#### BC Income Assistance Trends and Dynamics: Descriptions and Policy Implications

David A. Green, Vancouver School of Economics, University of British Columbia Jeffrey Hicks, Vancouver School of Economics, University of British Columbia Rebecca Warburton, School of Public Administration, University of Victoria William Warburton, Elevate Consulting, Victoria, B.C.

#### **Author Note**

The authors can be contacted at <u>david.green@ubc.ca</u>, <u>hicksj@ubc.ca</u>, <u>rnwarbur@uvic.ca</u>, and billwarburton8@gmail.com.

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#### **Abstract**

This paper documents various features of B.C. Income Assistance (IA), including durations of spells of IA, how durations differ according to recipient case characteristics, and how durations and case characteristics have changed over time from February 1989 through December 2017, based on official B.C. administrative data. The goal of the paper is to relate these patterns to key policy questions, and so it is framed as a set of main patterns, each followed by a list of policy implications.

#### Introduction

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After setting out key trends and implications, we turn to investigating long-term IA recipients in more detail since they have become an important component of the system. We begin with a short description of the policy changes that occurred during our sample time frame.

## **Policy and Legislative Framework**

The period from 1989 to 2017 spanned three major policy phases, governed by different B.C. legislation:

- Guaranteed Available Income for Need Act—1972–1995
- Benefits Act—January 1996–September 2002
- Employment and Assistance Act, and Employment and Assistance for Persons with Disabilities Act—September 2002 (some provisions may have been applied retroactively to April 1, 2002)

There was also a major review of disability status between September 2002 and June 2003, which resulted in some clients losing eligibility as of June 15, 2003 (Wallace et al., 2006, p. 15).

The legislative changes of 1996 and 2002 were intended to tighten welfare and focus it on promoting employment. Key changes included:

- January 1996
  - o non-disabled recipients must seek work
  - disabled applicants exempt but status to be periodically reviewed rather than permanent
  - mothers exempt from employment if youngest child under seven years of age (previously exempt if youngest under 12 years)
- 2002 to 2003
  - mothers exempt from employment if youngest child under than three years of age (April 2002)
  - o two-year time limit ("employable" welfare recipients without children limited to two years of support during any five-year period)

- two-year independence test (requiring new welfare applicants to demonstrate financial independence for previous two years)
- o three-week wait period for welfare applicants (requiring three-week work search after contact, before application for benefits)
- o "alternative service delivery models" that increased the requirement for phone and web contact

#### **Trends and Implications**

The patterns we present are based on IA records from what is now the Ministry of Social Development and Poverty Reduction. Our data (1989–2017) includes 1.4 million distinct case IDs. Since a case can include more than one household member, this means at least that number of people have received IA since February 1989. The figures that follow were developed as part of the Guaranteed Basic Income project, commissioned by the Ministry of Social Development and Poverty Reduction, Province of British Columbia. The Income Assistance data is from British Columbia Ministry of Social Development and Poverty Reduction(2019) while health outcomes are from British Columbia Ministry of Health 2019 a,b.

#### Trend 1: Major Reductions in the Overall IA Caseload Since the Mid-1990s

We begin by showing overall trends in order to provide context for our discussion of dynamics in the remainder of the paper. Figure 1 replicates results shown in Petit and Tedds (2020). It shows the IA caseload from 1989 to 2017 as a stacked area graph—the total is indicated by the top of the filled area. Disability cases show a slow increase from 1989 and a higher rate of steady increase since 1995–1996. For non-disability cases, there is more variation:

- a decreasing caseload in the late 1980s
- a dramatic increase in cases between 1990 and 1995
- a decrease between 1995 and 1999
- a period from 1999 until 2002, in which the caseload was relatively flat
- a precipitous decline starting in April 2002, which levelled out in 2004
- an increase between 2008 and 2010
- a slight increase after 2010

Note that this graph shows cases, not recipients; all case types except single men and single women include two or more recipients.

The impact of the global financial crisis and Great Recession of 2008–2009 can be seen clearly. The non-disability part of the system responded to a substantial degree to the recession.

<sup>&</sup>lt;sup>1</sup> B.C.'s 1989 population plus immigrants, in-migrants from other provinces in the preceding year, and births comes to 7.3 million, so almost one person in five in B.C. has received income assistance at some point since then.

This is part of what we need transfer systems to do—provide security through hard times—and something we need to make sure is present in an effective way in any redesign of the system.

One key question is the role of policy versus improvements in the economy in driving down IA participation rates. Kneebone and White (2009) find that tightened administrative procedures in Alberta, B.C., and Ontario can account for between half and two-thirds of the declines in IA rolls in those provinces between 1992 and 2003. Milligan and Stabile (2007) find that reductions in benefits associated with the federal child benefit changes that were variously clawed back or not clawed back by different provinces could account for about a quarter of the drop in Social Assistance (SA) rates in the early 2000s. Berg and Gabel (2015) use an extended time period and include variables representing both administrative tactics and the benefit rate. They find that the benefit rate effects become insignificant once one includes administrative control variables, with the variables relating to work requirements being particularly important.

As we will see, the big drops in IA participation in B.C. are for single employable men (where work requirements were likely particularly important and particularly enforced) and families with children (where reductions in the age of the youngest child beyond which the adults were expected to work). Berg and Gabel find that tighter administrative procedures (what they call "new reforms") account for 10% of the decline in SA rates between 1994 and 2009, with improvements in the economy accounting for 6%, and cuts to benefit rates for 4%. The biggest effect was actually reductions in the generosity of unemployment/employment insurance (UI/EI) in this period, explaining 17% of the SA rate decline. They argue that this reflects complementarity in UI/EI use and SA use. As we will see, there was a large mechanical complementarity that was essentially eliminated at the time of the large decline in IA receipt in B.C., but a large decline remains even after taking that out.

#### Implications for Current Policy

First, IA caseloads were at levels that were not politically sustainable in the mid-1990s (when approximately 12% of the population were in receipt of IA each month). We need to understand what changed in order to make sure that current policy changes do not put B.C. in another unsustainable situation. We also need to understand what the policy changes did in terms of outcomes for potential recipients.

