Assessing EHDI Healthcare Professional Needs in New Jersey: Response to the HRSA Needs Assessment Ariel Meltzer, MS/MSW/LSW - New Jersey EHDI Coordinator – New Jersey Department of Health

Introduction

This report presents findings from the Special Child Health and Early Intervention Services, New Jersey Early Hearing Detection and Intervention (NJ EHDI) Needs Assessment Survey, funded through a grant from the Health Resources and Services Administration (HRSA). The NJ EHDI Needs Assessment Survey was designed to identify the educational needs of health care professionals and service providers in New Jersey (referred to throughout this report as health care professionals) who interact at the time of diagnosis with children who have, or who may have, a hearing loss and their families.

The key objectives of the needs assessment were to identify:

- Perceived strengths and weaknesses in health care professionals' current knowledge related to care and services for infants who have, or who may have, a hearing loss, and their families;
- Priority areas where professional development is needed; and
- Health care professionals' preferences for delivery of professional development.

Method

Approach: Three-Phase Model developed by Witkin and Altschuld (1995)

A 13-member EHDI Needs Assessment Work Group (NAWG) was convened to provide input throughout the needs assessment planning and implementation process. The work group included stakeholders representing the needs assessment target population groups, including audiologists, otolaryngologists, pediatricians, midwives, Special Child Health case managers, Early Intervention providers and hearing screening professionals

Through a collaborative process, the evaluation consultant, NJ EHDI program leadership, and the EHDI NAWG developed a 36-item survey designed to collect quantitative and qualitative data to answer the guiding questions. The survey was conducted online using Qualtrics (Qualtrics, Provo, UT), a web-based survey platform. An anonymous link to the survey embedded in an email invitation was distributed using different methods for each target professional group

Guiding questions:

- 1. How familiar are New Jersey health care professionals with the NJ EHDI program?
- 2. How much do New Jersey health care professionals know about key topics related to hearing screening; hearing loss related issues; and relevant resources and referral
- 3. In which EHDI-related topics would New Jersey health care professionals like more professional development?
- 4. What are New Jersey health care professionals' preferred modalities for the delivery of professional development?
- 5. What EHDI-related resources do New Jersey health care professionals want/need? (e.g., checklists, fax-back forms, brochures, etc.)
- 6. What can New Jersey health care professionals do to facilitate parents'/caregivers' understanding of the importance of follow-up?
- 7. What barriers do New Jersey primary care pediatricians experience around receiving and/or reviewing the hospital's notification about the hospital/birthing center newborn hearing screen?
- 8. How easy is it for New Jersey primary care pediatricians to access and view a patients' hearing screening records?
- 9. What is the most effective way for the hospital to notify primary care pediatricians when a patient/infant does not pass the hospital/birthing center newborn hearing screen?

A series of survey questions asked respondents to rate their knowledge/familiarity of key EHDI-related topics using the following 5-point scale:

- 1 = I have never heard of it
- 2 = I have heard of it but don't know much about it
- 3 = I am generally familiar with it
- 4 = I am quite knowledgeable about it
- 5 = I have extensive and detailed knowledge about it

Overall

The NJ EHDI Needs Assessment Survey results presented in this report suggest that New Jersey health care professionals (N=225) who interact at the time of diagnosis with children who have, or who may have, a hearing loss and their families are generally familiar with key EHDI-related topics, but they may benefit from professional development that provides more detailed information on these topics (Figure 1)

New Jersey EHDI

Respondents' mean knowledge/familiarity ratings on four key topics related to New Jersey EHDI ranged from 2.9 (lowest) for EHDI "1-3-6" guidelines to 3.6 (highest) for New Jersey newborn hearing screening and follow-up laws and regulations (Figure 4)

Hearing Loss Related Issues

Respondents' mean knowledge/familiarity ratings on five key topics pertaining to Hearing loss related issues ranged from 3.2 (lowest) for Audiologic monitoring protocols for possible late onset hearing loss to 4.1 (highest) for Impact of hearing loss on speech and language development (Figure 6)

Resources and Referral

Respondents' mean knowledge/familiarity ratings on eight key topics pertaining to Resources and Referral ranged from 2.4 (lowest) for ASL Deaf Mentor and Snapshots Deaf Mentor program in New Jersey to 4.3 (highest) for New Jersey Early Intervention (EI) Services (Figure 7)

Pediatric Primary Care Physician Experiences

According to pediatric primary care physicians (N=37):

100% reported receiving hearing screening results from the hospital discharge summary, and most reported it is easy or very easy to access a patient's hearing screening records when needed.

Reported barriers included only receiving results from hospitals at which they are on staff; and patients who do not bring the discharge summary/results with them.

Results



Genetic counseling ser ASL Deaf Mentor and Snapshots Deaf Ment program in NJ

The most effective methods for hospitals/birthing centers to notify pediatric primary care physicians when a patient/infant does not pass the hospital/birthing center newborn hearing screen include providing the parent with a discharge summary to be handed to the physician, and to fax the results to the office (Figure 7)

Requested Topics for Professional Development

Of the total 225 respondents, the top five most-commonly requested topics for professional development included Hearing screening options and follow-up protocols (39.8%); Protocols for ear-specific, audiologic monitoring for children presenting with risk indicators for possible late onset hearing loss (39.4%); Communicating with parent/caregivers about hearing loss and EHDI-related issues (37.6%); Hearing aids, cochlear implants, and bone anchored hearing devices (36.3%); and New Jersey EHDI Laws and Regulations (35.8%) (Table 2)

The NJ EHDI Needs Assessment Survey yielded extensive and rich data on the strengths and areas in need of improvement in the EHDI-related knowledge of participating health care professionals. These findings may be useful to NJ EHDI leaders when planning future professional development opportunities that effectively support the vital role played by these health care professionals in newborn hearing screening and follow-up in New Jersey.

Issues related to non-probability sampling, unknown response rates and self-reported data may limit the generalizability of the results beyond the survey participants

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Table 2. Requested Topics for Professional Development (N=225)		
	n	%
Hearing screening options and follow-up protocols	89	39.6
Protocols for ear-specific, audiologic monitoring for children presenting with risk indicators for possible late onset hearing loss	89	39.6
Communicating with parents about hearing loss and EHDI-related issues	85	37.8
Hearing aids, cochlear implants, and bone anchored hearing devices (both non-implantable and implantable)	82	36.4
New Jersey EHDI Laws and Regulations	80	35.6
Genetic counseling for families of children with hearing loss	75	33.3
Deaf culture and community competency	74	32.9
Protocols for ear-specific, diagnostic and audiologic evaluation	72	32.0
Challenges related to accessing newborn hearing screening and follow-up for parents for whom English is not a primary language	70	31.1
Hearing loss and co-morbidities	70	31.1
New Jersey Birth Defects Registry (when and how to use it when a hearing loss is identified)	65	28.9
Referral for multidisciplinary team evaluation for children with facial differences	55	24.4
Use of the New Jersey Immunization and Information System (NJIIS) for obtaining a child's hearing health care history	53	23.6
Mandatory reporting of a hearing screening	46	20.4
Impact of hearing loss on speech and language development	46	20.4
Early Intervention (EI)	43	19.1
None at this time	21	9.3
Other	10	4.4

Conclusion

Limitations

The New Jersey EHDI program contracted with Kelley Analytics, LLC to conduct the needs