



ONTARIO
PSYCHOLOGICAL
ASSOCIATION

Supporting a successful Ontario Autism Program (OAP) across the age span

5 Recommendations to Improve Access to Services, Workforce
Capacity, Research and Evaluation, Efficiency, and Safety

Executive summary

There is a well acknowledged crisis when it comes to the provision of behavioural and psychological services to children with autism who need it. The Government of Ontario has recently recognized the extent of the crisis, and we commend the much-needed commitment of \$600 million in spending to ensure the individual needs of persons with autism are met.

Psychologists are an important part of the province's regulated behavioural and mental health care resource. ***The unique training of Psychologists allows for the provision of triage, diagnostic assessment, supervision, clinical direction, and treatment services that are unique from, but complementary to, the province's other health providers.*** Psychologists' training enhances the efficacy of health services both when working in the private sector or when funded as collaborative partners with other mental health professionals in the provision of comprehensive service. They have played pivotal roles in developing and evaluating highly effective evidence-based therapeutic techniques.

This document highlights the roles psychologists play in the lives of persons with autism, the need to invest in diagnostic and treatment services and provides recommendations that address the challenges associated with Ontario's Autism Program (OAP). Special considerations are given to expertise, workforce capacity, geographic challenges and technological considerations to address wait time, provider search and matching, and outcome monitoring.

In 2019, there were approximately 3,950 psychologists registered to practice in Ontario with 45% registered to work with children. The majority of psychologists (93%) practice in cities with populations greater than 100,000, with approximately 30% practicing in Toronto. These large municipalities account for a population of 9.3 million residents. Mid-size communities, accounting for a population of 2.6 million, share the remaining 7% of psychologists, while 1.5 million residents from small communities have no access to the specialized skills of psychologists that are urgently needed. Unfortunately, this means that families in 416 communities in the province will struggle to find autism supports from a registered psychologist. North Western Ontario, for example, had 60 psychologists, 56 of whom resided in Thunder Bay. While about half are authorized to work with children, the large geographic region will force numerous families of children with autism to travel hundreds of kilometers for services they need.

Ontario needs an effective and state of the art Autism program to meet the growing needs of young persons with autism. Such program must strive to provide peace of mind to families trying to get their children the assessment and treatment services they need to thrive and reach their full potential and be successful learners. These services must be responsive, comprehensive, equitable and available no matter where families live in the province. The services must be connected to the education and health care system and leverage technology that will connect and provide continuous meaningful feedback to families, service providers, as well as government.

Understanding Autism Spectrum Disorder (ASD)

Autism Spectrum Disorder (ASD) is known to be a complex neurodevelopmental disorder. At its core, ASD is defined by social communication challenges, fixed interests and problems associated with repetitive behaviour. Additionally, there are many other symptoms that can be associated with ASD that can affect individuals to varying degrees such as intellectual disability, developmental problems, executive functioning (reasoning and problem solving skills) challenges, mental health issues such as anxiety, depression and obsessive-compulsive disorder, attention deficit hyperactivity disorder and other behaviour problems. These problems can complicate the diagnosis and clinical presentation of ASD across the lifespan, requiring specialized training in order to diagnose accurately and treat the symptoms properly. Furthermore, it is important to be aware of and sensitive to diversity, as ASD occurs in all social, economic, cultural, language and family circumstances which can further affect the nature of symptom presentation.

Importance of early diagnosis for the right services at the right time

ASD can be diagnosed in children as young as 2 years of age, however, most children are not formally diagnosed until age 3 to 4. Early diagnosis is critical to appropriate identification and helping families select appropriate scientifically supported interventions. Intervention should start as soon as possible within this sensitive developmental period. Early intervention allows for the family and the child to develop the strategies required to optimize their child's developmental gains and symptom management and reduce ensuing behavioural crises.

With early diagnosis being crucial, the limiting factor in Ontario currently is the access to diagnosticians that follow the "Gold Standard" procedures as well as the DSM 5 and ICD-10 diagnostic systems to ensure appropriate identification and diagnosis. Many Ontarians with ASD cannot access appropriate diagnostic services early which results in growing intensification of symptoms and the need for greater resources. Psychologists, child psychiatrists and pediatricians trained in ASD have an important role to play in assessing ASD using systematic recognized diagnostic procedures and have the skills to support families and those with ASD during this stressful process.

