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Effects of the Timing of Participation in Employment Assistance Services

Technical Study Prepared Under the Second Cycle for the Evaluation of the Labour Market Development Agreements

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List of abbreviations

APEs	Action Plan Equivalents
EAS	Employment Assistance Services
EBSM	Employment Benefits and Support Measures
ESDC	Employment and Social Development Canada
EI	Employment Insurance
JCP	Job Creation Partnerships
LMDA	Labour Market Development Agreement
SD	Skills Development
SE	Self-Employment
TWS	Targeted Wage Subsidies

Executive Summary

This report presents the results from a study that aimed to determine whether starting participation in Employment Assistance Services (EAS) earlier after initiating an Employment Insurance (EI) claim leads to better labour market impacts for participants than postponing participation to a later time. This study was undertaken as part of stream 2 of the second evaluation cycle of the Labour Market Development Agreements (LMDAs).

This study focuses on active EI claimants who started their EAS participation between 2002 and 2005 and addresses the following questions:

1. Are the socio-demographic and labour market characteristics of active claimants who participated early in EAS-only during their EI benefit period different of those of active claimants who participated later?
2. Does entering EAS-only early after the start of an EI claim increase the employment earnings and incidence of employment of active claimants?
3. Does entering EAS-only early after the start of an EI claim decrease the use of EI by active claimants?
4. Do the impacts on earnings, employment and EI use vary according to timing of participation?
5. Does entering EAS-only early after the start of an EI claim lead to a quicker return to employment compared to participating later?

The purpose of this study is to help inform policy development and program delivery by providing evidence on the effects related to the timing of EAS delivery. With that respect, it is noted that EAS is a relatively low cost and is a low intensity intervention, which can be offered to newly unemployed individuals relatively quickly after the beginning of the EI claim.

Methodology

The study examines whether participating in EAS-only early after the start of an EI benefit period leads to better labour market impacts for active EI claimants as opposed to postponing participation to a later time. Active claimants were selected because they have an active EI claim at the time of starting their EAS-only participation while former claimants had an EI claim 3 to 5 years before participation. The study uses EI part I and II data linked to data from the Canada Revenue Agency for up to 100% of active claimants across Canada who participated in EAS-only between 2002 and 2005.

In order to determine whether the incremental impacts vary according to the time of participation, the sample of active claimants examined in this study is divided into six cohorts based on the time that elapsed between the start of the EI claim and the start of participation in EAS-only:

1. EAS-only participation in the first month following the start of the benefit period (U1)
2. In the second month (U2)
3. In the third month (U3)
4. In the second quarter (U6)
5. In the third quarter (U9)

6. In the fourth Quarter (U12)

The incremental impacts for each cohort of participants are measured relative to individuals who were eligible to participate in EAS-only during a given period (cohort) but did not participate during that particular period, and who may or may not have participated in any EBSMs (i.e., EAS-only or Employment Benefits) at a subsequent point in time. Specifically, a different comparison group was defined for each cohort and each comparison group consists of participants who started EAS-only participation at a later point in time than the cohort they were assigned to as well as active EI claimants who did not participate in any EBSMs between 2002 and 2005.

This report includes the following components:

1) A descriptive profile of the socio-demographic and labour market characteristics of participants according to the timing of their EAS-only participation during their EI benefit period.
2) An analysis of incremental impacts from participating at different times during the EI benefit period on the earnings, incidence of employment and use of EI of participants.
3) An analysis of incremental impacts from participating at different times during the EI benefit period on the timing of the return to employment.

Profile of Participants by Cohort

Active claimants who participate in cohort U1, U2 and U3 started their EAS-only participation within an average of 3, 7 and 11 weeks after the start of the EI benefit period, respectively. While active claimants in cohorts U6, U9 and U12 started their EAS-only participation within 19, 31 and 43 weeks respectively.

The socio-demographic profile of participants differs only slightly across the cohorts. Most participants were male, between 25 and 44 years of age and married. As well, most were in occupations requiring secondary or occupational training prior to participation. Participants in each cohort also had similar level of employment earnings and incidence of employment in the year prior to participation.

The only difference observed across the cohorts is in the average EI entitlement weeks and average insured hours. Earlier cohorts of participants had slightly lower average numbers of EI entitlement weeks and slightly lower insured hours than the later cohorts. Overall, this descriptive profile does not show an obvious link between the socio-demographic characteristics of participants and the timing of their participation in EAS-only.

