

The background of the cover features a complex graphic design. It includes a large, dark teal curved shape on the left side. Overlaid on this and the rest of the page are various mathematical and statistical elements: a line graph with a solid line and a dashed line, a bar chart with three bars of increasing height, and several mathematical symbols and formulas such as $f(x)$, $\alpha_1 + \alpha_2 \theta$, t_{u2} , and $\frac{1}{2}$. There are also silhouettes of human figures in the upper portion of the image.

Motivational Interviewing Pilot Project Final Report

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Motivational Interviewing Pilot Project

This is the final report on the Motivational Interviewing Pilot Project. The project responds to topical questions about what works in career development services in Canada by setting out to develop, implement and test an innovative approach to engage and motivate income assistance (IA) clients to improve their work readiness and participation in the labour market. More specifically, the project implemented a rigorous evaluation of the proposed approach in order that the lessons for policy and practice could be readily learned and disseminated.

Motivational Interviewing (MI) is an intervention to overcome ambivalence that keeps many people from making desired changes in their lives (Miller & Rollnick, 2002). It has a proven track record for helping individuals with addiction issues and for those in prison to reduce recidivism. It works by helping an individual to realize that change is necessary and achievable and to “own” the process that will bring about the change. The role MI plays in the proposed pilot project is that it is expected to act as a catalyst for change among IA recipients, helping them to move along the economic activity continuum from unemployment to employment.

MIPP builds on the *Stages of Change Research Project*, which was a three-year study implemented in the employment services field in Manitoba between 2007 and 2010.¹ MIPP aims to improve the labour market participation of IA clients by addressing their ambivalence towards integrating into the labour market and by increasing their self-confidence and motivation to find and secure employment.

In this project, the local implementation of the *Motivational Interviewing Pilot Project* (MIPP) in BC cities was dubbed *Transitions* to simplify communications with clients. The operational phases of the project drew to a close in March 2013 and the final round of data collection ended shortly after. The report describes, in successive chapters, the project’s objectives, design, implementation, results and their implications.

SRDC would like to thank Employment and Social Development Canada for the opportunity to pilot test and rigorously evaluate this innovative program intervention.

¹ The Manitoba Stages of Change Research Project was funded by the HRSDC’s Pan-Canadian Innovations Initiative.

1. Executive summary

Motivational Interviewing (MI) is intended to change the nature of interactions between caseworkers and their clients. It recognizes the ambivalence clients may have towards adopting employment-seeking behaviours and attempts to alter clients' motivations such that they are more inclined to follow through on their employment plans. Typically in implementing such plans, income-assistance clients interact with different caseworkers: at their income assistance office and at employment service centres. To test MI within regular service delivery for Income Assistance (IA) clients, therefore, the project sought to integrate MI into client interactions in both settings. This proved complicated to achieve, but the project's efforts to integrate MI in both settings for client interactions ensured that the project findings would apply to implementation in real-world settings.

The project adopted a randomized experimental design to ensure that a valid counterfactual would be measured: the outcomes of clients receiving MI could be compared to client outcomes when MI was not being used, thus providing a high level of certainty that the treatment rather than pre-existing differences among these two groups accounted for later observed differences in outcomes. A sample of 155 long-term IA recipients was allocated at random either to (a) a MI-stream group whose caseworkers (Employment and Assistance Workers at income assistance offices with responsibility for clients' Employment Plans – dubbed EP-EAWs – and case managers in employment services centres) would be trained in using MI or to (b) a non-MI stream control group whose caseworkers would not be trained in using MI. In all other respects the two groups were on average, statistically identical, although case managers themselves could not be randomly assigned to clients. This last feature leaves open the possibility that case manager differences and not the use of MI may account for the impacts attributed to program participation.

The project was delivered in British Columbia between September 2012 and March 2013, which was later than intended. It took time to determine that delivery in the originally-proposed Saskatchewan sites would not be practical. In turn, these delays to the project start up reduced the recruitment period and subsequent sample size. The small sample size was counterbalanced by the adoption of an experimental design, which in practice raises the explanatory power of a research project with a given sample size relative to a quasi-experimental approach. In MIPP, it proved possible to detect program impacts with a sample that was less than half the size originally intended.

Employment and Assistance Workers at two participating Employment & Income Assistance (EIA) offices in BC's Fraser Valley together with case managers at the equivalent local WorkBC employment service centres each received 60 hours of training in how to use MI, prior to participant recruitment, and another 9 hours of coaching during delivery of the project, from Empowering Change Inc. a leading Canadian trainer in the use of MI in employment service settings. The trained EP-EAWs set appointments to deliver MI for all participants allocated to the MI stream. At the end of interviews they were to assess clients' "stage of change" with respect to employment seeking behaviour: those at the stage of change termed "preparation" – meaning that they already had intent to take action – would be referred to WorkBC Employment Service Centres (ESCs) where receptionists were trained to allocate them to MI-trained case managers. Control group members received an immediate referral to the WorkBC ESCs, where receptionists allocated them to non-MI trained case managers.

EP-EAWs were instructed to use MI at least once, at the earliest opportunity, for everyone in the program group. This was in part to ensure the project tested the effect of MI across the whole of the target group, and in part due to researchers' concerns about the accuracy of the tool assessing clients' need for MI. Program data confirms that close to half the participants allocated to the MI stream attended their appointments with EP-EAWs and at least 20 per cent attended more than one motivational interview at some point over the period of study.

Table ES1 Impacts on participant employment and education outcomes – 3-month follow-up survey

	Control Group Mean	Program Group Mean	Difference	Standard Error
Work status at follow-up (%)				
Working part-time	2.0	9.4	7.5	(3.3)
Starting to work soon	0.0	0.0	0.0	(0.0)
Not working	98.0	90.6	-7.5	(3.3)
Compared to Baseline				
Net change of working status	-2.0	5.9	7.8 **	(2.7)
Studied in the past 3 months (%)				
Did not study	90.6	87.3	-3.3	(4.4)
Studied in a program	9.4	12.7	3.3	(4.4)
Apprenticeship, Trade school, or college dip./cert.	5.7	0.0	-5.7 *	(2.2)
PSE Degree	0.0	0.0	0.0	(0.0)
Other program (including ESL)	3.8	12.7	9.0 *	(3.8)

Sources: MIPP Follow-up Survey and Baseline Survey.

Notes: There are 55 observations in each of the control and program groups. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

The project found that integrating MI into client interactions significantly raised employment rates for long-term IA recipients over the three-month period, by 7.8 percentage points relative to the control group (Table ES1): the proportion in the control group working declined by 2 percentage points, from 4.0 to 2.0 per cent, while the proportion working in the MI-stream increased by 5.9 percentage points, from 3.5 to 9.4 per cent. Integrating MI also produced modest impacts on the types of education clients sought over the period. Over a longer follow-up period using administrative data, there were no significant impacts on IA receipt and very few on employment services use over the 12-month period following recruitment. Modest positive impacts on earned income disregards were seen for some months, which can be taken as a proxy for increased employment in the program group. However, inconsistent with the program theory were changes recorded via many assessment tools included in the three-month follow-up survey on employment readiness, attitudes and activities with respect to job search were found to be zero, ambiguous or negative.

Notably, the sample of long-term IA recipients targeted made very little progress towards employment, in the absence of an intervention. This is despite the project sampling only those the Ministry had designated “employment-obligated.” Anecdotally, EP-EAWs and case managers reported many to have physical or mental health, housing or addiction issues that needed resolution before employment was a realistic proposition. Quantitatively, the follow-up survey found more than seven in ten participants reported activity limitations that affected their ability to work. Health problems appeared more acute among those in the MI stream: just a quarter said their health was “good” or “very good” at the time of follow up. It would appear that many long-term IA recipients face multiple barriers to seeking work. Given the presence of these barriers, the additional MI-induced employment in this pilot may represent quite an achievement.

In sum, the project has found that the integration of MI into client interactions in IA and ESC settings is a feasible intervention but it is inconclusive with respect to its impacts. There is evidence that additional clients were able to transition into employment by virtue of being in the program group. However, alternative explanations for the modest employment impacts cannot be ruled out. The project has not determined precisely how MI increased employment, because the hypothesized increased participation in employment services as an intermediate step did not occur in the period observed. Furthermore, EP-EAWs struggled to secure clients’ attendance at their scheduled MI appointments, meaning that a substantial proportion of the target group – possibly as many as half – remained untreated. A plausible explanation is that MI encouraged the more cooperative and able clients to enter the labour market directly and quite quickly, but was not immediately effective for those facing barriers in addition to their motivation to seek employment. An expansion of the current study (by adding additional months of sample recruitment or new sites), preferably with random assignment of case workers, is recommended to draw firmer conclusions about the effectiveness of integrating MI into client interactions in IA and ESC settings. From a larger sample, the validity of the many assessment tools used can be analysed and the subgroups most likely to benefit from MI can be identified.

2. Background to the MIPP

MIPP aimed to use motivational interviewing (MI) and the “Stages of Change” model to help people receiving IA make decisions about employment and become ready to work. MI is a directive, client-centered counseling style used with individuals to help address and resolve ambivalence that may prevent them from making a desired change in their lives. In order to better understand a client’s current stage of readiness to work, a “Stages of Change” model is adopted to help determine where a person is located along a continuum of possible decisions relative to employment.

a) Objectives of the pilot project

The main objectives of MIPP were:

- To determine how well MI helps clients improve their access to the labour market, sustain employment and reduce IA use; and
- To test the feasibility of using an MI model in a public service setting.

b) The policy problem

In Canada, employment services are often delivered by government agencies or contractors (such as British Columbia’s WorkBC Employment Service Centres). Although services are client-centered, the main focus is to help clients move into employment, a strategy that has dominated welfare policy for the past decades. The challenge for employment service programs is finding ways to support clients who seem unable or reluctant to participate in the labour market and those who participate but cannot sustain their employment and end up returning to the IA system.

One school of thought holds that there needs to be a better understanding of the role of engagement with clients and establishing personal meaning for them in employment planning. Magnusson and Roest (2004) called for more research on the nature of problems or issues individuals may encounter when making employment-related decisions. As well, the authors pointed out the paucity of research that examines the nature of problems or issues clients may have when making employment and career decisions. This research gap underlines the need to design and test interventions that address this aspect of career planning, one that goes beyond the delivery of services, by targeting the prerequisites for employment decision making and the individual issues clients have that prevent them from seeking and maintaining employment.

c) Project location

The original design would have seen MIPP operating in Saskatchewan, but a new set of program service changes coinciding with the project launch rendered the original project design impractical. The British Columbia (BC) Ministry of Social Development expressed its willingness to support SRDC’s transfer of the study to a BC location. The switch of location produced some delay to project start up and shortened the project recruitment phase, but provided the opportunity to design the study to match local conditions.

For MIPP in BC, MI was to be used as a communication tool by the Ministry of Social Development's Employment Plan Employment Assistance Workers (EP-EAWs) at its Employment and Income Assistance (EIA) offices and by case managers from WorkBC Employment Service Centres (ESCs) who worked with long-term IA clients (including single parents with children over the age of three). The project sought an "integration" of MI into the client experience by training both sets of workers to use MI. As explained below, it sought this because both sets of workers play an important role in supporting clients making decisions about work.

