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# Multiple Sclerosis in the Workplace.

Making the Case for Enhancing Employment and Income Supports



## **Multiple Sclerosis in the Workplace: Making the Case for Enhancing Employment and Income Supports**

Alexandru Dobrescu, Thy Dinh, and Carole Stonebridge

### **Preface**

The Conference Board of Canada was asked to examine the issues that affect individuals with multiple sclerosis (MS) from an employment perspective. The main objective of this report is to articulate alternative policy options that would help Canadians living with MS to remain in or (re)enter the workforce. The report examines the economic impact of extending the duration of the EI sickness benefits program, lowering the number of hours required to qualify for the program, as well as converting the current disability tax credit into a refundable tax credit. The report also estimates the economic benefits to society in terms of higher GDP from boosting the labor force participation of those living with MS. Finally, the report draws on findings from the previous section to highlight recommendations for action.

On the cover: Julia Nimilowich, who lives with multiple sclerosis, with her son Matteo. Photo courtesy of the MS Society of Canada.

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## EXECUTIVE SUMMARY

# Multiple Sclerosis in the Workplace: Making the Case for Enhancing Employment and Income Supports

### At a Glance

- Canada has one of the highest rates of multiple sclerosis (MS) in the world, and about three times as many women than men live with MS.
- Expanding the EI sickness benefit program to better support Canadians with MS would increase federal expenses by approximately \$1.3 billion annually, while making the disability tax credit refundable would cost \$1.2 billion.
- Income supports would help persons with MS to remain in the labour force and ensure an adequate level of income. The economic benefit of increased labour force participation was estimated at \$1.1 billion.

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MS costs the health care system approximately \$16,800 annually per person, and those living with MS face higher costs of living.

## Executive Summary

**Multiple sclerosis (MS) is a chronic disease of the central nervous system that has a noticeable and prolonged impact on a person’s ability to work and earn adequate income. Canada has one of the highest rates of MS in the world: about 100,000 Canadians live with MS and it is about three times more prevalent among women. MS costs the health care system approximately \$16,800 annually per person (2011 figure),<sup>1</sup> and those living with MS face higher costs of living, including home modifications and accessible transportation. This briefing aims to explore the economic impact of increased income supports, which would enable those with MS to remain in or to re-enter the labour force and earn adequate income.**

Some Canadians living with MS or other episodic disabilities have access to disability support programs but may be unaware of existing federal supports such as the employment insurance (EI) sickness benefit program and the disability tax credit (DTC). Greater effort could be made to raise awareness of and to reduce barriers to accessing these programs. There are also several workplace supports that employers could implement to better support people living with MS and other episodic disabilities—for example, a flexible work environment that allows for the possibility of working remotely or working reduced or extended hours.

Although the current EI sickness benefit program applies to people who are unable to work due to illness, it has been challenged as being inaccessible for those living with MS or other episodic disabilities. Furthermore, restrictive eligibility requirements can make it difficult

<sup>1</sup> Amankwah and others, “Multiple Sclerosis in Canada 2011 to 2031.”

for people with MS to access the DTC. Changing the credit from non-refundable to refundable would improve the quality of life of people with MS, as the additional costs incurred from living with the condition would be offset by a tax refund.

The results of our analyses show that expanding the EI sickness benefit maximum duration from the current 15 weeks to 26 weeks would increase the annual cost of the program from \$19.7 to \$20.4 billion (a 0.2 per cent increase in federal expenses). Additionally, as indicated by our scenario analysis, lowering the minimum number of qualifying hours from the current 600 to 500, 400, and 300 would cost an additional \$220, \$436, and \$566 million, respectively. Extending the maximum duration would benefit approximately 129,000 Canadians, while reducing the minimum number of hours worked to receive benefits would help approximately 35,000, 73,000, and 99,000 Canadians, respectively. To provide context, there were 365,480 EI sickness claims in 2015/16.<sup>2</sup>

In 2015, approximately 800,000 tax filers claimed the DTC. According to our analysis, making both the federal and provincial portions of the credit refundable would cost \$1.2 billion to the federal government (0.4 per cent of federal expenses) and \$539 million to the provincial/territorial governments.

These changes in income supports, however, would increase the labour force participation rate of people living with MS, and boost the gross domestic product (GDP) by an estimated \$1.1 billion. (Our analysis does not take into account increases in GDP from increasing the productivity of Canadians with other episodic disabilities.)

Although extending EI sickness benefits and converting the DTC from a non-refundable to a refundable tax credit has clear and tangible costs, there are also clear benefits in helping Canadians living with MS maintain employment and income. As such, it is important for stakeholders to consider not only increasing awareness of income supports available to people with episodic disabilities, but also implementing workplace

2 Employment and Social Development Canada, *Employment Insurance Monitoring and Assessment Report*.

supports to accommodate their needs. This would improve their ability to work and enhance their overall quality of life.

This research did not explore the full impact on employers who may benefit from retaining a skilled workforce. It also did not explore the increased quality of life and health that would ensue for people with MS (or any other episodic disability) who are able to work intermittently. Further research may help to fully evaluate the value of reducing barriers to employment and income for people with MS.



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The most common forms of MS are characterized by acute symptoms called “relapses” and periods of recovery in between called “remissions.”

## Introduction

### What Is MS?

**Multiple sclerosis (MS) is a chronic progressive disease that affects the central nervous system, which consists of the brain, spinal cord, and optic nerves. The spectrum of MS may vary from mild to severe, with increasing disability and loss of physical and cognitive functions.<sup>3,4</sup> Although the cause(s) of MS are still largely unknown, scientists believe there are several genetic and environmental factors at play, whose interactions may be associated with the onset of the disease.<sup>5</sup> Much more research is needed to understand the disease and the risk factors associated with its development. While MS affects all ages, onset usually occurs during a person’s most employable period of life—between 15 and 40 years of age.<sup>6</sup> In Canada, women are three times more likely to be diagnosed with MS than men.<sup>7</sup>**

In terms of the clinical course of disease, MS is regarded as having four disease categories: clinically isolated syndrome, relapsing-remitting MS, secondary-progressive MS, and primary-progressive MS.<sup>8</sup> The most common forms of MS are characterized by acute symptoms or attacks called “relapses” and periods of recovery in between called “remissions,” at which time the individual will experience no or few symptoms.<sup>9</sup>

3 Krupp and Rizvi, “Symptomatic Therapy for Underrecognized Manifestations.”

4 Poppe, Wolfson, and Zhu, “Prevalence of Multiple Sclerosis in Canada.”

5 Tremlett and others, “New Perspectives in the Natural History of Multiple Sclerosis.”

6 Multiple Sclerosis Society of Canada, “What Is MS.”

7 Ibid.

8 Multiple Sclerosis Society of Canada, “Types.”

9 Lublin and others, “Defining the Clinical Course of Multiple Sclerosis.”

Relapses can last from a day to weeks or months, while remissions can last a year or more.<sup>10</sup> Due to the unpredictability and frequency of relapses experienced by many people, MS is characterized as an episodic disability. The episodic nature of this disease poses challenges in relation to the availability and quality of support services, which tend to be more widely available for people with chronic, stable disabilities.