Additionally, beyond providing a diagnosis, psychologists have the expertise needed to assess the child's developmental functioning within their family and cultural contexts. Psychologists reliably collect sensitive data about the child's adaptive behaviour, cognitive (thinking) skills, attention and language development as well as valuable family background information. Along with the information from the child's health team that includes medical doctors, behaviour therapists, speech and language pathologists, teachers and occupational therapists, psychological information provides a comprehensive picture about the strengths, needs, and priorities of the child and family. This psychological information informs treatment selection, as well as treatment and educational goals and plans.

Psychologists support the use of early intervention for ASD as soon as possible after diagnosis. There is over 30 years of research demonstrating the efficacy of Applied Behaviour Analysis (ABA) in individualized, comprehensive and intensive early interventions for the improvement of cognitive, language, adaptive behaviour and social functioning. The earlier intervention starts the greater the potential for fundamentally accelerating a child's rate of learning and making developmental improvements for the child and effective provision of supports and training for parents and other caregivers. Psychologists support the use of individualized focused ABA treatments for persons with ASD over the lifespan because they can be effective in both improving skill development and reducing harmful, problem behaviours that interfere with learning and functioning at home, school and in the community. Such interventions will help persons with ASD, and their families thrive and enhance quality of life.

Importance of evidence-based interventions, psychoeducation and psychosocial supports

There are no known medications that can treat the core symptoms of ASD, and this remains an area of active research. Medications are used to help manage the intensity of some challenging behaviours, such as aggression and anxiety, and other medical conditions such as epilepsy that can co-exist with ASD. Essentially, behavioural, educational and psychosocial interventions are the foundation of evidence-informed services for persons with ASD, their families and caregivers. These interventions have been shown to be effective through vast amounts of research in improving those ASD symptoms and associated mood/behavioural issues that interfere with a positive quality of life.

Psychologists value treatments that are based on empirical research (i.e., evidence-based) and meet standards of practice for clinical care. Evidence-based psychological interventions for children and youth with ASD, such as those recommended by the National Autism Standards, are primarily from the field of Applied Behaviour Analysis (ABA). ABA is the science of behaviour change to improve socially and functionally meaningful behaviours. Although a solid body of scientific and empirical evidence exists to support psychological and behavioural interventions for ASD, no single service, or treatment package has been found to be suitable for all persons with ASD. The current evidence is clear that individualized treatment is needed that takes into account all the factors indicated above that psychologists evaluate.

Children and youth with ASD and their families live, learn and interact in a variety of everyday settings including their homes, neighbourhoods, schools, hospitals, therapy clinics and community services. Evidence-based services and multidisciplinary services need to be available within these settings. Multidisciplinary teams that have persons with ASD and their families at the centre of the team need to include psychologists to guide the selection of interventions in the treatment plan, provide treatments and updated assessments as appropriate and evaluate treatment effectiveness.

Psychosocial supports including psychoeducation and parent, family and caregiver training (including skill acquisition) can be incorporated into treatment plans depending on the needs of the

person with ASD and their family. These supports can increase knowledge, understanding, quality of life and reducing stress.

Importance of school and community-based services

Psychologists have an important role to play in schools for persons with ASD and for incorporating behavioural programming at schools. Individualized assessments and consultations contribute important information about the learning, development and behaviour needs of children and youth with ASD. Training to educators and parents contributes important information about ASD, learning, attention, motivation, behaviour and mental health support strategies that are based on best practices and ABA evidence. Psychological services are also offered in the community and often funded through extended health benefits. These psychologists can be a source of considerable support for schools, primary care physicians, hospitals, and Children's Treatment Centres. Efforts are needed however to adequately map these resources, facilitate parents' access and manage e-referrals, wait time and outcomes.

Risks associated with limited access to diagnosis and treatment

Research shows that children and youth with ASD are at higher risk for psychiatric conditions and may experience more symptoms than their typically developing peers. Children and youth's co-existing conditions such as learning, attention and mental health challenges may actually exacerbate ASD symptoms and vice versa. Psychologists can help in recognizing these co-existing symptoms, providing evidence-based treatments such as Cognitive Behaviour Therapy for anxiety and depression, and support to parents and caregivers to improve quality of life. Failing to provide these services can increase the risk of crisis and hospitalization, harm to self and others, academic challenges and caregiver and individual burnout. Collectively these outcomes result in increased health care costs, and/or indirect costs associated with disability and lost productivity.

Early access to psychological services is needed to monitor and support persons with ASD, whose needs may increase over time and to avert, or minimize the impact of crises. There is a need for an inter-ministerial, multisectoral approach for both community, and hospital-based services to manage crises and provide care and treatment for persons with ASD and support for their families. Psychologists, with footings in education, community and hospitals, play an important role in identifying and helping to manage these needs in the community to avoid costly emergency department visits and hospital admissions. In the event of hospital admissions, psychologists also have an important role assessing and supporting persons with ASD, their family and caregivers.

