
- What is your best estimate of the earliest age at which:
 - A child not passing the screening should be seen for follow up testing
 - A child can be definitively diagnosed with permanent hearing loss
 - A child can begin wearing hearing aids
 - A child with permanent hearing loss should be referred to early intervention
- Enter age estimates _____

States Involved in Survey of Physicians



N = 21 States +
Puerto Rico

Physician Survey: Demographics



Gender:

53.2% Male

46.8% Female

Location:

62.5% Metro

24.1% Small town

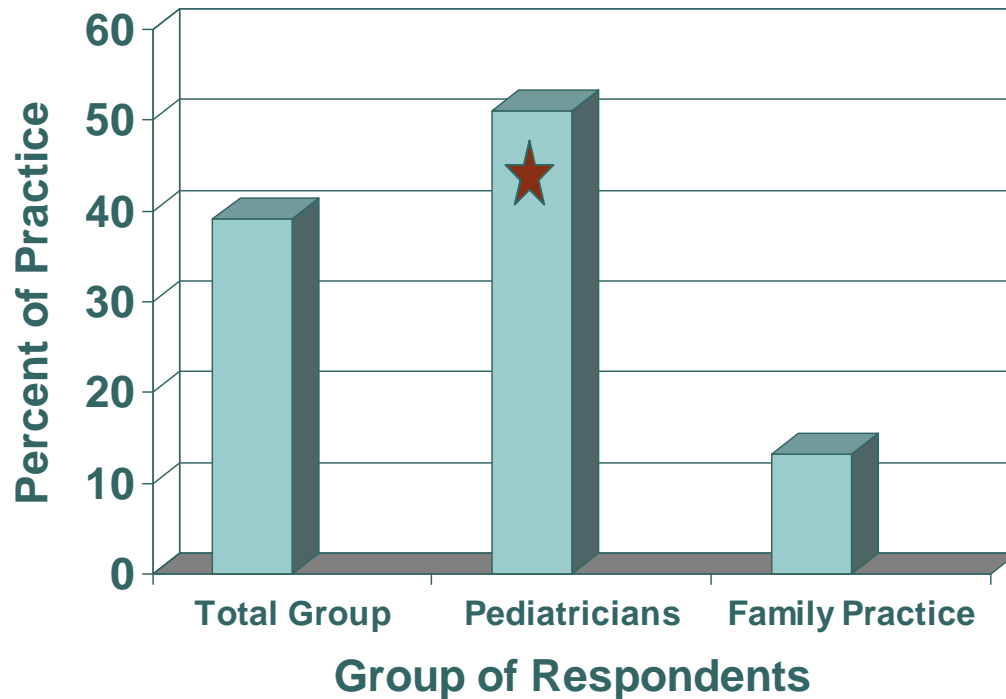
13.3% Rural



Practice Settings

Private/Community Clinic	75.6%
Hospital	10.4%
Medical School/University	5.8%
Other	3.6%
Unknown	3.7%