Incremental Impacts on Earnings, Incidence of Employment and Use of EI

The incremental impact analysis shows that, of all the cohorts examined, individuals who started their participation within four weeks following the start of their EI benefit period (U1) had larger post-program impacts on their earnings and incidence of employment. They had a total increase of $10,192 in their earnings over the five years post-program, which was accompanied by

increases in their incidence of employment ranging between 0.9 to 2.6 percentage points per year.

Participants in U2 and U3 also had increases in their earnings totalling $3,888 and $2,543 respectively over the post-program period. The increases in earnings for participants in U2 were accompanied by non-statistically significant impacts on incidence of employment. As well, participants in U3 had decreases in their incidence of employment after participation. The participants who started their EAS-only participation later during their EI benefit period (U6 to U12) generally had decreases in their employment earnings and their incidence of employment following participation.

Participants in all cohorts generally had decreases in the amounts of EI benefits collected in the five years following participation. However, the decreases were larger for the later cohorts compared to the earlier cohorts. Participants in U1 had a $503 decrease in the amount of EI benefits collected during the total post-program period while those in U12 had a $3,143 decrease. However, the post-program decreases experienced by participants in later cohorts could be due to the exhaustion of their EI benefits during or immediately after participation. As such, they may have not been able to continue claiming EI if they could not find employment right after participation.

Incremental Impacts on Return to Employment

An incremental impact analysis was conducted to determine the effects of participating in EAS-only at different times during the EI benefit period on the time of the return to employment. Those impacts were measured by calculating the difference between the number of EI weeks unused by participants and the number of EI weeks unused by those who postponed their EAS-only participation (comparison groups). The number of EI weeks unused represents the difference between the total number of weeks of EI entitlement and the number of weeks during which the individual received EI benefits. This is used as a proxy for measuring the return to employment since an EI claimant who stopped claiming EI before the end of his/her entitlement most likely do it because he/she found employment.

Of all the cohorts examined, only participants in U1 returned to employment more quickly than the comparison group. Specifically, they returned to employment 3 weeks earlier than the comparison group. Participants in all other cohorts returned to employment 0.5 to 3.5 weeks later than the comparison group.

Conclusions

In summary, the results indicate that earlier participation during an EI benefit period produced larger impacts on earnings and incidence of employment while all participants had decreases in their EI use following participation. Of all the active claimants examined, those who started within 4 weeks after the start of their EI benefit period (U1) had the largest earnings and incidence of employment gains following participation and experienced decreases in their use of EI. As well, they were the only participants to return to employment earlier than the comparison group.

1. Introduction

This report presents results from a study that seeks to determine whether starting participation in Employment Assistance Services (EAS) earlier after initiating an Employment Insurance (EI) claim leads to better labour market impacts for participants than postponing participation to a later time. This study was undertaken as part of stream 2 of the second evaluation cycle of the Labour Market Development Agreements (LMDAs).

This report builds upon previous evaluation work conducted on the timing of EAS participation by Employment and Social Development Canada (ESDC). Previously, the analysis was conducted with a sample of 10% of active claimants across Canada who participated in 2001 to 2003. The current analysis was conducted with up to 100% of active EI claimants who started participation in EAS-only between 2002 and 2005 across Canada.

The focus of this report is on the national level results. The provincial/territorial results will be presented in separate reports for each of the participating provinces and territories.

1.1 Overview of the Labour Market Development Agreements

The LMDAs are bilateral agreements between the Government of Canada and each of the thirteen provinces and territories. Under the LMDAs, the federal government provides $2 billion annually to provinces and territories to design, deliver and manage skills and employment programs mainly targeted to unemployed Canadians eligible for EI. The objective of these programs and services is to assist individuals to obtain or keep employment. The agreements allow provinces and territories to have flexibility in order to design and deliver programs and services that respond to their local and regional labour market needs but these programs and services need to be aligned with the following categories of Employment Benefits and Support Measures (EBSM) under the parameters of Part II of the 1996 EI Act:

Employment Benefits	Support Measures
• Skills Development (SD)	• Employment Assistance Services (EAS)
• Targeted Wage Subsidies (TWS)	• Labour Market Partnerships
• Self-Employment (SE)	• Research and Innovations
• Job Creation Partnerships (JCP)	
• Targeted Earnings Supplements	

Individuals eligible to receive programs under the Employment Benefit category must be either:

- Active (current) EI claimant (i.e., with an active EI claim at the time of participation)
- Former EI claimant whose benefit period has ended within the past three years.
- Former EI claimants who had established a claim for maternity or parental benefits within the past 5 years and is returning to the labour force for the first time after having left work to care for new born or newly adopted child(ren).