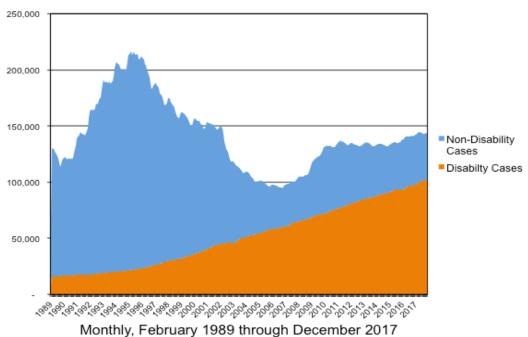
Second, the existing literature indicates that it doesn't seem to have been benefit rate movements that drove the large changes in recipiency rates. This may suggest some room for increases in benefit rates without driving up recipiency rates. Instead, one would expect to see increases in IA receipt rates if work-related restrictions were substantially weakened again.

Third, the system was responsive to needs during the 2008–2009 recession. Any redesigns need to make sure the system can be responsive in subsequent recessions and crises. In contrast, a system focused solely on supports for people with disabilities would not be well suited to responding quickly for others.

Fourth, interactions with EI policy need consideration, though as we will show, the type of interactions that were dominant in the past have subsided.

Figure 1
Income Assistance Caseload, 1989–2017

# Income Assistance Caseload 1989 to 2017



# Trend 2: Shift Toward a Majority Disability Assistance System

As seen in Figure 1 and in Petit and Tedds (2020), the reforms over our time period converted the B.C. IA system into a majority disability system. Disability Assistance moved from making up 10% of the caseload in 1995 to 71% in 2019. If we add in persons with persistent multiple barriers and those on Temporary Assistance in the excused from work category (which includes people with short-term disabilities and illnesses), people with some form of disability or illness made up 78% of the caseload in 2019.

The shift in the system looks even more stark when we examine people with a mental health–related condition. In Figure 2, we plot the proportion of B.C. residents in the Medical Services Plan (MSP) procedure billings with a mental health ICD9 code at some point during the year, for three subgroups:

- Those that did not receive IA
- IA recipients not classified as a person with a disability (PWD)

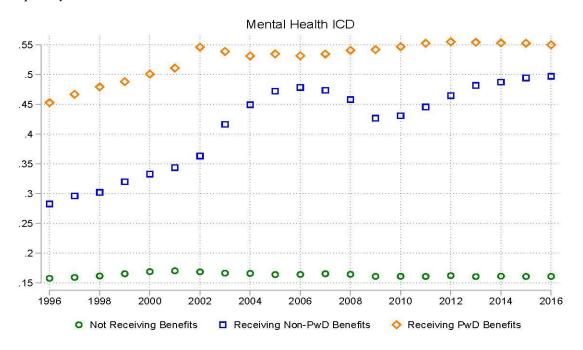
# • PWD IA recipients<sup>2</sup>

The percentage of IA recipients who do not have a PWD designation who had a mental health–associated billing rises to 50% by 2016 from 28% in 1996. In comparison, among B.C. residents who are not IA recipients, a relatively constant 16% have a mental health–related billing.

Further breakdowns not presented here show that for single males and females without children who are non-PWD IA recipients, approximately 60% have a mental health—related MSP system billing. Overall, people on Disability Assistance plus those on Temporary Assistance who have a mental health condition account for approximately 86% of the total IA caseload. Especially for single adults without children, the IA system is effectively a system focused on short- and long-term disability.

Figure 2

Proportion of People With a Mental Health–Related MSP Code in the Previous Year, by IA
Recipiency Status



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<sup>&</sup>lt;sup>2</sup> We define B.C. residents as individuals who satisfy any of the following conditions anytime in the given year: (a) appeared in the MSP premium registry, (b) appeared in the MSP procedure billing file, or (c) appeared in the B.C. Income Assistance benefit recipient file. This will erroneously capture non-residents who happen to use the health system, and fail to capture true residents that do not interact with the MSP or IA system. Mental Health ICD9 codes are those whose first three digits range from 290 to 219, inclusive, along with two MSP specific codes.

#### **Implications for Current Policy**

The disability part of the system is not a side component; it should be a main focus of policy concern. The other side of this observation is that the system is not tailored to help single employable adults without children. This is a group for whom there appears to be little direct help, which is particularly concerning given issues with the coverage rate in the EI system.

#### Trend 3: Shift Away From Families With Children and Single Employable People

Figure 3 shows total IA recipients, including disability recipients, by family type. Single-parent families (mostly mothers) were most affected by the 1996 and 2002 changes, probably because of the changes that lowered the age of the youngest child exempting the mother from work. Couples with children also experienced a substantial drop in numbers so that cases with recipients in either lone-parent or two-parent families made up approximately 60% of all recipients in 1995 (just before the changes brought in by the NDP government) but less than 30% of recipients in 2017. This shift, of course, is magnified because we are examining recipients and reducing the number of families with children, which eliminates the combination of adults and children in the families. The number of recipients in lone-parent households dropped by almost 75% between 1995 and 2007.

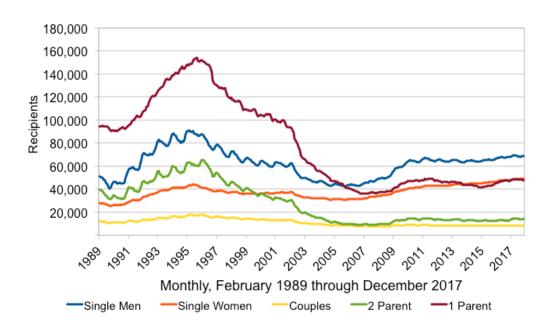
The shift down for single men (a cut of over 50% from the 1995 peak to 2005 before rising in the 2008–2009 recession) is also dramatic and an important part of the story.

#### Implications for Current Policy

The system is not primarily focused on children (unlike American welfare systems), although the Canada Child Benefit has stepped in to fill this gap to a large extent in terms of cash transfers. But what is the role for the province in this realm? Getting money through IA potentially also linked families to other services, and it is not clear what fills that role now. The reduction in the number of families with children on IA likely means that those children are even more disadvantaged than in the past and, therefore, require even closer attention in the transition to adulthood.