Practice with 0-5 Population



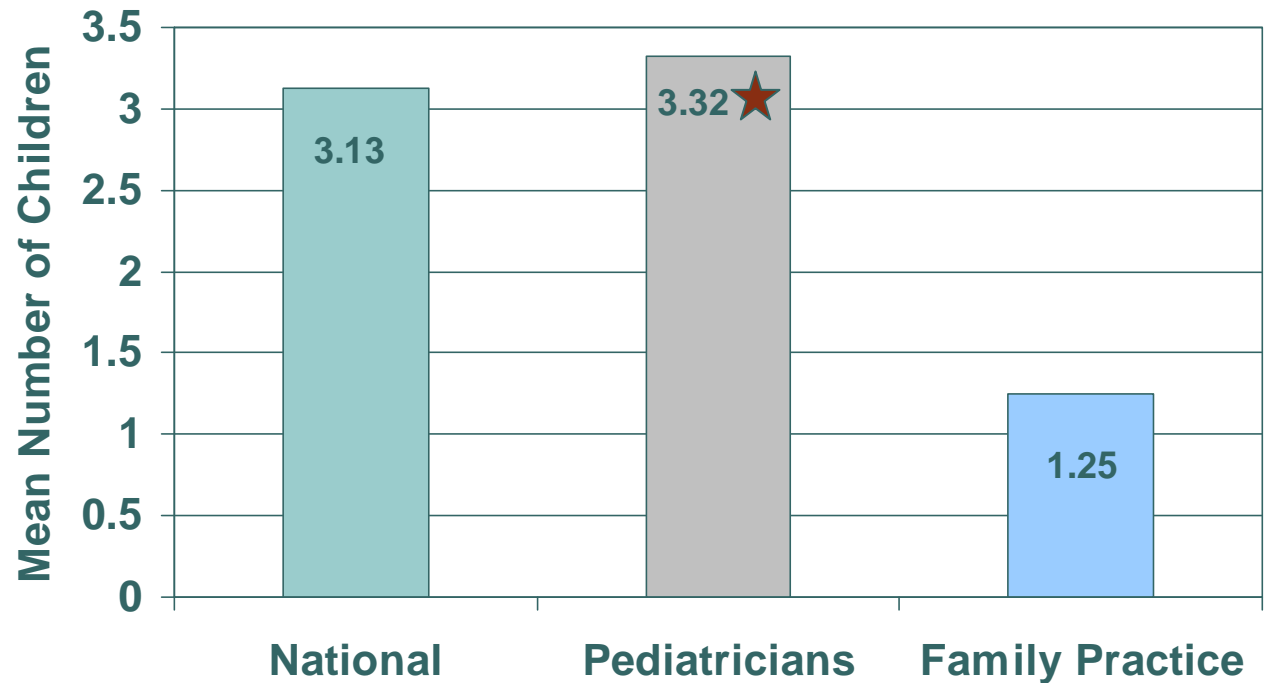
0-10 years = 40.2%

11-20 years = 28.6%

21-30 years = 22.5%

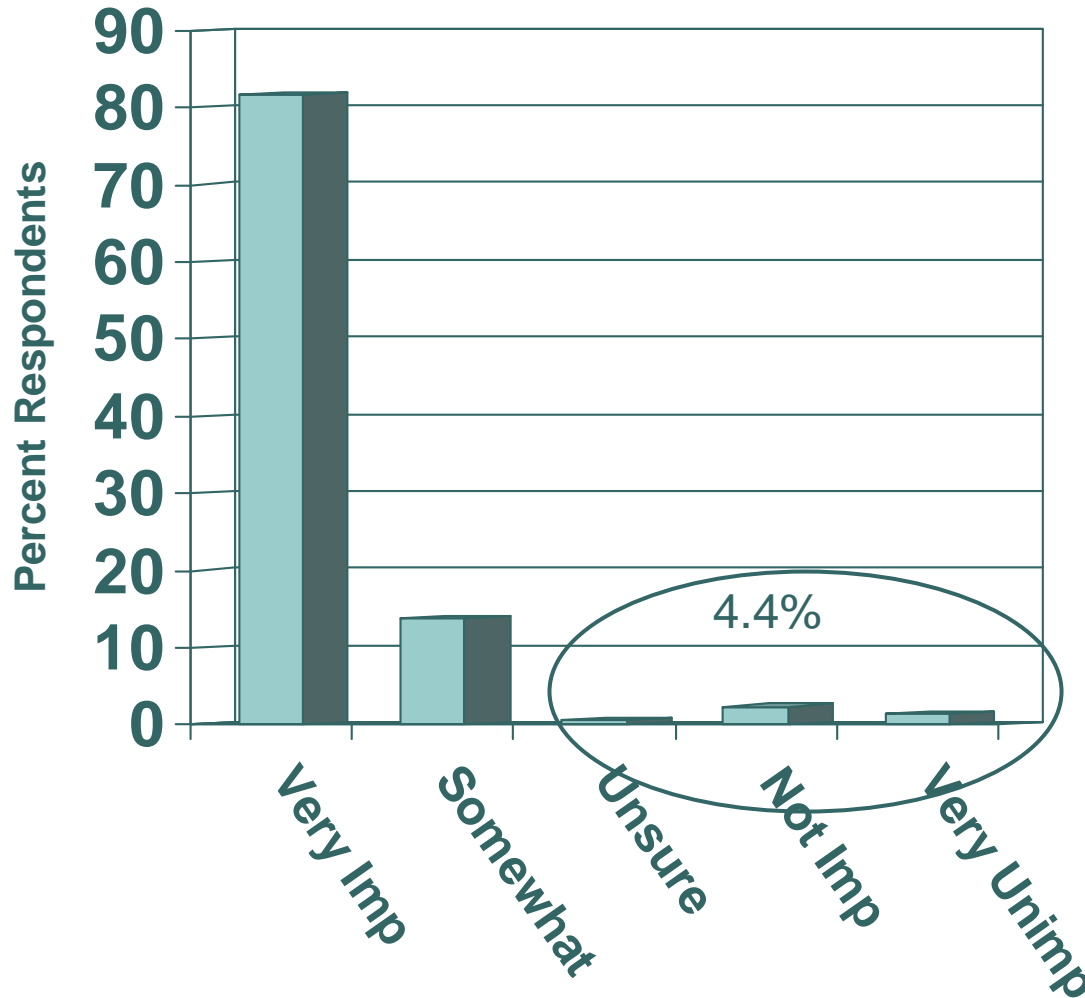
31+ years = 8.7%

Children with SNHL in past three years of practice



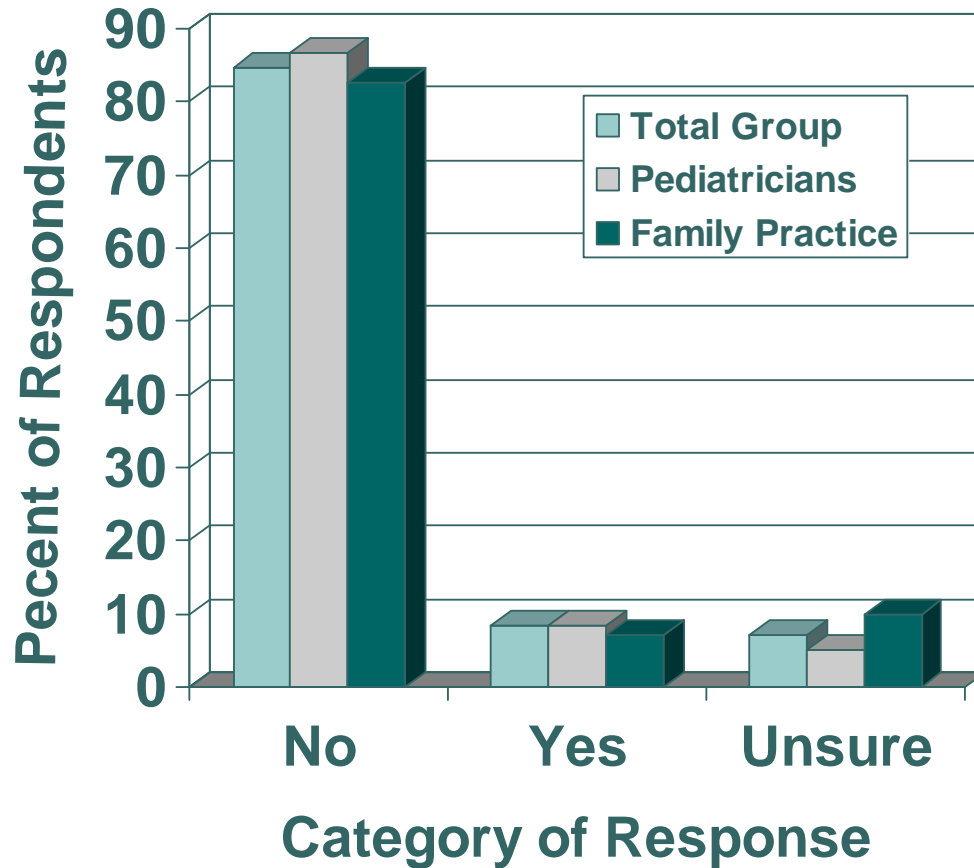
ENT $\bar{X} = 16.95$

Importance of testing all newborns



3% Pediatricians;
6% Family Practice
p < .001