## The Burden of MS in Canada

Canada has one of the highest documented rates of MS in the world. In 2011, there were an estimated 98,835 Canadians living with MS, and the prevalence of MS is expected to increase by 35 per cent to 133,635 by 2031.<sup>11</sup> In addition to its population health burden, MS also incurs a significant economic burden for people living with the disease, caregivers, and employers, and has an impact on the overall economy.

Of those diagnosed with MS, many have had to either decrease the amount of paid work they do or leave the workforce. Past research has estimated that unemployment among people living with MS is almost 60 per cent.<sup>12</sup> Estimates for 2011 indicate that the total annual health care cost for adults living with MS (aged 20 years and older) was \$16,800 per person. By 2031, total annual health sector costs for MS are estimated to reach \$2.0 billion.<sup>13</sup> Meanwhile, the cost of lost production, including unemployment and reduced working hours, has been estimated to account for 33 per cent of the overall economic burden of the disease and 47 per cent of increased costs when a relapse occurs.<sup>14,15</sup>

The average annual out-of-pocket expenditure is estimated at about \$1,300 per person.<sup>16</sup> This finding indicates that the need for informal caregiving represents an additional burden on family members and others—where about one-third of people living with MS aged 20 to

10 Gilmour, Ramage-Morin, and Wong, "Multiple Sclerosis: Prevalence and Impact."

11 Amankwah and others, "Multiple Sclerosis in Canada 2011 to 2031."

12 Schiavolin and others, "Factors Related to Difficulties."

13 Amankwah and others, "Multiple Sclerosis in Canada 2011 to 2031."

14 Oleen-Burkey and others, "Burden of a Multiple Sclerosis Relapse."

15 Olofsson and others, "Effect of Treatment With Natalizumab."

16 Ibid.

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Helping people with MS, and their caregivers, realize their full employment potential will improve personal and societal well-being.

24 years and more than half aged 60 to 64 years have an informal caregiver.<sup>17</sup>

## Opportunities to Better Support Successful Employment Experiences

Given the lack of research on reduced workplace productivity as an outcome in MS intervention research, The Conference Board of Canada previously released a report that examined opportunities to better support successful employment experiences for people with MS.<sup>18</sup> Key findings from that report include:

- increase research on drug and non-drug therapies to benefit people with MS—research to include not only clinical outcomes (reducing the severity, frequency, or progression of MS symptoms), but also impacts on productivity and employment;
- enhance coping strategies developed through workplace adaptation or vocational rehabilitation frameworks to enable people with MS to remain employed—achieving these workplace modifications means employers and employees must work together to find a solution that benefits both parties and that addresses both “visible” and “invisible” disabilities associated with MS, such as fatigue, depression, pain, and cognitive symptoms;
- improve employer literacy about MS and its symptoms—the creation of an open and positive culture regarding MS by employers can encourage employees to actively communicate their diagnosis at the early stages of the disease.

Helping people with MS, and their caregivers, realize their full employment potential will improve personal and societal well-being. From the government’s perspective, increasing access to disability programs and financial benefits and supports for those with MS and their caregivers makes it possible for people with MS to continue to participate in the workforce and improves their quality of life—helping them thrive as Canadians. (See “Living and Working With MS: A Vignette” for an example of how MS affects one person’s work and quality of life.)

<sup>17</sup> Ibid.

<sup>18</sup> Astles, Dinh, and Turpin, *Multiple Sclerosis in the Workplace*.

## Living and Working With MS: A Vignette

Sylvia (not her real name) is a 28-year-old living in Ontario. In 2007, just two days before her 17th birthday, she was diagnosed with relapsing-remitting MS, where people experience fluctuating periods of wellness and illness—lending an unpredictability to her daily life.

In those first few years after diagnosis, Sylvia attended university and graduated with two degrees. Following graduation, she received assistance through the Ontario Disability Support Program (ODSB) and eventually secured contract work, first as a teacher and later as a dispatcher.

Sylvia entered the workforce with some fear and trepidation about how her employer and co-workers would react. She is conscious of not wanting to appear to have a disability that would negatively impact her work. While Sylvia says her ability to work has never changed, it is more her capacity to work that has been impacted by her MS. She tires easily and sometimes requires a day off to rest. This time off is unpaid, with days spent recovering and sleeping. Household chores are often neglected.

To date, Sylvia's work life consists primarily of contract positions, which afford both benefits and challenges. While shorter stretches of work can be helpful because of the intermittent nature of the disease, contract work doesn't bring security or offer employer health benefits. Whether a contract or salaried position, Sylvia still requires a flexible work arrangement and income supports that meet her need to take occasional days off when fatigue and symptoms become overwhelming.

## Research Objectives

The objective of this current research is to further explore the economic impact of alternative governmental income support policies that would enable people with MS who are able to work, remain in or (re-)enter the workforce, and benefit from adequate income. (See “Methodology.”) Our research specifically addresses the challenges related to the current employment insurance (EI) sickness benefit and the disability tax credit

(DTC). Economic impacts include both the investment required to support such programs and the return-on-investment from increased labour force production.

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## Methodology

The research was conducted between January and March 2018, and was split into three phases. The first phase involved identifying and selecting policy options that would support more people with MS to remain/enter/re-enter the workforce and would be feasible to implement given the current policy environment in Canada. The second phase involved estimating the economic impact of the income policy options, including the cost (investment) and the economic benefits (returns). The third phase involved developing action-oriented recommendations based on our findings and consultations with key stakeholders.

### Identifying and Articulating Policy Options

Through a review of the literature (published and grey<sup>19</sup>), our research focused on specific issues faced by people living with MS, such as income supports that enable them to remain in or (re-)enter the workforce. Key areas of focus included:

- the lost opportunity for not supporting people with MS from different perspectives;
- the requirements for supporting this important population base;
- the options for employment and income supports;
- the ways in which society evaluates the investments and the benefits (returns) if governments were to act.

Key experts were also consulted to help identify the most impactful and feasible policy options that should be used for our quantitative analysis.

<sup>19</sup> That produced outside of traditional commercial or academic publishing and distribution channels.

## **Estimating the Economic Impact of a Flexible Employment Insurance Sickness Benefit Program and a Refundable Disability Tax Credit**

Statistics Canada's Social Policy Simulation Database (SPSD) and Model (SPSM) was used to estimate the impact of extending EI sickness benefits. The SPSP/M is a free microsimulation model designed to analyze financial interactions between governments and individuals in Canada.

