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Speech Pathology Australia

Speech Pathology Australia's Submission to the Standing Committee on Employment, Education and Training's Inquiry into the Education of Students in Remote and Complex Environments

28 February 2020

The Speech Pathology Association of Australia Limited
ABN 17 008 393 440

Committee Secretariat
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Dear Committee Secretariat

Speech Pathology Australia welcomes the opportunity to provide comment to the Standing Committee on Employment, Education and Training's Inquiry into the Education of Students in Remote and Complex Environments. Speech Pathology Australia is the national peak body for speech pathologists in Australia, representing over 10,000 members and an active member of the National Rural Health Alliance. Speech pathologists are university-trained allied health professionals with expertise in the diagnosis, assessment, and treatment of speech, language and communication disabilities, and swallowing disorders.

The impact of communication and swallowing difficulties can be considerable, negatively affecting an individual's academic achievement, employment opportunities, mental health, social participation, ability to develop relationships, and overall quality of life.

Within the education setting, speech pathologists focus on how students with communication disabilities can access and participate in both the school environment (e.g. interact with other students, request help or clarification from a teacher or educational support worker) and in the curriculum through provision of environmental supports (including equipment, adaptations in the classroom and through adjustments to the pedagogy, strategies and curriculum). Speech pathologists should be considered an essential part of the educational team, working alongside teachers to implement effective teaching practices to support language and literacy development (for whole classes) or to develop adjustments to teaching and assessment for individual students with identified needs.

As to rural and remote speech pathology services, like many other health care providers, there are two major concerns – access to services and workforce issues – including challenges in workforce distribution due to the current competing demands for allied health services from other sectors such as the NDIS and increasingly aged care.

Access to services is a major issue with a lack of regular speech pathology services available within a 50-minute drive for many living in rural and remote areas. In addition, there are several distinct personal and professional challenges faced by rural/remote based speech pathologists such as feelings of professional isolation, fatigue, stress and heavy workloads, all of which have a negative impact on the ability to recruit and retain health professionals to these areas. Speech pathologists do seek to achieve workforce optimisation and efficiency by using alternative methods of service delivery such as telepractice, however, current funding arrangements, such as no Medicare rebate for speech pathology delivered by telepractice, only for those provided face-to-face, does not facilitate this. We hope that the current MBS review will rectify this problem.

In response to your terms of reference we provide feedback to relevant questions from the perspective of issues relating to students with communication needs and speech pathology services. We include, where appropriate, examples provided by our members working in, or with knowledge of, education in remote and complex environments and have also encouraged our members to provide individual submissions. We preface our response and recommendations with background information on communication

disabilities and swallowing disorders in students and the role of speech pathologists in the education sector.

We hope the Committee finds our feedback and recommendations useful. If we can be of any further assistance or if you require additional information please contact Ms Jane Delaney, Senior Advisor Early Childhood and Education at Speech Pathology Australia's National Office on 03 9642 4899 or by email, jdelaney@speechpathologyaustralia.org.au.

Yours faithfully

Tim Kittel

National President

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Speech Pathology Australia welcomes the opportunity to provide comment to the Standing Committee on Employment, Education and Training's Inquiry into the Education of Students in Remote and Complex Environments. We have structured our feedback in response to the relevant terms of reference and preface these remarks and recommendations with background information on communication disabilities and swallowing disorders in students and the role of speech pathologists.

About Speech Pathology Australia

Speech Pathology Australia is the national peak body for speech pathologists in Australia, representing over 10,000 members. Speech pathology is a self-regulated health profession through Certified Practising Speech Pathologist (CPSP) membership of Speech Pathology Australia.

The CPSP credential is recognised as a requirement for approved provider status under a range of funding programs including Medicare, some Commonwealth aged care funding such as the Commonwealth Home Support Programme (CHSP), Department of Veteran Affairs (DVA) funding and the National Disability Insurance Scheme (NDIS), and all private health insurance providers.

As the national body regulating the quality and safety of speech pathology practice in Australia, Speech Pathology Australia manages the formal complaints process for the profession and can, if necessary, place sanctions on practice for any member who is demonstrated to contravene the Association's Code of Ethics.

