



**CASLPA Brief to the
Standing Senate Committee on Social Affairs, Science
and Technology**

Funding for the Treatment of Autism

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Introduction

The Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) is the national voice of more than 5,000 professionals. A not-for-profit association, CASLPA supports the professional needs of its members, champions the interests of those who require speech, language, and hearing services and promotes awareness of how speech-language pathologists and audiologists contribute to the well-being of Canadians living with communication disorders.

CASLPA currently represents 3,740 speech-language pathologists from across Canada (not including students). In 2006, 1208 members (32%) chose “Autism” as an area of interest on their membership renewal.

Provinces	Audiologists	Speech-Language Pathologists
N.L.	17	89
P.E.I.	4	22
N.S.	54	164
N.B.	49	171
Que.	223	1,218
Ont.	464	2,296
Man.	51	295
Sask.	35	218
Alta.	124	888
B.C.	154	685
Y.T.	1	10
N.W.T.	2	6
Canada	1,178	6,062

Source:
HPDB/CIHI

Notes:

1. The professions are regulated in 6 provinces/territories. The Canada total for each profession includes some provincial data in which registration with a regulatory authority may not be a condition of employment.

Autism: Definition and Incidence

Autism is a developmental disability that typically appears during the first three years of life. It is the result of a neurological disorder that affects the functioning of the brain. It is a pervasive developmental disorder (PDD) affecting all areas of a person’s development and there is a range of related disorders resulting in a spectrum, thus the term: Autism Spectrum Disorders (ASD). PDD is a term often used interchangeably with ASD to describe several closely related disorders. These disorders share the same essential features, but differ on specific symptoms, age of onset, or natural history.¹

¹ Canadian Autism Intervention Research Network, web site.

Children with ASD have difficulties in three specific areas: difficulties in verbal and non-verbal communication, social interaction and the presence of repetitive or stereotyped interests or behaviour. The condition is more common than previously thought and affects one in 167 children between birth and six years of age.² It is four times more common in boys than girls. Much of the apparent increase in the number of children with ASD is the result of broadening the definition in the Diagnostic and Statistical Manual of Mental Disorder (DSM IV, Fourth edition, 1994). These changes in the definition have led to significant discrepancies between early and current research in terms of those included within the broad diagnosis and the increasing heterogeneity in the field.

No one knows the exact cause of ASD beyond strong genetic factors and no two people with autism behave exactly the same way. Currently, a diagnosis is made, according to the DSM-1V, by a psychologist, or a physician. Frequently, expert clinical opinion supplements the diagnostic process through the administration of one or both “gold standard” assessment tools; the Autism Diagnostic Observation Schedule³ and the Autism Diagnostic Interview⁴. Moreover, clients should be assessed by a multidisciplinary team of professionals, including speech–language pathologists in order to obtain detailed information across developmental domains. Children with ASD are often suspected of having early hearing problems. Therefore, audiologists also play a critical role in spotting possible signs of ASD in those children they are testing and often make appropriate referrals for further diagnostic assessments.

As previously mentioned, ASD is characterized by core deficits in communication and social interaction. In other words, in spite of immense heterogeneity, all children with ASD will exhibit some type of communicative dysfunction, placing them within the realm of concern for the Speech-Language Pathologist. Recent research has shown that many children with ASD have a co-occurring language impairment that may be similar to Specific Language Impairment.⁵

In addition to general language delays, children with ASD have some specific difficulties with other areas of communication. Communication involves not only verbal skills but non-verbal skills such as using and understanding gestures, facial expressions, and body language as well as social language skills such as looking at the speaker/listener, initiating conversation, staying on topic, and taking turns in conversations. The aspect of communication that appears to be specifically disordered in all individuals with ASD is the appropriate use of language and communication in social situations. These social language challenges affect not only the individual with ASD but also his communication partners who need to modify their interactive style and the environment to communicate successfully.

Early indicators of ASD are observable by age 12 months⁶, (Zwaigenbaum et al, 2005) and ASD can be reliably diagnosed as early as 24 months by experienced, knowledgeable diagnosticians⁷.

² Chakrabarti S, Fombonne E. Pervasive developmental disorders in Preschool children. JAMA – Journal of the American Medical Association 2001; 285 (24):3093-3099.