Support Measures (services) are open to all unemployed[1] individuals whether or not they are eligible to EI.

1.2 Employment Assistance Services (EAS)

EAS helps unemployed persons who require assistance to enter or return to the labour force and includes three types of measures:

1) Employment Services comprise a variety of services that support participants as they prepare to enter or re-enter the labour force. These services range from job search assistance for job-ready clients to the development of in-depth return-to-work action plans for clients facing multiple employment barriers.
2) Group Services focus on short-term job search and re-entry activities.
3) Individual Counseling addresses more complex issues in the case management process and may involve a series of in-depth sessions, particularly when clients face multiple employment barriers.

[1] A less stringent definition of unemployment often applies to those who take Support Measures. In many jurisdictions a maximum of 20 hours of work per week is allowed for Support Measures while close to zero hours of work per week is allowed for Employment Benefits, reflecting their full-time attendance requirement.

2. Methodology

2.1 Scope

The main purpose of this evaluation is to examine whether participating in EAS-only earlier during an EI benefit period leads to stronger effects on the labour market experience of active EI claimants compared to participating later. Precisely, this study measures the incremental impacts of participating in EAS-only at a particular time during the EI benefit period relative to participating later. This differs from the incremental impact analysis usually conducted as part of the LMDA evaluations, which measured the incremental impacts from starting participation at any time during the EI benefit period relative to non-participation.

This study focuses on active EI claimants who started their EAS participation between 2002 and 2005 and addresses the following questions:

1. Are the socio-demographic and labour market characteristics of active claimants who participated early in EAS-only during their EI benefit period different of those of active claimants who participated later?
2. Does entering EAS-only early after the start of an EI claim increase the employment earnings and incidence of employment of active claimants?
3. Does entering EAS-only early after the start of an EI claim decrease the use of EI by active claimants?
4. Do the impacts on earnings, employment and EI use vary according to timing of participation?
5. Does entering EAS-only early after the start of an EI claim lead to quicker return to employment compared to participating later?

In order to address the first question, a descriptive profile of the socio-demographic and labour market characteristics of participants was produced according to the timing of their EAS-only participation during their EI benefit period. Questions 2 to 4 were addressed by an analysis of incremental impacts from participating at different times during the EI benefit period on the earnings, incidence of employment and use of EI benefits of participants. Question 5 was addressed by an analysis of incremental impacts from participating at different times during the EI benefit period on the time of the return to employment.

The study focuses on active EI claimants who only participated in EAS (referred to as EAS-only). EAS was selected among other EBSMs since participants and employment counsellors have more influence over the timing of participation in EAS compared to other EBSMs. In comparison, for example, the timing of participation in SD may depend on when the enrollment period for a given training is scheduled by the training institution.

The study was conducted using EI part I and II data linked to data from the Canada Revenue Agency for active EI claimants across Canada.

2.2 Approach for defining earlier versus later participation

This study covered a sample of active EI claimants who started their participation in EAS-only between 2002 and 2005 across Canada. In order to determine whether the profile and incremental impacts vary according to the time of participation in EAS-only within an EI benefit period, the sample of active claimants examined in this study was divided into six cohorts based on the number of weeks that elapsed between the opening of their EI claim and the start of participation in EAS-only:

1. Active claimants who started EAS-only during the first month following the start of their EI benefit period (referred to as U1)
2. Those who started during the second month after the start of their EI benefit period (U2)
3. Those who started during the third month after the start of their EI benefit period (U3)
4. Those who started during the second quarter after the start of their EI benefit period (U6)
5. Those who started during the third quarter (U9)
6. Those who started during the fourth quarter (U12)

2.3 Unit of Analysis

Consistent with current and past evaluations of the LMDAs, the unit of analysis used in this study is the Action Plan Equivalent (APE). This regroups all EAS provided to an active EI claimant within no more than six months of each other. The study examined active claimants who started an APE composed of EAS-only between 2002 and 2005. While active claimants could have had more than one APE composed of EAS-only or of any other EBSMs during this period, this analysis covered the participants who had only one APE composed of only one or more EAS between 2002 and2005.

2.4 Comparison group

The incremental impacts for each of the six cohorts of participants were measured relative to active claimants who postponed their participation in EAS-only to a later time, which can be during or after the reference period covered by this study (i.e., 2002-2005) or who never participated in any EBSMs. Precisely, a different comparison group was defined for each cohort and each comparison group regroups participants who started their EAS-only participation at a later point in time than the cohort they were assigned to as well as active EI claimants who did not participate in any EBSMs between 2002 and 2005.

