The Accessibility for Ontarians With Disabilities Act: Its Ability to Address the Needs of the Communicatively Disabled Population in Ontario, Canada

by Anna Victoria Wong

An Applied Dissertation Submitted to the Abraham S. Fischler College of Education in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

Approval Page

This applied dissertation was submitted by Anna Victoria Wong under the direction of the persons listed below. It was submitted to the Abraham S. Fischler College of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

Angela Sherman, SLPD Committee Chair

Kerrilyn Phillips, SLPD Committee Member

Kimberly Durham, PsyD Interim Dean

Statement of Original Work

I declare the following:

I have read the Code of Student Conduct and Academic Responsibility as described in the *Student Handbook* of Nova Southeastern University. This applied dissertation represents my original work, except where I have acknowledged the ideas, words, or material of other authors.

Where another author's ideas have been presented in this applied dissertation, I have acknowledged the author's ideas by citing them in the required style.

Where another author's words have been presented in this applied dissertation, I have acknowledged the author's words by using appropriate quotation devices and citations in the required style.

I have obtained permission from the author or publisher—in accordance with the required guidelines—to include any copyrighted material (e.g., tables, figures, survey instruments, large portions of text) in this applied dissertation manuscript.

Anna Victoria Wong Name

July 6, 2017 Date

Acknowledgments

Being able to influence systemic change has always been my passion. Realizing that passion is a luxury made possible and affordable by the support of others.

For the unlimited patience, support, and understanding shown by my family, I owe them much more than the financial resources expended on my academic pursuit. At the same time, I am eternally indebted to my beloved pets Miu Miu and Mung Mung. Not being able to graduate before their last day to repay the attention is my worst void in life.

I was never alone in this program because of the support of program colleagues
Krystal Simpson and Megan Thompson. Their encouragement has made the process
much more manageable. Gratitude also goes to Nixon Liu and Joyce Chan for their
insightful guidance on government auditing protocols and advice on statistical analysis.

Professor Sharon Diane Dixon was my motivator as I embarked on a second career of speech-language pathology and undertook this program. Dr. Angela Sherman and Dr. Kerrilyn Phillips provided valuable guidance to make this dissertation a success.

My late clinical mentor, Beth Woodward, was a vibrant person and a highly knowledgeable clinical field instructor to learn from. I am truly honored to have been her last intern. After I entered the profession, my late career mentor, Lena Mak, shared with me much of her clinical experience, professional wisdom, and resource connections. The profession suffers a great loss without their high caliber service and mentorship.

Above all, I wish to express my gratitude to God for empowering me with the talent to undertake this challenge, the persistence to complete the work successfully, and the wisdom to make the most out of the learning experience. May He continue to empower me to leverage these research results to influence systemic change, and to upgrade the quality of life for those affected by communicative disability.

Abstract

Accessibility of Ontarians With Disabilities Act: Its Ability to Address the Current and Emerging Needs of the Communicatively Disabled Population in Ontario, Canada. Anna Victoria Wong, 2017: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education. Keywords: communicative disability, policy evaluation, accessibility, speech-language pathology, Ontario, Canada

The Accessibility for Ontarians with Disabilities Act (AODA) was the pioneering legislation to address accessibility in Canada. Historically, policies and programs have been more focused on addressing the more visible forms of disabilities, those of mobility. Less focus has been placed on the invisible forms, such as communicative disability.

This dissertation serves to identify whether the AODA serves the target population, as per recommendations by United Nations Educational, Scientific and Cultural Organization in its *Convention on the Rights of Persons with Disabilities and Optional Protocol* and by World Health Organization in its *World Report on Disability 2011*. A formal analysis of the AODA addressed the questions listed in David Gil's social policy analysis framework (1992). Health service usage data of the population with communicative disability were compared with those of the population with mobility disabilities. The analysis demonstrated that the population with communicative disability has been significantly underserved, compared to their mobility counterparts in most health settings, and the primary reason was the lack of professional capacity in the system. More health investments are recommended to increase professional capacity in the field of speech-language pathology to increase the accessibility of services for the target population.

Table of Contents

	Page
Chapter 1: Introduction	1
Statement of the Problem	1
Program	
Purpose of the Evaluation	
Study Approach—Evaluation	
Feasibility of Evaluation	
Theoretical Definitions of Terms	6
Operative Definitions of Terms	9
Chapter 2: Literature Review	12
Theoretical/Conceptual Framework	12
The Social Background	15
Evaluation Framework	
Research Questions or Objectives	24
Results of the Study	
Suggested Result Implementation Model	27
Leveraging the Power of Coalitions	
Social Responsibility vis-à-vis Disability	30
Distributive Justice for the Disabled	
Roles of Society in Ensuring Equal Access	32
Moral Claims of the Communicatively Disabled	
Questions Regarding Professional Duties of Speech-Language Pathologists	34
Question Regarding Ethical Parameters for Speech-Language Pathologists	36
Reasons for an Advocacy Role for Speech-Language Pathologists	37
Chapter 3: Methodology	40
Program	
Evaluation Model	
Instruments	42
Procedures	45
Research Limitations	57
Chapter 4: Results	58
Addressing Research Question 1	
Addressing Research Question 2	
Addressing Research Question 3	
Summary of Results	
Chapter 5: Discussion	102
Results of Research Question 1	
Results of Research Question 2	
Results of Research Question 3	
Implications	

Limi	tatio	ons	113
Reco	Recommendations for Future Research		114
Conc	lusi	on	114
Referer	nces		119
Append	lice	s	
	A	Data Collection Types & Sources—Demographics	152
	В	Data Collection Types & Sources—Health Services Delivery and Health Outcomes related to Communicative Disability	
	C	Data Collection Types & Sources—Target Population Survey	
	D	Data Abstraction Chart—Demographics	
	E	Data Abstraction Chart—Health Service Delivery and Health Outcomes related to Communicative Disability	
	Б	•	
	F	Data Abstraction Chart—Target Population Survey	102
Tables			
	1	Logical Model	51
	2	Data Analysis Framework—Gil's Framework: Section A: The Issues Deal	
		With by the Policy	
	3	Data Analysis Framework—Gil's Framework: Section B: Objectives,	
		Value Premises, Theoretical Positions, Target Segments and Substantive	
		Effects of the Policy	55
	4	Data Analysis Framework—Gil's Framework: Section C: Implications of	
		the Policy for the Operating and Outcome Variables for Social Policies	56
	5	Disability Prevalence by Types in Canada 2006	
	6	Disability Rates by Geography and Age Groups in 2006	
	7	Disability Prevalence in 2012 in Canada Versus Ontario	
	8	Communicative Versus Mobility Disability Service Statistics in	
		2005–2006 in Ontario—90 th Percentile	81
	9	In-Home HPS—Communicative Versus Mobility Disability Service	
		Statistics in 2013–2017 Q2 in Ontario—90 th Percentile	82
	10	In-Home HPS CSS—Communicative Versus Mobility Disability Service	
		Statistics in 2013–2017 Q2 in Ontario—90 th Percentile	
	11	Hospital—Communicative Versus Mobility Disability Service Statistics in	
		2013–2017 Q2 in Ontario—90 th Percentile	83
	12	In-Home HPS—Communicative Versus Mobility Disability Service	
		Statistics in 2013–2017 Q2 in Ontario—Median	83
	13	In-Home HPS CSS—Communicative Versus Mobility Disability Service	
		Statistics in 2013–2017 Q2 in Ontario—Median	84
	14	Hospital—Communicative Versus Mobility Disability Service Statistics	
	•	in 2013–2017 Q2 in Ontario—Median	84
	15	In-Home Services Wait Times & Unit Costs—Communicative Versus	•
		Mobility Disability Service Statistics in 2013–2015 Year-End in Ontario	85
	16	Census Data Available on Communicative Versus Mobility Disability for	
		15+ Age Group in Canada and Ontario From 2006 and 2012 Census	86

17	Communicative & Mobility Disability in Total Population With Disability	
	in 15+ Age Group in Canada & Ontario in 2006 & 2012 Census Reports	88
18	Benchmark Figures for Health Service Usage Data Analysis	89
19	Analysis of In-Home HPS—Communicative Versus Mobility Disability	
	Service Statistics in 2013–2017 Q2 in Ontario—90 th Percentile	90
20	Analysis of In-Home HPS CSS—Communicative Versus Mobility	
	Disability Service Statistics in 2013–2017 Q2 in Ontario—90 th Percentile9	90
21	Analysis of Hospital—Communicative Versus Mobility Disability Service	
	Statistics in 2013–2017 Q2 in Ontario—90 th Percentile	91
22	Analysis of In-Home HPS—Communicative Versus Mobility Disability	
	Service Statistics in 2013–2017 Q2 in Ontario—Median	92
23	Analysis of In-Home HPS CSS—Communicative Versus Mobility	
	Disability Service Statistics in 2013–2017 Q2 in Ontario—Median	92
24	Analysis of Hospital—Communicative Versus Mobility Disability Service	
	Statistics in 2013–2017 Q2 in Ontario—Median	93
25	Analysis of In-Home Services Wait Times & Unit Costs—Communicative	
	Versus Mobility Disability Service Statistics in 2013–2015 Year-End in	
	Ontario	94

Chapter 1: Introduction

Protection for the disabled population in Canada is handled differently than in the United States of America (USA). Canada does not have a federal statute governing the treatment of the disabled population, unlike the USA which has the *Americans with Disabilities Act* (ADA). However, Canada has statutes at the provincial level. In addition, Canada has a publically funded healthcare system which allows for healthcare data to be publically accessible, unlike the two-tier system in the USA. By analyzing government-published health outcomes, federally published census data relating to the disabled population, and surveys of the disabled population published by service providers and advocacy agencies, results can shed light on the whether the current system meets the needs of the disabled individuals and their caregivers. This study focused on communicative types of disability.

Statement of the Problem

This dissertation analyzed the ability of the *Accessibility for Ontarians with*Disabilities Act (AODA) to address current and emerging needs of the communicatively disabled population in Ontario, Canada.

The topic. This dissertation was planned as a program evaluation of *Accessibility* for Ontarians with Disabilities Act (AODA) in Ontario, Canada, against the recommendations of United Nations Educational, Scientific and Cultural Organization (UNESCO) and World Health Organization (WHO). The AODA was also evaluated against the needs of the communicatively impaired community.

The research problem. The study project was designed because it is currently uncertain whether the new *Accessibility for Ontarians with Disabilities Act* (AODA) meets the needs of the communicatively disabled population. There has been little data to analyze as yet. This uncertainty about its fitness can be attributed to a few reasons.

First, accessibility is a recent concept on the global scale. Legislation protecting the rights of individuals with disabilities is relatively recent compared to laws protecting other human rights. While the USA has established and reinforced federal and state legislation on disabilities, Canada does not have a federal statute. Accessibility legislation exists in some provinces, such as the AODA in Ontario, however, when a need is not fully addressed for the target population provincially, individuals and organizations have to resort to the *Canadian Charter of Human Rights and Freedoms*, a federal law which was not designed for the local and current needs for protecting the accessibility rights of the disabled population.

Another reason for the uncertainty is the lack of research. Most of the research on access equality is associated with physical disabilities involving mobility, vision, or hearing. Little importance is placed on communicative disability, which is not as easy to see, and is much lower in the public awareness than physical disabilities are. No recent research has been done on the communicatively disabled population in Ontario to understand the size of the population, their needs and challenges, or their perceived quality of life. The lack of research and the overall limited level of awareness for the problem have formed a vicious cycle. The Canadian system, in line with public awareness, has allocated more resources to visible forms of disability, than to communicative disability. As a speech-language pathologist, the researcher has a role in

advocating for the rights and needs of the population she serves. Thus, an analysis of the AODA to evaluate whether it meets the needs of the population with communicative disability was essential.

Audience/stakeholders. Stakeholders involved in the research did not directly participate in the study. Instead, their input were considered via secondary research. This includes the population affected by communicative disability and their caregivers, whose demographic profile and opinion were collected via census reports and health service usage data published by different levels of the government, and user experience surveys published by advocacy groups. Another group of stakeholders includes the policy makers and advocacy bodies, who could benefit from the study by becoming more informed about the needs of the target population, to improve and update their policies and service programs accordingly.

Program

The study was designed with a goal to inform policy decision, community involvement, and advocacy groups on their future strategies. Secondary research was reviewed in the fields of disability legislation, policy analysis, and needs of the target population. Opinions of the subject matter experts and those of the target population were consulted via published survey reports. The results of this study can benefit stakeholders including policy makers, service providers, advocacy groups, and the communicatively disabled population, including their caregivers.

Professional evaluation standards. No human subjects in the target population were used for experimentation in this study. Only their responses in published census and survey documents were collected in aggregate and analyzed as part of the secondary

research for trends emerging within the target population. No new human interactions were required for this study. No privacy rights, human rights, nor quality of life were affected by the process of this study.

Purpose of the Evaluation

The purpose of this evaluation was to generate results to inform decisions regarding funding and policy development and modification. Results were also used by advocacy groups, the target population, and the main service providers to appeal for government resources and policy refinements. The main goals of the study included identification of current and emerging needs of the communicatively disabled population and their caregivers, and evaluation current policy provisions in Ontario against international guidelines on policy provisions for the target population. As strengths and weaknesses in the current policy were identified, areas of opportunities and challenges in the current policy were outlined, and recommendations were made for policy modifications to improve the quality of life for the target audience and their caregivers.

A variety of standards were used to analyze the policy. International guidelines from WHO and UNESCO were used as benchmarks to evaluate whether the AODA complies with their guiding principles. Data from secondary research (census and published surveys) and the primary research data (survey responses from subject matter experts) were used to analyze needs against provisions. These international guidelines, census data, and survey data on the needs of the target population were compared against AODA provisions. David Gil's policy analysis framework (1992), an established policy analysis theory commonly used in the health care arena, was used to evaluate the policy. Policy and practice recommendations were derived from these results.

Study Approach—Evaluation

The study is a formative evaluation with a goal to inform policy development but not to add to the current body of research. The study has a confined scope. Its results are not intended for generalization into other contexts but are only meant for the issue at hand. The study was an "outcome evaluation" based on the needs of the communicatively impaired population (Fitzpatrick, Sanders, & Worthen, 2011, p. 27). Also, the study was not designed as an analysis of the entire policy of the AODA. It was designed to analyze the provisions within the AODA that affect the needs of the target population—that with communicative impairments only, but not all groups with disabilities, and not the overall effectiveness of the policy.

The resulting report was part of the knowledge anchor for advocacy campaigns, policy commentary, or policy development. The study, therefore, took the Social Agenda/Advocacy approach as defined by Stufflebeam (2002). This approach was directed to "making a difference in society through program evaluation," ensuring that "all segments of society have equal access to educational and social opportunities and services," and having "an affirmative action bent toward giving preferential treatment through program evaluation to the disadvantaged," to serve the ultimate goal of employing "program evaluation to empower the disenfranchised" (Stufflebeam, 2002, p. 62). The study was, therefore, "concerned with involving or empowering groups who have less power in society" (Fitzpatrick, Sanders, & Worthen, 2011, p. 121).

Feasibility of Evaluation

Since this study was only involved with the analysis of published, secondary research data, the level of feasibility was high. There were, however, some anticipated

challenges and limitations. Data were limited and unavailable for a continuous period, given the fact that the target population were not a top government priority. Hence, the lack of continuity may affect trending. With limited data, the analysis was based on a small sample size, which may affect the statistical significance.

In addition, there were no suitable Canadian jurisdictions to use to compare the AODA provisions. Some comparisons had to be drawn with jurisdictions in other countries that were comparable in terms of population size, socioeconomic status, geographical size, government structure, and policy preferences. While these metropolitans have similar demographic compositions, their government and funding structures, and their historical policy preferences may be significantly different. Thus, these may be used as references but not as identical comparisons.

Theoretical Definitions of Terms

Profession of speech-language pathology. The practice of speech-language pathology is defined by The College of Audiologists and Speech-Language Pathologists of Ontario as "the assessment of speech and language functions and the treatment and prevention of speech and language dysfunctions or disorders to develop, maintain, rehabilitate or augment oral motor or communicative functions" (2016, p. 1).

Professional duties of speech-language pathologists. The national governing body of the profession of speech-language pathology—the American Speech-Language-Hearing Association (ASHA) indicated that duties for and services within the scope of speech-language pathologists (SLPs) include "prevention and pre-referral; screening; assessment/evaluation; consultation; diagnosis; treatment, intervention, and management; counseling; collaboration; documentation; and referral" (2007, p. 6).

The ASHA indicated that SLPs also have a role to be engaged in prevention and advocacy activities related to human communication and swallowing. These activities include: (a) improving communication wellness by promoting healthy lifestyle practices that can help prevent communication and swallowing disorders; (b) presenting primary prevention information to individuals and groups known to be at risk for communication disorders and other appropriate groups; (c) providing early identification and early intervention services for communication disorders; (d) advocating for individuals and families through community awareness, health literacy, education, and training programs to promote and facilitate access to full participation in communication, including the elimination of societal, cultural, and linguistic barriers; (e) advising regulatory and legislative agencies on emergency responsiveness to individuals who have communication and swallowing disorders or difficulties; (f) promoting and marketing professional services; (g) advocating at the local, state, and national levels for improved administrative and governmental policies affecting access to services for communication and swallowing; (h) advocating at the local, state, and national levels for funding for research; (i) recruiting potential SLPs into the profession; and (j) participating actively in professional organizations to contribute to best practices in the profession (2007).

Ethics of professional duty. The American Speech-Language-Hearing Association provides clear provisions in this area. Its *Principle of Ethics III* (2015) specifies that SLPs have "responsibility to the public when advocating for the unmet communication and swallowing needs of the public and shall provide accurate information involving any aspect of the professions" (p. 7). Performing technical duties

and serving the interests of the employer and/or the institution alone, therefore, does not fulfill the ethical mandate of the professional duty.

Social responsibility. The Cambridge Dictionary defines social responsibility as "the practice of producing goods and services in a way that is not harmful to society or the environment" (2016). When later applied to the for-profit sector in the late 1960s and early 1970s, the term corporate social responsibility (CSR) emerged when industrialization was booming and its negative effects on society and the environment first became evident (Ahuja, 2014). Social responsibility has recently taken on more sublime qualities, applying to not only the private sector but also the public sector.

Distributive justice. Distributive justice is a reflection of how inputs and outcomes are assessed vis-à-vis the manner resource allocation. In 1965, Adams developed a well-known model using the term "equity" to refer to proportional justice where "the ratio of outcomes to inputs for allocators within a relation were equal" (Sell & Griffith, 1993, p. 384).

Fragile population. To define the fragile population, one can use an authoritative scale called the Social Vulnerability Index (Yi, Zhang, Ge, & Zhao, 2014). A particular population was defined in the operative definitions under this category for this study.

People with Disabilities. The United Nations Convention on the Rights of Persons with Disabilities defined people with disabilities as "persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others" (2008, p. 4).

Public health. According to WHO,

Public health refers to all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases. Thus, public health was concerned with the total system and not only the eradication of a particular disease. (2016, p. 1).

WHO further defines three main public health functions: (a) the assessment and monitoring of the health of communities and populations at risk to identify health problems and priorities; (b) the formulation of public policies designed to solve identified local and national health problems and priorities.; and (c) the mandate to assure that all populations have access to appropriate and cost-effective care, including health promotion and disease prevention services (2016).

Equitable Access. The Canadian Medical Association defines equitable access as "the opportunity of patients to obtain appropriate health care services based on their perceived need for care. This necessitates consideration of not only availability of services but quality of care as well" (2013a, p. 1).

Operative Definitions of Terms

Fragile population. The fragile population identified in this paper referred to the population of the communicatively disabled. Focus group studies by Cook, Jack, Siden, Thabane, and Browne qualified this as a "medically fragile population" with "limited and divergent communication abilities" (2014, p. 9).

Communicative disability and public health. This public health mandate focuses on the development of communicative healthy populations through organized efforts designed to reduce both the risks and impact of communicative disability within populations.

Efforts in communicative disability public health address the development, implementation, and evaluation of programs and systems to achieve populations with good communicative health. Approaches that public health take to address communication needs require an understanding of the impact that social determinants have on communication skill development and that of the impact of communication skills (as a social determinant) on other social, economic and environmental outcomes.

Communicative disability public health targets whole populations or high-risk groups instead of the provision of clinical services for individuals (Wylie et al, 2014).

Ethics and advocacy role in the professional duty of speech-language pathologists. Advocacy work by health service providers is meant to benefit communities via the provision of services, public health interventions, and/or policy changes (Brown, 2013). Promoting the term "advocacy scientist," Brown pointed out that "advocacy social scientists" are scholars engaged in policy-oriented work while remaining firmly centered in rigorous theoretical and methodological studies.

Brown believed that some academic researchers remain excessively researchoriented "by eschewing practical implications, when in reality, physical and life sciences
are very often practical and applied," and that clinicians and researchers should
participate in research and advocacy for policy improvements to improve the overall
practice (2013, p. 159) which aligns with the main idea of this study—for SLPs to
participate more actively in public health planning and advocacy.

Public policy analysis. Nagel defined public policy analysis as a process to determine which of various alternative public or governmental policies would optimally achieve a given set of goals in light of the relations between the policies and the goals (2001). His definition brings out the five key elements of policy evaluation, including goals, policies and associated profess to achieve the goals, the relationship between the policies and the goals, a recommendation of the policy modifications, and an account of the required commitment for the alternative to be realized (Nagel, 2001).

Communication Access. Communication Disabilities Access Canada (CDAC) defines communication access as what those working in businesses and organizations can do so that people who have communicative disability can understand what was being verbally communicated to them; have their messages accurately understood; use different ways of communicating, including speech, gestures, writing, pointing to objects or pictures, spelling words, typing on a communication device, and assistance of a human intermediary; receive written information in ways they comprehend and can use, sign documents, take notes, and complete forms in ways that are accessible to them (2013). Communication Disabilities Access Canada further indicated that "depending on the business or service, effective communication may be required in: face-to-face interactions, over the telephone, a group setting, and a public event" (2013).

Quality of Life. World Health Organization defines quality of life as individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns (1997).

Chapter 2: Literature Review

Literature covering the models of policy analysis, the documented needs of the target population, and the legislation providing for their needs was reviewed in this study. The theories and frameworks relevant for this study are discussed. Needs of the population with communicative disability were reviewed through census data, published health indicators, and survey reports by service providers and advocacy organizations. The AODA and associated policies were analyzed against international guidelines by WHO and UNESCO, and AODA counterparts in comparable jurisdictions.

Theoretical/Conceptual Framework

There are many evaluation approaches available for policy analysis on the topic of disability. Stufflebeam's four evaluation methods (2002), Dye's policy analysis framework (1966) based on economics and politics, Simon's rational model (1957), and Gil's social policy analysis framework (1992) are a few examples of social policy evaluation frameworks. The medical model (Mauri, 2011), the social model (Mauri, 2011), and the functional model (Oliver, 1998) were a few examples of evaluation frameworks for disability.

Literature suggests that there is no single approach that suits all situations effectively, because each approach has its own strengths and limitations based on varying situations. "Often two or more approaches are combined when conducting an evaluation" (Kahan, 2008, p. 2). This study sought to deploy an authoritative analysis framework in the field of social policy, and supplement it by taking into consideration the documented needs of the target audience by taking their input into consideration, via review of census and survey data. Oliver indicated that disabled people have increasing influence in

policies (1998), which was in line with the consideration of input from the target population in this study.

An authority in the field of modern evaluation of social policies, David Gil, suggested that regardless of the variation in substance and scope, all policies are practically concerned with an underlying common domain, which can be related to financial support for those in poverty, levying of taxes, protection of marginalized groups, talent development and standards for working environment, housing provision, health care provision, education provision, crime prevention and criminal rehabilitation, consumer protection, industry regulation, commercial regulation, agricultural support, preservation of natural resources, and the like.

Providing for these social concerns, policies seek to deal with them for the human well-being in societal elements including: (a) the overall quality of life in society; (b) the circumstances of living for individuals and social groups; and (c) "the nature of intrasocietal human relations among individuals, groups, and society as a whole" (Gil, 1973–1974. p. 2). It is, therefore, important that the policy designed to address the needs of the mentioned marginalized populations focuses not only on the individual quality of life of the target audience, but also their experience within and among others in society, and the social participation and contribution resulting from these relationships and interactions.

In explaining his force field concept, Gil suggested that the "process of resource development, status collection, and rights distribution are themselves subject to the influences of certain natural and societal forces" (Gil, 1973–1974, p. 4), in ways that are more than linear, but in "multiple and circular" ways (Gil, 1973–1974, p. 6). Gil also suggested that the two most fundamental concepts in social policy development are "life-

sustaining" and "life-enhancing," and that the enablers around it include allocation of human and financial resources, distribution of rights, entitlements, and rewards (Gil, 1973–1974). In 1992, Gil published an updated version of the social policy analysis framework (1992), which was chosen as the basis of the evaluation in this study. Other international benchmarks by worldwide authorities including WHO and UNESCO are also taken into account in this analysis.

One of the approaches to policy evaluation is theory-based evaluation, which is not a specific method or technique. Instead it is a conceptual analytical model, a way of structuring and undertaking analysis in an evaluation. A primary theory in this domain, the theory of change, is as a logical model that is qualified by the "causal linkages between outputs and the different levels of outcome" (Treasury Board of Canada Secretariat, 2012, p. 2). This type of policy evaluation is guided by the logical relationships among all the parts. This type of analysis framework seeks to encourage a greater understanding of the fundamental mechanisms of the program/policy, decrease the chance of negative results, and increase dialogue among different stakeholder groups to clarify underlying assumptions. This type of analysis framework requires upfront reflection time to identify underlying theories and links between processes, activities and outcomes. Limitations of this model include the potential that it may not capture all important aspects of a program or policy, may lead to diversion or promote antagonism, and may be more quantitatively oriented versus qualitatively oriented (Kahan, 2008).

Walt and Gilson suggested that policy analysis draws on concepts from multiple disciplines including economics, political science, sociology, public administration and history, and subsequently policy analysis emerged as a sub-discipline in the late 1960s in

the USA (1994). Therefore, policy evaluation should be conducted with an adequate level of macro vision to have a comprehensive view of all the external and internal influencers that affect the development and results of the policy. Some researchers comment that a good portion of health policies erroneously focus solely "on the *content* of the reform, and neglects the *actors* involved in policy reform (at the international, national and subnational levels), the *processes* contingent on developing and implementing change, and the *context* within which policy is developed" (Walt & Gilson, 1994, p. 354).

The Social Background

Historical Perspective and Current Context. Policy analysis and advocacy in North America did not happen and take shape overnight. Initially, a high level of activism was present in the United States in the 1980s in support of the proposed *ADA* (Kerzner & Baker, 1999). *ADA* soon after became law in 1990.