About communication and swallowing disability in students

Communication is the means by which learning is facilitated and assessed. The ability to learn and to access curriculum is heavily reliant on robust language skills; without strong foundational communication skills children are at risk of falling behind in many areas. Children's social communication skills may also be compromised, in that they have difficulty interacting appropriately to make friends, participate in conversations, and to negotiate and make choices, all of which are an important part of school life. Children with speech, language and communication needs are at greater risk of bullying[i] and report less school enjoyment than peers. International population studies looking at the outcomes for children with language difficulties confirm that students' ability to participate in the more complex educational demands associated with secondary school can be severely compromised. These young people have a negative trajectory, with increased incidence of disengagement from school, poor educational outcomes, mental ill-health, problematic behaviour, anti-social problems and interaction with the juvenile justice system[ii]. As adults, they also generally have poor literacy skills and a history of unstable employment in manual labour or unskilled occupations[iii].

Language skills are a foundation of all learning, but in particular, literacy learning. These underlying language skills need to develop throughout schooling to support curriculum participation and achievement. Students with communication disabilities will require additional support to access and participate in the curriculum and achieve expected educational outcomes.

Communication disabilities can present in many forms in students. Some may be 'obvious' to the untrained person when communication needs are present along with other physical, intellectual, sensory

or cognitive disabilities or because the student is non-verbal or using a system to augment their spoken language. Other communication disabilities may be invisible to the untrained person.

Communication disabilities, whether obvious or not, may mean that a student's capacity to understand and use language can be severely compromised and the effects on their access and participation (including literacy and learning) can be significant.

Swallowing disorders affect the ability to safely swallow food or liquids and can lead to medical complications including chest infections/pneumonia, as well as death from choking. The causes of swallowing problems may be genetic, developmental, acquired and may be caused by structural, physiological and/or neurological problems affecting the swallowing function. This may present as difficulty with sucking, drinking, eating, controlling saliva, protecting the airways or swallowing.

Mealtime support may be needed for students with swallowing disabilities. Mealtime support needs refer to supports for a student with eating or drinking difficulties (regardless of the cause or underlying diagnosis); it may be needed for a student who has swallowing problems or for those who may have motor, sensory, cognitive, emotional or behaviour issues that impact on the student's ability to eat or drink. The NDIS has acknowledged that assessment, development of guidelines and training by allied health practitioners to staff providing mealtime supports for people with disability should be funded through the disability sector. These supports need to be provided within an educational setting for students with swallowing problems to ensure their physical safety (they don't choke) and adequate nutritional intake whilst they are at school. If a student cannot eat and drink safely whilst they attend school, then they are not able to participate in school.

Supports for students with communication and swallowing disability and the role of speech pathologists

All children and young people need to have acquired well developed speech, language and communication skills to reach their full potential: academically, socially, vocationally and economically. As well as being vital for learning, speech, language and communication skills are essential across the school day. Speech, language and communication underpin literacy and numeracy – skills which are necessary for students to understand and achieve in all key learning areas.

Early identification of speech, language and communication needs and access to appropriate interventions during the pre-school years can have a profound effect on a child's health, development, educational and wellbeing outcomes in the longer term. Early intervention provided by a speech pathologist is critical for identifying, assessing and addressing problems in speech and language for young children and ideally occurs prior to school entry. Children who start school with speech and oral language difficulties are at risk of experiencing challenges when learning to read and spell. Some children have problems with language development that creates significant barriers within everyday life and educational progress.

Within schools, supports need to be tailored to the needs of individual students, and be developed and implemented in partnership with the school, principal, teachers, parent/family and student. Speech pathologists and teachers have different but complementary roles in education. Speech pathologists are essential members of the educational team, working alongside teachers to support literacy and language development (for whole classes) or to develop adjustments to teaching and assessment for a student with identified needs. This detailed knowledge is particularly important when collaborating with teachers working with any child whose communication disability is impacting on their access and participation in schooling. It is also important for children from culturally and linguistically diverse backgrounds (CALD) including Aboriginal and Torres Strait Islander children who may need specific, explicit instruction if the sound-symbol relationship of their home language differs markedly from English. In addition to working at

a whole class level, speech pathology intervention within the school setting can include small group work and intensive individualised supports.

For students who are at risk of choking or aspiration due to swallowing difficulties specific support through clearly documented mealtime plans written and regularly reviewed by a speech pathologist is required.