2.5 Number of participants and comparison cases included in the study

The socio-demographic profile covers 100% of active claimants who had one EAS-only APE between 2002 and 2005 while the incremental impact analysis covers a random sample of participants and comparison cases. Table 1 describes the number of participants and comparison case included in both components of the study:

Table 1 Number of Participants and Comparison Cases Selected						
Cohorts (start of EAS-only after start of an EI claim)	**Socio-Demographic Profile**		**Incremental Impact Analysis**			
	Participants	**Comparison**	**Participants**		**Comparison**	
	Number	*Number*	*Number*	*Sample Selected*	*Number*	*Sample Selected*
U1 (in 1st month)	78,708	2,983,355	39,354	50%	298,312	10%
U2 (in 2nd month)	62,336	2,910,600	31,168	50%	291,045	10%
U3 (in 3rd month)	48,648	2,812,597	48,648	100%	281,249	10%
U6 (in 2nd quarter)	77,027	2,623,813	38,513	50%	262,368	10%
U9 (in 3rd quarter)	38,495	2,176,372	38,495	100%	217,623	10%
U12 (in 4th quarter)	24,456	1,603,554	24,456	100%	160,345	10%

2.6 Matching Process, estimation techniques and tests

A large number of variables were taken into account in the matching process in order to ensure that the comparison groups closely matched participants' socio-demographic and labour market characteristics. These variables included information such as socio-demographic characteristics; skills level related to last job before participation; industry code related to last job before participation; province where the EI claim was initiated; reason for job separation; use of EI and Social Assistance in the five years before participation; employment earnings in the five years before participation; number of APEs in the five years before participation, etc.

The incremental impact results presented in this report were generated using Difference-in-Difference in conjunction with Kernel Matching. In order to verify the sensitivity and robustness of the results, two other matching techniques were used (i.e., IPW and Nearest Neighbor) in addition to Kernel Matching. Overall, results produced with these three different techniques are very similar. A number of other tests and a sensitivity analysis were also conducted to confirm the validity of the results. More details on those tests as well as the results produced using IPW and Nearest Neighbor are presented in details the technical report[2] on the methodology and results from this study, which can be provided upon request.

2.7 Indicators

The incremental impacts were measured for the following indicators:

- Employment earnings: This indicator measures the total earnings an individual had from paid employment and/or self-employment. It is captured from Canada Revenue Agency data.
- Incidence of employment: This indicator measures the incidence of having earnings from employment and/or self-employment. This is captured from the Canada Revenue Agency data

[2] See the *Cycle II Evaluation of the Labour Market Development Agreements: How do Effects from Participating in Employment Assistance Services (EAS) Differ Based on the Timing of Participation during the EI Benefit Period? Evaluating the Effect of EAS-only in a Dynamic Setting* (Ottawa: Evaluation Directorate, ESDC, 2014)

as a binary variable on an annual basis. It takes on the value "1" if the individual is employed within a calendar year (in either the pre- or post-participation period), and "0" if not.

- Amount of EI benefits received: This indicator measures the average amount of EI benefits received. It is captured using EI part I data.
- Time of return to employment: This is measured as the difference between EI entitlement in weeks and weeks of EI used. Based on this measure, it is possible to determine whether participants in each cohort are interrupting their EI claim (i.e., proxy for returning to employment) earlier than the comparison group.

2.8 Strengths and Limitations

The main strength of this study lies in the use of multiple state-of-the-art econometric techniques and a large set of administrative data variables to match participants and comparison cases and to generate the results. Different matching and estimation approaches were used in order to validate the results obtained and various tests were conducted in order to ensure that the findings from this study are the most robust possible. As well, by combining the use of an extensive set of variables on socio-demographic characteristics with the implementation of state-of-the-art techniques, the matching process led to the creation of comparison groups closely matched to the EAS participants in terms of their background characteristics.

Incremental impact results for the participation period should be interpreted carefully. Since the information used to measure program effects on employment earnings and incidence of employment is only available on a calendar year basis, it is not possible to estimate the impacts over the exact duration of the participation period. In fact, the incremental impacts for the participation period were estimated based, for example, on the total annual employment earnings participants had in all the calendar years during which the participation took place. Considering that the average length of EAS-only APEs is 12 weeks, the incremental impacts for the in-program period generally overestimate the real effect experienced by participants during their EAS-only participation. The same approach was used to measure the in-program effects for all indicators included in this study.