Meanwhile, in Canada, the Council of Canadians with Disabilities invited a group of subject matter experts and relevant community leaders for a meeting in Winnipeg to discuss the relevance of the *ADA* model to Canada. The decision at that time was to pursue omnibus legislation to amend a variety of statutes with the sole goal of bettering the social conditions of people with disabilities. Two recurring themes were identified during the discussion (Kerzner & Baker, 1999). The first was that Canada, unlike the United States, already had comprehensive barrier-removal legislation, suggesting that the emphasis should be placed on access to justice and effective enforcement rather than on the enactment of new legislation. The second theme was the assumption that pursuing a Canadian version of the *ADA* would require the subordination or even abandonment of

long-held goals including Canada's cornerstone statute, the *Canadian Charter of Rights* and *Freedoms*, to focus on one piece of barrier-removal legislation.

While the Canadian Disability Rights Council (CDRC) assumed leadership of the omnibus legislation and facilitated a conceptually strong and consensual process, the resulting legislation enacted by the government turned out to be insubstantial. Faced with public inquiries and concerns, the federal government of Canada made non-specific promises for further rounds of omnibus legislation. "The sense of disappointment within the community, the disappearance of CDRC, together with a change in governments meant the goal of enacting further omnibus legislation is no longer being actively discussed" (Kerzner & Baker, 1999, p. 2).

While different nations are attuning to the need for disability legislation, disability has become one of the main health topics at the international level. The latest authoritative study on disability was the *World Report on Disability 2011* published by WHO. The United Nations also has its milestone directive from the Convention on the Rights of Persons with Disabilities and Optional Protocol (2008). These cornerstone documents have become the blueprints for most jurisdictions to design and implement their policies and procedures relating to the issue of disability.

One of the most recent legislative changes in Canada was the enactment of the *Accessibility for Ontarians with Disabilities Act* (AODA) in 2005. Since then, the provincial government has issued a series of operation plans for its ministries and industry guidelines for the community to follow. These include the annual accessibility plans for the Ministry of Citizenship and Immigration (2013), Ministry of Community and Social Services (2014), Ministry of Economic Development, Employment and

Infrastructure (2014), Ministry of Economic Development, Trade and Employment (2014). Ministry of Finance (2013), Ministry of Health and Long-Term Care (2013b), and Ministry of the Environment (2013).

The Social Problem. In 2012, out of a surveyed population of 27,516,200 individuals in Canada aged 15 and up, 3,775,910 identified themselves as disabled, while 1,651,620 individuals out of the 10,727,900 individuals aged 15 and up surveyed in the province of Ontario were disabled. This represented a 13.7% of prevalence of disability of ages 15 and up in Canada, and 15.4% in Ontario in 2012. (Statistics Canada, 2014).

According to a report by Human Resources and Skills Development Canada (HRDC)—Disability in Canada: A 2006 Profile, 54,130 disabled boys aged 5 to 14 in Canada had a communicative disability, while 24,100 disabled girls of the same age did in 2006 (2011).

In the same year, 17,270 young men aged 15 to 19 had a communicative disability versus 11,090 female counterparts (HRDC, 2011). Within this population and age range, 87.7% of these disabled youth remained in elementary school or high school, compared to 75.9% of their abled counterparts. More youth who were abled had moved on to post-secondary education at the age. Only 12.3% of these disabled youth attended trade school, college, university of other post-secondary institutions, compared to 24.1% of their abled counterparts (HRDC, 2011). At the same time, 25.9% of male disabled youth in this age group were unemployed, compared to only 13.8% of their abled counterparts. On the other hand, 47.1% of these disabled female youth were employed, compared to the 52.4% of their abled counterparts (HRDC, 2011).

Reports also showed that, in the age group of 20 to 24, 13,500 disabled men had a communicative disability, while 10,760 disabled women had a communicative disability (HRDC, 2011). Within this age group, 57.3% of the disabled young adults had no school attendance, compared to 48.2% of their abled counterparts (HRDC, 2011, p. 21). Only 15.2% of the disabled individuals in this age attended university, compared to 26.3% of their abled counterparts (HRDC, 2011).

In the age group of 15 to 24, 39.7% indicated that their condition prevented them from participating in social activities, while only 3.9% indicated that they required specialized aids or equipment to do so (HRDC, 2011). This indicates that the biggest factor against social participation was not the need for specialized equipment.

In the working population aged 25 to 54, the report indicated that 99,150 disabled men and 103,870 disabled female had a communicative disability (HRDC, 2011). In this age group, the average annual income for disabled men was \$39,245, compared to \$52,865 of their abled counterparts; whereas that of disabled women was \$25,678, compared to \$34,305 of their abled counterparts (HRDC, 2011). In the more mature working population aged 55 to 64, 43,390 disabled males self-identified with a communicative disability, and 37,320 disabled females did (HRDC, 2011). In the retired population aged 65 to 74, 29,520 disabled men indicated a communicative disability, while 20,150 disabled women did (HRDC, 2011). In the senior population aged 75 and over, 45,490 disabled men and 48,230 disabled women indicated a communicative disability (HRDC, 2011). These results indicated a total of 302,450 males and 255,520 females suffered from a communicative disability across all age groups in Canada in 2006, totaling 557,970 individuals across all genders. This population size was not one to

ignore. This could partially explain the fact that, although 73.9% of individuals with disabilities across Canada receive some form of caregiving, 30.6% of individuals with disabilities still indicated that they had unmet caregiving needs (HRDC, 2011). Such phenomena are not restricted to the national level.

In Ontario, 15.5% of the population reported that they had from some form of disability, representing a breakdown of 3.8% disability rate in the age group of 0–14, 18.1% for ages 15 and over, 12.6% for 15–64, and 47.2% for 65 and over (HRDC, 2011). Although 70.7% of all individuals with disabilities reported that they had received some type of caregiving, 32.45% of all individuals with disabilities indicated that they still had unmet caregiving needs (HRDC, 2011).

Despite these statistics, the Canadian government frequently screens for disabling conditions using only 10 types of disabilities, including seeing, hearing, mobility, flexibility, dexterity, pain, learning, developmental, mental/psychological, and memory (Statistics Canada, 2014). As shown in this list, communicative disability was not a standing criterion of the commonly surveyed type of disability. This risks that there will be a diminishing influence for inclusion of communicative disability in public policy. Due to the lack of representation of communicative disability in government data collection, further analysis on the current disability policies and provisions are, therefore, necessary to ensure that they address the needs of individuals with communicative disability.

Research showed a significant increase of burden and depression of their caregivers for individuals with communicative disability (Gauthier et al., 2007). This indicated that caregiving of loved ones without a voice presents significant challenges

and stress on the caregivers. It was therefore important for policies to account for the needs of caregivers of individuals with communication disabilities.

Apart from psychological stress, caregivers are also subject to financial stress due to their caregiving responsibilities, which take their time and energy away from their employment. As reported by Statistics Canada (2013), 8 million Canadians, equivalent to 28% of the population, provided care to family members or friends with a long-term health condition, a disability, or problems associated with aging in 2012. These caregivers spent at least two hours each week on caregiving. 38% of caregivers of children, 34% of caregivers of spouse, and 21% caregivers of parents reported depression, some of whom also had more health and psychological problems, mainly because of the intensity of care provided.

Over 20% of caregivers reported having experienced financial difficulties resulting from their caregiving responsibilities. In 2012, 30% of caregivers of children, 14% of caregivers of spouses, and 5% of caregivers of parents received government financial assistance. Despite the government assistance, 52% of caregivers of children, 42% of caregivers of spouses, and 28% of caregivers of parents would have liked more help than they received.

The lost employment hours and sub-optimal contribution to the labor market translate into economic losses and inefficient use of labor talents for the society. As reported by the Government of Canada in 2015, 35% of employees in Canadians were providing informal care to a family member or friend at the time of study, translating into a \$1.3 billion loss in workforce productivity due to caregiving commitments. The number of seniors requiring care was projected to double between 2012 and 2013. The report also

showed that caregiving at home affects 35% of the Canadian workforce (Employment and Social Development Canada, 2013).

Employers suffer from lost working hours and/or loss of talent from their optimal roles. Families suffer from high stress load and decreased household income. These phenomena all negatively affected the country's economy, especially since heath care became a major government expenditure, at 50.8%, as compared to the 25.2% in education—the second largest expenditure in Ontario in 2015–2016 (Toronto Star, 2015).

The results of this study could shed light on the current successes and opportunities for improvement of policy makers. Results can also benefit the public and the SLP community by identifying strengths and weaknesses of current system. The objective results and new information from this study could help identify the direction of SLP involvement in policy formulation and in public health. Results could lead to an ultimate increase in service provision for the public, improved care quality by SLPs, more and better ways to address previously unmet needs of individuals with communication disabilities, and an improved quality of life for all.

Attempted Solutions. The AODA outlines requirements for stipulations that organizations must create, provide, and receive information and communications in ways that are accessible for people with disabilities (MCSS, 2014). Before the AODA was enacted, the *Ontario Human Rights Code* was in place and requires organizations to accommodate people with disabilities to the point of undue hardship. After the enactment of the AODA, the Integrated Accessibility Standards Regulation does not replace or affect legal rights or obligations that arise under the *Ontario Human Rights Code* and other laws relating to the accommodation of people with disabilities. "This means that the

Ontario Human Rights Code or other applicable legislation may require additional accommodation measures that go beyond or are different from the standards established by the regulations of the AODA" (MCSS, 2014, p. 29).

The AODA intends that all organizations, upon request for accessible information, first consult with the user to determine the most appropriate communication format, and then provide information and communicate to the user according to the identified accessible manner about their goods, services or facilities for people with disabilities.

This information must be provided in a timely manner and at a cost that is no more than the regular price charged to others (MCSS, 2014). The AODA prescribes a list of accessible formats and communication supports, including accessible electronic formats such as HTML and MS Word; Braille; accessible audio formats; large print; text transcripts of visual and audio information; reading the written information aloud to the person directly; exchanging hand-written notes (or providing a note taker or communication assistant); captioning or audio description; assistive listening systems; augmentative and alternative communication methods and strategies such as the use of letter, word or picture boards, and devices that speak out messages; sign language interpretation and intervener services; repeating, clarifying, or restating information (MCSS, 2014).

Nonetheless, in the *World Report on Disability 2011*, WHO indicated that communication support was one of a few common areas of unmet need on the global scale. Lack of support by trained professionals as intermediaries, such as sign language interpreters, was prevalent in many countries, and was even worse in rural areas (WHO,

2011b). This lack of support may lead to unplanned, negative consequences for those with communicative disability, which were less common than vision and hearing loss, to have access to even less communication support.

In terms of Web communication, the universal standard to adopt the Web Content Accessibility Guidelines (WCAG) 2.0 (2008), which covers a wide range of recommendations for making Web content more accessible to individuals with disabilities, including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity, and combinations of these ("WCAG," 2008). Since WCAG 2.0 standards are evolving as per industry needs, this study does not focus on Web communications, but rather, on provisions for print and in-person communications for communicative disability.

International Guidelines. According to WHO, implementing policy and process recommendations requires involving different sectors, including health, education, social protection, labor, transport, housing, and other important players, including all levels of government, community organizations, professionals, the corporate sector, and individuals with disabilities and their families (2011b). Based on the understanding that multi-disciplinary stakeholders were involved in any change, any proposed strategies should involve multiple stakeholder groups for comprehensive engagement, and via communication opportunities to ensure ongoing dialogue and buy-in.

Evaluation Framework

The program evaluation entailed analyzing the AODA for its ability to address the needs of the communicatively disabled population using the research questions in David Gil's social policy analysis framework (1992). Other recommendations and principles by

international authorities collected from literature review, as well as documented opinion by subject matter experts were also considered in the analysis.

Research Questions or Objectives

This program evaluation was designed to answer following research questions:

Research Question 1. Does the AODA take the communicatively disabled population into consideration by policy design?

Research Question 2. Does the AODA meet the service needs of the communicatively disabled population and their caregivers in practice, by providing equitable access to the communicatively disabled population as well as it does to populations of mobility disabilities, which are more visible?

Research Question 3. What options would address the gaps identified?

These research questions are adapted from the *Disability and Inclusion Based*Policy Analysis by the Institute of Research and Development on Inclusion and Society

(2012). To conduct a policy analysis of the AODA, the established policy analysis

framework outlined by David Gil in his published book entitled *Unravelling social*policy: Theory, analysis, and political action towards social equality (1992) was used,
which is an updated version of his policy analysis framework originally published in

1973–1974.

This framework was selected because it was an established framework that was commonly used to evaluate social policy. A relevant example was the study by Shanita Hankins entitled "A Policy Analysis of the Americans with Disability Act of 1990"

published in 2010. The evaluation criteria prescribed in Gil's framework are outlined below:

Section A: The Issues Dealt with by the Policy.

- 1. Nature, scope, and distribution of the issues.
- 2. Causal theory(ies) or hypothesis(es) concerning the dynamics of the issues.

Section B: Objectives, Value Premises, Theoretical Positions, Target Segments and Substantive Effects of the Policy.

- 1. Policy objectives: Overt objectives and covert objectives.
- 2. Value premises and ideological orientation underlying the policy objectives: Explicit and implicit value premises.
- 3. Theory(ies) or hypothesis(es) underlying the strategy and the substantive provisions of the policy.
- 4. Target segment(s) of society—those at whom the policy is aimed.
 - a. Ecological, demographic, biological, psychological, social, economic, political, and cultural characteristics
 - b. Size of relevant subgroups and of entire target segment(s) projected over time.
- 5. Short/long-range effects of the policy on target and non-target segment(s) in ecological, demographic, biological, psychological, social, economic, political and cultural spheres:
 - a. Intended effects and extent of attainment of policy objectives.
 - b. Unintended effects

c. Overall cost and benefits

Section C: Implications of the Policy for the Operating and Outcome Variables for Social Policies.

- 1. Change concerning reproduction, socialization, and social control
- 2. Consequences and social control of changes concerning resources, work and production, rights, governance and legitimation and reproduction, socialization, and social control for:
 - a. Circumstances of living of individual, groups and classes.
 - b. Power of individual, groups and classes.
 - Nature and quality of human relations among individuals, groups and classes.
 - d. Overall quality of life. (Gil, 1992, pp. 33–36).

Results of the Study

Guided by David Gil's social policy analysis framework (1992), with census and service data mining, and benchmarking against WHO and UNESCO policy guidelines, the AODA was analyzed for its design and ability to meet the service needs of the communicatively disabled population and their caregivers in practice, as opposed to Ontarians with other types of disabilities. Gaps in the AODA were identified (if any), and recommendations were made to address the identified gaps. Justifications were provided for the proposed change, and the impact on the target population was outlined.

Suggested Result Implementation Model

The results of this study can inform decision-making in health and accessibility policy design. A resulting multi-pronged advocacy strategy is outlined herein.

First, the advocacy body, in this case, the Ontario Association of Speech-Language Pathologists and Audiologists (OSLA), should identify their advocacy goals based on health outcomes and documented user experience, as well as the results of the study, if any, and translate and articulate them into concrete changes in their disability policies and/or professional scope of practice. The advocacy body should then present any proposed changes to the government body of the profession, in this case, College of Audiologists and Speech-Language Pathologists of Ontario (CASLPO) for explicit endorsement. Based on the identified scope and areas of change, OSLA should compile a list of politicians, health critics, and social advocates to approach, as well as a network of like-minded organizations from which to rally support.

Second, to maximize the influence of public opinion on political decisions, stories should come from the user community through the press. If study results show a deficiency in policy provisions, the advocacy body may collect touching stories (tragedies or near misses) through front-line practitioners from their clientele, and, with proper consent, pitch those stories to the media.

OSLA can provide subject matter expert opinion by using SLPs as spokespeople.

OSLA can also rally public and professional support by authoring Letters to the Editors and calling into live radio and television shows to increase the strength and the duration of public opinion. During this process, OSLA, as an advocacy body, should contact existing and former government contacts within its network to plant the thought in the

provincial government and to solicit endorsement from key players in in health policy decisions.

Third, OSLA may also want to start a public petition by following the format of the provincial government, online and in print, to build up the strength of the public request. This would help raise public awareness and strengthen community buy-in.

At the same time, OSLA should enlist support from like-minded organizations.

Together as a consolidated group, OSLA should spearhead an advocacy movement with the provincial government—the level responsible for healthcare funding in this jurisdiction. OSLA should then assemble a team to meet with identified politicians, health critic and policy advisers.

The next milestone would be to meet with politicians. The team to meet with politicians should consist of the Board Chair of OSLA, key practitioners in this membership and within the constituency of the politician to meet, a representative of a local organization that has expressed support for the cause, and a user whose quality of life has been negatively affected by the unmet need in question.

While asking for meetings with politicians, OSLA should also prepare briefing materials. The materials should indicate whom within the government OSLA has approached, and the level of endorsement received from each supporting individual. The package should include, for the advocating members, the names, photos, portfolio and past activities of the politicians that they are meeting with. During the meeting, previous support within the government and in the community should be outlined, alongside the powerful and unmet need within the community. The solution should be followed by articulating the proposed changes. Other jurisdictions within similar practices could serve

as good supporting points. The team should also include a briefing note and supplementary information to leave with the politician for follow up. Information should include quantitative information on improvement of quality of care and quality of life, the size of population affected, as well as the estimated budget versus projected savings and/or return-on-investment.

In terms of timing, the months leading up to provincial election serves as a good window for discussion with politicians, candidates and the media. Straight after a crisis or tragedy would also be an excellent opportunity to advocate for systemic changes, but that window is unpredictable.

After meetings with politicians, responses to the public petition should be announced formally by OSLA, along with the efforts that OSLA has made to advance that agenda. An update on the government's response is also in order. This kind of feedback communication can feed into cycle of public opinion and political influence.

Leveraging the Power of Coalitions

Apart from enlisting support from like-minded community health organizations, OSLA can also reach out to the membership and clientele of these organizations by participating in their communication opportunities, such as by delivering seminars related to the topic. In return, OSLA should provide interaction opportunities with its members to these supporting organizations. The aggregate clientele and membership of all organizations form a very strong voice in the public to influence policy.

Apart from OSLA membership and clientele, the consolidated team of organizations supporting this cause can also come up with end-user stories that cover the range of interdisciplinary needs that are served by the listed organizations, to pitch to the

media to prolong the life cycle of public opinion on this topic. The government connections of the supporting organizations can also be leveraged for communication with politicians. These connections can be instrumental in providing access to the right policy developers and decision makers in question.

Social Responsibility vis-à-vis Disability

Apart from government engagement and advocacy involvement by the community and service providers, opinion of the public over the importance of this issue is also critical for the success of the movement to improve accessibility for the population affected by communicative disability. This paper first attempts to understand whether society has a moral obligation to serve the disabled. John Harris suggested that "it may be morally wrong to 'choose' to bring to birth an individual with any impairment, however slight, if a healthy individual could be brought to birth instead" (Bennett & Harris, 2002, p. 325). However, this claim was later refuted.

As Harris claimed that people have moral obligation to choose nondisabled future lives over disabled but worthwhile future lives, he was effectively conferring a lower moral value on disabled lives. Since he was passionately committed to the notion and strongly upholds the principle of moral, social, and political equality for all persons, this judgment was not acceptable to his own value system (Bennett, 2014). Therefore, his claim that society had a moral obligation to eradicate disability was refuted in this regard. Other moral obligations are discussed in later sections.

Distributive Justice for the Disabled

The discussion on the matter of justice starts at the federal level based on the

Canadian Charter of Rights and Freedoms. The fundamental principle that individuals are born to inherent rights and freedoms has been longstanding in Canada thanks to this statute (Gostin, 2001). However, recognizing these rights under international law is a relatively new notion. This change effectively holds governments accountable for violations (Gostin, 2001). Another fundamental principle is that human rights do not rely on government beneficence, that is, they are neither granted nor denied by governments (Gostin, 2001). People have rights merely because of their membership within humanity. As part of humanity, individuals with disabilities do not need to prove that they deserve certain rights or that they can be trusted to exercise them in socially and culturally acceptable ways (Gostin, 2001).

Echoing these principles is the international authority on human rights and justice of equity. At the World Conference on Human Rights in 1993, the Vienna Declaration states that all human rights are universal, indivisible, interdependent, and interrelated (United Nations Human Rights Office of the High Commissioner, 1993). It is, therefore, critical to understand that human rights do not refer only to civil and political rights, because "without minimal levels of social and economic status, including ... health, people cannot exercise their civil and political rights. If government had no obligation to satisfy basic ... needs, ... other rights would become meaningless for a portion of the population" (Gostin, 2001, p. 270).

Also on the matter of justice, the main constituents of distributive justice include the principle of equality, that everyone deserves to be equal; the principle of merit, that everyone is qualified by their merits; and the principle of need, that everyone is provided for according to their individual needs, according to Kiljis (2014).

The application of distributive justice has evolved. In the past few decades, the world has seen a stronger focus on empowerment, which refers specifically to the redistribution of power in favor of less influential individuals (Kiljis 2014), as seen in the more complex social policy development processes. "There has been a distinct and strong linkage between empowerment and the ideology of social justice and civil rights. …

People cannot 'be empowered' by others; they can only empower themselves by acquiring more of power's different forms," indicated Engebretsen and Heggen, who further suggested that external agents have a role to play to catalyze, facilitate or accompany the community in acquiring power (2015, p. 116).

Roles of Society in Ensuring Equal Access

The United Nations (UN) also endorsed the *catalyst* and *facilitation* roles of external agents, including government agencies and other entities within society. The international body called for agency-wide commitment in 2004 to internalise United Nations Global Impact within the UN itself. Subsequently, the UN has established working groups on the main areas for facilitation, including procurement, human resources, investment management and organisational integrity (Van der Lugt, 2007).

The UN further defined the types and levels commitment for the *catalyst* and *facilitation* roles governing bodies need to play. These include (a) developing and sharing key policy instruments that governing bodies need in order to facilitate social responsibility to ensure distributive justice; (b) developing informational or endorsing instruments, including, but not limited to, campaigns, guidelines, trainings, labels; (c) developing partnering instruments, including, but not limited to, agreements, networks, social dialogues, and public-private partnerships; (d) developing financial or economic

instruments such as subsidies, grants, prices/awards as incentives and start-up assistance for compliance by non-government entities in society; (e) developing legal instruments, including, but not limited to, laws, regulations, decrees; (f) developing *hybrid instruments*, including, but not limited to, strategies, action plans, best practice guidelines, Centre of Excellence models, as well as platforms and centers which employ varying combinations of the established instruments mentioned (Steurer & Berger, 2007).

Moral Claims of the Communicatively Disabled

The second question this paper attempts to answer is whether the population of the communicatively disabled has any moral claims on the rest of society. As summarized by Wasserman, Asch, Blustein, and Putnam, *moral considerability*, according to utilitarian philosophers, is (a) continuous because it varies in strength, character, and number of its interests among individuals; and (b) asymmetrical as an individual might have moral claims on others without others having moral claims on it (2013). These authors, however, also summarized the point of view of non-utilitarian philosophers, who believe moral status is sometimes regarded as symmetrical—the fact that an individual must be able to have moral claims made on him/herself to qualify to make moral claims on others. This moral symmetry would render it impossible for the disabled and child populations to have moral claims on others because of their lack of ability to fulfil moral claims against themselves (Wasserman, Asch, Blustein, & Putnam, 2013).

The utilitarian model of moral symmetry would deprive infants, children, and the cognitively disabled from being protected. This model does comply with the legal system and is impractical for social application. Alternatively, as per utilitarian philosophers, the

disabled population, just as infants and children, have unilateral moral claims on the rest of society.

In terms of the types of moral claims the population with communicative disability have on the rest of society, the main types of moral claims are related to the primary needs of mankind (Shapiro, 1991), examples include the rights to be adequately nourished, clothed, and sheltered. There are, nonetheless, other types of moral claims that are beyond primary needs. These include the rights to safety, the rights to productively participate in the workplace (Shapiro, 1991), as well as the rights to be excluded, to varying degrees, from the standard requirements for moral powers to comply with social norms due to the lack of ability to comply (Badano, 2013).

Questions Regarding Professional Duties of Speech-Language Pathologists

Within professional duty, one of the common question is where the boundary is while the clinician is advocating for patients and their families. Citing Frank (2002), Sherratt and Hersh suggested that boundaries in clinician-client relationships may be fluid and dynamic (2010). Citing Austin *et al* (2006), the authors further suggested that each clinician-client encounter could be arguable to change the clinician's individual sense of boundary, and therefore ethical practice refers to a process of continual learning (Sherratt & Hersh, 2010). This implies that clinicians are required to constantly and actively make judgements about where to draw lines.

One way that the authors suggested to define unethical boundary crossing is that, while some boundary crossings are not harmful and may have therapeutic benefits, they are quite different from boundary violations which are clearly harmful and exploitative.

They also warned that boundary crossings can be precursors to violations (Sherratt & Hersh, 2010).

Another example can be prolonged relationship between SLPs and participants in aphasia groups. "Members with aphasia often drift in and out of groups depending on their needs and circumstances so that friendships and acquaintances are made and broken. Despite these considerations, groups often do see close bonds form, particularly when members have attended for years. There is broad recognition that remaining within professional boundaries is considered difficult in prolonged or long-term relationships" (Sherratt & Hersh, 2010, p.157). It is also not unusual for both clinicians and clients to have dual or multiple roles within these relationships. For instance, a clinician may be conversation partner, group facilitator and therapist or blend different aspects of professional relationships such as therapist and supporter of social integration" (Sherratt & Hersh, 2010).

Another question of professional duty is around SLP's role of advocacy. Advocacy refers to being called to stand beside (Cross, 1996). The notions of this term, however, differ vastly among healthcare providers (Stone, 1999). In their research, Lennox, Taylor, Rey-Conde, Bain, Boyle, and Purdie defined *health advocacy* as "the process of engendering advocacy skills in all those involved in medical situations with people with intellectual disability, particularly the person themselves" (2004, p. 168).

If such is the case, in clinical cases where the person is cognitively incompetent, the clinician needs to be working beyond the patient to working with the family.

Relationship with the family has been an area of ethical concern. It is hard to draw the line over how much the clinician should involve the family versus the client.

As reported in a study by Kenny, Lincolin, and Balandin, experienced SLPs reported that that their duties toward clients and caregivers were generally based on the rights of clients to participate in informed health care decisions, which is essential for resolving ethical dilemmas (2010). "The perception of the health care client as an autonomous decision maker shifted SLPs' duties from facilitating safety to facilitating informed choice and then advocating for that informed choice within the health care team" (Kenny, Lincoln, & Balandin, 2010, p. 125–126). In their study, while the participants were concerned when client choices resulted in significant health consequences, they nonetheless, readily engaged in collaborative client partnerships, educating clients and caregivers with their knowledge and insight to for sharing decision making (Kenny, Lincoln, & Balandin, 2010).