Over time, the needs of a person with ASD may change or remain fairly stable. Ongoing psychological progress monitoring to measure changes in ASD features and assess for the associated problems that may or may not emerge will be invaluable to the families and multidisciplinary team and families supporting these children. The updated information is essential for determining treatment effectiveness and in updating treatment goals and plans. It is also needed

for designing and implementing successful transition plans for post-secondary education, employment, training and independent living as well as for accessing adult health, developmental and social services.

Geographic, linguistic and cultural competency gaps can have tremendous impact on a person's functioning and recovery. The saturation of service providers in one region and the complete absence in others will create imbalances regarding who receives high quality care and when. Equally problematic is the provision of French language services to families outside the Ottawa region where the vast majority of francophone psychologists reside (Ottawa has 40 francophone school psychologists for example, while Toronto and Peel have 17 and 9 respectively). Retention and recruitment efforts must aggressively attract psychologists in schools, Family Health Teams or Hospitals to ensure equitable access to care. Creative models involving University training programs were previously discussed in our document *Responding to the Mental Health Needs of Ontarians: Case for Investing in Training Psychologists and Growing the Psychologist Workforce*. Leveraging technology such as virtual care platforms could be used to assist with diagnosis, consultation and treatment monitoring in remote and hard to reach regions.

Recommendation 1: Ensuring the availability of psychological services throughout Ontario

The recruitment and retention of psychologists in small to mid-size communities is a systemic problem that plagues the healthcare, education and correctional systems. New graduates may be interested in working in a school, hospital or primary care team for some time, but frequently exit the public system within a few years to work in private clinics in larger municipalities such as Toronto, Ottawa and Hamilton. Attractive positions, with adequate compensation and benefits, research and collaborative opportunities, such as those offered in Family Health Teams are extremely rare in rural and northern regions. Psychologists thus have very little incentive to move to these communities, making access to behavioral, psychological and neuropsychological services next to impossible. In those communities, undertrained and unsupervised staff, family physicians and nurses are left to address the complex needs of children with ASD with limited resources or supports, leaving families with subpar care. Publicly funded positions will be necessary to address the increasing needs of children with autism and other neurodevelopmental disorders.

Recommendation 2: Addressing Workforce challenges

OPA recently submitted a proposal the Ministry of Training, Colleges and Universities (MTCU) and the Ministry of Health and Long-Term Care (MOHTLC) to produce and train more doctoral psychologists in Ontario. In the paper, we stated that university training programs could be asked to work more closely with hospitals, schools and Children's Treatment Centres. Funding doctoral students to do their residencies in small communities could go a long way in meeting unmet needs. Supervisors could provide supervision remotely. Increasing the number of psychologists throughout

the province would reduce pressures on the system and provide children and families with more options. They would also address other bottlenecks in schools, primary care, and hospitals.

Recommendation 3: Create an OAP research council to help improve program outcomes

Research and program evaluations are critical to ensure any program meets its purported goals. Under the advice and leadership of the research council, the Ministry of Children, Community and Social Services (MCCSS) is encouraged to continually evaluate the performance and outcomes of the autism program. Psychologists have research and scientific backgrounds that could help ensure outcomes are continually measured and improved. Applied research to study the effectiveness of treatments delivered, and program evaluations are needed. Studies were undertaken in Ontario, and further psychological intervention research improves understanding of variables such as mediators and moderators of treatment that may influence the effectiveness of an intervention program such as parental stress, parent training components, treatment fidelity, staff training and supervision, duration and intensity to name a few. Research and program evaluation could improve systems of care.

Recommendation 4: Leveraging technology to improve access to care and outcomes

Ensuring connectivity among providers, families and agencies from different sectors is vital to ensure the continuity of services. This needs to go beyond fax-based referrals, rather, it needs to include such services as e-referrals, provider search engines, payment processing, virtual care consultation services, digital records keeping and more. For people living in rural and remote parts of the province, for example, the use of technology will be needed to provide supervision and consultation services. Furthermore, with the OAP changes to provide funding directly to families, there will be increasing need for provider profiling and cataloging (e.g., competencies, specialty, wait time), better e-referrals management system (from primary care, families, schools, hospitals, community to psychologists & diagnostic hubs, treatment centers, private clinicians). Such system would help manage wait time, waitlist and outcome monitoring at the individual and system level.