Communication problems in Aboriginal and Torres Strait Islander children

While there is limited accurate data on the prevalence of communication disorders amongst Aboriginal and Torres Strait Islander children, it has been noted that, '*Indigenous children are particularly vulnerable to language and learning difficulties and that rural and remote Australian children are more likely to be identified as experiencing developmental vulnerabilities that impact on education and health attainment, on entry to primary school than their metropolitan counterparts*.'[iv] As reported by the Department for Education and Training '*in 2018, 41.3 per cent of all Indigenous Australian children in their first year of school were categorised as developmentally vulnerable on one or more of five key domains, compared to 20.4 per cent of their non-Indigenous counterparts*.' [v]

Otitis Media

Another significant issue is the impact of hearing loss, a child's hearing is extremely important to their development as it affects their ability to learn, socialise and communicate. Hearing loss affects a child's development in vocabulary, sentence structure, speaking, academic achievement, social functioning.[vi] A major cause of hearing loss is **o**titis media (middle ear infections) which are highly prevalent among Aboriginal and Torres Strait Islander children, indeed '*Aboriginal and Torres Strait Islander children experience the world's highest rates of middle ear disease and conductive hearing loss, and can substantially impact cognitive development and speech and language development which in turn affects educational outcomes. These impacts alter a child's trajectory into adolescence and adulthood and contribute to long-term disadvantage*.'[vii] Children with hearing losses often report feeling isolated, and do not catch up with their peers without intervention.[viii]

As a result of ear diseases, including recurrent acute otitis media, a cascade of follow-on effects occurs including '*detrimental effects on social and emotional wellbeing, behaviour, educational outcomes, and employment*'[ix]

It is important to note that hearing health services for children with hearing loss extend beyond device interventions and include follow up services, supports and therapies to maximise functional hearing and functional communication development (including spoken communication if that is preferred). As such, early intervention services for children with hearing loss need to include speech pathologists as part of the multi-disciplinary hearing health team.

While significantly better communication outcomes are associated with early enrolment in intervention,[x] outcomes are even better when early identification is paired with early interventions that actively involve families.

Remote and complex environments

As the Committee has not provided a definition of remote and complex environments, for the purpose of this submission we define it as those areas that are geographically isolated, include lower socio-economic status of populations and experience workforce shortages.[xi] Children in remote and complex environments are at greater risk of experiencing unidentified and untreated communication delays that impact their capacity for educational engagement, further limiting their opportunities to break cycles of poverty and disadvantage.[xii]

Other inequities and social disadvantages contribute further to the definition of complex environments, including working with young people who have experienced maltreatment and trauma and/or are in out-of-home care. Lack of access to support services is particularly problematic when children have experienced maltreatment and trauma, as maltreated children experience difficulties recognising, expressing and understanding their own emotions. These children exhibit more aggressive and reactive behaviours and are more predisposed to display angry emotional expression.

Disruption to the primary caregiver-child attachment in childhood, such as that associated with placement in out-of-home care, also has implications for the development of prosocial skills, empathy, emotion regulation[xiii] and for the development of oral language skills and overall communicative competence.[xiv] Understanding the complexity of children's experiences, the ways in which maltreatment may have disrupted the development of their emotional attunement, social skills and communication, and their education engagement and achievement, along with its contribution to the development of problem behaviour, is paramount to best practice and therapeutic provisions.

Speech Pathology Australia's feedback regarding relevant terms of reference:

The following highlights the key barriers to a child's educational journey in the context of speech pathology service provision.

Acknowledgement of the importance of speech pathology within the educational context

As stated previously, all children and young people need to have acquired well developed speech, language and communication skills to reach their full potential academically, socially, vocationally and economically. Speech, language and communication underpin literacy and numeracy – skills which are necessary for students to understand and achieve in all key learning areas. As well as being vital for learning, speech, language and communication skills are essential for social participation throughout the school day.

Speech pathologists have a role in identifying and addressing the barriers to participation that students may experience as a result of communication difficulties. Speech pathologists should therefore be considered an essential part of the educational team, working alongside teachers to implement effective teaching practices to support language and literacy development (for whole classes) or to develop adjustments to teaching and assessment for individual students with identified needs.

The Australian Curriculum Assessment and Reporting Authority (ACARA 2014) explain that the '*Australian Curriculum sets the same high standards for all students and that it is the role of the teacher to differentiate instructions to account for individual students needs and the different rate at which learning occurs*.'[xv] Speech pathologists can provide additional support and professional development to teachers to assist in this area, specifically when differentiating the instruction for children with communication difficulties. This detailed knowledge is particularly important when collaborating with teachers working with any child whose communication disability is impacting on their access and participation in schooling. It is also important for children from culturally and linguistically diverse backgrounds (CALD) including Aboriginal and Torres Strait Islander children who may need specific, explicit instruction if the sound-symbol relationship of their home language differs markedly from English.

