

Catalogue no. 89-654-X2019002
ISBN 978-0-660-33033-4

Canadian Survey on Disability

The Dynamics of Disability: Progressive, Recurrent or Fluctuating Limitations

by Stuart Morris, Gail Fawcett, Linden R. Timoney, and Jeffrey Hughes

Release date: December 3, 2019



Statistics
Canada

Statistique
Canada

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, www.statcan.gc.ca.

You can also contact us by

Email at STATCAN.infostats-infostats.STATCAN@canada.ca

Telephone, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following numbers:

- | | |
|---|----------------|
| • Statistical Information Service | 1-800-263-1136 |
| • National telecommunications device for the hearing impaired | 1-800-363-7629 |
| • Fax line | 1-514-283-9350 |

Depository Services Program

- | | |
|------------------|----------------|
| • Inquiries line | 1-800-635-7943 |
| • Fax line | 1-800-565-7757 |

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under “Contact us” > “[Standards of service to the public](#)”.

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

Published by authority of the Minister responsible for Statistics Canada

© Her Majesty the Queen in Right of Canada as represented by the Minister of Industry, 2019

All rights reserved. Use of this publication is governed by the Statistics Canada [Open Licence Agreement](#).

An [HTML version](#) is also available.

Cette publication est aussi disponible en français.

Table of contents

Abstract.....	4
Introduction	5
Section 1: Background.....	5
Section 2: Methodology	10
Section 3: Profile	12
Section 4: Employment	16
Section 5: Workplace Accommodations	22
Section 6: Conclusions	27
Appendix: Testing new questions.....	28
References	30

The Dynamics of Disability: Progressive, Recurrent or Fluctuating Limitations

by **Stuart Morris, Gail Fawcett, Linden R. Timoney, and Jeffrey Hughes**

Abstract

The conventional view of disability is that it is a persistent and unchanging limitation. However, many persons with disabilities may not follow this relatively stable pattern. Instead, they may experience periods of good health interrupted by periods of their limitations (on-again/off-again episodes) or their limitations may change over time (worsening, improving, or fluctuating). Such changing disabilities can be characterized as dynamic, as opposed to continuous disabilities, which tend to be more stable over time. Thus, the collective experiences of persons with disability dynamics may look different than those of persons with continuous disabilities. In this paper, four groups of persons with different disability dynamics (or lack of dynamics) are profiled based on data from the 2017 Canadian Survey on Disability. Each group has their own unique demographic, employment, and workplace accommodation profile based on the length of time between periods of their limitations, as well as changes in their limitations over time. The main findings are:

- Of the 6.2 million persons with disabilities aged 15 years and over, 2.4 million (39%) experienced conventional continuous limitations whereas 3.8 million (61%) experienced some type of disability dynamic.
- Of the 3.8 million persons with disability dynamics, nearly 1.4 million (37%) experienced limitations that worsened over time (“progressive”); over 1.5 million (41%) sometimes had periods of a month or more without experiencing limitations (“recurrent”); and over 0.8 million (22%) had shorter periods in which they experienced fluctuations in limitations (“fluctuating”).
- Among those with disabilities, women were more likely than men to experience fluctuating limitations (16% vs 10%) whereas men were more likely than women to experience continuous limitations (43% vs 36%).
- Persons with progressive limitations had the greatest number of disability types, with an average of four. Persons with fluctuating or continuous limitations averaged about three types, and those with recurrent limitations averaged about two.
- The employment rate was highest for those with recurrent limitations (65%) and lowest for those with progressive limitations (40%). For those with fluctuating or continuous limitations, the employment rates were in the middle range at 53% and 59% respectively.
- Among employed men, those with recurrent limitations (93%) had the highest rate of full-time employment while those with progressive limitations had the lowest (78%). Among employed women, those with continuous limitations (79%) had the highest rate of full-time employment while those with progressive limitations (67%) had the lowest.
- Among non-employed persons, those with progressive limitations had a lower likelihood of work potential than those with either recurrent, fluctuating, or continuous limitations.
- At around half their respective populations, employed persons with progressive (56%) or fluctuating (49%) limitations were the most likely to require workplace accommodations. By comparison, less than a third (31%) of employed persons with recurrent or continuous limitations required workplace accommodations.

Introduction

The conventional view of disability is a limitation that is continuous and remains, more or less, permanent and unchanged over time. However, many disabilities may not follow this relatively stable pattern. Instead, persons with disabilities may experience periods of good health in between periods of their limitations (on-again/off-again episodes) and/or experience changes in the severity of their limitations over time (worsening, improving, or fluctuating). These types of disabilities may be characterized as dynamic because the very nature of the disability is one of change with different possible trajectories over time. As a consequence, the collective experiences of those with disability dynamics are likely to be different than those with so-called “continuous” disabilities.

This paper presents preliminary findings on four groups of persons with different disability dynamics,¹ based on data collected from newly developed questions from the 2017 Canadian Survey on Disability (CSD). Each of these groups has its own unique profile based on the length of time between episodes of the limitation (if such exist) as well as the limitation’s progression over time. The paper is divided into six main sections. Section one provides a brief review of research to date on disability dynamics and some of the key challenges in how they have been traditionally operationalized and measured. Section two covers the present paper’s underlying methodology and rationale for measuring four disability dynamic groups. Section three provides a basic overview of the demographic profile of each of these groups and how they differ from each other. Section four provides an overview of employment profiles and work potential for each group as well as highlighting key differences between them. Section five explores how disability dynamics may affect the work experiences of employed persons with disabilities by presenting findings on their requirements and level of needs met for accommodations in the workplace. Finally, Section six provides a summary and conclusions.

Section 1: Background

1.1 Background

Since the 1990s, Canada has had survey results suggesting that the conventional view of disability, as constant and unchanging, does not accurately depict the reality of disability for a sizeable number of people who may experience fluctuations or changes in their limitations (e.g., Canadian Council on Social Development, 2001; Fawcett, 1996). Based on longitudinal data, which come from surveys that interview the same individuals repeatedly over time, these dynamics became evident. However, since most of the longitudinal data in the 1990s [e.g., Survey of Labour and Income Dynamics (SLID; Statistics Canada)] permitted only the identification of “disability versus no disability” at one point in time each year, these dynamics were easily interpreted as “on again/off again” episodes—where disability was present in one year, but not necessarily the next.²

By the early 2000s, increasing attention was given to the fact that not only did disability fluctuate for some in “on again/off again” episodes, but that also, for others, the progression of their underlying conditions often led to changes over time in terms of increasing levels of severity. This increase in severity, in turn, could lead to changing requirements and needs for supports and services over time even though the same underlying conditions remained present. This concern was well-summarized in the stakeholder report called *In Synchrony: Looking at Disability Supports from a Progressive Disability Perspective* (Majeau, Gaucher, Fougeyrollas, & Lemieux-Brassard, 2003). This report called for a “progressive disability lens” to be applied to research on persons with disabilities since the dynamics of disability could take many forms—each with a unique set of barriers facing the individual when trying to enter (and remain in) the labour market as well as trying to meet often changing support and accessibility needs.

1. While those with continuous disabilities are not technically “dynamic,” they are included in the four disability dynamic groups for ease of reference. In fact, this categorization could more logically be referred to as the four dynamic/non-dynamic groups.
2. However, in its final two years, the longitudinal Labour Market Activity Survey (1988 to 1990; LMAS) contained a “disability module,” which was more extensive than the module contained in the SLID, and it allowed the construction of a severity index. As noted in Fawcett (1996), almost two-thirds of those identified as having a disability in 1989 experienced a change in either the severity of the disability or in the presence of disability itself by the following year. This suggested that disability dynamics could be quite complex and varied.

1.2 Episodic Disabilities

In recent years, the term “episodic disability” has attracted increased attention in Canada as a lens through which to distinguish those whose disabilities do not conform to the conventional continuous type. Episodic disability research has typically concentrated on the “on again/off again” episodes in which long term conditions are characterized by periods of good health interrupted by periods of illness or disability.³ In this context, episodic disability is seen largely as part of a two-group construct in which disabilities are either “episodic” or “not episodic”.

However, within the literature on episodic disability there has been a range of conceptualizations regarding what “episodic disability” means. This is further complicated by a lack of data, until recently, that would allow researchers a more direct means of identifying those with episodic disabilities when using survey data.⁴ What all the researchers in this area have in common, however, is that they view “change” in one’s experience of their disability as a key element that is not well integrated into the conventional approach. This increased attention recently culminated in the House of Commons, Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities, Taking Action: Improving the Lives of Canadians Living with Episodic Disabilities, Fifteenth Report, 1st Session, 42nd Parliament, March 2019 (HUMA, 2019).

Defining episodic: underlying conditions or diseases

A common element in episodic disability research has been the use of a number of conditions or diseases deemed to be episodic in nature as examples and even as a method of identifying individuals with episodic disabilities. For example, the recent HUMA report (2019) introduced the concept of episodic disabilities as follows:

Episodic disabilities are the result of medical conditions or diseases that are prolonged and often lifelong but have unpredictable episodes of illness and disability. These episodes of disability can vary in severity and duration and are often followed by periods of wellness. Examples of conditions and diseases that are episodically disabling are arthritis, Crohn’s and colitis, HIV/AIDS, mental illness, multiple sclerosis (MS), as well as some forms of cancer and rare diseases (p. 7).

The use of concrete examples of conditions that might lead to episodic disabilities can be an effective method of helping people understand that some types of disabilities may not follow the conventional pattern of a continuous limitation. The conditions cited above represent only some of the conditions that could be used to demonstrate this point and provide context to help people conceptualize the lived experiences of those whose disabilities follow more dynamic patterns. However, even individuals with the same underlying health condition may experience limitations differently from others with the same diagnosis and can even experience different patterns of change in their own limitations at various points in their life.⁵ As noted in the HUMA report (2019, p. 19): “Witnesses who have been diagnosed with MS explained that various forms of the disease carry different prognoses and expected levels, frequency and duration of impairments” (see Text Box 1). Similarly, the HUMA report further highlighted this complexity by outlining testimony which demonstrated the need to recognize that “episodic disability” can take various forms and include the added dimension of trajectories over time. For example, some trajectories associated with “episodic degenerative conditions” are “progressive in their decline”, while others may result in some type of “remission” (Yates, as cited in Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities [HUMA-130], 2018).

