Collaboration Matters: Listening Access for Diverse Children with Hearing Loss from Rural Areas
Presented by Dr. Kelly J. Grillo & Mariana Barquet, EHDI 2026, Jacksonville Florida

Selected Citations

Barr, M.; Duncan, J.; & Dally, K. (2018). A Systematic Review of Services to DHH Children in Rural and Remote Regions, *The Journal of Deaf Studies and Deaf Education*, *23*(2):118–130. https://doi.org/10.1093/deafed/enx059

Findings indicate children in rural areas experience "reduced quality and frequency of service[s]".

Bush, M. L., Kaufman, M. R., & McNulty, B. N. (2017). Disparities in access to pediatric hearing health care. *Current opinion in otolaryngology & head and neck surgery*, *25*(5), 359–364. https://doi.org/10.1097/MOO.0000000000000388

Children from rural areas face significant disparities in hearing care (diagnosis and intervention) this is compounded by degree of hearing loss, patient characteristics, parental and provider factors.

Furze, C., Newall, J., Nickbakht, M., Dawes, P., Ching, T. Y. C., & Sharma, M. (2025). A systematic review of barriers and facilitators for ethnically diverse communities in accessing adult and paediatric hearing services. *International Journal of Audiology*, *64*(12), 1213–1223. https://doi.org/10.1080/14992027.2025.2477755

(1) Cost of care
(2) Dismissive beliefs around hearing loss
(3) Lack of accessible information (distance and language)
(4) Approachability/preference for gender (Clinician-Caregiver)/building rapport
(5) Representation and culturally tailored materials
(6) Availability of professional interpreters and local community health/case workers

Kingsbury, S., Khvalabov, N., Stirn, J., Held, C., Fleckenstein, S. M., Hendrickson, K., & Walker, E. A. (2022). Barriers to Equity in Pediatric Hearing Health Care: A Review of the Evidence. *Perspectives of the ASHA special interest groups*, *7*(4), 1060–1071. https://doi.org/10.1044/2021_persp-21-00188

(1) SES, Poverty, and Caregiver Education Levels
(2) Rurality and Distance to Diagnostic Centers
(3) Private or Public Insurance Coverage for Hearing Health Care Services
(4) Access to Qualified Professionals
(5) Cultural and Linguistic Differences

Wong, H.; Sheehan, J.; Sung, V.; Best, S.; & Leigh, G. (2025). Cultural diversity in early hearing detection and intervention: service provider perspectives, *The Journal of Deaf Studies and Deaf Education*, *30*(3), 347–358. https://doi.org/10.1093/jdsade/enaf002

(1) Communication between service providers and families,
(2) Cultural factors and external influences on families, and
(3) Practical barriers to engagement in services.

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Summary of Findings

There is consistent evidence of inequities in access to and quality of hearing health services for Deaf and Hard of Hearing (DHH) children, particularly those living in rural, remote, and culturally diverse contexts.

Children in rural and remote regions experience reduced quality, frequency, and timeliness of services, including delays in diagnosis and intervention and limited availability of specialized professionals (Barr et al., 2028; Bush et al., 2017; Kingsbury et al., 2022). Geographic distance to diagnostic and intervention centers, workforce shortages, and limited service infrastructure are central contributors to these disparities. Rurality often interacts with other factors such as severity of hearing loss, family resources, education level, number of children in the home and provider availability, compound barriers to access.

Socioeconomic factors play a significant role in shaping access to pediatric hearing health care. Lower socioeconomic status, poverty, caregiver education levels, and reliance on public or inadequate insurance coverage are associated with reduced access to diagnostic services, amplification, and ongoing intervention (Bush et al., 2017; Kingsbury et al., 2022). These structural barriers disproportionately affect families already facing multiple forms of disadvantage.

Cultural and linguistic diversity further influences service access and engagement. Barriers identified across studies include the cost of care, dismissive or stigmatizing beliefs about hearing loss, lack of accessible and culturally appropriate information, and language barriers (Furze et al., 2025; Kingsbury et al., 2022). Families from ethnically diverse backgrounds may also encounter challenges related to clinician–caregiver communication, preferences regarding clinician gender, and difficulties establishing trust and rapport with service providers.

Facilitators to improve access include culturally tailored materials, greater representation within the hearing health workforce, availability of professional interpreters, and involvement of local community health workers or case workers (Furze et al., 2025). Service provider perspectives highlight the importance of effective communication, sensitivity to cultural-religious beliefs and external family influences, and addressing practical barriers such as transport, time, and service flexibility to support meaningful engagement in early hearing detection and intervention programs (Wong et al., 2025).

Overall, the findings indicate that disparities in pediatric hearing health care are multifactorial, arising from the intersection of rurality, socioeconomic disadvantage, and cultural and linguistic diversity. Addressing these inequities requires coordinated, creative (flexible/remote), culturally responsive, and system-level approaches that improve service and intervention availability, accessibility, affordability, with compassionate family-centered engagement.

Learn More

Visit the following guide linked below, developed by the Early Hearing Detection & Intervention Parent to Parent Committee.

Rural Living 2023: Tips for Raising a Deaf/Hard of Hearing Child in a Rural Community.

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Case Studies Shared

Yatziry A

Born October 2024
Diagnosed March 2025 with bilateral severe – moderate loss (5 month old)
Started receiving DHH services in September 2025 (11 months old)
They traveled 63 miles to receive diagnostic ABR
They live 53 miles from the closest pediatric Audiology and 63 miles from the closest Pediatric ENT team.
Received Medical Clearance at 11 months and hearing technology at 12 months
Aided on October 2025 (12 months old)

A. Geographic Location: Rural Indiana, town of less than 21k population
B. Primary Language spoken in the home: Zapoteco
C. Primary caregiver: Mom and Dad
D. Factors that may lead to barriers of care:
   Challenges to attain 1-3-6 timeline
   Late diagnosis due to lack of access to ABR team
   No transportation, rely on Medicaid transport (unreliable when is that far)
   Language spoken is a dialect from Mexico, no interpreters available in the US

Jose L

Born on April 2025
Diagnosed July 2025 with bilateral mod-severe loss (4 months old)
Started receiving DHH services in September 2025 (6 months old)
They live about 10 miles from the general hospital where he had the ABR
They live 46 miles from the closest pediatric ENT and pediatric Audiology team
ENT Medical Clearance was not attained until late December 2025 due to access to transportation (Parent doesn't drive) and availability of apps with the Pediatric ENT team.
Aided on January 2026 (9 months old)

A. Geographic Location: Rural Indiana, town of less than 50 k population
B. Language primary spoken in the home: Spanish
C. Primary caregiver: Mom and aunt
D. Factors that may lead to barriers of care:
   Challenges to attain 1-3-6 timeline
   Lack of a pediatric audiology team close to their home address.
   Wait time to get a pediatric ENT app (over 3 months), distance to that app (46 miles, 1 hour 10 min)
   Single Parent, no transportation

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