³ Lord et al, 1989

⁴ Lord et al., 2003 Psychological Services

⁵ Kjelgaard and Tager-Flusberg, 2001

⁶ Baranek, G.T. (1999) Autism during infancy: A retrospective video analysis of sensory-motor and social behaviors at 9-12 months. Journal of Autism and Developmental Disorders, 29, 213-224

⁷ Filipek, P., Accardo, P., Barabek, G., Cooke, Dawson, G., Gordon, B., et al (1999). The screening and diagnosis of autism spectrum disorders. Journal of Autism and Developmental Disorders, 29, 439-484

As important as early diagnosis is for treatment, it should continue to be re-evaluated as diagnostic categories evolve and child development continues.

Prevalence of PDD in Canadian children aged 0-19		
<i>This table shows the estimated number of Canadian children with PDD, by province, based on 2001 Census data and a prevalence rate of 60/10,000. Current numbers would be higher, about 48,000 Canadian children.</i>		
PROVINCE	POPULATION	CHILDREN WITH PPD
Newfoundland and Labrador	128,220	769
Prince Edward Island	36,875	221
Nova Scotia	226,775	1,361
New Brunswick	180,770	1,085
Quebec	1,753,650	10,522
Ontario	3,002,165	18,013
Manitoba	314,140	1,885
Saskatchewan	285,540	1,713
Alberta	840,550	5,043
British Columbia	976,350	5,858
Yukon	8,325	50
Northwest Territories	13,060	78
Nunavut	12,445	75
Total for Canada	7,778,865	46,673

Recent studies in Canada and the United Kingdom show pervasive developmental disorder (PDD) to be much more common than previously thought with about 60 children in every 10,000, or one in 167, diagnosed with ASD.

Scope of Practice and Training for Speech-Language Pathologists

A speech-language pathologist is a highly trained professional who is engaged in the prevention, identification, evaluation, assessment, counselling, treatment, management, education and research regarding communication and/or swallowing disorders. Communication disorders include disorders of speech, language, voice and fluency in individuals from all age groups. Services can be provided directly to the client or to those who interact with individuals with communication or swallowing disorders. Speech-language pathologists work in various settings such as hospitals, schools, community health centers, nursing homes, childcare facilities, and in private practice.

Speech-language pathologists are trained at the Master's degree level in Canada and competition for entrance to the nine programs is high, with over 1382 applications. Programs are 2-3 years post-baccalaureate in length and include a clinical supervised training component of 350 hours. Of the nine programs, three are offered with French as the language of instruction. Graduates can pursue a PhD in Communication fields at seven Canadian universities. It is projected that there will be 262 new clinical Masters Degree graduates in speech-language pathology in 2007.

The Important Role of Speech-Language Pathologists in the Assessment and Treatment of Autism Spectrum Disorders

Parents want their child to look at them...and communicate with them....

Children need to communicate with their parents and siblings.....

Children need friends.

Speech-language pathologists play a critical role on the teams for early assessment, evaluation and intervention for persons with ASD. The communication problem lies not only with the individual diagnosed with ASD, but it also affects family members, peers, caregivers, teachers etc, who may encounter barriers in communication. The speech-language pathologist's role is important in supporting the individual, the environment and the communication partner to maximize opportunities for interaction and to overcome barriers. Although speech-language pathologists do not currently diagnose ASD in Canada, it is critical that they be involved as a part of the diagnostic team. As part of the interdisciplinary collaborative team, speech-language pathologists assess communicative skills and provide interventions that target deficits in language and communication. They also play a key role in counselling, education and training of families, teachers, and other service providers, and often in coordination and delivery of services and advocacy.

Qualified speech-language pathologists:

- have the knowledge to affect developmental achievements like acquiring language skills, decreasing behaviour, increasing social communication, and increasing literacy and academic skills.
- understand how to remediate difficulties in nonverbal and verbal communication, symbolic play, etc.
- understand the critical impact of ecological factors on typical development
- are aware of different cultures within Canada and the influences upon communication
- are aware of the multitude of roles that families have to play in dealing with ASD and know how to form partnerships with families
- can effectively communicate with family members and can educate and counsel them in the specific skills required
- understand the importance of early identification and are able to participate in early intervention programs
- know when to refer to and liaise with other professionals
- know how to effectively work as part of an interdisciplinary team
- have keen observation skills and can interpret indicators and characteristics of ASD
- know how to prioritize and sequence learning objectives

- can assist with the development of appropriate treatment plans following functional assessments of behaviour
- can evaluate scientific evidence and understand the importance of evidence-based research

Treatment Options for ASD

Individuals with ASD demonstrate a wide range of symptoms and characteristics and therefore, a wide range of approaches to intervention must be considered. Children with ASD need intensive programming. There is no question that early intervention for all speech and language disorders including ASD is imperative. Also, using a range of behavioural and naturalistic approaches is critical to maximizing outcomes, no matter what treatment approaches or methodologies are employed.