3. See, for example, the Episodic Disability Network (episodicdisabilities.ca).

4. Much of the work in this area has relied on qualitative methods and/or longitudinal studies focussing on a particular sub-population in a particular geographic area to advance our understanding of the unique barriers faced by this group of individuals (see for example, Gignac et al., 2011; Gignac et al., 2018; Vick, 2013; 2014; Vick & Lightman, 2010).

5. For example, see discussions in Gignac et al. (2011) about longitudinal findings from a sample of individuals with osteoarthritis or inflammatory arthritis interviewed over a four-and-a-half year period. Also see Gignac et al. (2012).

Text box 1: Example of disability dynamics

Disability dynamics can be related to a host of underlying conditions or life situations. However, these same underlying conditions can impact different people in different ways or they can impact the same person differently at different stages of their life or in different environments. For example, **multiple sclerosis (MS)** can result in a variety of dynamic experiences around limitation. Some persons, for example, may be living with relapsing-remitting MS and experience **infrequent periods** in which they feel limited in their daily activities. Furthermore, their ability to do those activities remains more or less the **same over time**. On the other hand, some persons may be living with primary-progressive MS and experience **more frequent periods** in which they feel limited in their daily activities, and that their ability to do those activities steadily **worsens over time**. In both cases, the general underlying condition (MS) is the same, but the frequency and intensity of the limitations are experienced differently.

For some persons, the primary challenge will be the “on again/off again” episodes of their disability; while for others it may be the progression of their disability over time; and for others still, the challenge may be experiencing a combination of both the “on again/off again” episodes as well as its progression over time. However, in all instances, simply the presence of an underlying health condition—in the absence of any other information – provides, at best, an incomplete picture of the actual experiences and challenges persons with disabilities may have in their day-to-day lives. Further to this, any analysis of underlying conditions using the CSD is limited because it does not actually provide a checklist of all underlying conditions that each person might have (see Textbox 2).

Text box 2: CSD and Main Underlying Condition

Using the CSD to flag underlying health conditions assumed to be associated with disability dynamics can present methodological challenges. The CSD questionnaire does **not** contain a “checklist” of conditions, illnesses, diseases, or injuries where a respondent can report having or not having each condition on the list. Instead, respondents are asked to write in up to two main underlying condition(s) leading to their limitations, which is then recoded numerically according to the International Classification of Diseases once the data have been collected. As such, the CSD is not an appropriate data source for providing estimates for the prevalence of a particular condition, disease, or injury type. All conditions, diseases, or injury types in the CSD will likely be underestimated to varying degrees since respondents can only write in their top two main conditions that they believed most contributed to their limitations—meaning that information on any other additional conditions they may have will not be captured. For this reason, the CSD cannot be used to obtain a profile of those with any particular underlying condition, nor can main underlying condition data in the CSD be used to identify groups based on conditions, diseases, or injury types. These data merely provide some context to better understand the disability-level data and, in particular, the potential profile of those with “unknown disabilities”.

Defining episodic: work capacity

Some have defined episodic disability in terms of work capacity, and perhaps more precisely, as “intermittent work capacity”. However, it is not always clear how long these intermittent periods may last (hours, days, weeks, or months). As well, it is not always clear whether it is a matter of experiencing changes in the severity level of the limitation, experiencing episodes without any limitation, or some combination of both. Lysaght, Krupa, and Gregory (2011), for example, describe a person with an episodic disability as someone who is having “unexpected and/or periodically diminished capacity relative to the usual or expected workload because of a disability or health condition, or is absent from the workplace frequently or for extended periods of time because of a disability or

health condition” (p. 5). Furrrie (2010), Gignac et al. (2011), Realize (2019), and Vick (2014), among others, view intermittent work capacity as being a product of fluctuating periods of illness and wellness; and, further to that, the length of these periods may vary considerably. Vick (2014) extended her analysis by examining the intersection of naturally fluctuating conditions with “precarious work”. In this view, work capacity is a function of both one’s underlying condition, which may fluctuate, and of one’s environment, which may involve mostly unstable, non-standard work opportunities (e.g., involuntary part-time, temporary, seasonal, or contract jobs that may also be low-paid, have poor working conditions, and lack benefits). As noted by Vick: “. . . the question is not whether persons with episodic disabilities can work but to what extent physical, emotional, organizational, attitudinal, institutional, programmatic, and environmental factors impede ability to seek, maintain, and negotiate the conditions of work” (p. 45). Similarly, Gignac et al. (2011) included a focus on the role of workplace accommodations, or lack thereof, in work capacity. Work capacity may not be impacted immediately for some, even with fluctuating conditions; however, over time, if episodes of limitation become longer and closer together, a threshold may be reached in terms of impact on work capacity. Lack of early intervention in terms of supports and accommodation can result in work capacity being impacted.

Defining episodic: severity and visibility of disability

Others (e.g., Wannell & Grekou, 2014) expand the notion of episodic disability to include conceptualizations based on the severity of the disability (such as including those with mild or moderate disabilities with episodic disabilities). Yet others bring into focus the idea of “invisible disabilities” when discussing episodic disabilities. As noted by Ontario Human Rights Commission (2014), episodic disabilities and invisible disabilities are separate categories, though there are some strong linkages and overlap: “disabilities are often invisible and episodic, with people sometimes experiencing periods of wellness and periods of disability” (p. 4). These approaches also have a common element in that they focus on a group of individuals with disabilities who do not necessarily fit the conventional view of someone with a disability or may not always appear to have a disability.

Alternative approach to episodic: focus on wider range of dynamic patterns using 2017 CSD

In response to this diversity of conceptual definitions, one of the most recent reviews of the episodic disability literature (Office for Disability Issues, 2016) recommended that future work on the subject “investigate more precise approaches to defining episodic disability” (p.13). However, defining episodic disability goes hand in hand with methods of identifying those with episodic disabilities. It can be particularly difficult to identify those with episodic disabilities in a survey environment.⁶

The 2017 CSD contained two new questions which were designed to help identify those with “episodic disabilities”; and the methodology involved with this is explained below. It is important to note, however, that this paper does not provide or recommend a particular approach to identifying those with “episodic disabilities”. This paper focusses on a wider range of dynamic patterns that were developed from the new questions contained on the 2017 CSD. This wider range of dynamic patterns adopts, among other things, a “progressive disability lens” by separately identifying those who are experiencing increasing levels of limitation over time, while also identifying those experiencing other types of dynamics. For those experiencing the latter, this paper also provides some additional context regarding whether the individual ever experiences “a month or more” without feeling limited since this group may be at a heightened risk of appearing “not disabled” when, in fact, they are. Depending on one’s particular focus, a different configuration of the groups that can be identified from these questions may be chosen.

6. One of the greatest challenges to survey research in this area has been a lack of suitable data, until recently, to capture the nuances of complex dynamics experienced by some persons with disabilities. Knowledge has often been advanced by researchers using a range of qualitative methods and/or employing smaller-scale, longitudinal surveys of specific sub-populations who often experience dynamics in their disabilities. For example, see the work of Gignac, et al. (2011), Gignac, et al. (2018), Vick (2013; 2014), and Vick and Lightman (2010). This type of work has also advanced, on a more practical level, approaches to addressing barriers faced by individuals experiencing these types of dynamics in the labour market. For example, the Episodic Disability Network has developed a toolkit for assisting individuals and employers with accommodation approaches to these barriers (<https://episodicdisabilities.ca/home.php>)—providing links to information resources and helpful, potential solutions. Also of note is an ongoing project formally known as: Accommodating and Communicating about Episodic Disabilities (ACED): A partnership to deliver workplace resources to sustain employment of people with chronic, episodic conditions. Funded by the Canadian Institutes of Health Research (CIHR) and by the Social Sciences and Humanities Research Council of Canada (SSHRC) as part of a signature initiative, the Healthy and Productive Work Initiative. The ACED project brings together a range of academic researchers along with a range of participating stakeholder organizations and groups (for more details about the project, see <https://aced.iwh.on.ca>). This project aims to develop a toolkit of resources that will be piloted and evaluated, and will expand the evidence base currently available to include diverse workplaces, sex/gender diversity, age/life course diversity, diverse employment contexts, etc.

Note: The information in this paper is intended to be a first look at some key dynamic patterns which provide a better understanding of how different patterns might lead to different outcomes. It is also important to remember that some individuals may experience various patterns during the course of their life; and, as such, these categories are not categories of people, but rather categories of how people are experiencing their disability at a particular point in time.

Section 2: Methodology

2.1 Methodology and Rationale

In Canada, the conceptualization of “disability” has changed over time, with the movement away from disability within a “medical model” toward a “social model” (Grondin, 2016). This movement is reflected in both the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), ratified by Canada in 2010, and in Canada’s new Disability Screening Questions (DSQ), which were developed between 2010 and 2012 to identify persons with disabilities on Statistics Canada’s surveys including the CSD (Grondin, 2016). This move has resulted in a focus on the limitations experienced in everyday life by those with impairments and how those with impairments interact with their environment.

However, there is another “dimension” of disability that has presented greater challenges both conceptually and methodologically, and this has involved the “dynamic nature” of the experience of disability over time for many individuals. While Canada’s new DSQ were designed to capture both those with continuous limitations as well as those who experience dynamics or changes over time in their limitations, there has been no direct method of distinguishing between the two until recently. In an effort to address this gap in data, the 2017 CSD included new questions that were intended to identify disability dynamics (see Appendix for an overview of qualitative testing of questions). These questions were:

1. EPD_Q05, which asked “*Do you ever have periods of one month or more when you do not feel limited in your daily activities due to your overall condition?*” and had two possible response options: a) yes or b) no.
2. EPD_Q10, which asked “*Is your ability to do your daily activities...?*” and had four possible response options: a) getting better, b) getting worse, c) staying about the same, or d) you are able to do more activities during some periods but fewer activities during other periods.