Recommendation 5: Regulating Behavioural Analysts by the College of Psychologists of Ontario (CPO)

Psychologists recognize the unique services provided by Behavioural Analysts in the province. Some psychologists are in fact behavioural analysts. The Ontario Psychological Association fully supports the regulation of master's and doctoral level behaviour analysts and encourages the Ontario government to engage CPO, who previously approved a motion, to support the regulation of Behavioural Analysts. Regulation improves safety and quality oversight and reduces the likelihood of abuse of vulnerable Ontarians across the age span. The scope of practice of behaviour analysts, like

that of psychologists, must go beyond autism and extend to other vulnerable populations such as those involved in forensic settings as well as those with brain injury, dementia and mental illness.

About psychologists

The Canadian Institute for Health Information (CIHI) has released a number of reports on the status of Canada's health care providers. The CPA, and the regulatory colleges of psychologists across Canada, also house data about the practice and demographic characteristics of psychologists. Psychologists are regulated health professionals whose foundational knowledge is the biological, cognitive, emotional, social, cultural and environmental determinants of behaviour. Psychologists provide diagnostic assessment and treat psychological problems and mental as well as cognitive disorders. Psychologists provide services, teach and/or conduct research in settings such as hospitals, community clinics, private practices, universities, schools, criminal justice settings, social welfare agencies, workplace employee assistance programs, rehabilitation programs and workers' compensation boards. Psychological services are provided across a continuum of care, which includes wellness, injury and illness prevention, diagnosis and treatment, rehabilitation and relapse prevention, chronic disease and disability management, and palliative care. Psychologists can direct and lead care, develop programs and treatments, and evaluate program efficacy and outcomes.

In Canada, psychology has been a regulated profession for decades. Ontario has been regulating psychologists since 1960. Quality assurance for the training of psychologists has also been achieved through accreditation of doctoral and internship programs by the CPA since 1984. Psychologists are regulated in all 13 provinces and territories. To practice as a psychologist in Canada, an individual must obtain a certificate of registration from one of the provincial or territorial psychology regulatory authorities. The registration requirements vary somewhat across the country. The CPA, OPA, and Canada's regulatory bodies of psychology (ACPRO) endorse the doctoral degree as the entry to practice standard for the profession. However, some provinces permit registration at the master's level. All but one jurisdiction (Quebec) requires successful completion of the North American Examination for Professional Practice in Psychology. Jurisdictions typically have additional requirements that include practice-related oral and jurisprudence examinations. While registration certificates are general, psychologists typically have their declared areas of competence reviewed and approved by their regulatory body which, in turn, become the basis for their authorized practice. Psychologists are obligated to practice within those areas so declared and approved (see next section). Continued registration requires ongoing professional development and participation in quality assurance programs including practice audits. In addition, the regulatory authorities have robust complaint mechanisms and the ability to impose consequences including the removal of certificates of registration. More information on the requirements of Canada's regulatory bodies in psychology can be found at: <https://cpa.ca/public/whatisapsychologist/regulatorybodies/>.

Psychologists usually focus their practice in specific areas such as: clinical psychology, counselling psychology, clinical neuropsychology, school psychology, correctional/forensic psychology, health psychology, rehabilitation psychology, and industrial/organizational psychology. Within these areas, psychologists may work with a variety of individual client populations, such as children, adolescents,

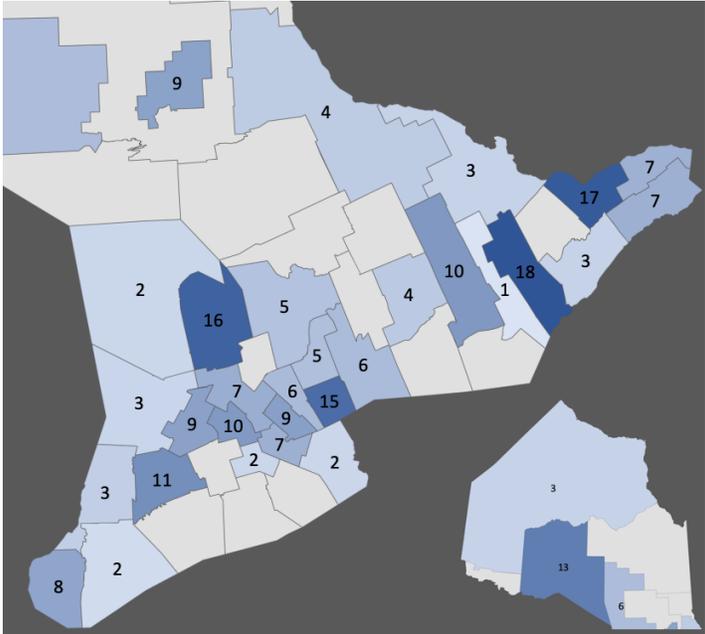
adults or seniors, and they may focus their attention on individuals, families, couples or organizations. They work in a range of settings, including schools, hospitals, industry and business, social service agencies, rehabilitation facilities and correctional facilities. Approximately half of Ontario’s psychologists work outside the publicly funded system and accept referrals from third party payors such as WSIB, auto insurance accident benefits, employment benefits plans and private insurance, as well as self-payment from patients who can afford to pay the fees or for whom insurance covers only a fraction of their assessment and treatment fees.