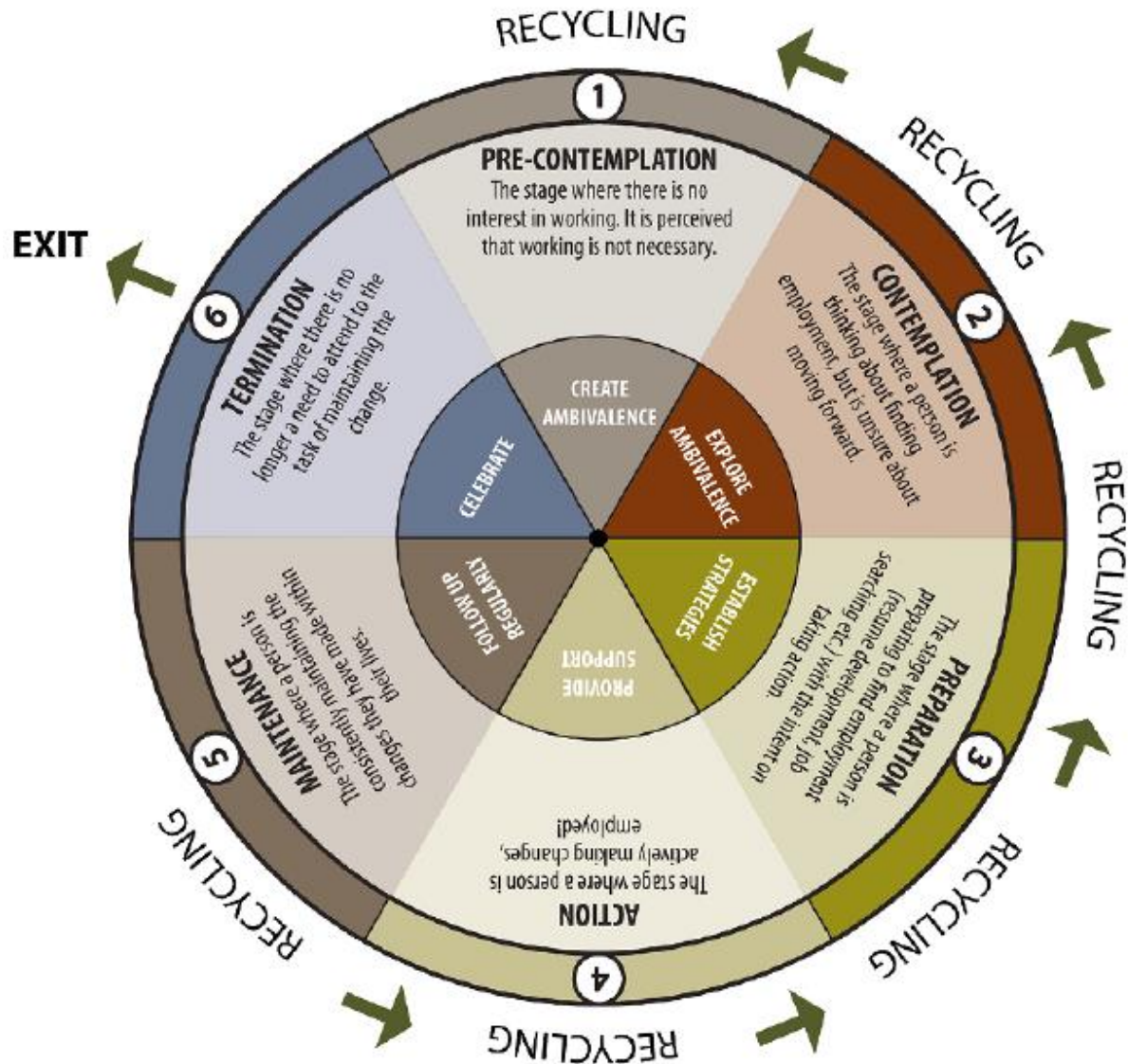
d) The Stages of Change model and the potential of motivational interviewing

Stages of Change

The Stages of Change model (SOC), also known as the Transtheoretical Model of Change, focuses on individual intention and behaviour change (Prochaska & DiClemente, 1983; Prochaska, DiClemente, & Norcross, 1992). The model views positive change as gradual and progressive, however, it may not always be a linear process. The SOC model has been well established within the fields of public health and health psychology. It has been used to help change health behaviours such as addiction, smoking and participation in physical activity. Its application to employment services is relatively new. There are results from a research project in Manitoba that suggest it is a good fit to the field (Swibaker, 2011). The SOC comprises six stages which an individual moves through. The stages and their application to employment are (Figure 1):

- **Pre-contemplation:** The stage in which an individual has no interest or intention in working. He or she perceives that working is not necessary.
- **Contemplation:** The stage in which an individual has started to consider entering the work force but has not taken any action forward or is unsure about moving forward.
- **Preparation:** An individual has made a conscious decision to seek employment and is preparing to take action steps forward (resume development, job searching, etc.).
- **Action:** An individual is actively seeking employment or becomes employed.
- **Maintenance:** An individual has made changes, is employed and is maintaining changes he or she has made.
- **Termination:** An individual no longer needs to make changes and is participating in the labour market.
- **Recycling:** In this SOC model, it is understood that individuals rarely start at one point and move through the stages without interruption. Interruptions or setbacks occur and are referred to as "recycling." When this happens – as shown in Figure 1 – an individual returns to earlier stages. This is a natural part of the change cycle. Individuals learn from experience and begin to move forward again through the stages.

Figure 1 Employment continuum using a Stages of Change lens



Source: Empowering Change Inc. (2011).

Motivational Interviewing

Motivational interviewing is designed to bring about change (Miller & Rollnick, 2002). It is a directive, client-centered counselling style that enhances motivation for change by helping clients clarify and resolve ambivalence about making a behaviour change. The approach recognizes that individuals pressured to change often become resistant. In contrast, creating safe conditions can increase the likelihood that individuals will explore and resolve problematic patterns of behavior. In this instance, that would mean overcoming their barriers to obtaining and maintaining employment (Swibaker, 2011).

Initially, MI was used and developed within the field of addiction services. The approach arose from a desire to understand why some individuals changed behaviour and others were unable to do so, even when faced with negative consequences resulting from the behaviour. Miller and Rollnick (2002) found that relatively brief interventions such as a little counselling can lead to significant changes. They examined studies that compared different numbers of counselling sessions and showed that while there were differences in the amount of time over which change occurred, often change occurred relatively early in treatment/counselling. Key factors appeared to be how people talked about change, especially the extent to which they believed change was possible, and use of an empathic counselling style. In other words, if individuals talked about change as a realistic possibility, it was more likely to occur. Miller and Rollnick concluded that the individual's level of motivation to change was often a good predictor of change. They suggested that it would be possible to influence motivation levels through inter and intrapersonal factors and also through interventions. Their aim in developing MI was to help individuals become, ready, willing and able to change.

“Goal-oriented style of communication with particular attention to the language of change. It is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person’s own reasons for change within an atmosphere of acceptance and compassion”

~ Miller & Rollnick, 2011

Four principles form the basis of MI:

1. **Express empathy:** A client-centered and empathetic counselling style is fundamental to MI. Through skilful and reflective listening, the counsellor seeks to understand the client's feelings and perspectives. Ambivalence to change problematic behaviour is to be expected. The objective is to understand why the client has become “stuck” in this behaviour.
2. **Develop discrepancy:** MI is intentionally directive as its aim is to help the client change behaviour. This is done by developing discrepancy between the client's present state of affairs and what they want it to be. When the client views a behaviour as in conflict with important personal goals, he or she is more likely to change it. The aim is for the client to present the reasons for change, rather than the counsellor/facilitator.
3. **Roll with Resistance:** Arguing over the need for change is discouraged as it can result in the client becoming more entrenched in his or her current behaviour as they seek to defend it. Instead MI seeks to capitalize on a client's self-determination and to reframe it so that it supports change. The

client is supposed to be the primary source for finding answers and solutions. The counsellor asks the client whether he or she would like to consider an alternative perspective but will not impose this perspective on the client. If a client starts to appear resistant then this signals to the counsellor that there is a need to take a different approach.

4. **Support self-efficacy:** This refers to an individual's belief in his/her own abilities to carry out and succeed at a task. The goal of MI is to enhance these beliefs so the client feels that he or she will be able to overcome any barriers and sees change as credible. The role of the counsellor is to develop self-efficacy beliefs by creating an environment that is positive and supports change.

In sum, MI is a collaborative, empathic, and evocative style of communication that respects the individual client's autonomy and point of view. What differentiates MI from other styles of communication is that it assumes each individual has the capacity for positive behaviour change and does not work to identify weaknesses or other attributes the individual lacks. By combining MI with SOC, counsellors and practitioners can determine and measure a client's progress in overcoming ambivalence and in moving towards making and sustaining a change in behaviour, such as seeking and gaining employment.

e) Review of previous knowledge of the use of MI in the employment services setting

In 2007, a faith-based non-profit organization in Manitoba applied the SOC plus MI model to the field of employment development (Swibaker, 2011). This research project, called Opportunities for Employment, sought to assist unemployed and underemployed individuals to address their ambivalence and motivations towards employment through (a) identifying their current stage of employment readiness and (b) providing appropriate interventions to help them transition through the stages of change. The project achieved promising results on program participation rates and employment outcomes. However, the SOC plus MI model has not been implemented widely in the employment and career development field. Prior to the current study, it had only been formally tested in this one site. As an exciting and innovative approach, it warrants further research.

f) Integrating MI into current models of service delivery for income assistance clients

Services to support IA recipients moving from unemployment to employment span multiple agencies. At a minimum, support to clients seeking to implement their employment plans is provided by EP-EAWs in the first instance and case managers at ESCs. Therefore, to fully test an approach like MI – which is intended to change the nature of service providers' interactions with clients throughout their transitions to employment – staff at both agencies needed to adopt the approach. While Opportunities for Employment found success training only case managers in the use of MI, they provided services to a broad cross-section of clients (including IA recipients). There is a risk in seeking to serve longer-term IA recipients that many will lack sufficient motivation even to reach the point of registering for services at an ESC. Anecdotally, at the time of project launch in 2012, ESCs were indeed reporting very low

levels of IA client participation per month. For MI to reach these clients, it needed to be introduced earlier in the process.

The project therefore sought to train two groups in the use of MI:

- EP-EAWs who specialized in constructing employment plans for employment-obligated IA recipients and who also monitored their compliance.
- Case managers at ESCs who assist eligible clients in accessing appropriate employment supports and services and accessing employment opportunities.

While both groups deal with long-term assistance clients making the transition from unemployment to employment, case managers do not have the capacity that EP-EAWs have actively to identify and contact long-term IA recipients. Normally, a case manager would need to wait for such a client to present independently at the ESC's reception, which many under-motivated clients could not be expected to do. Since EP-EAWs have the capacity to identify and contact long-term IA recipients and could be trained to use MI to help motivate clients to a stage where they will present at the ESC, the project sought to increase the flow of IA recipients to ESCs by providing MI training to EP-EAWs as well as ESC case managers.

If MI worked as expected, clients would need MI as part of their initial discussions about work (typically with the EP-EAWs) to address their ambivalence towards employment and overcome the barriers and challenges holding them back from seeking and securing gainful employment. Since this journey towards employment would likely establish the need for additional employment services not directly available at EIA offices, ESC case managers would then be involved in the process and they would require the ability to use MI as well. In theory then, MI would increase motivation to seek employment among IA clients and their demand for employment services.²

² At the time of the project start, the number of income assistance recipients referred to and actually seeking ESC case management in the project sites was very low. Anecdotally, they numbered in single digits per month, and were thus too few to consider a test of MI solely among those recipients enrolling at ESCs.

3. Project design and timelines

a) Evaluation design: establishing a randomized trial to test the integration of MI into BC models of service delivery

A rigorous research design was used to assess the impact of two groups of workers including motivational interviewing in the employment-focused discussions they have with a program group of long-term IA clients. The design permits comparison of these clients' outcomes to those of a randomly assigned, statistically identical control group of IA clients who do not receive MI.

MIPP moved from design through development and into its operational phase over the three-month period July-September 2012. SRDC undertook discussions with the BC Ministry of Social Development (MSD) regional and local managers as well as the contractors who deliver employment services to IA clients via the ESCs. These revealed the need – discussed in the preceding section – for the project to engage EIA offices and their staff to participate actively in project delivery. The project client flow was designed to include two stages of MI delivery (at the EIA office and ESC). As a consequence SRDC trained three groups of workers to deliver services for this project:

In the EIA office:

- Face-to-face workers trained to enroll clients in the study
- EP-EAWs trained to use MI and to recruit participants

In the ESCs:

- Case managers trained to use MI

The discussions also revealed that the most suitable clients (among IA recipients) to receive MI would be long-term IA recipients. While the project intent had always been to work with IA recipients, the precise group had not been defined. Clients who were relatively new to IA were much less likely to be located at stages of change where MI would make a difference. Many returned to work quickly. Conversely, nearly all those on IA for more than a year faced motivational challenges returning to work, and rates of transition to employment among such long-term recipients were low. Furthermore, there were many more long-term clients than new applicants, which held the prospect for more rapid fulfillment of the sample size requirements. Therefore, the sample was drawn from a list of employment-obligated clients who had been on IA for 12 months or more. The EP-EAWs would be assigned to make initial contact and recruit existing IA clients from this list to become part of the study and receive referral to ESCs.³

³ Privacy of information policies would prevent an outside agency like SRDC making first contact with IA clients. Only after clients had agreed to share their personal information with SRDC, via the informed consent process, could SRDC make contact with them.

Recruited clients who wished to participate will be enrolled by front line face-to-face workers at the EIA office, who would administer the project consent, oversee baseline data collection and would randomly assign the clients to an MI-stream or a non-MI stream group (using an application provided by SRDC).

MI stream clients would receive one or more MI-based interviews with the MI-trained EP-EAW on site at the EIA office and would then be referred to the local ESC for case management by a MI-trained ESC case manager.