Question Regarding Ethical Parameters for Speech-Language Pathologists

One common question regarding the ethical parameters of professional duty of SLPs is how to balance the need of the employer to increase billing while serving clients with quality and required care, and giving needy clients equal opportunity to access care. Weinstein and Nesbitt suggested that "an institution may pressure the health care practitioner to act reflexively by responding to the pressures of the moment with little thought or personal judgment" (2007, p. 113). As such, this process forms an internal conflict of decision making where "the health care provider may feel torn between the correct behavior as dictated by the code of ethics and employer expectations or personal

expediency" (Weinstein & Nesbitt, 2007, p. 113). This, essentially, is the role of economics in healthcare.

In a study by Kenny, Lincoln, and Balandin, participants who are SLPs reported using two main strategies to manage caseloads within existing resources. The first one involved distributing services equally across their caseload by assigning each client a predetermined number of intervention sessions (2010). The second one involved weighing treatment priorities based on anticipated benefit from receiving intervention and risks from withholding services (Kenny, Lincoln, & Balandin, 2010). In any case, the lack of resources and the high caseload among SLPs has shifted the focus of care from prevention to acute care and crisis intervention.

Reasons for an Advocacy Role for Speech-Language Pathologists

A potentially confusing area is whether or not to prescribe NPO (*non para oral*, i.e., nothing to eat or drink by mouth) for patients with swallowing disorders to avoid causing aspiration pneumonia. In patients with advanced dementia, research has indicated that using tube feeding to supply nutrition does not prolong life (Volicer, 2005). The clinical decision becomes a quality of life issue: whether to minimize the risks of aspiration pneumonia through prescribing NPO or to afford such patients a higher quality of life through allowing them to enjoy a meal with family.

Clinical decisions in such cases involve judgments related to technical risk prevention and management, quality of life, and advocacy, as shown in the Scope of Practice of SLPs (2007). In patients with advanced dementia, the need for risk prevention and management conflicts with the need for higher quality of life during the end of life.

Understanding professional duties does not solve this problem. The clinician often cannot know the wishes of these patients, but often resorts to the family for an opinion.

Following ethical boundaries to prescribe no food does not work either. If there is no designated substitute decision maker (SDM) for the patient, the clinician has no legal grounds to assume that the patient would rather enjoy food by mouth than prevent risks of aspiration pneumonia. Therefore, the clinician has no grounds upon which to prescribe against dietary and feeding restrictions to provide a higher quality of life for a patient suffering from dementia during the end of life.

This is but one example of the dilemmas that SLPs face in their daily practice.

There are many more cases that all healthcare professionals see every day. Cases like this one may put the clinician at risk for violating professional and/or ethical conducts, and may compromise the patient's health and/or quality of life.

As a proactive measure, it would be best for the SLP to be part of the care team that work with the interdisciplinary team and the family. Advanced care directives and SDMs should be authorized in advance. When the clinician is caught in the situation, the best is to talk to the family to assign an SDM. Failing to identify family, the clinician is better off stating that the patient has advanced dementia and chronic aspiration pneumonia, and that patient is expected to continue suffering from aspiration pneumonia if nutrition is consumed by mouth.

In the long term, SLPs can advocate for policy refinement in end-of-life care for patients with speech-language pathology and for mandated advanced care directives and SDMs for every individual, which can be updated on every renewal of identification

documents and at every point of care, providing the patient is mentally competent. This would rule out situations like the aforementioned, not only for SLPs, but for all healthcare professionals. Patients and families would be even more educated on these needs and associated risks. Advanced Care Planning and assignment of SDM would no longer be the job of the intake worker alone. This testifies to the need for SLPs to be involved in public health, in order to influence policy planning and funding decisions through assessment and monitoring community health, formulation of public policies accordingly, and ensure fair access care, including health promotion and disease prevention services (WHO, 2016).

Results of this study could provide evidence of areas of improvement within the existing system, where SLPs can play an active role in explaining the areas of deficit and in formulating a proposal for an improved model. This implies the SLPs have an advocacy role in policy making for the benefit of their patients, aside from their client-facing clinical role.

Chapter 3: Methodology

Program

This policy study evaluated the statute *Accessibility for Ontarians with*Disabilities Act (AODA) for its ability to address accessibility for adults with

communicative disability. With the lack of a federal statute addressing accessibility for

people with disabilities, AODA was the only government framework for provincial and
municipal government agencies and businesses to follow for compliance in facilitating

accessibility for people residing in Ontario with disabilities. First introduced in 2005,

AODA has gone through multiple amendments to its latest version from April 19, 2016,

and was designed to mandate compliance in stages, leading to a fully accessible Ontario

in 2025. Formal accessibility plans have been rolled in various Ontario ministries to

comply with the Act and to serve as role models for other organizations.

This study evaluated the design and practical provisions of AODA, and whether these components are addressing the accessibility needs of Ontarians with communicative disability. The study provides recommendations on the main gaps identified, if any, to improve the quality of access for Ontarians with communicative disability. Comparisons against other metropolitans with a similar diversity and population composition were used wherever necessary. This chapter describes the methodology of the study.

Participants. The target population for this study included those affected by communicative disability whose data were reflected in recently published census reports, health service usage data, user opinion, surveys and advocacy reports from year 2005–2016 in Toronto, Ontario, and Canada. Specific types of reports, their sources, and the types of information sought are listed in the Data Abstraction Charts in Appendices D to

F. Participants' information were accessed through secondary research. Another group of participants was the subject matter experts. These included disability policy makers and advisers, advocacy groups representing the target population, as well researchers and service providers for the target population. Their input was reflected via service delivery reports, position papers, and advocacy surveys.

Evaluation Model

A causal design was based on the question of whether X program or policy cause Y outcomes (Fitzpatrick, Sanders, & Worthen, 2011). This evaluation sought to address the question of whether the existing AODA and related policies are addressing the needs of the communicatively disabled population in Ontario, Canada. As such, this study adopted the causal design. This causal model was implemented via analysis of the existing provisions of AODA and its related policies as cause. The cause was then compared with the international standards outlined by WHO and UNESCO. Outcomes were analyzed against the recent census and survey data showing the needs of the target population as effects. David Gil's Social Policy Analysis Framework (1992) was used.

In addition to Gil's 1992 model, authoritative international frameworks and guidelines were also used. These included UNESCO's Convention on the Rights of Persons with Disabilities and Optional Protocol (2008) and WHO's World Report on Disability 2011.

The overall policy analysis framework used was David Gil's Social Policy

Analysis Framework (1992). The developer of this framework, David Gil is the Professor

Emeritus of Social Policy at Brandeis University. His policy analysis frameworks

originated in 1970, and have undergone various updates and refinements to date (Gil,

1920, 1973–1974, & 1992). His Social Policy Analysis Framework published in 1992 is the latest version that has garnered attention and adoption in the field (Gil, 1992). This instrument was used because it was an established policy analysis model for social and health policies, such as in the policy "Analysis of the Americans with Disability Act of 1990" by Hankins in 2010 (Hankins, 2010). Gil's 1992 framework was also a pertinent one to use as it provided the "necessary tools to view a social policy critically, while simultaneously allowing a comprehensive understanding of development" (Hankins, 2010, p. 23).

Instruments

The study used data routinely collected by all three levels of government—
municipal, provincial, and federal. These three levels of government are owners of their
respective websites where their managed databases are housed. The types of databases
accessed were dependent on the type of data required. The websites of Statistics Canada,
the Government of Canada, the Government of Ontario, and the City of Toronto were
used for census and disability statistics of the population. Health outcome and service
usage data were mainly collected from the government published health and Community
Care Access Centre (CCAC) databases, including Canadian Institute for Health
Information (CIHI), Ontario Health Professions Database Stat Book, Ontario Ministry of
Health and Long-Term Care, Health Data Branch Web Portal, Ontario Association of
Community Care Access Centres (OACCAC), CCAC Management Information System
(MIS) Comparative Reports, CCAC Home Care Database, the Canadian Health Measures
Survey by Statistics Canada, and health service usage data published by the Auditor
General of Ontario. International comparisons were drawn from Organization for

Economic Co-operation and Development, WHO, against local data drawn from City of Toronto, Government of Ontario, Government of Canada sources, as well as data published by professional associations and governing bodies, including OSLA, Speech-Language & Audiology Canada, CASLPO, and their American counterpart, the ASHA. These data were also referenced in parallel with the American systems as drawn from Medline & PubMed research databases, Behavioral Risk Factor Surveillance Systems Brief—Disability (New York), as well as the National Quality Measures Clearinghouse: Speech and language function. All of these databases provided aggregate datasets for public access.

At the federal level, Statistics Canada provided census data covered a wide range of demographics. Data categories included disability types and severity, gender, age groups, caregiver employment issues, labor force participation rate and education level of disabled population, rate of social participation by disabled youth and their reasons for the lack of participation, unemployment rates by disability severity, average income on the workplace by gender for people with disabilities versus those without, types of occupation of disabled population at working age, average household income, rate of disabled population requiring support with activities of daily living, and disability rates by province and by age group.

Statistics Canada also has statistics on the number of users for different types of health care facilities, wait time for access to different types of health care services, and the confidence level of users. It also contained data on the financial, physical, and emotional burden by caregivers. The CIHI provided total usage data by discipline by patient need by province, age group and service population size by diagnosis in hospital-

based continuing care versus residential care by province. It also provided the percentage of the population in hospital-based continuing care versus residential care by different levels of independence, cognitive abilities, and quality indicators.

At the provincial level, the OACCAC provides usage statistics for different types of data by year and age group. Community Care Access Centres also provide usage, wait time, age group, and costs data for each region in Ontario on the delivery of different service types, including services provided by SLPs. The Office of the Auditor General of Ontario also provided service reports including data on the costs of service delivery for different health disciplines in different regions of Ontario. CCAC Home Care Database provided data on the length of stay per client age group and per client need, as well as the number of clients served per user need. It also showed total service data per geographical area in Ontario per health discipline.

At the municipal level, this research focused on the City of Toronto. In the official website of City of Toronto, reports provided data on gender, age group, geographical area, disability type, and severity of its disabled population. They also showed the participation rate in recreation program versus the rate of participation with activity limitation, percentage of adapted versus integrated participation into programs, and the reasons for non-participation by the disabled population. They also showed the key improvement suggestions by the disabled population, as well as the disability types, linguistic and geographical distribution of, and the types of community services used by the disabled population.

Structured data collection forms (the Data Abstraction Charts, Appendices D to F), were created by the investigator and used to identify and record relevant patient

characteristics, demographics, disability types and severity, access challenges, caregiver burdens, and suggestions for improvement. This information was used to understand the target population. Equitable access was analyzed by comparing wait time, length of care, and health indicators of the population with communicative disability versus that of the more visible disabilities involving mobility. The data of SLP services were compared against those of physiotherapy and occupational therapy. The analysis covered data between January 1, 2005, and December 31, 2016.

Procedures

Design. The three research questions were answered in this study. A retrospective cohort study with a causal program evaluation design and a logical model were used.

The retrospective cohort study was carried out in the present with data collected in the past, to examine medical outcomes (Song & Chung, 2010). A causal program evaluation design was used to evaluate the effectiveness of AODA in meeting the access needs of the target population, as compared with the populations of other mobility disabilities.

The research design was appropriate for the availability of the data, the low operating cost, the possibility of influencing patient health outcomes, and the replication of the study. Using the retrospective cohort study allowed the investigator to examine and describe current clinical practice and to determine if, after the implementation of the AODA, the access experience of the communicatively disabled population was as good as the experience of the populations with other disabilities.

The policy in question was the AODA. The AODA was evaluated according to Gill's established (1992) Social Policy Analysis Framework. International standards

including UNESCO's Convention on the Rights of Persons with Disabilities and Optional Protocol (2008) and WHO's World Report on Disability 2011 were also consulted for their overarching principles and were used to qualify the questions within the Gil framework.

The performance, provisions, feasibility, and effectiveness of the AODA were represented by service usage, delivery data, and health indicators as published in government reports, as well as survey results from the population with communicative disability and their caregivers. These two sets of data were compared against each other to determine whether the AODA was addressing the needs of the target population of this study.

Data collection procedures. The study used data routinely collected by all three levels of the Canadian government, which were the main funding source of most health care services in Canada. The major data collection activities were informal and conducted online. The collection process involved a combination of secondary research data from surveys of the target population, records, and advocacy reports. Surveys included those responded to by the affected population in Ontario and in Canada.

The investigator requested exempt level approval from the Institutional Review Board of Nova Southeastern University. No formal request was needed to query the databanks, which were accessible to the public. Once approval was granted, the investigator began to review the databanks to gather specific data.

The structured data collection form "Data Abstraction Chart—Demographics" in Appendix D was created by the investigator and used to identify and record relevant patient demographics. These included gender, age, percentage and severity of disability,

percentage and severity of communicative disability, level of education, income, labor force participation, and unemployment rate.

Another structured data collection form, the "Data Abstraction Chart—Health Services Delivery & Health Outcomes Related to Communicative Disability" in Appendix E was created to capture data on the experience of access by the target population compared to other disciplines. These data covered wait time, service data (number of visits, total hours of service, individuals served, average number of visits, service expenses, initiation time, referral numbers, and unit cost for individual served), special therapy in different health care settings, number of clinical assessments triggered, loss of work hours and employment income from caregiving, as well as the number of regulated health care professionals available by discipline.

The "Data Abstraction Chart—Target Population Survey" in Appendix F was created to capture data on social participation of the target population, including the types of programs participated in, level of social participation, reasons for non-participation, suggestions for improvement, preferred means of receiving information, disability types served by disability service agencies, and primary functions of disability service agencies, as reported by the communicatively disabled population and their caregivers to better understand their needs and challenges of the target population. The investigation included the period of January 1, 2005, to December 31, 2016.

The following is a list of specific data that were accessed during the queries.

Research Question 1. Records were queried to include the census data showing the incidence of communicative disability published by the government, as well as usage data published by service providers for the target population, in Ontario and in Canada.

Data of this category were collected by consulting government websites that hosted published census information and disability statistics. These included census data from Statistics Canada at www.statcan.ca, and disability statistics and reports from the City of Toronto at www.toronto.ca, the Province of Ontario at www.ontario.ca, and the Government of Canada at www.canada.gc.ca. The search criteria used included the date range of 2005–2016, geographical parameters including Canada and Ontario, and keywords including "disability," "communicative disability/impairment," "Canada," and "Ontario" (Appendices A to C).

Research Question 2. Records of health indicators were collected from health information accessible via the secure government portals after successful request for access as a student conducting research for academic purposes. As health services are mainly funded and provided by the government in the Canadian system, the health data and service delivery reports are published by the government, at both the provincial and federal levels. Websites of different department of the government and those of the SLP profession were target sources for health service delivery and health outcome data related to communicative disability.

These websites included Statistics Canada, Auditor General of Ontario, CIHI, Ontario Health Professions Database Stat Book, Ontario Ministry of Health and Long-Term Care—Health Data Branch Web Portal, Ontario Association of Community Care Access Centres, CCAC MIS Comparative Reports on in-home speech and language pathology, CCAC Home Care Database, Canadian Health Measures Survey, as well as the official websites of the City of Toronto, Province of Ontario, and Government of Canada. American and international counterparts were also consulted, including the

Organization for Economic Co-operation and Development, WHO, Behavioral Risk Factor Surveillance Systems Brief Disability (New York), and the National Quality Measures Clearinghouse: Speech and Language Functions.

Also included were the websites of professional governing bodies and associations, including the CASLPO, OSLA, and Speech-Language and Audiology Canada. For comparison with similar jurisdiction, the American Speech-Language-Hearing Association was also used.

Relevant research databases including Medline and PubMed were also used. Search criteria included the data range of 2005–2016, the geographical parameters of Canada and Ontario, and keywords including "speech-language pathology/therapy," "communicatively disabled," "communication impairment," and "family caregiving" (Appendices A to C).

Research Question 3. Advocacy data collected included published position papers, health commentary, user opinion, and advocacy briefs by major advocacy groups and service providers for the target population. Websites of the relevant government departments, international authorities, medical research journal databases, and professional governing bodies and association were used for data research.

Websites of government departments included the Government of Canada's survey on disability, Health Council of Canada, Statistics Canada, Auditor General of Ontario, CIHI, Disability Research Consortium, Ontario Health Professions Database, Canadian General Social Survey, City of Toronto, Province of Ontario, Government of Canada, and Statistics Canada. Websites of international authorities included WHO and the UN.

For the literature reviews and theoretical background on health outcomes and service delivery for the population with communicative disability, online medical research journals were sourced from the Medline journal database and the PubMed journal database. Websites of professional governing bodies and associations included that of the CASLPO, OSLA, Speech-Language and Audiology Canada, and the American Speech-Language-Hearing Association.

Search criteria included the data range of 2005–2016, the geographical parameters of Canada and Ontario, and keywords including: "disability survey," "health survey," "communicative disability," "communication access," "disability policy," "caregivers of disabled," "wait time," "quality of life," and "social determinants of health." Criteria for data abstraction are outlined in the Data Collection Types and Sources (Appendices A to C) and the Data Abstraction Forms (Appendices D to F). These quantitative and qualitative results were compared against each other to analyze the level of compliance of the AODA to international guidelines and its responsiveness to the needs of the target population of this study—the population with communicative disability.

Another group of data was the seminal literature. This included existing AODA and related policies, and relevant, seminal, international guidelines—UNESCO's Convention on the Rights of Persons with Disabilities and Optional Protocol (2008) and WHO's World Report on Disability 2011, collected from laws and international standards published online. They became input for the logical model illustrated in Table 1.

Table 1

7	. 1	1.4	. 1	1 1
1.09	gical	M	od	PI
	, i c cii	1,1	O CI	·

Step	Logical Flow	Sources and Products
Step 1	Inputs	UNESCO: Convention on the Rights of Persons with Disabilities and Optional Protocol WHO: World Report on Disability 2011 Accessibility for Ontarians with Disabilities Act (AODA) and local policies in funding and provision Policy Analysis Theories Reports from Advocacy organizations and primary service providers Government and healthcare data on needs of and services obtained by communicatively impaired, and as per the target population with communicative disability as well as their caregivers
Step 2	Activities	Review of international guidelines, benchmarks, and recommendations by UNESCO and WHO Review of AODA, with compare with similar jurisdictions as necessary Literature review on policy commentary, policy reports, advocacy reports, and data on needs of the population with communicative disability
Step 3	Outputs	Results of policy analysis, including the following: Areas of strengths and gaps of AODA in meeting the needs of the target population Resulting benefits and shortfalls for the target population Limitations of the current system and limitations of this study
Step 4	Outcomes	Conclusion of policy analysis, including the following: Recommendations on policy change(s) Recommendations on service provisions Projected outcomes for the target community: filing of service gaps Recommendations for future study

Based on the data collected, the AODA was analyzed using Gil's policy analysis framework (1972–1974). This section revealed the areas of strengths and weakness of the AODA, and qualified each area specified by Gil. Policy and practice recommendations were derived from these results.

Data analysis. The overarching question to ask was whether AODA and its related policies address the needs of the target audience of the population affected by communicative disability as well as their caregivers. A quantitative analysis compared the published service data and health indicators against the published needs of the population in terms of service coverage, amount of service, timeliness of service, quality of service, and any other quantifiable criteria as expressed in the survey responses by the target population.

A qualitative analysis followed. It compared the concerns and recommendations shared by subject matter experts and the target population according to survey reports, with the provisions of AODA and its related policies. Details follow.

Research Question 1. Does the AODA consider the communicatively disabled population by policy design? A literature review was done to match up the terms of Ontario legislation and policies with those of the WHO and UNESCO standards.

Research Question 2. Does AODA meet the service needs of the communicatively disabled population and their caregivers in practice, by providing equitable access to the communicatively disabled population as well as it does to populations of mobility disabilities, which are more visible? The authority of public policy auditing was referenced. According to the authority for auditing government

services in Ontario—Office of the Auditor General of Ontario (2016), the key comparison indicators include the *median* and 90th percentile of various health services across all health settings, including wait times, length of service, and number of visits. Therefore, the *median* and the 90th percentile were used to compare the access to service across all regulated health disciplines to determine equitable access for the target population among others.

The different access components to services were compared according to the 90th percentile value and the mean, between that of the communicatively disabled population and other disability disciplines. Any discrepancy between the communication discipline and others were noted to substantiate equitable access or the lack thereof.

Research Question 3. What are some options that would address the gaps identified?

Comments from the stakeholder surveys were gathered and reflected, and logical conclusions were drawn based on the discrepancy of equitable access (if any) and discrepancy between AODA and international standards (if any). These responses and data were analyzed per Gil's Social Policy Analysis Framework (1992, pp. 33–36) by comparing against the international guidelines by WHO and UNESCO.

Tables 2 to 4 show the sections and areas to address within Gil's framework, charted against the verification sources and the analysis processes. Gil's framework is shown in sections, charted against each of the verification sources and analysis processes.

Data Analysis Framework—Gil's Framework: Section A: Issues Dealt With by the Polic

Table 2

Data Analysis Framework—Gil's Framework: Section A: Issues Dealt With by the Policy				
	Gil's Framework	Verification Source	Analysis Process	
1.	Nature, scope, and distribution of the issues.	AODA definitions of disability and access; scope; and UNESCO and WHO guidelines on disability policies in <i>World Report on Disability 2011</i>	Evaluate whether the AODA provisions are aligned with UNESCO and WHO guidelines	
2.	Causal theory(ies) or hypothesis(es) concerning the dynamics of the issues.	Historical development of disability legislation and the AODA	Trending disability data against service usage data	

Table 3
Data Analysis Framework—Gil's Framework: Section B: Objectives, Value Premises,
Theoretical Positions, Target Segments and Substantive Effects of the Policy

Theoretical Positions, Target Segments and Substantive Effects of the Policy			
1.	Gil's Framework Policy objectives: overt objectives and covert objectives.	Verification Source Purposes and objectives listed in AODA and related policies, and UNESCO and WHO guidelines.	Analysis Process Charting articulated objectives and historical rationale for the legislation against UNESCO & WHO guidelines.
2.	Value premises and ideological orientation underlying the policy objectives: explicit and implicit value premises.	Context and principles in AODA and related policies, and UNESCO and WHO guidelines; legal commentary.	Comparing the commissioning reasons for the legislation against UNESCO and WHO principles.
3.	Theory(ies) or hypothesis(es) underlying the strategy and the substantive provisions of the policy.	Theoretical background of AODA versus those of UNESCO and WHO.	Research and compare the background theories of AODA with UNESCO/WHO guidelines.
4.	Target segment(s) of society—those at whom the policy is aimed.	Census data for disabled population versus communicatively	Outline disability data in Canada versus Ontario in 2005–2016 versus data
4a.	Ecological, demographic, biological, psychological, social, economic, political, and cultural characteristics	disabled population in Ontario versus Canada 2005–2016.	on communicative disability in Canada versus Ontario from 2005–2016. Show trends.
4b.	Projected size of relevant subgroups and target segment(s) over time.		
5.	Short/long-range effects of the policy on target and non-target segment(s) in ecological, demographic, biological, psychological, social, economic, political and cultural spheres:	Health service data for disabled population versus communicatively disabled population in Ontario versus Canada 2005–2016; including reports on economic impact, and AODA	Contrast health service usage data for the disabled population in Ontario versus Canada 20015–2016 with that for the communicatively disabled population; show trends.
5a.	Intended effects and extent of attainment of policy objectives.	support budget.	Show economic impact of target population at work.
5b. 5c.	Unintended effects Overall cost and benefits		Trend budgets allocated to support AODA in 2015–2016.

Table 4

Data Analysis Framework—Gil's Framework: Section C: Implications of the Policy for the Operating and Outcome Variables for Social Policies

ine C	peranng and Outcome var	·	
	Gil's Framework	Verification Source	Analysis Process
1.	Change concerning reproduction, socialization, and social control	Comparison of usage statistics and budget from 2005–2016	Trend health indicators and/or social determinants of health for communicatively impaired population in Ontario 2005–2016.
2.	Consequences and social control of changes concerning resources, work and production, rights, governance and	Legal commentary. Survey reports from advocacy bodies and service providers.	Evaluate expert opinion in legal/policy commentary and advocacy report.
	legitimation and reproduction, socialization, and social control for:	Opinion of communicatively impaired individuals and their caregivers via survey reports.	Trend opinion of communicatively impaired individuals and their caregivers in Ontario and Canada from 2005–2016 survey
2a.	Circumstances of living of individual, groups and classes.	Opinion of industry authority and service providers via journals and commentary.	reports. Trend opinion of industry authority and service
2b.	Power of individual, groups and classes.	Health indicator data of the communicatively impaired population and their caregivers.	providers in Ontario and Canada from 2005–2016 survey reports.
2c.	Nature and quality of human relations among individuals, groups and classes.	mon caregivers.	and/or social determinants of health for caregivers of communicatively impaired population in Ontario 2005–2016.
2d.	Overall quality of life.		

Research Limitations

Based on the recent removal of communicative disability from census and data collection on disabilities, data availability was limited, or lacking for the continuity of years determined as a scope for analysis. The lack of data continuity affected trending. With limited data and the gaps in time, the present analysis was based on a relatively smaller sample size, which affected the statistical significance. Supplementary data collected by advocacy groups and service providers were used to increase the size and temporal coverage of the data sample.

There were no comparable provinces or territories in Canada within the same time frame, since Ontario was the pioneer of provincial accessibility legislation. Wherever required, comparison was drawn with jurisdictions in other countries that were comparable in terms of population size, socioeconomic status, geographical size, government structure, and policy preferences. Such comparison might affect the internal validity of the study.

Because only the interests of the target population in Ontario were considered in this study, the research findings might not be generalizable to other jurisdictions, populations, or other forms of disability. The results of this study may no longer be pertinent after 10 years, as social demographics may have changed substantially by then.

Chapter 4: Results

This research study was conducted as an evaluation of whether the AODA meets its intended goal. Analysis of the statute was benchmarked against international guidelines, through policy analysis and a secondary research and analysis of the data from government-published census and health service usage.

Specific recommendations would follow any identified gaps. This chapter includes the results of the current study as it relates to the research questions identified on page 25, which address (a) whether the communicatively disabled population is considered by AODA policies; (b) whether the service needs of this population are met equally to other disabled populations; and (c) how service gaps could be identified.

These research questions were adapted from the *Disability and Inclusion Based*Policy Analysis by the Institute of Research and Development on Inclusion and Society

(2012). The said document suggested that question design for disability policy evaluation should start with a review of the policy design, followed by an analysis of the policy's implementation and outcomes, and finally, whether the policy implications are consistent across different programs and populations.

To address the first research question, international standards on disability policies by WHO—World Report on Disability (2011b) and UNESCO—Convention on the Rights of Persons with Disabilities and Optional Protocol (2008) were consulted. David Gil's Social Policy Analysis Framework (1992) was also used to analyze the design policy against its mandated objectives.

To understand whether the AODA met the service needs of the communicatively disabled population and their caregivers in practice, AODA was analyzed for its

provision of equitable access to the communicatively disabled population as well as it does to populations of mobility disabilities which are more visible. To achieve this goal, the service access and usage data needed to be compared to the demographics of the target population.

