An Investment in Autism Will Save Ontario Millions.

The Economic Cost of Autism

A recent Canadian public policy study estimated the lifetime cost of supporting an individual with autism spectrum disorder (ASD) at a range of between **$1.2 million to $4.7 million** based on level of symptom severity and disability (Dudley & Emery, 2014).

As each individual has unique needs, annual support costs can vary from $26,639 and $130,000 per person. At an estimated prevalence of 100,000 individuals on the autism spectrum in Ontario, the total social cost would exceed **$13 billion** per year.

According to a recent study in Ireland (Roddy & O'Neill, 2018) when government restricted funding to $20,000 in general supports, many families spent in excess of **$40,000 out-of-pocket** attempting to access treatment each year.

In many jurisdictions, the high cost of treatment for autism spectrum disorder has made it a frequent target of restrictive policies such as age-based funding caps or attempts to redesign treatment programs as "eclectic" or "support-based" with less resources allocated.

We propose that funding scientifically-supported behavioural treatments is not only the compassionate thing to do, it is also a fiscally responsible use of tax-payer money.

Intensive Behavioural Intervention

Intensive Behavioural Intervention (IBI or Comprehensive Behavioural Interventions) is an evidence-based treatment of "the multiple affected developmental domains, such as cognitive, communicative, social, emotional, and adaptive functioning" (BACB, 2016) associated with ASD. IBI is one application of the science of Applied Behaviour Analysis (ABA).

The effectiveness of behavior analytic intervention in ASD has been rigorously supported by scientific research in systematic reviews and meta-analyses (Eldevik, Hastings, Hughes, Jahr, Eikeseth, & Cross, 2009, 2010; Klintwall, Eldevik, & Eikeseth, 2015; Virués-Ortega, Rodríguez, & Yu, 2013; Wong et al., 2015)

High-intensity treatment (30+ hours of direct ABA treatment over two or more years) produces the largest improvements (Eldevik et al., 2010).

Focused Interventions (~20 hours of ABA treatment) can also be beneficial when targeting specific issues or skill deficits.

"Eclectic" approaches that mix together some ABA with other kinds of therapy have been shown to be ineffective in comparison studies (Howard, Stanislaw, Green, Sparkman, & Cohen, 2014).

According to a Government of Ontario report by the Ministers' Autism Spectrum Disorders Reference Group (2007) "the research indicates that Applied Behaviour Analysis (ABA) based practices (including intensive ABA) are the only practices that meet the criterion of effectiveness evidenced in randomized or non-randomized controlled trials".

Reduce Wait-lists By Increasing Access to Treatment

Historically, governments and insurance funders have attempted to reduce waitlists with "quick financial fixes" such as instituting unscientific age-based funding caps, by providing one-size-fits all payouts, or by providing less funding for a wider range of services, including those without any scientific support. Paradoxically, this attempt to save money often ends up costing tax-payers much more than treatment.

An Ontario-specific study conducted by Piccininni, Bisnaire, and Penner (2017) identified significant benefits to reducing wait-lists including:

- Cost savings of more than **$50,000 per person** during their lifetime based on increased independence.
- Cost savings of **$276,000 per person** in direct and indirect healthcare and social supports.

Multiple research studies and cost analyses across Canada, the United States, and Europe have demonstrated that the initial cost of scientifically-supported behaviour analytic interventions (comprehensive and focused) is quickly off-set by the savings in education, healthcare, and social services.

Savings to the Education System

According to a study by Chasson, Harris, and Neely (2007) children with ASD who had received an average of 3 years of behaviour analytic intervention at approximately 36 hours a week of treatment required significantly less support in special education.

The costs savings to the education system were projected to be more than **$275,000** for each student by their 18th birthday.

Based on Ontario's population, and a conservative estimate of 1 in 10,000 students requiring specialized autism services, Ontario taxpayers would save more than **$1.4 Billion** in educational costs.

Savings in Community Settings

Peters-Scheffer and colleagues (2012) examined the impact of behaviour analytic interventions on costs associated with education, supported employment and supported living for individuals with ASD from age 3 to 65 years in the Netherlands.

The lifetime cost savings for children who received behaviour analytic interventions in the Netherlands (which has a smaller population than Ontario) were projected to be in excess of **$200 Billion.**

Adults who received behaviour analytic interventions in the UK incurred **28% less** in medical and non-medical social support costs in the years following intervention (McClean, Grey & McCracken, 2007)

Savings in the Healthcare System

According to Ontario's Auditor General, emergency department visits cost tax payers more than **$1.1 Billion** in 2009 alone. Individuals with ASD visit emergency departments due to untreated behavioural health issues at a disproportionate rate as compared to their 'neurotypical' peers (Lunsky, Gracey, & Gelfeld, 2008)

Individuals with ASD and their families use healthcare services most frequently when behavioural health issues remain inadequately treated and snow ball into crisis situations.

Ontario spends more than **$19 Million** per year prescribing anti-psychotic medication in an attempt to manage challenges associated with autism and intellectual disability. Sadly, these medications are seldom effective.

When individuals living with autism find themselves inappropriately placed on psychiatric inpatient units, costs can balloon to more than **$2000/day** (Ontario Ombudsman, 2016).

The Bottom Line

When it comes to treatment and support for individuals with autism spectrum disorder, financial efficiency and compassionate service means investing in scientifically-validated treatment.

Click here to see our detailed program recommendations.

Click here for our research syntheses on evidence-based practices for individuals with autism spectrum disorders.

ONTABA

Ontario Association For Behaviour Analysis