The SPSP combines personal income tax data and unemployment claims data with survey data on family income, employment, and expenditure. The Canadian Income Survey (CIS) was used to provide information on income and family structure and the Survey of Household Spending (SHS) was used to provide information on household expenditure. The SPSP also incorporates T1 personal income tax returns and EI claimant history data from Employment and Social Development Canada (ESDC), which capture benefit type, duration, phase, and repeater status.<sup>20</sup>

The SPSM uses several algorithms to calculate taxes and transfers for individuals and families, who are given specified input parameters.

### **Employment Insurance Sickness Benefit**

This policy option examined the expansion of the employment insurance (EI) sickness benefit by modelling two scenarios:

1. base case (status quo) scenario—current EI sickness benefit;
2. policy scenario—modifying and expanding the EI sickness benefit.

The base case scenario reports the usage and cost of the current EI sickness benefit, while the policy scenario reports the number of Canadians who would benefit from expansion of the program and the additional costs associated with the expansion.

Expanding the EI sickness benefit involved modifying the variable "UIMAXSICWKS" from 15 to 26, which increased the maximum allowed duration of the benefit from 15 to 26 weeks. Due to the nature of the SPSP/M, a behavioural response variable also needed to be changed to allow modelled claims to exceed the duration of actual claims. However, given that the behavioural response applies the additional number of weeks to all claims, the estimates in our analysis report the difference in costs from changing

20 Statistics Canada, Social Policy Simulation Database and Model (SPSP/M) Product Overview.

“UIMAXSICWKS” from 15 to 26, while maintaining the behavioural response to allow modelled claims to exceed observed durations by 11 weeks.

In order to determine the reduction in the number of hours required to qualify for EI, we modelled three thresholds of insurable employment:

1. 500 hours
2. 400 hours
3. 300 hours

Data from the Labor Force Survey (LFS) were used to estimate the proportion of Canadians who could have qualified for EI sickness benefits under the lower thresholds. To obtain the new number of claimants for each threshold, we applied these proportions to claims data from ESDC. According to these data, there were 1.9 million EI claims in 2015/16; under the base case (status quo) scenario, the SPSPD/M estimates there will be 2.2 million EI sickness claims in 2019. Also in 2019, there would be an additional 35,323 claims if the threshold was lowered to 500 hours, 73,114 if the threshold was 400 hours, and 98,979 if the threshold was 300 hours. These thresholds were then set as the target increase in the number of EI recipients in the SPSPD/M, by modifying the UITARGET variable.

### **Refundable Disability Tax Credit**

This policy option examined changing the DTC from a non-refundable to a refundable tax credit. First, the value of the federal DTC and the respective provincial/territorial DTC was calculated as the amount allowed to be claimed multiplied by the lowest respective marginal tax bracket. For instance, the federal DTC allows tax filers to claim \$8,113 in 2017 (the amount is indexed for inflation) on their tax return and the lowest federal marginal tax rate is 15 per cent. In this scenario, someone claiming the federal DTC would receive \$1,216.95 from the federal government—provided they owe enough income tax.

The uptake rate of the DTC was then calculated as the number of tax filers claiming the DTC divided by the number of total tax filers. The increasing trend in the uptake rate was linear between 2009 and 2015 (the period for which the Canada Revenue Agency [CRA] has publicly available data), and this linear trend was projected forward to 2018. The increase in the number of tax filers from 2015 to 2018 was also projected using a linear trend. (See Appendix B.)

Finally, the number of Canadians claiming the DTC on their income tax returns from 2015 to 2018 was calculated by multiplying the DTC uptake rate with the total number of tax filers.

This analysis assumed that both the federal DTC and its provincial/territorial counterparts are converted into refundable tax credits. It did not consider changes to the eligibility criteria for the DTC as defined by the CRA, which would likely increase the number of Canadians claiming the credit—and thus increase its cost.

## Limitations

The SPSD/M is a static first-round model; as such, it does not inherently model behavioural responses and is constrained by the data available. For example, the duration of modelled EI sickness claims will generally not exceed the duration of sickness benefits claims observed on the database (the maximum duration is 15 weeks). The model does, however, allow users to modify behavioural flag variables such that individuals may take up to a predefined extra number of weeks more than the number documented in the database (without exceeding the maximum number of weeks allowed). For this analysis, the maximum duration of EI sick leave was modified from 15 to 26 weeks, and the behavioural response was set such that individuals could take up to 11 more weeks than the maximum observed in the database.

Reducing the number of hours worked to be able to claim EI sickness benefits would also not result in new claims, since claimants would have already qualified for these benefits under the more restrictive rules (i.e., 600 hours for EI sickness benefits). Modelling new claims required that we increase the observed target of claims by the number of additional individuals who would claim EI sickness benefits under the less stringent rules as estimated using the LFS and ESDC data.

For this study, we did not consider the labour supply effects of converting the DTC from a non-refundable to a refundable credit. Since a refundable tax credit acts as a negative income tax, it provides a disincentive for individuals to obtain or retain employment.

## Economic Impact of Increased Income Supports

The economic impact of increasing income supports for Canadians with MS was estimated using The Conference Board of Canada's national forecasting model. First, the prevalence rates of MS by age-sex group were obtained from



the 2010/11 Canadian Community Health Survey, and were then applied to the overall population of each respective age-sex group to determine the number of Canadians with MS. Second, the labour force participation rate of people living with MS was obtained from a review of the literature.<sup>21</sup>

To estimate the proportion of people with MS who are not in the workforce but would seek employment, we reviewed a survey previously conducted by the Conference Board on individuals with mobility-related disabilities. The survey included questions on current employment status and if individuals believe their disability is preventing them from looking for work. The proportion of respondents who said that they are currently not looking for work due to their disability was then applied to the number of Canadians living with MS. A labour supply shock was introduced in the Conference Board's national forecasting model, based on the assumption that these individuals were part of the labour force.

## Development of Recommendations for Action

Next, we identified specific actions that could be taken, incorporating knowledge and insights that were derived from the economic analysis. Further insights on the policy implications, challenges, and opportunities for people with MS, caregivers, employers, and the population at large, along with next steps, were validated by key stakeholders, prior to the development of recommendations.

Source: The Conference Board of Canada.

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## Income Supports for People With MS: Alternative Policy Options

Our ability to define alternative policy options for this analysis involved:

- understanding the inherent challenges presented by the current income support programs for people living with MS;
- understanding the potential solutions to ensuring these programs are more accessible and meaningful to this population;
- translating the program design into costs and benefits.

