1. Context

1.1 CHI.L.D Association is a not-for-profit charity organisation whose mission is to provide services for the development, support and education of children and youth with primary language disorder.

1.2 Since 1979, CHI.L.D. Association through The Glenleighden School, and more recently through the LET'S TALK Developmental Hub outreach and clinical programs, has catered for children and adolescents with severe speech and language impairments, which are primary in the sense of being the most significant impairment contributing to activity limitations and participation restrictions on the individual’s current life and well-being, as defined in the World Health Organisation’s Classification of Functioning, Disability and Health\(^1\).

1.3 CHI.L.D. Association has defined its target group as children and young people with primary language and related disorders. These speech and language disabilities are different from those disabilities directly attributable to physical impairments, sensory impairments, general intellectual impairments, emotional or behavioural disturbances, social disadvantage, or second language learning, such that the speech and/or language difficulties are considered to be the child’s primary impairment, even if other disabilities exist.

1.4 Speech and language skills are disordered, not merely delayed, in linguistic knowledge and performance and can therefore exhibit differing patterns of linguistic presentation.

1.5 Severe impairments of language are pervasive, affecting more than one level of linguistic organisation, and associated with selectively and potentially permanently compromised development of many areas of functioning beyond oral communication, including academic learning, cognitive and movement skills and social development\(^{ii}^{\text{iii}}^{\text{iv}}^{\text{v}}^{\text{vi}}^{\text{vii}}^{\text{viii}}^{\text{ix}}\).

2. Terms of Reference

2.1 Definition and prevalence of primary language disorder in Australia

2.1.1 Definition of Primary Language Disorder

*Primary language disorder* is an oral (or spoken) communication (language and/or speech) disability which meets all of the following criteria:

i. Persistent difficulties in the acquisition and use of language, speech sound production, or the social use of verbal and nonverbal communication or any combination.

ii. Language, speech and/or social use of language are substantially and quantifiably below those expected for age.

iii. Language, speech and/or social use of language result in functional limitations in effective communication, social participation, social relationships, academic achievement, or occupational performance, individually or in combination.

iv. Onset of symptoms occur in the early developmental period.

v. Language, speech and/or social use of language are not attributable to hearing or other sensory impairment, motor dysfunction, congenital or acquired conditions, or another medical or neurological condition, and are not better explained by autism spectrum disorder, intellectual disability or global developmental delay.
2.1.2 Primary language disorder, or language impairment, "includes a range of related and often over-lapping difficulties with language expression and/or comprehension, however the terminology used is not straight forward. Not only are different terms and definitions used in different countries, disciplines, and for clinical versus research applications, terminology is often inconsistent even within these contexts" x. The issue with terminology is no less so in Australia, with different terms being used depending on the state, the purpose for the terminology (eg funding), the system (e.g. health versus education), the age of the person affected (e.g. pre-school age versus school aged) and the discipline or professional involved.

2.1.3 Historically, children with primary language disorder were referred to as having developmental dysphasia. However, specific language impairment became a more popular term in some circles and, in more recent literature, while debate continues about the most appropriate terminology to use in this specialist field, labels such as primary language impairment, developmental language disorders and child language disorders have also emerged or re-emerged xi. There has been a change in terminology over many years due to lack of clear evidence of specific neurological structural or functional differences to define the disorder xii xiii, as well as difficulty in communicating the specialized meaning of language, in this context, to the broader community and the fact that there are no obvious causal factors xiv.

2.1.4 Individuals with primary language disorder are heterogeneous. This means that children and youth labelled with primary language disorder (PLD) or a similar term will demonstrate significant variations in their developmental profile while continuing to show general difficulties in the communication domain xv.

2.1.5 Reported sex ratios for language disorders are between 1.3:1 and 3:1, boys to girls, however vary considerably. Significantly fewer girls than boys are referred for remediation for speech/language impairment which may be partly due to the higher incidence of behaviour difficulties which make boys more visible xvi.