The advantage of these two questions is that they simultaneously address periods or episodes of the disability (EPD_Q05) as well as its progression over time (EPD_Q10), resulting in eight possible combinations or categories. Table 1 shows the combinations of these questions and the resulting categories that are numbered one through eight.

Table 1
Eight possible response combinations to questions EPD_Q05 and EPD_Q10

EPD_Q05: Periods of one month or more without limitations	EPD_Q10: Ability to do daily activities			
	Getting better	Getting worse	Staying about the same	Able to do more activities during some periods but fewer activities during other periods
Yes	1	3	5	7
No	2	4	6	8

Source: Statistics Canada, Canadian Survey on Disability, 2017.

Given the complexity of examining each of the eight categories as distinct groups and associated issues with sample size restrictions, a number of different options were considered to reduce the number of categories to generate a more meaningful typology regarding disability dynamics. For the purposes of this paper, a four-group typology was created (see below for descriptions). The methodology followed to develop this typology is based on the following:⁷ a) issues raised during the qualitative testing sessions, b) underlying similarities/differences among some groups with respect to disability type, severity, and other characteristics, and c) logic with respect

7. Depending on the purpose of the research, one might select different groupings and/or different numbers of groupings. For example, in the HUMA report released in March, 2019, three groups were selected for reporting purposes since the focus was on “episodic disabilities”—with less emphasis on separately identifying specific patterns of dynamics. Using data from the 2017 CSD, the HUMA report examined those who had “periodic” disabilities (experienced a month or more without limitation); those who did not have periodic disabilities, but did have fluctuation in the shorter term; and those who experienced increasing levels of limitation over time. This latter group is included in our current analysis independent of the other dynamic patterns due to the following: the importance placed on progressive limitations by participants during qualitative testing by Statistics Canada of this module; the 2003 call for the application of a progressive disability lens; testimony at the HUMA Committee meetings, for example by Yates, which outlined the case of those with “episodic degenerative conditions” that are “progressive in their decline” (Yates, as cited in HUMA-130, 2018), and the focus placed on this type of dynamic in the international literature (for example: Banks and Lawrence, 2006).

to the wording of each combination listed above. For this paper, the eight categories were combined to form the following four disability dynamic groups:⁸

- i. **Progressive limitations** (3, 4): This includes those who indicated that their ability to do daily activities was getting worse over time, regardless of whether or not they had periods of one month or more without feeling limited. This gives primacy to the dimension of progressive limitations over the experience of some lengthy periods without feeling limited. Examining numerous underlying characteristics showed a great deal of similarity between both groups of people indicating their abilities were getting worse—quite distinct from those selecting other response options.
- ii. **Recurrent limitations** (1, 5, 7): This includes those who indicated that they had periods of one month or more when they did not feel limited and that their ability to do daily activities was either: staying about the same; getting better; or able to do more activities during some periods but fewer activities during other periods.⁹ This group includes all those who reported periods when they did not feel limited, except those who also indicated that their ability to do their daily activities was getting worse (i.e., progressive limitations, as defined above).
- iii. **Fluctuating limitations** (8): This includes those who indicated that they never had periods of one month or more without feeling limited but that they were able to do more activities during some periods but fewer activities during other periods. These fluctuations could be an indication of shorter time periods (i.e., less than a month) when they did not feel limited, or they could indicate changes in level of severity, where individuals always felt limited to some degree but did have periods where these limitations were getting better or worse.
- iv. **Continuous limitations** (2, 6): This includes those who indicated that they never had periods of one month or more without feeling limited and that their ability to do daily activities was either staying about the same or getting better. It is important to note that “getting better” could mean either a certain amount of stabilization over time (possibly due to medical intervention or a better system of supports) or, in some instances, this could signal recovery from a long-term illness or injury resulting in no disability. While for some research purposes it might be valuable to examine this “getting better” group separately, examination of several underlying characteristics (disability types, severity, etc.) suggests that these individuals are relatively similar to those who reported their ability to do daily activities was “staying about the same”. This “getting better” group was also relatively small; thus, for the purposes of this paper these two categories were grouped.

8. Note also that these groupings are somewhat similar to concepts proposed by Furrie (2015), in her typology of working Canadians whose health status changes. For those with long term conditions, Furrie proposed the following four groups: (1) Long-term and stable (LTS) which is conceptually similar to the continuous group defined here; (2) Long-term progressive (LTP), similar to progressive; (3) Long-term impairment episodes (LTIE) which could be most closely associated with fluctuating in terms of its conceptualization; and (4) Long-term episodes (LTE) which could be most closely associated with recurrent in terms of its conceptualization of having discrete episodes without experiencing limitation. Also note that these groupings address some of the testimony at the HUMA committee, including Yates' discussion of “episodic degenerative conditions” which result in progressive decline (Yates, as cited in HUMA-130, 2018). The “progressive” category in this paper is consistent with this conceptualization, allowing them to be examined separately from the other groups.

9. The reasoning behind this, in addition to underlying characteristics being fairly similar for these groups, is that for those reporting the pattern of limitation as able to do more activities during some periods but fewer activities during other periods (in question EPD_Q10), they might be referring to the long periods of a month or more without limitation reported in the previous question (EPD_Q05) (this would be logical as a pattern) or they might have shorter fluctuations as well as longer fluctuations.

Section 3: Profile

3.1 Overall Rates of Disability Dynamic Groups

Three in five persons with disabilities do not experience conventional continuous limitations

Of the nearly 6.2 million persons with disabilities aged 15 years and over, almost 3.8 million (61%) experienced some type of disability dynamic, while 2.4 million (39%) experienced “continuous” limitations (Table 2).¹⁰ Among those with disability dynamics, nearly 1.4 million had limitations that were worsening over time (“progressive”); over 1.5 million had experienced periods of a month or more without being limited (“recurrent”); and over another 0.8 million experienced fluctuations in limitations (“fluctuating”).

Table 2
Canadian population aged 15 years and over with disabilities, by disability dynamic group and age group, 2017

Age group	Progressive	Recurrent	Fluctuating	Continuous
	number			
15 years and over	1,394,230	1,537,050	821,660	2,410,110
	percent			
15 years and over	22.6	24.9	13.3	39.1
15 to 24 years (reference category)	6.8	33.6	16.7	42.9
25 to 64 years	20.7*	27.4*	14.2*	37.7*
25 to 34 years	8.4	36.3	16.1	39.3
35 to 44 years	15.4*	32.1	14.9	37.7*
45 to 54 years	23.8*	24.6*	15.2	36.4*
55 to 64 years	27.2*	22.6*	12.1*	38.1*
65 years and over	30.6*	18.0*	10.8*	40.6
65 to 74 years	27.6*	18.8*	13.1*	40.4
75 years and over	33.9*	17.0*	8.3*	40.9

* significantly different from reference category ($p < 0.05$)

Notes: Significance tests were not performed on “15 years and over” category.

The sum of the four disability dynamic groups does not equal the total population of persons with disabilities due to non-response and rounding.

Source: Statistics Canada, Canadian Survey on Disability, 2017.

Prevalence of progressive limitations increases with age

An age breakdown of these data suggests that these patterns of dynamics could change over the course of an individual’s lifespan. While roughly two in five people experienced continuous limitations across all age groups, it was the relative proportions among those with progressive, recurrent, and fluctuating limitations that differed across the life course. For example, among youth aged 15 to 24 years, less than one in ten experienced progressive limitations, while a third of older seniors aged 75 years and over, experienced progressive limitations. At the same time, the proportion who experienced recurrent limitations decreased from 34% among youth to 17% among older seniors. Similarly, fluctuating limitations were experienced by 17% of youth, but this percentage dropped to 8% among older seniors. Among older age groups, limitations that were dynamic were more likely to be associated with progressive limitations than with either recurrent or fluctuating limitations.

3.2 Rates of Disability Dynamic Groups by Sex, Age, and Severity

Women are more likely to experience fluctuating limitations; men are more likely to experience continuous limitations

Women with disabilities were less likely than men to experience continuous limitations and more likely to experience fluctuating limitations. Among youth, women were more likely than men to experience both fluctuating and recurrent limitations. Overall, women were more likely than men to experience fluctuating limitations (16% vs 10%), but less

10. The actual estimated number of persons with disabilities is 6,246,640. However, the sum of the four disability dynamic groups in this paper is slightly less than this actual total due to rounding and due to non-response.

likely to experience continuous limitations (36% vs 43%) (Table 3). In many cases, these trends held across age groups; but among seniors aged 65 years and over, men and women experienced fluctuating limitations in roughly equal proportions. Among youth, women were more likely than men to experience recurrent or to have fluctuating, and less likely to experience continuous limitations.

Table 3
Canadian population aged 15 years and over with disabilities, by disability dynamic group, age group and sex, 2017

Age group and sex	Progressive	Recurrent	Fluctuating	Continuous
	percent			
15 years and over				
Men (reference category)	22.9	24.1	10.4	42.6
Women	22.4	25.6	15.7*	36.3*
15 to 24 years				
Men (reference category)	6.0	28.8	12.6	52.7
Women	7.5	37.1*	19.7*	35.8*
25 to 64 years				
Men (reference category)	22.2	26.8	10.5	40.6
Women	19.6*	27.8	17.2*	35.5*
65 years and over				
Men (reference category)	28.9	17.7	9.7	43.8
Women	31.9	18.2	11.7	38.2*

* significantly different from reference category ($p < 0.05$)

Source: Statistics Canada, Canadian Survey on Disability, 2017.

Text box 3: Global Severity Class

A global severity score was developed for the CSD, which took into account the number of disability types that a person has, the level of difficulty experienced in performing certain tasks, and the frequency of activity limitations. To simplify the concept of severity, four severity classes were established: mild, moderate, severe, and very severe. It is important to understand, however, that the name assigned to each class is simply intended to facilitate use of the severity score and is not a label or judgement concerning the person's level of disability. In this paper, mild and moderate classes were collapsed into "less severe" and severe and very severe classes were collapsed into "more severe".