Figure 3
Income Assistance Recipients

#### Income Assistance Recipients



# **Trend 4: Reforms Sharply Cut IA Entry Rates**

Figure 4 shows that the gradual changes to the caseload followed dramatic changes in the number of new starts, defined as new recipients starting benefits who had not received benefits in the previous 12 months. The figure is a stacked area graph, where the total is indicated by the top of the filled area.

In September 1995, before the IA reforms, there were 14,514 new starts of IA recipiency spells. In September 1996 that number had fallen to 8,260—or by 40%. In that same year, the total caseload fell by 12%. A similar change occurred at the time of the 2002 policy reforms: new starts fell to 2,966 in May 2002 from 6,614 in May 2001. Cutting the new starts to less than half resulted in a reduction of the caseload by 20% in 2003 relative to 2001. The biggest reductions in new starts were associated with single employable people, particularly males.

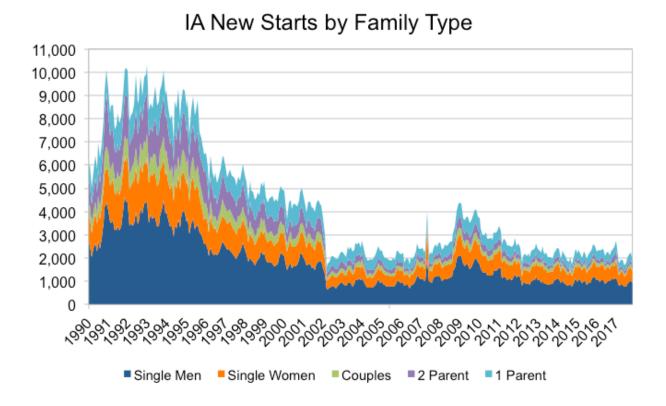
Wallace et al. (2006), working with data obtained through a freedom of information (FOI) request found: "The acceptance rate for those who apply for welfare has dropped dramatically. According to FOI data, in June 2001, 90 per cent of people who began an application for welfare were successful in gaining IA. By September 2004, only 51 per cent of those who sought welfare were granted assistance" (p. 6).

#### Implications for Current Policy

Implications for current policy are discussed below, after the durations trend depiction.

Figure 4

IA New Starts by Family Type



#### Trend 5: Changes in Entry and Exit Rates Both Determined the Caseload Drops

Wallace et al. (2006) argue that the reduction in the caseload at the time of the 2002 reforms was almost entirely about shutting the door to entering IA. They saw this as a very different picture from the government narrative of the reforms moving people out of IA and into employment. They argue that such a movement should show up in increased exit rates, which they say did not happen.

Understanding what happened with entry and exit rates is complicated by changes in the composition of people on IA, which affected exit rates over and above direct actions to get people off the IA rolls. Consider, for example, a situation in which there are two types of IA recipients before the reforms: short-term users, perhaps seasonal; and long-term users, perhaps disabled. Suppose the short-term users are denied access to the system while the long-term users remain largely the same. Since the short-term users have high exit rates, simply reducing their

entry into the system will reduce the average observed exit rate from the system (since the users who are left are long-term users who have low exit rates). In this situation, a finding of little observed change in the exit rate—which is what Wallace et al. (2006) report—would actually indicate there must have been an increase in pushing people off IA.

To understand the relative importance of changes in entry and exit rates, we performed a set of counterfactual exercises:

- 1. There were 231,037 individuals receiving IA in March 2002, just before the tightening. By February 2003, 175,326 individuals received IA, a reduction of 55,711 or 24%. In that period, the number of starting cases went down and the number of leaving cases went up. To get an idea of which had the bigger impact on the caseload we simulate the change that would have occurred if the starts had been the same as in the previous year and if the rate of leaving had been the same as in the previous year.
- 2. Of those on IA in March 2001, 176,922 or 73% were still on IA in the following February. For the next year, of the 231,037 on IA in March 2002, 145,601 or 63% were still on IA in the following February. If the rate of leaving had been the same as in the previous year, 168,288 would have remained on IA, so the difference, 22,687, can be attributed to the increased rate of leaving.

#### We can do a similar analysis of starts:

- 1. There were 90,387 starts between April 2001 and February 2002, of which 57,781 were still on IA in February 2002. The following year, from April 2002 until February 2003 there were 48,552 starts of which 29,725 were still on IA in February 2003. The difference, 28,056 is the effect of decreased starting cases.
- 2. The remainder of the difference is due to (a) the decreasing caseload (by 3.3%) between March 2001 and February 2002, and (b) applying our percentage difference to a different denominator.

Of the differences in rates of starting and leaving between 2001–2002 and 2002–2003, 45% can be attributed to higher rates of leaving and 55% to lower rates of starting. This does not show up in the graphs because the much less dramatic percentage increase in rates of leaving is applied to a much higher number of cases.

When we do the same calculations for the 1996 cuts, we find 41% attributable to higher rates of leaving and 59% attributable to reductions in starts.

#### Implications for Current Policy

Implications for current policy are discussed below, after the durations trend depiction.

# Trend 6: Employment Insurance Pending Cases Dropped Substantially in the Late 1990s and They Were Short-Duration IA Spells

In the 1990s, people who were awaiting EI benefits could receive IA. Frontline caseworkers in the IA system coded cases as "EI pending" if the client indicated they had been working, though not all such clients went on to receive EI. The goal was to help clients bridge the processing and waiting period between application and eventual receipt of EI benefits. While clients were asked to repay their IA from their EI benefits when they arrived, very little was recovered. Changes to the Employment Insurance Act in the mid-1990s allowed provinces to recover IA directly from the federal government.

Figure 5 shows that the EI pending caseload peaked at more than 18,000 cases, or 9% of the total caseload, in January 1993. The caseload declined throughout the 1990s (with a steeper decline in 1996) so that by 1999 only about 1.5% of the people receiving IA were an EI pending case. (In Figure 5, note the left-hand scale for EI pending cases is one-tenth of the right-hand scale for other cases.)

Figure 6 shows the distribution of durations of IA spells for the period March 1993 to December 1995, broken down by EI pending and Other. The lines include a correction for "right censoring"—the fact that some spells are still ongoing and therefore of unknown eventual length at the end of our data window. The figure shows much more mass at short spell lengths in the distribution of spells for EI pending cases.