Readers should interpret the medium-term results (i.e., years 3 to 5 after participation) with caution. Services provided under EAS are generally low intensity in the sense that they are shorter in duration and relatively low cost compared to Employment Benefits. The main objective of EAS is to help individuals to achieve quicker return to work through the provision of services such as counselling, job finding club, resume writing, etc. These services do not focus on human capital development or the acquisition of job related skills. In this context, it might not be reasonable to expect that participation in EAS-only would lead to impacts that last up to five years after participation. The impacts observed over the medium-term may not be directly attributable to EAS.

The results from this study do not allow for the identification of the optimal time for starting participation in EAS-only; however, it can still provide an indication about whether participating earlier during an EI benefit period leads to better labour market outcomes than deferring participation to a later time.

3. Participant's Profile by Cohort

Table 2 presents the analysis of the socio-demographics characteristics of participants in each cohort.

As shown in the table, most participants started their EAS-only participation earlier than later during their EI benefit period. Out of the 329,670 participants examined in the socio-demographic profile, the highest proportion (24%) started their EAS-only participation within the first month after starting their EI claim. The proportion of participants in each cohort decreased almost steadily and went from 19% in U2 to 7% in U12. Unemployed individuals who participate in cohort U1, U2 and U3 entered into the program within an average of 3, 7 and 11 weeks after the start of the EI benefit period, respectively.

The proportion of males ranged from 50% to 55%. At the time of participation, 10% to 13% of the participants were under 25 years old and another 28% to 30% were between 25 and 34 years old. Twenty nine percent to 31% of participants were between 35 and 44 years old and 22% were between 45-54 years old. Those who were 55 and older represented 7% to 10% of the participants.

Between 45% and 49% of participants in each cohort were married while between 34% and 38% were single. The proportion of individuals who self-identified as Aboriginal was relatively small, consisting of 3% to 4% of the participants. Persons with disabilities amounted to between 4% and 5% of the participants for all the cohorts. Visible minorities consisted of 5% to 6% of participants. Immigrants account for 7% to 10% of the participants.

The skill level required in the last occupation participants held before opening their EI claim was similar for all the cohorts[3]. The majority were in jobs requiring secondary or occupational training (38% to 39%), college or apprenticeship (27% to 28%) or on-the-job training (21% to 22%).

Earlier cohorts of participants had slightly lower average number of EI entitlement weeks (32 to 33 weeks for U1 to U6 compared to 35 and 36 weeks for U9 and U12) and slightly lower insured hours than the later cohorts.

The proportion of frequent EI users (individuals with more than three EI claims in the past five years) was relatively consistent between U1 and U12 and ranged from 24% to 26%.

Participants had similar level of earnings, incidence of employment and incidence of Social Assistance use in the year prior to participation. As expected, the proportion of participants in receipt of EI benefits in the year prior to participation was lower for earlier cohorts and greater for later cohorts. For example, 25% of participants in U1 and 75% of participants in U12 received EI benefits in the year prior to participation.

[3] The data used for this study did not include consistent and complete information on the highest education level of participants and non-participant

This descriptive analysis shows that there does not seem to be an obvious link between participants' characteristics and the time spent on EI before enrolling into EAS-only. The only difference observed is in the average EI entitlement weeks and average insured hours where the latter cohorts (U9 and U12) had higher values than other cohorts.

Table 2. Socio-Demographic and Labour Market Characteristics Before EAS-Only Participation