Does NHS cause undue parental anxiety?





Positive Findings:

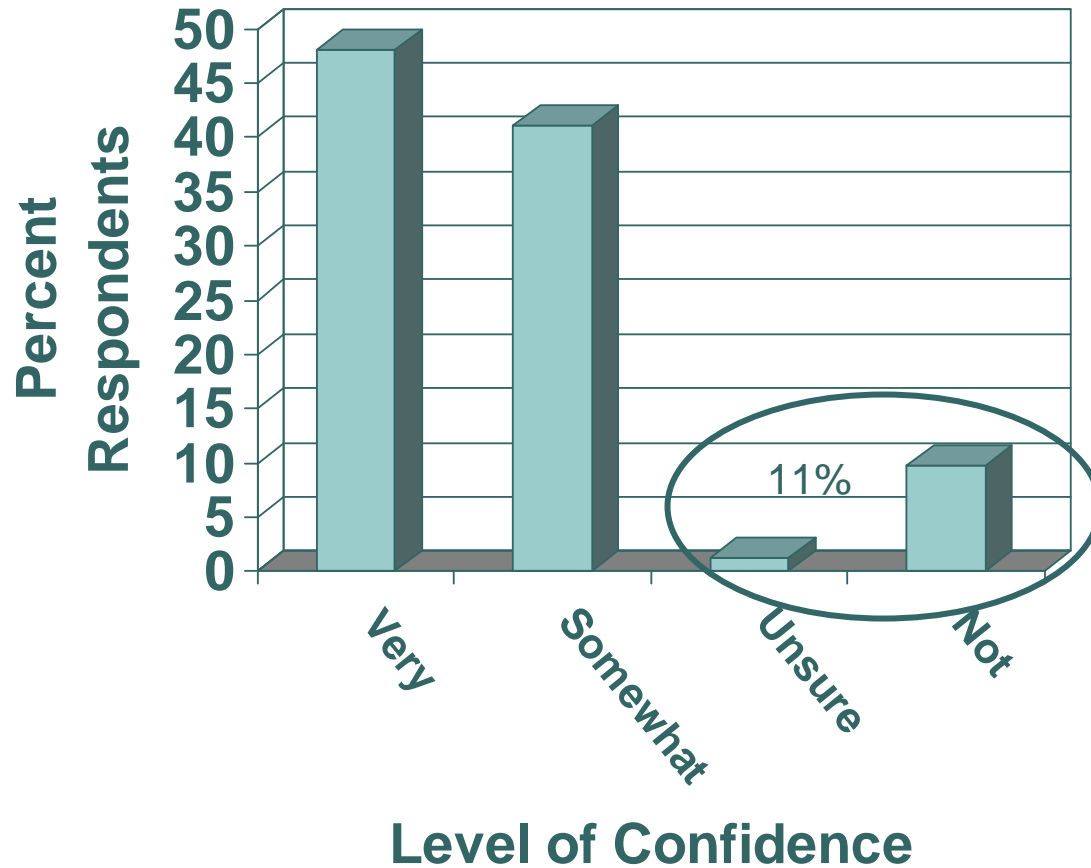
- Most of our physicians receive screening results (88.61% >)
- But...12% of pediatricians and 17% of family physicians receive < 50% of results!
- Most know that infants should be referred immediately for additional testing (89.2 < 3 mos >)
- But...24.3% unsure NHS is worth what it costs