21 Lunde and others, "Employment Among Patients With Multiple Sclerosis."

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The current EI sickness benefit program in Canada has been challenged as being inaccessible, inflexible, and inadequate for people living with MS.

Ultimately, this research aims to make it possible for people with MS to remain in or to (re)-enter the labour force. Doing so has positive implications for themselves, their families/caregivers, employers, and the economy. It also promotes greater gender equity when it comes to employment, as MS affects approximately three times as many women as men in Canada.

In this section, two alternative policy options are examined: a flexible EI sickness benefit program and a refundable disability tax credit.

## A Flexible EI Sickness Benefit Program

The current EI sickness benefit program in Canada has been challenged as being inaccessible, inflexible, and inadequate for people living with MS or other types of episodic disabilities. Some of the limitations of and possible amendments to the current EI sickness benefits program include:

- Eligibility is subject to minimum contribution requirements (600 hours in the past 52 weeks); except for sickness/injury/quarantine, the unemployed individual would otherwise be available to work. However, many people with episodic disabilities are ineligible because they fail to meet this minimum requirement.
- The benefit is only accessible over 15 weeks or 75 full days. Extending the program over a longer period enables people with MS to stay in the workforce, have access to their employer's benefit plan, and continue to pay income tax and EI premiums.
- There is limited flexibility in the calculation of benefits (in weeks), with such flexibility not reflecting the episodic nature of MS and the consequent impacts on productivity. Using days instead of weeks would increase eligibility and access for people with MS and other types of episodic disabilities—providing them with the support they need to return to work gradually. Although there is flexibility in terms of not having to take the 15 weeks consecutively, there is no support on a day-to-day basis for a person with an intermittent capacity to work. As an example, working a few hours per week would result in the loss of a week of benefits.

- The benefit does not incentivize return-to-work due to a clawback on income. (See “Clawback on Income as a Disincentive for Returning to Work” for more information.) A reduction or elimination of the dollar-for-dollar clawback would provide an incentive for claimants to gradually return to work in a modified capacity.

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## Clawback on Income as a Disincentive for Returning to Work

Until recently, EI sickness benefits were reduced dollar for dollar by any job earnings, making a gradual return to the job or intermittent work very difficult for claimants. A reduction of the dollar-for-dollar clawback would incentivize claimants to gradually return to employment in a modified work capacity. A return-to-work incentive is already available to regular employment insurance claimants, as a measure for reducing claim duration and increasing re-employment rates (i.e., Working While on Claim Project.)

Recently, as a pilot program, the federal government announced that EI sickness benefits would be available to those returning to work while on a claim, with claimants able to keep \$0.50 on the dollar. It will be interesting to observe how this change may affect return-to-work and employment for people with MS.

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The analysis in this briefing examines the costs and benefits of an alternative EI sickness benefit program with the following characteristics:

- expansion of eligibility by re-defining “disability” to place greater emphasis on functional impairment and impact on full employment—which would ultimately increase the number of individuals with MS who can access the program;
- extension from 15 to 26 weeks to match the duration period for compassionate care benefits<sup>22</sup>;
- calculation of benefits using days (or half-days) instead of weeks (i.e., 260 half-days (26 weeks x 5 days per week x 2 half-days per day);

22 Compassionate care benefits are EI benefits paid to people who must be away from work temporarily to provide care or support to a family member who is gravely ill and who has a significant risk of death within 26 weeks (six months). Source: <https://www.canada.ca/en/employment-social-development/programs/ei/ei-list/reports/compassionate-care.html>.

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The current DTC has been challenged as being inaccessible for people with MS, as well as other Canadians who have an episodic disability.

- reduction of the dollar-for-dollar clawback to provide an incentive for claimants to gradually return to or remain in employment in a modified work capacity—this would shadow the EI Working While on Claim program.

## **A Refundable Disability Tax Credit Program**

The current DTC has been challenged as being inaccessible for people with MS, as well as other Canadians who have an episodic disability. Canadians must have taxable income to qualify for this credit. (See “A Refundable Tax Credit Versus a Tax Deduction” for additional information.)

Tax filers must meet several conditions in order to be eligible for the DTC. First, the impairment must have lasted, or be expected to last, at least 12 months. Second, the impairment restricts the person in one or more daily activities, or the person is receiving life-sustaining therapy. Third, the impairment must cause the patient to be restricted in daily activities at least 90 per cent of the time.<sup>23</sup>

The analysis in this briefing examines the costs of converting the DTC from a non-refundable to a refundable tax credit. A non-refundable tax credit can only be used by Canadians with enough income to pay income tax, whereas a refundable tax credit acts as a negative income tax for those who are eligible to claim it. That is, any tax filer eligible for and claiming the refundable DTC would benefit from its full value.

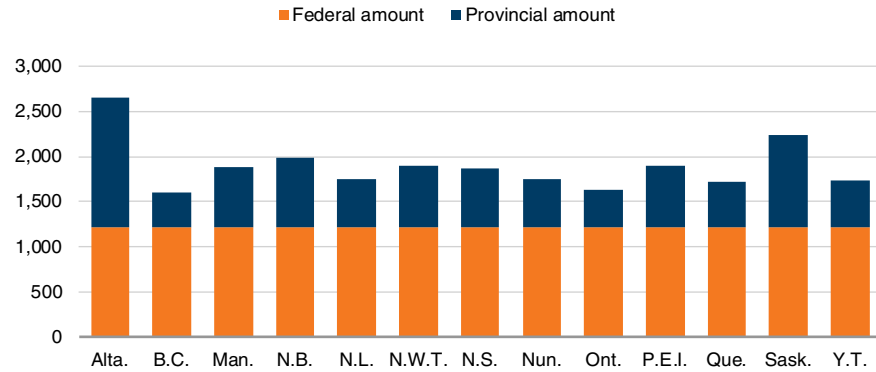
In 2017, the federal DTC allowed eligible tax filers to claim \$8,113 on their tax return, which means the credit had an actual value of \$1,216.95 for the 2017 tax year (calculated by multiplying the value of the credit by the lowest federal marginal tax rate of 15 per cent). Provinces and territories also offer their own credits, which, in 2017, varied in value from \$387 in British Columbia to \$1,442 in Alberta (again, calculated by multiplying the value of the credit by the lowest marginal tax rate in each province/territory). (See Chart 1.)

23 Canada Revenue Agency, “Disability Tax Credit.”

Chart 1

**Amount of Federal and Provincial Disability Tax Credit, 2017**

(\$)



Sources: Canada Revenue Agency; Revenu Québec.

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## A Refundable Tax Credit Versus a Tax Deduction

An income tax credit reduces the amount of tax an individual owes, while a tax deduction (or exemption) reduces taxable income. Tax deductions have a greater benefit to high-income earners, since these individuals face a higher marginal tax rate.