In addition to working at a whole class level, speech pathology intervention within the school setting can include small group work and intensive individualised supports.

The following need to be addressed in order to facilitate appropriate support to educators and students as these are consistent barriers that impact on educational outcomes for students with communication disorders:

- lack of awareness and understanding of the links between speech, language and communication skills and access to literacy and learning.
- policy, practice, knowledge, skill and attitudinal barriers to providing the appropriate and necessary evidence-based supports for children with communication disabilities.

Access to Speech Pathology Services and funding constraints

Children raised in rural and remote communities can experience limited, to no, speech pathology service access. When services are available significant challenges or barriers are evident for the speech pathologist providing the services and for students and families accessing services.

Funding and resourcing constraints affect the ability of service providers, including speech pathologists, to work effectively within remote and complex environments. Service provision in remote environments are often of a fly-in, fly-out nature, irregular and consist of short, time limited periods. This impacts significantly on the service delivery model implemented and outcomes for families and students.

When working within these complex environments service providers require adequate training and supports in place to ensure culturally acceptable ways of working, and time and resources to allow the development of relationships with families of children with disabilities including communication disorders.

This is evidenced in the 'Looking After Children with Disabilities from the NPY Lands' report published by the Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council Aboriginal Corporation in 2019 which outlines '*if visiting the Lands, rather than being lands-based, services need to plan sufficient time in each community to locate people and spend quality time with them, as opposed to visiting, consulting briefly and then leaving*.'[xvi] The report also discusses the need for '*people working closely with affected families must be culturally aware and have cultural orientation and ongoing mentoring led by Anangu*.'

In this context, current NDIS funding guidelines do not allow for this model of service delivery and does not allow for flexibility in the use of individual funding. The NDIS system provides funding for an individual child to receive face-to-face therapeutic services, despite the evidence and recommendation of working and developing relationships with the wider community. In Aboriginal and Torres Strait Islander communities there is a strong recognition and emphasis of working with and spending time with the community. Additional funding or adjustments to the NDIS pricing system should reflect both individual needs and cultural values. This includes providing adequate funding to enable service providers to work proactively with clients and their extended family and community. As stated by Jones et al 2017 '*there is an increasing recognition that health is socially determined and that health issues are best addressed through the engagement of community partners, partners that bring their own perspective, experiences and understanding of community life and health issues to healthcare strategies*.'[xi]

Staff recruitment and retention

There are several distinct personal and professional challenges faced by rural/remote based speech pathologists. These include feelings of professional isolation, fatigue, stress and heavy workloads, all of which have a negative impact on the ability to recruit and retain health professionals to these areas.

Research outlines additional negative influences reported by those working remotely including insufficient supervision, poor access to professional development, lack of financial reward, large professional load and a lack of work resources.[xvii]

Indeed, one Speech Pathology Australia member describes the experience as follows:

'When working and living remotely it's clear that most other non-remote work sites do not always realise the personal and professional challenges that come with the role. Losing anonymity and social isolation from friends/family as well as professional isolation was difficult at times. A true understanding of the clinical challenges of remote work was also hard to explain to some metro sites, particularly when working with Indigenous clients who were accessible by flight every few months. I found considerable support from colleagues near and far and had enormous benefit from professional visits to neighbouring towns (about 4 hours away) which coincided with mandatory government trainings. I would recommend that anyone working remote have multiple opportunities to go off site to give the speech pathologist a chance to network with others who can relate and troubleshoot some of the unique challenges of working in remote areas. I would encourage others to try remote work, I learned so many invaluable skills.' (Member feedback - February 2020).

Telehealth

There is an increasing body of evidence to support the use of telehealth, for example:

- research investigating the efficacy of telehealth-delivered speech and language intervention for primary school-aged children found that 'telehealth is a promising service delivery method for delivering speech and language intervention to this population. This alternative service delivery model has the potential to improve access to speech pathology services for children living in geographically remote areas, reducing travel time and alleviating the detrimental effects of communication difficulties on the education, social participation and employment.'[xviii]
- there may be '*benefits in using interventions using telehealth to individuals with autism spectrum disorder, their families and teachers*,'[xix] in addition to promising outcomes for the Rapid Syllable Transitions Treatment program being delivered via telehealth for children diagnosed with childhood apraxia of speech.[xx]

However, despite such evidence promoting the application of telehealth, policy and funding constraints limit their implementation in Australia.[xxi] Indeed, speech pathologists actively seek to achieve workforce optimisation and efficiency by using alternative methods of service delivery such as telepractice, however, current funding arrangements, such as no Medicare rebate for speech pathology delivered by telepractice, does not facilitate this.