To understand the demographics of the target population, census data and disability survey reports were analyzed. Available, recent census reports include the Canadian socioeconomic database from Statistics Canada covering years 2001 and 2005–2010; "Disability in Canada: A 2006 Profile" by Human Resources and Skills Development Canada; and the 2012 Canadian Survey on Disability. The size and demographics of the communicatively disabled population was reported in "Disability in Canada: A 2006 Profile" based on the data from the Participation in Activity Limitation Survey.

However, the researcher later learned that the 2012 *Canadian Survey on Disability* was not designed to account for disability data for individuals affected by communicative disability. Therefore, such data were removed from the collection methodology of the census. As confirmed by Statistics Canada, the federal body responsible for census research in Canada, "an additional difference between the [2006 and 2011] surveys involves the identification of communication disabilities which was done in the Participation and Action Limitation Survey (PALS) but not in the CSD" (2013, p. 2). To explain this change, Statistics Canada cited reasons relating to failure to properly identify persons with communicative disability, difficulties surveying people whose primary language was neither English nor French, and people with cultural difficulties, as well as difficulties with the definition of communication as made ambiguous with the advent of social media.

To track accessibility to service by the target population, target population size was compared with service accessibility based on wait times and frequency, health outcomes, and services received by users and caregivers. These data were accessible via Quick Stats Tables from CIHI covering 2013–2014; provincial service usage data from Ontario Association of CCACs covering 2008–2013. *Ontario Home Care Database CCAC Year in Review* reports covering 2005–2006; and CCAC MIS Comparative Reports covering 2012–2015 show the usage data, wait time, and service hours of the communicatively disabled population.

The results of these analyses were used to identify gaps between policy provisions and service accessibility for the target population. Data from user opinion surveys were used as references to coming up with recommendations. These included the Canadian Perceptions of the Health Care System (2007), International Survey of Older Adults by The Commonwealth Fund (2014), survey by Disability Research Consortium (n.d.), agency survey by Office of the Advocate for People with Disabilities 2005–2008 (2008).

Addressing Research Question 1

To answer whether the AODA took into consideration the communicatively disabled population by policy design, Gil's Social Policy Analysis Framework (1992) was used to evaluate the AODA. In Gil's framework, Section A dealt with "the Issues Dealt with by the Policy," including the "Nature, scope, and distribution of the issues" and "Causal theory(ies) or hypothesis(es) concerning the dynamics of the issues" (Gil, 1992, p. 71).

Section A: Issues dealt with by the policy (Gil, 1992). The purpose as outlined in the AODA was to recognize the "history of discrimination against persons with

disabilities in Ontario, the purpose of this Act is to benefit all Ontarians by (a) developing, implementing and enforcing accessibility standards in order to achieve accessibility for Ontarians with disabilities with respect to goods, services, facilities, accommodation, employment, buildings, structures and premises on or before January 1, 2025; and (b) providing for the involvement of persons with disabilities, of the Government of Ontario and of representatives of industries and of various sectors of the economy in the development of the accessibility standards" (Government of Ontario, 2016, p. 1). This purposed was compared against WHO recommendations.

The purpose of the AODA was aligned with the recommendations of WHO. WHO advocates for the adoption of International Classification of Functioning, Disability and Health (ICF), which emphasizes environmental factors in creating disability. ICF of Functioning, Disability and Health categorizes human functioning into three connected areas, including *impairments*—"problems with body functions or alterations in body structure"; *activity limitations*—"difficulties in carrying out activities"; and *participation restrictions*—"problems with involvement in any aspect of life," including discrimination and access (WHO, 2011b, p. 5). The ICF also contains a classification on *environmental factors*—"products and technology, natural and built environment, support and relationships, attitudes, and services, systems, and policies"; and *personal factors*—one's motivation and self-esteem to influence social participation, the discrepancy between one's capacities to perform actions and the actual performance (WHO, 2011b, p.5).

The meet the WHO requirements for addressing environmental factors to prevent *impairments* and *activity limitation* from adversely affecting the access for individuals

with disability, AODA outlines the importance of access to goods, services, facilities, accommodation, employment, buildings, structures and premises. It also addresses *participation restrictions* by providing guidelines for corporations and public service providers to ensure accessibility for the population affected by disability.

To analyze whether the AODA was designed for the target population affected by communicative disability, the definition of *disability* in the AODA needs to be examined. In the AODA, *disability* refers to:

- (a) any degree of physical disability, infirmity, malformation or disfigurement that is caused by bodily injury, birth defect or illness and, without limiting the generality of the foregoing, includes diabetes mellitus, epilepsy, a brain injury, any degree of paralysis, amputation, lack of physical co-ordination, blindness or visual impediment, deafness or hearing impediment, muteness or speech impediment, or physical reliance on a guide dog or other animal or on a wheelchair or other remedial appliance or device;
- (b) a condition of mental impairment or a developmental disability;
- (c) a learning disability, or a dysfunction in one or more of the processes involved in understanding or using symbols or spoken language;
- (d) a mental disorder, or;
- (e) an injury or disability for which benefits were claimed or received under the insurance plan established under the Workplace Safety and Insurance Act, 1997. (Government of Ontario, 2016, p. 1).

Mobility disabilities, which are more visible, are covered under the AODA's definition of disability. Invisible disabilities, including skills leading to communication impairment, and mental disabilities, are also covered. This showed that the AODA does take the communicatively disabled population into account by policy design, as per Research Question one.

Gil's model also calls for the consideration of causal theories or hypotheses concerning the dynamics of the issue. Based on this understanding, the AODA needed to be evaluated based on whether its reasoning and design have considered major theories of disability. To do so, the major theories about disability needed to be reviewed. There are two major theories to qualify disability. These include the medical model and the social model. In explaining the differences between the two models, Mauri indicated that "the medical approach has two central characteristics: the tendency to treat disability as a pathological state, and the tendency to treat disability as a form of social deviance" but that the social model focuses on "the social oppression of disabled individuals, and the need for a re-examination of the language that is often used to discuss disability" (2011, p. 5–6).

In Part I Section 2, AODA's definition of *barrier* refers to "anything that prevents a person with a disability from fully participating in all aspects of society because of his or her disability," which includes "a physical barrier, an architectural barrier, an information or communications barrier, an attitudinal barrier, a technological barrier, a policy or a practice," which takes into the account the social deviance of the target population based on their disability (Government of Ontario, 2016, p. 1). In Part III, Section 6(6), AODA specifies that an accessibility standard shall:

- (a) set out measures, policies, practices or other requirements for the identification and removal of barriers with respect to goods, services, facilities, accommodation, employment, buildings, structures, premises or such other things as may be prescribed, and for the prevention of the erection of such barriers; and
- (b) require the persons or organizations named or described in the standard to implement those measures, policies, practices or other requirements within the time periods specified in the standard. 2005, c. 11, s. 6 (6). (Government of Ontario, 2016, p. 1).

This shows that the AODA considers the social oppression that individuals with disability face, and further, aims to rectify their situation through the *Act* and via reinforcement of non-compliance by individuals, business entities, and government departments. These factors demonstrate that the rationale and design of the AODA are in line with Section A of Gil's model.

Section B: Objectives, value premises, theoretical positions, target segments and substantive effects of the policy (Gil, 1992). Gil's model focuses on policy objectives, value premises, theories or hypotheses, target segment, and short- and long-range effects next in his model. The Community-Based Rehabilitation (CBR) guidelines join the development and human rights aspects of disability to offer a suitable benchmark for comparison against AODA policy objectives to:

(a) promote the need for inclusive development for people with disabilities in the mainstream health, education, social, and employment sectors;

- (b) emphasize the need to promote the empowerment of people with disabilities and their family members; and
- (c) through the provision of practical suggestions, position CBR as a tool that countries can use to implement the Convention on the Rights of Persons with Disabilities. (WHO, 2011b, p. 13).

In the AODA, Part I Section 1(a) discusses "developing, implementing and enforcing accessibility standards in order to achieve accessibility for Ontarians with disabilities with respect to goods, services, facilities, accommodation, employment, buildings, structures and premises on or before January 1, 2025" (Government of Ontario, 2016, p. 1). The AODA does not explicitly refer to "education" and "health" services.

In reviewing whether it would be reasonable to assume that the "services" referred to in this section covers provisions for education and health, the operational documents were reviewed. These included the accessibility plans of individual ministries in the Government of Ontario, including the Ministry of Health and Long-Term Care, the Ministry of Education, and the Ministry of Finance. Those policies covered aspects including customer service, information and communications, employment accommodation, built environment, and procurement in general. It is, therefore, safe to assume that the "services" in the AODA Part I Section 1(a) covered accessibility for employment needs, but not accessibility for health needs.

In terms of the value premises and ideological orientation underlying the policy objectives, the definition by the UN was used as a benchmark. *Article I of the Convention*

on the Rights of Persons with Disabilities and the Optional Protocol by the UN specified that the purpose of the Convention. It was mandated "to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity" (2008, p. 4). It targeted persons with disabilities including "those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others" (2008, p. 4). AODA's definition of "barrier," as previously mentioned, shows that the *Act* held this value premise as its raison-d'être.

To evaluate the theories and hypotheses underlying the strategy and the substantive provisions of AODA, the WHO's Draft Global Disability Action Plan 2014–2021 provides a good benchmark for provisional legislative substance. The action plan identified three objectives: (a) to remove barriers and improve access to health services and programs; (b) to strengthen and extend rehabilitation, habilitation, assistive technology, assistance services, support services, and community-based rehabilitation; and (c) to strengthen collection of relevant and internationally comparable data on disability and support research on disability and related services (2014, p. 5).

The mandate to remove access barriers was discussed in detail in previous sections. It was clear that the substantive actions require empowerment of individuals with disability with either rehabilitation, habilitation, assistive devices, or any combination thereof. The document dictating the implementation and reinforcement of the Act, AODA Regulation 429/07, prescribes in Section 3 that, "without limiting subsections (1) and (2), the policies must deal with the use of assistive devices by persons

with disabilities to obtain, use or benefit from the provider's goods or services or the availability, if any, of other measures which enable them to do so" (Government of Ontario, 2016, p. 2). AODA Regulation 429/07 also specified the requirement for staff training:

- (2) The training must include a review of the purposes of the Act and the requirements of this Regulation and instruction about the following matters:
 - How to interact and communicate with persons with various types of disability.
 - 2. How to interact with persons with disabilities who use an assistive device or require the assistance of a guide dog or other service animal or the assistance of a support person. (Government of Ontario, 2016, p. 3).

This showed that the AODA was designed to accommodate individuals with disabilities that require the use of assistive devices and mandates proper training of staff to enable the use of such assistive devices or service animals by the target population.

However, the access to and availability of such assistive supports was not covered by the *Act*. The onus rested on the user to obtain the assistive supports. With communicative disability, it would be logical to assume that user would have challenges navigating the system and would therefore find it difficult or impossible to obtain access to such supports, should they lack a family or social support system to advocates on their behalf.

To satisfy point 3 of WHO's Global Disability Action Plan, namely to "strengthen collection of relevant and internationally comparable data on disability and support research on disability and related services" (2014, p. 5), Part VIII Section 32(3)(e) of the AODA prescribes the Accessibility Director of Ontario, a government agency, the responsibility to "conduct research and develop and conduct programs of public education on the purpose and implementation of this Act" (Government of Ontario, 2016, p. 1). This provision did address the need for research but did not require benchmarking against or comparing with international data as suggested by WHO.

Section 4 of Gil's model covers the target population of the policy. For the purposes of this study, the AODA was examined for whether it was designed to address the needs of population affected by communicative disability. Gil focuses on (a) ecological, demographic, biological, psychological, social, economic, political, and cultural characteristics; and (b) the size of relevant subgroups and of entire target segment(s) projected over time" (Gil, 1992, p. 71).

The list of characteristics listed in B.4a by Gil was aligned with social determinants of health as prescribed by WHO, which covers "the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels" (2017, p. 1). WHO believed social determinants of health are "mostly responsible for health inequities—the unfair and avoidable differences in health status seen within and between countries" (WHO, 2017, p. 1). This alignment implied the need for social policies to ensure health equity. AODA does not provide for the social determinants of health. This lack of consideration of social determinants of health went against the recommendations

of WHO, which advocates that disability was a development issue, because of its bidirectional link to poverty:

Disability may increase the risk of poverty, and poverty may increase the risk of disability. A growing body of empirical evidence from across the world indicates that people with disabilities and their families are more likely to experience economic and social disadvantage than those without disability. The onset of disability may lead to the worsening of social and economic well-being and poverty through a multitude of channels including the adverse impact on education, employment, earnings, and increased expenditures related to disability. (2011b, p. 10).

Gil's requirements in B.4b can be interpreted as to understand and project the needs over time of the subgroups, which, in this study, are the different types of disability. While the Act does provide for ongoing research on demographics and needs for implementation of the Act, the Government of Canada failed in this aspect for the target audience of this study. This was shown through the discontinuation of accounting for the population with communicative disability in the 2016 census, as compared to the 2011 census. This discrepancy was in line with WHO's findings. "Countries reporting a low disability prevalence rate—predominantly developing countries—tend to collect disability data through censuses or use measures focused exclusively on a narrow choice of impairments" in the case of study, this referred to the intentional choice to remove communicative disability as a type of disability to report on (WHO, 2011b, p. 22–23).

In Section B.5a, Gil aimed to examine the intended effects, including ecological, demographic, biological, psychological, social, economic, political, and cultural spheres;

and the extent of attainment of policy objectives. As reported in *Convention on the Rights of Persons with Disabilities—First Report of Canada*, AODA has resulted in a few regulatory and policy changes at the provincial, and some of which pertain to the target population affected by communicative disability, among other forms of disability. The report suggested that AODA "establishes the goal of an accessible Ontario by 2025. This goal was to be achieved through the development, implementation and enforcement of accessibility standards in five key areas of daily living: customer service, transportation, employment, information and communications, and the built environment" (Government of Canada, p. 34).

A few other regulations were enacted or revised to be in synchrony of AODA requirements. These include the *Accessibility Standard for Customer Service Regulation* which applies to all organizations (public, private and not-for-profit) that provide goods or services directly to the public or to other organizations in Ontario and that have one or more employees in Ontario. Another regulation was enacted by Ontario Ministry of Children and Youth Services that requires all custody/detention (correctional) staff and probation office to be trained in "accommodating or admitting persons with disabilities, in accordance with the *Public Service of Ontario Act*, the *Child and Family Services Act*, the *Youth Criminal Justice Act* and the *Criminal Code* of Canada" (Government of Canada, 2014, p. 34) and standards, policies, procedures, and directives established by the ministry. Ontario Ministry of Community Safety and Correctional Services has also "developed the *Police Response to Persons who are Emotionally Disturbed or Have a Mental Illness or a Developmental Disability Guideline* to assist police services in the implementation of the *Police Services Act* and its regulations" (Government of Canada,

2014, p. 34). The act AODA also resulted in two other policy changes within the operations of the Ontario Provincial Police, who introduced "the use of video conferencing equipment to provide access to sign language interpreters for both victims and witnesses who are deaf/hard of hearing" and revised its policy "to ensure that officers consider the provision of a support person when interviewing an accused with a cognitive-related disability" (Government of Canada, 2014, p. 34).

Other Ontario regulations and policies were instilled to ensure effective information dissemination to individuals with communicative disability. To establish polices to facilitate compliance with the AODA in terms of communications, the information and communications committee was assembled and started its work in Spring 2007. "It developed an initial proposed standard that went through public review from November 2008 to February 2009. The committee made revisions and submitted its final proposed standard to the minister in June 2009" (Beer, 2010, p. 13). The Information and Communications Standard now requires organizations to prepare emergency and safety information in an accessible format upon request. The Employment Standard now requires employers to provide employees with disabilities with workplace emergency safety information individualized according to their disability and needs to prepare for potential workplace emergencies. The Information and Communications Standard under the Integrated Accessibility Standards Regulation requires all public, private, and not-for-profit organizations to send and receive information and communications in ways that are accessible to persons with disabilities. Also, also Ontario public sector, private, and not-for-profit organizations with 50 employees or more are required to make their corporate websites and web content conform to the

international standard developed by the World Wide Web Consortium (W3C), which are known as the *Web Content Accessibility Guidelines* 2.0 (Government of Canada, 2014).

To ensure fair access to health services for Ontarians with disability, AODA has effected changes in health-related policies. The *Ontario Personal Health Information Protection Act*, 2004 balances individuals' right to privacy with respect to their own personal health information with the legitimate needs of persons and organizations providing health care services to access and share such information. Before administering treatment, health practitioners in Ontario must now obtain consent either from the patient or, if the patient is unable or has assigned responsibility to make or to communicate a treatment decision, from an SDM legally authorized for the relevant time period (Government of Canada, 2014).

Although the AODA does not contain specific provisions for social determinants of health, the Government of Ontario did implement relevant changes in various types of social policies that cover some provisions of social determinants of health that would be negatively affected by communicative disability. While there are more aspects of social determinants of health that are covered by Ontario policies, the population with communicative disability benefits only in terms of education policies. Many school boards in Ontario now have school-based teams that provide advice and teaching strategies to teachers who have students with special education needs, which include regard for areas including speech and language development, psychology, physical and occupational therapy, and social work. Education resources, student records, and information on programs are included in the types of information that are required to be

made available in accessible formats according to the needs of the person with communicative disability upon request (Government of Canada, 2014).

Gil's Section 5b dealt with unintended effects of the policy. There has been a disproportionately high number of human rights cases challenged the provincial level as compared to the federal level. In Ontario, 54% of the 3,242 applications received by the Human Rights Tribunal of Ontario in 2013–14 were about treatment for individuals with disability. "Such legal proceedings are typically very time-consuming, complex and costly. Moreover, achieving broader systemic change is not easily accomplished through case-by-case determinations" (Moran, 2014, p. 11) which became part of the reason for those concerned with accessibility for persons with disabilities to examine further means of reaching the goal of inclusion.

In Section B.5c of his social policy evaluation model, Gil examined the overall cost and benefits of the policy. As reported by AODA Alliance about Ontario budget, that starting 2008–09 for four year, the Accessibility Directorate of Ontario would have an annual budget of \$4 million to go toward developing new accessibility standards as well as a compliance framework for AODA requirements" (AODA Alliance, 2008, p. 1). This was a stark comparison against the potential economic benefit that proper implementation would have yielded.

According to the Ontario College of Art and Design (OCAD) University which was commissioned to conduct research on the costs and benefits of AODA in 2010, "the most significant potential gains could be realized in workplaces and schools. Enabling increased workforce participation among persons with disabilities would not only

increase their individual and family income, but it could also increase the GDP per capita in Ontario by up to \$600 per annum" (OCAD University, 2010, p. 3). If people with disabilities were enabled by policy to achieve parity with average educational achievement in Ontario, an additional boost to Ontario's GDP per capita of up to \$200 will be realized" (OCAD University, 2010, p. 3). OCAD further assumed that under the new standards the percentage of persons with mild and moderate disabilities who are not in the labor force would be the same as that of people without disabilities, and then made a broad assumption that there are jobs available to be filled by this new in-flux of people, which would result in an increase in the number of people with disabilities that are employed by 12,316. This would increase employment income in Ontario by \$359 million. The "Ontario Disability Support Program (ODSP) payments made by the Government of Ontario would decrease by \$151 million and the total combined benefit to Ontario from the increase in employment income and decrease in ODSP payments would be \$510 million" (OCAD, 2010, p. 19). The OCAD used a simple regression between Ontario's GDP and wages, salaries and supplementary income for the years 1981 to 2008 to estimate the impact of an increase in employment income on GDP, and found that GDP would "increase by \$4.1 billion with an associated increase in employment income. The increase in GDP per capita across Ontario would be \$49" (OCAD, 2010, p. 19).

Ontario College of Art and Design (OCAD) assumed that the 48% underestimated population who chose to not declare their disabilities would have the same characteristics as that of persons with mild or moderate disabilities. "The increase in the number of people employed in this scenario is 153,057. As a result, employment income increases by \$4.8 billion and GDP per capita increases by \$653" (OCAD, 2010, p. 19). The

correlation between these numbers showed a clear connection between unemployed and under-employed population with disability in Ontario and the economic loss suffered by Ontario. The research further correlated improved access to education with employment to estimate the potential increase in wages if education levels of people with disabilities matched that of people without disabilities, and found that employment income would increase by \$618 million, and the GDP per capita would increase by \$85. Therefore, improved access to education and employment and improved income for the disabled population would also "move Ontario's economy to a better position with a more educated workforce. This in turn will attract more businesses, further increasing employment and make Ontario's economy more prosperous" (OCAD, 2010, p. 23).

Ontario College of Art and Design (OCAD) University further indicated that

Ontario is uniquely situated to rapidly advance the area of inclusion because the province
is home to a multitude of internationally recognized centers and institutions that focus on
inclusion and disability studies (OCAD, 2010). This included the Adaptive Technology
Resource Centre at the University of Toronto, Ryerson's School of Disability Studies,
York University's Disability Studies Graduate Program; authoritative researchers in the
field, such as Geoff Fernie of the Toronto Rehabilitation Centre; and media that support
disabilities issues, including *Abilities* magazine and *ZoomerMedia* (OCAD, 2010).

Despite these exceptional resources, "Ontario is quickly falling behind Japan, Sweden,
Germany, Australia, and parts of the United States when it comes to inclusion and the
economic benefits that follow. The AODA provides an opportunity for Ontario to catch
up to these peer economies" (OCAD University, 2010, p. 5).

These economic statistics reflected only the overall disabled population in Ontario. They were, however, not reflective of the segment of our target population—those affected by communicative disability.

Section C: Implications of the Policy for the Operating and Outcome

Variables for Social Policies. In Section C.1 and C.2, Gil aimed to examine the change concerning reproduction, socialization, and social control; and the consequences and social control of changes concerning resources, work, and production, rights, governance and legitimation and reproduction, socialization, and social control for:

- a) circumstances of living of individual, groups and classes;
- b) power of individual, groups and classes;
- c) nature and quality of human relations among individuals, groups and classes; and
 - d) overall quality of life. (Gil, 1992, pp. 33–36).

To illustrate the types and magnitude of changes, a statistical analysis of the service availability, resources, and usage statistics were analyzed to compare communicative disability and mobility disability. Statistics for use of physiotherapy and occupational therapy was used particularly.

The nature and quality of human relations and overall quality of life of the population with communicative disability was addressed by analyzing survey results by target population on accessibility and quality of life. Such analysis is shown in the

following sections that answer Research Question 2: Does AODA meet the service needs of the communicatively disabled population and their caregivers in practice, by providing equitable access to the communicatively disabled population as well as it does to populations of mobility disabilities, which are more visible?

Addressing Research Question 2

Research Question 2 of this study asked whether the AODA meets the service needs of the communicatively disabled population and their caregivers in practice, by providing equitable access to that population as well as it does to populations with more visible mobility disabilities. Census and disability data were consulted. The breakdown of the disabled population at that time according to *Disability in Canada: A 2006 Profile*, a document based on the 2006 census, is shown below. For this study, only the information on communicative and mobility disabilities are shown, as per available statistics to address the research question comparing accessibility for people with communicative disability, the target population of this research study, with accessibility for people with more visible mobility disabilities (Human Resources and Skills Development Canada, 2011). Note that the types of information across census and disability report varied according to survey design, and this variation affected the consistent availability of comparable data.

Table 5 shows the prevalence of communicative disability versus mobility disability in Canada in 2006, broken down by age group and gender. Census 2006 included survey questions on communicative and mobility disabilities.

Table 5

Disability Prevalence by Types in Canada in 2006

	ulation Dem	ographics	Disability	Types
Age Group	Gender	Statistics	Communication	Mobility
5–14 years	Male	# of Individuals	54,130	11,210
		% of Population	2.8	0.6
	Female	# of Individuals	24,100	11,940
		% of Population	1.3	0.6
15–19 years	Male	# of Individuals	17,270	17,710
		% of Population	1.6	1.6
	Female	# of Individuals	11,090	18,630
		% of Population	1.1	1.8
20–24 years	Male	# of Individuals	13,500	19,400
		% of Population	1.3	1.9
	Female	# of Individuals	10,760	22,240
		% of Population	1.1	2.2
25–54 years	Male	# of Individuals	99,150	378,120
		% of Population	1.5	5.7
	Female	# of Individuals	103,870	519,890
		% of Population	1.5	7.5
55–64 years	Male	# of Individuals	43,390	249,420
		% of Population	2.4	14.0
	Female	# of Individuals	37,320	355,360
		% of Population	2.0	19.3
65–74 years	Male	# of Individuals	29,520	216,030
		% of Population	2.8	20.3
	Female	# of Individuals	20,150	316,860
		% of Population	1.7	27.0
75+ years	Male	# of Individuals	45,490	289,840
		% of Population	6.2	39.4
	Female	# of Individuals	48,230	519,500
		% of Population	4.5	48.4
15+ years	All	# of Individuals	557,970	2,946,150
		% of Population	1.91%	10.07

Table 6 shows the prevalence of disability in general in Ontario versus Canada in 2006 by age group (HRDC, 2011). Data from the 15+ age group was used, as this study focused on the adult population. Children have other specific legislation addressing their educational accessibility needs, which is out of scope of this study.

Table 6

Disability Rates by Geography and Age Groups in 2006

Geography \ Age	All Ages	0–14	15/+	15–64	65/+
Canada	14.3%	3.7%	16.6%	11.5%	43.4%
Ontario	15.5%	3.8%	18.1%	12.6%	47.2%

Table 7

Disability Prevalence in 2012 in Canada Versus Ontario

D	emograph	ics \ Disability	Ca	nada	On	tario
Age	Gender	Statistics	All	Mobility	All	Mobility
15–24	Male	# of Individuals	101,870	16,950	47,750	6,310
		% of Population	4.5	0.075	5.3	0.70
	Female	# of Individuals	93,850	27,390	39,950	15,110
		% of Population	4.3	1.25	4.6	1.74
24-44	Male	# of Individuals	273,940	85,000	130,820	41,530
		% of Population	6.0	1.86	7.4	2.35
	Female	# of Individuals	324,740	130,620	146,560	65,800
		% of Population	7.1	2.86	8.0	3.59
45-64	Male	# of Individuals	721,550	374,120	309,280	166,290
		% of Population	15.2	7.88	17.0	9.14
	Female	# of Individuals	822,290	449,400	360,720	190,640
		% of Population	17.1	9.35	19.3	10.20
65-74	Male	# of Individuals	297,460	163,160	115,650	64,020
		% of Population	25.0	13.71	25.8	14.28
	Female	# of Individuals	356,440	225,750	167,150	102,920
		% of Population	27.5	17.42	33.8	20.81
75+	Male	# of Individuals	304,200	194,740	128,570	84,270
		% of Population	39.8	25.48	43.4	28.45
	Female	# of Individuals	479,570	304,600	205,160	120,800
		% of Population	44.5	28.26	48.5	28.56
15+	All	% of Population	13.7	7.2	15.41	8
		# of Individuals	3,763,328	1,977,876	1,651,891	857,630

As mentioned earlier in this section, the 2012 Canadian Census did not inquire about the prevalence of communicative disability as a type of disability. Table 7 shows the statistics showing the prevalence of mobility disability in Canadian Survey on Disability, part of 2012 Canadian Census (Statistics Canada, 2013).