Cohorts (start of EAS-only after start of an EI claim)	**Cohorts by Time Period**					
	U1 (1st month)	**U2** (2nd month)	**U3** (3rd month)	**U6** (2nd quarter)	**U9** (3rd quarter)	**U12** (4th quarter)
Observations	78,708	62,336	48,648	77,027	38,495	24,456
Proportion over total number of participants	24%	19%	15%	23%	12%	7%
Average number of weeks on EI before start of participation	3wks	7wks	11wks	19wks	31wks	43wks
Gender						
Male	55%	54%	55%	53%	52%	50%
Female	45%	46%	45%	46%	47%	50%
Age						
Under 25	13%	11%	12%	11%	10%	10%
25-34	28%	28%	28%	29%	29%	30%
35-44	30%	29%	29%	30%	31%	30%
45-54	22%	22%	22%	22%	22%	22%
55 and over	7%	10%	10%	9%	8%	7%
Marital status						
Single	37%	36%	38%	37%	36%	34%
Married or common law	45%	48%	46%	46%	46%	49%
Divorced/separated/ widowed	15%	14%	13%	14%	15%	15%
Missing	3%	3%	3%	3%	3%	2%
Socio-demographic groups						
Aboriginal*	4%	3%	3%	3%	4%	4%
Person with disability*	4%	4%	4%	4%	5%	5%
Visible minority*	6%	6%	6%	5%	6%	5%
Immigrants*	9%	10%	10%	9%	8%	7%
Skill level**						
Managerial occupation	5%	5%	5%	5%	5%	5%
University degree	6%	7%	7%	8%	8%	8%
College or apprenticeship training	28%	28%	27%	27%	28%	28%
Secondary or occupational training	39%	39%	38%	38%	38%	38%
On-the-job training	22%	21%	22%	22%	21%	21%
Main EI variables						
Average EI entitlement weeks	33	33	32	33	35	36
Average insured hours	1,497	1,476	1,460	1,449	1,512	1,553
Proportion of frequent EI users in 5 years before start of participation***	24%	25%	25%	26%	25%	25%

Table 2. Socio-Demographic and Labour Market Characteristics Before EAS-Only Participation

Cohorts (start of EAS-only after start of an EI claim)	**Cohorts by Time Period**					
	U1 (1st month)	**U2** (2nd month)	**U3** (3rd month)	**U6** (2nd quarter)	**U9** (3rd quarter)	**U12** (4th quarter)
Labour Market Characteristics in the Year Before Participation						
Earnings	$23,182	$23,068	$22,633	$22,117	$22,320	$21,418
Incidence of Employment	97%	97%	97%	97%	98%	98%
Incidence of EI Use	25%	32%	40%	50%	62%	75%
Incidence of Social Assistance use	6%	6%	6%	7%	6%	5%

Proportion may not add up to 100% due to rounding
*Self-reported information
**Skill level corresponds to the type and/or amount of training or education typically required to work in the last occupation participants had before opening the last EI claimant they had before participating in EBSMs :
-Managerial: Management occupation
-University: Occupations usually requiring university education (i.e., University degree at the bachelor's, master's or doctorate level)
-College or apprentices training: Occupations usually requiring college or vocational education or apprenticeship training such as 2 to 3 years of post-secondary education at a community college, institute of technology or CEGEP or 2 to 5 years of apprenticeship training or 3 to 4 years of secondary school and more than 2 years of on-the-job training, specialized training courses or specific work experience and/or occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as firefighters, police officers and registered nursing assistants.
-Secondary or occupational training: Occupations usually requiring secondary school and/or occupation-specific training such as one to four years of secondary school education or up to 2 years of on-the-job training specialized training courses or specific work experience.
-On-the-job training: On-the-job training is usually provided for occupations (i.e., short work demonstration or on-the-job training or no formal educational requirements).
***Frequent EI users are those who had three or more EI claims in the 5 years preceding their EBSM participation.

4. Impacts and Outcomes

4.1 Incremental Impacts on Earnings, Employment and Use of EI Benefits

In the recent 2013-2014 Stream 1 evaluation[4], an incremental impact analysis was conducted for active claimants in EAS-only relative to non-participants. It was found that participation in EAS-only increased employment earnings in the fourth and fifth year after participation and increased incidence of employment during the second to fifth year. As well, EAS-only participants had reductions in the amount of EI benefits received during each of the post-program years.

While the results discussed above relate to participating in EAS-only at any time during an EI benefit period and are relative to non-participation, the following discusses the results from participating at a particular time during the EI benefit period relative to postponing participation.

As shown in Table 3, individuals who started their participation in the earlier cohorts (U1 and U2) had larger post-program impacts on their earnings and incidence of employment compared to those who started participation later. Specifically, individuals who started their participation within four weeks after initiating an EI claim (U1) had the largest increase in earnings ($10,192) during the total post-program period followed by participants in U2 ($3,888), and U3 ($2,543). Participants in U6 had a statistically non-significant increase in earnings while those in U9 had a total decrease of $1,754. Participants in U12 had decreases in earnings in the first two years following participation and statistically non-significant results in subsequent years.

Participants in U1 also had the largest annual increases in their incidence of employment. They had increases ranging from 2.1 percentage points in the first year post-program to 0.9 percentage points in the fourth year post-program. Participants in U2 had statistically non-significant results in most post-program years. Participants in U3 had decreases in each of the post-program years ranging from 0.6 to 1.0 percentage points annually. Participants in U6 and U9 had statistically significant decreases ranging between 0.5 and 1 percentage point in most of the post-program years. Participants in U12 had statistically non-significant decreases during each of the post-program years.

