

## **Productivity Issues Paper on Childcare and Early Childhood Learning**

### **Productivity Commissions Paper:**

#### ***Response on behalf of the Australian Advisory Board on Autism Spectrum Disorders***

Responses are provided to the following questions on which the Commission is seeking information in relation to “services for additional needs and regional and remote areas”.

- *How well the needs of disadvantaged, vulnerable or other additional needs children are being met by the ECEC sector as a whole, by individual types of care, and in particular regions*
- *The extent to which additional needs are being met by mainstream ECEC services or specialised services*

Autism Spectrum Disorder (ASD) is a lifelong condition affecting at least 1 in 100 children (Baron-Cohen et al., 2009; Centers for Disease Control and Prevention (2012). It is a lifelong condition with estimated annual support costs to Australia potentially exceeding \$7 billion (Synergies Economic consulting, 2007). With an unexplained 25-fold increase in diagnosis in the past 30 years, there are now more children with ASD than the combined number of children with cerebral palsy, diabetes, deafness, blindness and leukemia. Social and communication deficits and rigid and repetitive behaviours are core diagnostic features of ASD (American Psychiatric Association, 2013). Evidence has demonstrated that early intervention is essential to generate optimum outcomes for these children (Rodgers & Vismara, 2008).

Children with ASD who are placed in Australian inclusive child care centres have been found to interact with other children less frequently and to be less engaged in play than other children, including children with other disabilities (Kemp, Kishida, Carter, & Sweller, 2013). The social difficulties of children with ASD often lead to impoverished play opportunities, which ultimately leads to reduced learning opportunities. Research suggests, however, that this cycle of reduced engagement in play can be broken through direct teaching and the facilitation of social play by appropriately skilled staff (Jordan, 2003, Kemp et al., 2013). In a recent review of

early intervention for children with ASD commissioned by the Australian Government, inclusion of children with ASD in programs with typically developing children was identified as a key element of effective intervention (Prior, Roberts, Rodger & Williams, 2011). In order to capitalise on these critical early childhood opportunities for children with ASD to interact with and learn from other children, there is an urgent need for staff to be trained in ways to facilitate peer interaction of children with ASD (Jordan, 2003, Kemp et al., 2013). Although all eight childcare centres involved in the study by Kemp et al. (2013) participated in the Australian Government childcare support program for children with disabilities, this funding was reported to provide only 2 to 3 hours of release time and some untrained social aide support. Approximately a third of the centre staff were untrained, with the reminder having minimal training. This suggests that current government funding is insufficient to enable children with ASD to be successfully included in Australian child care centres.

Several studies suggest that mothers of children with ASD are much more likely to reduce or stop work to care for their child, and as a result on average earn much less than other mothers (Cidav, Marcus & Mandell, 2012; Kogan et al. 2008; Montes & Halterman, 2008). Cidav et al. (2012) found that mothers of children with ASD earn 35% less than the mothers of children with other health limitations and 56% less than the mothers of children with no health limitations. Similarly Bourke-Taylor, Howie and Law (2011) found that Australian mothers of 152 children with disabilities (94 of whom had ASD) reported lower workforce participation, and lower family income than mothers of typically developing children. Bourke-Taylor et al. (2011) also found that mothers of children with disabilities who were not in the paid workforce reported poorer health-related quality of life and mental health than those who were employed. Paid employment may therefore have important health benefits for mothers of children with disabilities. The capacity of parents to participate in the paid workforce is also likely to protect the family from further disadvantage that stems from ongoing financial hardship (Bourke-Taylor et al., 2011).

- *Key factors that explain any failure to meet these needs*

The service limitation that was most commonly reported in the study by Bourke-Taylor et al (2011) was that appropriately skilled carers were not available for their children.