To compare the service usage by the population with communicative disability with the service usage by the population with mobility disability, published health service data, costs, and wait times of the SLP were used for communicative disability, and those of occupational therapists (OTs) and physiotherapists (PTs) were used for mobility disability. Data from Ontario Ministry of Health and Long-Term Care—Community Care Access Centres Management Information System (MIS) Comparative Reports from 2013–2017, Community Care Access Centres (CCAC)—Functional Centres: Local Health Integration Network (LHIN) Comparison published in the Healthcare Indicator Tool of Ontario's Ministry of Health and Long-Term Care (MOHLTC) from 2013–2017 were collected for analysis and comparisons (MOHLTC CCAC MIS 2013–2017; MOHTLC Healthcare Indicator Tool, 2016).

Table 8 shows the total number of clients served in and the total number of visits rendered for the population with communicative disability versus and that with mobility disability in Ontario in 2005–2006 as published by the Ontario Ministry of Health. As shown in the numbers, the population with communicative disability was significantly smaller than the population with mobility disability. The smaller number, coupled with the fact that communicative disability is invisible, makes this type of disability less of a priority in the policy making process than more visible mobility disabilities.

Table 8

Communicative Versus Mobility Disability Service Statistics in 2005–2006 in Ontario—
90th Percentile

Quantity	Communicative Disability	Mobility Disability
Total clients served	30,820	220,591
Total visits rendered	251,126	1,073,968

Service statistics were also compared across different settings, including in-home health professional services (in-home HPS), in-home HPS Community Support Service (in-home HPS CSS), and hospitals as shown in Tables 9–25 (MOHLTC CCAC MIS 2013–2017; MOHTLC Healthcare Indicator Tool 2016). As this study focused on access by the adult population with disability in relation to their overall health indicators, data on service provision at public and private schools were excluded from the analysis. Relevant health service usage data were compared using Ontario Auditor General standards of 90th percentile and median wherever available.

In the HPS category, individuals with disability received services at home by health professionals who were employed on payroll by the funding government agency. In the community support services (CSS) setting, individuals with disability who required HPS were treated at home by self-employed staff of a network of multiple community support agencies; the government funding agency contracts these self-employed staff to increase the service capacity.

Table 9 shows the 90th percentile of operating expenses, number of individuals served, total number of visits completed, and the total number of service hours completed

by in-home HPS for SLP services versus occupational therapy services versus physiotherapy services, from 2013 to 2017 end of Q2 (September 30).

Table 9

In-Home HPS—Communicative Versus Mobility Disability Service Statistics in 2013—2017 Q2 in Ontario—90th Percentile

	Op	erati	ing		Individ	uals						
Year	Exp	ense	(%)		Serve	ed		Total V	isits	Total	Service	Hours
	SLP	OT	PT	SLP	OT	PT	SLP	OT	PT	SLP	OT	PT
13YE	0.4	2.5	2.6	1,237	12,805	9,713	3,333	41,477	40,007	914	8,066	10,779
14 Y E	0.4	2.4	3.1	1,389	14,340	12,888	3,690	43,538	87,938	1,043	8,093	15,614
15YE	0.4	2.6	3.4	1,465	16,100	13,504	4,370	48,745	98,054	1,426	10,007	18,625
16YE	0.4	2.6	3.6	1,558	15,811	13,512	4,185	43,331	100,737	2,179	10,875	19,285
17Q2	0.4	2.6	3.5	909	9,101	7,651	2,390	21,939	39,541	1,191	6,378	8,836

Table 10 shows the 90th percentile of operating expenses, number of individuals served, and total number of visits completed by in-home HPS in CSS for SLP services versus occupational therapy services versus physiotherapy services, from 2013 to the end of Q2 2017.

Table 10

In-Home HPS CSS—Communicative Versus Mobility Disability Service Statistics in 2013–2017 Q2 in Ontario—90th Percentile

Year	Op	erating E	xpense	Indiv	Individuals Served			Total Visits		
	SLP	OT	PT	SLP	OT	PT	SLP	OT	PT	
13YE	0.50%	0.30%	0.30%	3,079	342	384	5,816	2,141	1,268	
14YE	0.50%	0.40%	0.30%	3,073	371	506	5,714	2,345	2,740	
15YE	0.40%	0.40%	0.40%	3,636	461	817	5,841	2,500	3,472	
16YE	0.40%	0.40%	0.40%	3,949	496	752	8,913	3,362	1,745	
17Q2	0.40%	0.40%	0.50%	2,201	290	529	3,968	1,554	1,089	

Table 11 shows the 90th percentile of operating expenses, number of total attendance days, and workload SLPs versus OTs versus PTs in the hospital setting from 2013 to 2017 end of Q2 (September 30).

Table 11

Hospital—Communicative Versus Mobility Disability Service Statistics in 2013–2017 Q2 in Ontario—90th Percentile

Year	Ope	rating E	xpense	Total	Attendand	ce Days		Workload		
	SLP	OT	PT	SLP	OT	PT	SLP	OT	PT	
13YE	0.30%	1.10%	1.40%	52,917	251,721	462,063	114.30	624.00	59.90	
14YE	0.30%	1.20%	1.30%	55,241	235,802	471,663	117.70	376.50	60.40	
15YE	0.30%	1.20%	1.30%	55,262	239,841	472,436	102.90	524.10	60.10	
16YE	0.30%	1.20%	1.30%	57,980	259,571	484,116	97.90	314.70	60.00	
17Q2	0.30%	1.10%	1.40%	30,267	143,814	235,497	103.60	380.00	60.30	

Table 12 shows the median of operating expenses, number of individuals served, total number of visits completed, and the total number of service hours completed by inhome HPS for SLP services versus occupational therapy services versus physiotherapy services, from 2013 to 2017 Q2.

Table 12

In-Home HPS—Communicative Versus Mobility Disability Service Statistics in 2013—2017 O2 in Ontario—Median

2017	<u> 2</u> - 111	O TITLET	111	Corrett								
	()perat	ing							T	otal Se	rvice
Year	Ex	pense	e (%)	Indiv	iduals	Served	-	Γotal Vis	sits		Hour	S
	SLP	OT	PT	SLP	OT	PT	SLP	OT	PT	SLP	OT	PT
13YE	0.20	2.10	2.10	716	6,947	5,456	2,451	24,682	24,794	499	1,485	6,682
14YE	0.20	2.20	2.60	864	7,504	7,406	2,669	23,437	38,794	729	944	8,535
15YE	0.30	2.00	2.80	850	7,935	7,669	2,812	27,038	44,436	644	1,832	9,819
16YE	0.30	2.00	2.70	1,003	8,564	7,766	3,528	29,069	47,514	547	832	9,711
17Q2	0.30	2.00	2.50	602	5,241	4,316	1,734	14,078	22,854	317	633	4,022

Table 13 shows the median of operating expenses, number of individuals served, and total number of visits completed by in-home HPS in the CSS for SLP services versus occupational therapy services versus physiotherapy services, from 2013 to 2017 end of Q2.

Table 13

In-Home HPS CSS—Communicative Versus Mobility Disability Service Statistics in 2013–2017 Q2 in Ontario—Median

Year	Ope	rating Ex	pense	Indi	Individuals Served			Total Visits		
	SLP	OT	PT	SLP	OT	PT	SLP	OT	PT	
13YE	0.20%	0.30%	0.20%	140	240	63	1,770	539	78	
14YE	0.20%	0.30%	0.20%	220	246	192	2,043	874	946	
15YE	0.30%	0.30%	0.20%	222	312	123	4,991	927	878	
16YE	0.40%	0.30%	0.10%	358	306	93	4,749	898	63	
17Q2	0.30%	0.20%	0.20%	277	207	73	1,704	255	55	

Table 14 shows the median of operating expenses and number of total attendance days for SLP services versus occupational therapy services versus physiotherapy services, as well as the workload for SLPs (serving the population with communicative disability) versus OTs (serving the population with mobility disability) versus physiotherapists (serving the population with mobility disability) in the hospital setting from 2013 to 2017 end of Q2 (September 30, 2017).

Table 14

Hospital—Communicative Versus Mobility Disability Service Statistics in 2013–2017 Q2 in Ontario—Median

Year	Oper	ating Ex	pense	Total	Attendand	ce Days		Workload		
	SLP	OT	PT	SLP	OT	PT	SLP	OT	PT	
13YE	0.20%	0.80%	1.10%	19,528	126,277	220,841	90.60	236.20	53.50	
14YE	0.20%	0.80%	1.20%	0,202	122,174	217,787	90.20	282.70	51.60	
15YE	0.20%	0.80%	1.10%	22,677	138,191	251,416	83.80	277.60	53.10	
16YE	0.20%	0.70%	1.20%	23,878	143,929	258,174	83.60	223.60	53.90	
17Q2	0.20%	0.80%	1.20%	13,140	72,219	126,172	84.60	238.90	55.10	

Table 15

In-Home Services Wait Times & Unit Costs—Communicative Versus Mobility Disability Service Statistics in 2013–2015 Year-End in Ontario

Provincial	20	13/2014 Yea	ır-End	2014	/2015 Year-H	End
Total	SLP	TO	PT	SLP	OT	PT
Individuals	13,761	126,748	121,077	14,366	136,515	121,41 5
In-person, in- home, phone, outsourced	39,195	382,364	672,553	42,297	404,031	777,69 6
Avg visits/ individual	2.8	3.0	5.6	2.9	3.0	6.4
Avg days waited for service start	9.0	6.7	10.3	8.4	5.7	5.5
Client service expenses (\$)	5,608,510	48,832,132	59,669,889	5,571,187	51,376,330	69,499, 331
Unit cost (\$) / person served (\$)	407.57	385.27	492.83	400.33	376.34	127.16
Unit (\$)/visit (\$)	143.09	127.71	88.72	135.97	127.16	89.37

Table 15 compares the number of individuals served; in-person, phone, in-house and outsourced; average visits per individual; average days waited for service start; client services expenses; unit cost per individual served; and the unit cost per visit for the population with communicative disability versus that with mobility disability in 2013–2015 in Ontario, for professional health services rendered in the in-home setting.

To compare the usage statistics with census data, the percentage of adult population with communicative disability versus mobility disability was collected and analyzed. As mobility disability statistics were available in both the 2006 and 2012 censuses, but communicative disability statistics are only available in the 2006 census, a logical estimate was required (Statistics Canada, 2008a-d; Human Resources and Skills Development Canada, 2011; Statistics Canada, 2013). Shown below are the data from the

disabled population aged 15 and over; the age group was the adult category reported in all three census reports by the Government of Canada. Table 16 shows the data available through 2006 and 2012 census reports on the populations with all disability versus communicative disability versus mobility disability in Ontario versus Canada.

Table 16

Census Data Available on Communicative Versus Mobility Disability for 15+ Age Group in Canada and Ontario From 2006 and 2012 Census

Year	Statistics	Disa	bility in C	anada	Disa	bility in Oı	ntario
		All	Commu-	Mobility	All	Commu-	Mobility
			nication			nication	
2006	# of Individuals	4,417,870	557,970	2,946,150	1,770,760	211,120	1,251,420
	% of Population	14.3	1.91	10.07	18.1	2.2	12.8
2012	# of Individuals	3,763,328	Not	1,977,876	1,651,891	Not	857,630
			Available	;		Available	
	% of Population	13.7	Not	7.2	15.41	Not	8
			Available	;		Available	
	Change in %	-0.6		-2.87	-2.69		-4.8
	% of Change	↓4.2		↓28.5	↓14.9		↓37.5

For fair comparison of accessibility between the target population and its mobility counterpart, the proportion of communicative disability versus mobility disability in Canada and Ontario in 2006 and 2012 are required. With an absence of data on the population of communicative disability in 2012, the change in this population is projected to have followed the same decreasing trend, as shown in the reasoning the follows.

Based on available census data, the overall prevalence of disability decreased in Canada and in Ontario from 2006 to 2012. The same decreasing pattern was noted in the the prevalence of mobility disability in both geographical jurisdictions. The population with mobility disability (2,946,150 individuals) formed 70.4% of the total population with disability in Canada and 70.7% in Ontario (1,251,420 individuals in 2006); and 1,977,876 individuals equivalent to 52.6% in Canada and 857,630 individuals equivalent

to 51.9% in Ontario in 2011. In 2012, the population with communicative disability was 19% of that of the population with mobility disability in Canada, and 17.3% in Ontario.

This showed that the relationship between the population with communicative disability and that with mobility disability was similar across Canada and Ontario in 2006. It is, therefore, safe to project that the 2012 population with communicative disability would follow closely the trend and magnitude of change in the population with mobility disability.

Projecting that the population with communicative disability followed the same trend and percentage of decrease, this population would form 10% of the total population with disability in Canada and 8.95% in Ontario in 2012. Table 17 shows the proportion of communicative disability versus mobility disability in Canada, and same comparison in Ontario, in 2006 and 2012 census reports. Projections are also shown.

Communicative & Mobility Disability in Total Population With Disability in 15+ Age Group in Canada & Ontario in 2006 & 2012 Census Reports

Table 17

Year & Projections	In Total Popu Disability in		In Total Population with Disability in Ontario		
	Communicative Disability	e Mobility Disability	Communicative Disability	Mobility Disability	
2006 (%)	13.4	70.4	12.2	70.7	
2006 (individuals)	557,970	2,946,150	211,120	1,251,420	
2012 (%)	Not Available	52.6	Not Available	51.9	
2012 (Individuals)		1,977,876		857,630	
% Change		↓25.3		↓26.6	
Communicative disabled as % of mobility disabled	19		17.3		
Projected % of communicative disability within total population with disabilities	10		8.95		

To compare whether accessibility to health services was the same for the population with communicative disability with that for the population with mobility disability, benchmark figures needed to be established. These included (a) the percentage of population with communicative disability in relation to the overall population, (b) the percentage of population with communicative disability in relation to the population with disability in general, and (c) the percentage of population with communicative disability (as shown from their need for SLP services) out of the population with mobility disability (as shown from their need for physiotherapy and occupational therapy. With the absence of census data on the percentage of communicative disability in Ontario and Canada in 2011, educated and logical estimates were needed. To come up with the estimated percentage of communicative population within the total population with disability, the

Statistics from Canada and Ontario were averaged: 10% from Canada and 8.95% from Ontario were averaged to become 9.5%. A population with communicative disability that was equivalent to 9.5% of total population with disability 3,775,910 in 2012 would be 358,711 individuals, equivalent to 1.3% of the total population of 27,516,200 in 2012. Health service usage data were analyzed using 18.2% to compare speech-language therapy services against the sum of occupational therapy and physiotherapy services rendered to a show the variance between the services received by the population with communicative versus mobility disability.

Renchmark Figures for Health Service Usage Data Analysis

Table 18

Benchmark Figures for Health Service Osage Data Analysis								
Quantity	Total Population with	SLP Services	Services	Services				
	Communicative	Required in	Required: SLP	Required:				
	Disability Requiring	Relation to Total	versus All	SLP versus				
	SLP Services	Population	Disability	PT & OT				
Percentage		1.3	9.5	18.2				
# of Individuals	358,711							

Based on these benchmark figures, the health service usage statistics, operating costs, and workload of related health professionals for the population with communicative disability was compared against the health service usage statistics of the population with mobility disability across different settings. Again, the *median* and 90th percentile were used as these are the measurements used by the Auditor General of Ontario.

Table 19 shows the 90th percentile of operating expenses, number of individuals served, total number of visits fulfilled, and total number of service hours completed in the population with communicative disability versus that with mobility disability in 2013–

2017 end of Q2 (September 30) in Ontario, in the HPS setting at home. Results show that the population with communicative disability was served proportionately less than its mobility counterpart for all four measurement categories.

Table 19

Analysis of In-Home HPS—Communicative Versus Mobility Disability Service Statistics in 2013–2017 O2 in Ontario—90th Percentile

		~							
Year	Opera	Operating Expense		Individuals Served		Total Visits		Total Service Hours	
	%	Variance	%	Variance	%	Variance	%	Variance	
13YE	7.8	-56.9%	5.5	-70.0%	4.1	-77.5%	4.9	-73.4%	
14 Y E	7.3	-60%	5.1	-72.0%	2.8	-84.6%	4.4	-75.8%	
15YE	6.7	-63.4%	5.0	-72.8%	3.0	-83.6%	5.0	-72.6%	
16YE	6.5	-64.6%	5.3	-70.8%	2.9	-84.0%	7.2	-60.3%	
17Q2	6.6	-64.0%	5.4	-70.2%	3.9	-78.6%	7.8	-57.0%	

Table 20 shows the 90th percentile of operating expenses, number of individuals served, and total number of visits fulfilled in the population with communicative disability versus that with mobility disability in 2013–2017 end of Q2 in Ontario, in the HPS provided through CSS. Results show that the population with communicative disability was served proportionately more than its mobility counterpart for all three measurement categories in this model.

Table 20

Analysis of In-Home HPS CSS—Communicative Versus Mobility Disability Service Statistics in 2013–2017 Q2 in Ontario—90th Percentile

Year	Operating Expense		Individ	duals Served	Tota	Total Visits		
	%	Variance	%	Variance	%	Variance		
13YE	83.3%	+457.9%	424.1%	+2330.2%	170.6%	+937.4%		
14YE	71.4%	+392.5%	350.4%	+1925.3%	112.4%	+617.4%		
15YE	50.0%	+274.7%	284.5%	+1563.2%	97.8%	+537.4%		
16YE	50.0%	+274.7%	316.4%	+1738.6%	174.5%	+958.9%		
17Q2	44.4%	+244.2%	268.7%	+1476.6%	150.0%	+824.9%		

Table 21 shows the 90th percentile of operating expenses, total days of attendance, and workload of staff in hospitals in 2013–2017 end of Q2 in Ontario. Results show that the population with communicative disability received one third to one half less services than their mobility counterpart for both operating expense and total attendance days. In the meantime, the workload for the speech-language pathologists who are the professionals addressing communicative disability, were higher by more than double in 2014, 2016, and 2017 till end of Q2, than that of the professionals addressing mobility disability—physiotherapists and OTs combined in hospitals.

Table 21

Analysis of Hospital—Communicative Versus Mobility Disability Service Statistics in 2013–2017 Q2 in Ontario—90th Percentile

Year	Opera	ating Expense (%)	Total A	Total Attendance Days		orkload
	%	Variance	%	Variance	%	Variance
13YE	12%	-34.1%	7.4%	-59.3%	16.7%	-8.2%
14 Y E	12%	-34.1%	7.8%	-57.1%	27.0%	+148.0%
15YE	12%	-34.1%	7.8%	-57.4%	17.6%	-3.2%
16YE	12%	-34.1%	7.8%	-57.2%	26.1%	+143.6%
17Q2	12%	-34.1%	8.0%	-56.2%	23.5%	+129.3%

Table 22 shows the median of operating expense, number of individuals served, the total number of visits fulfilled, and the total number of service hours completed in the population with communicative disability versus the population with mobility disability from 2013 to the end of Q2 2017 in Ontario, in the health professional services setting of services delivered in clients' home. Results show that the population with communicative disability received one third to one quarter of the services received by their population with mobility disability in all four categories.

Table 22

Analysis of In-Home HPS—Communicative Versus Mobility Disability Service Statistics in 2013–2017 Q2 in Ontario—Median

Year	Operating		Individuals		Total Visits		Total Service	
	Expense		Served]	Hours
	%	Variance	%	Variance	%	Variance	%	Variance
13YE	4.8%	-73.8%	5.8%	-68.3%	5.0%	-72.8%	6.1%	-66.4%
14YE	4.2%	-77.1%	5.8%	-68.2%	4.3%	-76.4%	7.7%	-57.7%
15YE	6.3%	-65.7%	5.5%	-70.1%	3.9%	-78.4%	5.5%	-69.6%
16YE	6.4%	-64.9%	6.1%	-66.3%	4.6%	-74.7%	5.2%	-71.5%
17Q2	6.7%	-63.4%	6.3%	-65.4%	4.7%	-74.2%	6.8%	-62.6%

Table 23

Analysis of In-Home HPS CSS—Communicative Versus Mobility Disability Service Statistics in 2013–2017 Q2 in Ontario—Median

Year	Operating Expense		Indivi	duals Served	То	Total Visits	
	%	Variance	%	Variance	%	Variance	
13YE	40.0%	+219.8%	46.2%	+253.9%	286.9%	+1576.2%	
14YE	40.0%	+219.8%	50.2%	+276.0%	112.3%	+616.8%	
15YE	60.0%	+329.7%	51.0%	+280.4%	276.5%	+1519.3%	
16YE	100.0%	+549.5%	89.7%	+493.0%	494.2%	+2715.2%	
17Q2	75.0%	+412.1%	98.9%	+543.6%	549.7%	+3020.2%	

Table 23 shows the median of operating expenses, number of individuals served, and total number of visits fulfilled in the population with communicative disability versus that with mobility disability in 2013–2017 end of Q2 in Ontario, in the HPS provided through CSS. These results agree with that of the 90th percentile that the population with communicative disability was served proportionately more than its mobility counterpart for all three measurement categories.

Table 24

Analysis of Hospital—Communicative Versus Mobility Disability Service Statistics in 2013–2017 Q2 in Ontario—Median

Year	Operat	Operating Expense		Attendance Days	Workload	
	%	Variance	%	Variance	%	Variance
13YE	10.5%	-42.2%	5.6%	-69.1%	31.3%	+171.8%
14YE	10.0%	-45.1%	5.9%	-67.3%	27.0%	+148.3%
15YE	10.5%	-42.2%	5.8%	-68.0%	25.3%	+139.2%
16YE	10.5%	-42.2%	5.9%	-67.4%	30.1%	+165.5%
17Q2	10.0%	-45.1%	6.6%	-63.6%	28.8%	+158.2%

Table 24 shows the median of operating expense, total days of attendance, and workload of staff in hospitals in 2013–2017 end of Q2 in Ontario. Results show that the population with communicative disability received 42% to 69% of the services less than that received by their mobility counterpart for both operating expense and total attendance days. In the meantime, the workload for the professionals addressing communicative disability—SLPs, were higher by more than a double in 2014, 2016, and 2017 till end of Q2, than the workload of the professionals addressing mobility disability—physiotherapists and OTs combined in the hospital setting. These results are worse than those of the 90th percentile measurement. The disproportionately high workload for SLPs versus physiotherapists and OTs combined, coupled with the gaps in the operational expense and the total attendance days, show a significant resource gap where there was not enough SLPs to handle the caseload within the system, while staffing of physiotherapists and OTs was at a more reasonable and sufficient level to deal with the amount of services required.

Table 25 compares the number of individuals served, including in-person, phone, in-house and outsourced; the average visits per individual; average days waited for

service start; client services expenses; unit cost per individual served; and the unit cost per visit for the population with communicative disability versus that with mobility disability in 2013–2015 in Ontario, for professional health services rendered in the inhome setting.

Table 25

Analysis of In-Home Services Wait Times & Unit Costs—Communicative Versus Mobility Disability Service Statistics in 2013–2015 Year-End in Ontario

		2013/14YE		2014/15YE			
	OT+PT	SLP/OT+P	T Variance	OT+PT	SLP/OT+P	T Variance	
Individuals	247,825	5.6%	-69.2%	257,930	5.6%	-69.2%	
Served							
In-person, in-	1,054,917	3.7%	-79.7%	1,181,727	3.6%	-80.2%	
house, tel,							
outsourced							
Avg visits/	9	32.6%	+179.1%	9	30.9%	+169.8%	
individual							
Avg days	17	52.9%	+290.6%	11	75%	+412.1%	
waited for							
service start							
Client service	s 108,502,021	1 5.2%	-71.4%	120,875,661	4.6%	-74.7%	
expenses (\$)							
Unit cost/	878	46.4%	+255.0%	504	79.5%	+436.8%	
individual							
served (\$)							
Unit cost/ visi	t 216	66.1%	+363.2%	217	62.8%	+345.1%	
(\$)							

Results show that within the population with communicative disability, 69% to 80% fewer patients were served and 69% to 80% less human interactions were received proportionately compared to their mobility counterparts. Results also show that patients waiting for SLP services waited three to four times more in number of days, when proportionately compared to the wait for physiotherapy and occupational therapy combined. On the other hand, client expenses on SLP were 25–30% to that of

physiotherapy and occupational therapy combined from 2013–2015. That said, the unit cost per individual served and the unit cost per visit for SLP services were 2.5 to 4.4 times more than physiotherapy and occupational therapy combined. This can be attributed to the higher hourly rate of SLP services than the hourly rate of physiotherapy and occupational therapy services. The 1.7 times of average visits per individual receiving services over that of physiotherapy and occupational therapy combined can be attributable to the model of outsourcing services to community agencies. Results are further analyzed later in this chapter and in Chapter 5.

According to these variance analyses, the population with communicative disability had better access to care in the in-home setting through CSS than the same population in other settings. For individuals with disability receiving HPS at home, the health professionals were employed on payroll by the funding government agency, while those receiving HPS via CSS were treated at home by self-employed staff of a network of multiple community support agencies that the government funding agency contracts out to for increased services capacity.

According to the variance analysis across the variety of health service access, the target population faired consistently better than its mobility disability counterpart in the setting of In-Home HPS CSS from 2013–2016 end of September, as shown in data of both 90th percentile and median, with 46% to 424% more individuals with communicative disability served and 98% to 175% more visits rendered than their mobility counterpart.

Another consistent pattern of positive variance was in the operating expense, including the correspondingly higher operating costs in the In-Home HPS CSS setting where the most individuals with communicative disability were served, as well as the unit

cost per individual and unit cost per visit in the overall report of in-home services, where the number of individuals with communicative disability was only one third the number of the mobility counterparts served.

This discrepancy in costs could be attributed to the fact that the hourly rate for SLPs was higher than that of OTs and physiotherapists. For labour injury cases, the hourly rate for speech-language pathology services rendered by a registered SLP in 2016 was CAD\$80; while the hourly rate for physiotherapy rendered by a registered PT in 2016 was CAD\$24, and the hourly rate for occupational therapy services rendered by a registered OT in 2016 was CAD\$59 (WSIB Ontario, 2017a-b). For regular rehabilitation cases covered by major insurance companies, the 2016 hourly rate for SLP services was CAD\$150, CAD \$150 for PT, and CAD\$145 for OT (UBC, 2016). In general, the costs of SLP services are higher than PT and OT services, possibly causing the difference in operating expenses.

In the same period from 2013 to the end of September 2016, for all other indicators of access in settings apart from In-Home HPS CSS, significant negative variances were shown for SLP services in relation to physiotherapy and occupational therapy services combined. For the non-CSS in-home HPS setting, SLP services accounted for one third or less of physiotherapy and occupational therapy services combined. The number of individuals served by SLPs were 30% less of those treated by PTs and OTs. The total number of visits by SLP were 25% less than visits by PTs and OTs. Total SLP service hours rendered were 27% to 43% of that of PT and OT service hours. These results were similar across the 90th percentile and the median counts.