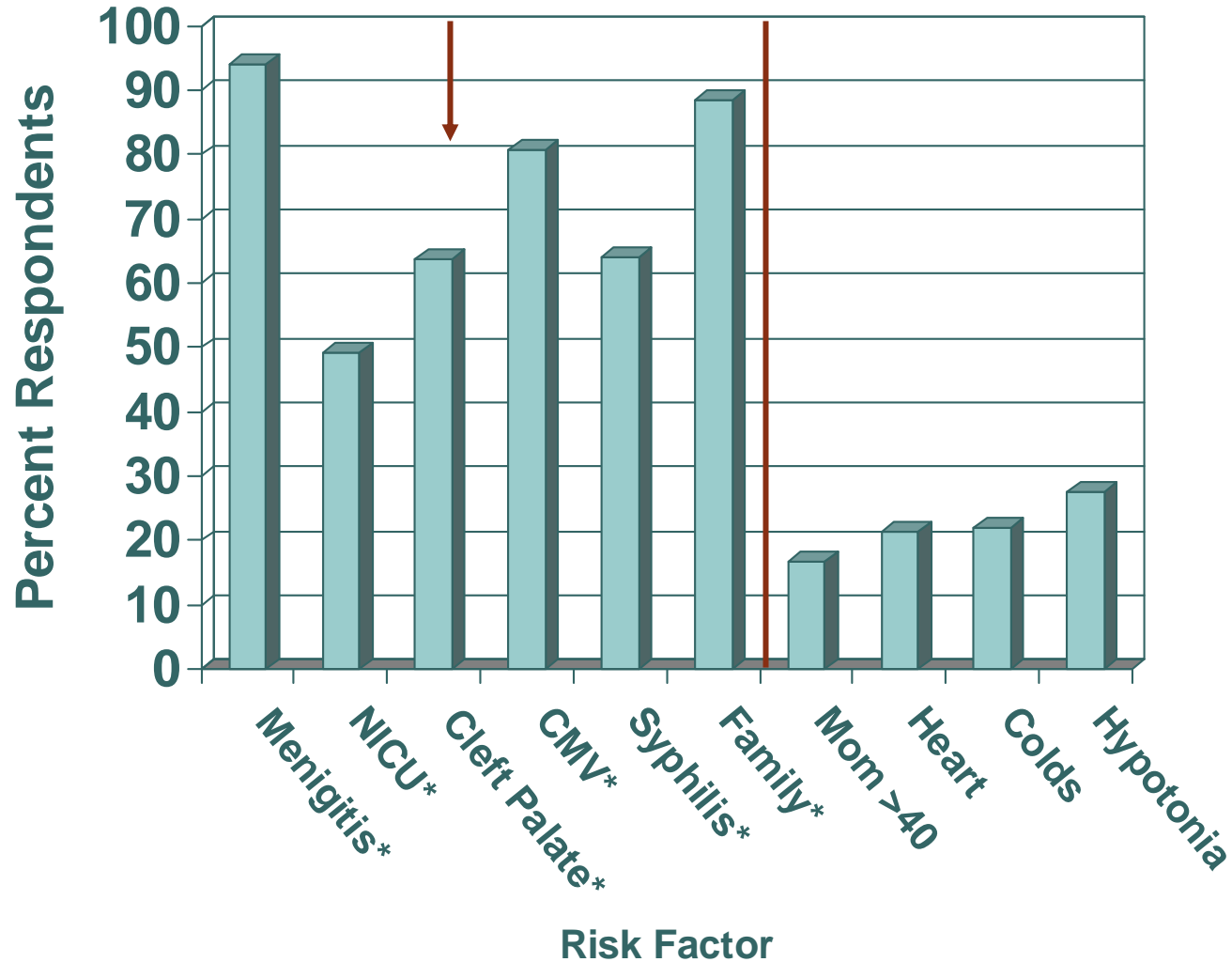
Concerns about NHS

- Too many false positives
- Costs outweigh benefits
- Loss to follow up
- Need for training
- Unclear about procedures; complex
- Inconclusive results
- Need for parent education
- Need for funding & better equipment

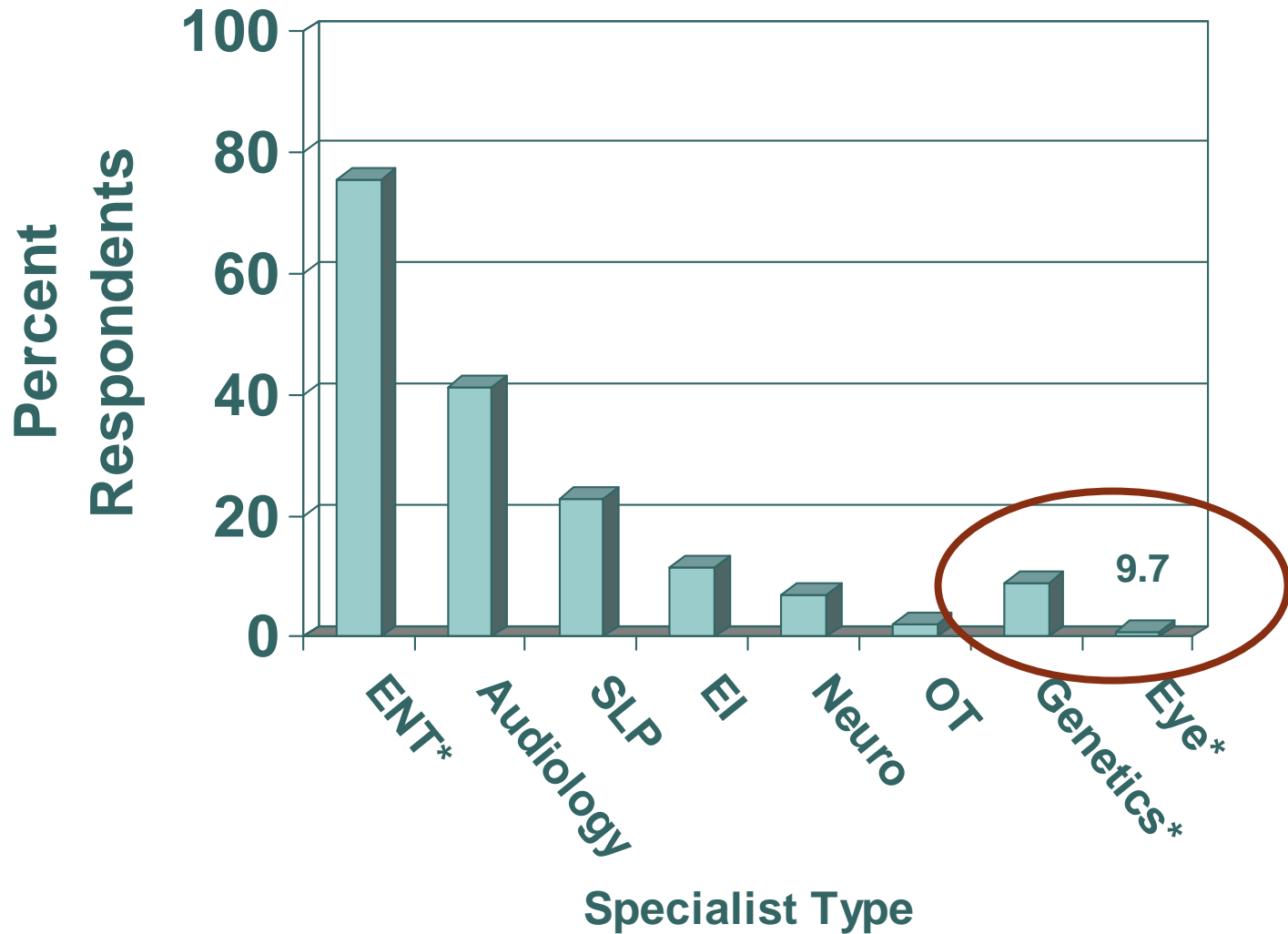
Confidence in Counseling Parents following Screening



