

EHDI 2022- Barriers to and Facilitators of EHDI: Learning from our Past for a Better Future

62 Articles Included in the Systematic Review

1. Al-Mulki, K., & Todd, N. W. (2020). Relation of public health staffing to follow-up after newborn hearing screening in three health districts in Georgia, 2009-2015. *Int J Pediatr Otorhinolaryngol*, 129, 109784. <https://doi.org/10.1016/j.ijporl.2019.109784>
2. Auerbach, C., Mason, S. E., Schudich, W. Z., Spivak, L., & Sokol, H. (2013). Public Health, Prevention, and Social Work: The Case of Infant Hearing Loss. *Families in Society*, 94, 175–181.
3. Awad, R., Oropeza, J., & Uhler, K. M. (2019). Meeting the Joint Committee on Infant Hearing Standards in a Large Metropolitan Children’s Hospital: Barriers and Next Steps. *American Journal of Audiology*, 28, 251–259.
4. Behl, D. D., DesGeorges, J., & White, K. R. (2016). The role of family-led disability organizations in supporting families with hearing-related concerns. *Journal of Early Hearing Detection and Intervention*, 1, 13–20.
5. Brown, N. C., James, K., Liu, J., Hatcher, P. A., & Li, Y. (2006). Newborn hearing screening. An assessment of knowledge, attitudes, and practice among Minnesota physicians. *Minnesota Medicine*, 89, 50–54.
6. Bush, M L, Bianchi, K., Lester, C., Shinn, J. B., Gal, T. J., Fardo, D. W., & Schoenberg, N. (2014). Delays in diagnosis of congenital hearing loss in rural children. *Journal of Pediatrics*, 164, 393–397. <https://doi.org/10.1016/j.jpeds.2013.09.047>
7. Bush, Matthew L, Alexander, D., Noblitt, B., Lester, C., & Shinn, J. B. (2015). Pediatric hearing healthcare in Kentucky’s Appalachian primary care setting. *Journal of Community Health*, 40, 762–768.
8. Bush, Matthew L, Burton, M., Loan, A., & Shinn, J. B. (2013). Timing discrepancies of early intervention hearing services in urban and rural cochlear implant recipients. *Otology & Neurotology*, 34-43.
9. Bush, Matthew L, Hardin, B., Rayle, C., Lester, C., Studts, C. R., & Shinn, J. B. (2015). Rural barriers to early diagnosis and treatment of infant hearing loss in Appalachia. *Otology & Neurotology*, 36, 93.
10. Bush, Matthew L, Kaufman, M. R., & McNulty, B. N. (2017). Disparities in access to pediatric hearing healthcare. *Current Opinion in Otolaryngology & Head and Neck Surgery*, 25, 359.
11. Chapman, D. A., Stampfel, C. C., Bodurtha, J. N., Dodson, K. M., Pandya, A., Lynch, K. B., & Kirby, R. S. (2011). Impact of co-occurring birth defects on the timing of newborn hearing screening and diagnosis. *American Journal of Audiology*, 20, 132–139.
12. Christensen, M., Thomson, V., & Letson, G. W. (2008). Evaluating the Reach of Universal Newborn Hearing Screening in Colorado. *American Journal of Preventive Medicine*, 35(6), 594–597. <https://doi.org/10.1016/j.amepre.2008.09.007>
13. Crouch, E. L., Probst, J. C., Bennett, K. J., & Carroll, M. C. D. (2017). Evaluating loss to follow-up in newborn hearing screening in a southern state. *Journal of Early Hearing Detection and Intervention*, 2, 40–47.
14. Cunningham, M., Thomson, V., McKiever, E., Dickinson, L. M., Furniss, A., & Allison, M. A. (2018). Infant, Maternal, and Hospital Factors’ Role in Loss to Follow-up After Failed Newborn Hearing Screening. *Academic Pediatrics*, 18, 188–195. <https://doi.org/10.1016/j.acap.2017.05.005>