This design maximized the flow of IA clients coming into contact with MI-trained personnel and provided the opportunity for MI-stream clients to receive MI in both the ESC and EIA offices. Approximately 320 clients were sought. The project would administer a baseline survey and a 3-month follow-up survey to both MI-stream and non-MI stream clients in order to assist in the estimation of program impact.

b) Project delivery partners and roles

Several individuals and organizations were involved in the delivery of MIPP and the accompanying research activities:

- **SRDC research team members** were responsible for the planning and organization of MIPP and the accompanying research activities. Team members trained and supported those who worked directly with study participants. SRDC was responsible for the administration of the follow-up survey to study participants and its analysis alongside administrative and other data.
- **Empowering Change Inc.** provided training in MI to ESC case managers and EP-EAWs who worked with study participants assigned to the Program Group.
- **MSD face-to-face Workers** were the first in-person contact for clients who were invited to participate in MIPP. The face-to-face workers introduced clients to the MIPP research project, administered the Informed Consent Form and Baseline survey, and by using SRDC's online application, assigned the participants to the **MI-Stream** (Program Group) or **Non-MI Stream** (Control Group). Face-to-face workers referred the **Non-MI Stream** participants to the ESC and arranged the appointment time for **MI-Stream** participants to meet with an EP-EAW.
- **EP-EAWs** were responsible for contacting eligible IA clients and inviting them to participate in the MIPP research project. In addition to recruiting participants, EP-EAWs were the first contact for program group participants who practiced MI. Only clients who had been randomly assigned to the **MI-Stream (Program Group)** were referred to an EP-EAW to receive MI. EP-EAWs were responsible for conducting the first MI sessions with program group participants. As soon as the EP-EAW determined the client to be at the stage of change "preparation", i.e. ready to begin work towards finding employment, he or she referred the client to the appropriate ESC case manager.
- **ESC Reception Staff.** All IA clients who participated in the MIPP research project received a referral to one of two ESCs participating in the study. Clients residing in Maple Ridge and the surrounding area were referred to the Work BC ESC in Maple Ridge. Clients residing in Abbotsford and the surrounding area were referred to AbbotsfordWORKS ESC. It was the responsibility of the

ESC reception staff to ensure participants met with the appropriate case manager depending on their group assignment. Participants assigned to the **MI-Stream** worked with a case manager who was trained in MI. Participants assigned to the **Non-MI Stream** worked with a case manager who was not trained in MI.

- **ESC case managers** worked with all participants enrolled in the MIPP research project. Case managers who did not receive training in MI worked with participants assigned to the **Non-MI Stream**. Non-MI Stream participants received the range of services and treatment which they would typically receive when referred to an ESC. Case managers who received training in MI were responsible for using the approach when working with participants assigned to the **MI-Stream**. These case managers were also expected to administer a SOC assessment at the end of each session, and to use the participant's responses in combination with their own opinion to decide whether the participant had reached the stage ready to move on to the employment-focused activities available at the ESC. Case managers were expected to provide three pieces of information for project purposes: upload a scan of the assessment completed at the end of each MI session, record the occurrence of each session (both of these were entered in SRDC's online application) and also record any *additional* time they spent with Program group clients (due to the need to incorporate MI) for budget purposes.

A notable feature of this design is the separate flow of MI-stream clients and non-MI stream clients. The former must receive MI from an EP-EAW before they will receive referral to the local ESC. The non-MI stream clients receive referral immediately upon enrollment in the study. At the ESC, the case workers delivering services to the MI-stream clients are different from the case workers delivering services to the non-MI stream clients. These differences are bound up in the experimental design, since it was not possible to randomly assign the caseworkers to the training. At the outset, the MI trainer had warned SRDC that once a case worker was trained in MI, they would be very likely to use it whenever the need arose, since it is an approach that is hard to "turn on and off". This feature of MI prevented the same case workers working with both program and control group members.

The experimental design thus controls for receipt of MI but also combines with the treatment, a lower probability of ESC referral (since MI stream clients do not receive referral if they do not attend their first MI session) and assignment to specific individual caseworkers at each site. Thus it is impossible to rule out that the treatment effects observed are partly attributable to these differences in the experiences of the groups, and not the receipt of MI per se.

c) Training and system considerations

The optimal sites for the project were identified as the IA and ESC offices in two cities in BC's Fraser Valley: Maple Ridge and Abbotsford. The management of the EIA offices and ESCs in the two cities agreed to take part and SRDC sub-contracted the ESCs to make case managers available for MI training and delivery.

MI training for the project had four distinct stages:

- **Level One (three days):** in September 2012, designated staff learned the basics of implementing the approach in an employment counselling setting.

- Group coaching (12 hours spread over six weeks, ending 23 October 2012): staff began to use MI with existing clients and received coaching from the trainer and each other over the phone.
- Level Two (three days): staff learned more advanced applications and were trained in project procedures on October 24-26, 2012.
- One-on-one coaching (3 hours per month for 3 months): from November 2012 through to February 2013, trainers listened to excerpts of motivational interviews and provided advice to counsellors to fine tune the delivery, in one-to-one telephone sessions.

To conform with the research requirements of the pilot project, not all case managers were trained in MI. By training some and not others, the project was able to create pathways – or “streams” – from the EIA office to the ESC for IA recipients that would either include staff who used MI (“the MI stream”) and that would not include staff who used MI (“the non-MI stream”).⁴ Figure 2 illustrates how MI was integrated into client interactions for those clients assigned to the MI-stream in the study, and how MI was bypassed for those assigned to the Non-MI stream. In this way the project simulated the effect of having MI-trained staff dealing with IA recipients making the transition towards employment, while creating a valid counterfactual experience among equivalent clients who were also referred from EIA offices to ESCs, but did not receive MI to encourage them to do so.

SRDC lodged its sample selection and outcome data requests with the Ministry of Social Development in September 2012. Following a privacy impact assessment, the project was approved the following month, ensuring that the sample could be contacted and the outcome data could be released.

Sample recruitment was first undertaken by EP-EAWs at each city’s EIA office. EP-EAWs phoned long-term and single parent IA clients on a list provided by the Ministry of Social Development. The client flow is shown in Figure 2. Interested clients were invited in to the office to sign up to the study by completing the project consent and baseline survey, prior to random assignment.

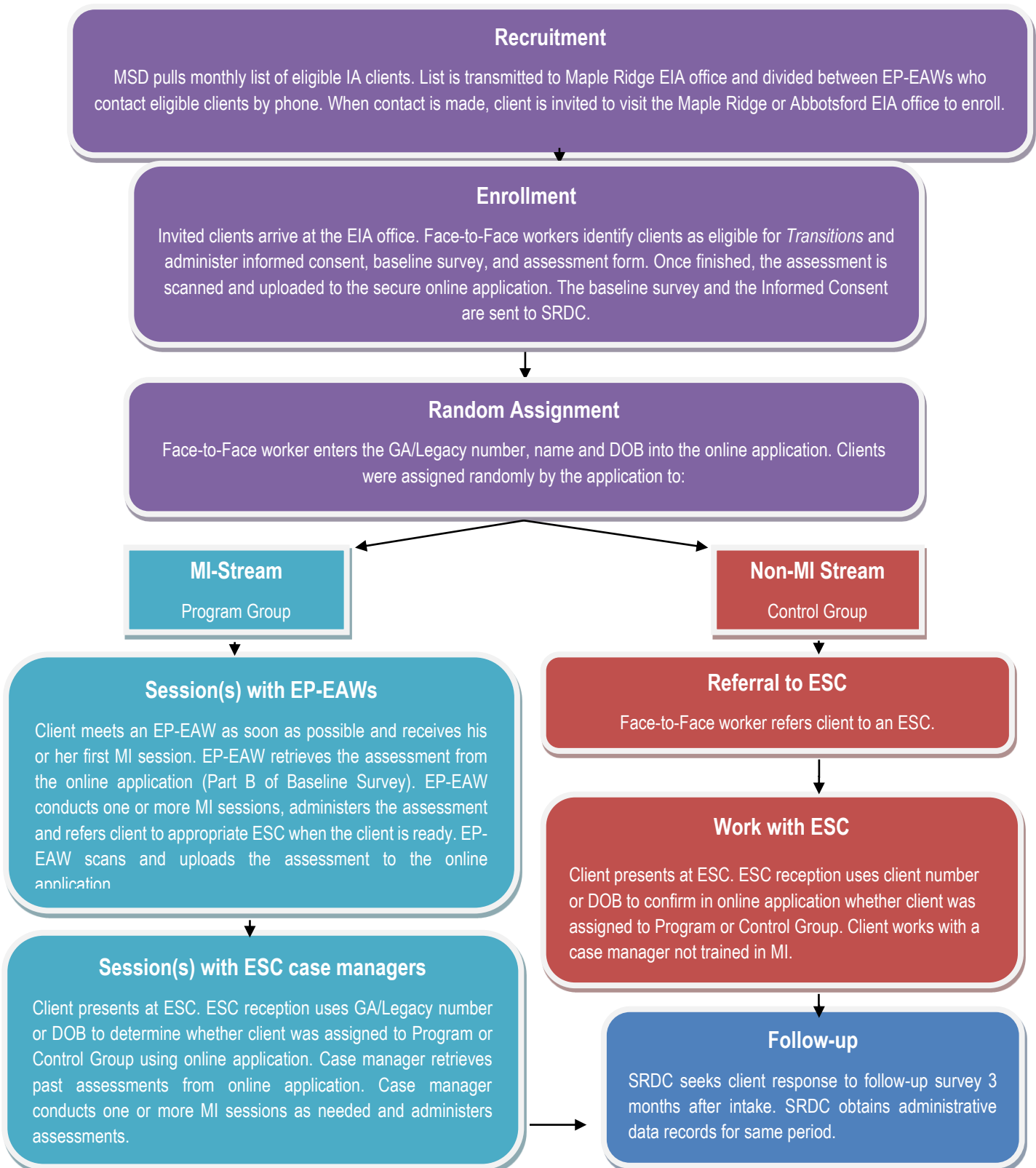
⁴ The MI trainer confirmed early in the project that it would be extremely difficult for a case manager trained in MI not to use it. In order to ensure that study control group members did not inadvertently receive MI, therefore, some case managers were not trained in MI. Similarly, the design precluded clients in the control group from having extended interviews with MI-trained EP-EAWs.

d) Project timelines and client flow

Table 1 Duration and timelines

Date	Activity	Responsibility
September 19-21, 2012	Level 1 MI Training for EP-EAWs and case managers	Empowering Change Inc.
October 24-26, 2012	Level 2 MI Training for EP-EAWs and case managers	Empowering Change Inc.
November 1, 2012	Participant-enrollment training for face-to-face Workers	SRDC
November 5, 2012	MIPP project begins recruitment	
November 5, 2012 – January 31, 2013	Participant Recruitment	EP-EAWs
	Participant Enrollment:	Face-to-face workers
	Informed Consent	SRDC (support)
	Baseline Survey	
November 5, 2012 - March 29, 2013	Random Assignment	
	Delivery of <i>Transitions</i> intervention to project participants	ESC reception
		EP-EAWs
		ESC case managers
February 7, 2013		SRDC (support)
February 7, 2013	Follow-up survey administration training with Face-to-Face workers	SRDC
February 7-March 29	Follow-up survey with participants	SRDC
March 29, 2013	Last MI sessions delivered to MIPP participants	EP-EAWs
		ESC case managers
June 14, 2013	Follow-up Survey closes for MIPP participants	

Figure 2 Client flow



4. Implementation of MIPP

a) Research and assessment tools

A number of scales rooted in the SOC model have been developed to assess the stage of change at which individuals are located. Many of these scales have been adapted from the University of Rhode Island Change Assessment scale (URICA; McConaughy, DiClemente, Prochaska, & Velicer, 1989) to address specific target behaviours such as readiness to change drug use, alcohol use, job situation, etc. SRDC assessed many of these scales in terms of their ability to support the project's assessment needs. The results are summarized in Tables A1 and A2 in Appendix 1.

The SOC model posits that change can be conceptualized as “distinct” stages of change. However, the main concern emerging from SRDC's assessment was the inability of the different tools to represent the distinct/discrete stages of change hypothesized in the model. Observations on a few of the scales are included here for illustrative purposes. According to Swibaker (personal communication, June 21, 2012), the measure of SOC derived from the Work Readiness Assessment (WRA) URICA should really be considered a *continuum* and a person should not be labeled as lying within a specific stage. Significant intercorrelations among the subscales of the URICA Stages of Change Readiness and Treatment Eagerness Scale and the Readiness to Change Questionnaire also suggest that the URICA may fail to capture the discrete, qualitatively distinct stages required by the SOC model (Sutton, 2001). This is the case also with the Lam Assessment on Stages of Employment Readiness (Lam et al., 2010). Participants completing the URICA can have mixed responses to items measuring a specific stage, and could conceivably score high on some or all of the subscales. Categories of readiness of the URICA-Vocational Counseling scale are not supported by cluster analyses (see Gervery, 2010). Together, these findings lead to the conclusion that further development and refinement are required, applied to the scales, or to the SOC model or to both.

For practical purposes, MIPP has sought to build upon lessons learned from the Opportunities for Employment (OFE) study, since this study was the most similar to MIPP in population and program intent. In the OFE study, research and input from the MI Facilitators led to the cut-off scores used for the study to be refined. Over the course of the three years of that project, confidence grew in the chosen cut-off scores, but the cut-off was chosen to designate a participant as “Work Ready” rather than at a specific stage (Swibaker, personal communication, June 21, 2012).

While practitioners' input points to the pre-contemplation stage as an independent stage, the other stages of change seem more accurately to represent a continuum. This distinction is important because it affects the way items of a scale should be conceptualized and scored.

Another common issue affecting all scales is social desirability. Participants will not likely answer pre-contemplation items honestly for fear of losing their IA benefits.

For the MIPP research study, SRDC adopted two different *pre- and post-measures for research purposes* that could be compared against each other to help evaluate convergent and concurrent validity of the tools. Furthermore, SRDC sought replacement of the pre-contemplation items with constructs that were more indirectly related to this stage (e.g., predictors of the pre-contemplation stage). However,

only one measure (the modified WRA URICA scale) was recommended for use in practitioners' field assessments during the program delivery, for practical and operational reasons.

