IT TAKES A VILLAGE TO RAISE A CHILD

Why integrated care matters for children with hearing, listening, speech and language difficulties.

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Children with hearing, listening, speech and language difficulties rarely present with a single isolated issue. Instead, they often experience overlapping developmental, educational, behavioural and psychosocial challenges that influence communication, learning, participation and wellbeing across childhood and beyond. For clinicians, this creates an important reality: no single profession can effectively address these needs alone.

Communication underpins literacy, academic achievement, social participation and mental health. When services are fragmented, families are often left navigating multiple referrals, disconnected recommendations and inconsistent care pathways. Evidence increasingly shows that integrated and collaborative models of care improve access to services and long-term developmental outcomes for children[1–2].

The need for integrated care

Children with hearing and communication difficulties may require support from audiologists, speech pathologists, paediatricians, ENTs, psychologists, occupational therapists, teachers of the deaf, educators and social workers. Historically, these services have often operated independently. While each discipline contributes valuable expertise, separation between professions can result in duplicated assessments, delayed intervention and confusion for families[3–4].

Integrated care models aim to change this. Rather than functioning as disconnected services, integrated systems coordinate assessment, intervention, education and family support into a shared developmental pathway. Importantly, integrated care is not simply about co-locating professionals in the same building. It is about creating shared goals, coordinated decision-making, clear communication and continuity across health care, education and community systems.

Different care models

The terms "multidisciplinary", "interdisciplinary" and "transdisciplinary" are often used interchangeably in clinical practice but represent fundamentally different approaches to collaboration.

Multidisciplinary care: Multiple experts, parallel pathways

In multidisciplinary care, professionals work within their own discipline-specific roles and contribute separate assessments or recommendations. This model provides valuable specialist expertise and remains the most common structure in hearing health care, including in paediatric hearing and communication services. However, care often occurs sequentially rather than collaboratively. Families may attend multiple appointments across different services without there being a unified understanding of their child's needs. While parents value access to multiple specialists, they may still feel uncertain about how recommendations fit together or who is coordinating care[5].

Interdisciplinary care: Shared planning and collective decision-making

Rather than professionals working in parallel, interdisciplinary teams engage in shared assessment, collaborative interpretation, joint planning and coordinated intervention. This model is particularly well suited to children with complex and overlapping difficulties involving hearing, language, cognition, learning and participation. In practice, interdisciplinary care means that a child is not viewed simply as "an audiology case", "a speech pathology referral" or "a behavioural concern". Instead, the child is understood holistically through a shared formulation that considers communication, cognition, emotional wellbeing, education and family context simultaneously.

The evidence supporting interdisciplinary care is growing. Studies consistently show that coordinated care pathways, active navigation, shared planning and integration with education improve access to intervention and reduce delays in care[6].

Transdisciplinary care: Extending access through shared roles

Transdisciplinary care involves partial sharing or "release" of roles between disciplines following cross-training around common goals. This model may improve service access in rural, regional or workforce-limited settings where specialist availability is constrained. Blended models between audiology and speech pathology, as an example, may support early screening, triaging or parent education where specialist resources are scarce[7].

While transdisciplinary practice has important advantages for access and continuity, the evidence remains stronger for interdisciplinary models in complex diagnostic and school-aged populations, such as children with developmental or neurodevelopmental presentations.

Benefits of interdisciplinary care

The strongest argument for interdisciplinary care is not theoretical; it is practical and outcome driven.

Children with listening difficulties, for example, frequently present with overlapping language disorders, attention difficulties, learning problems, anxiety and neurodevelopmental differences[8]. A fragmented approach risks missing the interaction between these factors.

Interdisciplinary care improves outcomes because it strengthens early identification, coordinated intervention, reduced service delays, active family support, smoother transitions between services and stronger educational integration.

This is clinically important because early intervention is consistently associated with better language, developmental and psychosocial outcomes. Coordination is not merely an administrative improvement; it is part of the mechanism through which better outcomes become possible.

The critical role of education

For many children with hearing, listening and communication difficulties, the most meaningful outcomes are observed in classrooms rather than clinics.

These include:
- listening in noise
- classroom participation
- attention to instruction
- fatigue management
- literacy development
- academic achievement
- social inclusion.

Integration between health care and education is critical. Research shows that embedding educational support within paediatric hearing and communication services improves access, strengthens communication between schools and clinicians, and enhances long-term educational participation[9]. Integrated education pathways ensure that recommendations made in clinic translate into meaningful functional support in real-world learning environments.

