

Hidden in plain sight

Optimising the role of speech-language therapists in the future health and disability system

The speech-language therapists workforce

According to the New Zealand Census (2018) there are approximately 942 speech-language therapists in New Zealand. Around 200 of these currently on a DHB payroll. The majority of the remaining workforce work in private practice or in educational settings. Speech-language therapists work across the lifespan with particular emphasis on swallowing disorders (dysphagia) and communication difficulties.

Speech-language therapists are currently self-regulated with membership of the New Zealand Speech-Language Therapists' Association (NZSTA) being voluntary and accounting for around 90 percent of the workforce.

Current speech-language therapist contribution

Speech-language therapists in publicly-funded health system roles currently work primarily with adults with dysphagia, dysphonia (voice) and related disorders, aphasia (language disorders), and dysarthria or dyspraxia (disorders of motor speech output). Both swallowing and communication disorders arise from a range of conditions including neurological disorders (e.g. Parkinson's disease (PD), stroke, dementia, motor neuron disease), traumatic brain injury, head and neck cancers, structural anomalies of the head and neck, post-surgical complications, and at times changes associated with ageing. Speech-language therapists in health also work with children and their whānau, where their core business includes dysphagia and feeding difficulties.

Historically, approximately half of publicly-funded health sector input from speech-language therapists is within a tier 2 setting and addresses acute care needs. This results in reduced access for people with a lower risk of hospitalisation but who nevertheless face a higher risk of social isolation and mental illness (approximately one in ten people experience a communication disability that impacts on their wellbeing and/or employment)

Optimal speech-language therapy input

Tier 1 services can and should focus on those services which enable people to remain well, in their communities, for longer, and reduce the burden on acute care where possible. In an optimal state, tier 1 professionals would refer patients to community-based, publicly-funded speech-language therapy early in the patient journey to provide proactive care planning. In newly diagnosed conditions where communication or swallowing disability is likely (e.g., progressive neurological conditions, head and neck cancers, certain developmental disorders), referrals would happen at the point of diagnosis to support education and proactive planning with interprofessional tier 1 teams.

Speech-language therapists could reduce the social and economic burden of health conditions by helping people return to work and maintain employment following brain injury acquired communication difficulties or voice disorders.

Barriers and enablers

Speech-language therapy input is currently sub-optimal due to:

- A lack of publicly-funded speech-language therapy services in tier 1 and integrated care settings and prioritisation of acute demand in tier 2 settings with limited resources over more proactive, preventative, but less acute, care.

- A lack of understanding by clinicians, education professionals and others of the capabilities, skills and potential impacts of speech-language therapy as well as the need for earlier intervention.
- Services organised within DHB boundaries results in workforce shortages and inconsistent care. A central system as now planned should allow more effective workforce planning and investment.
- Inadequate funding for rehabilitation to enable sufficient speech therapy FTE and equity of access to support patients to achieve better outcomes, particularly in head and neck cancer.

Evidence base (sample)

- Children with hearing loss and neurological conditions have a 2-8 times greater likelihood of having additional medical visits¹ and increased health costs².
- A dysphagia in stroke protocol was found to reduce aspiration pneumonia by 18 percent, resulting in cost savings of \$4,924 per patient due to hospitalisations prevented³.
- Communication impairment is twice as prevalent in more socioeconomically deprived areas⁴. Children with pervasive language problems are more likely to live in poorer areas and reach a lower occupational status at age 25⁵, indicating important considerations for equity.
- A growing body of research is demonstrating a high prevalence of communication impairment in male youth offenders⁶. Speech-language therapy with male youth offenders have demonstrated an ability to increase engagement with education and training programmes⁶.

Recommendations

Increased input from speech-language therapists in preventive care and earlier intervention can support a more person-centred, cost-effective integrated health and disability system. To address the critical barriers and enable an optimal use of speech-language therapists, we recommend:

- Recognition and funding for integrated speech-language therapy services in tier 1 service networks with referral protocols for education providers and health practitioners to support better access for people from socioeconomically deprived backgrounds.
- Improving ARC facilities' access to speech-language therapy services to support capacity building and systems improvements in dysphagia care.
- Educate health care professionals about the role and potential benefits of speech-language therapy and swallowing management and the importance of early referral.

¹ Boulet, Sheree L., Coleen A. Boyle, and Laura A. Schieve. 2009. "Health Care Use and Health and Functional Impact of Developmental Disabilities among US Children, 1997-2005." *Archives of Pediatrics & Adolescent Medicine* 163 (1): 19–26.

² Cronin, P., Reeve, R., McCabe, P., Viney, R., & Goodall, S. (2017). The impact of childhood language difficulties on healthcare costs from 4 to 13 years: Australian longitudinal study. *International Journal of Speech-Language Pathology*, 19(4), 381-391.

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Sciberras, E., Westrupp, E. M., ... & Reilly, S. (2015). Healthcare costs associated with language difficulties up to 9 years of age: Australian population-based study. *International Journal of Speech-Language Pathology*, 17(1), 41-52.

³ Perry, SE. et al. 2019. "The Dysphagia in Stroke Protocol reduces aspiration pneumonia in patients with dysphagia following acute stroke: A clinical audit. *Transl Stroke Res.* Feb; 10 (1): 36-43.

⁴ Reilly, S., Harper, M., & Goldfeld, S. (2016). The demand for speech pathology services for children: Do we need more or just different? *Journal of Paediatrics and Child Health*, 52(12), 1057-1061.

⁵ Beitchman, J. H., Wilson, B., Brownlie, E. B., Walters, H., Inglis, A., & Lancee, W. (1996). Long-term consistency in speech/language profiles: II. Behavioral, emotional, and social outcomes. *Journal of the American Academy of Child & Adolescent Psychiatry*, 35(6), 815-825.

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⁶ Lount, Sarah A., Suzanne C. Purdy, and Linda Hand. 2017. "Hearing, Auditory Processing, and Language Skills of Male Youth Offenders and Remandees in Youth Justice Residences in New Zealand." *Journal of Speech, Language & Hearing Research* 60 (1): 121–35.