URICA Scales

In order to treat change as a **continuum**, the URICA items were reworded to facilitate interpretation of the composite score. With the original WRA URICA, a client could score low on contemplation either because s/he was actively changing his "job situation" or because s/he didn't recognize that s/he had a problem. This affects the validity and interpretation of the composite scores because the composite scores are obtained by adding the contemplation item scores to the preparation item scores. In theory, to obtain the highest readiness score, an individual would have to score high on both the contemplation and preparation/action stages. Items were reworded so that a client who scored high on the most advanced stage (preparation/action) would also score high on the previous middle stage (contemplation), but low on the pre-contemplation stage. The SRDC version of the short scale (3 items per subscale) attempted to address this issue and the social desirability bias.

To treat change as **discrete stages** within the current URICA scales, the only logical way to analyze the data would be with a cluster analysis to classify the participants into homogenous groups according to the three different stages of work readiness (e.g., Lam et al., 2010; Mannock, 2004). However, given the nature of cluster analyses (i.e., post-hoc analyses on the sampled population), this approach could not be used by front line staff to categorize clients into different stages of change.

The main study thus used a modified version of the URICA (based on the Stages of Change Model: i.e., with pre-contemplation, contemplation, preparation and action phases). SRDC modified and shortened the URICA in collaboration with the motivational interviewing trainer and validation tests (prior to study recruitment) undertaken by counselors working in ESCs. The goal was to develop a scale that would limit the social desirability bias for participants in the "pre-contemplation phase" and would be easy for the targeted clientele to respond to, in particular those with low levels of literacy. It appears in Table 2.

Self-Determination Theory (SDT) approach to assessing motivation

SRDC also created two short scales based on Self-determination Theory (SDT; Deci & Ryan, 2000) and the Zucker 3-point Work Readiness Scale (Table 3). SDT is a theory on human motivation, which posits that individuals are more likely to engage in behaviour that satisfies the three fundamental psychological needs of autonomy, competence and relatedness. This measure is designed to capture satisfaction of these needs as well as effort. The first scale assesses need satisfaction, that is, how the social context supports the client's fundamental needs for autonomy, competence and relatedness. The second scale assesses the level of self-determined motivation with respect to working. These types of scales have been extensively used in research and they have been useful to predict a number of outcomes. SRDC included these scales to support validation of the other scales.

Table 2 Modified URICA used in MIPP⁵

- I've been thinking about the kind of work I want to do.
- I don't think I have what it takes to find a job that is right for me.
- I've been thinking about ways of getting a job that's right for me.
- My job search includes applying for work.
- I am really working hard to find a job as soon as possible.
- I don't believe I will be able to find a job I enjoy.
- I've been thinking about my employment options.
- I feel like I am being forced to work.
- I am actively doing something every day to find a job.

Table 3 Scales based on Self-determination Theory (SDT) and Work Readiness Scale

- Why are you searching for a job?
- Because I know I really should be searching for a job.
- Because working is what I really want to do.
- Because searching for a job is expected of me.
- Because I think working would be satisfying.
- I'm searching for a job, but given my situation, I don't really think that working would be worthwhile for me.
- Because it is important for me to work.
- How important is it for you to find a job right now?
- How confident are you that you could find a job that is right for you right now?
- How much support are you getting from your friends or family to find a job right now?
- To what extent do you feel that searching for a job is your choice?
- How much effort have you made in searching for a job in the last week?

⁵ The OFE study version of the modified URICA used these 12 items:

1. I think I might be ready for a change in my job situation.
2. It might be worthwhile to work on improving my job situation.
3. There's no problem with my job situation. It doesn't make much sense for me to be here.
4. I am finally doing some work to improve on my job situation.
5. I've been thinking that I might want to change something about my job situation.
6. I would rather spend my time somewhere else because I don't feel I need to improve my job situation.
7. I guess I have faults, but there's nothing regarding my job situation that I really need to change.
8. I am really working hard to improve my job situation.
9. I have a problem with my job situation and I really think I should work at it.
10. Anyone can talk about changing, but I'm actually doing something about my job situation.
11. I am actively working to improve my job situation.
12. I would rather cope with my present job situation than try to change it.

b) Training and systems development

Training in MI

The use of MI with study program group member participants was central to the fidelity of the study. However, the MI approach is a skill that is developed over time; training must be delivered by a certified MI trainer. Staff who would be working one-on-one with study participants received extensive training in MI, delivered over the course of two workshops in a 6-week period. Trainees received their introduction to MI in the Level 1 workshop. This 3-day in-person intensive workshop introduced trainees to the MI approach, background, theory and application. Over the course of the three days, trainees learned MI skills and began to use the skills in role playing exercises. In the five weeks that followed the Level 1 workshop, trainees participated in 12 hours of group coaching by phone. Each two-hour group coaching session was led by one MI trainer and included no more than six trainees. During the five weeks trainees were also expected to practice using MI outside of the coaching sessions. After the 5-week coaching period, trainees returned for the advanced in-person 3-day MI Level 2 workshop. The Level 2 workshop helped to refine trainees understanding and use of MI. Following the Level 2 workshop, trainees received 9 to 12 hours of *individual* coaching sessions with a MI trainer over the phone.

Level 1 and Level 2 training in Motivational Interviewing took place in the fall of 2012 (Table 4). Six EP-EAWs from the Ministry of Social Development attended as well as their direct supervisor. One EP-EAW withdrew from the training shortly after. One EP-EAW did not attend the trainings, but had received MI training previously and part way through the project she began working as part of the project team as well – conducting MI sessions with clients when the usual EP-EAW responsible was not available.

Seven case managers from 2 ESCs attended the training. One case manager from Maple Ridge withdrew from the training part way through, and another case manager from the same office changed position and so did not complete the training. Two case manager s from Abbotsford withdrew from the training after Level 1 – both were relatively new to their case manager positions and had difficulty managing learning MI alongside their other responsibilities.

Table 4 MI training session schedule

Training	Date	Duration	Location
Level 1 MI workshop	September 19-21	8 hours per day	Training Group at Douglas College Maple Ridge, BC
Level 1 Group Coaching	September 24-October 23	12 hours total	Telephone
Level 2 MI workshop	October 24-26	8 hours per day	Training Group at Douglas College Maple Ridge, BC
Level 2 Individual Coaching	November – January	9 hours total	Telephone

SRDC developed an online application for MIPP which collected data on participants and randomly assigned them either to the MI-Stream (Program Group) and Non-MI Stream (Control Group). The online application also served as a reference point for those involved in the delivery of the program to check the project status of a client and review completed assessments. Depending on the roles and responsibilities of the individual using the application they had access to different components of the application. SRDC provided instructions on when and how to use the application to each staff group in training sessions in late October and early November 2012 as well as in a procedures manual. Each EP-EAW, face-to-face worker, ESC reception or ESC case manager set up a personal account on the application in order to access the functions of the application.

The face-to-face worker would be the first to use the application, creating a record for each new project participant. The worker automatically obtains the randomly assigned program status from the application. The worker then attaches to program group members' client record a scan of the completed employment assessments from the baseline survey. Later on, EP-EAWs and ESC case managers who have an appointment with the same client for MI can view past assessments from the application. At the end of their appointments they also upload scans of their own assessments to the application for later use.

EP-EAWs, ESC reception and ESC case managers all use the application to confirm participants' program or control group status. Since both program and control group members are referred to the ESC, the ESC reception needs to screen each arriving IA recipient to confirm (a) whether he or she is part of the MIPP research project and if so (b) the group (program or control) he or she is assigned to. Program group members must be referred to a case manager trained in MI. Control group members must be referred to a case manager not trained in MI. The case managers trained in MI should also confirm this status when meeting a new client (and in the case of program group members, review previous assessments and upload their own) using the application.

c) Monitoring and ongoing support

Program delivery began in early November 2012 and ran through to March 2013. SRDC obtained periodic updates on progress via the managers of the EIA offices and ESCs and also monitored progress on recruitment via the incoming flow of survey and consent forms face-to-face workers collected and forwarded weekly. SRDC responded to urgent issues arising for delivery staff or clients by telephone, including support via a toll-free line for project participants.

d) Research data collection

Surveys

All participants were required to complete the baseline survey in order to join the study. Questions covered basic demographic information, job search and employment history, health and well being and a battery of employment readiness assessments including the modified URICA to be used in assessing a client's stage of change. All participants were followed up three months later to complete the follow-up survey. Questions again covered changes in demographic status, job search and employment history, health and well being and the same battery of employment readiness assessments including the

modified URICA. Both were paper instruments, although a telephone interview was offered as an alternative means to complete the follow up. Participants received \$20 for completing the baseline survey and \$40 for completing the follow up.⁶ The response rate for the follow up was 71 per cent (55 people in each of the program and control groups), which is unusually high for long-term IA recipients, who very often lack permanent telephone or email communications and can move residence frequently.

Administrative data

In joining the study, participants consented to the release of data from administrative records. The information would cover up to 12 months of subsequent participation in employment services and supports and IA claims. It also included name and other contact information, to assist with follow-up survey contact.

Program delivery data

Staff from the Ministry of Social Development and the Maple Ridge and Abbotsford ESC were trained to use an online application developed by SRDC to assign participants to experimental groups and to capture key data during program delivery. They were trained to upload scans of any URICA assessment forms administered as part of MI interviews to the application. These scanned forms were coded and included as indicators of program participation in later analysis.

Interviews with pilot site staff

SRDC observed all six days of training workshops Empowering Change Inc. conducted with staff from the Ministry of Social Development and the Maple Ridge and Abbotsford ESC and gathered informal feedback on program operations from the trainees during the five months of program delivery that followed. More formally, interviews with the seven staff from the Ministry and the ESCs most involved in MIPP delivery were conducted in the spring of 2013, following the close of the follow-up survey for participants. The interviews took place by telephone and lasted approximately 20 to 30 minutes. These interviews provided an opportunity for those involved in the delivery of MIPP to reflect upon their experiences and to provide their understanding of the program's implementation. The interviews also provided a means for gathering feedback on how to improve the training of staff in MI and the delivery of the program. Qualitative data gathered from the interviews were coded and analyzed using qualitative analysis software (NVivo10).

e) Participant recruitment

Although the target had been to recruit 320 clients, persistent recruitment activity secured just under half (48 per cent) of this number (155). The slower rate was partly due to the shorter time period available for recruitment but also limited capacity of EP-EAWs to include project recruitment alongside

⁶ The incentive process was structured to maximize the response to the follow up survey among a recognized hard-to-contact group. Payment of the initial smaller incentive for completing the baseline survey would reassure participants that the larger payment for the second survey would be made. Both program and control group members received the incentive for completing the survey, which means the payments are unlikely to have biased the impact results.

their other commitments and a lower proportion of attempted contacts than forecast resulting in study sign up. Contact information on the list of potentially-eligible long-term IA clients provided by the Ministry was not always up to date – prompting SRDC to add a mailed letter to the recruitment exercise to reach those not contactable by phone. A higher proportion of clients than originally anticipated were already clients of the ESC. Such clients, who already had a designated ESC case manager, could not be recruited into the project. Recruitment was extended into January, but SRDC's funding from HRSDC expired in March 2013, which required recruitment to be curtailed in January 2013, because SRDC needed to administer a follow-up survey three months after recruitment to each recruited participant. SRDC's attempts to secure funding to continue recruitment past January 2013 were not successful. The completed sample size was considerably smaller than researchers had planned, and proved too small to allow for subgroup analysis or detailed analysis of the performance of different scales. Nonetheless, the sample size was sufficient for an analysis of impacts of MI (as implemented) on key outcomes (Chapter 5).

f) Participant characteristics

By design, participants were selected because they were long-term recipients of IA. The Ministry of Social Development had classified most (72.4 per cent of the program group and 75.6 per cent of the control group) of the project participants as long-term “employable” while the remainder were classified as single parents (Table 5). The demographic profile of the sample was consistent with these classifications: slightly over half were women, only a few were married or in common law relationships, and about two thirds had no children. More than two thirds of participants were under the age of 45 years.

Table 5 Participant characteristics at baseline

	Control Group Mean (%)	Program Group Mean (%)	Difference	Standard Error
Gender				
Male	47.4	44.7	-2.7	(5.7)
Female	52.6	55.3	2.7	(5.7)
Age				
15 to 24	11.5	10.5	-1.0	(3.6)
25 to 34	19.2	22.4	3.1	(4.6)
35 to 44	35.9	31.6	-4.3	(5.4)
45 to 54	20.5	25.0	4.5	(4.8)
55 to 64	10.3	7.9	-2.4	(3.3)
Income Assistance Record Type				
Long-term employable	75.6	72.4	-3.3	(5.0)
Single parent	24.4	27.6	3.3	(5.0)
Marital Status				
Married or common law	3.9	8.0	4.1	(2.7)
Single, divorced, separated, or widowed	96.1	92.0	-4.1	(2.7)

	Control Group Mean (%)	Program Group Mean (%)	Difference	Standard Error
Household Size				
Living Alone	19.7	25.3	5.6	(4.8)
2 people	46.1	42.7	-3.4	(5.7)
3 or 4 people	23.7	14.7	-9.0	(4.5)
5 or more people	10.5	17.3	6.8	(4.0)
Number of Children				
No child	65.8	62.7	-3.1	(5.5)
1 child	18.4	22.7	4.2	(4.7)
2 or more children	15.8	14.7	-1.1	(4.1)
Immigrant Status				
Born in Canada	90.9	86.8	-4.1	(3.6)
Immigrant	9.1	13.2	4.1	(3.6)
Aboriginal Status				
Not an aboriginal	84.0	80.6	-3.4	(4.4)
Aboriginal	16.0	19.4	3.4	(4.4)
Highest Level of Education				
Elementary school or below	13.7	10.7	-3.0	(3.8)
Some secondary school	42.5	48.0	5.5	(5.9)
High school diploma	23.3	21.3	-2.0	(4.9)
Trade, college, or university degree	20.5	20.0	-0.5	(4.7)

Sources: MIPP Baseline Survey and Income Assistance Administrative File.