In the hospital setting from the same period of 2013 to end of September 2016, all SLP indicators in the 90th percentile data were consistently worse than those of physiotherapy and occupational therapy. Operating expenses for SLP services were one third less than those of physiotherapy and occupational therapy combined. Total SLP attendance days were less than half of mobility therapy. The workload for SLPs in the hospital was 1.3 to 1.5 times heavier than that of PTs and OTs. Results from the median data were even worse. This showed a significant gap between resource investment and client needs.

In 2013–2015 period, the number of individuals served and the number of client interactions by SLPs in the in-home setting were 20% to 30% of that of PTs and OTs. In the same period, the average days waited for SLP service start 2.9 to 4.1 times more than that of physiotherapy and occupational therapy combined. This showed that the access by the population with communicative disability to SLP services was not as good as the access of people with mobility disability to occupational therapy and physiotherapy services.

These results showed that, in the hospital and home settings where services were not performed by outsourced professionals, the target population with communicative disability did not enjoy the same access as the counterpart with mobility disability. In the in-home service setting, the shortfall in service access was compensated by the CSS rendered by outsourced SLPs. Nonetheless, the number of days waited by people with communicative disability remained significant higher than for people with mobility disability.

These results address Research Question 2. These results also concluded that the service access for communicatively disabled was not equitable to that for the mobility disabled.

Unmet rehabilitation needs can delay discharge, limit activities, restrict participation, cause deterioration in health, increase dependency on others for assistance, and decrease quality of life. These negative outcomes can have broad social and financial implications for individuals, families, and communities. (WHO, 2011b, p.102).

Thus, it is recommended that rehabilitation services become more accessible to all types of disabled persons, and particularly to those with communicative disability.

To answer the second part of the research question, about whether the AODA meets the service needs of the communicatively disabled population, and the needs of the caregivers, survey results published by government, service provider, and advocacy organizations were collected and analyzed.

There was not enough data on the quality of life and social determinants of health of the target population and their caregivers available for analysis. According to the Ontario Caregiver Coalition, 2.6 million, or over 28%, of Ontarians over the age of 15 who provide unpaid care to their family members, friends, neighbors, or others, on a daily basis. Many of these caregivers are seniors (n.d).

These caregivers save the national health and community service system \$31 billion dollars annually (Ontario Caregiver Coalition, n.d.). According to City of Toronto's report entitled "Getting Services Right for Torontonians with Disabilities: Demographics and Service Delivery Expectations," 61% of caregivers of family

members with any type(s) of disability reported to require recreational respite for 1–2 days every week, 37% of these caregivers reported to require recreational respite of weekends and 29% to require it during evenings, while 34% of these caregivers reported to require recreation respite time for 2 hours each time and 26% reported to require recreation respite time for half a day each time (2008). However, these data are confined to caregiver experience in the City of Toronto, and are restricted to the need for recreation respite. The caregivers surveyed were caregivers of family members with disability but not only communicative disability. Other types of caregivers, such as professional caregivers, were not included. Caregivers in other municipalities of Ontario were excluded.

Apart from these information, no provincial study was done to understand the access needs of caregivers of individuals with communicative disability. Caregiver experience and challenges, such number of lost work days, and financial losses from caregiving, were surveyed as an aggregate population of disability. There were also overlap between the population with communicative disability and mobility disability due to co-morbidities. As such, the part of Research Question 2 on whether the caregivers of the population with communicative disability experienced the same access under the AODA as their mobility counterpart could not be answered due to lack of data.

The same goes for question C2.a-d of Gil's evaluation model. Data on social determinants of health and quality of life were reported on the aggregate population with disability but not for disability types. As such, Gil's question on consequences and social control of social determinants of health and the results quality of life on the affected population could not be addressed.

Addressing Research Question 3

Research Question 3 concerned options that would address the gaps identified.

This research question was answered based on the findings of Research Questions 1 and 2, and is answered in detail in Chapter 5.

Summary of Results

Based on authoritative international guidelines, the AODA did address the accessibility needs of the target population by design. However, it is more employment-oriented, and lacks reference to education or health needs, nor does it provide for social determinants of health. It also differs from international guidelines by not requiring the need for research that benchmarks against international data. The AODA also put the onus on the person with disability to identify the need for and navigate the system to access assistive support, subsequently putting those without advocates at a disadvantaged position. These conclusions address Research Question 1.

Based on the analysis of health service usage data between the population with communicative disability and that with mobility disability, users with communicative disability in the community received equitable access as the mobility counterparts due to the systemic use of outsourced SLP services. However, SLP services were rendered consistently to disproportionately fewer individuals, with much fewer visits, for much less care time, after much longer wait time than services rendered for mobility disabilities. Workload for SLPs was also much heavier than their mobility counterparts. These findings address Research Question 2.

To address the shortfalls listed above, a few statutory and systemic changes need to be implemented. Statutory changes include providing for access to health services to

match up to employment access; including provision that ensure social determinants of health; collecting data reflecting the socioeconomic profile of the population with communicative disability versus the entire population with disability; and having provisions requiring the research data to be benchmarked against international data. A key systemic change is to increase SLP service capacity to address issues of heavy workload, long wait time, and inadequate care time. This can be done by increasing formal training opportunities and allocation of public health funding to increase employment opportunities across all clinical settings to ensure fair access to SLP services as compared to physiotherapy and occupational therapy services. Another systemic change is to empower the public with the centralized gateway in the public health system to access speech-language services. These recommendations address Research Question 3. All research findings are discussed in detail against each research question in Chapter 5: Discussion.

Chapter 5: Discussion

Conducted by a community advocate and a professional speech-language pathologist, this study is aimed at addressing three research questions:

Research Question 1. Does the AODA take the communicatively disabled population into consideration by policy design?

Research Question 2. Does the AODA meet the service needs of the communicatively disabled population and their caregivers in practice, by providing equitable access to the communicatively disabled population as well as it does to populations of mobility disabilities, which are more visible?

Research Question 3. What are some options that would address the gaps identified?

These research questions were adapted from the Disability and Inclusion Based Policy Analysis by Institute of Research and Development on Inclusion and Society (2012). The WHO and UN models on disability policy were referenced. Census and health service data published by the government were analyzed by comparing the patterns for population with communicative disability against those of the population with mobility disability.

Results of Research Question 1

To address question 1, in general, the AODA did address the accessibility needs of the target population, but is more focused on employment, with no reference to education or health needs. The AODA does not provide for the social determinants of health either.

In comparison with WHO recommendations, the AODA did address the need for research. However, it did not require benchmarking their provisions and evaluation efforts against or comparing with international data, contrary to WHO recommendations.

To improve social interactions and ultimately restore qualify of life, the onus of obtaining assistive support rests on the ultimate user. Individuals affected by communicative disability typically experience challenges in comprehending instructions, navigating the system, and obtaining access to support. People who do not have family or caregiving advocates would be the most adversely affected.

Results of Research Question 2

Strengths. To address Research Question 2, service usage data showed a few areas where people with communicative disability have been faring better than their mobility counterparts from 2013 to the end of September 2016 in both 90th percentile and median data. These are in the in-home HPS CSS, where:

- 1. 46% to 424% more individuals with communicative disability were served than their mobility counterpart;
 - 2. 98% to 175% more visits rendered than their mobility counterpart;
 - 3. the Higher operating costs was incurred;
 - 4. the most individuals with communicative disability were served;
 - 5. there was a higher unit cost per individual; and
- 6. there was a higher unit cost per visit in the overall report of in-home services, where the number of individuals with communicative disability was only one third the number of the mobility counterparts served.

On the other hand, the target community also had much better access to care in the in-home setting through CSS than in other settings. Individuals affected by communicative disability who received SLP services as CSS at home actually received more services than individuals affected by communicative disability in the hospital setting.

Gaps. The following gaps were identified between access for populations with communicative versus mobility disabilities:

- 1. In the non-CSS in-home HPS setting, where results were similar across the 90th percentiles and medians through 2013 to the end of September 2016:
- a. SLP services accounted for one third or less of OT and PT services combined;
- b. 30% fewer individuals were served by SLPs than by OTs and PTs;
- c. 25% fewer visits were made by SLPs than by OTs and PT; and
- d. total service hours rendered by SPPs were 27% to 43% of hours rendered by OT and PT.
- 2. In the hospital setting from the same period, all SLP indicators in the 90th percentile data through 2013 to the end of September 2016 were consistently worse than those of OTs and PTs. This included:
- a. operating expenses for SLP services were one third less than for PTs and OTs combined;
- b. total SLP attendance days were less than half of mobility therapy days rendered; and c. workload for SLPs in the hospital setting was 1.3 to 1.5 times heavier than for OTs and PTs combined. Results from the median data were even worse, showing a significant gap resource investment that under-empowers service providers to match client needs.

3. In the in-home setting for the 2013–2015 period:

a. the number of individuals served and the number of client interactions by SLPs were 20% to 30% of those of OTs and PTs; and

b. the average days waited for SLP service to start were 2.9 to 4.1 times more than those of OT and PT combined. These results show that in the in-home setting where SLP services were outsourced, the target community had access to more services than in other settings. However, even with outsourcing, individuals who required SLP services also waited much longer than their mobility counterparts.

These results addressed Research Question 2. In conclusion, the service access for communicatively disabled people for the time period researched was not equitable to for the mobility disabled. Based on the multiple gaps identified, a major pattern has emerged.

The overall service capacity for SLP services was lower than that of OT and PT services when proportioned according to the populations of the communicative versus mobility disabilities, as shown as the lower number of individuals served, lower number of client interactions, and longer wait times across all settings. Equally apparent are the gaps of lower operating expense, fewer attendance days, and higher workload for SLPs in the hospital setting.

The disproportionate workload of SLPs in the health care setting was confirmed in a research report by graduate-level speech-language pathology students at the University of Toronto and published by Ontario Association of Speech-Language Pathologists and Audiologists (OSLA). There were approximately 2,617 SLPs in Ontario, which had a population of approximately 12,372,997 in 2011. Researchers of the report estimated that approximately 1/10 people have speech or language disorder. Therefore,

for every 500 Ontarians requiring SLP services, there was 1 SLP available. This implied that the average caseload size for a full-time SLP in Ontario would be 500 people (University of Toronto Students of Speech-Language Pathology Graduate Program, 2011). However, based on the Health Professions Database 2011 Stat Book published by Health Force Ontario. (2014), only 67% of SLPs in Ontario work full-time equivalents. This made the estimate of 1 SLP per 500 Ontarians with a speech-language disorder a gross overestimation of service capacity. Compared to the full-time caseload of 47 students per full-time SLP in the American school in 2014 (ASHA, 2014a), the Ontario system was below capacity by over 10 times. That said, the caseload of 47 should be used with caution as it represented only school-based SLP caseloads and therefore is not necessarily representative of other work settings (University of Toronto Students of Speech-Language Pathology Graduate Program, 2011).

The need for increased system capacity was also confirmed by Wickenden in 2013. She confirmed that "a country will have both the capacity and structures in place to consider initiating development of a specialist profession or service to serve people with communication disabilities specifically" (Wickenden, 2013, p. 18). An increase in the service capacity would not only increase accessibility to services in general, but would also allow for more specialized services for individuals with communicative disability.

These systemic challenges could be resolved if the overall capacity for SLP services was increased according to the size of the population with communicative disability, to match the service capacity per capita for the population with mobility disability. This process would start from development of talents at graduate schools, to an

increase in funding for more SLP employment opportunities across all clinical settings, to the establishment of a more efficient referral process of patients for SLP services.

Results of Research Question 3

To address the shortfalls in the design of the AODA in being able meet the access needs of the target population in Ontario with communicative disability, the gaps within the AODA that fall short of WHO and UN recommendations and the needs of the target population should be filled. These include the lack of the following elements:

- 1. support for individuals with communicative disability to obtain assistive supports;
- 2. access to health services to match up to employment access;
- 3. provisions that ensure social determinants of health;
- 4. data reflecting the socioeconomic profile of the population with communicative disability versus the entire population with disability; and
- 5. provisions requiring the research data to be benchmarked against international data.

Support for obtaining assistive support. The AODA can include obligations for service providers to support individuals and caregivers affected by communicative disability to navigate the system to seek the appropriate assistive support and to be financially supported for that. This process would be feasible since the SLP Code of Ethics By-Law No. 2011–8 already includes the following terms:

SLPs and Audiologists:

4.2.11 shall protect the health and well-being of their patients/clients and advocate for them when appropriate;

- 4.2.12 shall utilize all possible resources to ensure that quality service is provided, acknowledging the need for referral in special cases;
- 4.2.14 shall apprise patients/clients of all programs and services from which they may benefit (CASLPO, 2011, p. 3).

These terms indicated the roles SLPs play when a client requires assistive support, and specifies that SLPs have to advocate for the best interests of their client, use all possible resources to ensure quality and comprehensive services, and inform the client of all appropriate programs and services. What was missing in this by-law was the fact that the SLP needs to support the client throughout the process. Explicit mention of that in the AODA would empower and mandate all relevant service providers to support individuals with disabilities through process of seeking, sourcing, applying for, and obtaining funding for such support.

Access to health services to match up to employment access and provisions that ensure social determinants of health. As confirmed by Wickenden in 2013, people with communication impairments are the bottom of the hierarchy of exclusion not only because they are disabled, but also that they cannot advocate for themselves.

"They are denied their right to participate in education and work, community, and political life, to access healthcare, social protection, and justice, because their communication differences mean they are often denied personhood" (Wickenden, 2013, p. 16). Both of these gaps in the AODA can be addressed by using a lens that ensures accessibility for improved social determinants of health.

Socioeconomic profiling of the communicatively disabled population. In the existing census and disability reports, the economic statistics reflect only the overall

disability population in Ontario but our target population—those affected by communicative disability. Filling in the data gap on the quality of life and social determinants of health for the communicatively disabled population would shed light on the socioeconomic disparities between population with communicatively disability versus that with mobility, and inform future policy and service development decisions.

Requirement of research data to be benchmarked against international data. WHO's Global Disability Action Plan called for stronger "collection of relevant and internationally comparable data on disability and support research on disability and related services" (2014, p. 5), Part VIII Section 32(3)(e) of the AODA, can therefore, be modified to prescribe that Accessibility Director of Ontario to conduct research and benchmark against international data, and "to develop and conduct programs of public education on the purpose and implementation of this Act" (Government of Ontario, 2016, p. 1). This would also meet WHO's recommendation to "expand research programmes, including improving information and access to good practice guidelines" (WHO, 2011b, p. 104).

To address the discrepancies in health service usage data between the populations with communicative disability versus mobility disability, the overall system capacity for SLP services needs to increase. This would entail a few aspects of capacity increase, including professional training, increase of employment opportunities across all clinical settings, and increased referral process of patients for SLP services.

Professional training of speech-language pathologists. There are currently three graduate schools with class size of under 50 each, developing professional SLPs in in Ontario, with a population of 13.6 million. In an American state that was inhabited by

the closest population size—the state of Illinois, there are 13 graduate schools, with class sizes of over 100 each, which are accredited by ASHA to train professional SLPs (ASHA, 2014b). To increase the supply for professional SLPs, new funding would be required to develop more programs and to support clinical placements.

Employment opportunities in all clinical settings. As the health system in Ontario is mostly government funded, new health investments are required to increase the employment opportunities of SLPs across all clinical settings. The bulk of the investment needs to be injected into those out of the in-home CSS services, where payroll employees are used instead of self-employed practitioners in outsourced agencies.

Referral process of patients for speech-language pathology services. As SLP services outside of the hospital setting are mostly not funded by the government health care services, clients have to understand the system in order to self-refer, a process through which they are not well supported. With new investments in all settings outside of in-home CSS, there would be more SLPs jobs and more clients requiring SLP services can benefit. The caseload per full-time SLP should fall below 500. Services would be more in-depth and programs could last longer. The financial barrier of the client would be removed as the SLP services would be funded by the provincial health care system.

With this increased capacity and reduced barrier, more referrals to SLP services would be feasible. There can be a formal process to connect SLPs with the relevant expertise and language skills with the need of the client and their family. Currently, clients who are outside of the hospital system either contact their local CCAC for an assessment by a case manager for referral to government-funded SLP services if eligible,

or access the OSLA website and input user search criteria, including areas of practice, geographical coverage, client age group, and language of service. Once government investment is injected into the system to increase SLP job opportunities, the two processes can be combined. Service users can still go through the OSLA website to identify their preferred practitioners, and they can apply through CCAC for health service coverage. CCACs can also act as a body to support them through the practitioner search process.

In increasing capacity, apart from professional capacity, the capacity of the target population also needs to be increased. "If SLPs provided capacity-building training with [people with communicative disability (PWCDs)] so that they had the skills and confidence to lobby and self-advocacy within political arenas, this would help PWCDs to bring about the emancipatory change they want" (Wickenden, 2013, p. 19). Wickenden advocated for SLPs to work in a more empowering way to disrupt the existing hierarchy of exclusion which acts as barriers against PWCDs taking up equal roles in social system at the micro to macro levels (2013). Inequalities faced by people with disabilities experience inequalities come in many forms. They may be denied equal access to health care, employment, education, or political participation because of their disability.

People with disabilities are also vulnerable to violations of dignity as they are often subjected to violence, abuse, prejudice, or disrespect due to their disability. Some people with disability are denied autonomy and would be made to surrender to *de facto* treatments, or the lack thereof, against their will, because an inability to communicate as result of their disability may cause them to be deemed incompetent to make decisions (WHO, 2011b).

The proposed recommendations can form a continuum that starts with increasing capacity to hire more SLPs, followed by SLPs being directly funded by the government for client services, concluding with SLPs empowering clients with skills capacity and self-advocacy know-how to navigate and advocate for their own rights, ultimately empowers the individuals with communicative disability not only with the clinical intervention to improve their communication ability, but also an increased level of independence for the individuals to advocate their own health care and access needs. Clients would therefore become advocates for themselves and would independently move up the social hierarchy.

Implications

The data substantiating the answers to the three research questions showed that the current version of the AODA has gaps that can be addressed by including provisions to mandate data collection, international benchmarking, and support by professional service providers for users to access assistive support. A few challenges were experienced in this study, and they were related to incomprehensive data and the general lack of data on quality of life, health service access, health service experience, and social determinants of health for the population affected by communicative disability.

These challenges imply the need for the service providers and the government, at all levels: municipal, provincial, and federal, to collect data on the demographic profile of the population affected by communicative disability, including their caregivers. Findings also show that the public health system has room to improve by increasing the overall capacity for speech-language pathology services, increasing professional training opportunities and employment opportunities to increase the supply of SLPs, streamlining

the system for users to access speech-language pathology services, and funding SLP services as much as it does for OT and PT services.

Implementing these changes would ensure fair access to health services and better chances for improved social determinants of health for the population affected by communicative disability as compared to their physical counterpart. These changes would also improve social, employment, and economic participation by individuals with communicative disability and their caregivers. Positive social effects would likely be lasting and widespread. The additional health care investment would ensure health equity, distributive justice, and fair access for all, and would bring Canada and Ontario up to par with international guidelines.

Limitations

This study focused on the access to health services by the adult population with communicative disability in Ontario, with no focus on the population of children.

Research findings may not be transferrable to other provinces of Canada, to other types of services to access, or to the under-18 age group.

Due to the limited data available, the analyses conducted were based on informed estimates. There was no uniform measurement for quality of life. There was no data available on the quality of life and social determinants of health of the target population and their caregivers for analysis. Available data did not match the jurisdiction of Ontario or sample population of individuals with communicative disability and caregivers. As such, the last question of Gil's social policy analysis framework (1992) could not be addressed.

Recommendations for Future Research

Due to the lack of data for the target population, a demographic profiling of the population with communicative disability in Ontario is recommended. To address the needs of the target population with communicative disability, further segmenting the target population into ethnolinguistic groups would help to identify the additional challenges that speakers of non-official languages (English and French) would face with accessibility. New immigrants affected by cultural linguistic barriers may experience more challenges with health care access, because the caregivers in this population have limited language proficiency to advocate for the disabled family members.

To address the needs of other populations with disabilities that are invisible, the same study can be replicated for the population with mental health disabilities. Just like the population with communicative disability, the population with mental disabilities is also an invisible population with a disability based on the nature of mental disability. Their ability to understand and express their needs are also affected by their disability, and their needs also need to be understood and addressed.

Conclusion

Under the current AODA regime, the population with communicative disability is underserved, based on the comparison of service statistics between the services that are received for communicative disability versus those received mobility disability. The patterns of discrepancy in service access are confirmed by the definition *underserved* by Roulstone and Harding (2013), who suggested that there are two interpretations of the concept medically underserved as it relates to speech-language pathology: service availability and service accessibility. Policy makers and service providers should be

concerned about whether "some members or groups within the community ... are not accessing or being provided with the service or the level of the service that one might expect given the demographics of the population" (Roustone & Harding, 2013, p. 29).

The lack of accessible communication and information has affected the lives of many people with disabilities. Individuals with communication difficulties, including receptive and expressive challenges, are at a significant social disadvantage. This disadvantage was particularly experienced in sectors where effective communication was critical—such as those of health care, education, local government, and justice. This confirmed the need for AODA provisions to cover all aspects of life, not just employment. "Non-speaking individuals need access to 'augmentative and alternative communication' systems and acceptance of these forms of communication where they live, go to school and work. These include communication displays, sign language, and speech-generating devices" (WHO, 2011b, p. 172).

To empower the population with communicative disability to move up the social hierarchy, access to services that contribute to their quality of life and social determinants of health need to be referenced in the AODA. Corresponding social investment also needs to be injected in the system to facilitate such success. These investments should benefit both the individuals with communicative disability and their caregivers, in ways including but not limited to financial support and increased access to health care.

Research that is regularly conducted to ensure ongoing effectiveness of the *Act* needs to be benchmarked against relevant international data. At the national level, demographic profiling of the population with communicative disability needs to be

restored. Accurate demographic and socioeconomic profiling of the population affected by communicative disability will inform policy and resource allocation.

To address access to support devices or services, the AODA needs to explicitly specify the need for the service provider to support individuals with disability to understand their options and navigate the system to apply for, be evaluated for, and be funded for supportive devices or services. That way, service providers are held accountable for providing information and support for their clients with communicative disability to navigate the health and social system for access to services. These service providers also need to be empowered with resources to effectively do so. Navigation tool kits and case management resources can be provided to achieve this goal.

To increase service capacity for the population with communicative disability, more SLPs need to be trained and developed. Bigger class sizes for speech-language pathology graduate programs and more clinical placement opportunities are required to increase capacity of the profession. More provincial health funding needs to be invested to increase the number of employment opportunities so that wait times can be decreased and individual clinical times can increase.

Service capacity does not end with hiring more professionals to increase service provisions. SLPs need to equip the population affected by communicative disability, including their caregivers, to identify their own needs, advocate for those needs, and make their concerns known to the public, service providers, and policy makers. A two-way communication channel needs to be created between service users and the policy makers.

Once service capacity has increased, the referral process can be streamlined and communicated to the target population to provide a platform for the target population to make educated decisions. The existing government funding and referral body can continue to manage cases by processing funding for eligible cases, and the average caseload per speech-language pathologist will decrease. Wait time for clients will shorten and speech-language pathology services will be more accessible as the services will be funded by the government, regardless of where the services are rendered. Clients' confusion over system navigation will be minimized since the referral process is streamlined, and since service providers are mandated to provide support for access and application.

This completes the continuum with the policy articulating the missing provisions according to: international standards and social determinants of health, regular government surveys of the demographic profile of the target population, provisions for more opportunities for training and jobs, empowerment of the health care system to provide more services and in a timely manner, and concluding with the target population becoming more empowered to understand and advocate for their own needs. The changes proposed are designed with minimal changes to the system, while addressing the gaps to update the system according to the latest population needs in Ontario.

These recommendations would remove barriers to rehabilitation service provision for people with communicative disability. Strategies to remove barriers would include reforming policies, laws, and delivery systems (including development or revision of national rehabilitation plans). Financial barriers would be removed by developing funding mechanisms to address barriers related to financing of rehabilitation.

Accessibility barriers would be minimized by increasing human resources for rehabilitation (including training and retention of rehabilitation personnel); expanding and decentralizing service delivery. Barriers against independence would include increasing the use and affordability of technology and assistive devices. These recommendations are aligned with the recommendations by WHO (2011b).

References

- Accessibility Directorate of Ontario. (2009). Communication access for people who have communication disabilities: Guidelines and resources on communicating with people who have communication disabilities. Retrieved from http://www.mcss.gov.on.ca/documents/en/mcss/publications/accessibility/commA ccessCommunicationDisabilities/Communication_Access_ENG.pdf
- Ahuja, V. (2014). Role of government and civil society in corporate social responsibility.

 International Journal of Trade & Global Business Perspectives, 3(1), 846-852.
- American Academy of Family Physicians (AAFP). (2015): HHS Looks to Advance

 Health Equity through ACA. Retrieved from

 http://www.aafp.org/news/government-medicine/20150923hhsantidiscrim.htm
- American Speech-Language-Hearing Association. (2007). Scope of practice in speech-language pathology. Retrieved from http://www.asha.org/policy/SP2007-00283.htm
- American Speech-Language-Hearing Association. (2013). *SLP Health Care Survey 2013:*Outcome measures report. Retrieved from www.asha.org/uploadedFiles/2013
 SLP-Health-Care-Survey-Outcome-Measures.pdf
- American Speech-Language-Hearing Association. (2014a). Schools Survey. SLP

 Caseload Characteristics. Retrieved from

 http://www.asha.org/Research/memberdata/SchoolsSurvey/
- American Speech-Language-Hearing Association. (2014b). Search by program criteria.

 Retrieved from http://www.asha.org/edfind/

- American Speech-Language-Hearing Association. (2016a). *Code of Ethics*. Retrieved from http://www.asha.org/code-of-ethics/
- American Speech-Language-Hearing Association. (2016b). Speech or language impairments: Second most prevalent disability category. Retrieved from http://www.asha.org/newslist.aspx?cat=SLP&PageNumber=2
- American Speech-Language-Hearing Association. (2016c). 2016 public policy agenda.

 Retrieved from http://www.asha.org/uploadedFiles/2016-Public-Policy-Agenda.pdf
- American Speech-Language-Hearing Association. (2017). 2017 public policy agenda.