Risk for late onset SNHL

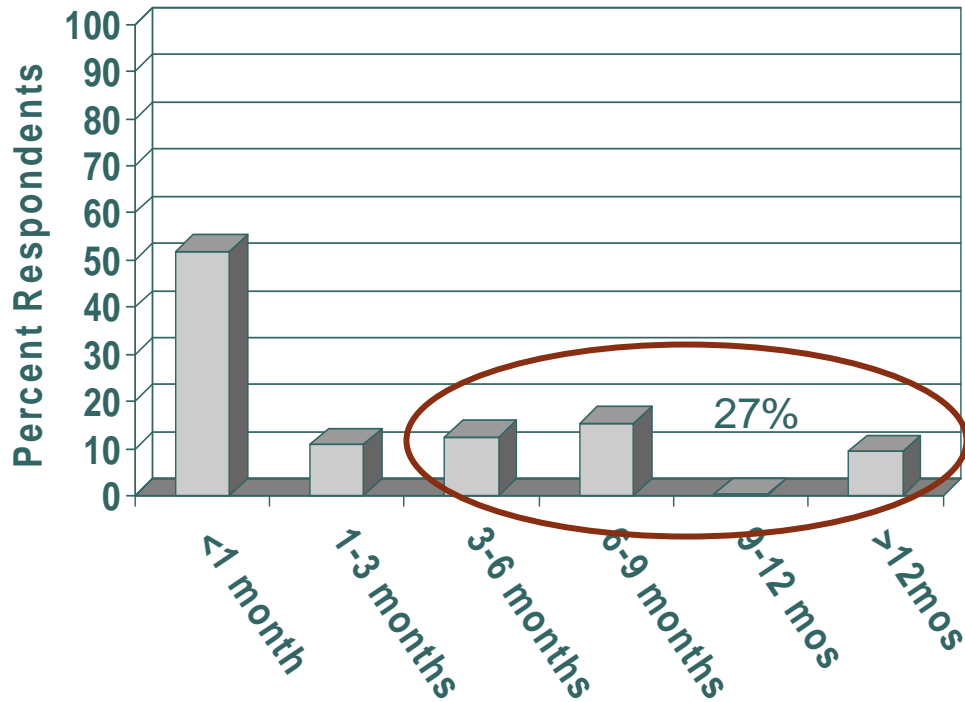


Referral to Specialists

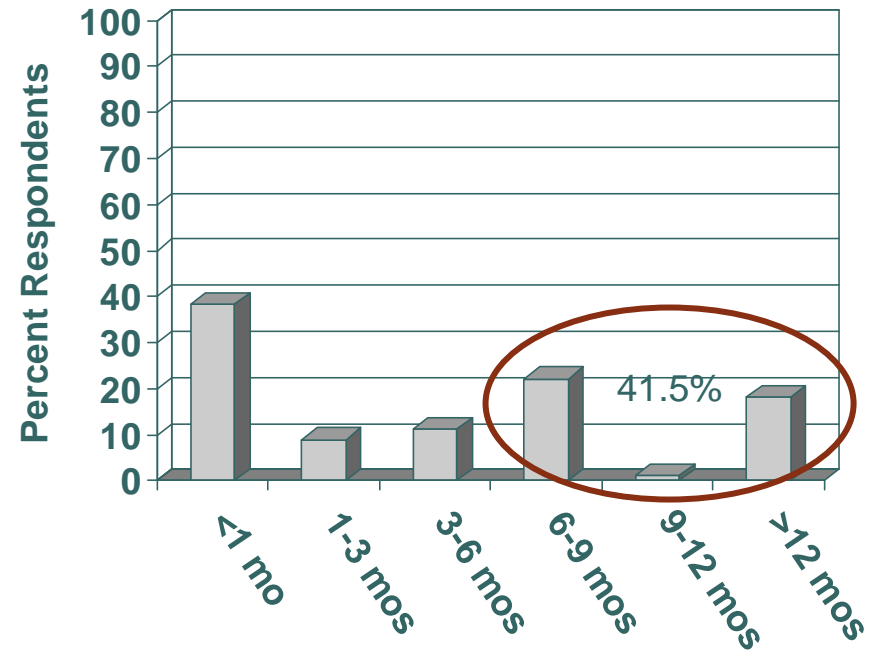


Follow Up & Intervention

Age Diagnosis Possible



Wear Hearing Aids

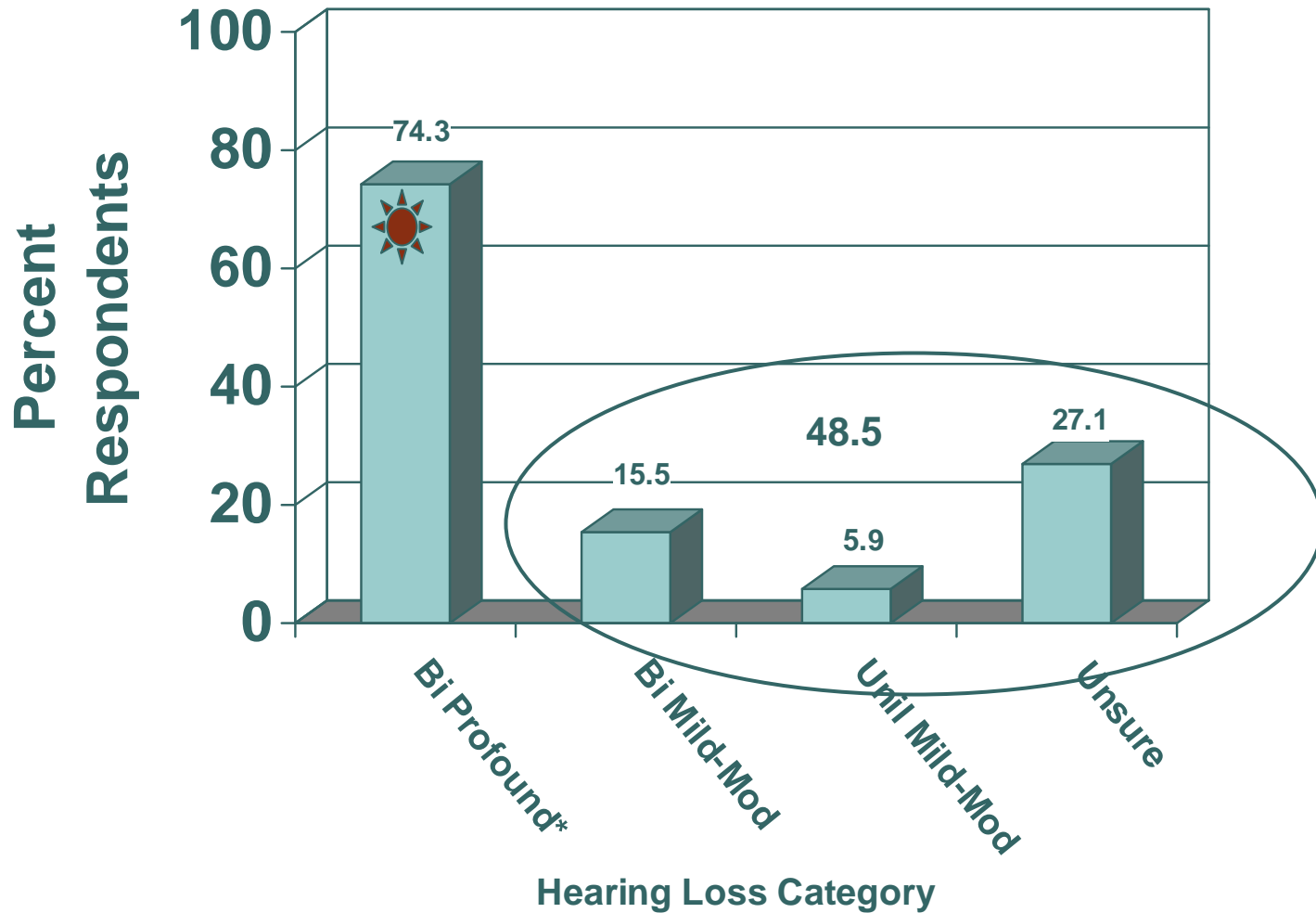




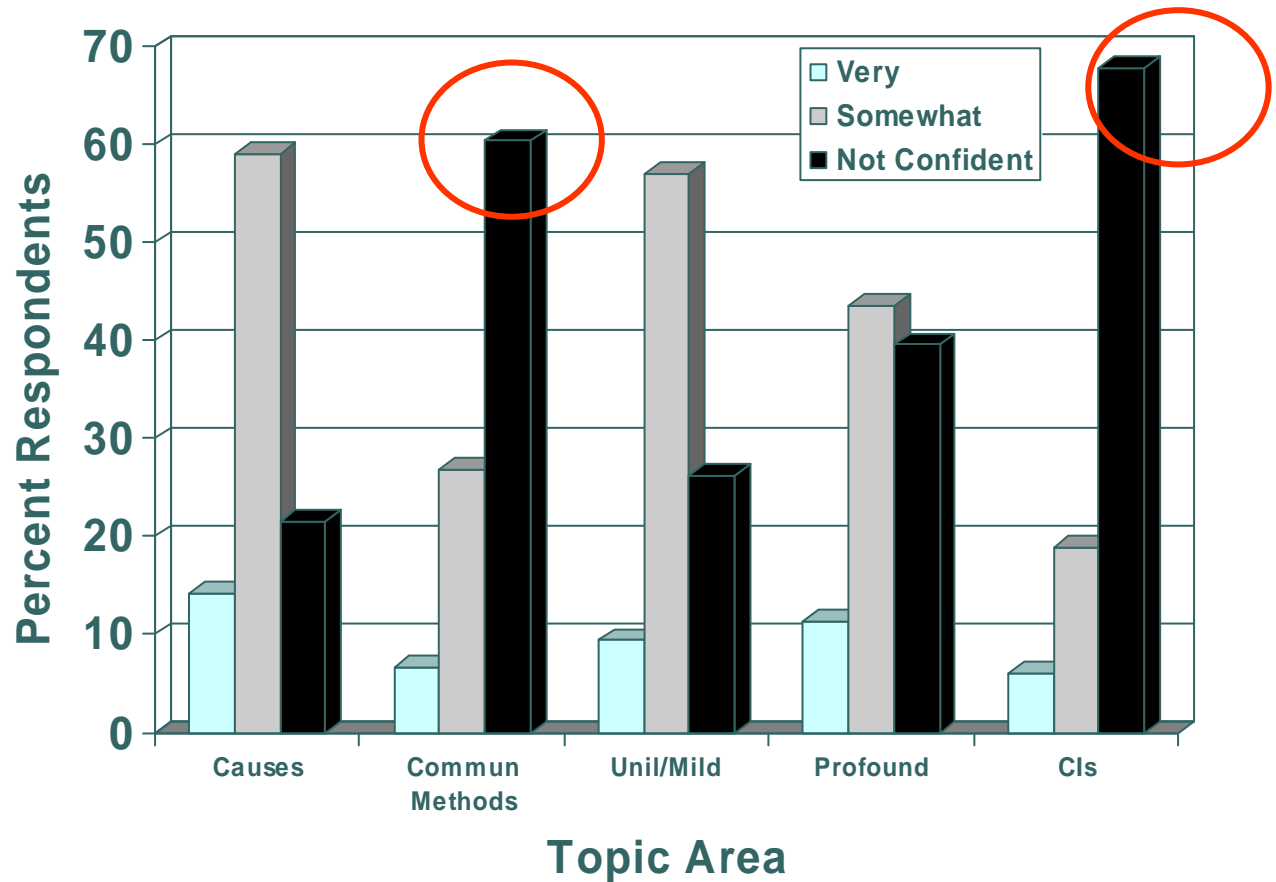
Ages at which....(1-3-6?)

	<1	1-3	3-6	6-9	9+
Diagnosis	51.9	10.8	12.4	15.4	9.6
Hearing Aids	38.1	9.1	11.2	22.3	19.3
Early Intervention	61.6	8.0	9.8	13.2	7.4