### **Implications for Current Policy**

The EI pending cases inflated both the total number of recipients and the turnover rate for IA in the mid-1990s. There is no risk of this policy environment returning, and so, we should focus on plots that remove EI pending cases to get a clearer picture of trends and the impacts of past policy changes.

Figure 5
Income Assistance, Employment Assistance Pending

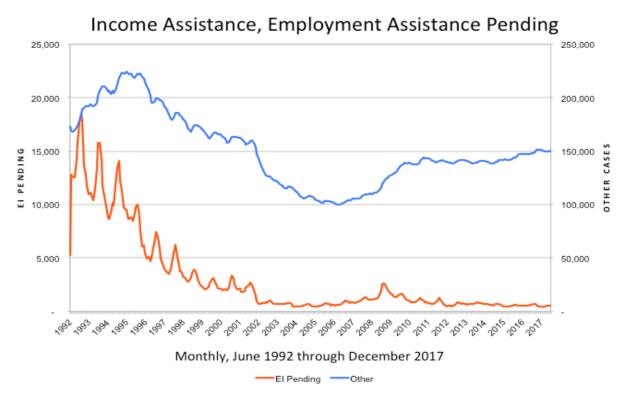
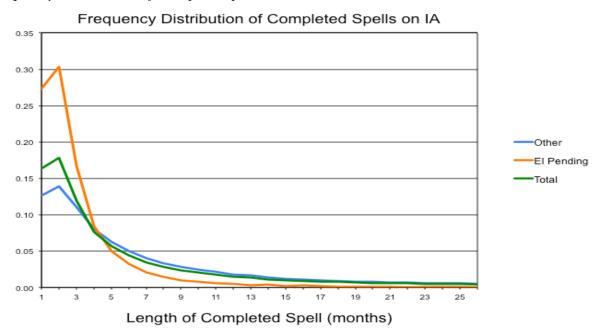


Figure 6
Frequency Distribution of Complete Spells on IA



# Trend 7: Short Spells Make Up the Majority of Cases But There Has Been a Substantial Reduction in the Proportion of Spells That Are Short Over Time

Simply counting the durations of spells will yield a biased estimate of the distribution of durations of spells because spells are censored for those who receive benefits in the first and last months observed. Kaplan and Meier (1958) gave a simple non-parametric method for correcting this bias. The discrete nature of IA simplifies this analysis. The Kaplan-Meier method is built on two key entities: the survival function at duration, t, is the proportion of clients who receive benefits for at least t months; and the hazard function at duration, t, is the proportion of spells that have so far lasted t months but that end in month t+1. Thus, suppose that we have a sample with 100 new spells of IA receipt and 10 are still in progress at month 12, and 8 are still in progress at month 13. In this case, the survivor function at month 12 is 0.1 (10% of cases are of length 12 or more since that percentage is still ongoing) and the hazard rate at month 12 is 0.2 (since two of the 10 spells are still ongoing at month 12 end in month 13). A key advantage of working with the survivor and hazard rates is that they can be used to address the problem of censoring.<sup>3</sup>

We can observe IA use in 347 months from February 1989 to December 2017, inclusive: 140,930 individuals received benefits as an applicant or a spouse in February 1989 (left censored) 150, 773 received benefits in December 2017 (right censored), and 2,803 individuals received benefits in every month (both right and left censored). We can observe 2,872,568 uncensored spells.

Figure 7 shows the distribution of durations of those uncensored spells of IA. The figure stops at 25 months, which captures 88% of spells. Spell length of 25 months represents 0.5% of spells, and the number of spells continues to decrease with duration.

Figure 7 also shows the frequency of completed spells, together with the estimated distribution of durations calculated using the Kaplan-Meier correction for right censoring. As expected, the unbiased estimates have relatively more long spells—the censored spells are more likely to be longer spells. Most spells of IA use are short, with half of completed spells having a duration of four months or less. Ninety percent of durations are 28 months or less, but of course, longer spells contain more benefit months. The 90% of spells with durations of 28 months or less only account for 45% of benefit months among completed spells.

For any given month, m, the expected distribution of durations of starting spells can be estimated using the hazard rates for that month. That is, we can use the hazard rates observed for spells in that month at different lengths, t, of how long the spells have so far lasted to construct

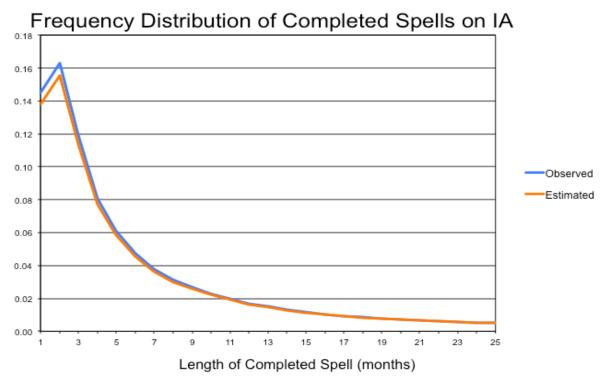
<sup>&</sup>lt;sup>3</sup> Censoring takes two forms: left and right. A left-censored spell is one that is already in progress at the time that the sample window starts. A right-censored spell is one that is still ongoing at the time the sample window ends. For both, we are unable to measure the true length of the spell. Uncensored spells are spells that begin and end in our sample window, so we can observe their true length.

estimates of the proportion of spells we expect to last each possible number of months. The spells that are ongoing in month m will not necessarily end according to that distribution of lengths because there may be future changes in policies that will terminate them earlier or allow them to continue longer than one would predict. Still, the expected distribution of durations at month m provides a good summary of what is going on in that month and what has led up to it.

In Figure 8, we plot the expected distribution of IA spell lengths built from the hazard rates in a set of years spanning our time frame. Following from our earlier discussion, we drop the EI pending cases in order to highlight other changes in the system. As in Figure 7, we see that the majority of spells are short in duration, but this is much less true as time goes on. Both the 1996 and 2002–2003 reforms served to substantially reduce the proportion of short spells. This fits with the cutting out of the single employable people and the shift toward a greater emphasis on disability (the spells for which tend to be longer).