 Retrieved from http://www.asha.org/uploadedFiles/2017-Public-Policy-Agenda.pdf
- Anderson, E. (2010). Justifying the capabilities approach to justice. In: I. Robeyns and H. Brighouse (eds.), *Measuring justice—primary goods and capabilities*, pp. 81-100. Cambridge, U.K.: Cambridge University Press.
- Annable, G., Goggin, G., Stienstra, D. (2007). Accessibility, disability, and inclusion in information technologies. Introduction. *The Information Society*, 23, 145-147. doi: 10.1080/01972240701323523.
- AODA Alliance. (2008). Accessibility for Ontarians with Disabilities Act Alliance

 Update: viewing the 2008 Ontario budget through a disability lens how does it
 look? Retrieved from http://www.aodaalliance.org/strong-effectiveaoda/03252008-2.asp

- Arim, R. (2015): Canadian Survey on Disability, 2012. A profile of persons with disabilities among Canadians aged 15 years or older, 2012. Ottawa, ON: Statistics Canada.
- Badano, G. (2014). Political liberalism and the justice claims of the disabled: A reconciliation. *Critical Review of International Social and Political Philosophy*, 17(4), 401-422. doi:10.1080/13698230.2013.775734
- Baker, P. M. A., & Bellordre, C. (2004). Adoption of information and communication technologies: key policy issues, barriers and opportunities for people with disabilities. *Proceedings of the 37th Annual Hawaii International Conference*. pp. 1-10. doi: 10.1109/HICSS.2004.1265319
- Balandin, S., & Hines, M. (2011). The involvement of people with lifelong disability and communication impairment in lecturing to speech-language pathology students.

 *International Journal of Speech-Language Pathology, 13, 436-445. doi: 10.3109/17549507.2011.513738
- Banks, Y. (2007). The CSR debate in Canada: Extractive companies operating in developing countries. In *The role of government in social responsibility* (pp. 11-12). Vienna, Austria: Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management.
- Barnartt, S., Seelman, K., & Gracer, B. (1990). Policy issues in communications accessibility. *Journal of Disability Policy Studies*, 1, 47-63. doi: 10.1177/104420739000100203

- Bartlett, G. R., Blais, R., & Tamblyn, R. (2008). Impact of patient communication problems on the risk of preventable adverse events in the acute care settings.

 Canadian Medical Association Journal, 178, 1555-1562.
- Beer, C. (2010). Charting a path forward: Report of the Independent Review of the Accessibility for Ontarians with Disabilities Act, 2005. Retrieved from https://www.ontario.ca/page/charting-path-forward-report-independent-review-accessibility-ontarians-disabilities-act
- Bennett, R. (2014). There can be no moral obligation to eradicate all disability.

 *Cambridge Quarterly of Healthcare Ethics, 23, 30-40.

 doi:10.1017/S0963180113000418
- Bennett, R., & Harris, J. (2002). Are there lives not worth living? When is it morally wrong to reproduce? In: Dickenson D. (ed.), *Ethical Issues in Maternal-Fetal Medicine* (p.p. 321-334). Cambridge U.K.: Cambridge University Press.
- Bond, R., McColl, M. A. (2013). *A review of disability policy in Canada*. 2d ed. Kingston ON: Canadian Disability Policy Alliance.
- Borg, J., Lantz, A., & Gulliksen, J. (2014). Accessibility to electronic communication for people with cognitive disabilities: A systematic search and review of empirical evidence. *Universal Access in the Information Society*, 14, 1-16. doi: 10.1007/s10209-014-0351-6
- Boyle, M. H.; Furlong, W.; Feeny, D.; Torrance, G., & Hatcher, J. (1995). Reliability of the Health Utilities Index-Mark III used in the 1991 Cycle 6 Canadian General Social Survey Health Questionnaire. *Quality of Life Research*, *4*, 249-257.

- Brčić Kuljiš, M. (2014): Justice for disabled persons. *The Holistic Approach to Environment* 4, 153-170.
- Bredemeier, J., Peretti Wagner, G., Agranonik, M, Spalding Perez, T. (2014). The World Health Organization Quality of Life Instrument for People with Intellectual and Physical Disabilities (WHOQOL-Dis): Evidence of validity of the Brazilian version. *BMC Public Health*, 14, 1-12.
- Bromley, D. (1989): The ideology of efficiency: Searching for a theory of policy analysis. *Journal of Environment Economics and Management* 19, 86-107.
- Brown, P. (2013). Integrating medical and environmental sociology with environmental health: Crossing boundaries and building connections through advocacy. *Journal of Health and Social Behavior*, 54, 145-64.
- Buell, S. (2013). A perspective from Bolivia on the implications of the World Report on Disability for people with communication disabilities. *International Journal of Speech-Language Pathology* 15, 32–36. doi: 10.3109/17549507.2012.729611.
- Building and Construction Authority. (2007). Code on accessibility in the built environment 2007. Singapore. Retrieved from https://www.bca.gov.sg/BarrierFree/others/AccessibilityCode2007.pdf
- Byles, J. (2009): The epidemiology of communication and swallowing disorders.

 *Advances in Speech Language Pathology, 7, 1-7. doi: 10.1080/14417040500055037.
- Caldwell, B., Cooper, M, Guarino Reid, L., Vanderheiden, G. (2008). Web content accessibility guidelines (WCAG) 2.0. Retrieved from

- https://www.w3.org/WAI/WCAG20/versions/guidelines/wcag20-guidelines-20081211-a4.pdf
- Canadian Institute for Health Information. (2014). Perceptions of the healthcare system.

 Commonwealth Fund Survey 2014. Retrieved from

 https://www.cihi.ca/en/commonwealth-fund-survey-2014
- Canadian Medical Association. (2013a). Ensuring equitable access to care: strategies for governments, health system planners, and the medical profession. *CMA Position Statement*. Retrieved from https://www.cma.ca/Assets/assets-library/document/en/advocacy/PD14-04-e.pdf
- Canadian Medical Association. (2013b). Health equity and social determinants of health: a role for the medical profession. *CMA Policy*. Retrieved from https://www.cma.ca/En/Pages/health-equity.aspx
- Chubb, C. (2015). Hoskins' 10-point plan aimed at transforming senior care. CityNews.

 Retrieved from http://www.citynews.ca/2015/05/13/hoskins-10-point-plan-aimed-at-transforming-senior-care/
- City of Toronto. (2008). getting services right for Torontonians with disabilities:

 Demographics and service delivery expectations. Retrieved from

 https://www1.toronto.ca/city_of_toronto/parks_forestry__recreation/accessibility/
 files/pdf/Getting_Services_Right.pdf
- Clara, N., Misirowski, J. (2010). Disability and health services policy analysis. Kingston ON: Queen's University.

- College of Audiologists and Speech-Language Pathologists of Ontario. (2011). By-Law No. 2011-8. Retrieved from
 - http://www.caslpo.com/members/resources/legislation-regulations-and-by-laws
- College of Audiologists and Speech-Language Pathologists of Ontario (Caslpo). (2016). What is a Speech-Language Pathologist? Toronto ON: Caslpo.
- Collier, B. (2013). Update: Communication disabilities access Canada. *Figuratively Speaking*, 42, 1-2.
- Collier, B. Blackstone, S. W. Taylor, A. (2012): Communication access to businesses and organizations for people with complex communication needs. *Augmentative and Alternative Communication*, 28, 205–218. doi: 10.3109/07434618.2012.732611.
- Comartin, M. Accessibility for Ontarians with Disabilities Act, 2005, Part III: What are my obligations as a private-sector employer Under the Law's Integrated Accessibility Standards? *Lexology*. Retrieved from http://www.lexology.com/library/detail.aspx?g=baf698a4-cd16-493a-bac2-42427de6bccf
- Commonwealth Fund (The). (2014). International Survey of Older Adults Finds

 Shortcomings in Access, Coordination, and Patient-Centered Care. *In the Literature*.
- Communication Disabilities Access Canada. (2013). Communication Access.
- Communication Disabilities Access Canada. Communication Intermediaries in Canada (CDAC, 2012): Key Findings.

- Communications Access Now (2016): Communication Access Now gives voice to those with speech, language difficulties. 'The right to be understood' at heart of a national campaign to improve communication access. CBC News.
- Cook, K.; Jack, S.; Siden, H.; Thabane, L.; Browne, G. (2014): Innovations in Research with Medically Fragile Populations: Using Bulletin Board Focus Groups. In *The Qualitative Report* 19 (77), pp. 1–12.
- Council on Access to Information for Print-Disabled Canadians. (2000). Fulfilling the

 Promise: Report of the Task Force on Access to Information for Print-Disabled

 Canadians. Task Force on Access to Information for Print-Disabled Canadians.
- Council on Access to Information for Print-Disabled Canadians. (2008). Fulfilling the Promise: A Progress Report. Task Force on Access to Information for Print-Disabled Canadians.
- Creswell, J. (2003): Research Design. Qualitative, Quantitative, and Mixed Methods

 Approach. 2nd ed. Thousand Oaks, California: Sage Publications, Inc.
- Cruice, M. (2007). Issues of access and inclusion with aphasia. *Aphasiology*, 21(1), p. 3-8, doi: 10.1080/02687030600798071
- Cruice, M.; Worrall, L.; Hickson, L.; & Murison, R. (2003). Finding a focus for quality of life with aphasia: Social and emotional health, and psychological well-being. *Aphasiology*, 17(4), 333-353.
- D'Aubin, A. (2007). Working for Barrier Removal in the ICT Area: Creating a More Accessible and Inclusive Canada. *The Information Society: An International Journal*, 23(3), p. 193-201, doi: 10.1080/01972240701323622

- D'Souza, C. (2009): Survey of Canadian Speech-Language Pathology Service Delivery to Linguistically Diverse Clients. Dissertation. Dalhousie University.
- Deulgaonkar, Parag (2015): Dubai 2020: Barrier-free, inclusive, disability friendly. Emirates 24/7.
- Dickey, L., Kagan, A; Lindsay, M., Fang, J., Rowland, A., Black, S. (2010): Incidence and Profile of Inpatient Stroke-Induced Aphasia in Ontario, Canada. In *Archives of Physical Medicine and Rehabilitation*, *91*(2), pp. 196–202. doi: 10.1016/j.apmr.2009.09.020.
- Dickson, B. (1998). *Disabilities Act must have teeth*. Council of Canadians with Disabilities.
- Diderichsen, F. (2005). Resource Allocation and Health Equity: Issues and Methods.

 World Bank
- Disability and Health Program. (2009). How to Create Effective Health Messages for People with Disabilities. New York State Department of Health.
- Disability Research Consortium. (n.d.) Making Change Happen for Disabled People?
- Dixon-Woods, M.; Agarwal, S.; Jones, D.; Young, B.; Sutton, A. Synthesising qualitative and quantitative evidence: a review of possible methods. *Journal of Health Services Research & Policy*, 10(1), p. 45.
- Dworkin, R. (2000). Sovereign Virtue, Harvard University Press, Cambridge,
 Massachusetts, London, England.
- Dye, T. R. (1966) Politics, Economics, and the Public: Policy Outcomes in the American States. Chicago, IL: Rand McNally

- Ellcessor, E. (2012). Access ability: Policies, practices, and representations of disability online.
- Employment and Social Development Canada. (2013). Federal Disability Reference Guide. Government of Canada.
- Engebretsen, E., & Heggen, K. (2015). Powerful concepts in global health: Comment on "Knowledge, moral claims and the exercise of power in global health."

 International Journal of Health Policy and Management, 4(2), 115–117.
- Etscheidt, S. (2013): "Truly Disabled?": An Analysis of LD Eligibility Issues Under the Individuals With Disabilities Education Act. In *Journal of Disability Policy Studies* 24 (3), pp. 181–192. doi: 10.1177/1044207312453323.
- Federal Register. (2015). HHS Looks to Advance Health Equity through ACA.
- Finnis, E., Howell, J., & Gorrie, R. (2014). Some reflections on improving accessibility and the classroom experience. *Transformative Dialogues: Teaching & Learning Journal*, 7(3).
- Fischer, F.; Miller, G. J., Sidney, M. S. (Eds.) (2007): Handbook of Public Policy Analysis: Theory, Politics, and Methods: CRC Press.
- Fischer, L. (2009): A comparative analysis of chip perinatal policy in twelve states.

 Dissertation, Houston, Texas. The University of Texas.
- Fitzpatrick, J., Sanders, J., & Worthen, B. (2011). *Program evaluation: Alternative approaches and practical guidelines* (4th ed.). Boston: Allyn & Bacon.
- Foster-Fishman, P.G., Nowell, B., & Yang, H. (2007). Putting the system back into systems change: a framework for understanding and changing organizational and

- community systems. *American Journal of Community Psychology*, *39*, p. 197-215, doi: 10.1007/s10464-007-9109-0
- Freeman, C. Availability and delivery of speech-language pathology services for adults with intellectual disabilities in south-eastern Ontario. *Journal on Developmental Disabilities*, 10(2), p. 81–91.
- Gallagher-Mackay, Kelly; Kidder, Annie (2014): Special Education. A People for Education Report. People for Education. Toronto.
- Garcia, L., Barrette, J., & Laroche, C. (2000). Perceptions of the obstacles to work reintegration for persons with aphasia. *Aphasiology*, 14(3), 269–290.
- Garcia, L., Laroche, C., & Barrette, J. (2002). Work integration issues go beyond the nature of the communication disorder. *Journal of Communication Disorders*, 35, 187–211.
- Gardener, A.; Geierstanger, S. (2007): Working with logic models to evaluate a policy and advocacy program. In *The Evaluation Exchange* XIII (1), pp. 8–9.
- Gauthier, A.; Vignola, A.; Calvo, A., Cavallo, E.; Moglia, C.; Sellitti, L.; Mutani, R.; and Chiò, A. (2007). A longitudinal study on quality of life and depression in ALS patient–caregiver couples. *Neurology*, 68(12) 923–926. doi: http://dx.doi.org/10.1212/01.wnl.0000257093.53430.a8
- Généreux, S., Julien, M., Larfeuil, C., Lavoie, V., Soucy, O., & Le Dorze, G. (2004).
 Using communication plans to facilitate interactions with communication impaired persons residing in long-term care institutions. *Aphasiology*, 18(12), p. 1161-1175, DOI: 10.1080/02687030444000507

- Gil, D. G. (1970): A Systematic Approach to Social Policy Analysis. In *Social Service Review*, 44 (4), pp. 411–426.
- Gil, D. G. (1973-1974). Theoretical perspectives on the analysis and development of social policies. *Journal of Sociology and Social Welfare*, *I*(1), [ccxiv]-[ccxxv].
- Gil, D. G. (1992). Unravelling social policy. Theory, analysis and political action towards social equality. Rochester, VT: Schenkman Books.
- Gil, D. G. (1993): Beyond Access to Medical Care. Pursuit of health and prevention of ills. In *Evaluation & the Health Professional* 16 (3), pp. 251–277. doi: 10.1177/016327879301600301
- Gordon, P. (2006). A Federal Disability Act: Opportunities and Challenges. Council of Canadians with Disabilities.
- Gostin, L. O. (2001). Beyond moral claims: A human rights approach in mental health.

 *Cambridge Quarterly of Healthcare Ethics, 10(3), 264-274.

 doi:10.1017/S0963180101003061
- Government of Canada. (2014). Convention on the Rights of Persons with Disabilities— First Report of Canada.
- Government of Ontario. (2016). Accessibility for Ontarians with Disabilities Act, 2005.
- Government of Ontario: Accessibility for Ontarians with Disabilities Act, 2005, Ontario Regulation 429/07 Accessibility Standards for Customer Service. AODA, O. Reg. 212-14.
- Government of Ontario. (2012). What you have to do to comply with the Accessibility Standards for Customer Service. *Out of the Box*.
- Government of United Kingdom (2010): Equality Act 2010 (c. 15).

- Government of United States of America (2009). *Americans with Disabilities Act of* 1990, as amended.
- Hankins, S. (2010): A Policy Analysis of the Americans with Disability Act of 1990.

 California State University.
- Harris, J.L., Kiran, S., Marquardt, T.P., & Fleming, V.B. (2008). Communication wellness check-up: age-related changes in communicative abilities. *Aphasiology*, 22(7-8), p. 813-825, doi: 10.1080/02687030701818034
- Hays, R.; Hahn, H., Marshall, G. (2002). Use of the SF-36 and other health-related quality of life measures to assess persons with disabilities. *Archives of Physical Medicine and Rehabilitation*, 83, S4-S9
- Health Care Services Team. *SLP Health Care Survey 2013: Outcome Measures Report*.

 American Speech-Language-Hearing Association.
- HealthForceOntario. (2014). *Health Professions Database 2011 Stat Book*. Ministry of Health and Long-Term Care.
- Heath, J.; & Totan, T. (2016). Update on the Accessibility for Ontarians with Disabilities Act. *Lexology*.
- Hemsley, B., Werninck, M., & Worrall, L. (2013). "That really shouldn't have happened": People with aphasia and their spouses narrate adverse events in hospital. *Aphasiology*, 27(6), p. 706-722, DOI: 10.1080/02687038.2012.748181
- Home Care Database. (2006a): Year in Review 2005/06. Ontario Home Care Administrative Systems (OHCAS).
- Home Care Database. (2006b): Year in Review 2005/06 Supplemental by LHIN. Ontario Home Care Administrative Systems (OHCAS).

- Hosseinpoor, A.R., Nambiar, D., Schlotheuber, A, Reidpath, D. & Ross, Z. (2016).

 Health Equity Assessment Toolkit (HEAT): software for exploring and comparing health inequalities in countries. *BMC Medical Research Methodology*, 16:141. DOI: 10.1186/s12874-016-0229-9
- Human Resources and Skills Development Canada. (2011): Disability in Canada. A 2006 profile. Ottawa, Ont.
- India Education Diary. (2015). Children with Disabilities urge PM Modi to ensure implementation of Accessible India.
- Institute on Independent Living. (1997). Government Action on Disability Policy: A Global Survey. Sweden.
- Institute for Research and Development on Inclusion and Society (IRIS). (2012).

 *Disability and Inclusion Based Policy Analysis. York University.
- Jans. M. (2007). A framework for public policy analysis and policy evaluation. Virje Universiteit Brussel.
- Kagan, A. (1998a). Reply: Philosophical, practical and evaluative issues associated with "Supported conversation for adults with aphasia". *Aphasiology*, 12(9), p. 851-864, doi: 10.1080/02687039808249580
- Kagan, A. (1998b). Supported conversation for adults with aphasia: methods and resources for training conversation partners. *Aphasiology*, *12*, 816-830, doi: 10.1080/02687039808249575
- Kagan, A., & LeBlanc, K. (2002). Motivating for infrastructure change: toward a communicatively accessible, participation-based stroke care system for all those

- affected by aphasia. *Journal of Communication Disorders*, *35*(2): p. 153-169, ISSN 0021-9924, doi: dx.doi.org/10.1016/S0021-9924(02)00062-X.
- Kahan. B. (2008). Excerpts from Review of Evaluation Frameworks. Saskatchewan Ministry of Education.
- Kathard, H., & Pillay, M. (2013). Promoting change through political consciousness: A South African speech-language pathology response to the World Report on Disability. *International Journal of Speech-Language Pathology*, 15(1): p. 84–89, doi: 10.3109/17549507.2012.757803
- Kenny, B., Lincoln, M., & Balandin, S. (2010). Experienced SLPs' responses to ethical dilemmas: An integrated approach to ethical reasoning. *American Journal of Speech Language Pathology (Online)*, 19(2), 121-134.
- Kerzner, L., & Baker, D. (1999). A Canadian with Disabilities Act? Council of Canadians with Disabilities.
- Kopycinski. Gary (2015): HHS Takes Next Step in Advancing Health Equity through the Affordable Care Act. *eNews*. Park Forest.
- Kuljis, M.B. (2014). Justice for Disabled Persons. *Holistic approach to environment,* 4(4), 153-170.
- Langdon, P.M., Lazar, J., Heylighen, A., Dong, H. (Ed.) (2014): *Inclusive Designing. Joining usability, accessibility, and inclusion*. Springer.
- Law, J., Bunning, K., Byng, S., Farrelly, S., & Heyman, B. (2005). Making sense in primary care: Levelling the playing field for people with communication difficulties. *Disability & Society*, 20(2), 169–184.

- Le Dorze, G., Salois-Bellerose, E., Alepins, M., Croteau, C., & Hallé, M.-C. (2014). A description of the personal and environmental determinants of participation several years post-stroke according to the views of people who have aphasia.

 *Aphasiology, 28(4), p. 421-439, doi: 10.1080/02687038.2013.869305
- Lennox, N., Taylor, M., Rey-Conde, T., Bain, C., Boyle, F.M., & Purdie, D.M. (2004). ask for it: development of a health advocacy intervention for adults with intellectual disability and their general practitioners. *Health Promotion International.* 19(2):167-175. doi: 10.1093/heapro/dah204
- Lepofsky, D. (2012). Supplemental Brief to the Andrew Pinto Ontario Human Rights

 Code Review. Accessibility for Ontarians with Disabilities Act Alliance.
- Lettner, M. (2008). *Health Equity Now: A Working Paper on the Best First Steps for Ontario*. Wellesley Institute.
- Lock, S., Jordan, L., Bryan, K., & Maxim, J. (2005). Work after stroke: focusing on barriers and enablers. *Disability & Society*, 20(1), 33–47.
- Lomas, J., Pickard, L., & Mohide, A. (1987). Patient versus Clinician Item Generation for Quality-of-Life Measures: The Case of Language-Disabled Adults. *Medical Care*, 25(8), 764-769.
- Lowell, A., (2013). "From your own thinking you can't help us": Intercultural collaboration to address inequities in services for Indigenous Australians in response to the World Report on Disability. *International Journal of Speech-Language Pathology*, *15*(1): p. 101–105, doi: 10.3109/17549507.2012.725770
- Madhukalya, A. (2015). Narendra Modi to announce accessibility campaign on World Disabled Day. DNA India.

- Mak, J. (2010). Disability Demographics: Gender, Poverty and Age. City of Hamilton.
- Mauri, C. J. (2011). The Medical Approach and the Social Approach to Disability: A Descriptive Analysis. Murdoch University.
- McAllister, L., Wylie, K., Davidson, B., & Marshall, J. (2013). The World Report on Disability: An impetus to reconceptualise services for people with communication disability. *International Journal of Speech-Language Pathology*, 2013; 15(1): p. 118–126, doi: 10.3109/17549507.2012.757804
- McAllister, S.; Lincoln, M.; Ferguson, A.; McAllister, L. (2011): A systematic program of research regarding the assessment of speech-language pathology competencies. In *International Journal of Speech-Language Pathology*, *13*(6), pp. 469–479. doi: 10.3109/17549507.2011.580782.
- McColl, M.A., Stephenson, R. (2008). A Scoping Review of Disability Policy in Canada:

 Effects on Community Integration for People with Spinal Cord Injuries. Queen's

 University.
- Meloncon, L. (Ed.) (2013). Rhetorical Accessibility: At the Intersection of Technical Communication and Disability Studies. Baywood Publishing Company, Inc.
- Michailakis, D. (1997). *Government Action on Disability Policy: A Global Survey Annex*I. Independent Living Institute.
- Ministry of Citizenship and Immigration. (2013). *Ministry of Citizenship and Immigration 2-13-14 Accessibility Plan*. Government of Ontario.
- Ministry of Community and Social Services. (2014). A Guide to the Integrated Accessibility Standards Regulation. Government of Ontario.

- Ministry of Economic Development, Employment & Infrastructure. (2014). A Guide to the Integrated Accessibility Standards Regulation. Government of Ontario.
- Ministry of Economic Development, Trade and Employment. (2014). A Guide to the Integrated Accessibility Standards Regulation.
- Ministry of Finance. (2013). *Ministry of Finance 2013-2014 Accessibility Plan*.

 Government of Ontario.
- Ministry of Health and Long-Term Care (MOHLTC). (2013a). CCAC MIS Comparative Reports 2012/13YE.
- Ministry of Health and Long-Term Care (MOHLTC). (2013b). *Ministry of Health and Long-Term Care 2013-2014 Annual Accessibility Plan*. Government of Ontario.
- Ministry of Health and Long-Term Care (MOHLTC). (2014). CCAC MIS Comparative Reports 2013/14YE.
- Ministry of Health and Long-Term Care (MOHLTC). (2015). CCAC MIS Comparative Reports 2014/15YE.
- Ministry of Health and Long-Term Care (MOHLTC). (2016). CCAC MIS Comparative Reports 2015/16YE.
- Ministry of Health and Long-Term Care (MOHLTC). (2017). CCAC MIS Comparative Reports 2016/17Q2.
- Ministry of Health and Long-Term Care (MOHLTC) Healthcare Indicator Tool (2016).

 Community Care Access Centres (CCAC) Functional Centres: Local Health

 Integration Network (LHIN) Comparison.
- Ministry of the Environment. (2013). *Ministry of the Environment 2013-14 Accessibility*Plan. Government of Ontario.

- Mont, D. (2007). SP Discussion Paper: Measuring Disability Prevalence. The World Bank.
- Moran, M. (2014). Second Legislative Review of the Accessibility for Ontarians with Disabilities Act, 2005.
- Morestin, Florence. (2012). A Framework for Analyzing Public Policies: Practical Guide.
- Nagel, S. (2001): Conceptual Theory and Policy Evaluation. In *Public Administration & Management: An Interactive Journal* 6 (3), pp. 71–73.
- National Law Review (The). (2016a). Affordable Care Act Section 1557: New Rule, New Requirements for Healthcare Providers.
- National Law Review (The). (2016b). Musicians and FCC Finally Singing from Same (Accessible) Sheet of Music.
- Neufeldt, A.H., Watzke, J., Birch, G., & Buchner, D. (2007). Engaging the

 Business/Industrial Sector in Accessibility Research: Lessons in Bridge Building.

 The Information Society: An International Journal, 23(3), p. 169-181, doi:

 10.1080/01972240701323580
- New York State Department of Health. (2012): *BRFFS Brief. Disability: New York State Adults*, 2012 (1406).
- Nolte, J. (2005). Enhancing Interdisciplinary Collaboration in Health Care in Canada.

 The Conference Board of Canada.
- Norheim, O.F., & Asada, Y. (2009). The ideal of equal health revisited: definitions and measures of inequity in health should be better integrated with theories of

- distributive justice. *International Journal for Equity in Health*, 8:40, 1-9. doi: 10.1186/1475-9276-8-40
- OCAD University Inclusive Design Research Centre. (2010). *Releasing Constraints:*Projecting the Economic Impacts of Improved Accessibility in Ontario. Retrieved from http://idrc.ocadu.ca/index.php/policy/idrc-and-aoda/454
- Office of Legislative Counsel. Accessibility for Ontarians with Disabilities Act, 2005 O.

 Reg. 191/11. Retrieved from Office of Legislative Counsel. Accessibility for

 Ontarians with Disabilities Act, 2005 O. Reg. 191/11.
- Office of Legislative Counsel. *Accessibility for Ontarians with Disabilities Act*, 2005, S.O. 2005, c. 11. Retrieved from https://www.ontario.ca/laws/statute/05a11
- Office of Legislative Counsel. *Accessibility for Ontarians with Disabilities Act*, 2005 O.