Notes: There are 78 and 76 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

Participants reported low education levels: over half did not complete high school while only one fifth had a post-secondary credential. A relatively high proportion of the sample reported themselves as Aboriginal (19.4 per cent of the program group, 16.0 per cent of the control group) but the proportion who were immigrants was similar to the community as a whole (13.2 per cent of the program group, 9.1 per cent of the control group). Although it is not shown in Table 5, the baseline survey data indicate that all immigrants arrived in Canada more than 5 years before joining the project.

Perhaps surprisingly, most participants' prior employment and learning experiences did not indicate significant detachment from the labour market. However, issues encountered in seeking employment were diverse (Table 6). Most did not identify a barrier in seeking employment (67.1 per cent of the program group and 74.4 per cent of the control group). For those who identified a barrier, it was typically related to a drug problem or criminal record. Over half had worked in the 3 years prior to joining MIPP. Many separated from their last job involuntarily because of company relocation, closure,

seasonality, being laid off or due to illness, or disability. Most (over 70 per cent in both groups) had worked full-time in the last job. Many had worked or studied for more than 18 of the previous 36 months.

Almost all participants were receiving income assistance benefit in the month prior to the program (Table 7). On average, the amount of benefit received in the month prior to program participation was about \$1,000. Not many clients received case management services (6.6 per cent of the program group, 3.8 per cent of the control group), employment services (5.3 per cent of the program group, 2.6 per cent of the control group), or workshops (6.6 per cent of the program group, 2.6 per cent of the control group) prior to the program. A few participants had earned income benefit deductions prior to the program which indicated employment. This is consistent with the work status reported by participants in the baseline survey.

Tables 5, 6, and 7 indicate some minor statistical differences between the program and control groups. The differences are, however, within the expectations of chance following random assignment. Analysts can expect one in ten differences that arise due to chance to be found significant at the 10 per cent level and one in twenty differences that arise due to chance to be found significant at the 5 per cent level. There is no evidence to suggest that the randomly-assigned experimental groups are systematically different from one another. SRDC has conducted checks to ensure that any differences in outcomes cited as impacts of the program in chapter 5 have no relationship to pre-existing minor differences between program and control groups.

Table 6 Prior employment related characteristics and learning activities

	Control Group Mean (%)	Program Group Mean (%)	Difference	Standard Error
Number of identified employment barriers				
No barrier	74.4	67.1	-7.3	(5.2)
Had one or more barriers	25.6	32.9	7.3	(5.2)
Had multiple barriers	10.3	17.1	6.8	(3.9)
Type of employment barriers				
Discrimination (gender or race)	9.0	6.6	-2.4	(3.1)
Cognitive and non-cognitive skills	15.4	9.2	-6.2	(3.7)
Drug problem	12.2	18.4	6.3	(4.2)
Criminal record	14.9	19.7	4.9	(4.4)
Work status at baseline				
Working part-time	2.6	2.8	0.1	(1.9)
Starting to work soon	0.0	6.9	6.9 **	(2.0)
Not working	97.4	90.3	-7.1 *	(2.7)
Years since last work				
0 year	24.3	16.7	-7.7	(6.7)
1 year	18.9	27.8	8.9	(7.0)

	Control Group Mean (%)	Program Group Mean (%)	Difference	Standard Error
2 years	24.3	11.1	-13.2	(6.3)
3 to 4 years	21.6	33.3	11.7	(7.4)
5 or more years	10.8	11.1	0.3	(5.2)
Reason of Last Job Separation				
Illness or disability	20.3	26.5	6.2	(4.9)
Caring family, school, another job, moved or dissatisfaction	17.6	17.6	0.1	(4.5)
Company moved, closed, seasonal job, laid off, labour dispute, dismissal or contract end	45.9	30.9	-15.1 *	(5.6)
Others	16.2	25.0	8.8	(4.7)
Usual Weekly Work Hours of Last Job				
40 hours or more	56.1	58.6	2.6	(6.1)
30 to 39 hours	22.7	13.8	-8.9	(4.8)
20 to 29 hours	10.6	12.1	1.5	(3.9)
10 to 19 hours	10.6	8.6	-2.0	(3.7)
1 to 9 hours	0.0	6.9	6.9 **	(2.2)
Industry of Last Job				
Construction	18.7	27.5	8.9	(4.9)
Manufacturing and Transportation	9.3	14.5	5.2	(3.7)
Hospitality	29.3	18.8	-10.5	(5.0)
Retail Sales	13.3	11.6	-1.7	(3.8)
Others	29.3	27.5	-1.8	(5.2)
Proportion of time worked or studied in the past 3 years				
18 months or more	58.5	66.2	7.7	(6.0)
Less than 18 months	41.5	33.8	-7.7	(6.0)
Studied in the past 3 years				
Did not study	66.7	73.0	6.3	(5.2)
Studied in a program	33.3	27.0	-6.3	(5.2)
Apprenticeship, Trade school, or college dip./cert.	6.6	8.3	1.8	(3.0)
PSE Degree	1.3	0.0	-1.3	(0.9)
Other program (including ESL)	23.7	18.1	-5.6	(4.7)

Source: MIPP Baseline Survey.

Notes: There are 78 and 76 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

Table 7 Prior Income Assistance Services and Supports Receipt

	Control Group Mean	Program Group Mean	Difference	Standard Error
Income Assistance Services Receipt in the Month Prior to MIPP (%)				
Case Management indicator	3.8	6.6	2.7	(2.5)
Employment Service Centre	2.6	5.3	2.7	(2.2)
Case Management Activities	3.8	6.6	2.7	(2.5)
Workshops	2.6	6.6	4.0	(2.4)
Short Term Orientation and Certificate Training	0.0	1.3	1.3	(0.9)
Occupational Trainings	0.0	0.0	0.0	(0.0)
Labour Market / Community Attachment	0.0	2.6	2.6	(1.3)
Financial Support/Related Activities/Tasks	1.3	0.0	-1.3	(0.9)
Placement	0.0	0.0	0.0	(0.0)
Referrals to other programs	0.0	0.0	0.0	(0.0)
Income Assistance Benefit Received				
Average Amount Prior to MIPP (\$)	1,018	969	-49	(60.0)
Percent Receipt Prior to MIPP (%)	98.7	100.0	1.3	(0.9)
Positive Work Support Allowance or Earned Income Deduction Prior to MIPP (%)				
Month before MIPP	2.6	2.6	0.1	(1.8)

Source: Income Assistance Administrative File

Notes: There are 78 and 76 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

g) Reactions to the adoption and use of MI

This section assesses the implementation of MIPP, the challenges that arose in the delivery model and how they were addressed along with what worked well, utilizing SRDC observations and the experiences and feedback from MSD and ESC staff responsible for the on-the-ground delivery of the program. The main impacts of the treatment, measured as changes in participants' behaviour in response to the treatment, appear in Chapter 5.

MI training

Overall trainees spoke very highly of their experience and reported high satisfaction with the training in MI provided. Several were grateful for being offered the opportunity to learn MI. Many reported that the MI training was eye-opening for them and that it gave them a new perspective to how to work with and engage clients.

First impressions and expectations

On the first day of the Level 1 workshop the majority of trainees did not fully comprehend either what MI was and/or the time commitment required for the training and project delivery.⁷ Some had an initial understanding of MI that turned out to be inaccurate. For example, one individual thought of MI as “engaging interviewing” whereby the interviewer motivates the client with “rah rah” talk. Soon after the start of training it became clear to the trainees that their preconceptions were inaccurate. While most reported that they did not have a clear understanding of what MI was when they first arrived for training, they also reported that they came to the training with few expectations and an open mind to learning a new technique or approach to working with clients. When returning five weeks later for the Level 2 workshop trainees reported having a better sense of what to expect and said they looked forward to developing their skills in MI and having the instructor answer questions that had arisen for them since Level 1.

Aspects of the training that trainees reported finding especially useful appear in the following text box. During Level 1 and 2 workshops the trainer used various strategies to convey key messages about the role of MI and illustrate how it could and should be used. The two training strategies that trainees reported most often as highly useful were the use of role play activities and viewing video examples of MI sessions.

⁷ The findings derive principally from seven individual interviews with MSD and ESC staff. All seven interviewees attended the Level 1 training workshop, and six attended Level 2 five weeks later.

The most useful aspects of MI training (according to interviews with trainees)

- Learning simple things, such as how the tone of your voice can make a big difference when asking a question (i.e. questions can be made more sincere, empathic, non-confrontational).
- Learning to identify what was important to the client, what the client's values were.
- How to identify "change talk" as clients speak and how to explore the issue(s) underlying the desire to change.
- Learning how to highlight for clients the discrepancies between their values and their behaviours.
- Watching videos and role play examples to visualize how an MI session would play out.
- Working with coaches to create strategies to personalize the language of MI so that it is more authentic.
- Becoming more aware of the importance of the client's personal choice in decision making.
- Understanding the importance and value of open ended questions and not restricting client's answers to specific categories or responses

Trainees reported that MI was a departure from their standard approach to working with clients, an approach that was long-established for many. As training progressed, most trainees reported that they were able to identify with the philosophy underlying MI. However, some withdrew from the training following the Level 1 workshop citing challenges in balancing learning a new approach to working with clients and their regular workload. Or they struggled to identify with the approach. Three EP-EAWs and two ESC case managers completed both Level 1 and 2 workshops and were responsible for conducting MI sessions with MIPP participants.

Suggestions for future training emerging from interviews with trainees

- Explore the use of Skype or other methods of video conferencing for individual coaching. One participant reported feeling less accountable to the coaching process when sessions were conducted over the phone. Including, seeing the facial expressions, replicating more of an in-person experience may help some trainees to connect better with coaches and feel more accountable to the training process.
- Provide more information for MI trainees in advance of the training about what MI is, and what to expect in the training and project delivery. Including:
 - Learning that MI can be challenging and daunting, but overcoming this apprehension is a normal part of the process.
 - The time commitment required, which is likely to mean trainees will need to invest personal time over a two to three month period while learning to use MI.
- Provide an opportunity for trainees to hear from the MI trainer or past MI trainees prior to the start of the Level 1 workshop to learn about what to expect (e.g. to hear warnings first hand that learning MI may take them out of their comfort zone, but over time will come more naturally).
- Spread the activities of each 3-day workshop over five days. Spreading the workshops over more days would reduce the time trainees spend away from their desks. Adding length would allow more time for the information from the training to sink in and be digested. [Although it may not prove as convenient for the trainer's schedule unless there were two groups to train].
- For an instructor or assistant instructor to spend more time with each group during the training session's role play activities. Some trainees reported feeling that they did not have enough of the instructor's time and so found it challenging to give feedback to others when they themselves were unsure of MI best practice. They suggested that they would have benefited more if they had received feedback consistently from someone skilled in MI.

Coaching

Each MI training workshop was followed by several weeks of group and individual telephone coaching sessions. The coaching offered an opportunity to practice MI and ask questions of skilled MI practitioners and trainers. Trainees all stated that they felt the coaching was integral to learning MI and the full allocation of coaching was needed. However, some found it challenging to meet the requirements to record interviews prior to training, and were not prepared for the amount of additional time that participation demanded. Both individual and group coaching were a part of the level 1 and 2 MI training. Views were mixed about the relative merits of individual versus group sessions. Some would have preferred to continue group coaching sessions instead of switching to the individual coaching sessions that were offered following the Level 2 workshop. Reasons for preferring group sessions included the ability to connect with others, to hear more examples of role playing and to work out challenges. One participant suggested that Skype or videoconferencing would have improved individual sessions: She reported feeling less accountable and disengaged when trying to connect with the coach one-on-one via the phone. Some trainees also found it a challenge to have a series of different coaches over time as this required building rapport and trust with each coach. Trainees felt very well supported by the coaches. Many reported that submitting recorded sessions on time was a challenge. For some, particularly case managers, it was difficult to find a client to practice MI with. Overall trainees felt well supported by the coaches in learning to use MI.