Participants in all cohorts generally had decreases in the amount of EI benefits collected in the five years following participation. The decreases were larger for the later cohorts compared to the earlier cohorts. Participants in U1 had a $503 decrease in the amount of EI benefits collected during the total post-program period while those in U12 had a $3,143 decrease. All of the cohorts had increases in the amount of EI benefits received during the in-program period ranging from $298 in U1 to $1,498 in U12.

Overall, it is not surprising to see that later cohorts had larger increases in EI use during participation since the data used to capture the in-program impacts are only available on an annual basis. Therefore, the in-program impacts reflect the use of EI for the entire year during which the participation occurred although their EAS-only participation was 12 weeks on

[4] See the *Cycle II Evaluation of the Labour Market Development Agreements: Analysis of National Employment Benefits and Support Measures Profile, Outcomes and Incremental Impacts* (Ottawa: Evaluation Directorate, ESDC, 2014).

average. Since participants in later cohorts had used most of their EI benefits before or during participation, they may have not been able to remain on EI after participation if they had not found employment right away. This may explain why they had larger decreases in EI use immediately after participation. In other words, the impacts on EI benefits used during and after participation should be interpreted carefully because they are affected by the timing of the EAS participation during the EI benefit period. Those results should not be seen as an indication of the effects of participation on EI savings. In fact, the results provided in Table 4 and 5 below show, that despite achieving larger incremental decreases in EI use, participants in later cohorts have used more EI overall than earlier participants and used almost all the EI benefits they were entitled to. Participants in earlier cohorts had more weeks of EI entitlement left than later participants.

Table 3. Incremental Impacts by Cohort

Cohorts (start of EAS-only after start of an EI claim)	n=	In-program	Post-program period					Total impact in- and post-program	Total impact post-program
			1 year	2 years	3 years	4 years	5 years		
Employment Earnings									
U1 (in 1st month)	*39,354*	-$505***	$258***	$1,708***	$2,343***	$2,804***	$3,080***	$9,687***	$10,192***
U2 (in 2nd month)	*31,168*	-$2,046***	-$765***	$444***	$1,123***	$1,511***	$1,574***	$1,842***	$3,888***
U3 (in 3rd month)	*48,648*	-$3,109***	-$839***	$124	$783***	$1,179***	$1,296***	-$566	$2,543***
U6 (in 2nd quarter)	*38,513*	-$4,566***	-$1,106***	-$240**	$327***	$603***	$775***	-$4,209***	$358
U9 (in 3rd quarter)	*38,495*	-$6,680***	-$1,139***	-$703***	-$178	$151	$114	-$8,433***	-$1,754***
U12 (in 4th quarter)	*24,456*	-$6,814***	-$545***	-$696***	-$253	-$11	$287	-$8,032***	-$1,218
Incidence of Employment									
U1 (in 1st month)	*39,354*	2.6pp***	2.1pp***	1.6pp***	1.6pp***	0.9pp***	0.3pp	N/A	N/A
U2 (in 2nd month)	*31,168*	1.4pp***	0.4pp*	0.3pp	0.2pp	-0.3pp	-0.8pp***	N/A	N/A
U3 (in 3rd month)	*48,648*	0.2pp	-0.6pp***	-0.6pp***	-0.4pp**	-0.6pp***	-1.0pp***	N/A	N/A
U6 (in 2nd quarter)	*38,513*	-1.2pp***	-0.5pp**	-0.6pp**	-0.4pp	-0.5pp**	-0.7pp***	N/A	N/A
U9 (in 3rd quarter)	*38,495*	-4.1pp***	-0.5pp**	-0.7pp***	-0.6pp**	-0.7pp***	-1.0pp***	N/A	N/A
U12 (in 4th quarter)	*24,456*	-5.8pp***	-0.4pp	-1.1pp	-0.5pp	-0.8pp	-0.2pp	N/A	N/A
EI Benefits									
U1 (in 1st month)	*39,354*	$298***	$5	-$209***	-$137***	-$84***	-$80***	-$205**	-$503***
U2 (in 2nd month)	*31,168*	$1,174***	-$31***	-$214***	-$195***	-$157***	-$65***	$511***	-$663***
U3 (in 3rd month)	*48,648*	$1,470***	-$385***	-$270***	-$229***	-$198***	-$146***	$242***	-$1,228***
U6 (in 2nd quarter)	*38,513*	$1,809***	-$687***	-$333***	-$196***	-$138***	-$94***	$360***	-$1,449***
U9 (in 3rd quarter)	*38,495*	$1,823***	-$1,502***	-$453***	-$364***	-$240***	-$164***	-$899***	-$2,723***
U12 (in 4th quarter)	*24,456*	$1,498***	-$1,911***	-$442***	-$355***	-$266***	-$167***	-$1,645***	-$3,143***