We have long advocated for changes to MBS items to allow speech pathology services to be delivered via telehealth. Most recently in our feedback to the current MBS Review Allied Health Reference Group report in which we supported the recommendation for the creation of a new item for patients to consult with an allied health professional via telehealth but felt the associated requirement for the allied health professional to be a primary health care provider for the patient, defined as having had at least two face-to-face consultations with the patient was particularly problematic in that it is likely that many patients and providers already using telepractice or wanting to use telepractice have not or are unable to meet face-to-face initially and will therefore exclude the very people for whom telepractice is likely to help. Indeed, we argued that it seems counterintuitive to insist on such requirements to a service designed to provide access to individuals who are geographically so remote that they are unable to physically visit their nearest provider or, where the market is so thin (or has already failed) there are no service providers near enough to travel to provide a face-to-face consultation.

Recommendations

Speech Pathology Australia requests that the Committee consider the following recommendations:

- Ensure all early childhood services, primary schools and high schools include speech pathologists as core staff in multidisciplinary education teams.
- Provide consistent access to speech pathology services in remote and complex environments.
- Promote the funding of a national project to develop guidelines for speech pathology supports to be provided within the education sector, including whole school, group and individual supports, teacher focused information, training and coaching.
- Ensure all undergraduate teacher training includes raising awareness of the relationship between speech, language and communication and participation in education, communication as a human right, development of literacy, mental health and wellbeing.
- Recognise the importance of communication development for children with complex communication needs and include it as a component in continuing professional development for educators and support staff working with children with disabilities.
- Develop resources and provide education and training to assist educators in the provision of reasonable adjustments and implementation of appropriate curriculum modifications to assist students with communication disorders to participate in education on the same basis as other students.
- Ensure adequate and appropriate professional and personal supports for services providers, including speech pathologists, working with remote and complex environments, to help address recruitment and retention issues.
- Provide additional funding or adjustments to the NDIS funding system to support more efficient and culturally appropriate service delivery models. This approach would provide more opportunity for the community members to develop trusting relationships with health professionals, leading to more effective outcomes for all.
- Engage local communities within remote and complex environments in the design and implementation of their healthcare and education strategies.
- Recognise the benefits of telehealth as a service delivery model and make the necessary system changes to the MBS items to support telehealth models of care in allied health.

If Speech Pathology Australia can assist the Committee in any other way or provide additional information please contact Ms Jane Delaney, Senior Advisor Early Childhood and Education on 03 9642 4899, or by email jdelaney@speechpathologyaustralia.org.au.

References cited in this submission

[i] Knox, E., & Conti-Ramsden, G. (2007). Bullying in young people with a history of specific language impairment (SLI). Educational and Child Psychology, 24(4), 130. And Hugh-Jones S. and Smith P. (1999). Self-reports of short- and long-term effects of bullying on children who stammer. British Journal of Educational Psychology, 69,141–58.

[ii] See for example, research by:

- Conti-Ramsden, G., Durkin, K., Simkin, Z and Knoz, E., (2009) 'Specific language impairment and school outcomes. 1. Identifying and explaining variability at the end of compulsory education.' International Journal of Language and Communication Disorders, 44: 15-35.
- Law, J., Rush, R., Schoon, I. and Parsons, S (2009) Modeling developmental language difficulties from school entry into adulthood: literacy, mental health and employment outcomes.' Journal of Speech, Language and Hearing Research, 52: 1401-1416.
- Snowling, M., Adams, J., Bishop, D., and Stothard, S., (2001) 'Educational attainments of school leavers with a preschool history of speech-language impairments'. International Journal of Language and Communication Disorders, 36: 173-183.
- Johnson, C., Beitchman, J., Brownlie, E., (2010) 'Twenty-year follow-up of children with and without speech-language impairments: family, educational, occupational, and quality of life outcomes', American Journal of Speech Language Pathology, 19(1): 51-65.

[iii] Clegg, J., Hollis, C., Mawhood, L., & Rutter, M. (2005). Developmental Language Disorders: A follow-up in later life. Journal of Child Psychology and Psychiatry, 46, 128-149.