"As I practiced it, I had more questions that came up. The coaching sessions gave me the opportunity to ask the coach – "in this situation what should I do?" To me it was very important"

- MI Trainee

Overall satisfaction

Trainees who were interviewed spoke highly of the quality of training provided and of their satisfaction with the trainer and coaches. They reported how one beneficial side effect was that training brought together two groups of practitioners who worked with the same client group but who previously rarely interacted with one other. Both the MSD and ESC staff liked that they were able to attend training together, learn about each other's roles, and correct misperceptions each may have had about the other's work. The training thus opened lines of communication between the two groups and provided the opportunity to build new working relationships.

Trainees found the five week gap between the two workshops to be very helpful because it allowed the wealth of information provided in the Level 1 workshop to be digested. This gap was included to allow each Level 1 trainee to practice MI individually and in group coaching. When trainees returned for the Level 2 workshop they reported being better prepared and eager to learn more.

"It was an eye opener to be given those tools to figure out how to do my job in a different and better and more productive way."

MI Trainee

Learning how to use MI

After attending the Level 1 workshop, trainees quickly began work on learning how to apply what they learned in their practice. In the five weeks between the two workshops, trainees practiced using MI in group coaching sessions. During this time they also started to practice MI techniques with clients. Following the Level 2 workshop, trainees continued with individual coaching for several weeks, refining their use of MI. Learning to use MI effectively and with confidence required dedication and focus.

Challenges in learning to use MI

Learning MI posed challenges for the trainees. Mastering MI requires time and commitment. One of the primary challenges was that MI represented a stark departure from trainees' long-standing approach to working with clients, typically involving the provision of solutions to clients on how to "fix" the problems or issues they cited. The MI approach required instead that they had to ask the client for permission to provide such solutions, as suggestions. Another challenge was recognizing clients' "change talk" and another was remembering and implementing each of the features of MI in a natural-sounding conversation including becoming an active listener.

The project presented additional challenges beyond learning and using MI. Trainees also engaged to a much greater degree, and often for the first time, with clients who had mental health and addictions issues. Some trainees did not feel adequately prepared for this client group. To overcome this at least one trainee sought help from her coaches, and was referred to Miller and Rollnick's text on MI for guidance. Learning to use MI while at the same time navigating changes made to the Employment Program of BC and the Integrated Case Management System presented challenges for some, particularly those based at the ESCs.

Using MI in practice

It takes time and patience to master the use of MI. Individuals in project's MI training had only a short amount of time following their training before they were expected to start using MI with MIPP participants. During interviews, trainees were asked about their experiences in learning to use MI in practice and the struggles and barriers they encountered.

It also took time for trainees to feel comfortable with MI and to include the approach naturally in conversation. Because MI is an unfamiliar approach, client trust and buy-in had to be established which could take time. Trainees spoke of how MI put more responsibility on the client to overcome barriers and identify their own solutions. This is in contrast to the more common practices used by EP-EAWs or case managers where they provide the solutions (which the client might or might not yet be ready for). As well, MI is less directive than the approach that is commonly used by EP-EAWs and case managers.

"I think it's made me a better case manager because it's a mutual partnership between me and the client, it's not just me managing the whole show."

MI Trainee

EP-EAWs reported that they struggled at times with incorporating MI alongside regular work duties that would normally be completed during an appointment, such as completing an employment plan or discussing compliance issues. EP-EAWs also noted that they were viewed by clients as an authority figure because they can "hold the cheque". Trainees spoke of the challenges of overcoming this power imbalance in the relationship with clients in order to build rapport and use MI.

One participant added that making simple changes, such as changing tone of voice when asking a question, or asking how a client was doing could better support building rapport, trust and helping the client open up.

"There is a conflict between the ministry regulations and the MI principles. With MI the conversation is always client directed – what does the client want to do? And we don't push them. With the ministry you have to comply with a directive. "

MI Trainee

In regular day-to-day work with clients, EP-EAWs would only meet with a client for 20 minutes while case managers might meet initially with a client for an hour, but make subsequent meetings much shorter. A MI session demands more time, and more sessions may be needed than would normally occur. The additional sessions were possible because the MIPP research project allowed for it, but going forward both case managers and EP-EAWs noted that they would not be able to meet as often with clients and for as long as they did during the project - they would however use MI when possible in any meetings and conversations with clients.

The MIPP project was originally designed with 'employment' as the target for conversations in the MI sessions. However, many found treating mental health or addiction represented a more suitable initial target. The EP-EAWs in particular found they were unprepared to address these issues, and uncertain about

how to conduct an MI session with these clients, particularly if it was clear that it was too early to begin work on finding employment. Some also felt unprepared in knowing what resources and programs they could refer clients to.⁸

⁸ It is worth noting that all study participants were those the BC Ministry of Social Development had classified as "employment obligated."

A frustration experienced by trainees was the lack of follow-through by clients. EP-EAWs reported that clients left their first MI session motivated, however, when it came time for the client to attend their second or third session, or to contact the ESC to continue work with a case manager, many did not follow through. The lack of follow through resulted in frustration and discouragement among EP-EAWs, uncertain why the MI sessions did not result in any observed change in behaviour, and also produced lower than anticipated numbers of clients working with the ESCs.

Changes in clients

There was not a strong indication from trainees that MI was suited to any particular groups of clients. It was more challenging for some when a client was more firmly in a pre-contemplative stage, or had very strong opinions. The EP-EAWs and case managers interviewed by SRDC expressed satisfaction in seeing clients become more motivated to make changes in their lives, and were encouraged to see these

Trainees' advice for others learning MI (from SRDC interviews with trainees)

- Keep an open mind when attending training
- MI is a departure from practices which assistance workers and case managers typically adopt. Some trained to use MI may nevertheless find it difficult to adopt MI in day-to-day practice.
- Trust the training process. Learning MI can take more time than you anticipate, and the learning process can feel bumpy, awkward, or even uncomfortable at times.
- Building trust and rapport with clients, particularly long-term income assistance recipients, can take time. The first session with a client may not reach the point where MI can be used. It can take time to build the necessary trust and rapport. In other words, to be able to run a session where MI can be used effectively may require a preceding session just to build rapport and establish trust.
- Remember that the perspective the client shares is important. MI requires empathy. What the client has said should be acknowledged.
- Just as MI is a new approach for trainees, it is also a new experience for the client. Clients must be given time to work through their ambivalence to change. They should not be rushed.
- Instead of providing solutions to challenges and barriers that the client talks about, allow the client to identify his or her own solutions. One trainee put it this way: *"let the client drive the bus."*

changes. One found that single mothers in particular seemed to benefit from MI sessions because they did want to return to work, but needed motivation to overcome some barriers first.

"I've had people say 'I feel like I've just lost 10 pounds in here: that was fantastic'."

MI Trainee

MI gave clients more autonomy and choice over their own future – they would find themselves less often being told what they had to do by an EP-EAW or case manager. However, the relatively low number of clients who followed through with appointments after the first meeting meant that observing change in clients was difficult. Despite high rates of attrition among MIPP participants, EP-EAWs and case managers did incorporate MI into their regular work and reported observing positive changes in both MIPP participants and other clients they worked with. For example, other long term IA recipients who had previously accomplished little started to take small steps forward. Examples cited included going out to buy work boots and getting documents signed by doctors.

Experience with the MIPP research project

MIPP involved not only the delivery of the intervention to the target population, but also training several Ministry and ESC staff in motivational interviewing, recruiting participants, scheduling meetings, and administering the MIPP assessment tool, consent form and surveys. This section presents reflections, comments and feedback from EP-EAWs, case managers, and an ESC Manager and MSD manager about their experiences with the research project.

Participant recruitment

The MSD offices in Maple Ridge and Abbotsford were responsible in large part for the recruitment of eligible IA clients to participate in MIPP. Two EP-EAWs (one at each site) did the majority of recruitment work. Initially, recruitment was by telephone. In many cases, the EP-EAWs either found many of the phone numbers supplied from MSD records to be out of service or that clients could not be reached (e.g., due to having a pay-as-you-go phone). Several attempts to reach clients by phone were made. When EP-EAWs were unable to reach clients by phone, invitations were mailed. These invited clients to come to the MSD office to enroll in the program. Notices were also added to cheques that had been flagged in the office. In the last days of recruitment one of the EP-EAWs visited the office waiting room and talked with clients there to see whether they were eligible and interested in participating. Face-to-face workers at one office kept a list of eligible clients that they could check each time they served a client. A key difference between the two offices was that in Maple Ridge all face-to-face workers received training to administer the consent form and survey whereas in Abbotsford only a subset of four face-to-face workers received this training. This difference in training meant that, at any one time, all face-to-face workers in Maple Ridge would be familiar with MIPP while fewer than half would be familiar in Abbotsford.

Overall experience

Overall, those interviewed had a positive experience with MIPP research project. However, the project did present some challenges, including finding the time to fit in the work, such as learning how to use MI effectively, and having low numbers of participant's follow through with scheduled appointments. A key benefit of the project that many cited was that it brought to both ESC and MSD offices the opportunity to work with counterparts at the other local offices who they often did not get to meet but who worked with the same clients. Working on MIPP and training together helped to facilitate bonding between the groups and opened up lines of communication during the course of the project.

The work involved in learning MI and delivering the intervention was heavy at times, in particular for the EP-EAWs and case managers. One trainee reported that although she felt the work was worth it, she wished she had had more time to devote to all the activities involved. Both the time required to do the work, and the specific time in 2012 that the project launched proved challenging for many.⁹

MIPP assessment form

The assessment form was intended to be a tool for EP-EAWs and case managers to use to confirm the stage of change the client was in with respect to employment. Once a client was in or approaching the "action" stage, EP-EAWs would in theory refer the client to the ESC to see a MI-trained case manager. There was inconsistent use of the MIPP assessment form during the MI sessions. Some felt that the assessment form was not relevant to some sessions because employment was not the focus of the conversations, whereas others forgot about the assessment entirely citing that they got carried away in the conversation. Another trainee said she would get the client to complete the form, but she did not refer to it afterwards, which meant she did not use the assessment to confirm the stage the client had reached. This trainee also said she felt the assessment form did not fit well with the flow of the session. One trainee found that the scale used in some of the questions was difficult for clients to interpret (e.g., in questions where the scale starts with "not true of me"). EP-EAWs stated they infrequently used the tool and relied on their own assessment to what stage of change the client was in and when the client was ready to take action towards seeking employment. This infrequent use of the tool artificially depressed the project's quantitative estimates of MI delivery, which are based on upload of the completed instruments, in the next chapter.

⁹ The launch of *Transitions* coincided with recent changes made to the EPBC program and the Integrated Case Management System. Learning MI while learning to navigate the new system and the ICM was reportedly difficult at times. The two case managers mentioned that had the project been launched a year after changes to the system were made it would have been easier for them to put more time into learning MI.

Trainees' suggestions for program improvement (from SRDC interviews with trainees)

- Re-evaluate the assessment form to ensure it is easy for clients to understand and interpret the scales used. Review the role of the form in the MI process and consider alternative assessment tools.
- The EP-EAW should be required to call the ESC to book an appointment with the case manager while the IA client is in the office with them instead of putting the onus on the client to make the first contact with the ESC. Outside of the research project, this would help to ensure that a client who goes on their own to an ESC is assigned a MI trained case manager.
- Have more EP-EAWs (or others, such as Face-to-Face workers) help with the participant recruitment. EP-EAWs did recruitment, MI sessions and follow-up with clients and consequently struggled to find enough time to do all the tasks, plus their regular work. Ideally there would be staff dedicated to using this approach and they could do the required activities without also fitting in their regular work - this would allow them to focus more on learning how to use MI.
- ESC Managers and MSD managers should meet with staff to outline expectations about what would be asked of them in becoming involved in the delivery of MI. Preparation for the training comprised an email that included reading material as attachments. Managers felt many may not have read these thoroughly before becoming involved.
- More information about the potential composition of the targeted client group would help trainees prepare for conducting MI sessions with them. Many of the clients had mental health or addictions issues and staff were not as prepared as they felt they could have been (e.g. by becoming knowledgeable about supports and services, on how to conduct MI sessions with such clients, including focusing on targets other than employment from the outset).

5. Results

a) Client process, participation patterns, MI receipt and assessment outcomes

The program successfully enrolled and randomly assigned 154 participants. The client intake process included a baseline survey that included the initial URICA assessment. As shown in Table 8, all 78 control group and 76 program group participants completed the baseline survey, but 2 from each group did not complete the URICA assessment.

Table 8 MIPP activities

	Control Group Number	Program Group Number	Total Number of Participants
Number of people			
Completed baseline survey	78	76	154
Did not complete any URICA assessment	2	2	4
Completed URICA assessment at baseline	76	74	150
Number of days with URICA assessments			
Did not complete any URICA assessment	2	2	4
1 day	76	38	114
2 days	0	21	21
3 days	0	11	11
4 days	0	4	4
Number of weeks between the first and the last URICA assessment			
Did not complete any URICA assessment	2	2	4
1 week	76	43	119
2 weeks	0	5	5
3 weeks	0	4	4
4 weeks	0	4	4
5 weeks	0	0	0
6 weeks	0	3	3
7 weeks	0	2	2
8 weeks	0	1	1
9 weeks	0	0	0
10 weeks	0	4	4
11 weeks	0	3	3
12 or more weeks	0	5	5
Number of people answering the follow-up survey			
Responded	55	55	110
Did not respond	23	21	44

Sources: MIPP Baseline Survey, Assessment Records, and Follow-up Survey.