A tax credit directly reduces the amount of income tax owed. Non-refundable tax credits can only reduce tax owed to zero, while refundable tax credits can reduce tax owed below zero, thus creating a refund from the government for the individual.

Source: Canada Revenue Agency.

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In the 2015/16 fiscal year, 35.7 per cent of claimants exhausted all 15 weeks of their EI sickness benefits.

## The Economic Impact of the Policy Options: Analytic Results and Findings

### A Flexible EI Sickness Benefit Program

The current EI sickness benefit program applies to people who are unable to work due to an illness and would otherwise be available to work. Additionally, people who work and whose normal weekly earnings have been reduced by more than 40 per cent because of their sickness are also eligible to receive EI sickness benefits. Anyone applying for an EI sickness benefit must have at least 600 hours of insurable employment (or approximately 17 weeks of full-time employment) during the qualifying period, which is the shorter of 52 weeks before the date of the EI claim or the period since the start of a previous EI benefit period.<sup>24</sup>

In the 2015/16 fiscal year, there were approximately 365,480 new EI sickness benefit claims out of a total of 1.9 million new EI claims.<sup>25</sup> The average duration of an EI sickness claim was 10 weeks—up from 9.5 weeks in 2011/12—and the average weekly benefit was \$409—up from \$353 in 2011/12. Overall, in 2015/16, EI sickness benefits paid out \$1.5 billion to claimants.<sup>26</sup>

In 2017, about 78,605 EI sickness benefit claims were filed, on average, every month, out of about a monthly total of 794,326 EI claims.<sup>27</sup>

More importantly, 35.7 per cent of claimants exhausted all 15 weeks of their EI sickness benefits in 2015/16. This meant that approximately 130,476 Canadians used the maximum amount of 15 weeks of EI sickness benefits. The exhaustion rate of claims also steadily increased with age, from 26.6 per cent for those aged 20 to 29 years up to 42.9 per cent for those aged 60 and over.<sup>28</sup>

24 Government of Canada, "Employment Insurance Sickness Benefits."

25 Employment and Social Development Canada, *Employment Insurance Monitoring and Assessment Report for the Fiscal Year Beginning April 1, 2015, and Ending March 31, 2016*.

26 Ibid.

27 Statistics Canada, CANSIM table 276-0020.

28 Employment and Social Development Canada, *Employment Insurance Monitoring and Assessment Report*.

Although the EI sickness benefit program currently provides valuable financial support for Canadians, people with episodic disabilities such as MS may not be able to benefit. People with MS could benefit from an expansion in the EI sickness program from 15 to 26 weeks (to match the compassionate care benefit), as well as a reduction in the number of hours of insurable employment required.

According to the SPSP/M, extending the duration of EI sickness benefits from the current 15 weeks to 26 weeks would increase the cost of EI benefits to the federal government from \$19.7 to \$20.4 billion in 2019. With an additional 129,000 Canadians benefiting from the extension, the annual cost of the program would increase to \$686.2 million (representing 0.2 per cent of total federal expenses), primarily because an additional 129,000 Canadians would benefit from the extension. (See Table 1.)

**Table 1**  
**EI Benefits Paid, by Age Group and Scenario, 2019**  
(\$ millions)

Age group	Status quo	26 weeks' incremental benefit	Per cent increase	Tax collected—incremental increase	Net cost
Under 18	52.2	0.2	0.4	0.0	0.2
19–24	1,003.0	30.1	3.0	7.7	22.4
25–29	2,867.1	62.3	2.2	18.4	43.9
30–34	3,414.9	95.6	2.8	26.9	68.7
35–39	2,776.0	94	3.4	29.2	64.8
40–44	1,715.5	57.7	3.4	19.2	38.5
45–49	1,652.5	61.5	3.7	18.7	42.8
50–54	1,957.9	67.7	3.5	21.6	46.1
55–59	1,895.6	88.8	4.7	31.1	57.7
60–64	1,618.4	76.7	4.7	29.8	46.9
65–69	562.9	42.3	7.5	10.0	32.3
70–74	86.9	1.9	2.2	0.5	1.4
75–79	27.4	2.6	9.5	0.8	1.8
80–84	21.2	0	0.0	0.1	–0.1
85+	17.4	5.1	29.3	1.2	3.9
<b>Total</b>	<b>19,668.9</b>	<b>686.2</b>	<b>3.5</b>	<b>215.3</b>	<b>470.9</b>

Source: The Conference Board of Canada.

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Although federal expenditures would increase, provincial net balances (revenues minus expenses) would increase by \$102.2 million.

Not surprisingly, working-age Canadians between the ages of 19 and 64 claiming EI benefits would account for the vast majority of the cost increase—at \$634.4 million, or 92.5 per cent. However, extending the maximum duration of EI sickness benefits to 26 weeks would only lead to a 3.5 per cent increase in the overall cost of the EI program.

As shown in Table 1, since EI benefits are counted as taxable income, the additional benefits would be subject to federal and provincial income tax. This expansion alone would lead to an extra \$215.3 million of income tax collected. As expected, the largest increase in income tax collected would come from the working-age population.

After accounting for the increase in income tax paid, the net cost of an expansion of the EI sickness benefits program from 15 to 26 weeks would be \$470.9 million. This represents about \$3,650 per new beneficiary.

Given that the EI expansion also increases taxable income, recipients of the expanded EI benefit could see a reduction in the amount they receive from other federal benefits, such as the Canada Child Benefit, GST credit, or other federal transfer. Therefore, federal expenses would increase by \$536.4 million—not the full cost of an EI sickness expansion of \$686.2 million.

More interestingly, although federal expenditures would increase, provincial net balances (revenues minus expenses) would increase by \$102.2 million. (See Table 2.) This is due to the increase in taxable income, which is at the expense of the federal government while provincial governments receive the benefit through higher taxable income. Provincial taxes collected would increase by \$93.1 million (mostly from provincial income tax collected but also from an increase in commodity taxes collected), and provincial transfers would decrease by \$9 million (mostly from a decrease in provincial refundable tax credits claimed).



**Table 2****EI Benefits, Federal and Provincial Net Balances, by Province, 2019**

(\$ millions)

<b>Jurisdiction</b>	<b>EI benefits</b>	<b>Federal net balance</b>	<b>Provincial net balance</b>
N.L.	14.4	-11.2	2.6
P.E.I.	6.4	-4.8	1.1
N.S.	26.3	-20.6	4.6
N.B.	20.8	-16.4	3.3
Que.	125.4	-99.3	30.5
Ont.	228.7	-177.8	30.7
Man.	22.3	-17.4	3.6
Sask.	20.4	-15.6	2.6
Alta.	111.9	-88.3	11.7
B.C.	109.7	-85.1	11.6
Canada	686.2	-536.4	102.2

Source: The Conference Board of Canada.