15. Deem, K. C., Diaz-Ordaz, E. A., & Shiner, B. (2012). Identifying quality improvement opportunities in a universal newborn hearing screening program. *Pediatrics*, 129, 157–164.
16. Deng, X., Ema, S., Mason, C., Nash, A., Carbone, E., & Gaffney, M. (2020). Receipt and Timeliness of Newborn Hearing Screening and Diagnostic Services Among Babies Born in 2017 in 9 States. *Journal of Public Health Management and Practice : JPHMP*, <https://doi.org/10.1097/PHH.0000000000001232>
17. Dharmar, M., Simon, A., Sadorra, C., Friedland, G., Sherwood, J., Morrow, H., ... Marcin, J. P. (2016). Reducing loss to follow-up with tele-audiology diagnostic evaluations. *Telemedicine and E-Health*, 22, 159–164.
18. Elpers, J., Lester, C., Shinn, J. B., & Bush, M. L. (2016). Rural family perspectives and experiences with early infant hearing detection and intervention: A qualitative study. *Journal of Community Health: The Publication for Health Promotion and Disease Prevention*, 41, 226–233. <https://doi.org/10.1007/s10900-015-0086-1>
19. Findlen, U. M., Hounam, G. M., Alexy, E., & Adunka, O. F. (2019). Early Hearing Detection and Intervention: Timely Diagnosis, Timely Management. *Ear & Hearing*, 40, 651–658.
20. Gaffney, M., Eichwald, J., Gaffney, C., Alam, S., Centers for Disease, C., & Prevention. (2014). Early hearing detection and intervention among infants--hearing screening and follow-up survey, United States, 2005-2006 and 2009-2010. *Morbidity and Mortality Weekly Report. Surveillance Summaries (Washington, D.C. : 2002)*, 63 Suppl 2, 20–26.
21. Gehring, C. E., & Jones, A. L. (2017). Information Given to Parents of Neonatal-Intensive Care Unit Graduates on Hearing. *Journal of Early Hearing Detection and Intervention*, 2, 29–39.
22. Giordano, T., Marchegiani, A. M., & Germiller, J. A. (2015). Children With Sensorineural Hearing Loss And Referral To Early Intervention. *ORL-Head and Neck Nursing : Official Journal of the Society of Otorhinolaryngology and Head-Neck Nurses*, 33, 10–14.
23. Guignard, G. H., & Jeff Hoffman MS, C.-A. (2011). Strategic analysis of family support in EHDI systems. *The Volta Review*, 111, 181.
24. Hoffman, J., Muñoz, K. F., Bradham, T. S., & Nelson, L. (2011). Loss to Follow-Up: Issues and Recommendations. *Volta Review*, 111, 165–180. <https://doi.org/10.17955/tvr.111.2.m.664>
25. Holte, L., Walker, E., Oleson, J., Spratford, M., Moeller, M. P., Roush, P., ... Tomblin, J. B. (2012). Factors influencing follow-up to newborn hearing screening for infants who are hard of hearing. *American Journal of Audiology*, 21(2), 163–174. [https://doi.org/10.1044/1059-0889\(2012/12-0016\)](https://doi.org/10.1044/1059-0889(2012/12-0016))
26. Hunter, L. L., Meinzen-Derr, J., Wiley, S., Horvath, C. L., Kothari, R., & Wexelblatt, S. (2016). Influence of the WIC program on loss to follow-up for newborn hearing screening. *Pediatrics*, 138, e20154301.
27. Juarez, J. M., Shaffer, A. D., & Chi, D. H. (2020). Follow-up after failed newborn hearing screening: Parental and primary care provider awareness. *American Journal of Otolaryngology - Head and Neck Medicine and Surgery*, 41. <https://doi.org/10.1016/j.amjoto.2020.102614>
28. Krishnan, L. A., & Van Hyfte, S. (2014). Effects of policy changes to universal newborn hearing screening follow-up in a university clinic. *American Journal of Audiology*, 23, 282–292.
29. Larsen, R., Muñoz, K., DesGeorges, J., Nelson, L., & Kennedy, S. (2012). Early hearing detection and intervention: Parent experiences with the diagnostic hearing assessment. *American Journal of Audiology*, 21(1), 91–99. [https://doi.org/10.1044/1059-0889\(2012/11-0016\)](https://doi.org/10.1044/1059-0889(2012/11-0016))