Four in ten persons with "more severe" disabilities experience progressive limitations versus one in ten with "less severe" disabilities

Persons with "more severe" disabilities were much more likely to experience progressive limitations, and less likely to have recurrent limitations, compared to those with "less severe" disabilities. These differences between "more severe" and "less severe" disabilities held across age groups. However, among those with "more severe" disabilities, the percentage with progressive limitations increased by about 30 percentage points from 17% among youth to 46% among seniors, while among those with "less severe" disabilities, this increase was 11 percentage points, from 3% among youth to 14% among seniors (Table 4).

Table 4
Canadian population aged 15 years and over with disabilities, by disability dynamic group, age group and severity of disability, 2017

Age group and severity of disability	Progressive	Recurrent	Fluctuating	Continuous
	percent			
15 years and over				
Less severe (reference category)	10.0	35.0	12.1	42.9
More severe	39.3*	11.7*	15.0*	34.0*
15 to 24 years				
Less severe (reference category)	2.7	39.9	15.8	41.6
More severe	16.5*	18.7*	18.8	46.0
25 to 64 years				
Less severe (reference category)	9.4	37.6	11.9	41.0
More severe	37.2*	12.4*	17.4*	33.0*
65 years and over				
Less severe (reference category)	14.2	27.0	10.9	47.9
More severe	46.2*	9.4*	10.7	33.7*

* significantly different from reference category (p < 0.05)

Source: Statistics Canada, Canadian Survey on Disability, 2017.

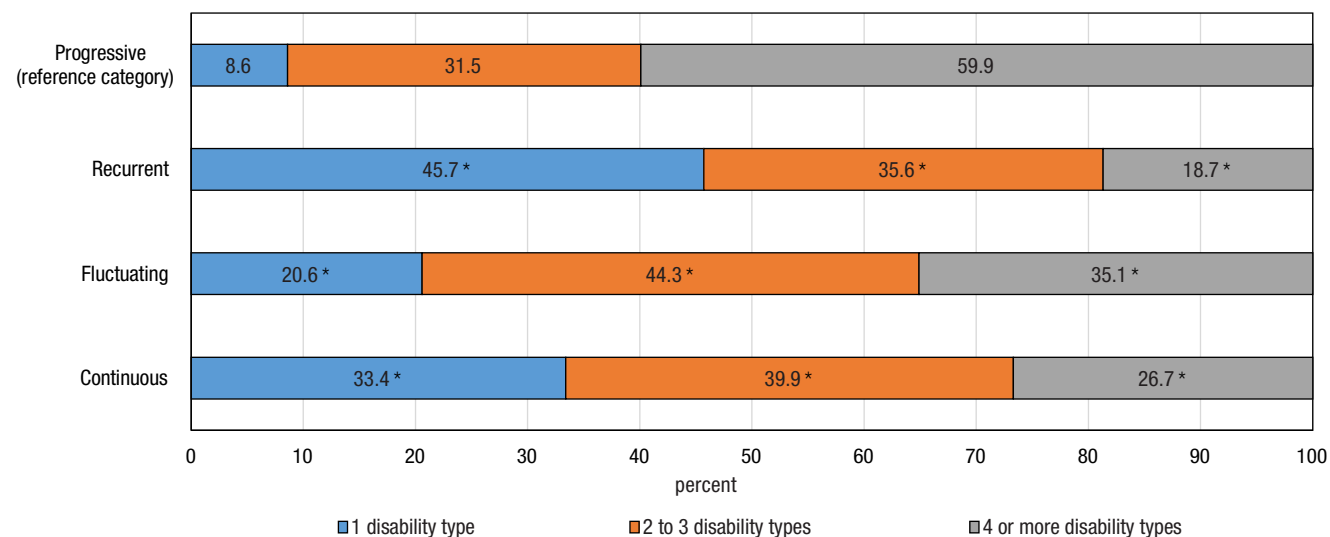
3.3 Disability Dynamic Groups by Number and Types of Disabilities

Over 90% of persons with progressive limitations have more than one disability type

Those with progressive and fluctuating¹¹ limitations tended to have a higher number of disability types¹² than the other groups. For example, those with progressive limitations had an average of four disability types compared to two for those with recurrent.¹³ In fact, three in five of those with progressive limitations had four or more types of disabilities compared with one in five with recurrent. In contrast, nearly half of those with recurrent limitations had only one type of disability compared with one in ten of those with progressive (Chart 1).

Chart 1
Canadian population aged 15 years and over with disabilities, by disability dynamic group and number of disability types, 2017

Disability dynamic group



* significantly different from reference category (p < 0.05)

Source: Statistics Canada, Canadian Survey on Disability, 2017.

11. Separate significance testing was also done using fluctuating limitations as a reference category.

12. Disability types include: pain-related, mobility, flexibility, dexterity, seeing, hearing, learning, developmental, memory, mental health-related, and unknown.

13. The mean number of disability types for the four disability dynamic groups is as follows: progressive, 4.1; recurrent, 2.2; fluctuating, 3.1; and continuous, 2.7.

Although it is instructive to examine the pattern of disability types that occur among the various disability dynamics, care must be taken when interpreting the data because, as described above, individuals can (and often do) have more than one disability type. As shown in Table 5, pain-related disabilities were relatively common among all groups, and this is consistent with overall findings regarding prevalence of disability types. However, the highest concentration of both pain-related and physical disabilities (roughly 84%) was found among those with progressive limitations. The higher rate of multiple disability types among the progressive group may be resulting in this group having a higher prevalence of almost all of the disability types. The exception to this higher prevalence involves mental health-related disabilities. Approximately one third of those with progressive limitations indicated having a mental health-related disability, while 43% of those in the fluctuating group had a mental health-related disability.

Table 5
Canadian population aged 15 years and over with disabilities, by disability dynamic group and disability type, 2017

Disability dynamic group	Physical	Pain-related	Sensory	Cognitive	Mental health-related
	percent				
Progressive (reference category)	84.4	83.4	45.9	35.8	35.5
Recurrent	37.8*	55.8*	33.0*	23.7*	32.9
Fluctuating	62.1*	72.8*	32.6*	28.7*	43.2*
Continuous	53.8*	58.4*	38.5*	25.5*	27.3*

* significantly different from reference category ($p < 0.05$)

Notes: The sum of the five disability types within each disability dynamic group does not equal 100% because persons can have more than one type of disability.

Physical disabilities includes those with mobility, flexibility, and/or dexterity disabilities; sensory disabilities includes those with seeing and/or hearing disabilities; and cognitive disabilities includes those with learning, memory, and/or developmental disabilities.

Source: Statistics Canada, Canadian Survey on Disability, 2017.

Section 4: Employment

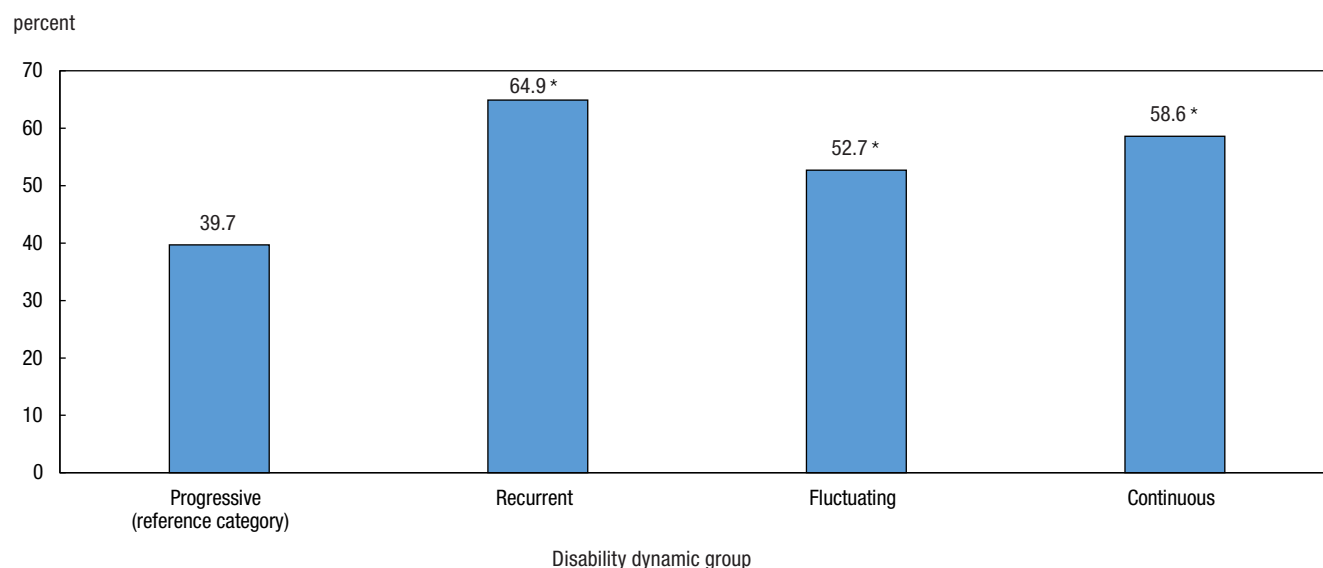
4.1 Employment Rates among Adults Aged 25 to 64 Years

Employment rate is highest for those with recurrent limitations; lowest for those with progressive limitations

When taking into account disability dynamics, among persons with disabilities aged 25 to 64 years, clear asymmetries in employment rates become apparent. The employment rate was highest for those with recurrent limitations (65%) and lowest for those with progressive limitations (40%) (Chart 2). The employment rate was in the middle range for those with fluctuating (53%) or continuous (59%) limitations. No statistically significant differences between men and women were found within each of the four disability dynamic groups.

Chart 2

Employment rate of Canadian population with disabilities aged 25 to 64 years, by disability dynamic group, 2017



* significantly different from reference category ($p < 0.05$)

Source: Statistics Canada, Canadian Survey on Disability, 2017.