Residents of Ontario and Quebec would be responsible for the largest share of the increase in the federal deficit and for the largest increase in the provincial net balance. Indeed, these two provinces combined would account for 51.7 and 59.9 per cent, respectively, of the change in net balances. Conversely, Prince Edward Island would account for the smallest change in net balance due to its low population.

In addition to increasing the maximum duration of EI sickness benefits, Canadians living with MS and other episodic disabilities would also benefit from a reduction in the minimum hours of insurable employment required to qualify for benefits. Since people living with disabilities are more likely to have precarious employment situations, they face more difficulties than the general population in qualifying for EI sickness benefits. As such, a reduction in the minimum number of employment hours from the current 600 to 500, 400, and 300 hours was considered as a scenario analysis.

Meanwhile, the SPSPD/M model estimates that decreasing the minimum number of employment hours required to qualify for EI sickness benefits from the current 600 hours to 500 hours would cost an additional \$219.5 million annually due to approximately 35,000 additional people

Approximately 931,000 Canadians are forecast to claim the DTC in 2018, up from 812,870 tax filers in 2015 and 585,780 in 2009.

using the program. A further reduction to 400 hours would cost \$436.2 million, while reducing the minimum number of hours to 300 would cost about \$565.9 million and enable almost 100,000 additional people to claim the benefit. (See Table 3.)

**Table 3**  
**Incremental Cost and Beneficiaries From Decreasing Minimum Hours for EI Sickness Benefits**

	500 hours	400 hours	300 hours
Cost (\$ millions)	219.5	436.2	565.9
Beneficiaries (number)	35,323	73,114	98,980

Source: The Conference Board of Canada.

## A Refundable Disability Tax Credit

In 2017, the non-refundable federal DTC enabled eligible Canadians with a disability to claim up to \$8,113 on their income tax return. Provinces and territories also offer their own disability tax credits, although the amounts vary by jurisdiction. In this section, we examine the fiscal impact of making both the federal and provincial portions of the DTC refundable.

In 2015, the DTC was claimed by 812,870 tax filers.<sup>29</sup> This is up from 585,780 in 2009 and is forecast to be claimed by approximately 931,000 Canadians in 2018.<sup>30</sup> At the same time, the uptake of the credit (number of tax filers claiming the credit out of total number of tax filers) increased from 2.3 per cent in 2009 to 2.9 per cent in 2015, and is forecast to increase to 3.3 per cent in 2018. (See Appendix B for disability tax credit usage.)

The federal portion of the DTC accounted for \$6.4 billion claimed, while the provincial/territorial portions accounted for another \$6.4 billion cumulatively. This resulted in foregone revenues of \$963 million for the federal government and \$493 million for the provincial/territorial governments combined. (See Table 4.)

29 Most recent year for which data were available.

30 Canada Revenue Agency, "T1 Final Statistics 2017 Edition."

**Table 4**  
**Disability Tax Credit Values, 2015**

Jurisdiction	DTC amount (\$)	Marginal tax rate (per cent)	DTC value (\$)	Total amount claimed (\$ 000s)	Foregone revenue (\$ 000s)
Federal	8,113	15.00	1,217	6,420,174	963,026
Alta.	14,417	10.00	1,442	555,256	55,526
B.C.	7,656	5.06	387	931,033	47,110
Man.	6,180	10.80	667	428,210	46,247
N.B.	8,011	9.68	775	189,790	18,372
N.L.	6,058	8.70	527	145,965	12,699
N.W.T.	11,579	5.90	683	4,029	238
N.S.	7,341	8.79	645	284,589	25,015
Nun.	13,128	4.00	525	1,027	41
Ont.	8,217	5.05	415	2,847,997	143,824
P.E.I.	6,890	9.80	675	44,787	4,389
Que.	3,307	15.00	496	796,011	119,402
Sask.	9,464	10.75	1,017	184,684	19,854
Y.T.	8,113	6.40	519	4,128	264

Source: Canada Revenue Agency.

It is estimated that 931,474 tax filers would claim the DTC in 2018. If the credit was refundable, the federal government would pay out almost \$1.2 billion (0.4 per cent of total federal expenses) to eligible claimants (\$1,238 to each claimant), while provincial and territorial governments would pay out \$539.3 million combined. (See Table 5.) Again, the amount that provincial/territorial governments would pay per claimant depends on the value of each provincial/territorial tax credit. For example, in 2018, the Nunavut government will pay out \$79,600 and the Ontario government \$174.3 million to eligible tax filers. (See “The DTC and Canadians Living With MS” for a calculation of the share of the cost attributable to MS.)

**Table 5**  
**Cost of Federal and Provincial/Territorial Refundable Disability Tax Credit**  
 (\$ millions)

	2015	2016	2017	2018
DTC claimants (number)	812,870	842,283	886,557	931,474
Federal cost	963,129	1,010,866	1,078,896	1,152,839
Alta.	98,594	103,481	110,445	118,014
B.C.	44,439	46,641	49,780	53,192
Man.	35,215	36,960	39,447	42,151
N.B.	18,158	19,058	20,341	21,735
N.L.	9,498	9,969	10,640	11,369
N.W.T.	339	356	380	406
N.S.	22,693	23,817	25,420	27,162
Nun.	67	70	75	80
Ont.	145,614	152,832	163,117	174,296
P.E.I.	3,721	3,905	4,168	4,454
Que.	48,765	51,182	54,627	58,370
Sask.	23,159	24,307	25,943	27,721
Y.T.	263	276	295	315

Sources: Canada Revenue Agency; The Conference Board of Canada.

## The DTC and Canadians Living With MS

Canadians living with MS represented about 2.47 per cent of the total number of Canadians living with disabilities in 2012.<sup>31</sup> Assuming those with MS claim the DTC at the same rate as other Canadians with disabilities, it is possible to calculate the share of the cost of the DTC attributable to MS. Using a simple calculation, it is estimated that 23,007 out of the 931,474 DTC claimants in 2018 live with MS, which would account for \$28.5 million of the federal cost.

Source: The Conference Board of Canada.