Prognostic indicators are difficult to determine in children with ASD. However, research has identified that children who develop some expressive and receptive language by age 5 have better outcomes.⁸ “It is also encouraging to note that there is now evidence that both intensive behavioural and naturalistic treatments for children with ASD can lead to significant improvements in socialization, communication, and cognitive ability. The Centre of Excellence for Early Childhood Development reports that intervention for children with ASD is needed and must start as early as possible.”⁹

Canadian researchers have contributed to the growing bodies of evidence regarding Autism. In Canada there are centres of excellence for autism training, programming, and research including, as examples, the Offord Centre for Child Studies at the Hamilton Health Sciences Centre headed by Dr. Peter Szatmari, the Geneva Centre for Autism, The Hanen Centre, and the new Edmonton Centre for Excellence in Autism Research. At the University of British Columbia, the Centre for Interdisciplinary Research and Collaboration in Autism (CIRCA) is being planned.

All research suggests that intensity is a key component of successful treatment. Intensity was defined by the National Research Council (USA) in 2001 as 25 hours/week. These are direct intervention hours and do not include assessment hours, diagnosis, interdisciplinary meetings or other indirect hours.

There is a common misconception that the only treatment options for those diagnosed with ASD are Applied Behavioural Analysis (ABA) and Intensive Behavioural Intervention (IBI). There are many other approaches that have strong research foundations and others that have proven clinically successful and which are currently undergoing study. There is no one approach that can be universally applied to all and it should be left to the speech-language pathologist and other ASD professionals on the team, in consultation with the family, to determine the best treatment option. Approaches need to be based on the unique strengths and challenges of the individual. Some individuals with ASD respond well to a highly structured program. They may have sensory concerns, like sensitivity to noise or touch. Speech-language pathologists work with the parents, families, caregivers and teachers to have a flexible, consistent individually tailored approach to communication intervention. In addition, consideration must be given to

⁸ Howlen, Patricia (2005)

⁹ Reitzel, PhD, C. Psych, Szatmari, MD Autism Intervention: Comments on Harris and Bruinsma, Koegel and Kern Koegel, Centre of Excellence for Early Childhood Development, published online Feb 2, 2005)

how cultural, linguistic, socioeconomic factors affect families' access to or use and selection of services

After a systematic review of research on educational interventions for children with ASD from birth through age 8, The National Research Council in the USA identified a number of important components for effective interventions for children with ASD including:

- early intervention
- active engagement in intensive programming aimed at helping the communication partner provide supports and teaching strategies to enhance engagement in natural learning environments
- planned and repeated teaching opportunities
- inclusion of a family component including parent training
- low student teacher ratios; and mechanisms for ongoing assessment and program evaluation.

The National Academy of Sciences of the United States has conducted the most comprehensive, impartial review of interventions for children with ASD currently available (Committee on Educational Interventions for Children with Autism, 2001). Despite the proliferation of intervention approaches, at that time there was no definitive evidence for any one approach and no adequate comparisons of the different comprehensive approaches. The Academy's report recommends that "effective services will and should vary considerably across individual children, depending on a child's age, cognitive or language levels, behavioural needs, and family priorities" (page 220).

Wait Times for Speech-Language Pathologists in Autism Treatment

Given the current focus of the Federal and Provincial Governments on wait times, the Pan-Canadian Alliance of Speech-Language Pathology and Audiology Associations recently conducted a survey of members on wait times in 25 different diagnostic areas for speech, language and hearing services. The Wait Times Task Force developed two definitions for wait times:

Date referral received until date of first offered appointment.

And

Date of initial assessment to date of offered treatment.

Autism is one of the priority diagnostic areas under Complex Developmental Behavioural conditions. In fact, 95% of respondents working with clients with Complex Developmental Behavioural conditions cited ASD as a primary area of treatment. 70% of speech-language pathologist respondents' work with clients from birth to 5 years and 73% work with school-aged children.

Speech-language pathologists were asked in the survey, in their expert opinion, what the maximum time clients should wait from the time the S-LP received the referral until the date of the first offered appointment. In ASD, as in most speech and language disorders, after the initial assessment, there is usually another waiting period for treatment. Thus, the survey found that some families are waiting more than a year for the initial diagnosis and then subsequently

waiting another period of more than a year to receive services. This combined wait time of two years plus is unacceptable and contradicts the notion of 'early' intervention.