Regardless of age, employment rates tend to be lowest for those with progressive limitations

When examining age-specific employment rates by disability dynamic groups, some noteworthy patterns emerge. Those with recurrent, progressive, or continuous limitations showed fairly consistent levels of employment between ages 25 to 54 years, but showed significant declines in employment rates for those aged 55 to 64 years (Table 6).¹⁴ Regardless of age groups, however, those with progressive limitations consistently had lower rates of employment (a difference of between 5 to 27 percentage points) than did their same-age peers with either recurrent or continuous limitations.

14. A similar pattern is found for those without disabilities, among whom employment rates hover between 82% and 86% across age groups 25 to 54, but drop to 67% among those 55 to 64. It is likely that early retirement at least partially explains this phenomenon (Morris et al., 2018).

Table 6
Employment rate of Canadian population with disabilities aged 25 to 64 years, by disability dynamic group and age group, 2017

Age group	Employment rate			
	Progressive (reference category)	Recurrent	Fluctuating	Continuous
		percent		
25 to 34 years	54.1	72.2*	64.7	72.8*
35 to 44 years	50.8	78.0*	63.9*	66.4*
45 to 54 years	45.9	72.5*	50.8	64.2*
55 to 64 years	29.8	42.0*	39.1*	43.2*

* significantly different from reference category ($p < 0.05$)

Source: Statistics Canada, Canadian Survey on Disability, 2017.

Drop in employment rates for those aged 55 to 64 years is more pronounced among women than men—particularly for women with fluctuating limitations

The intersection between age and sex also resulted in some key differences in employment rates. For those aged 25 to 54 years, the gap in employment rates between men and women was not significantly different within each disability dynamic group. However, employment rates for both sexes—in this age group—were lowest for those with progressive limitations (48%) and highest for those with recurrent (74%) (Table 7). Among those aged 55 to 64 years, significant differences in employment rates were found between men and women with fluctuating limitations. In this case, employment rates were lower for women than they were for men. Although employment rates declined for both men and women from age group 25 to 54 years to 55 to 64 years across all disability dynamic groups, the magnitude of the decline was greater for women.

Table 7
Employment rate of Canadian population with disabilities aged 25 to 64 years, by disability dynamic group, sex, and age group, 2017

Age group and sex	Employment rate			
	Progressive (reference category)	Recurrent	Fluctuating	Continuous
		percent		
25 to 54				
Both sexes	48.3	74.2*	58.5*	67.2*
Women	46.6	72.8*	58.3*	67.4*
Men	50.0	76.1*	59.0	66.9*
55 to 64				
Both sexes	29.8	42.0*	39.1*	43.2*
Women	26.7	35.2	30.3	38.3*
Men	33.3	49.7*	55.3*	47.9*

* significantly different from reference category ($p < 0.05$)

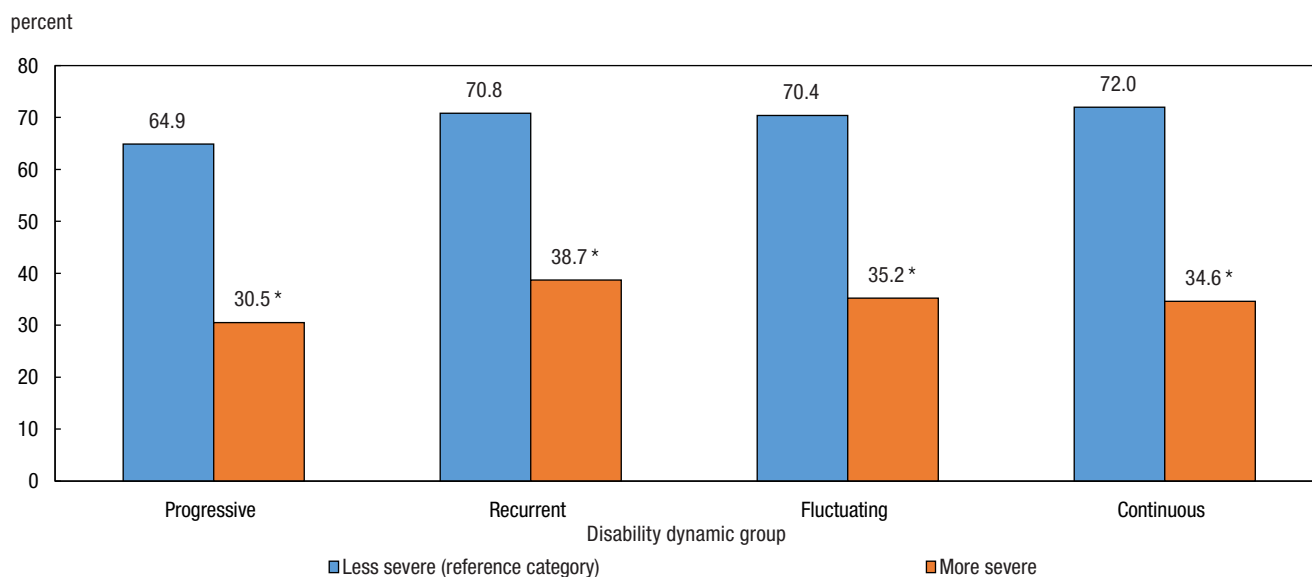
Source: Statistics Canada, Canadian Survey on Disability, 2017.

4.2 Employment rate and Severity of Disability

Regardless of disability dynamic, those with “less severe” disabilities are twice as likely to be employed as those with “more severe” disabilities

Severity is an important factor for understanding employment rates. Persons with “less severe” disabilities were significantly more likely to be employed than those with “more severe” disabilities within each disability dynamic group (Chart 3). In each case, those with “less severe” disabilities were approximately twice as likely to be employed as those with “more severe” disabilities.

Chart 3
Employment rate of Canadian population with disabilities aged 25 to 64 years, by disability dynamic group and severity of disability, 2017



* significantly different from reference category ($p < 0.05$)

Source: Statistics Canada, Canadian Survey on Disability, 2017.

However, examining both severity and disability dynamics allows for a richer understanding of key factors in employment. For example, among those with “less severe” disabilities, while there are few differences among those with recurrent, fluctuating, or continuous limitations, having a progressive limitation (even if it is “less severe”) presents an added employment challenge. The lowest rate of employment is found among those with “more severe” progressive limitations.

4.3 Full-Time/Part-Time Employment

Men and women with progressive limitations are at least 1.5 times more likely to work part-time than are those with continuous limitations

Women and men with disabilities were both more likely to work on a full-time basis than part-time¹⁵ (Table 8). However, women were more likely to work on a part time basis than were men. Among women, those with continuous limitations had the highest rate of full-time employment (79%), while those with progressive or fluctuating limitations had the lowest (approximately 70%). Among men, those with recurrent limitations had the highest rate of full-time employment (93%) while those with progressive had the lowest (78%). The highest rate of full-time employment for women was the same as the lowest rate of full-time employment for men.

15. Part-time work consists of less than 30 hours per week.

Table 8
Employed Canadian population with disabilities aged 25 to 64 years, by hours worked, disability dynamic group and sex, 2017

Sex and hours worked	Progressive (reference category)	Recurrent	Fluctuating	Continuous
	percent			
Women				
Part-time	29.3	24.6	29.0	19.7*
Full-time	67.4	74.3	70.6	78.8*
Men				
Part-time	20.0 ^E	6.7*	12.3 ^E	11.7*
Full-time	78.2	93.1*	86.3	86.8*

^E use with caution

* significantly different from reference category ($p < 0.05$)

Note: Sum of part-time and full-time employment do not equal 100% due to non-response.

Source: Statistics Canada, Canadian Survey on Disability, 2017.

4.4 Impact of Disability on Employment Experiences

Persons with progressive limitations are the most likely to report that their condition impacts their employment

Those with progressive limitations were the group most likely to report that their condition had an impact on their employment, with 65% having difficulty changing jobs or advancing at their current job and 62% experiencing limitations on the amount or kind of work they could perform (Table 9).¹⁶ By comparison, persons with either recurrent or continuous limitations were around half as likely to report these same two impacts on employment. Persons with either progressive or fluctuating limitations were more likely than those with continuous limitations to have taken a leave of absence from work of one month or more due to their disability.

Persons with recurrent or continuous limitations did still, however, report that their condition impacted their employment, particularly in the areas of difficulties changing or advancing at their job and limits on the amount or kind of work they could do. These patterns underscore the importance of considering each of the four disability dynamic groups in turn.

Table 9
Employment experiences of employed Canadian population with disabilities aged 25 to 64 years, by disability dynamic group, 2017

Employment experience	Progressive (reference category)	Recurrent	Fluctuating	Continuous
	percent			
Because of your condition:				
Changed kind of work	32.6	19.5*	33.2	21.1*
Changed amount of work	45.5	23.8*	37.8*	21.1*
Changed jobs	24.3	16.7*	23.8	16.3*
Began working from home	10.8	8.0	10.1	7.4
Took an absence from work of one month or more	35.9	26.8*	35.0	24.5*
Limits on amount or kind of work	61.8	27.8*	49.8*	33.0*
Difficulty changing jobs or advancing at job	64.7	28.8*	47.3*	36.2*

* significantly different from reference category ($p < 0.05$)

Note: Difficulty changing jobs or advancing at job excludes persons who are self-employed.

Source: Statistics Canada, Canadian Survey on Disability, 2017.

16. These items capture whether or not a person has ever experienced these impacts. It does not capture those who may have attempted to or wanted to make any of these changes, but were not able to do so. For example, it is possible that there are individuals who may have wanted to take a leave of absence from work of a month or more, to change the amount of work they were doing, or to work at home, but they were either denied the opportunity to make these changes or the circumstances of their lives would not permit it (e.g., they could not afford the loss in income that might accompany any of these changes, they did not have a home environment from which they could work, or they lacked the skill set to move into other types of work).

4.5 Employment Discrimination

Among persons with recurrent limitations, those with “more severe” disabilities are three times more likely to experience employment discrimination than are those with “less severe” disabilities

Overall, employed persons with progressive (25%) or fluctuating (18%) limitations were almost twice as likely as those with recurrent (12%) or continuous (12%) limitations to report experiencing some type of employment discrimination in the past five years. These experiences of discrimination could include being refused a job interview, a job, and/or a promotion.

