
Sarah Webster, B.S. (NC-LEND), Lucia Quiñonez Sumner, M.S., Jackson Roush, Ph.D.
Division of Speech and Hearing Sciences, UNC School of Medicine;
North Carolina Department of Public Instruction, Raleigh, NC

Purpose
This project was designed and conducted by the first author in collaboration with the two co-authors, in partial fulfillment of requirements for graduate students funded by the North Carolina LEND program. The purpose is to identify barriers and facilitators encountered by Spanish-speaking families in North Carolina when accessing pediatric audiology services. A multi-media Resource Guide for Spanish-speaking families is being developed to address the unique challenges faced by this population.

Background
Spanish-speaking families in the United States often experience barriers to accessing healthcare that can lead to loss of follow up or delayed diagnosis of hearing loss in children. Barriers to healthcare access for this population include: lack of transportation, language barriers, excessive wait-times to see a health care provider, and lack of health insurance (Flores et al., 1998). According to results from the National Health Interview Survey on Disability (NHIS-D), Hispanic children “experienced greater access barriers and lower rates of utilization [of healthcare] than non-Hispanic children” (Newacheck et al., 2002, p. 253). Many of these barriers were related to low rates of insurance coverage among Hispanic children. However, even when the variable of insurance coverage is controlled for, there is still disparity in health care access between Hispanic and non-Hispanic children. This finding suggests that Spanish-speaking families experience nonfinancial barriers to care that could be due to cultural differences, attitudes toward healthcare, availability of providers, or discrimination.

Perhaps the most prominent challenge faced by Spanish-speaking families seeking healthcare is the language barrier. Families do not always receive results and recommendations in their first language, or they might receive information through an unqualified interpreter or a child or other family member who speaks English. With regard to accessing EHDI services, the Virginia EHDI Program (2007) found that over half of the Spanish-speaking respondents (55%) to a maternal exit survey indicated that they had not explained the results of the hearing screening to them in Spanish. Another one-third of those respondents (33%) had not received written materials in Spanish regarding the results of hearing screening.

North Carolina has one of the fastest growing Hispanic populations in the nation. From 2000 to 2010 the Hispanic population in North Carolina increased from 4.7% of the total population to 8.4% (U.S. Census Bureau, 2000; 2010). Among the over 800,000 Hispanics living in North Carolina, 81% speak a language other than English at home, and 43% are uninsured (Pew Research Center, 2011). Furthermore, many of these families are migrant or agricultural workers who live in rural areas of the state (NC Institute of Medicine, 2003).

EHDI-Related Needs
According to Quiñonez Sumner (2015), professionals working with deaf and hard-of-hearing children would benefit from a deeper understanding of the Hispanic population, because the percentage of deaf and hard-of-hearing children in this group is greater than in the Caucasian population (Smith, 2002) and other ethnic groups (Mehra, Eavey, & Keamy, 2009). Although the reasons are unknown, “neonatal hearing loss, already one of the most common birth disorders in the U.S., is especially prevalent among Hispanic-Americans” (American Academy of Otolaryngology-Head and Neck Surgery, 2009). The suggested greater prevalence of hearing loss in this population coupled with barriers to accessing audiologic care makes the need for a specialized resource guide for Hispanic families of children with hearing loss very apparent.

Acknowledgements
This work was sponsored, in part, by the North Carolina LEND Program (Leadership Education in Neurodevelopmental and Related Disabilities) through a grant from the U.S. Maternal and Child Health Bureau to the Carolina Institute for Developmental Disabilities, which provided funding for Ms. Webster.

Methods
A Qualtrics survey was sent to six of the largest pediatric audiology centers in North Carolina. It was also distributed to 53 NC EHDI stakeholders that included: speech-language pathologists, teachers of the deaf, Beginnings Parent Educators, sensory support professionals, and EHDI regional consultants. Respondents were asked to identify the most significant barriers encountered by Spanish-speaking families in seeking pediatric audiology services. The survey respondents were also asked to indicate the resources they felt would be most useful to include in a resource guide for Spanish-speaking families.

Results and Future Directions
To date, four of the six pediatric audiology centers have returned the survey and 31 of 53 EHDI stakeholders have responded. Figure 1 provides a summary of the most commonly identified barriers to timely audiologic access for Spanish-speaking families.

Resources recommended for inclusion in the Resource Guide included:

- Information about bilingual Beginnings parent educators
- How to access the EHDI "phone tree" for Spanish-speaking families
- A summary of families’ rights under Title VI
- A registry of interpreters and how to access them
- Culturally sensitive information on communication options
- A listing of centers that provide hearing aids through Medicaid
- Information on schools and programs for children with hearing loss
- Resources for financial or disability assistance

Based on survey responses combined with the authors’ observations and professional experience, an EHDI Resource Guide for Spanish-Speaking Families is being developed to provide information on important topics for families. The guide will be produced in cooperation with the North Carolina EHDI program and NC-LEND, in hard copy and on a CD. It will be distributed to pediatric audiology centers across the state and published on the NC-EHDI website for families with access to the internet.

References