From the data collected in 2006, current wait times for S-LP services for patients with autism are significantly higher than recommended by S-LPs experts working in the field. It has been reported that intensive treatment has the longest wait times. Some of this is due to the shortage of speech-language pathologists in Canada.

Funding and Costs

Provincial/territorial governments have responded in various ways to parent advocacy on the issue of funding for intervention. The following information does not reflect funding opportunities across the country, but is a sampling of information provided by CASLPA members.

BC

Up to \$20,000 is available annually (for children under 6 years) and up to \$6,000 annually (for children ages 6-18 years). These funds are for autism intervention services. Funds were allocated on the basis of diagnosis alone, not on severity or developmental level. This has resulted in inequities in service delivery where severely handicapped children with other diagnoses are ineligible for funding while mildly handicapped children with ASD receive relatively large budgets.

Alberta

The Family Support for Children with Disabilities (FSCD) Act in Alberta legislation is the only legislation of its kind in Canada and it allows for the provision of Specialized Services to children with ASD who qualify under the Act. Funding is now based on needs of the child and family rather than on diagnosis of ASD alone. Currently a multi-disciplinary panel reviews the diagnosis and recommendations of speech-language pathologists and other professionals to approve the provision of the services under FSCD. Programming is provided in the home and community and is intended to focus on functional skills and family involvement. Programming is highly individualized and the cost of providing services for an individual child may range anywhere from a \$1,000 - \$2,000 a year to more than \$50,000 per year. Speech-language pathologists are key members in service delivery and speech-language pathology services are integrated within this framework.

In addition to funding provided through FSCD, funding is also available through Alberta Education. Program Unit Funding (PUF) is provided to approved Early Childhood Services (ECS) operators for children with severe disabilities who require support beyond that offered in regular ECS programs. PUF is available for a maximum of three years for each eligible child between 2 ½ and 6 yrs of age. Services for older children vary by school jurisdiction and are very limited.

Although there is funding available in Alberta, there are often very long wait lists for both educational and FSCD services due to staffing shortages. Families experience considerable frustration when they are approved for services yet are unable to access them due to a lack of professionals and paraprofessionals. In addition to human resource shortages, the maximum rates of pay for speech-language pathologists, other professionals, and paraprofessionals are specified by FSCD and have not been changed in the past decade. In an environment where

demand for personnel is extremely high, it is a challenge for some service providers to attract experienced staff when FSCD rates have strict limits. Some families choose to supplement the rates to attract and retain qualified staff and pay for the difference out of pocket.

In addition, service options for rural Albertans are extremely limited, as are the options for families where English is not the language spoken at home.

Saskatchewan

Public services to support children with autism and their families are available through community health services for young children and through school services for children once they enter school. Assessment services for autism are provided primarily through the larger centres of Regina and Saskatoon. Saskatchewan Learning provides funding to each School Division to assist in the costs for additional supports to students with diverse needs, including those with autism.

Wait time for assessment ranges from 12 weeks up to 12 months and the wait time for intervention services may be up to 3 years. The wait time can be attributed to increasing demand for services and difficulties in recruiting and retaining communication professionals, particularly professionals with expertise in working with autism. Private services are available in larger centers with little to no wait, for fees averaging \$70 per hour. There is tremendous variation across the province regarding wait time, service delivery model and intensity of service.

Beginning in 2004-05, the government of Saskatchewan committed new funding to the *Communities Working Together: Saskatchewan's Action Plan for Citizens with Cognitive Disabilities*. The strategy is primarily targeted to individuals with cognitive disabilities between 6 and 24 years of age who have significant behavioural and developmental challenges, including those related to Fetal Alcohol Spectrum Disorder (FASD), Acquired Brain Injury and Autism. The strategy focuses on prevention, assessment and diagnosis and providing supports to children and families who meet entrance criteria. Funding is intended to supplement or extend a wide range of existing programs that support individuals with cognitive disabilities and their families throughout the province. Eligibility for funding is based on an assessment of impact of disability, unmet need, and family income.

There is currently no indication that long wait times for speech-language pathology services will improve in either urban or rural areas of the Saskatchewan. Access to communication services for adults with autism is extremely rare and not likely to change without an increase in funding targeted to this population.

Manitoba

In Manitoba, the St. Amant ABA Preschool Program is government funded to provide 31 hours per week of intensive one-on-one treatment for a maximum of three years. Parents are trained and supervised to provide a minimum of 5 additional hours per week.