30. Liu, C. L., Farrell, J., MacNeil, J. R., Stone, S., & Barfield, W. (2008). Evaluating loss to follow-up in newborn hearing screening in Massachusetts. *Pediatrics*, 121, e335–e343. <https://doi.org/10.1542/peds.2006-3540>
31. MacNeil, J. R., Liu, C. L., Stone, S., & Farrell, J. (2007). Evaluating families' satisfaction with early hearing detection and intervention services in Massachusetts. *Am J Audiol*, 16, 29–56. [https://doi.org/10.1044/1059-0889\(2007/004\)](https://doi.org/10.1044/1059-0889(2007/004))
32. McInerney, M., Scheperle, R., Zeitlin, W., Bodkin, K., & Uhl, B. (2020). Adherence to follow-up recommendations for babies at risk for pediatric hearing loss. *International Journal of Pediatric Otorhinolaryngology*, 132, 109900.
33. McNee, C. M., & Jackson, C. W. (2012). The experiences and involvement of grandparents in hearing detection and intervention. *Topics in Early Childhood Special Education*, 32, 122–128. <https://doi.org/10.1177/0271121412443136>
34. Meyer, A. C., Marsolek, M., Brown, N., & Coverstone, K. (2020). Delayed Identification of Infants Who Are Deaf or Hard of Hearing - Minnesota, 2012-2016. *MMWR. Morbidity and Mortality Weekly Report*, 69, 303–306. <https://doi.org/10.15585/mmwr.mm6911a6>
35. Muñoz, K., Blaiser, K., & Barwick, K. (2013). Parent hearing aid experiences in the United States. *Journal of the American Academy of Audiology*, 24, 5–16. <https://doi.org/10.3766/jaaa.24.1.2>
36. Muñoz, Karen, Nelson, L., Goldgewicht, N., & Odell, D. (2011). Early hearing detection and intervention: Diagnostic hearing assessment practices. *American Journal of Audiology*, 20(2), 123–131. [https://doi.org/10.1044/1059-0889\(2011/10-0046\)](https://doi.org/10.1044/1059-0889(2011/10-0046))
37. Palmer, S. B., Adelson, J. L., Crawford, B. F., Asher, N., & Switalski, W. (2019). Newborn Hearing Screenings for Babies Born at Home: Report from an Initiative in Michigan. *Journal of Early Hearing Detection and Intervention*, 4, 36–42.
38. Prins, H. B., Peters, K. A., & Sladen, D. P. (2021). Diagnostic Infant ABR Testing Via Telehealth: A Survey of Professional Opinions and Current Barriers. *Journal of Early Hearing Detection and Intervention*, 6, 60–68.
39. Rao, A., Anderson, G., & Zack, J. (2002). A collaborative early hearing detection and intervention program for five rural hospitals. *International Pediatrics*, 17, 102–106.
40. Razak, A., Fard, D., Hubbell, R., Cohen, M., Hartman-Joshi, K., & Levi, J. R. (2021). Loss to Follow-Up After Newborn Hearing Screening: Analysis of Risk Factors at a Massachusetts Urban Safety-Net Hospital. *Ear and Hearing*, 42, 173–179.
41. Roman, A. M., Gustin, S., & Wagner, J. D. (2021). Evaluating Pennsylvania's Newborn Hearing Screening Program. *Journal of Early Hearing Detection and Intervention*, 6, 32–37.
42. Ross, D. S., & Visser, S. N. (2012). Pediatric primary care physicians' practices regarding newborn hearing screening. *Journal of Primary Care & Community Health*, 3, 256–263.
43. Sanchez-Gomez, M. C., Dundon, K., & Deng, X. (2019). Evaluating data quality of newborn hearing screening. *Journal of Early Hearing Detection and Intervention*, 4, 26.
44. Sapp, C., Stirn, J., O'Hollearn, T., & Walker, E. A. (2021). Expanding the Role of Educational Audiologists After a Failed Newborn Hearing Screening: A Quality Improvement Study. *American Journal of Audiology*, 1–11.
45. Sax, L., Razak, A., Shetty, K., Cohen, M., & Levi, J. (2019). Readability of online patient education materials for parents after a failed newborn hearing screen. *International Journal of Pediatric Otorhinolaryngology*, 125, 168–174.