The same point is made in a different way in Figure 9 where we plot the percentage of spells that are expected to last at least 25 months for a set of years. The percentage of spells that are over two years nearly tripled between 1998 and 2017, with these very long spells now making up approximately a third of all spells.

**Figure 7**Frequency Distribution of Completed Spells on IA



**Figure 8**Frequency Distribution of IA Spells, No EI Pending

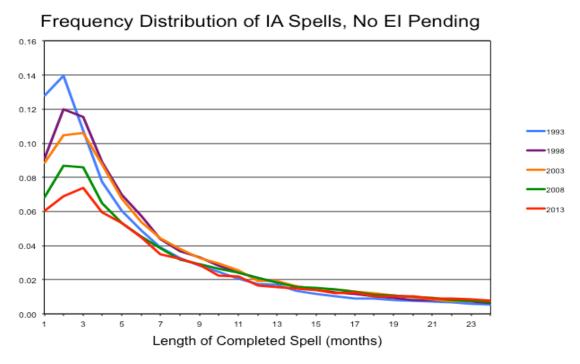
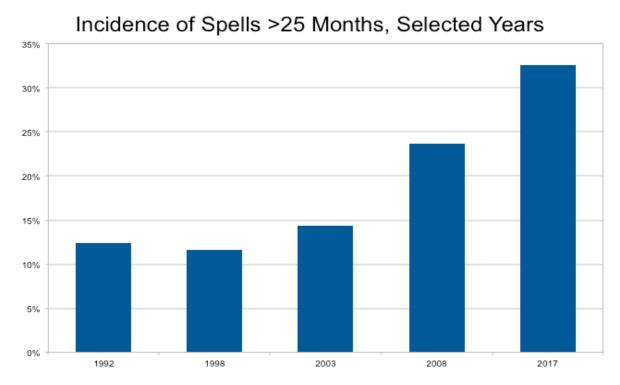


Figure 9
Incidence of Spells Greater Than 25 Months, Selected Years



#### **Trend 8: Decrease in Seasonality**

Figure 10 shows the average hazard rate (the proportion of ongoing IA spells that end in the month) for each month from 1989 through 2017. One can see in the figure both the general long-term decline as the system shifted away from admitting short-term users and the jump in exits at the time of the 2002–2003 reforms. Also notable is the sharp up-and-down pattern that reflects seasonal swings in the use of the system and the substantial dampening in that seasonal pattern after the 2002–2003 reforms.

Figure 11 provides another look at seasonality. It shows the difference, in percentage points, between cases leaving in August (typically the month with the highest leaving rate) and cases leaving in December (typically the month with the lowest leaving rate). This confirms the impression from Figure 10. Seasonality increased in 1996, presumably as a result of changes to the Employment Insurance Act. Seasonality has declined since and is now at levels roughly one-sixth of its peak by this measure.

Figure 10
Percentage of Adults Ending an IA Spell

# Percentage of Adults Ending an IA Spell

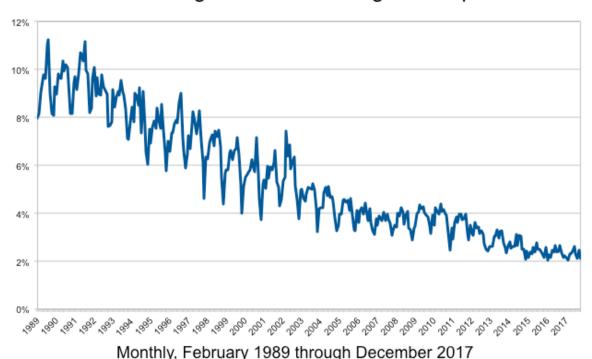
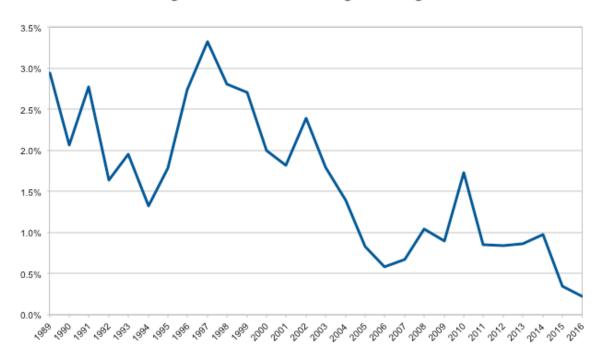


Figure 11
Percentage of Cases Leaving IA, August–December





### Implications for Current Policy

Taken together, the entry rate, exit rate, duration, and seasonality patterns paint a consistent picture of the shifts in policy that took place in 1996 and 2002–2003. Those shifts substantially reduced access for short spell, seasonal users of the system. This was done primarily through reducing access for single employable people and parents with all but the youngest of children, but the spike in exits at the time of the 2002–2003 reforms suggest that the government also sent the message that this use of the system was no longer available by terminating ongoing cases at that time. It is interesting to compare the usage patterns for IA to the ratio of EI recipients to the unemployed. Gray and Busby (2016) show that the latter ratio declined from 84% in 1990 to 44% in 1997 and has been flat ever since. The drop in the 1990s comes from a combination of the disentitlement of people who quit their job, increases in long-term unemployment, and other changes in EI policy. It coincides almost exactly with the dramatic run up in IA cases seen in Figure 1. It seems quite likely that the IA system took over from EI in covering a large set of non-employed workers who were no longer covered by the federal policy.

The key point is that the current system is mainly not one that provides short-term, seasonal support. This highlights the gap in the overall current system. With EI not covering people with more than 12 months without work, those who quit their last job and those who are self-employed, the question becomes, who does cover them? The B.C. IA system seems to have moved away from filling that gap toward covering long-term and, to some extent, short-term disability-related need. This raises the clear policy question of what should be done for people who are non-covered and unemployed. Should the IA system be moved back in a direction that covers them (with the coincident rise in the proportion of the population in receipt of IA benefits), or should an alternative system be created? And will the federal government be creating that alternative system or should B.C. do it itself?