As well, in Manitoba, the RDI model is available privately for about \$12,000 per year and publicly if the child is non-verbal through the Rehabilitation Centre for Children, with estimates at around \$4,000 - 6, 000 per year.

Ontario

In Ontario, the provincial government has funded an intensive IBI program for children with a diagnosis of Autism. Intensity of IBI varies between 20 to 30 hours per week and includes preschoolers to youth of 18 years of age. Nine regional providers deliver services to identified children within a variety of settings including, centre-based programs, home-based programs, within daycares, nursery schools, private schools and publicly-funded school placements. Speech-language pathologists have not been included in the current service delivery model within Ontario.

Quebec

The standard of care for ASD in Quebec is Applied Behaviour Analysis (ABA), but given that ABA is an intensive, one-on-one program involving roughly 20 hours of therapy a week, the province does not have sufficient resources to provide every autistic child with ABA when the treatment is needed.

In Quebec, the waiting list for ABA can be anywhere from six months to a year after diagnosis. This is challenging for hospital staff as speech-language pathologists are there to assist with the diagnosis but there is not any on-going mandate to provide treatment. Frustration with ABA waiting lists has caused speech-language pathologists and psychiatrists to seek out more cost-effective therapeutic alternatives, such as intervention programs that are designed to help parents support language development in their autistic children.

New Brunswick

New Brunswickers have access to 20 hours per week of intensive one-on-one ABA intervention services for all preschoolers who are diagnosed with Autism. The agency model has been running since early last year and one agency in the Fredericton area is servicing nearly 40 preschoolers and their families. There is currently a training program through the University of New Brunswick - College of Extended Learning that has been carefully designed with theory sessions as well as intensive practicums for both the autism support worker's and the clinical supervisors in this province. Funding support may be up to \$20,000 per year.

Newfoundland and Labrador

Children who are diagnosed as pre-schoolers can access early intervention until the age of 6 years (or until the end of kindergarten year). They receive intensive (30 hours a week) ABA therapy in the home and once they enter Kindergarten, this is reduced to 15 hours a week. This is funded by the Department of Health. Once in school, depending on the needs of the child, they receive special education support. This can include any or all of the services from a student assistant, special education teacher (called non-categorical teachers) who is a generalist of sorts and can see a multitude of children with varying needs, as well as a categorical teacher (this is a low ratio teacher who delivers very specialized programming to children with ASD). This teacher will teach a maximum of four students and thus the programming is highly individualized and based on the needs identified by their special services team. All services are based on the needs identified by the special services team, which is funded by the Department of Education.

General

Based on 2005 figures from the US government accountability office, the average annual cost for educating a child with ASD is \$18,800 (US) compared with \$12,500 (US) for the average special education student and \$6,556 (US) for the typical regular education student.

Treatment for IBI is reported to cost upwards of \$70,000 per year.¹⁰

Statistics Canada Reports¹¹:

- A 1% gain in the average literacy/numeracy skill level in Canada would create a permanent increase of \$18.4 billion per year in Canada's Gross Domestic Product.
- Investments in human capital, such as education and skills training, produce three times more economic growth than does investment in physical capital.

Recommendations

1. Create a National Autism Strategy that involves an interprofessional team approach for the diagnosis, assessment, treatment, training, education and research of Autism Spectrum Disorders.

Currently, there is no provincial or federal mechanism for consolidating all the various areas of education, expertise, research and practice and for assisting and facilitating collaborative efforts. Through supporting and sharing national tools -- such as training and education programs, best practices, awareness initiatives and evaluation and monitoring systems -- each province will be able to develop its own unique approach to the diagnosis, assessment, treatment, training, education and research of ASD. The National Stoke Strategy was noted by our members as a good example of collaborate leadership and research.

A National Autism Strategy would:

- ensure that people with ASD have rapid access to high quality, appropriate diagnostic, assessment and treatment services, no matter where they live in Canada
- accelerate the coordination between the different agencies and professionals involved in research, diagnosis, assessment, treatment, training and education of ASD
- support individuals with ASD throughout the lifespan
- support interdisciplinary education, training and research for ASD
- support the family and caregivers of individuals with ASD
- ensure that the workforce is developed, in terms of numbers and skills, to enable the implementation of the strategy
- examine treatment options and evidence-based research across the lifespan, including adult populations.

2. Fund appropriate Speech-Language Pathology intervention over the lifespan of the individual as part of the Autism treatment program.