46. Seeliger, E. L., Martin, R. A., Gromoske, A. N., & Harris, A. B. (2016). WIC Participation as a Risk Factor for Loss to Follow-Up in the Wisconsin EHDI System. *Journal of Early Hearing Detection and Intervention*, 1, 57–65.
47. Shanker, A., Rojas-Ramirez, M. V., Jacobs, J. A., Shinn, J. B., Lester, C., Westgate, P. M., & Bush, M. L. (2019). Assessment of factors involved in non-adherence to infant hearing diagnostic testing. *Journal of Early Hearing Detection and Intervention*, 4, 2.
48. Shulman, S., Besculides, M., Saltzman, A., Ireys, H., White, K. R., & Forsman, I. (2010). Evaluation of the Universal Newborn Hearing Screening and Intervention Program. *Pediatrics*, 126, Suppl 1 PG-S19-S27. <https://doi.org/10.1542/peds.2010-0354F>
49. Smith, B., Zhang, J., Pham, G. N., Pakanati, K., Raol, N., Ongkasuwan, J., & Anne, S. (2019). Effects of socioeconomic status on children with hearing loss. *International Journal of Pediatric Otorhinolaryngology*, 116, 114–117.
50. Soto, P., Ibieta, T., Peat, M., & Berry, S. (2016). Using Medicaid Data to Improve New-born Hearing Screening Follow-Up Reporting: Results from a Pilot Study. *Journal of Healthcare Communications*, 1, 13.
51. Spivak, L., Sokol, H., Auerbach, C., & Gershkovich, S. (2009). Newborn hearing screening follow-up: Factors affecting hearing aid fitting by 6 months of age. *American Journal of Audiology*, 18, 24–33. [https://doi.org/10.1044/1059-0889\(2008/08-0015\)](https://doi.org/10.1044/1059-0889(2008/08-0015))
52. Stich-Hennen, J. R., & Barga, G. A. (2017). Implementing a two class system for monitoring risk indicators for delayed-onset hearing loss. *Journal of Early Hearing Detection and Intervention*, 2, 48–54.
53. Stuart, A. (2016). Infant Diagnostic Evaluation via Teleaudiology Following Newborn Screening in Eastern North Carolina. *Journal of Early Hearing Detection and Intervention*, 1, 63–71.
54. Thomson, V., & Yoshinaga-Itano, C. (2018). The Role of Audiologists in Assuring Follow-Up to Outpatient Screening in Early Hearing Detection and Intervention Systems. *American Journal of Audiology*, 27, 283–293. https://doi.org/10.1044/2018_AJA-17-0113
55. Tran, T., Ng, I., Choojitrom, T., Webb, J., Jumonville, W., Smith, M. J., ... Berry, S. (2016). Late newborn hearing screening, late follow-up, and multiple follow-ups increase the risk of incomplete audiologic diagnosis evaluation. *Journal of Early Hearing Detection and Intervention*, 1, 49–55.
56. Tran, T., Schindelar, L., Ibieta, T., Webb, J., Jumonville, W., Peat, M., & Berry, S. (2017). Scheduling Hearing Appointments Prior To Hospital Discharge Improves Follow-up After Failed Newborn Screening. *Journal of Early Hearing Detection and Intervention*, 2, 24–29.
57. Tran, T., Wang, Y., Smith, M. J., Sharp, B., Ibieta, T., Webb, J., ... Berry, S. (2016). Time trend and factors associated with late enrollment in early intervention among children with permanent hearing loss in Louisiana 2008-2013. *Journal of Early Hearing Detection and Intervention*, 1, 17–22.
58. Ward, A. C., Hunting, V., & Behl, D. D. (2019). Supporting families of a deaf or hard of hearing child: Key findings from a national needs assessment. *Journal of Early Hearing Detection and Intervention*, 4, 6.
59. Windmill, S., & Windmill, I. M. (2006). The status of diagnostic testing following referral from universal newborn hearing screening. *Journal of the American Academy of Audiology*, 17, 367–378. <https://doi.org/10.3766/jaaa.17.5.6>

60. Zeitlin, W, McInerney, M., Aveni, K., Scheperle, R., & Chontow, K. (2021). Better late than never? Maternal biopsychosocial predictors of late follow-up from new Jersey's early hearing detection and intervention program. *International Journal of Pediatric Otorhinolaryngology*, 145. <https://doi.org/10.1016/j.ijporl.2021.110708>
61. Zeitlin, Wendy, Auerbach, C., Mason, S. E., Spivak, L. G., & Reiter, B. (2017). Factors related to not following up with recommended testing in the diagnosis of newborn hearing loss. *Health & Social Work*, 42, 24–31.
62. Zeitlin, Wendy, Auerbach, C., Mason, S., Spivak, L., & Erdman, A. (2019). Factors predicating loss to follow-up with rescreening in early hearing detection and intervention programs. *Families in Society*, 100, 213–223. <https://doi.org/10.1177/1044389419828884>