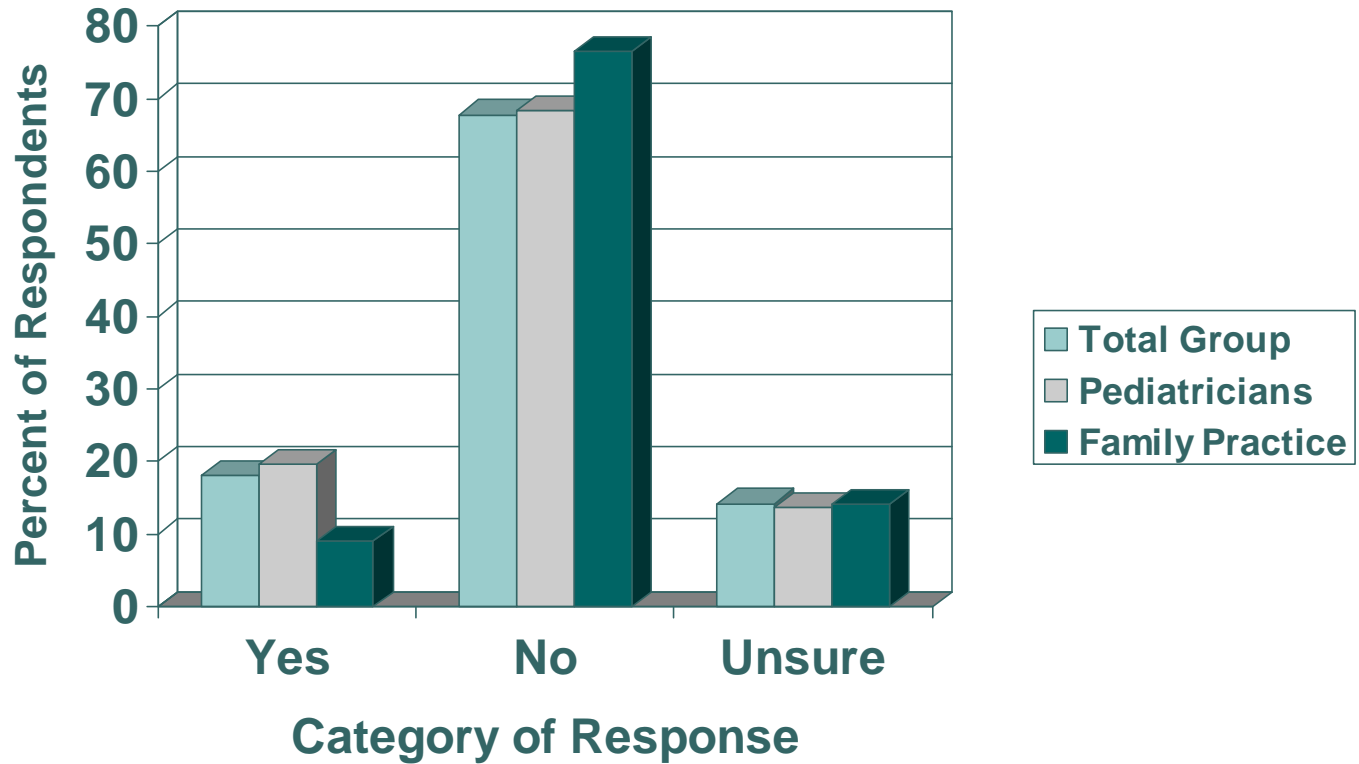
Candidates for Cochlear Implants



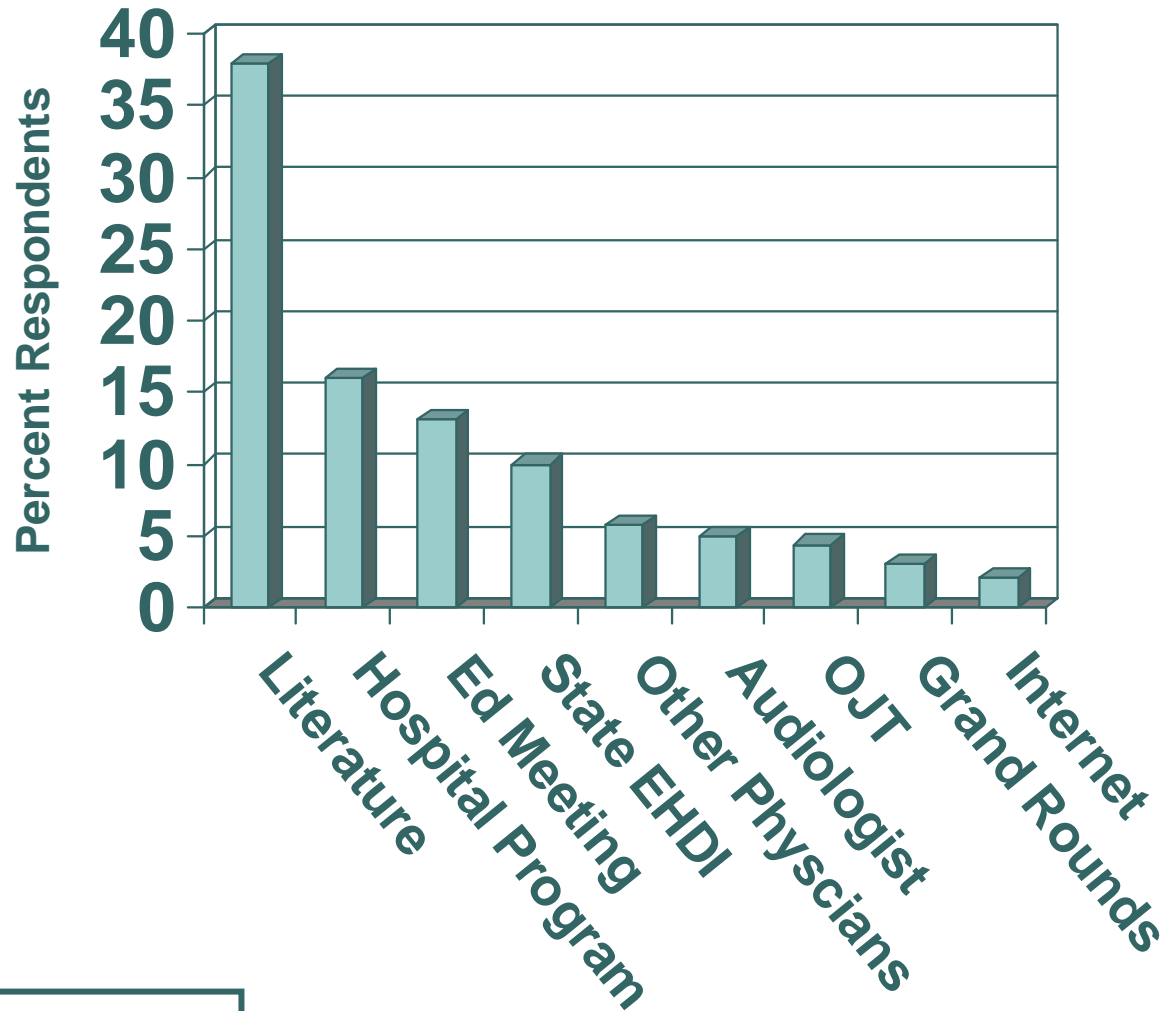
Confidence in Talking with Parents about...



Did your training prepare you?