- *What can childcare operators and governments do to improve the delivery of childcare services to children with additional needs?*

A key recommendation of the best practice guidelines for early intervention for children with ASD commissioned by the Australian government was that teachers and child-care personnel should be specifically trained in working with children with ASD in order to ensure that they have the knowledge and skills necessary to work with these children (Prior & Roberts, 2006). ASD-specific staff training of teachers (Hinton, Sofronoff & Sheffield, 2008; Hsien, Brown & Bortoli, 2009; LeBlanc, Richardson & Burns, 2009; Syriopoulou-Delli, Cassimos, Tripsianis & Polychronopoulou, 2012) and teacher aides (Rispoli, Neely, Lang & Ganz, 2011) has consistently been found to lead to improvements in service provision for children with ASD, and is therefore considered an essential component of effective programs for these children. Autism-specific coaching has been found to be especially beneficial for education teams working in early childhood settings (Wilson, Dykstra, Watson Boyd & Crais, 2012). The Australian Advisory Board on Autism Spectrum Disorders therefore recommends that:

- Increased funding should be provided for multi-disciplinary teams (e.g., speech language pathologists, occupational therapists and special education teachers) from autism-specific organisations to provide consultation in regard to the programs for individual children with ASD in inclusive early childhood settings such as child care centre.
- Autism-specific organisations should also be funded to build the capacity of staff in childcare and other early childhood learning centres to include children with ASD in their programs (e.g., coaching, co-teaching, and reframing the understanding of children with ASD).

- Inclusive childcare and other early childhood learning centres should have at least one key staff member who has received some training in understanding and working with children with ASD.
- *The types of ECEC services which work particularly well and would be viable in regional and remote locations.*

In early 2013, the National Disability Insurance Agency commissioned Autism Queensland to conduct a study investigating the advantages and disadvantages of using remote technologies to extend early intervention services for children who live in rural and remote locations (report available on request from Autism Queensland or the National Disability Insurance Agency). The local teachers in rural mainstream early childhood services involved in this study reported on the substantial benefits of receiving on-going professional support and guidance from ASD specialists via remote technology. Remote technologies therefore proved to be an effective means of building the capacity of local services in rural areas to accommodate the needs of young children with ASD and their families. All participants were of the view however, that remote technology could not completely replace face-to-face contact with clinicians. Initial face-to-face contact was seen by local service providers as essential for building trust and rapport. They also considered it important for the ASD-specialist to visit and observe the child in his or her local environment.

These findings are consistent with research on the use of telemedicine for children with ASD and their families conducted overseas. A systematic review by Boisvert, Lang, Andrianopoulos and Boscardin (2010) and a number of recent studies (Baharav & Reiser, 2010; Gibbs & Toth-Cohen, 2011; Vismara, Young & Rogers, 2012) found telemedicine to be a promising approach for this population.

The Australian Advisory Board on Autism Spectrum Disorders therefore recommends that remote technologies be used to extend face-to-face specialist support to children with ASD in rural and remote early childhood settings.

