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Pediatric Sensorineural Hearing Loss: Improving Services for Children At-Risk for Future Developmental Delays

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Title: Pediatric Sensorineural Hearing Loss: Improving Services for Children At-Risk for Future Developmental Delays

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Abstract

Introduction: Research reveals that children born with Sensorineural Hearing Loss (SNHL) are at increased risk for developmental delays. In 2021, an enhanced screening process was implemented into the cochlear implant CI clinic at the Medical University of South Carolina for kids (<5 years of age) who were (CI) candidates or who had already received CIs. 65.6% of the 31 participants screened positive for potential delay in one or more categories. A needs assessment was then completed to understand the impact of this new screener. This revealed that caregivers would benefit from further education to better understand the purpose of the screener and referrals. The purpose of this capstone was to develop educational materials to enhance caregiver understanding of each service and enhance CI team confidence in educating families on each service/topic (Occupational Therapy, Sensory Processing Disorder, Physical Therapy, Vestibular Rehab, and Developmental-Behavioral Pediatrics)

Methods: Educational handouts were created for families and providers. Pre- and post-handout RedCAP surveys were then collected from Provider Group A) participating CI team members and pediatric Audiologists (pre-survey n=18; post-survey n=7) and Provider Group B) CI Audiologists and speech language pathologists (n=5). RedCAP surveys were also collected from participating families of children with SNHL after receiving the materials (n=13). Results were analyzed using descriptive statistics, inferential statistics, and thematic analysis.

Results: All participating providers reported increased confidence in their ability to educate families about each topic. A statistically significant increase in confidence for all topics was found for Provider Group B. The largest increase in confidence was reported for describing Sensory Processing Disorder. 100% (13/13) of participating caregivers reported improved understanding of the services their child was referred to.

Conclusion: Educational materials increased provider confidence in their ability to educate families on the purpose of each referred services. Therefore, providers would benefit from continued access to these materials. Caregivers would also benefit from continuing to receive educational handouts to improve their understanding of each referral; however, caregiver readiness for information should be considered when deciding which handouts to distribute to avoid overwhelming the caregiver.