Primary Sources of Info on NHS



Frequent Internet
Use = 51.7%

Information Source



Policy Statement Awareness

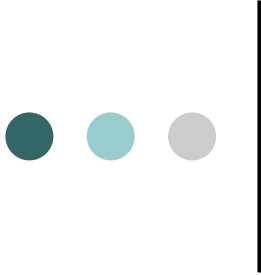
Organization	
AAP	56.8%
AAO	1.9%
AAFP	6.6%
State	1.1%
AMA	.3%
CDC	.5%
USPSTF	.7%



Continuing Medical Education: Most Successful Methods

- Learning linked to clinical practice (including tests of knowledge & evaluation of clinical practice needs)
- Educational meetings with interactive components
- Outreach events
- Use of multiple interventions (e.g., Outreach + reminders; Grand rounds with case study discussion + reminders)

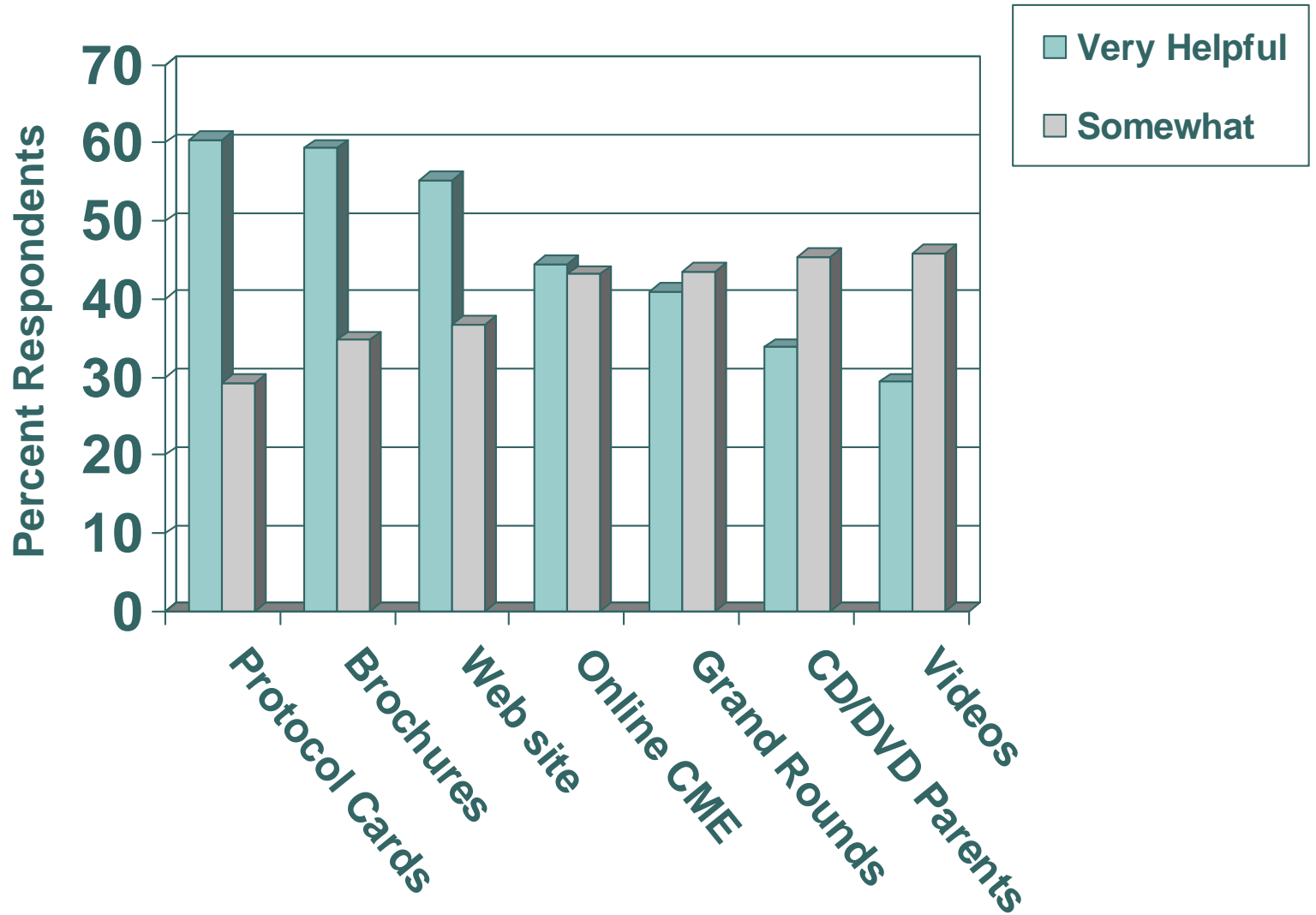
Davis, et al, 1995; Davis & Maxmanian, 2002

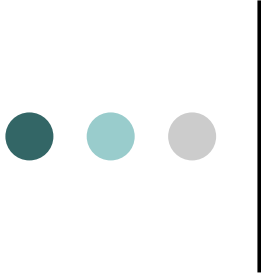


Topics Judged as Needs (In prioritized order):

1. Protocol for f/u
2. Early intervention
3. Contacts for more information
4. Screening for late onset SNHL
5. Patient Education Resources
6. Impact of HL on language
7. Screening at well-child visits
8. Hearing Aids and cochlear implants
9. Genetics and hearing loss
10. Counseling families about screening results
11. Screening methods

Useful Resources





	National n=1,981 (16.1%)	MN n=153 (24%)
Newborn Hearing Screening is very important	81.7%	78.4%
Newborn hearing screening causes excessive parent anxiety	8.4%	11.1%
Universal newborn hearing screening is worth what it costs.	75.7%	73.9%
Very confident in explaining results of newborn hearing screening to parents with questions	48.0%	53.6%
The earliest age you can fit a child with hearing aids is 3 months or older	52.7%	48.3
Percent who would refer a child with a permanent hearing loss to a geneticist	8.8%	13.1%
Percent who frequently use internet to access information about medical topics	51.7%	51.0%
Feel that training was adequate to deal with needs of infants with permanent hearing loss	18.0%	20.9%
Percentage of respondents who are pediatricians	60.3%	83.7%



Big Picture: Physicians

- Positive changes seen, but more education is needed
- “One size” will not fit all; multiple strategies are needed
- “Just in time” resources; protocol steps
- Action-oriented resources focused on medical management, family counseling
- Many topics “needed” but at a manageable level
- Additional resources (e.g., peer education and internet) needed



Other Important Health Care Providers

- Pediatric Nurse Practitioners
- Nurses
- Midwives
- Physician Assistants
- OB/GYNs



Focus Group Themes:

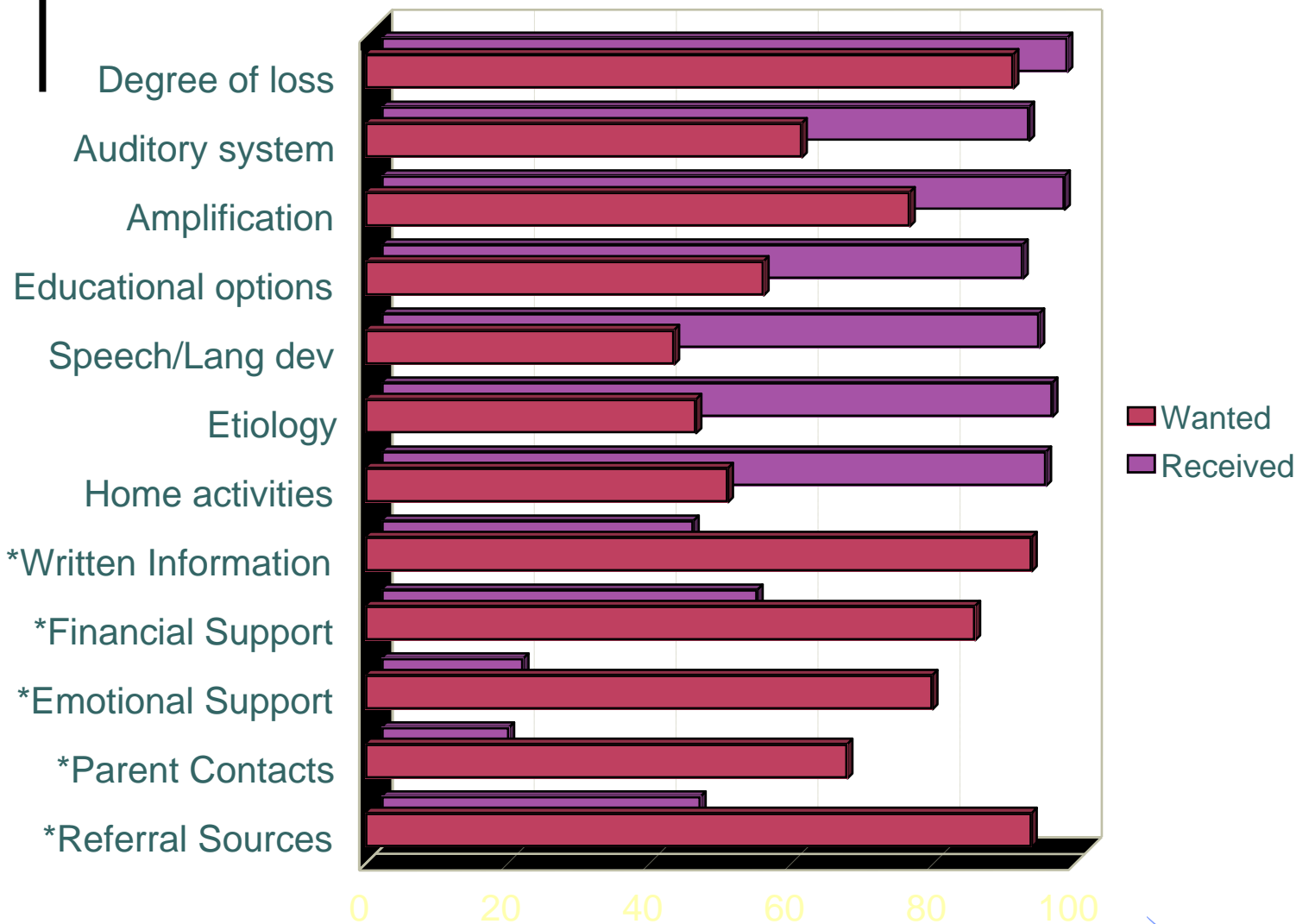
- Limited experience with confirmed hearing loss in infants
- Considerable experience with babies who pass second screening (some “complacency” about “refers” in talking with families)
- Reporting barriers: “Most often we are under the assumption – which is a bad assumption – that if they were not told anything, then it was a pass.”
- Improved monitoring (WIC form, Immunization visits, checklist)
- Increase public awareness



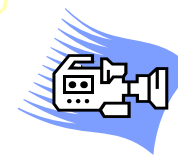
Focus Group Themes

- Audiences that need to learn with us:
 - The Public!
 - Specialists: OB, ENT, Prenatal Class Teachers
 - Parents
 - Day Care Workers
 - School Nurses
 - Newborn Nursery Workers
 - Office Staff

Information Wanted vs. Received by Parents When Hearing Loss is Diagnosed



Martin, George, O'Neal, & Daly (1987); *Sweetow & Barrager (1980)





Parent's Attitudes About Newborn Hearing Screening

After all hearing tests were completed, how did you feel?

**Strongly Agree
or Agree**

total group

Worried about my baby's hearing

11%

Confused about the results of screening tests

10%

Glad hearing screening is done at this hospital

91%

Confident the hearing tests were correct

91%

Frustrated by how long it took to get results

13%

Happy with the professional way screening was done

86%

Confident about what I needed to do next

88%



Parent's Attitudes About Newborn Hearing Screening

After all hearing tests were completed, how did you feel?

	Strongly Agree or Agree	
	total group	subgroup
Worried about my baby's hearing	11%	24%
Confused about the results of screening tests	10%	24%
Glad hearing screening is done at this hospital	91%	70%
Confident the hearing tests were correct	91%	70%
Frustrated by how long it took to get results	13%	28%
Happy with the professional way screening was done	86%	76%
Confident about what I needed to do next	88%	56%

Hearing needs are going unheard for kids in Utah

By Amy Joi Bryson

Deseret Morning News

PLEASANT GROVE — Two years ago, Norm and Taunya Paxton discovered silence had crept into their home — a silence that would forever change their life: They learned their middle child, Chance, was profoundly deaf.

"It's like being thrown into the deep end of the pool and not knowing how to swim," Norm Paxton said.

The discovery left the couple flailing in their efforts to confront the mixed messages they received from doctors, the lack of coordinated support from hearing advocacy groups and, they say, the surprising indifference of the insurance industry.

"There's absolutely no guidance," said Taunya Paxton. "It was worse than shooting in the dark."

Beyond coping with her new-found disability, the Paxtons discovered that hearing aids are not covered by most private health plans, largely viewed as the best level of insurance for parents.

and while dental, vision or even erectile dysfunction insurance or riders on other dental, vision or even erectile dysfunction insurance don't make sense.

That can be problematic when the devices range from a few hundred dollars to as much as \$7,200.

"Part of the industry's denial process is that it's not a sensory issue," says Rich Harward, the state director of hearing and vision services.

"Most plans pay for eyeglasses; very few pay for hearing aids. There are some out there who have helped, but it's not the norm," he says.

The Paxtons, covered under Intermountain's plan, have filed appeals, having been told by IHC officials early this year it would be "irresponsible" for them to modify their plan to include coverage.



Chance Paxton, left, who turns 5 today, hugs his friend, 5-year-old Payton McPhie.

Keith Johnson, Deseret Morning News

"It's like being thrown into the deep end of the pool and not knowing how to swim,"

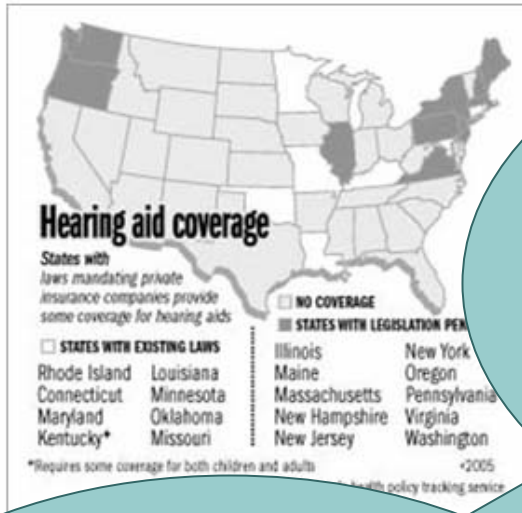
"There's absolutely no guidance. It was worse than shooting in the dark."

8 states require hearing aid assistance for kids

Utah group hopes to get insurance firms to help

By Amy Joi Bryson

Deseret Morning News



"The chances
are all

"There is not an awareness out there. Another parent is going to find out their child is deaf and say, 'Thank goodness I have insurance' and they will find it isn't so. They will go through the same battle we have."

"The market is so incredibly price sensitive, we are being told to take away benefits rather than add them," said Kevin Bischoff, vice president of public and corporate affairs of Regence BlueCross BlueShield.

There should be some help for children. When it is so critical for a child who is developing in socialization, isn't there any help in that child's life?"
Insurance related to deafness and hard-of-hearing
Another parent is going to find out their child is deaf and they will find it isn't so. They will go through

Where Families Find Support