Within each dynamic group, those with “more severe” disabilities were approximately two to three times more likely to report employment discrimination compared to their counterparts with “less severe” disabilities (Table 10). Among those with “less severe” disabilities, persons with progressive limitations (16%) were the most likely to report having experienced employment discrimination related to their disability. Among those with “more severe” disabilities, persons with progressive (31%) or fluctuating (29%) limitations were more likely to report having experienced employment discrimination than were those with continuous limitations (20%). No statistically significant differences were found between men and women in rates of reported employment discrimination within these groupings.

Table 10

Employment discrimination in past five years due to disability among employed Canadian population with disabilities aged 25 to 64 years, by disability dynamic group and severity of disability, 2017

Disability dynamic group	Employment discrimination		
	All severity levels	Less severe	More severe
		(reference category)	
Progressive	24.5	15.5 [‡]	31.4*
Recurrent	11.8	9.6	28.6*
Fluctuating	18.3	13.0	28.9*
Continuous	12.1	10.0	20.0*

[‡] use with caution

* significantly different from reference category ($p < 0.05$)

Note: Significance tests were not performed on “all severity levels” category.

Source: Statistics Canada, Canadian Survey on Disability, 2017.

4.6 Work Potential among Non-Employed¹⁷ Adults

Persons with recurrent limitations have highest rate of work potential; those with progressive limitations have the lowest

The concept of “work potential” is an attempt to provide an indication of the total size of the potential labour force with disabilities under the best-case scenario—an inclusive labour market without discrimination, with full accessibility, and accommodation. The work potential variable used here is a way to assess how the labour market could change under this scenario, by classifying non-working individuals who might be likely or able to enter paid employment under these more inclusive conditions. It is not a measure of people who are currently looking for or willing to work.¹⁸

For both non-employed men and women, those with recurrent limitations were the most likely to be potential workers (52%), whereas those with progressive limitations were least likely to be potential workers (27%) (Table 11). Of those with recurrent limitations, 60% of men and 47% of women had work potential. No other sex-based differences were significant. Those with progressive limitations, regardless of severity level, had a consistently lower likelihood of work potential than those with fluctuating, continuous, or recurrent limitations.

17. Non-employed population excludes persons who are: a) currently employed, b) currently a student, c) completely retired, or d) completely prevented from working.

18. See Morris et al. (2018) for a complete description of how this variable is derived.

Table 11
Work potential of non-employed Canadian population with disabilities aged 25 to 64 years by disability dynamic group, sex, and severity of disability, 2017

Disability dynamic group	Work potential				
	Both (reference category)	Men	Women	Less severe	More severe
		(reference category)		(reference category)	
			percent		
Progressive	27.4	31.6	24.4	42.0	25.0*
Recurrent	52.0	59.8	46.6*	59.7	35.8*
Fluctuating	41.9	38.0	43.6	55.1	36.1*
Continuous	38.9	40.8	37.3	50.4	30.2*

* significantly different from reference category ($p < 0.05$)

Note: Significance tests were not performed on "both" category.

Source: Statistics Canada, Canadian Survey on Disability, 2017.

Section 5: Workplace Accommodations

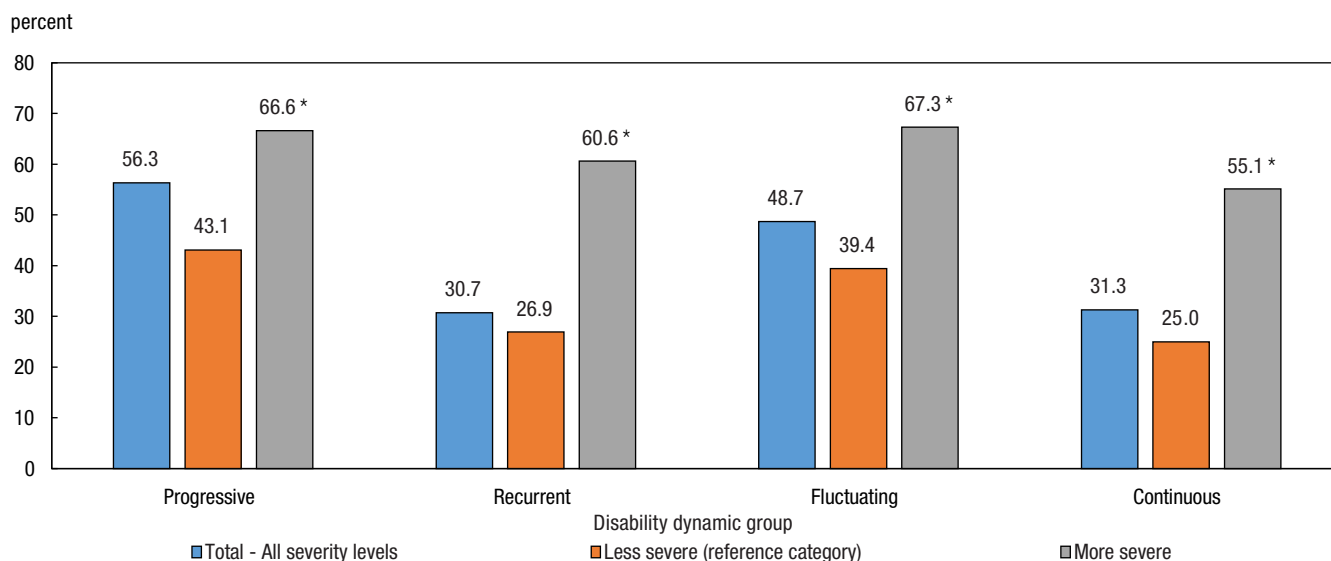
5.1 Requirements and Access to Workplace Accommodations

Employed persons with progressive or fluctuating have highest level of WPA requirements

Workplace accommodations (WPA) such as flexible work schedules or workstation modifications play an important role in creating an inclusive and accessible work environment for many employed persons with disabilities (Morris, 2019). At half of their respective populations, employed persons with progressive limitations (56%) or fluctuating limitations (49%) were the most likely to require at least one or more WPA¹⁹ (Chart 4). By comparison, less than a third (about 31%) of those with recurrent or continuous limitations required WPA. In all instances, those with “more severe” disabilities were more likely to require WPA than those with “less severe” disabilities regardless of disability dynamic group. However, this was most pronounced for those with either recurrent or continuous limitations, among whom those with “more severe” disabilities were twice as likely to require WPA as those with “less severe” disabilities.

Chart 4

Workplace accommodation requirements for employed Canadian population with disabilities aged 25 to 64 years, by disability dynamic group and severity of disability, 2017



* significantly different from reference category ($p < 0.05$)

Note: Significance tests were not performed on “all severity levels” category.

Source: Statistics Canada, Canadian Survey on Disability, 2017.

19. The 2017 CSD contains a “mark all” that apply question (EMO_Q05), which lists 15 different WPA options commonly required in the workplace. These include WPA such as modified schedules, work hours, working from home, ergonomic workstation, and adapted washrooms.

Text box 4: Defining level of needs met for WPA

A ‘need’ is considered ‘met’ if the WPA required by employed persons with disabilities to be able to do their job was made available to them. Since employed persons vary in terms of the number of WPA they required as well as how many of those were actually made available to them, a three level classification system was developed for “needs met”. This classification is based on questions EMO_Q05 (**Because of your condition, do you require any of the following to be able to work...?**) and EMO_Q10 (**Which of the following have been made available to you...?**), where each lists the same 15 WPA options.

Provided that at least one WPA was required, respondents were classified into one of three levels of needs met. Respondents were classified as having **“all of their needs met”** if all required WPA options selected in EMO_Q05 were also all selected as being made available to them in EMO_Q10. Respondents were classified as having **“some of their needs met”** if some, but not all, of the required WPA options selected in EMO_Q05 were selected as being made available to them in EMO_Q10. To be eligible for this classification, respondents needed to have selected at least two required WPA in EMO_Q05. And finally, respondents were classified as having **“none of their needs met”** if none of the 15 WPA options selected as required in EMO_Q05 were selected as being made available to them in EMO_Q10.

Flexible work arrangements is the most required WPA²⁰ among all four disability dynamic groups

When it came to flexible work arrangements, employed persons with progressive (45%) or fluctuating (38%) limitations had the highest WPA requirements (Table 12). On the other hand, those with recurrent and continuous limitations indicated lower levels of requirements (around 21%). In terms of level of needs met for flexible work arrangements, no statistically significant differences were found among disability dynamic groups. As a whole, around 70% of employed persons had all of their needs met for flexible work arrangements, 9% had some of their needs met, and 22% had none of their needs met.

20. To increase sample size and enable further in-depth comparisons, different WPA sharing similar features from the list of 15 options in question EMO_Q05 from the 2017 CSD were grouped into broader categories. Although not all WPA options could be meaningfully collapsed due to insufficient sample sizes, three groups of WPA were created for this paper: flexible work arrangements, workstation modifications, and human or technical supports.

Table 12**Requirement and level of needs met for workplace accommodations for employed Canadian population with disabilities aged 25 to 64 years, by disability dynamic group and grouped workplace accommodations, 2017**

Workplace accommodations and disability dynamic group	Require	Level of needs met		
		All	Some	None
		percent		
Flexible work arrangements				
Progressive (reference category)	44.7	69.2	8.7 ^E	22.0
Recurrent	21.1*	72.9	7.6 ^E	19.5
Fluctuating	37.6	70.9	7.6 ^E	21.4 ^E
Continuous	21.6*	66.4	7.1 ^E	25.9
Workstation modifications				
Progressive (reference category)	23.0	48.2	7.4 ^E	44.3
Recurrent	11.7*	59.5	F	35.8
Fluctuating	22.1	49.9	F	37.7
Continuous	11.5*	64.8*	F	32.0
Human or technical supports				
Progressive (reference category)	9.5	46.4 ^E	F	49.6
Recurrent	3.9 ^{E*}	43.2 ^E	F	49.3 ^E
Fluctuating	8.6 ^E	41.0 ^E	F	52.8 ^E
Continuous	5.5*	57.1	F	35.1 ^E

^E use with caution

F too unreliable to be published

* significantly different from reference category ($p < 0.05$)**Notes:** Level of needs met do not sum to 100% because it excludes those who required a workplace accommodation but did not state whether it was made available.