It is critical to stress the key leadership role of speech-language pathologists in providing treatment and diagnostic services for individuals with this disorder as the two main diagnostic features of ASD are impaired social interaction and impaired communication.

¹⁰ Beskin, Brenda Autism in Canada Fact Sheet, June 2005

¹¹ Center for Language and Literacy Research Network conference. New Words, New Worlds: Partnering for Childhood Literacy, Charlottetown, 2006.

The key finding of all research focuses on the importance of intensity in delivering treatment. Intensive treatment must be part of the funding model to be considered appropriate. Various service delivery models such as the use of telehealth technologies and telepractice, as well as the training and engagement of supportive personnel need to be explored in terms of quality, access and cost effectiveness. Strategies designed to build community capacity should also be explored. There will be increasing demands for speech-language pathology services in the adolescent and adult ASD communities in the near future as the initial group of diagnosed individuals currently moves through secondary school and transitions to the community.

In the pressure to respond to constituent demands from parents for support for their children with ASD, many provincial/territorial governments have funneled money into preschool programs, however, educational budgets have not experienced a coordinated approach to transitioning children and services. Funding for adult services and research is almost non-existent.

3. Ensure funding for coordinated evidenced-based research to determine the communication interface as part of the treatment approach.

Continued research is necessary to assist in understanding what form of treatment is most effective for what type of individual at what developmental stage and for what outcome goals.

Individuals and their families are now waiting for speech-language pathology services. While waiting for peer-reviewed research evidence to grow, expert clinical judgement of highly trained speech-language pathologists as one level of evidence is necessary. This can help guide public policy until higher levels of research are available.

4. *Ensure that government funding of treatment for children and adults with autism spectrum disorders includes all methods of evidence-based treatment or models of intervention, since every individual responds differently to the variety of treatment options available.*

There are a number of treatment models available for this very complex disorder. These range from behavioural approaches such as ABA/IBI to developmental approaches such as social-pragmatic activity based programming. All approaches recognize that intensity is required.

Any treatment approach should address the core components of communication and social interaction.

5. *Ensure that assessment and treatment plans be intensive, interdisciplinary, flexible and collaborative.*

Integration of services is of critical importance - not only for treatment efficacy and efficiency but also for the sake of parents who already have tremendous challenges. Parents often experience conflicting information (and promises), approaches, goals and therapies. Conflict and 'duelling evidence' not only takes its toll on families but also on therapists - especially young clinicians who can be overwhelmed with the current dynamics of autism. Interventions should be based on an integrated understanding of an individual's needs and strengths across all members of that ASD individual's 'team' of parents, educators and service providers. A single set of prioritized goals across domains and agreed upon approaches should be developed to achieve the planned interventions.¹²

Speech-language pathologists assess the child's expressive and receptive language skills, language-related cognitive skills (symbolic play, constructive play, and attention skills), social affective behaviour, speech production, oral-motor status, voice, and speech fluency. An assessment should include a comprehensive observation and evaluation of the individual in all settings—home, school, and community. The assessment includes holistically gathered information and standardized testing with a focus on communicative intent. The speech-language pathologist makes referrals to and works with adjunct professionals such as paediatricians, psychologists, psychiatrists, occupational therapists, and teachers. This collaborative and interdisciplinary approach to assessment, treatment planning, and intervention is crucial to 'best outcomes' for individuals with ASD across the lifespan.

¹² Schriebman, Laura, Anderson, Aimee (2001) Focus on Integration: The Future of the Behavioral Treatment of Autism. *Association of Behavior Therapy* pp 619-631

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Website Information:

<http://www.firstsigns.org/research/current.htm>

<http://www.cairn-site.com/who.html>

<http://www.autism.net> (Geneva Centre)

www.child.gov.ab.ca/whatwedo/disabilities/pdf/autism_expert_report.pdf

(Alberta Children's Services Expert Panel Report (September 2002) [A System of Care for Children with Autism](#) The Expert Panel on Autism was formed in April 2002 by the Ministry of Children's Services, in partnership with Alberta Health and Wellness and Alberta Learning. The Expert Panel was mandated to review the research literature, consider current best practice experience and recommend best practice guidelines for programming for preschool children with autism and for transition services for school aged children)

<http://books.nap.edu/books/0309072697/html/index.html>

(This contains the full-length version of Educating Children with Autism, National Research Council (2001). Committee on Educational Interventions for Children with Autism. Catherine Lord and James P. McGee, eds. Division of Behavioural and Social Sciences and Education. Washington, DC: National Academy Press.)