2.1.6 Language disorders are often unrecognised. "A number of studies have shown that in clinical settings, one third to one half of children may meet criteria for a language disorder, and of these, as many as half may not have been previously diagnosed xvii.

2.1.7 Epidemiological research indicates that 73% of children identified with language impairment at age 5 continue to meet the criteria at age 19 xviii.

2.1.8 Although the profiles of children’s language strength and weaknesses are consistent enough to classify primary language disorder into distinct subgroups, individual children’s language strengths and weaknesses change with time, resulting in children moving between subgroups. Primary language disorder is therefore a dynamic condition that changes with time and maturity and likely with the influence of other factors such as intervention xix.

2.1.9 Primary language disorder is one of the most common developmental disabilities of childhood, with an estimate of 7% of children at 5 years of age affected by the disorder xx, although estimates vary considerably depending on instruments used to measure, diagnostic thresholds and the use of exclusionary criteria xxi.
2.1.10 There is no reason to suggest that the incidence of primary language disorder is any different in populations from culturally or linguistically diverse communities. However, language difficulties may be affected differently dependent on the type of language spoken\textsuperscript{xxi}. Additionally, children may have both a primary language disorder as well as experiencing language differences experienced when immersed in culture which speaks a different language to that used at home.

2.1.11 While evidence suggests that the incidence of primary language disorder has not increased over time\textsuperscript{xxii}, it is possible that increasing awareness of the condition at earlier developmental stages in conjunction with increasing awareness of other developmental disabilities (such as autism spectrum disorder)\textsuperscript{xxiv} has increased the demand for services and specific intervention before and during school.

2.2 Association and implications of primary language disorder and mental health

2.2.1 Learning difficulties

2.2.1.1 There is extensive research demonstrating a strong relationship between learning disabilities and language impairments\textsuperscript{xxv, xxvi, xxvii}. This includes research showing that students with serious specific reading disabilities have a range of language problems and studies showing that speech and language impairments are predictors of later reading disabilities\textsuperscript{xxviii, xxix, xxx, xxxx}. Severity of language impairment also predicts degree of reading immaturity\textsuperscript{xxxi}. 

2.2.1.2 The learning disabilities of students with PLD are not restricted to literacy acquisition in reading, spelling and written language or handwriting\textsuperscript{xxxiv}, however. They also include difficulties in acquiring basic numeracy skills\textsuperscript{xxxv, xxxvi, xxxvii}, critical and creative thinking, personal and social behaviour and ethical behaviour. These basic literacy, numeracy and social difficulties impose obvious constraints on academic attainment and, in consequence, occupational and social access opportunities.

2.2.2 Social-emotional and behavioural functioning

2.2.2.1 Investigations have also indicated that students with specific language impairment or primary language disorder present with impaired social skills\textsuperscript{xxviii} and are at risk of significant social difficulties in adulthood\textsuperscript{xxxix, xlix}. These appear to be related to both problems with social-emotional development inherent in the impairment and social interaction as well as other social coping problems which derive from the impaired communication abilities. Indeed, there is growing evidence that not only are language disordered children at increased risk for emotional/behavioural problems, but that children with emotional/behavioural problems are at greater risk for language problems\textsuperscript{xli}. Social-emotional factors, in particular, appear to be important predictors of personal-social adjustment and achievement in adulthood.

2.2.2.2 The extent of intensive, specialised education and therapy during the preschool and school years is considered an important factor in determining the level of educational and social outcomes in adulthood\textsuperscript{37}. Educational context as a social-therapeutic milieu as well as a learning environment is also significant in relation to social-emotional development and, ultimately, self-esteem. Evidence suggests that older children or adolescents with
primary language disorder demonstrate a more negative self-perception than their language competent peers\textsuperscript{\textit{xliii} xlv}.

2.2.3 It has been found that young people with primary language disorders, or specific language impairment, are more likely to pursue vocational training and work in jobs not requiring a high level of language or literacy ability\textsuperscript{xlvi}.