Penny Beeston

Chair

**Australian Advisory Board on Autism Spectrum Disorders**

## References

- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders: 5<sup>th</sup> Edition (DSM-5)*. Washington DC: American Psychiatric Association.
- Baharav, E. & Reiser, C. (2010). Using telepractice in parent training in early autism. *Telemedicine and e-Health*, 16, 1-5.
- Baron-Cohen, S. , Scott, F. J., Allison, C. Williams, J., Bolton, P, & Matthews, F. (2009) Prevalence of autism-spectrum conditions: UK school-based population study. *The British Journal of Psychiatry*, 194, 500–509. doi: 10.1192/bjp.bp.108.059345)
- Boisvert, M., Lang, R., Andrianopoulos, M., & Boscardin, M.L. (2010). Telepractice in the assessment and treatment of individuals with autism spectrum disorders: A systematic review. *Developmental Rehabilitation*, 13, 423-32.
- Bourke-Taylor. H., Howie, L. & Law, M. (2011). Barriers to maternal workforce participation and relationship between paid work and health. *Journal of Intellectual Disability Research*, 55, 511-520.
- Centers for Disease Control and Prevention (2012). Prevalence of Autism Spectrum Disorders — Autism and Developmental Disabilities Monitoring Network, 14 Sites, United States, 2008. Surveillance Summaries, 61 (3), 1-18.
- Cidav, Z., Marcus, S. C. & Mandell, D. M. (2012). Implications of Childhood Autism for Parental Employment and Earnings. *Pediatrics* , 129, 617–623
- Gibbs, V., & Toth-Cohen, S. (2011). Family-centered occupational therapy and telerehabilitation for children with autism spectrum disorders. *Occupational Therapy in Health Care*, 25, 298-314.
- Hinton, Sofronoff & Sheffield (2008). Training Teachers to Manage Students with Asperger’s Syndrome in an Inclusive Classroom Setting. *The Australian Educational and Developmental Psychologist*, 25, 34-46.
- Hsien, M., Brown, M. & Bortoli, A. (2009). Teacher qualifications and attitudes toward inclusion. *Australasian Journal of Special Education*, 33, 26–41.
- Jordan, R. (2003). Social play and autistic spectrum disorders: A perspective on theory, implications and educational approaches. *Autism*, 7, 347–360.
- Kemp, C. Kishida, Y., Carter, M., & Sweller, N. (2013). The effect of activity type on the engagement and interaction of young children with disabilities in inclusive childcare settings. *Early Childhood Research Quarterly*, 28, 134– 143.
- Kogan, M. D., Strickland, B. B., Blumberg, S. J, Singh, G., Perrin, J., & van Dyck, P. C. (2008). A national profile of the health care experiences and family impact of autism spectrum disorder among children in the United States, 2005–2006. *Pediatrics*, 122, e1149-e1158.
- LeBlanc, L., Richardson, W. & Burns, K. A. (2009). Autism Spectrum Disorder and the Inclusive Classroom: Effective Training to Enhance Knowledge of ASD and Evidence- Based Practices. *Teacher Education and Special Education*, 32, 166-179.
- Montes. G. & Halterman, J. S. (2008). Association of childhood autism spectrum disorders and loss of family income. *Pediatrics*, 121, e821-826.
- Prior, M. & Roberts, J. (2006). *Early Intervention for Children with Autism Spectrum Disorders: Guidelines for Best Practice*. Australian Government.
- <http://www.health.gov.au/internet/publications/publishing.nsf/Content/mental-child-autbro-toc>

- Prior, M., Roberts, J. M. A., Rodger, S., Williams, K., & Sutherland, R. (2011). *A review of the research to identify the most effective models of practice in early intervention of children with Autism Spectrum Disorders*. Australian Government Department of Families, Housing, Community Services and Indigenous Affairs, Australia.
- Rispoli, M., Neely, L., Lang, R., & Ganz, J. (2011). Training paraprofessionals to implement interventions for people autism spectrum disorders: A systematic review. *Developmental Neurorehabilitation*, 14, 378–388.
- Rodgers, S. & Vismara, L. (2008) Evidence based comprehensive treatments for early autism. *Journal of Clinical Child and Adolescent Psychiatry*, 37, 8-38.
- Synergies Economic Consulting (2007). Costs of Autism Spectrum Disorder in Australia. Synergies Consulting Pty Ltd: Queensland.
- Syriopoulou-Delli, C. K. Cassimos, D. C. Tripsianis, G. I. & Polychronopoulou, A. A. (2012). Teachers' Perceptions Regarding the Management of Children with Autism Spectrum Disorders. *Journal of Autism and other Developmental Disorders*, 42, 755-768.
- Vismara, L.A., Young, G.S., & Rogers, S.J. (2012). Telehealth for expanding the reach of early autism training to parents. *Autism Research and Treatment*. 2012, 1-12.
- Wilson, K. P., Dykstra, J. R., Watson, I., Boyd, B., A., & Crais, E. R. (2012). Coaching in Early Education Classrooms Serving Children with Autism: A Pilot Study. *Early Childhood Education Journal*, 40, 97–105.