Model	How the team works	Typical pathway	Main strengths	Main limits
multidisciplinary	several professionals contribute from within their own discipline specific roles	referrals move from one discipline to another findings are often gathered sequentially and combined late	brings specialist depth to complex cases	care can remain parallel rather than integrated families may receive multiple opinions without a shared formulation
interdisciplinary	the same range of professionals work through shared planning, joint interpretation, explicit role clarity and coordinated transitions across settings	referral enters a common pathway assessment is broader from the outset and management is agreed across clinic, family and school, with a shared plan	best match for complex conditions such as mixed hearing, language, learning and participation needs strongest fit with the integrated care evidence	needs leadership, time for interprofessional case discussion, and shared information systems
transdisciplinary	roles are partly shared or released across disciplines after cross-training around common goals	fewer handoffs screening, first-line support and some intervention may be delivered by blended roles in community settings	task shifting and role expansion may improve access, improve specialist referrals and extend scarce expertise	evidence is thinner in this field, especially for complex school-age diagnostic work

Table 1/ *The strengths and limitations of each model.*

Family-centred care: The foundation of integration

Integrated care is most effective when families are treated as active partners rather than passive recipients of services. Family-centred models have been associated with improved parent-child interaction, stronger family coping, better language development and enhanced psychosocial outcomes[10]. Parents are often the only constant across health care, education and community systems. Effective integrated care reduces the burden placed on families to coordinate services themselves. When clinicians communicate clearly, collaborate effectively and share responsibility, families experience care as a coordinated journey rather than a series of disconnected appointments.

TSH's Interprofessional–Interdisciplinary Model

Interprofessional practice refers to health care professionals from different disciplines working collaboratively with patients and families to deliver coordinated care. Interprofessional education occurs when professionals learn "with, from and about" one another to improve collaboration and quality of care. At TSH, integrated care combines health care and education into a coordinated child- and family-centred pathway. The model brings together audiology, speech pathology, psychology, occupational therapy, counselling and family support, teachers of the deaf and educational professionals.

Rather than isolated referrals, children move through coordinated assessment, therapy, parent education and educational support systems designed around shared goals. The model incorporates targeted group therapy, focused individual assessment and therapy in clinical, educational and community settings. This approach recognises that successful outcomes are not defined solely by diagnostic labels or device fitting. Instead, success is measured by improvements in participation, communication, learning and the quality of life of the child and family. The model also incorporates carefully deployed transdisciplinary approaches in regional and workforce-limited settings to improve triaging, continuity and family engagement.

Key takeaways

Multidisciplinary expertise remains essential in paediatric hearing, listening, speech and language care. However, evidence increasingly suggests that expertise alone is not enough. The strongest outcomes occur when multidisciplinary knowledge is organised through interdisciplinary and interprofessional collaboration.

The most effective services:

- take family concerns seriously
- use broad developmental and functional assessments
- coordinate across health and education
- minimise fragmentation
- support transitions across the child's journey
- focus on participation and long-term outcomes rather than isolated diagnoses alone.

Ultimately, integrated care models shift the focus from "Who owns this problem?" to "How do we work together to support this child?" For children with hearing, listening, speech and language difficulties, that collaborative approach may make all the life-changing difference. ●

References

1. White, K., et al. (2010). The evolution of early hearing detection and intervention programs in the United States. Seminars in Perinatology, 34(2), 170–9. doi.org/10.1053/j.semperi.2009.12.009
2. Witton, C. (2010). Childhood auditory processing disorder as a developmental disorder: The case for a multi-professional approach to diagnosis and management. International Journal of Audiology, 49(2), 83–7. doi.org/10.3109/14992020903289808
3. Ebrahimi-Madiseh, A., et al. (2023). Models of service delivery in adult cochlear implantation and evaluation of outcomes: A scoping review of delivery arrangements. PLOS ONE, 18(5), e0285443. doi.org/10.1371/journal.pone.0285443
4. American Speech-Language-Hearing Association. (2023). Language and communication of deaf and hard of hearing children. asha.org/practice-portal/professional-issues/language-communication-deaf-hard-of-hearing-children/
5. Findlen, U. M., et al. (2019). Parent perspectives on multidisciplinary pediatric hearing healthcare. International Journal of Pediatric Otorhinolaryngology, 116, 141–6. doi.org/10.1016/j.ijporl.2018.10.044
6. Findlen, U. M., et al. (2022). Barriers to and facilitators of early hearing detection and intervention in the United States: A systematic review. Ear and Hearing, 44(3), 448–59. doi.org/10.1097/AUD.0000000000001312
7. Lyons, R., & Marsh, B. (2018). A transdisciplinary model of care: Audiology and Speech Pathology. International Journal of Integrated Care, 18(s1), 116. doi.org/10.5334/IJIC.S1116
8. Dawes, P., & Bishop, D. (2009). Auditory processing disorder in relation to developmental disorders of language, communication and attention: A review and critique. International Journal of Language & Communication Disorders, 44(4), 440–65. doi.org/10.1080/13682820902929073
9. Miranda, N. A., et al. (2023). Retrospective assessment of the impact of an education specialist on the care of children with hearing loss. American Journal of Otolaryngology, 44(6), 103971. doi.org/10.1016/j.amjoto.2023.103971
10. Holzinger, D., et al. (2022). Multidimensional family-centred early intervention in children with hearing loss: A conceptual model. Journal of Clinical Medicine, 11(6), 1548. doi.org/10.3390/jcm11061548.