 Reg. 430/07. Retrieved from https://www.ontario.ca/laws/regulation/070430
- Office of Special Education and Rehabilitation Services. (2015). *U.S. Department of Education: 37th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2015* (PDF). Retrieved from https://www2.ed.gov/about/reports/annual/osep/2015/parts-b-c/37th-arc-for-idea.pdf
- Office of the Auditor General of Ontario. (2015). Community Care Access Centres—
 Financial operations and service delivery. Retrieved from
 http://auditor.on.ca/en/content/specialreports/specialreports/CCACs_en.pdf
- Office of the Auditor General of Ontario. (2016). *Annual Report 2016*. Retrieved from http://www.auditor.on.ca/en/content/annualreports/reportsbytopic.html

- Oliver, M. (1998): Theories in health care and research. Theories of disability in health practice and research. In *British Medical Journal*, *317*, 1446–1449.
- Ontario Association of Speech-Language Pathologists and Audiologists (OSLA). (2014).

 *Pushed out of hospital, abandoned at home. After twenty years of budget cuts,

 *Ontario's health system is failing patients. Retrieved from

 https://www.osla.on.ca/uploads/Pushed%20Out%20of%20Hospital%20FINAL_F

 ebruary%202014.pdf
- Ontario Association of Speech-Language Pathologists and Audiologists (OSLA). (2016).

 Recommended fee schedule for speech-language pathology services 2016.

 Retrieved from

 https://www.osla.on.ca/uploads/OSLA%20SLP%20Recommended%20Fee%20Schedule%202016.pdf
- Ontario Caregiver Coalition. (n.d.) *Where we stand*. Retrieved from http://www.ontariocaregivercoalition.ca/the-work-we-do.html
- Ontario Public Health Association. (2014). *Position statement on applying a health*equity lens. Retrieved from http://opha.on.ca/getmedia/e19faab2-52d0-4aae-bde8-e4d9364aab3f/OPHA-Position-Statement-Applying-a-Health-Equity-Lens.pdf
- Organisation for Economic Co-operation and Development (2007). Students with disabilities, learning difficulties and disadvantages. Policies, statistics and indicators. Retrieved from
 - http://www.oecd.org/edu/school/students with disabilities learning difficulties and disadvantages policies statistics and indicators 2007 edition. htm

- Osborn, R., Moulds, D., Squires, D., Doty, M. M., Anderson, C. (2014). International survey of older adults finds shortcomings in access, coordination, and patient-centered care. *Health Affairs*, 33, 2247–2255. doi: 10.1377/hlthaff.2014.0947.
- Owen, G. T. (2014). Qualitative methods in higher education policy analysis: Using interviews and document analysis. *The Qualitative Report, 19*, 1-19.
- Palley, E. (2006). Challenges of rights-based law: Implementing the least restrictive environment mandate. *Journal of Disability Policy Studies*, 16, 229-235.
- Parr, S. (2007). Living with severe aphasia: Tracking social exclusion. *Aphasiology*, *s21*(1), p. 98-123, doi: 10.1080/02687030600798337
- People for Education. (2014). Special education: A People for Education report.

 Retrieved from http://www.peopleforeducation.ca/wpcontent/uploads/2014/04/special-education-2014-WEB.pdf
- Perry, A., Morris, M., Unsworth, C., Dickett, S., Skeat, J., Dodd, K., Taylor, N., & Reilly, K. (2004). Therapy outcome measures for allied health practitioners in Australia: the AusTOMs. *International Journal for Quality in Health Care, 16*, 285-291. doi: 10.1093/intqhc/mzh059
- Pfister Johnston, S. (2013). Unequal treatment or uneven consequence: A content analysis of American with Disabilities Act Title I Disparate Impact Cases from 1992-2012. Iowa City: University of Iowa.
- Pinto, A. (2012). Report of the Ontario Human Rights Review 2012. Toronto: Attorney General of Ontario.

- Pound, C., Duchan, J., Penman, T., Hewitt, A., & Parr, S. (2007). Communication access to organisations: Inclusionary practices for people with aphasia. *Aphasiology*, 21, 23-38. doi: 10.1080/02687030600798212
- Pressman, E.B. (1985). The prevalence of communication disorders in Canada: A need for a reliable Canadian data base. *Human Communication Canada*, *9*, 29-30.
- Putnam, M. (2005). Conceptualizing disability: Developing a framework for political disability identity. *Journal of Disability Policy Studies*, 16, 188-198.
- Rodier, J. (2010). A narrative policy analysis of the Accessibility for Ontarians with Disabilities Act, 2005: Exploring Implementation in municipal recreation.

 Waterloo ON: University of Waterloo.
- Rombough, R.E., Howse, E.L., Bagg, S.D., & Bartfay, W.J. (2007). A comparison of studies on the quality of life of primary caregivers of stroke survivors: a systematic review of the literature. *Topics in Stroke Rehabilitation*, *14*, 69-79, doi: dx.doi.org.ezproxylocal.library.nova.edu/10.1310/tsr1403-69
- Rombough, R. E., Howse, E. L., & Bartfay, W. (2006). Caregiver strain and caregiver burden of primary caregivers of stroke survivors with and without aphasia.

 *Rehabilitation Nursing, 31, 199-209.
- Rose, T. A., Worrall, L. E., Hickson, L. M., & Hoffman, T. C. (2012). Guiding principles for printed education materials: Design preferences of people with aphasia.

 International Journal of Speech-Language Pathology, 14, 11-23. doi: 10.3109/17549507.2011.631583

- Roulstone, S., & Harding, S. (2013). Defining communication disability in under-served communities in response to the World Report on Disability. *International Journal of Speech-Language Pathology*, *15*, 27–31. doi: 10.3109/17549507.2012.727870
- Rubaii-Barrett, N., & Recascino Wise, L. (2008). Disability access and e-government: An empirical analysis of state practices. *Journal of Disability Policy Studies*, 19. doi: 10.1177/1044207307311533
- Saposnik, G., Black, S. E., Hakim, A., Fang, J., Tu, J. V., Kapral, M.K. (2009). Age disparities in stroke quality of care and delivery of health services. *Stroke*, 40, 3228-3335. doi: 10.1161/STROKEAHA.109.558759
- Sarkar, A. (2016). Disability activists to intensify movement for accessibility rights. *The Indian Express*. Retrieved from http://indianexpress.com/article/cities/mumbai/disability-activists-to-intensify-movement-for-accessibility-rights/
- Savundranayagam, M. Y., Hummert, M. L., & Montgomery, R. J. V. (2005).

 Investigating the effects of communication problems on caregiver burden. *Journal of Gerontology: Social Sciences*, 60(1): S48-S55. doi: 10.1093/geronb/60.1.S48
- Scott, T. (2011). Understanding disabilities and Ontario law. *Municipal World*, *121*, 19-22.
- Sell, J., & Griffith, W.I. (1993). Are inputs sometimes outcomes? Some thoughts on definition in distributive justice. *Social Justice Research*, 6, 383-398. doi: 10.1007/BF01050338
- Seng. L. D., Compton-Brown, A. B. & Jakubowski, K. N. (2016). New rule, new requirements for healthcare providers. *Lexology*. Retrieved from

- $http://www.btlaw.com/files/Uploads/Documents/2016\%20Alerts/Alert\%20-\\ \%20New\%20Rule,\%20New\%20Requirements\%20for\%20Healthcare\%20Providers.pdf$
- Serra, A.; Matos, M.; & Jesus, L. (2016). *Proceedings of the 3rd IPLeiria's International Health Congress*. Leiria, Portugal. doi: 10.1186/s12913-016-1423-5.
- Shapiro, I. (1991). Resources, capacities, and ownership: The workmanship ideal and distributive justice. *Political Theory*, *19*, 47-72.
- Sherratt, S., & Hersh, D. (2010). "You feel like family ...": Professional boundaries and social model aphasia groups. *International Journal of Speech-Language*Pathology, 12, 152-161. doi:10.3109/17549500903521806
- Simmons-Mackie, N.N., & Damico, J.S. (2007). Access and social inclusion in aphasia: interactional principles and applications. *Aphasiology*, *21*, 81-97. doi: 10.1080/02687030600798311
- Simmons-Mackie, N. N., Kagan, A., O'Neill Christie, C., Huijbregts, M., McEwen, S., & Willems, J. (2007). Communicative access and decision making for people with aphasia: Implementing sustainable healthcare systems change. *Aphasiology*, 21, 39-66. doi: 10.1080/02687030600798287
- Simon, H. A. (1957). Models of man: social and rational; mathematical essays on rational human behavior in society setting. New York: Wiley.
- Song, J. W., & Chung, K. C. (2010). Observational studies: Cohort and case-control studies. *Plastic and Reconstructive Surgery*, 126, 2234–2242. Retrievd from http://doi.org/10.1097/PRS.0b013e3181f44abc

- Soroka, S.N. (2007). A report to the Health Council of Canada: Canadian perceptions of the health care system. Toronto ON: Health Council of Canada..
- Speech-Language & Audiology Canada. (2015). Position paper, 2015: SAC Position paper on the role of speech-language pathologists with respect to augmentative and alternative communication (AAC). Retrieved from http://www.sac-oac.ca/professional-resources/resource-library/sac-position-paper-role-speech-language-pathologists-respect
- Stanford Encyclopedia of Philosophy. (2011). Disability: Definitions, Models, Experience. Retrieved from https://plato.stanford.edu/entries/disability/
- Statistics Canada. (1991). General Social Survey 1991, Cycle 6: Health, Questionnaire Package. Ottawa ON: Statistics Canada.
- Statistics Canada. (2002a). A Profile of Disability in Canada, 2001. Ottawa ON: Statistics Canada.
- Statistics Canada. (2002b). 2001 Participation and Activity Limitation Survey A Profile of Disability in Canada, 2001—Tables. Ottawa ON: Statistics Canada.
- Statistics Canada. (2002c). Table 108-3012: Acceptability of waiting times for specialized services, by type of service, household population aged 18 and over, Canada, "Terminated". Ottawa ON: Statistics Canada.
- Statistics Canada. (2008a). Table 3: The 2006 Canada and provincial disability rates standardized to the 2001 population. Ottawa ON: Statistics Canada.
- Statistics Canada. (2008b). Table 3.7-1: Disability rates by sex and age groups, Ontario, 2006. Ottawa ON: Statistics Canada.
- Statistics Canada. (2008c). Table 6.1-1: Type of disability for adults and children with

- disabilities by province, 2006. Ottawa ON: Statistics Canada.
- Statistics Canada. (2008d). Table 6.2-1: Type of disability for adults and children with disabilities by province, 2006. Ottawa ON: Statistics Canada.
- Statistics Canada. (2012). 2011 Census Profile. Ottawa ON: Statistics Canada.
- Statistics Canada. (2013). Canadian Survey on Disability, 2012: Data Tables. Catalogue no. 89-654-X —No. 001. Ottawa ON: Statistics Canada.
- Statistics Canada. (2014). Canadian Survey on Disability, 2012: Concepts and Methods Guide. Catalogue no. 89-654-X No. 2014001. Ottawa ON: Statistics Canada.
- Steurer, R. (Ed.) (2007): The Role of Government in Social Responsibility—Proceedings.

 International Workshop. Government Stakeholder Group of ISO 26000. Vienna,

 Austria.
- Steurer, R., & Berger, G. (2007). RIMAS—Research institute for managing sustainability at the Vienna University of Economics and Business Administration: CSR policies in EU member states, (p. 15-16). Vienna, Austria: Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management.
- Stufflebeam, D. L. (2002). Evaluation methods. *New Directions for Evaluation*, 2001,. 7-98. doi: 10.1002/ev.3.
- Surjadjaja, C.; Mayhew, S. H. (2011). Can policy analysis theories predict and inform policy change? Reflections on the battle for legal abortion in Indonesia. *Health Policy and Planning* 26, 373-384. doi: 10.1093/heapol/czq079.
- Szick, S., Angus, D., Nichol, G., Harrison, M., Page, J, & Moher, D. (1999). Health Care

 Delivery in Canada and the United States: Are There Relevant Differences in

 Health Care Outcomes? Institute for Clinical Evaluative Sciences (ICES).

- Retrieved from https://www.ices.on.ca/Publications/Atlases-and-Reports/1999/Health-care-delivery-in-Canada-and-the-United-States
- Threats, T. (2007). Access for persons with neurogenic communication disorders:

 Influences of personal and environmental factors of the ICF. *Aphasiology*, 21, 67-80, doi: 10.1080/02687030600798303
- Toronto Star. (2015). Breaking down the numbers of the Ontario budget. Retrieved from https://www.thestar.com/news/canada/2015/04/23/everything-you-need-to-know-about-the-ontario-budget.html
- Treasury Board of Canada Secretariat. (2012). *Theory-based approaches to evaluation*.

 *Concepts and practices. Retrieved from https://www.canada.ca/en/treasury-board-secretariat/services/audit-evaluation/centre-excellence-evaluation/theory-based-approaches-evaluation-concepts-practices.html
- Turcotte, M. (2013). Family caregiving: what are the consequences? *Insights on Canadian Society*. Ottawa ON: Statistics Canada.
- United Kingdom Legislation. *Equality Act 2010*. London: The National Archives.
- United Nations. (2008): Convention on the Rights of Persons with Disabilities and

 Optional Protocol. Retrieved from

 https://www.un.org/development/desa/disabilities/convention-on-the-rights-ofpersons-with-disabilities.html
- United Nations Human Rights Office of the High Commissioner. (1993). Vienna

 Declaration and Programme of Action. Retrieved from

 http://www.ohchr.org/EN/ProfessionalInterest/Pages/Vienna.aspx

- United States Department of Justice. ADA.gov. (2010). 2010 ADA Standards for Accessible Design. Retrieved from https://www.ada.gov/2010ADAstandards_index.htm
- United States Department of Justice Civil Rights Division. Americans with Disabilities

 Act of 1990, as amended. (2009). Retrieved from

 https://www.ada.gov/pubs/adastatute08.htm
- University of British Columbia (UBC). (2016). Reasonable and customary charges for paramedical services. Retrieved from
 - $http://www.hr.ubc.ca/benefits/files/Reasonable_and_customary_fees.pdf$
- University of Toronto Students of Speech-Language Pathology Graduate Program.

 (2011). Speech-Language Pathology Coverage in Ontario by LHIN. Report based on the health professions database 2011 stat book. Retrieved from https://www.osla.on.ca/en/ServicesinOntario
- U.S. Department of Education. (n.d.). Early intervention program for infants and toddlers with disabilities. Retrieved from https://www2.ed.gov/programs/osepeip/index.html
- U.S. Department of Education. (1997). *Individuals with Disabilities Education Act*(IDEA): Part B, ages 3-21. *Federal Register—Rules and Regulations*, 78, pp. 10525-10538. Washington, D.C.: United States Government Publishing Office.
- U.S. Department of Education. (2004). *Individuals with Disabilities Education Act*(IDEA): Part C: Ages Birth-2. Public Law 108-466, 108th Congress. Retrieved from

- https://view.officeapps.live.com/op/view.aspx?src=https://www2.ed.gov/policy/speced/reg/idea/part-c/idea-part-c-final-regs.doc
- U.S. Department of Education. (2013). Assistance to states for the education of children and disabilities, pp. 10525–10538. Retrieved from https://www.ed.gov/content/assistance-states-education-children-disabilities
- U.S. Department of Health & Human Services. Agency for Healthcare Research and Quality. (2015). Speech and language function: proportion of stroke patients in each risk-adjusted group that at least one level of progress on the Reading Functional Communication Measure (FCM). Retrieved from https://www.qualitymeasures.ahrq.gov/summaries/summary/26772/
- U.S. Department of Justice. (2009). *A guide to disability rights laws*. Retrieved from https://www.ada.gov/cguide.htm
- Van der Lugt, C. (2007). Internalizing SR and the global impact principles in the UN system: a challenge for all public institutions. In *The role of government in social responsibility*, (p. 12). Vienna, Austria: Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management.
- Volicer, L. (2005). End-of-life care for people with dementia in residential care settings.

 Alzheimer's Association.
- Walt, G. & Gibson, L. (1994). Reforming the health sector in developing countries: The central role of policy analysis. *Health Policy and Planning*, *9*, 353-370.
- Wasserman, D., Asch, A., Blustein, J., & Putnam, D. (2013). Cognitive disability and moral status. *The Stanford Encyclopedia of Philosophy*, Fall.

- Watson, J. (Ed.). (2011): Inclusion. A universal human right? Paper presented at the Communicate, Participate, Enjoy!: Solutions to Inclusion Conference, Melbourne, Australia.
- Weinstein, M., & Nesbitt, J. (2007). Ethics in health care: Implications for education and practice. *Home Health Care Management & Practice*, 19, 112-117. doi:10.1177/1084822306294453
- Westby, C. (2013). Implementing recommendations of the World Report on Disability for indigenous populations. *International Journal of Speech-Language Pathology*, 15, 96-100, doi: 10.3109/17549507.2012.723749
- Wickenden, M. (2013). Widening the SLP lens: How can we improve the wellbeing of people with communication disabilities globally? *International Journal of Speech-Language Pathology*, 15, 14-20, doi: 10.3109/17549507.2012.726276
- World Health Organization. (1997). WHOQOL: Measuring quality of life. WHO

 Division of Mental Health and Prevention of Substance Abuse. Retrieved from
 http://www.who.int/mental_health/media/68.pdf
- World Health Organization. (2001). International classification of functioning, disability and health. Retrieved from http://www.who.int/classifications/icf/en/
- World Health Organization. (2011a). *Disability and rehabilitation*. Retrieved from http://www.who.int/disabilities/en/
- World Health Organization. (2011b). *World Report on Disability*. Retrieved from http://www.who.int/disabilities/world_report/2011/en/

- World Health Organization. (2013a). Closing the health equity gap: Policy options and opportunities for action. Retrieved from http://apps.who.int/iris/bitstream/10665/78335/1/9789241505178_eng.pdf
- World Health Organization. (2013b). Success Indicators for measuring the WHO action plan 2014-2021: Better health for persons with disabilities.
- World Health Organization. (2014). Draft WHO global disability action plan 2014-2021:

 Better health for all people with disability (A67-16). Geneva: World Health

 Organization.
- World Health Organization. (2016). *Trade, foreign policy, diplomacy and health*.

 Retrieved from http://www.who.int/trade/en/
- Worrall, L., Howe, T., O'Callaghan, A.; Hill, A. J., Rose, M.; Wallace, S. J., Rose, T.,
 Brown, K.; Power, E., O'Halloran, R., & Rohde, A. (2013). The World Report on
 Disability as a blueprint for international, national, and local aphasia services.
 International Journal of Speech-Language Pathology, 15, 106-112, doi:
 10.3109/17549507.2012.721004
- Worrall, L., Rose, T., Howe, T., Brennan, A., Egan, J., Oxenham, D., & McKenna, K. (2005). Access to written information for people with aphasia. *Aphasiology*, *19*, 923-929, doi: 10.1080/02687030544000137
- Worrall, L., Rose, T., Howe, T., McKenna, K., & Hickson, L. (2007). Developing an evidence-base for accessibility for people with aphasia. *Aphasiology*, 21, 124-136. doi: 10.1080/02687030600798352
- Wright, W. K. (2016): Musicians and FCC—Finally singing from same (accessible) sheet of music. *National Law Review*. Retrieved from

- http://www.lexology.com/library/detail.aspx?g=bc10548f-a7bc-466f-a651-e900e0f6f8b7
- WSIB Ontario. (2017a). Fee schedules: Occupational therapy. Retrieved from http://www.wsib.on.ca
- WSIB Ontario. (2017b). Fee schedules: Physiotherapy. Retrieved from http://www.wsib.on.ca
- Wylie, K., McAllister, L., Davidson, B., & Marshall, J. (2013). Changing practice:
 Implications of the World Report on Disability for responding to communication disability in under-served populations. *International Journal of Speech-Language Pathology*, 15, 1-13, doi: 10.3109/17549507.2012.745164
- Wylie, K., Mcallister, L., Davidson, B., Marshall, J., & Law, J. (2015). Adopting public health approaches to communication disability: Challenges for the education of speech-language pathologists. *Folia Phoniatrica Et Logopaedica*, 66, 164-175. doi: dx.doi.org/10.1159/000365752
- Yi, L., Zhang, X., Ge, L., Zhao, D. (2014). Analysis of social vulnerability to hazards in China. *Environmental Earth Sciences*, 71, 3109-3117.
- Zeit, K. (n.d.). Functional Outcome Data and Effectiveness of Speech Therapy. The Childhood Apraxia of Speech Association of North America.

Appendix A

Data Collection Types & Sources—Demographics

Appendix A

Data Collection Types & Sources—Demographics

Collection Sources	Data Criteria
Canadian Census data from Statistics Canada Disability Statistics & Reports from www.toronto.ca & www.ontario.ca & www.canada.gc.ca	Date Range: 2005–2016 Geography: Canada versus Ontario Purpose: to identify the incidence of communicative disability versus all disabilities in the population Keywords: disability, communicative disability, Canada, Ontario

Appendix B

Data Collection Types & Sources—Health Service Delivery & Health Outcomes related to Communicative Disability

Appendix B

Data Collection Types & Sources— Health Service Delivery & Health Outcomes related to Communicative Disability

Collection Sources	Data Criteria
Statistics Canada	Date Range: 2005–2016
Auditor General of Ontario	Geography: Canada versus Ontario
CIHI Ontario Health Professions Database Stat Book	Health indicators: overall population health versus disabled health versus communicatively disabled health
Ontario MOHLTC, Health Data Branch Web Portal at https://hsimi.on.ca/hdbportal/	Health outcomes in acute and rehabilitation levels of care – communications, language, speech
OACCAC	Keywords: speech-language pathology/
CCAC MIS Comparative Reports (inhome speech and language pathology)	therapy, communicatively disabled, communication impairment, family caregiving
CCAC Home Care Database	
Canadian Health Measures Survey	
Organisation for Economic Co-operation and Development	
www.toronto.ca	
www.ontario.ca	
www.canada.gc.ca	
www.caslpo.com	
www.osla.on.ca	
www.sac-oac.ca	
www.asha.org	
Medline & PubMed research databases	
WHO	
Behavioral Risk Factor Surveillance Systems Brief" Disability (New York)	
National Quality Measures Clearinghouse: Speech and language function	

Appendix C

Data Collection Types & Sources—Target Population Surveys

Appendix C

Data Collection Types & Sources—Target Population Surveys

Collection Sources	Data Criteria
Government of Canada: Canadian Survey on Disability	Date Range: 2005–2016
Health Council of Canada	Geography: Canada versus Ontario Keywords: disability survey health survey
Statistics Canada	Keywords: disability survey, health survey, communicative disability, communication
Auditor General of Ontario	access, disability policy, caregivers of disabled, wait time, quality of life, social
Canadian Institute of Health Information	determinants of health (including income and social status; social support networks; education; employment/working conditions;
Disability Research Consortium	social environments; physical environments; personal health practices and coping skills;
Ontario Health Professions Database	healthy child development; gender; and culture)
Canadian General Social Survey	,
www.toronto.ca	
www.ontario.ca	
www.canada.gc.ca	
www.statcan.gc.ca	
www.caslpo.com	
www.osla.on.ca	
www.sac-oac.ca	
www.asha.org	
Medline & PubMed research databases	
World Health Organization	

Appendix D

Data Abstraction Chart—Demographics

Appendix D

Data Abstraction Chart—Demographics

	Date Range &	2005–2016				
	Geography	Toronto	Ontario	Canada	New York	
Search Criteria / Data Type					USA	
Gender	Female	#/%	#/%	#/%	# / %	
	Male	#/%	#/%	# / %	#/%	
Age	Infants and children	#/%	#/%	# / %	#/%	
	Youth	#/%	#/%	#/%	# / %	
	Adults	#/%	#/%	#/%	# / %	
	Seniors	#/%	#/%	#/%	#/%	
Disability	/ general population	%	%	%	%	
j	Severity (No vs. Mild vs. Moderate vs. Severe / Very Severe)	#/%	#/%	# / %	#/%	
Communicative	/ disabled population	# / %	# / %	# / %	# / %	
Disability	Severity (No vs. Mild vs. Moderate vs. Severe or Very Severe)	# / %	#/%	#/%	# / %	
Education	Less than high school	# / %	#/%	# / %	# / %	
	High school	# / %	# / %	#/%	# / %	
	Trade certificate / Diploma	# / %	#/%	# / %	# / %	
	Community college	# / %	#/%	#/%	# / %	
	University or above	# / %	# / %	# / %	# / %	
Income	Mean employment income	\$	\$	\$	\$	
	Average household income	\$	\$	\$	\$	
Labor Force Participation	Communicatively disabled vs. Disabled vs. Not	#/%	#/%	# / %	#/%	
Unemployment Rate	Communicatively disabled vs. Disabled vs. Not	#/%	#/%	# / %	#/%	

Appendix E

Data Abstraction Chart— Health Service Delivery and Health Outcomes Related to

Communicative Disability

Appendix E

Data Abstraction Chart—Health Service Delivery and Health Outcomes related to Communicative Disability

	Date Range	2005–2016						
Search Criteria Geography		Ontario (including all funded regions))	
Data Types \	Service Types	SLP	PSW	RN	ОТ	PT	DT	RSW
Wait Time	Acceptable wait	#	#	#	#	#	#	#
in Days	Actual wait / service	#	#	#	#	#	#	#
Service Data	Visits	#	#	#	#	#	#	#
	Hours	#	#	#	#	#	#	#
	Individuals served	#	#	#	#	#	#	#
	Interactions contracted out	#	#	#	#	#	#	#
	Average visits per individual served	#	#	#	#	#	#	#
	Individuals waiting for service	#	#	#	#	#	#	#
	Days waited for initiation	#	#	#	#	#	#	#
	New referrals	#	#	#	#	#	#	#
	Average days waited for initiation	#	#	#	#	#	#	#
	Client service expenses	\$	\$	\$	\$	\$	\$	\$
	Unit cost per individual served	\$	\$	\$	\$	\$	\$	\$
	Unit cost per visit	\$	\$	\$	\$	\$	\$	\$
Special therapy	Residents assessed in hospital-based continuing care versus total in Canada	#/%			#/%	#/%		
	Residents assessed in resident care versus total in Canada	#/%			#/%	#/%		
Clinical Assessment Protocols	Triggered by assessed residents in continuing care facilities	#/%			#/%	#/%		
Family	Loss of work hours	#						
Caregiving	Loss of employment income	\$						
Service Providers	# of regulated health professionals	#/%	#/%	#/%	#/%	#/%	# / %	#/%

Appendix F

Data Abstraction Chart—Target Population Survey

Appendix F

Data Abstraction Chart—Target Population Survey

Date Range/	2005–2016						
Target Criteria/	Communicatively Disabled			Caregivers of			
Geography		•			Communicatively Disabled		
Data Types	Toronto	Ontario	Canada	Toronto	Ontario	Canada	
Program of Social							
Participation							
Level of Social Participation							
Reasons for Non-							
participation							
Suggestions for							
Improvement							
Preferred Means for							
Receiving Information							
Disability Types Served by							
Disability Service Agencies							
Primary Function of							
Disability Service Agencies							