Flexible work arrangements include: a) modified or different duties, b) working from home, and/or c) modified hours or days or reduced work hours. Workstation modifications include: a) modified or ergonomic workstation and/or b) special chair or back support. Human or technical support includes: a) human support such as reader or sign language interpreter, b) technical aids such as infrared system or portable note-taker, c) computer, laptop or tablet with specialized software or other adaptations, and/or d) communication aids such as Braille or recording equipment.

Source: Statistics Canada, Canadian Survey on Disability, 2017.

With respect to workstation modifications, once again, employed persons with progressive (23%) or fluctuating (22%) limitations had the highest WPA requirements. Those with recurrent and continuous limitations again had lower levels of requirements at around 12% for both. In terms of level of needs met for workstation modifications, those with progressive (48%) or fluctuating (50%) limitations were less likely to have all of their needs met, relative to those with continuous (65%). No statistically significant differences were found for those with none of their needs met among the four disability dynamic groups.

Human or technical supports were the least required WPA among all four disability dynamic groups. Nonetheless, similar patterns were found—with those with recurrent (4%) or continuous (6%) limitations being less likely to require human or technical supports compared to those with progressive (10%). In terms of level of needs met for human or technical supports, no statistically significant differences were found among disability dynamic groups.

5.2 Number of Required Workplace Accommodations

Employed persons with progressive or fluctuating limitations are the most likely to require at least three or more WPA

In addition to requiring different types of WPA, employed persons among the four disability dynamic groups also varied in terms of the number of WPA they required. Those with progressive or fluctuating limitations had the highest likelihood of WPA requirements, and, also tended to require more types of accommodations. Overall, around 36% of these individuals required three or more WPA compared to around 20% of those with recurrent or continuous limitations (Table 13). Conversely, half of employed persons with recurrent or continuous limitations who required WPA only required one compared to just over one-third of employed persons with progressive or fluctuating limitations.

When broken down by severity level, no statistically significant differences were found between the four disability dynamic groups in terms of percentage who required one WPA. Among those with “less severe” disabilities, the percentage or proportion who required one WPA were similar for all four disability dynamic groups. This was also the case among those with “more severe” disabilities. Of those who required three or more WPA, no statistically significant differences were found by severity level between the disability dynamic groups with the exception of those with recurrent limitations. For these employed persons, those with “more severe” disabilities were significantly less likely to require three or more WPA compared to those with progressive limitations.

Table 13
Number of workplace accommodations required for employed Canadian population with disabilities aged 25 to 64 years, by disability dynamic group and severity of disability, 2017

Severity and disability dynamic group	Number of work accommodations required		
	1	2	3 or more
	percent		
All severity levels			
Progressive (reference category)	38.4	25.6	36.0
Recurrent	50.3*	29.9	19.8*
Fluctuating	35.4	27.7	36.9
Continuous	50.0*	26.9	23.1*
Less severe			
Progressive (reference category)	56.0	21.6 ^E	22.4 ^E
Recurrent	51.9	30.3	17.7 ^E
Fluctuating	43.0	28.3 ^E	28.7
Continuous	55.6	26.9	17.5 ^E
More severe			
Progressive (reference category)	29.4	27.7	42.9
Recurrent	44.5	28.5 ^E	26.9 ^{E*}
Fluctuating	26.7	27.0 ^E	46.4
Continuous	40.5	26.9	32.6

^E use with caution

* significantly different from reference category ($p < 0.05$)

Source: Statistics Canada, Canadian Survey on Disability, 2017.

5.3 Level of Needs Met for Workplace Accommodations by Selected Characteristics

Younger employed persons with progressive limitations are more likely to require WPA than older persons

Requirements for WPA did not vary as a function of age for most disability dynamic groups, with the exception of those with progressive limitations (Table 14). In this instance, those aged 25 to 44 years (64%) who were employed were more likely to require WPA than those aged 45 to 64 years (53%). For employed persons with either recurrent or continuous limitations, requirements for WPA remained somewhat stable at around 30% regardless of age group while this figure was at around 49% for those with fluctuating limitations.

In terms of the level of needs met, older employed persons aged 45 to 64 years with progressive limitations were more likely to have all of their needs met and less likely to have none of their needs met compared to younger ones. In contrast, older employed persons aged 45 to 64 years with fluctuating limitations were less likely to have all of their needs met than their younger counterparts. No other statistically significant differences were found by age groups in level of needs met for any of the other disability dynamic groups.

Table 14**Requirement and level of needs met for workplace accommodations for employed Canadian population with disabilities aged 25 to 64 years, by disability dynamic group and age group, 2017**

Disability dynamic group and age group	Require	Level of needs met		
		All	Some	None
		percent		
Progressive				
25 to 44 years (reference category)	64.3	45.2	25.9 ^E	28.8 ^E
45 to 64 years	53.1*	64.1*	19.9 ^E	15.8 ^{E*}
Recurrent				
25 to 44 years (reference category)	30.4	65.9	17.4	16.5 ^E
45 to 64 years	31.0	59.8	12.9 ^E	27.3 ^E
Fluctuating				
25 to 44 years (reference category)	49.3	64.4	22.8 ^E	12.8 ^E
45 to 64 years	48.2	47.2*	30.6 ^E	22.0 ^E
Continuous				
25 to 44 years (reference category)	32.9	60.5	13.2 ^E	26.2
45 to 64 years	30.1	59.2	19.4 ^E	18.7 ^E

^E use with caution* significantly different from reference category ($p < 0.05$)**Note:** Level of needs met do not sum to 100% because it excludes those who required a workplace accommodation but did not state whether it was made available.**Source:** Statistics Canada, Canadian Survey on Disability, 2017.**With the exception of those with progressive limitations, women are more likely than men to require WPA**

Requirements for WPA varied between men and women within most disability dynamic groups with the exception of those with progressive limitations (Table 15). In each instance, women were more likely to require WPA than men. For example, women (55%) with fluctuating limitations were 1.4 times more likely to require WPA than men (38%) with fluctuating limitations. In terms of level of needs met, women with recurrent limitations were more likely to have none of their needs met and less likely to have all of their needs met compared to their male counterparts. On the other hand, women with continuous limitations were less likely to have none of their needs met compared to men but equally likely to have all of their needs met. No statistically significant differences were found between men and women in level of needs met for those with fluctuating or progressive limitations.

Table 15**Requirement and level of needs met for workplace accommodations for employed Canadian population with disabilities aged 25 to 64 years, by disability dynamic group and sex, 2017**

Disability dynamic group and sex	Require	Level of needs met		
		All	Some	None
		percent		
Progressive				
Men (reference category)	52.0	60.0	19.6 ^E	20.4 ^E
Women	60.8	56.3	23.8 ^E	19.6 ^E
Recurrent				
Men (reference category)	23.5	74.3	12.8 ^E	12.7 ^E
Women	36.8*	56.9*	16.6 ^E	26.5*
Fluctuating				
Men (reference category)	38.3	62.6	21.1 ^E	16.0 ^E
Women	54.7*	53.0	29.0	18.0 ^E
Continuous				
Men (reference category)	27.5	59.3	10.7 ^E	29.1
Women	35.0*	60.2	20.9 ^{E*}	17.0*

^E use with caution* significantly different from reference category ($p < 0.05$)**Note:** Level of needs met do not sum to 100% because it excludes those who required a workplace accommodation but did not state whether it was made available.**Source:** Statistics Canada, Canadian Survey on Disability, 2017.

Section 6: Conclusions

Three in five persons with disabilities do not fit the conventional view of disability

The findings from this paper highlight the importance of considering disability dynamics when looking at the demographic and employment profiles of persons with disabilities. Despite the conventional belief that disability is fairly continuous, permanent, and with very little change over time, the findings show that the majority of persons with disabilities do not follow this pattern. In fact, of the approximately 6.2 million persons with disabilities aged 15 years and over, 61% do not fit this classification. Instead, 23% experienced progressive limitations; 25% had recurrent limitations; 13% experienced fluctuating limitations. The remaining 39% experienced continuous limitations.

Disability dynamic groups have different age and sex distributions

Examination of the four disability dynamic groups revealed a number of patterns associated with age and sex. In particular, progressive limitations were more commonly experienced among seniors compared to youth; whereas recurrent limitations were more common among youth compared to seniors. Women were more likely to experience fluctuating limitations, whereas men were more likely to experience continuous limitations.

Certain disability dynamics are consistently associated with better employment experiences than others

Relative to the other three disability dynamic groups, persons with progressive limitations were less likely to be employed, and when employed, they experienced greater employment discrimination and impacts on their employment. Employed persons with progressive limitations also tended to have more workplace accommodation needs, with younger persons aged 25 to 44 years being less likely to have all their needs met compared to older persons aged 45 to 64 years. Among non-employed persons, those with progressive limitations were the least likely to be potential workers compared to the other three dynamic groups.

Conversely, those with recurrent limitations were the least likely of the four disability dynamic groups to report that their disability impacted their employment experiences. Persons who experienced recurrent limitations were more likely to be employed, required fewer employment accommodations, and experienced less employment discrimination and impacts on their employment. Among non-employed persons, those with recurrent limitations also had a greater likelihood of being potential workers than the other disability dynamic groups.

Disability dynamic groups have different levels of severity; however, severity of disability is important even within groups

When examining the four disability dynamic groups severity emerged as a key variable. While those with progressive limitations were the most likely to experience “more severe” disabilities, those with “more severe” disabilities – regardless of disability dynamic group – still reported greater impacts on employment. For example, irrespective of disability dynamic group, employment rates were nearly double for those with “less severe”, compared to “more severe”, disabilities.