We can get some picture of the nature of IA use in the pre-2002 system that allowed shorter-term use from the analyses in Green et al. (2020). They use linked B.C. administration data to examine the impact of benefit denial under IA. In particular, they employ two related strategies. The first uses variation from a natural experiment in the IA system in 1996 that was previously studied in Green and Warburton (2004). In that year, a new set of verification officers (VOs) were introduced into some IA offices. The VOs re-examined applications that had already been given approval by the initial assessment worker. The empirical approach was to compare outcomes in offices with VOs and those in a set of other offices chosen to match the VO offices in terms of case characteristics and trends. Green and Warburton (2004) examined subsequent IA receipt, finding that for those who were denied benefits if they faced a VO but would have received benefits in a non-VO office. The effect was that being granted benefits on subsequent IA receipt declined quickly after the assessment and was essentially zero after approximately two years. Interestingly, they show that this happened mainly because those who were granted benefits moved out of IA receipt rather than because those who were denied benefits found a way to get onto IA later. That is, this marginal group affected by the tightening of the IA system were truly using the system in a short-term way.

Green et al. (2020) use the same natural experiment but look at other outcomes. They also use further related variation. After the 1996 natural experiment, VOs were extended to work in all IA offices. The second approach is to use variation that comes from variability in VO officer rejection rates to examine the effect of being denied benefits. This approach identifies effects for people who are rejected by high-rejection rate VOs who would not have been rejected by a lower-rejection rate VOs. Under both approaches, the authors find support for the conclusion in Green and Warburton (2004) that this group of people at the margin of being given benefits move off of IA receipt relatively quickly and have receipt that falls to the same levels they would experience if they had been rejected in the VO assessment within two years after the assessment. They also find that the difference in their likelihood of being employed in a good job (defined as one in which the employer pays the individual's MSP premiums) is small and not

statistically significantly different from zero starting within six months after the assessment and continuing for at least three years afterward.

The main implication from these results is that even though there was a considerable proportion of the population in receipt of IA benefits in the late 1990s, some of them (those who were denied entry to IA benefits because of the type of closer scrutiny provided by the VOs and enshrined in the 2002 policy changes) were using the system in a short-term way. If granted benefits, they were on IA, at rapidly declining rates, over the next two years. If denied benefits, their IA receipt rates stayed persistently low. In either case, their rate of employment in good jobs was relatively constant. Thus, the system was not (as was feared at the time) engendering dependence or hampering people from moving into employment. Rather they seem to have used it as a short-term support at a difficult time—that is, as something to fill the space vacated by the EI system in the mid-1990s.

#### **Long- and Short-Duration IA Recipients**

Given the evidence so far that the IA system shifted toward longer-term users in the 1996 and 2002–2003 reforms, we next move to investigating who the long-term recipients are compared to those in receipt of benefits for shorter periods.

As a first step, we examine the hazard rate (the probability of exiting from IA at any duration) in a regression context. To do this, we regress a dummy variable equal to one if a person leaves IA in a month on: the time they have so far been on IA (to capture the pattern observed before that people tend to exit at a higher rate earlier in the spell); a complete set of dummy variables corresponding to five-year age categories; a dummy for being an EI pending case; a dummy for being denoted a PWD; dummies for family status categories; and a complete set of dummy variables corresponding to every month in our sample period. We first run this separately for long-term recipients (people who have been on IA, so far, for 36 to 59 months)<sup>4</sup> and short-term recipients (recipients with durations of one to 12 months so far). Given the set of controls, we can examine rates of exit for the two groups while holding constant changes in the age distribution, EI pending status, family status, and PWD status. This isolates changes in policy or other changes in composition from changes in composition in these dimensions.

We restricted the sample of long-term recipients to months after February 1994 to allow a full sample of durations up to 59 months, and the long-term sample was further restricted to ages over 24 because underage applicants or spouse-recipients with long durations are unusual cases. The sample size for the long-term recipients was six million benefit months. For short-term recipients, we restricted our analysis to those over age 20, and for comparability with long-term

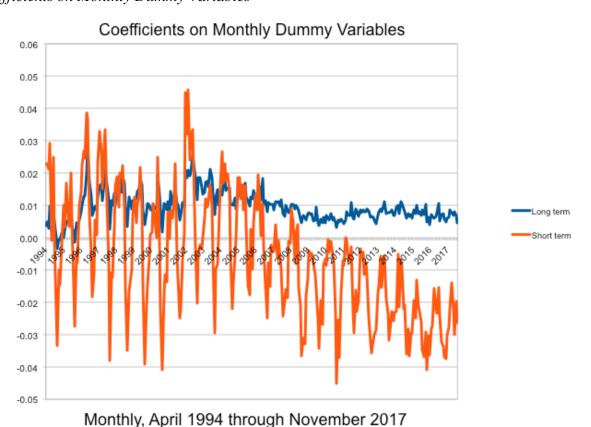
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<sup>&</sup>lt;sup>4</sup> We need to put an upper limit on the range or else we see changes in composition over time because people earlier in the sample can be followed for longer and attain higher duration values.

recipients to months after February 1994. Sample size for the short-term recipients was just under five million benefit months.

We present the results in Figure 12. Note that the plots are relative to the base month and so the average levels of the lines are not of interest (they need to be scaled up by the size of the exit rate in the base month). What is of interest is the long-term patterns. For the short-term recipients, the pattern captures spikes in exits at the time of the policy changes in 1996 and 2002–2003 and a general decline in exit rates after the 2002–2003 policy change. This likely reflects the reduction in entry of short-term and seasonal recipients mentioned earlier. Taking that group out leaves recipients with lower exit rates. We also see a marked reduction in the seasonal spikes and troughs. In contrast, with the exception of spikes in the policy change years, the exit rate for long-term recipients is essentially flat. This fits with the system being mainly changed by removing high-frequency users. The people with longer-term needs follow the same patterns as before the reforms.

Figure 12
Coefficients on Monthly Dummy Variables



The regression coefficients show that single parents have lower exit rates than singles without children in the short-term sample, but higher rates in the long-term sample; that is, they need benefits for more than just a year but leave IA at a greater rate later, as their children get older. Somewhat similarly, older people are much more likely not to exit IA in the first year but the age gradient for longer spells is relatively flat: age is not a strong determinant of leaving IA if a person is already in long-term use.