[iv] The University of Sydney (2014). Senate Inquiry into the prevalence of different types of speech, language and communication disorders and speech pathology services in Australia, Submission by Broken Hill University Department of Rural Health.

[v] The Queensland Productivity Commission's Inquiry into imprisonment and recidivism. Final Report 2020. https://qpc.blob.core.windows.net/wordpress/2020/01/FINAL-REPORT-Imprisonment-Volume-I-.pdf

[vi] American Speech-Language-Hearing Association: http://www.asha.org/public/hearing/Effects-of-Hearing-Loss-on-Development/

[vii] Queensland Government – Deadly Ears Program. https://clinicalexcellence.qld.gov.au/improvement-exchange/deadly-ears-program

[viii] Blamey, P. J., Sarant, J. Z., Paatsch, L. E., Barry, J. G., Bow, C. P., Wales, R. J., et al. (2001). Relationships among speech perception, production, language, hearing loss, and age in children with impaired hearing. Journal of Speech, Language, and Hearing Research, 44, 264–285.

[ix] Nguyen, K.H., Smith, A.C, Armfield, N.R, Bensink, M. & Scruffham, P.A. (2015). Cost effectiveness Analysis of a Mobile Ear Screening and Surveillance Service versus an Outreach Screening, Surveillance and Surgical Service for Indigenous Children in Australia.

[x] See: Yoshinaga-Itano, C. (2003.) From Screening to Early Identification and Intervention: Discovering Predictors to Successful Outcomes for Children with Significant Hearing Loss, J. Deaf Stud. Deaf Educ. 8 (1): 11-30.

Nicholas, J.G., & Geers, A.E. (2008). Expected Test Scores for Preschoolers with a Cochlear Implant Who Use Spoken Language Am J Speech Lang Pathology. May; 17(2): 121–138.

[xi] Jones, D.M, MCallister. L. & Lyle, D.M. (2018). Rural and Remote speech-language pathology service inequities: an Australian human rights dilemma.

[xii] McLachlan, R., Gilfillan, G., & Gordon,J. (2013). Deep and persistent disadvantage in Australia. Retrieved from https://www.pc.gov.au/research/supporting/deep-persistent-disadvantage/deep-persistent-disadvantage.pdf

[xiii] Schuengel, C., Oosterman, M., & Sterkenburg, P. S. (2009). Children with disrupted attachment histories: Interventions and psychophysiological indices of effects. Child and Adolescent Psychiatry and Mental Health, 3:26. doi:10.1186/1753-2000-3-26

[xiv] Snow, P. C. (2009a). Child maltreatment, mental health and oral language competence: Inviting speech-language pathology to the prevention table. International Journal of Speech-Language Pathology, 11(2), 95-103. doi: 10.1080/17549500802415712

[xv] Freeman, L. A., & Staley, B (2018) The positioning of Aboriginal students and their languages within Australia's education system: A human rights perspective.

[xvi] Ngaayatjarra Pitjantjatjar Yankunytjatjara Women's Council Aboriginal Corportaion (2019). Tjitji Atunymankupai Walytja Tjutangku Looking after children with Disabilities form the NPY Lands.

[xvii] Campbell, N., Mcallister, L., & Eley, D. (2012). Review Article: The influence of motivation in recruitment and retentiona of rural and remote allied health professionals: a literature review. Retrieved from http://www.rrh.org.au

[xviii] Wales, D., Skinner, L., & Hayman, M. (2017) The efficacy of telehealth-delivered speech and language intervention for primary school-aged children: A systematic review. International Journal of Telerehabilitation. Vol. 9 No. 1 Spring.

[xix] Sutherland, R., Trembath, D., & Roberts., J. (2018). Telehealth and autism: A systematic search and review of the literature. International Journal of Speech- Language Pathology. Vol 20, 2018 Issue 3 p 324-336

[xx] Thomas, D. C., McCabe, P., Ballard, K.J., & Loncoln, M. (2016). Telehealth delivery of Rapid Syllable Transitions (ReST) treatment for childhood apraxia of speech. International Journal of Language and Communication Disorders. Vol 51 (6): pp 654-671.

[xxi] The University of Queensland Australia (2019). Developing a policy strategy for telehealth in Australia. A summary of the telehealth FUTURES forum. https://espace.library.uq.edu.au/view/UQ:e39e00e