PP= percentage points

** Significant at 10%; ** significant at 5%; *** significant at 1%*

n= refers to the number of participants. It corresponds to a 50% random sample for cohorts U1, U2 and U6 and 100% of participants for U3, U9 and U12.

4.2 Outcomes on EI Weeks Unused by Participants

Table 4 shows the average number of weeks during which each cohort was entitled to receive EI benefits and the average number of weeks spent on EI by participants in each cohort as well as the difference between the two. As shown in the table, individuals who started participating in EAS-only earlier after the start of their EI benefit period had the largest difference between their entitlement and the number of EI weeks actually used. For example, individuals in U1 had 12 weeks of EI left in their claim when they interrupted their EI benefit period while those in U2 had 9 weeks and those in U9 and U12 had 2 weeks. As shown in this table, participants in earlier cohorts have also spent less time on EI (21, 24 and 26 weeks for U1 to U3) than the participants in later cohorts (29, 33 and 34 weeks for participants in U6, U9 and U12). Note, the results presented in Table 4 were not examined relative to a comparison group and therefore, do not represent the effect of the timing of participation.

Table 4. Difference Between EI Entitlement Weeks and Weeks In Receipt of EI

Cohorts (start of EAS-only after start of an EI claim)	**U1** (1st month)	**U2** (2nd month)	**U3** (3rd month)	**U6** (2nd quarter)	**U9** (3rd quarter)	**U12** (4th quarter)
Average EI entitlement weeks	33wks	33wks	32wks	33wks	35wks	36wks
Average number of weeks in receipt of EI	21wks	24wks	26wks	29wks	33wks	34wks
Difference (EI weeks unused)	12wks	9wks	6wks	4wks	2wks	2wks

4.3 Incremental Impacts on Time of Return to Employment

An incremental impact analysis was conducted to determine the effects of participating in EAS-only at different times during the EI benefit period the time of the return to employment. Those impacts were measured by calculating the difference between the number of EI weeks unused by participants and the number of EI weeks unused by those who postponed their EAS-only participation (comparison groups). The number of EI weeks unused represents the difference between the total number of weeks of EI entitlement and the number of weeks during which the individual received EI benefits. This is used as a proxy for measuring the return to employment since an EI claimant who stopped claiming EI before the end of his/her entitlement most likely do it because he/she found employment.

Of all the cohorts examined, only participants in U1 returned into employment more quickly than the comparison group. Specifically, they returned into employment 3 weeks earlier than the comparison group. Participants in all other cohorts returned into employment 0.5 to 3.5 weeks later than the comparison group.

Table 5. Incremental Impacts on Time of Return to Employment

Cohorts (start of EAS-only after start of an EI claim)	**U1** (1st month) **(N=39,354)**	**U2** (2nd month) **(N=31,168)**	**U3** (3rd month) **(N=48,648)**	**U6** (2nd quarter) **(N=38,513)**	**U9** (3rd quarter) **(N=38,495)**	**U12** (4th quarter) **(N=24,456)**
Time of Return to Employment	2.9wks***	-0.5wks***	-1.9wks***	-3.3wks***	-3.5wks***	-3.0wks***

** Significant at 10%; ** significant at 5%; *** significant at 1%*

5. Conclusion

Overall, the results generally show that earlier participation leads to better post-program impacts on earnings and incidence of employment while participants in all cohorts decreased their use of EI benefits. The results indicate that among all participants, the individuals who started participation in EAS-only within four weeks after the beginning of their EI benefits period had the largest increases in earnings and incidence of employment during and after participation. As well, participants in U1 were the only cohort to return to employment more quickly than the comparison group.

From a policy perspective, the findings from this study indicate that providing EAS-only earlier to new EI claimants leads to better labour market impacts than providing the same services later into their EI claim. However, in order to do so, provinces and territories would require timely access to EI Part I data.

It should be noted that this study did not examine whether, from a government and society perspective, it is cost-effective to provide EAS-only earlier to EI claimants due to data limitations around program expenditures.