Figure 13 plots the coefficients on an indicator being over age 50 in each month in our sample period. There is essentially no trend in the exit rate for this group (note that the scale is smaller than in Figure 12 so that small movements are amplified). That is, the increase in the proportion of recipients who are over age 50 that we will see momentarily is not being driven by them staying longer on IA. Their experience in terms of exiting IA has not changed over time—it is the number of them entering IA that has shifted.

Similarly, in Figure 14, we plot the coefficients on PWD status, which also show a very flat trend (the scale of the vertical axis is even more compressed here). Again, the point is that the rise in the proportion of IA recipients who are on disability is not happening because of changes in their exit dynamics. PWDs have much longer durations on IA, but the extent to which that is true is not changing over time (41% of PWD spells are 12 months or less compared with 77% of spells associated with other programs and, in contrast, 34% of PWD spells are 54 months or longer compared with 5% of spells associated with other programs).

**Figure 13**Coefficients on Monthly Dummy Variables, Over Age 80

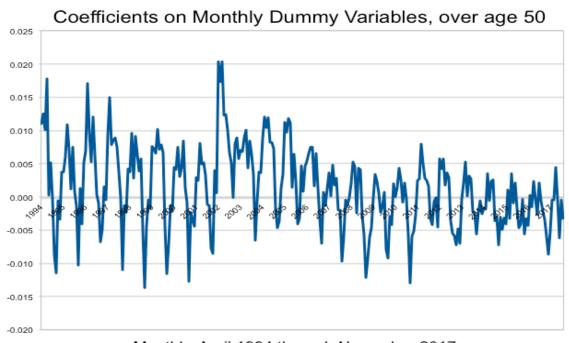
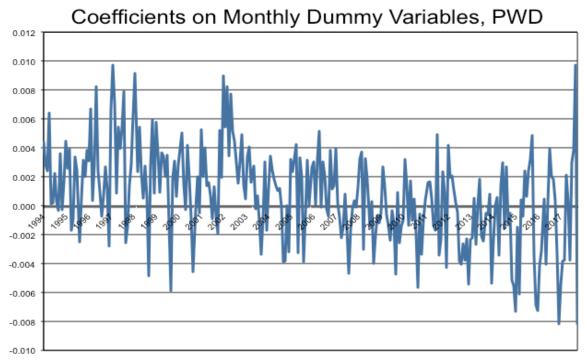


Figure 14
Coefficients on Monthly Dummy Variables, PWDs



Monthly, April 1994 through November 2017

# **Long-Term Recipients in 2016**

To provide more detail on long-term recipients, we drew the sample of all IA recipients age 25 and older in December 2016 (chosen because it is both recent and is a month in which we have access to the most extensive set of measures). We divided the recipients into three groups:

- long term (in receipt of IA benefits in at least 48 of the last 60 months)
- medium term (in receipt of benefits between 12 and 48 months)
- short term (in receipt for 12 months or less)

Figure 15 plots the proportions in each of these three groups from 1994 to 2018. As before, we can see that long-term use of the system has become the predominant category.

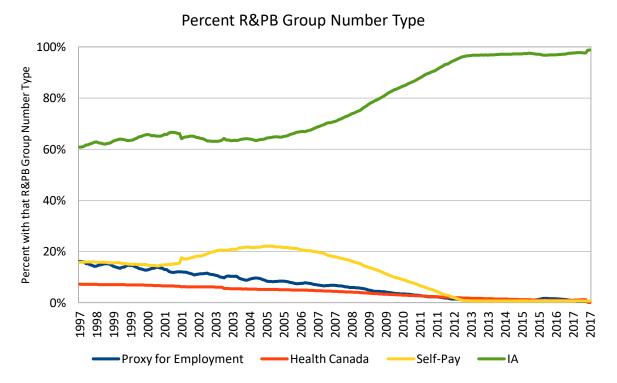
In Figure 16, we plot the proportion of people whose MSP premiums were paid from different sources for the long-term recipient group. For those on IA, MSP premiums were paid by the province and those are denoted as the IA line. The other possible categories are employer pay, self-pay, and Health Canada pay. Health Canada corresponds mainly to status Indians. The distinction between employer and self-pay is the difference between a job with benefits and one without (the self-employed would be the self-pay category but likely make up only about a third of those in the category).

Figure 15
Adults (25 and Older) Receiving Income Assistance

# Adults (25 and older) Receiving Income Assistance

By Months received in previous 5 years < 12 Number of adults 12 to 48 9 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016

Figure 16
Long-Term Recipients of IA by MSP Billing Category



For the long-term recipients, IA paid their premiums almost entirely for the five years before our December 2016 sample point (which is reasonable given the definition of the group). But the rates of IA paying for the premiums remain high back to 1997. That is, this is a group in very persistent receipt of IA benefits, and this is the first lesson from examining the data—long term means very long term. Indeed, the rates are close to 100% IA paid in the previous five years, suggesting that most are in receipt all the time in that period (not moving on and off very much). To the extent they are not on IA, their premiums are mostly self-pay, indicating that this is a group without access to good jobs, especially in the most recent 10 to 12 years.

For medium-term recipients, shown in Figure 17, prior IA receipt rates are much lower, especially before five years prior to our observation point. This is a group with a high rate of self-pay for MSP premiums, though, so they still tend to have been in less good jobs. Interestingly, some portion of them seem to have been among those who made greater use of IA in the pre-2002 regime.

The same is true to a lesser degree of the short-term recipients shown in Figure 18. For this group, there seemed to be a move toward less good jobs just before entering IA, but IA use itself is quite low (close to the rates for the population at large in the three to five years prior to our observation point period). That is, there is not a lot of evidence of a pattern of long-term cycling in and out of IA for this group.