2.1.3 \textit{Mental health and psychopathology}

2.1.3.1 Prevalence of language impairment is as high as 50% in mental health clinics for children and adolescents in the United States\textsuperscript{xlv}, with one longitudinal study indicating that 42% of children identified with language impairment at age 5 met the criteria for psychiatric disorder at age 12. In contrast, children who are “late talkers” and who go on to develop language within the normal range, even at the lower normal range, do not appear to have an increased risk of long term emotional or behavioural difficulties.

2.1.3.2 The most salient behavioural correlates of language impairments for children in the preschool years are over-activity, attention difficulties, wetting and soiling\textsuperscript{xlvii}.

2.1.3.3 In the early school years, emotional and behavioural symptoms and syndromes increase in prevalence as well as a group of children who continue to demonstrate characteristics of attention deficit hyperactivity disorder (ADHD)\textsuperscript{xlviii}.

2.1.3.4 In adolescence, there is an important association between language disorder and antisocial behaviour\textsuperscript{xlix}, particularly for those who develop reading disability in middle childhood\textsuperscript{l}.

2.1.3.5 Executive dysfunction may be a shared risk factor for comorbid language disorder and ADHD, leading to further psychopathology in later years\textsuperscript{li}.

2.1.3.6 Girls with residual elements of language disorder may be more likely to experience emotional disorders and are more vulnerable to anxiety and depression in late adolescence specifically\textsuperscript{lii}, and boys more likely to experience conduct disorder and ADHD\textsuperscript{liii}.

2.1.3.7 Children and youth with language disorders tend to be viewed more negatively by peers and are more likely to experience peer victimization\textsuperscript{liv}.

2.1.3.8 While symptoms of depression have been found to improve over time (particularly as young people transition from compulsory education), feelings of anxiety are likely to persist in young people with specific language impairment\textsuperscript{lvi}.

2.1.4 \textit{Youth detention}

2.1.4.1 In 2012, a report released from the Australian Bureau of Criminology indicated that 50% of youth offenders in Australia demonstrated clinically significant and undiagnosed oral language difficulties\textsuperscript{lvii}.

2.1.4.2 In 2007, a UK study showed that 66-90% of juvenile offenders had below average language skills, with 46-67% of these being in the poor or very poor group. A total of 62% did not achieve Level 1 in literacy\textsuperscript{lviii}. In 2000, a study from Texas indicated that 80% of prison inmates were functionally illiterate\textsuperscript{lix}.

2.1.4.3 Although research dating back to the 1920s shows the relationship between communication disorders and delinquency, violence and incarceration\textsuperscript{lx}, the
lack of attention to the topic may be a result of lack of awareness of the importance of adequate communication skills, general disinterest in the welfare of the incarcerated, and lack of research funding.

2.1.4.4 A newspaper report in 2010\textsuperscript{i} indicated that the cost of keeping offenders in custody was $112,000 in Tasmania, and approximately $77,000 in other states, and it was reported in 1989 that the cost to the community was in excess of $45,000 per year per prisoner\textsuperscript{ii}.

3 Implications for mental health services and support

3.1 Young people who have been identified with a primary language disorder (for example who have been identified for funding support as Speech Language Impairment under the Department of Education disability funding categories) need to be considered at higher risk than the general population for mental health issues, particularly anxiety and potential victims of bullying, and be supported appropriately.

3.2 The cost to governments and the community of youth detention and incarceration be considered when evaluating the return on investment (ROI) of financial and other resources required for supporting young people with primary language disorders post-school.

3.3 The specific challenges faced by young people with primary language disorders living in rural and remote communities be specifically acknowledged and addressed, for example through the adequate provision of speech pathology and counselling services post-school.

3.4 The impact of primary language disorder and mental health on incidence of detention and incarceration be acknowledged and supported through adequate and appropriate speech pathology and counselling screening and support for young people entering the justice system, including assessment of language comprehension and adjustments to communication to ensure equitable and non-discriminatory access to legal counsel and ensure understanding of ramifications of provision of ‘evidence’ (eg responses to questions).

4 References


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