31 Statistics Canada, CANSIM tables 115-0001 and 105-1300.

## Economic Benefit of Enhanced Income Supports

Extending EI sickness benefits and converting the DTC from a non-refundable to a refundable tax credit has clear and tangible costs. But the assumption in this briefing is that altering these programs will allow more people with MS to (re-)enter the workforce. This will have a significant positive impact on the Canadian economy, as Canadians living with disabilities generally have lower participation rates, higher unemployment rates, and lower incomes, compared with the general population.<sup>32</sup>

For instance, the labour force participation rate for people with a disability was 53.6 per cent in 2012, the most recent year for which data are available for Canadians with disabilities.<sup>33</sup> In comparison, the labour force participation rate for all Canadians was 77.8 per cent.<sup>34</sup> Similarly, in 2012, the unemployment rate for people with a disability was 11.8 per cent versus 7.4 per cent for all Canadians.<sup>35</sup> Meanwhile, the average income for people without a disability was about 26.6 per cent higher than for people with a disability.<sup>36</sup>

More specifically, a study by Lunde and others outlined the differences in the participation rate between people with and without MS. Applying his findings to the Canadian example generates 2017 labour force participation rates among people with MS of 42.7 per cent for females and 35.7 per cent for males.<sup>37</sup> For the general population, the labour force participation rate was 65.8 per cent.<sup>38</sup>

This analysis utilizes the Conference Board's national model of the Canadian economy to simulate a labour force shock, where some of the people with MS who are currently not in the workforce are assumed to (re-)enter the workforce. Ultimately, this reduces the gap in participation rates between those with MS and the general population. This will

32 Statistics Canada, CANSIM tables 115-0006 and 115-0024.

33 Statistics Canada, CANSIM table 115-0006.

34 Statistics Canada, CANSIM table 282-0002.

35 Statistics Canada, CANSIM tables 282-0002 and 115-0006.

36 Statistics Canada, CANSIM table 115-0014. Averages calculated by The Conference Board of Canada.

37 Calculations based on Lunde and others, "Employment Among Patients With Multiple Sclerosis."

38 Statistics Canada, CANSIM table 282-0002.

It is estimated the labour force participation rate of people with MS in 2017 would increase to 51.5 per cent for females and 47.2 per cent for males.

generate an increase in the number of employed Canadians—producing an impact on both GDP and general government revenues. The estimate of the number of people with MS who would enter the workforce was based on proportions estimated from a previous Conference Board survey about the likelihood of people with disabilities looking for work if they had adequate supports.<sup>39</sup>

Based on these findings, it was estimated the labour force participation rate among people with MS in 2017 would increase from 42.7 per cent to 51.5 per cent for females and from 35.7 per cent to 47.2 per cent for males.<sup>40</sup> (See Table 6.)

**Table 6**  
**Labour Force Participation Rate, by Scenario and Sex**  
 (per cent)

	Males	Females
General population	70.2	61.5
MS—Baseline	35.7	42.7
MS—Intervention	47.2	51.5

Sources: Statistics Canada; Lunde and others; The Conference Board of Canada.

The baseline scenario is the current situation in Canada for people living with MS, with labour force participation rates based on the Lunde report. The intervention scenario calculates the boost to GDP general government revenues if labour force participation rates are increased, based on the Conference Board survey. The difference between the baseline and intervention scenarios is an estimate of the benefit of expanding programs for people with MS.

All in all, increasing the labour force participation rate of Canadians with MS from the baseline to the intervention scenario would increase the overall workforce by approximately 11,400 people—8,200 additional females and 3,200 additional males. (See Table 7.) The higher number

39 Gibbard and others, *The Business Case to Build Physically Accessible Environments*.

40 Although the overall participation rate of female and males appears in the text, the labour force participation rate shock was calculated by age group and by sex.

of females is not surprising given that MS is about three times more prevalent among females than males.

**Table 7**  
**Incremental Employment, by Sex and Age Group**  
(number of people)

Age group	Both sexes	Females	Males
20–24	451	278	173
25–29	328	307	21
30–34	352	316	37
35–39	906	753	154
40–44	896	711	185
45–49	1,773	1,259	514
50–54	2,374	1,768	606
55–59	2,651	1,798	853
60–64	1,686	1,049	637

Source: The Conference Board of Canada.

It is estimated that the increase in the labour supply due to people with MS becoming employed would lead to an annual increase in GDP of almost \$1.1 billion and in general government revenues of about \$220 million. (See Table 8.) Although significant, these figures do not include the potential economic benefit from Canadians with other episodic disabilities entering the workforce. Expanding the EI program and making the DTC refundable to enable Canadians with other disabilities to also (re-)enter the workforce would lead to additional economic benefits. However, these benefits were not considered in this analysis.

**Table 8**  
**Fiscal Impact of Increased Income Supports**

Increase in GDP (2017 \$ millions)	1,086.60
Increase in general government revenues (\$ millions)	220.7

Source: The Conference Board of Canada.

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The benefits of supporting Canadians with MS include individual well-being and societal gains, such as a \$1.1 billion annual increase in GDP.

## Recommendations for Action

The benefits of supporting Canadians with MS to realize their full employment potential are significant, and include individual well-being—financially and health-wise—and societal gains, such as a \$1.1 billion annual increase in the GDP. This briefing explores the economic impact of alternative government income support policies that would enable people with MS who have the capacity to work, to remain in or re-enter the workforce.

The economic impacts of modifying and expanding the EI sickness benefit and changing the DTC from a non-refundable to a refundable tax credit include both the investment required to support such program changes and the return-on-investment that would result from increased labour force participation.

Some Canadians living with MS or other episodic disabilities have access to disability support programs (such as the Ontario Disability Support Program), but may be unaware of existing federal supports such as the EI sickness benefit program and the DTC. Improving awareness of and reducing barriers to accessing these two programs would benefit these individuals. As such, employers as well as governments should consider increasing awareness of income supports available to those with episodic disabilities.

Furthermore, increasing workplace supports to accommodate the needs of people with MS would improve their ability to work, as well as their overall quality of life because of increased employment and income.

### Extending EI Sickness Benefits

As noted earlier, extending EI sickness benefits has clear and tangible costs, but also clear benefits in helping Canadians living with MS maintain employment and achieve adequate income. Compared with the general population, these individuals face additional difficulties obtaining and maintaining employment, as well as higher living costs and lower incomes.<sup>41</sup>

41 Turcotte, *Persons With Disabilities and Employment*.



Making the EI sickness benefit program more easily accessible would enable people with MS to maintain an adequate level of income during those times when they are unable to work, without having to leave the workforce.

## **A Refundable Disability Tax Credit**

Persons living with MS and other episodic disabilities are more commonly engaged in part-time or casual work, compared with the general population.<sup>42</sup> For these individuals, employment is not only important in terms of obtaining and maintaining adequate income, but also for its associated benefits, such as improved social connection, self-esteem, and quality of life.<sup>43</sup> In the specific case of MS, the disability is approximately three times more prevalent among women than men (See Appendix A.)