Appendix: Testing new questions

Qualitative Testing of New Questions from the 2017 CSD on Disability Dynamics

A number of proposed questions and modules²¹ about episodic disabilities were tested by Statistics Canada during two extensive periods of qualitative testing of the 2017 CSD questionnaire. Early results of this testing revealed that the average Canadian did not interpret the term “episodic disability” in a consistent manner, and many individuals reported not understanding what was meant by it at all. As well, feedback from respondents during qualitative testing indicated that the phenomenon under consideration was much more complex—with many indicating that the “change” they felt most strongly about reporting in a survey environment was that their limitations were getting increasingly “more severe” or that they experienced such unpredictability in their situation that they did not feel they had discrete episodes, but rather just constant change. Additionally, the rather high rate of co-occurrence among disability types²² experienced by individuals further complicated efforts to capture episodic disabilities—while some individuals might experience “on again/off again” patterns for one disability type, they were often more concerned about the limitations presented by another, more constant or progressive disability type. In the end, two questions appeared to provide background information that was consistently understood in the same manner across all types of respondents and that attempted to capture some of the critical dimensions of the dynamics reported during testing. In particular, it was clear that some opportunity to report progressive limitations was needed. Another concern that was important to address from a program and policy perspective was the need to identify those who may experience fairly long periods without limitation and may be at risk of failing to qualify for required programs or supports. With limited space and time on the survey, two questions passed qualitative testing and were placed on the survey.

Goodness of Fit with Main Underlying Condition

In an effort to better understand the four disability dynamic groups identified in this paper, the main underlying conditions data (i.e., write-in responses) in the 2017 CSD were examined for all respondents, with the caveat provided in Textbox 2. Specifically, it is important to emphasize that the analyses below only represent a subset of the actual number of persons who in fact had the underlying condition; those who did not report it as one of their top two conditions leading to their limitations are not represented here. Using a number of “main underlying conditions” often deemed to be “episodic” in nature, the findings suggests that using the CSD to capture disability dynamics based on underlying condition data would fail to capture the true nature of disability dynamics. For example:

- i. Multiple Sclerosis (MS) is an example of a condition often used as an example of an “episodic” disability (HUMA 2019 report). Yet, of those who reported MS as their main underlying condition in the 2017 CSD, nearly five in ten indicated that their limitations were progressive in nature and nearly a quarter indicated a fairly continuous limitation pattern. Only one in five indicated having recurrent limitations (one month or more without limitation) and another one in five reported fluctuating limitations.
- ii. Anxiety is one of the more common conditions leading to a mental health-related disability and is often deemed to be episodic in nature. However, on the 2017 CSD, nearly two in five of those reporting anxiety as a main underlying condition reported having recurrent limitations (one month or more without limitation) and another one in five experienced fluctuating limitations, while a third reported continuous limitations.
- iii. Of those listing migraines (also often associated with episodic disabilities) as the main underlying condition leading to their disability, a third reported recurrent limitations, another third reported a more continuous limitation pattern, one in five reported a progressive limitations, and one in ten reported fluctuating limitations.

21. A number of key stakeholder groups and a variety of researchers provided input into the various questions and modules tested.

22. Disability types include: pain-related, mobility, flexibility, dexterity, seeing, hearing, learning, developmental, memory, mental health-related, and unknown.

While no definitive conclusions can be drawn from the main underlying condition data in the CSD, it is clear that those with any particular underlying condition can be found in any of the four dynamic groups identified in this paper. The same underlying condition can impact different people in different ways as evidenced by their pattern of responses to questions EPD_Q05 and EPD_Q10.

References

- [Accommodating and Communicating About Episodic Disabilities](https://aced.iwh.on.ca/) (ACED). (n.d.). Retrieved from <https://aced.iwh.on.ca/>
- Banks, P., & Lawrence, M. (2006). [The Disability Discrimination Act, a necessary, but not sufficient safeguard for people with progressive conditions in the workplace? The experiences of younger people with Parkinson's disease.](http://doi.org/10.1080/09638280500165120) *Disability and Rehabilitation*, 28, 13-24. <http://doi.org/10.1080/09638280500165120>.
- Canadian Council on Social Development. (2001). [Methodological issues when using longitudinal data: The disability status variable](https://www.ccsd.ca/images/research/DisabilityResearch/PDF/dis2.pdf) (CCSD Disability Information Sheet No. 2). Ottawa, Ontario: Canadian Council on Social Development. Retrieved from <https://www.ccsd.ca/images/research/DisabilityResearch/PDF/dis2.pdf>
- Episodic Disabilities Network. (2014). [About the episodic disabilities network.](https://episodicdisabilities.ca/home.php) Retrieved from <https://episodicdisabilities.ca/home.php>
- Fawcett, G. (1996). *Living with disability in Canada: An economic portrait*. Ottawa, Ontario: Office for Disability Issues, Human Resources Development Canada.
- Furrie, A. D. (2010). [Towards a better understanding of the dynamics of disability and its impact on employment.](http://www.adelefurrie.ca/PDF/Dynamics_of_disability.pdf) Ottawa, Ontario: Adele Furrie Consulting Inc. Retrieved from http://www.adelefurrie.ca/PDF/Dynamics_of_disability.pdf
- Furrie, A. D. (June, 2015). Identifying the population. *Institute for Research on Public Policy Roundtable on Income and Employment Needs of Persons Dealing with Illness*. Presented at the meeting of the Institute for Research on Public Policy, Ottawa, Ontario.
- Gignac, M. A. M., Backman, C. L., Kaptein, S., Lacaille, D., Beaton, D. E., Hofstetter, C., & Badley, E. M. (2012). [Tension at the borders: Perceptions of role overload, conflict, strain and facilitation in work, family and health roles among employed individuals with arthritis.](http://doi.org/10.1093/rheumatology/ker317) *Rheumatology*, 51, 324-332. <http://doi.org/10.1093/rheumatology/ker317>
- Gignac, M. A. M., Cao, X., Tang, K., & Beaton, D. E. (2011). [Examination of arthritis-related workplace activity limitations and intermittent disability over four-and-a-half years and its relationship to job modifications and outcomes.](http://doi.org/10.1002/acr.20456) *Arthritis Care & Research*, 63, 953-962. <http://doi.org/10.1002/acr.20456>
- Gignac, M. A. M., Kristman, V., Smith, P. M., Beaton, D. E., Badley, E. M., Ibrahim, S., & Mustard, C. A. (2018). [Are there differences in workplace accommodation needs, use and unmet needs among older workers with arthritis, diabetes and no chronic conditions? Examining the role of health and work context.](http://doi.org/10.1093/workar/way004) *Work, Aging and Retirement*, 4, 381-398. <http://doi.org/10.1093/workar/way004>
- Grondin, C. (2016). *A new survey measure of disability: The Disability Screening Questions (DSQ)*. Canadian Survey on Disability Reports (Statistics Canada Catalogue no. 89-654-X2016003).
- Lysaght, R., Krupa, T., & Gregory, A. (2011). *Employers' perspectives on intermittent work capacity – What can qualitative research tell us?* (HRSDC Contract No. 7616-09-0016/00). Kingston, Ontario: Queen's University.
- Majeau, P., Gaucher, C., Fougeyrollas, P., & Lemieux-Brassard, L. (2003). *In Synchrony: Looking at disability supports from a progressive disability perspective*. Ottawa, Ontario: Muscular Dystrophy Association of Canada and Partners.
- Morris, S. (2019). *Workplace accommodations for employees with disabilities in Canada, 2017*. Canadian Survey on Disability Reports (Statistics Canada Catalogue no. 89-654-X2019001).
- Morris, S., Fawcett, G., Brisebois, L., & Hughes, J. (2018). *A demographic, employment and income profile of Canadians with disabilities aged 15 years and over, 2017*. Canadian Survey on Disability Reports (Statistics Canada Catalogue no. 89-654X2018002).
- Office for Disability Issues. (2016). *Suggested policies and practices for employment and income programs to support people with episodic disabilities*. Ottawa, Ontario: Office for Disability Issues, Employment and Social Development Canada.
- Ontario Human Rights Commission. (2014) *Policy on preventing discrimination based on mental health disabilities and addictions*. Toronto, ON: OHRC.

- Realize. (2019). [Work and income](http://www.realizecanada.org/en/our-work/episodic-disabilities/work-and-income/). Retrieved from <http://www.realizecanada.org/en/our-work/episodic-disabilities/work-and-income/>
- Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities. (2018). *Taking action: Improving the lives of Canadians living with episodic disabilities* (HUMA-130). Ottawa, Ontario: House of Commons.
- Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities. (2019). *Taking action: Improving the lives of Canadians living with episodic disabilities* (HUMA M-192). Ottawa, Ontario: House of Commons.
- Statistics Canada. [Survey of Labour and Income Dynamics \(SLID\)](https://www150.statcan.gc.ca/n1/en/catalogue/75F0011X) - A Survey Overview. 1993 to 2011. Retrieved from <https://www150.statcan.gc.ca/n1/en/catalogue/75F0011X>
- United Nations. (2006). [Convention on the Rights of Persons with Disabilities](https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html). Treaty Series, 2515, 3. Retrieved from <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>
- Vick, A. (2013). [The embodied experience of episodic disability among women with multiple sclerosis](http://doi.org/10.1080/09687599.2012.699279). *Disability & Society*, 28, 176-189. <http://doi.org/10.1080/09687599.2012.699279>
- Vick, A. (2014). [Living and working precariously with an episodic disability: Barriers in the Canadian context](http://doi.org/10.15353/cjds.v3i3.171). *Canadian Journal of Disability Studies*, 3(3), 1-28. <http://doi.org/10.15353/cjds.v3i3.171>.
- Vick, A., & Lightman, E. (2010). [Barriers to employment among women with complex episodic disabilities](http://doi.org/10.1177/1044207309358588). *Journal of Disability Policy Studies*, 21(2), 70-80. <http://doi.org/10.1177/1044207309358588>
- Wannell, T., & Grekou, D. (2014). *Episodic and moderate disabilities data report*. Ottawa, Ontario: Social Research and Demonstration Corporation.