The uploading of URICA assessments is the only data source to quantify MIPP activities across all IA recipients. During MIPP training, staff were instructed to scan and upload each URICA assessment into the SRDC online application. However, some may not have consistently followed these instructions, leading to fewer recorded assessments than conducted. As a result, estimates based on records from these assessment uploads may underrepresent actual activity levels.

The results in Table 8 suggest that the intensity of motivational interviewing activities was relatively low with only half the program group participants completing the assessment on more than one occasion. Out of the 76 program group participants, only 36 (21+11+4 people, or 47 per cent of the sample) have more than one day's records in the assessment file. Unsurprisingly then, 43 people have only activities recorded within the first week of the initial assessment. The remaining participants have activity periods that varied from 2 weeks to 12 or more weeks.

The SRDC application recorded uploads of assessments more than once for roughly half the participants. This represents a lower-bound estimate for MI receipt, because the second and later uploads would occur at the end of motivational interviews where the case worker followed recommended procedures. Some case workers, however, did not use the formal assessments on every occasion and some omitted to upload completed assessments. However, repeat assessments represent the only available quantification of MI receipt. If as many as half those in the program group did not receive MI, this result pinpoints a challenge to any real-world implementation of MI for longer-term welfare recipients, which is ensuring clients receive the treatment. The impact results in Tables 10 through 18 compare the observed outcomes of the program group to the control group regardless of MI receipt. These are labelled "intention-to-treat" impact estimates for the target group (as is conventional in randomized trials) and do not represent estimates of "treatment-on-the-treated".

Table 9 presents all the assessment results at baseline. The URICA assessment and work readiness scale paint two different pictures of the stage of change reached by participants. Compared to the control group participants, it seems that in the work readiness measurement the program group participants leaned slightly towards being in the "pre-contemplation" stage (though the result is not statistically significant: 58.3 per cent program versus 48.0 per cent control). Yet in URICA score they leaned towards the contemplation stage (a result that is statistically significant: 37.5 per cent program versus 21.4 per cent control). The program group also contained a higher percentage of clients with negative (unweighted) self-determination scores than their control group counterparts, suggesting that self-determination to seek employment was less often present in the program group.¹⁰

¹⁰ Self determination theory differentiates types of behavioural regulation along a continuum of autonomous-controlled functioning. On the autonomous end of the spectrum is intrinsic motivation, which is the prototype of autonomous activity. On the other end of the spectrum is the concept of amotivation which represents no intention or motivation for a particular behavior. In between the two ends are behavior regulatory styles that are affected by extrinsic motivation. Extrinsically-motivated regulatory styles are more controlled than intrinsically-motivated activities, but these styles can be further differentiated based on the degree to which they have been internalized. In order, from the most to the least internalized, the four types of extrinsically-motivated behavioural regulation are integrated regulation, identified regulation, introjected regulation, and external regulation.

Table 9 Assessment outcomes at baseline

	Control Group Mean	Program Group Mean	Difference	Standard Error
URICA Assessment				
Average Score	29.5	27.0	-2.5	(2.1)
Pre-contemplation (%)	30.0	26.4	-3.6	(5.4)
Contemplation (%)	21.4	37.5	16.1 **	(5.4)
Preparation (%)	48.6	36.1	-12.5	(5.9)
Work Readiness Scale				
Pre-contemplation (%)	48.0	58.3	10.3	(5.8)
Contemplation (%)	36.5	27.8	-8.7	(5.4)
Preparation (%)	16.2	13.9	-2.3	(4.2)
Self Determination Scale (Weighted)				
Average Score	8.9	8.8	-0.1	(1.3)
Negative Score (%)	15.5	25.7	10.2	(4.8)
Zero or Positive Score (%)	84.5	74.3	-10.2	(4.8)
High Score – 12 points or more (%)	43.7	42.9	-0.8	(5.9)
Self Determination Scale (Unweighted)				
Average Score	3.7	3.8	0.1	(0.5)
Negative Score (%)	11.3	27.1	15.9 **	(4.6)
Zero or Positive Score (%)	88.7	72.9	-15.9 **	(4.6)
High Score – 12 points or more (%)	40.8	40.0	-0.8	(5.9)

Following the literature of self-determination/relative autonomy index (e.g. Levesque, Blais, and Hess, 2004; Guay, Mageau, and Vallerand, 2003), SRDC has constructed the self-determination index with respect to working using participant's level of agreement (7-point) on six items of self-regulation. Each item measures one of the six types of behavioural regulation. The three items closer to the autonomous end of the spectrum are given positive weight while the three items closer to the controlled end of the spectrum are given negative weight in the calculation of the index. Furthermore, the index was computed by assigning each item a weight that corresponds to each motivational construct's place on the self-determination continuum. i.e.

Weighted self-determination index = 3 x Intrinsic + 2 x Integrated + 1 x Identified – 1 x Introjected – 2 x External – 3 x Amotivation.

An alternative method of index calculation in the literature (e.g. Williams, Grow, Freedman, Ryan, & Deci, 1996) simply subtracts the sum of the controlled items from the sum the autonomous items. i.e.

Unweighted self-determination index = Intrinsic + Integrated + Identified – Introjected – External – Amotivation.

	Control Group Mean	Program Group Mean	Difference	Standard Error
Self Efficacy Scale				
Average Score (1-5)	2.9	2.9	0.1	(0.1)
Distribution of the score (%)				
No confidence (1 to 1.8)	9.3	13.2	3.9	(3.7)
Very little confidence (1.8 to 2.6)	30.7	25.0	-5.7	(5.2)
Moderate confidence (2.6 to 3.4)	30.7	30.9	0.2	(5.4)
Much confidence (3.4 to 4.2)	25.3	22.1	-3.3	(4.9)
Complete confidence (4.2 to 5)	4.0	8.8	4.8	(2.8)
Job Search Intensity Scale				
Average Score (1-5)	2.2	2.1	-0.1	(0.1)
Distribution of the intensity score				
Never (1 to 1.8)	45.3	49.3	4.0	(5.8)
1-2 times (1.8 to 2.6)	24.0	16.9	-7.1	(4.7)
3-4 times (2.6 to 3.4)	17.3	16.9	-0.4	(4.4)
5-6 times (3.4 to 4.2)	8.0	14.1	6.1	(3.6)
Over 6 times (4.2 to 5)	5.3	2.8	-2.5	(2.3)
Scale of Employment Constraints				
Average Score (1-5)	2.9	2.8	-0.1	(0.1)
Distribution of the constraint score				
No clarity (1 to 1.8)	7.3	7.3	0.0	(3.5)
Very little constraints (1.8 to 2.6)	29.1	40.0	10.9	(6.4)
Moderate constraints (2.6 to 3.4)	41.8	25.5	-16.4 *	(6.3)
Much constraints (3.4 to 4.2)	20.0	27.3	7.3	(5.8)
Complete constraints (4.2 to 5)	1.8	0.0	-1.8	(1.3)
Life Satisfaction Score				
Average Score (1-10)	5.9	5.3	-0.6	(0.3)
Distribution of the Life Satisfaction Score				
Very dissatisfied (1 to 3)	17.9	30.6	12.6 *	(4.8)
Dissatisfied (4 to 5)	30.8	27.8	-3.0	(5.2)
Satisfied (6 to 7)	29.5	22.2	-7.3	(5.0)
Very satisfied (8 to 10)	11.5	15.3	3.7	(3.9)

Source: MIPP Baseline Survey.

Notes: There are 78 and 76 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

The survey contained a battery of measures of employment readiness, attitudes and well-being and so when the differences in other scales such as job search self efficacy, job search clarity, job search intensity, employment constraints, and life satisfaction are taken into account, it does not seem as though program group participants were substantially different from those in the control group. The mean scores at baseline were very similar between the two groups. Most statistically-significant differences in the distribution between the two groups were in categories with either very high (over 80 per cent) or very low (lower than 20 per cent) proportions. When variation is at the tails of a distribution only, any observed differences can often be attributable to variation in a small sample. On balance, taken the scales together, if there was any difference between groups in pre-treatment disposition with respect to employment, it is more likely that participants assigned to the MI-stream were slightly less ready for change than participants in the non-MI stream.

Although it is hard to draw conclusions from a small sample, the different assessments resulting from different instruments suggest that the tools available for assessing participants' stage of change are not highly reliable and more work may be needed to develop assessment tools that prove reliable with respect to the use of MI in employment services.

b) Impacts on participant outcomes (data from administrative records)

Each participant's participation and survey data was linked to their records in supplied IA administrative files for the first three months of project participation. These data provide a reliable source of information for measuring participant outcomes in terms of any change in reliance on IA benefits or in usage of employment services. Tables 10 to 13 present the impacts of MIPP on income assistance in the 12 months following participation in MIPP.

Use of ESC Services

As shown in Table 10, the proportion of clients receiving ESC services, Case Management services, and workshops increased substantially during the program period (Months 0, 1, 2 and 3) compared to the month prior to the program (Table 7). MI had no statistically-significant impact on the use of various employment services during the program period. However, in the month immediately following the program period (Month 4), MI increased the incidence of using Short Term Orientation and Certificate Training by 5.3 percentage points. By the end of one year, there were 6.6 percentage points more program group participants who had received Short Term Orientation and Certificate Training than their control group counterparts. Although it was not a large impact in magnitude, the impact on cumulated usage of Short Term Orientation and Certificate Training was statistical significant.

Table 10 Impacts on income assistance services received - administrative records

	Control Group Mean	Program Group Mean	Difference	Standard Error
Income Assistance Services Receipt during MIPP (Months 0, 1, 2 and 3) (%)				
Employment Service Centre	29.5	28.9	-0.5	(5.2)
Case Management Activities	30.8	30.3	-0.5	(5.2)
Workshops	28.2	27.6	-0.6	(5.1)
Short Term Orientation and Certificate Training	1.3	5.3	4.0	(2.0)
Occupational Trainings	3.8	1.3	-2.5	(1.8)
Labour Martket / Community Attachment	2.6	3.9	1.4	(2.0)
Financial Supports Related Activities/Tasks	2.6	1.3	-1.2	(1.6)
Placement	1.3	2.6	1.3	(1.6)
Referrals to other programs	3.8	1.3	-2.5	(1.8)
Income Assistance Services Receipt Immediately After MIPP (Month 4) (%)				
Employment Service Centre	28.2	30.3	2.1	(5.2)
Case Management Activities	29.5	31.6	2.1	(5.2)
Workshops	26.9	28.9	2.0	(5.1)
Short Term Orientation and Certificate Training	1.3	6.6	5.3 *	(2.2)
Occupational Trainings	3.8	1.3	-2.5	(1.8)
Labour Martket / Community Attachment	2.6	3.9	1.4	(2.0)
Financial Supports Related Activities/Tasks	2.6	1.3	-1.2	(1.6)
Placement	1.3	2.6	1.3	(1.6)
Referrals to other programs	3.8	1.3	-2.5	(1.8)
Income Assistance Services Receipt from Month 0 to Month 12 (%)				
Employment Service Centre	42.3	44.7	2.4	(5.6)
Case Management Activities	43.6	46.1	2.5	(5.7)
Workshops	38.5	36.8	-1.6	(5.5)
Short Term Orientation and Certificate Training	1.3	7.9	6.6 **	(2.3)
Occupational Trainings	5.1	1.3	-3.8	(2.0)
Labour Martket / Community Attachment	2.6	5.3	2.7	(2.2)
Financial Supports Related Activities/Tasks	2.6	1.3	-1.2	(1.6)
Placement	1.3	2.6	1.3	(1.6)
Referrals to other programs	3.8	1.3	-2.5	(1.8)

Source: Income Assistance Administrative File

Notes: There are 78 and 76 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

The program model hypothesizes that being in the MI stream would lead to increases in ESC usage because more in the program group would have been motivated to act on their referral to the local ESC. As part of the program, both groups were to be referred to the ESC by Income Assistance workers,

control group members received this referral from face-to-face workers immediately upon completion of the baseline survey (Figure 2). Program group members were to receive this referral only after their EP-EAW judged them to have achieved the preparation stage of change during the course of their first or subsequent motivational interview. The theory was that more in the program group would thus have been motivated and prepared to act on their referral to the ESC. Yet there is no statistically significant differences in most service use (with the exception of short term orientation and certification training), implying that the theory on how integrating MI into the process might alter participant outcomes did not hold.

Possibly, MI stream clients who received MI may have been more motivated to visit the ESC, but their service take up may have been diluted by MI stream clients not reaching the point in motivational interviews where they received referrals to the local ESC. If the evidence in Table 8 on assessment uploads is taken to imply that the program group participated at relatively low rates in motivational interviews, then it could be that fewer members of the program group actually reached the stage where they received the referral. In that case, proportionately fewer would have been referred to ESCs than members of the control group. In this situation, MI might still produce an impact by supplying clients to the ESC who were more motivated or prepared to benefit from services (such as the short term orientation and certification training).

Changes in income assistance status

There were only a handful of cases closed during the program period of the MIPP and there was virtually no difference between the program and control groups at the time. The proportion of closed cases within the program group was slightly lower than that within the control group from Month 7 to Month 12, but these measured reductions were well within sampling errors and thus not statistically significant.