The current DTC is meant to recognize that people living with disabilities have higher costs of living and unavoidable expenses due to their disability, compared with other Canadian taxpayers.<sup>44</sup> Though the DTC should improve tax equity by allowing some relief for these costs, it has been estimated that only 40 per cent of Canadians with eligible disabilities actually claim and receive the DTC.<sup>45</sup>

Converting the DTC into a refundable tax credit would provide a level of adequate income for Canadians with disabilities who have difficulty maintaining employment and as such are not able to take advantage of a non-refundable tax credit. It would also help them defray some of the costs associated with their disability, regardless of their employment or income status. Given that Canadians with disabilities are more likely to be unemployed and not in the workforce, or have lower incomes than the general population, a refundable tax credit would ensure all individuals living with a disability can benefit from the tax refund.

42 Ibid.

43 Doogan and Playford, "Supporting Work for People With Multiple Sclerosis."

44 Canada Revenue Agency, "Disability Tax Credit."

45 Dunn and Zwicker, "Policy Brief—Why Is Uptake of the Disability Tax Credit Low in Canada?"

## Workplace Supports

In addition, there are several workplace supports that employers could implement to better support people with MS. One example is a flexible work environment to enable people with an episodic disability such as MS to work remotely or to work reduced or extended hours. Although workplace supports are beyond the scope of this briefing, studies have been conducted on successful employment supports for those with MS<sup>46</sup> and on making workplaces more accessible for Canadians with disabilities.<sup>47</sup>

## Future Research

Opportunities to extend the research could include examining the impact of eliminating the dollar-for-dollar clawback to further incentivize claimants to return to or remain in employment in a modified work capacity—shadowing the Work-Sharing program.<sup>48</sup> We did not explore the positive impact on employers from retaining a skilled workforce, as well as the increase to the quality of life and health for people with MS and other types of episodic disabilities who are afforded the ability to work intermittently. Further research may help to fully evaluate the value of reducing barriers to employment and income for people with MS.

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46 Astles, Dinh, and Turpin, *Multiple Sclerosis in the Workplace*.

47 Gibbard and others, *The Business Case to Build Physically Accessible Environments*.

48 The Work-Sharing program is designed to help employers and employees avoid layoffs when there is a temporary reduction in the normal level of business activity that is beyond the control of the employer. Income support is provided to employees eligible for EI benefits who work a temporarily reduced work week while their employer recovers. Work-Sharing is a three-party agreement involving employers, employees, and Service Canada. Employees on a work-sharing agreement must agree to a reduced schedule of work and to share the available work over a specified period of time. See <https://www.canada.ca/en/employment-social-development/services/work-sharing.html>.

## APPENDIX A

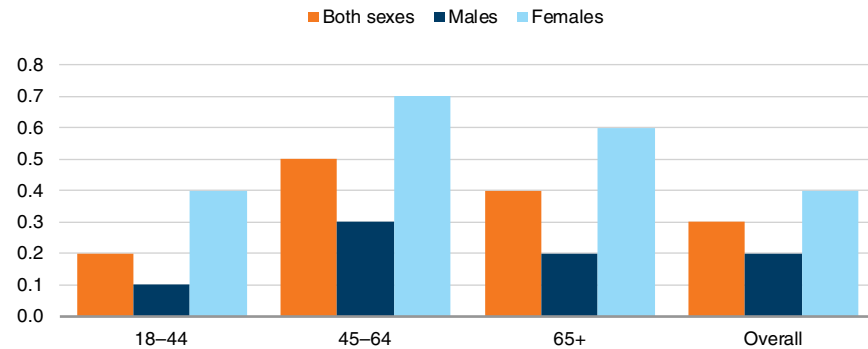
# Prevalence of MS

The prevalence of MS is considerably higher among females, and highest among the 45–64 age group. This is important to consider because different age-sex groups have different unemployment and labour force participation rates. For instance, the labour force participation rate is very low in the 65+ age group, since most of these individuals would be retired. Conversely, most of the cost burden of foregone earnings due to MS is in the 45–64 age group, given that this group has the highest prevalence of MS as well as a high labour force participation rate. (See Chart 1.)

Chart 1

### Prevalence Rate of MS, by Age Group and Sex, 2012

(per cent)



Source: Statistics Canada, CANSIM table 105-1300.

## APPENDIX B

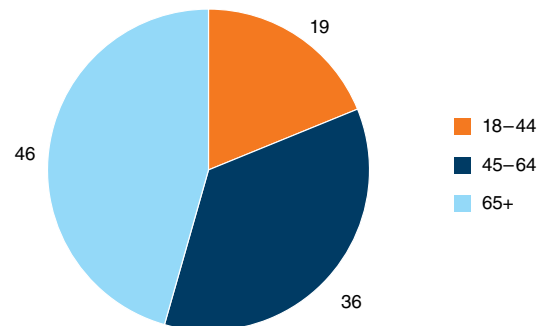
# Usage of the Disability Tax Credit

Overall, about 832,000 Canadian tax filers claimed the disability tax credit (DTC) in 2015, which is the most recent year for which data were available. This represents 3 per cent of total tax filers.<sup>49</sup> The number of DTC claims was almost evenly split between males and females, with 48.8 per cent of claimants being male and 51.2 per cent being female. (See Chart 1.)

Chart 1

### Claimants of Disability Tax Credit, by Age Group

(per cent)



Source: Canada Revenue Agency.

Almost half of the claimants of the DTC are over the age of 65. As these individuals tend to be retired, the amount of foregone earnings as a result of their disability is low.

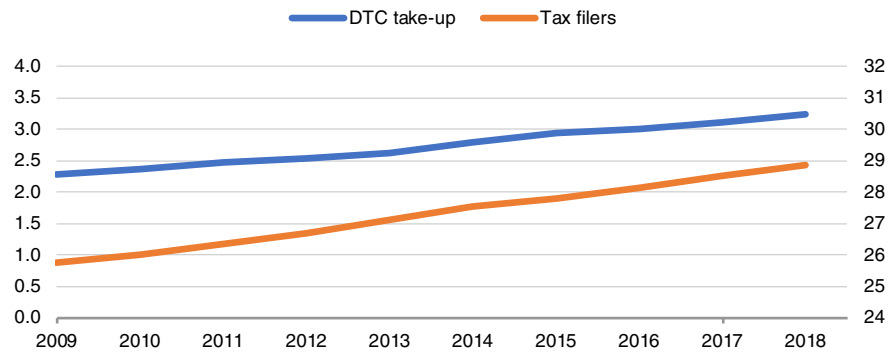
49 Canada Revenue Agency, "T1 Final Statistics 2017 Edition."

Between 2009 and 2015, the uptake rate of the DTC and the total number of tax filers followed a fairly linear increasing trend. This trend was extended to 2019 to estimate the number of Canadians expected to claim the DTC in 2019. (See Chart 2.)

**Chart 2**

**DTC Take-Up Rate and Number of Tax Filers**

(per cent (left), millions (right))



Source: Canada Revenue Agency.

## APPENDIX C

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