Table 1. Population estimates and psychologist workforce by Local Health Integration Networks

LHIN	New births (Ontario)	Population 3-4	Population 5 to 9	Population 10 to14	Population 15 to 17	School age Population (5 to 17)	Children born with autisms each year	Number of children with Autism (3-4)	Number of children with Autism (5-17)	Child Psychologists	School Psychologists	Francophone School Psychologists
Central LHIN	20,200	39,385	102,111	106,315	66,037	274,463	306	597	7,121	94	60	1
Central East LHIN	17,363	34,043	85,049	85,434	52,530	223,013	263	516	5,036	72	41	0
Central West LHIN	11,403	23,332	60,052	63,019	37,323	160,395	173	354	3,950	49	36	0
Champlain LHIN	14,612	29,458	73,007	72,757	44,702	190,466	221	446	4,859	282	116	40
Erie St. Clair LHIN	6,278	13,221	33,941	36,698	22,961	93,600	95	200	2,372	62	30	5
HNHB LHIN	14,950	29,811	76,462	79,228	49,261	204,951	227	452	5,164	120	51	2
Mississauga Halton LHIN	13,966	27,447	72,834	79,226	49,234	201,294	212	416	5,080	133	76	9
North Simcoe Muskoka LHIN	4,830	9,878	25,163	26,116	16,200	67,479	73	150	1,673	38	21	0
North West LHIN	2,612	5,323	13,197	13,016	7,931	34,144	40	81	833	29	2	0
South East LHIN	4,471	9,147	22,833	24,168	14,630	61,631	68	139	1,553	58	21	2
South West LHIN	10,710	21,848	54,830	55,280	33,311	143,421	162	331	3,557	126	53	2
Toronto Central LHIN	14,559	25,864	61,375	58,227	36,231	155,833	221	392	4,498	555	287	17
Waterloo Wellington LHIN	9,086	18,556	45,913	46,946	28,130	120,988	138	281	3,018	114	55	0
North East LHIN	5,209	11,069	27,546	27,747	16,780	72,073	79	168	1,786	47	19	6
	150,249	298,381	754,311	774,178	475,261	2,003,750	2,277	4,521	50,500	1,779	868	84

*2019 Population estimates were obtained from the Ministry of Health and Long-Term Care. ASD estimates of 1-66 were extrapolated from the Ministry data. Psychologist workforce data was extracted from the College of Psychologist website. There are approximately 1779 registered child psychologists and 1300 registered pediatricians in Ontario.

Figure 1. Ratio of Child Psychologists per 10,000 School age Children by region in Ontario.



Note. Child psychologist data by city was mapped in March 2019 using the College of Psychologists of Ontario’s (CPO) online registry. There were approximately 2 million school age children enrolled in Ontario schools in 2016-2017. The ratios were calculated using school board enrollment data within specific geographic regions and the number of child psychologists within those regions. School boards and geographic regions do not always align.

Authors & contributors

Dr. Sylvain Roy, Ph.D., C.Psych.,
Neuropsychologist
Past-President,
Ontario Psychological Association
DrRoy@psych.on.ca

Dr. Jo-Ann Reitzel, Ph.D., C. Psych.,
Psychologist
Assistant Professor, McMaster University,
Former Clinical Director of the Hamilton-
Niagara Regional Autism Intervention
Program, McMaster Children's Hospital.

Contributors:

Dr. Jane Summers, Ph.D., C.Psych.
Dr. Nancy Freeman, Ph.D. C.Psych.
Dr. Carolyn Lennox, Ph.D., C.Psych.
Dr. Debra Lean, Ph.D., C.Psych.
Dr. Chris Mushquash, Ph.D. C.Psych.

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