Figure 17

Medium-Term Recipients of IA by MSP Billing Category

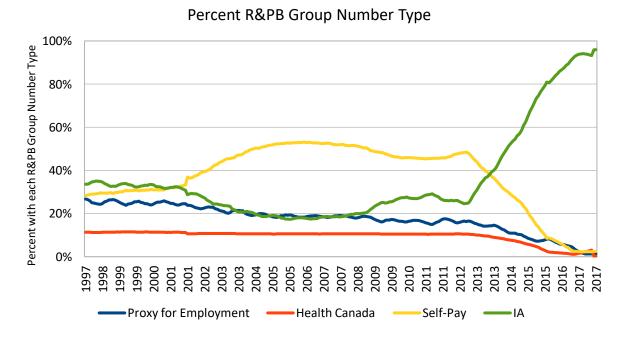


Figure 18
Short-Term Recipients by MSP Billing Category

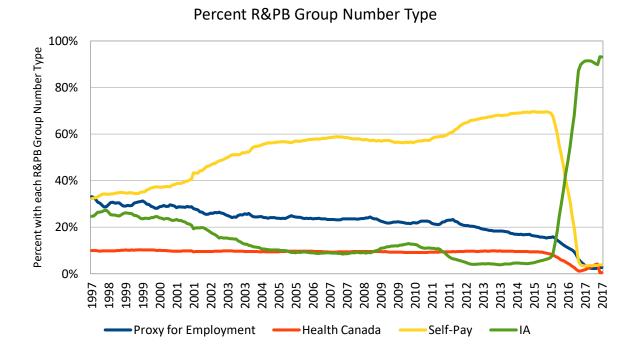


Figure 19 contains the breakdown of the different duration groups by IA programs. A key result is that approximately 90% of the long duration group is in either the PWD or PMPB people with persistent multiple barriers), program while the largest program component in the short-duration group is expected to work (ETW). The shift toward longer incidence spells seen in Figure 9, above, and the increase in the proportion of cases that are in a disabled category are two sides of the same coin. This is also reflected in the age distribution in the different duration categories shown in Figure 20.

Figure 21 shows the distribution of completed spells, broken down between those related to a PWD and others. PWD cases have substantially longer spells—41% are of 12 months or less compared with 77% of spells associated with other programs. Further, 34% of PWD spells are of 54 months or longer compared with 5% of spells associated with other programs. But while individual non-PWD spells are short, Figure 19 indicates that 70% of the ETW group have received 12 months or more of benefits in the previous five years, including 25% who received benefits for 48 months or more out of the last 60 months. Thus, there is a considerable proportion of ETW recipients who use benefits repeatedly, including a quarter who are in almost continuous receipt of benefits.

Figure 19
Who Uses the Income Assistance Program?

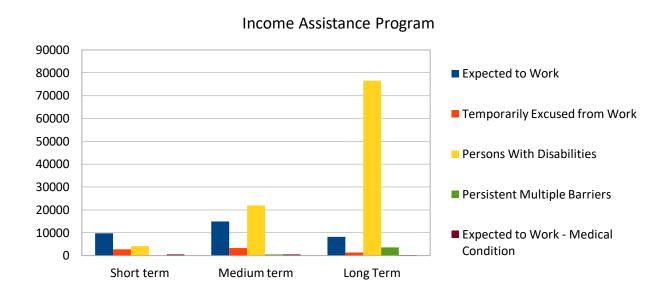
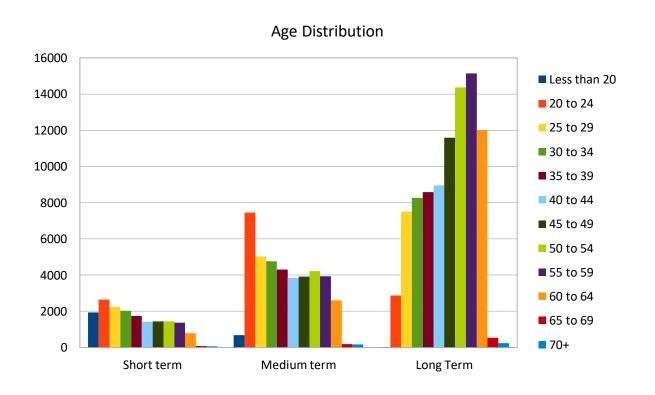
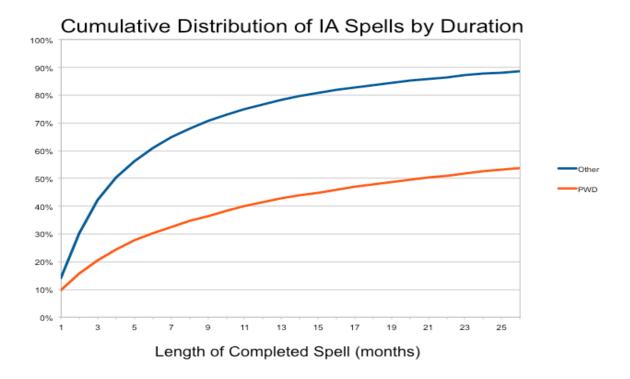


Figure 20
Age Distribution of People Who Use Income Assistance



**Figure 21**Cumulative Distribution of IA Spells by Duration



#### **Conclusion**

Using almost 30 years administrative data, we have characterized the main trends in the dynamics of using IA and pointed out implications of those trends. As Petit and Tedds (2020) point out, since the mid-1990s, the IA system has shifted dramatically away from covering people with some ongoing relation to work to being a system that is almost entirely focused on providing benefits based on disability and mental health issues. At the same time, the system has also shifted away from being child centred, implying that it is not like the U.S. system and calling into question whether lessons can be learned from U.S. data. In terms of dynamics, the system has shifted from having a preponderance of short spells of receipt with a high degree of seasonality to having quite long-term, non-seasonal spells. This, of course, fits with the shift toward a disability focus. The most recent version of the system has both low entry and exit rates. Our analysis of patterns by spell duration category show that the behaviour of long-spell recipients of IA has changed very little over time. What has changed is that they have become a larger part of the recipient population.

Perhaps the main policy implication from these trends is that the system no longer covers people *without* disabilities with short-term employment-related income interruptions. This is a group whose access to EI was restricted after the mid-1990s reforms to that program. For a while, the IA system filled the hole created by those reforms, but with the 1996 and 2002

changes, that became no longer the case. There could be concerns that returning IA to a system that provided some support for these types of workers could create dependence on benefits and reduce work. The evidence from IA applicant behaviour in the 1990s and 2000s before the cutbacks does not support these concerns. Similarly, there is limited evidence that people are very responsive to increases in benefit amounts in terms of moving into IA. Instead, recipiency rate declines and changes in composition have been driven by policies directly affecting entry and exits.

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