Table 11 Impacts on income assistance status - administrative records

	Control Group Mean	Program Group Mean	Difference	Standard Error
Percentage of Closed Cases in Each Month (%)				
Month 0	2.6	0.0	-2.6	(1.3)
Month 1	0.0	0.0	0.0	(0.0)
Month 2	1.3	2.6	1.3	(1.6)
Month 3	5.1	5.3	0.1	(2.5)
Month 4	9.0	7.9	-1.1	(3.2)
Month 5	10.3	14.5	4.2	(3.7)
Month 6	16.7	17.1	0.4	(4.3)
Month 7	21.8	18.4	-3.4	(4.6)
Month 8	23.1	17.1	-6.0	(4.6)
Month 9	24.4	15.8	-8.6	(4.5)
Month 10	26.9	17.1	-9.8	(4.7)
Month 11	25.6	21.1	-4.6	(4.8)
Month 12	26.9	19.7	-7.2	(4.8)

Source: Income Assistance Administrative File

Notes: There are 78 and 76 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

Income Assistance receipt and amounts

MIPP had no significant impact on benefit receipt and the amount of benefit received over the short term (Table 12). Three months after random assignment, the percentage receiving benefit had declined only by 2.7 percentage points, and the average amount received was reduced by only \$88. The average reduction in the cumulative benefit received for the program period was \$167. These measured reductions were well within sampling errors and thus not statistically significant.

Table 12 Impacts on income assistance benefit receipt – administrative records

	Control Group Mean	Program Group Mean	Difference	Standard Error
Average Amount of Benefits Received (\$)				
Month 0	984	946	-38	(57.0)
Month 1	967	968	0	(52.7)
Month 2	1,009	918	-91	(58.8)
Month 3	929	891	-38	(60.6)
Month 4	919	831	-88	(64.2)
Month 5	884	820	-64	(63.8)
Month 6	822	799	-23	(64.7)
Month 7	782	775	-7	(65.5)
Month 8	752	789	36	(67.9)
Month 9	764	788	24	(65.9)
Month 10	730	747	17	(65.6)
Month 11	765	750	-14	(69.3)
Month 12	745	764	19	(68.3)
Percentage Receiving Benefits (%)				
Month 0	98.7	100.0	1.3	(0.9)
Month 1	100.0	100.0	0.0	(0.0)
Month 2	98.7	97.4	-1.3	(1.6)
Month 3	97.4	94.7	-2.7	(2.2)
Month 4	92.3	92.1	-0.2	(3.1)
Month 5	89.7	86.8	-2.9	(3.7)
Month 6	84.6	82.9	-1.7	(4.2)
Month 7	78.2	81.6	3.4	(4.6)
Month 8	76.9	82.9	6.0	(4.6)
Month 9	75.6	84.2	8.6	(4.5)
Month 10	73.1	82.9	9.8	(4.7)
Month 11	74.4	78.9	4.6	(4.8)
Month 12	73.1	80.3	7.2	(4.8)
Average Cumulative Amount of Benefits Received Since Month 0 (\$)				
Month 3	3,890	3,723	-167	(210.4)
Month 6	6,516	6,174	-342	(365.3)
Month 9	8,814	8,526	-288	(522.1)
Month 12	11,054	10,786	-267	(692.7)

Source: Income Assistance Administrative File

Notes: There are 78 and 76 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

Similar to impacts seen on the proportions of closed cases, the proportion in receipt of income assistance benefit within the control group decreased slightly faster than that of the program after Month 7. However, the differences between the program and control groups were not statistically significant.

Reported employment in income assistance administrative records

The income assistance administrative data recorded the amount of work support allowance received by a client and the amount of earned income benefit deduction. This information can provide proxy indicators for employment.

The cumulative impacts of MI on the proportion of clients with reported employment are presented in Table 13. In the 12 months following the beginning of the program, a higher proportion of MI stream participants reported employment in income assistance administrative records than did the control group. The impacts were the largest from Month 6 to Month 8 at 8 percentage points, monthly differences which were statistically significant at 10 per cent level. The impacts decreased from Month 9 onwards when there was a surge of reported employment among control group participants.

Table 13 Impacts on reported employment – administrative records

	Control Group Mean	Program Group Mean	Difference	Standard Error
Positive Work Support Allowance or Earned Income Deduction Prior to MIPP (%)				
Month before MIPP	2.6	2.6	0.1	(1.8)
Had Received Work Support Allowance or Been Subjected to Earned Income Deduction Since MIPP (%)				
Month 0	2.6	5.3	2.7	(2.2)
Month 1	2.6	6.6	4.0	(2.4)
Month 2	3.8	7.9	4.0	(2.7)
Month 3	5.1	10.5	5.4	(3.0)
Month 4	5.1	11.8	6.7	(3.1)
Month 5	5.1	11.8	6.7	(3.1)
Month 6	5.1	13.2	8.0 *	(3.2)
Month 7	5.1	13.2	8.0 *	(3.2)
Month 8	5.1	13.2	8.0 *	(3.2)
Month 9	9.0	13.2	4.2	(3.6)
Month 10	10.3	14.5	4.2	(3.7)
Month 11	10.3	14.5	4.2	(3.7)
Month 12	10.3	14.5	4.2	(3.7)

Source: Income Assistance Administrative File

Notes: There are 78 and 76 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

c) Impacts on participant outcomes (data from follow-up survey data)

Employment-seeking activities

MIPP did not increase the intensity of employment seeking activities, and may have reduced them. These results come from the follow-up survey, which asked participants about the frequency with which they performed a number of different job search activities in the past 3 months, and from the job search intensity scale which was included in both the baseline and follow-up surveys. When asked at the time of follow-up survey, program group participants had conducted 0.8 fewer job search activities on average compared to their control group counterparts (Table 14). Similarly, scores on the job search intensity scale, measuring the intensity of search during the four weeks prior to the follow-up survey, were lower for program group members than for control group members (1.9 vs. 2.3). When job search intensity was measured in terms of change in intensity since the baseline observation (a more reliable indicator), still more in the program group reduced their intensity than in the control group, but this result was not statistically significant.

Table 14 Impacts on participant job search outcomes – follow-up survey

	Control Group Mean	Program Group Mean	Difference	Standard Error
Average Number of Job Search Activities at follow-up survey	2.7	1.9	-0.8 **	(0.3)
Job Search Intensity Scale				
Average Score (1-5)	2.3	1.9	-0.4 **	(0.1)
Distribution of the intensity score (%)				
Never (1 to 1.8)	38.2	49.1	10.9	(6.7)
1-2 times (1.8 to 2.6)	18.2	28.3	10.1	(5.7)
3-4 times (2.6 to 3.4)	29.1	15.1	-14.0 *	(5.6)
5-6 times (3.4 to 4.2)	9.1	7.5	-1.5	(3.8)
Over 6 times (4.2 to 5)	5.5	0.0	-5.5 *	(2.2)
Compared to Baseline				
Average score change	0.0	-0.2	-0.1	(0.1)
Improved (%)	44.2	32.0	-12.2	(6.8)
Regressed (%)	40.4	48.0	7.6	(6.9)
Remained the same (%)	15.4	20.0	4.6	(5.3)
Self Efficacy Scale				
Average Score (1-5)	3.2	2.9	-0.3	(0.1)
Distribution of the score (%)				
No confidence (1 to 1.8)	13.7	16.4	2.6	(5.1)
Very little confidence (1.8 to 2.6)	9.8	25.5	15.7 **	(5.3)
Moderate confidence (2.6 to 3.4)	27.5	25.5	-2.0	(6.2)
Much confidence (3.4 to 4.2)	33.3	23.6	-9.7	(6.3)
Complete confidence (4.2 to 5)	15.7	9.1	-6.6	(4.6)
Compared to Baseline				
Average score change	0.2	0.1	-0.2	(0.1)
Improved (%)	55.1	51.0	-4.1	(7.2)
Regressed (%)	28.6	47.1	18.5 *	(6.9)
Remained the same (%)	16.3	2.0	-14.4 **	(4.0)
Job Search Clarity Scale				
Average Score (1-5)	3.6	3.5	0.0	(0.1)
Distribution of the clarity score (%)				
No clarity (1 to 1.8)	6.0	3.8	-2.2	(3.1)
Very little clarity (1.8 to 2.6)	14.0	20.8	6.8	(5.4)
Moderate clarity (2.6 to 3.4)	18.0	18.9	0.9	(5.5)
Much clarity (3.4 to 4.2)	38.0	26.4	-11.6	(6.6)
Complete clarity (4.2 to 5)	24.0	30.2	6.2	(6.3)
Compared to Baseline				
Average score change	0.2	0.2	0.0	(0.1)
Improved (%)	55.6	55.3	-0.2	(7.5)
Regressed (%)	24.4	34.0	9.6	(6.8)
Remained the same (%)	20.0	10.6	-9.4	(5.4)

Sources: MIPP Follow-up Survey and Baseline Survey.

Confidence in employment seeking activities

Participants reported perceptions of their self-efficacy in job search in terms of level of confidence in successfully carrying out various job search activities. MI (as implemented) appeared to lower some participants' short-term confidence in performing these employment-seeking activities successfully. Measured at the time of follow-up survey, program group participants were more likely to report very little confidence in their job search than their control group counterparts (25.5 per cent vs. 9.8 per cent respectively). Using the more reliable measure of change in confidence since the baseline measure, MI seems to have increased the proportion of IA clients whose self-efficacy declined. However, MI did not seem to affect the percentage of participants who reported improved confidence in their job search.

Clarity in employment goals

Regardless of the approach to measurement, being in the MI stream did not change participants' reported levels of clarity in employment goals, as shown in Table 14.

Reasons for seeking employment

At the time of follow-up survey, program group participants reported themselves to be less self-determined (as shown by the statistically significant percentages in the weighted and unweighted self-determination scores reported in Table 15), however Table 9 demonstrated that these differences were present at the baseline. When the program's impact on self-determination is measured in terms of change since the baseline measurement, being in the MI stream has no statistically significant impact on reasons for seeking employment.

Barriers to employment

Regardless of the approach to measurement, being in the MI stream did not change participants' employment constraints as measured using the scale of employment constraints (Table 15).

Employment

Perhaps surprisingly, given the absence of impacts on measures related to employment seeking behaviour, but consistent with findings in IA records, there was a net increase of employment among those in the MI stream of 7.8 percentage points (Table 16). Additional analysis (not shown) found that those in employment were not drawn from participants who reported at baseline that they expected to "start to work soon."

The experience of the control group, within which nearly every member remained unemployed over the period, implies that the target group of long-term IA recipients is not likely to transition to employment spontaneously or without support. Being in the MI stream motivated one in ten program group members to obtain employment within three months, yet nine in ten did not find work within the observation period. These results are interpreted in the next chapter.

Enrollment in education or training

MIPP was not associated with any significant increase in education or training in the 3 months running up to the follow-up survey. However, being in the MI stream was associated with a change in the type of studies chosen. There was a 5.7 percentage point decrease in choosing apprenticeship, trade school, or college programs, balanced by a 9 percentage point increase in choosing other types of programs. There are two hypotheses here. MI may have directly influenced participants' education choices. Alternatively, the result could represent evidence that being in the MI stream altered participants' experiences within employment services, by altering the types of onward referral to education they received at ESCs, even if the overall level of participation in these employment services did not change.

Health, physical or mental condition, life satisfaction

MIPP did not have significant impact on health or life satisfaction (Table 17). Surprisingly, the program group participants were much more likely to report activity limitation in the follow-up survey (by 21.6 percentage points). There was no baseline measurement of this outcome, but it was included at follow up due to practitioner reports of high levels of health problems among participants. Without a baseline measure, it is unclear whether the observed difference was a pre-existing difference between the two groups or whether it was an outcome of the program.

Employment and change readiness assessments

Being in the MI stream produced no impact on scale-measured work readiness scores (Table 18). The distributions of changes over the three months since baseline were almost identical for the program and control groups. However, there were some changes in status as measured by the URICA assessment. Program group participants were less likely to score at the same URICA level at three months as at baseline, compared to their control group counterparts (48.1 per cent of the program group stayed the same versus 72.7 per cent of the control group). More in the program group showed improvement in employment readiness (by 7.9 percentage points) as well as regression, with nearly one in six reporting a reduction in their readiness (by 16.8 percentage points). These results are interpreted in the next chapter.

Table 15 Impacts on participant attitudinal outcomes – follow-up survey

	Control Group Mean	Program Group Mean	Difference	Standard Error
Self Determination Scale (Weighted)				
Average Score	11.6	7.2	-4.4 *	(1.7)
Negative Score (%)	9.8	28.8	19.0 **	(5.4)
Zero or Positive Score (%)	90.2	71.2	-19.0 **	(5.4)
High Score - 12 points or more (%)	60.8	32.7	-28.1 ***	(6.8)
Compared to Baseline				
Average score change	2.4	-0.9	-3.3	(1.8)
Improved (%)	44.9	42.0	-2.9	(7.2)
Regressed (%)	40.8	44.0	3.2	(7.1)
Remained the same (%)	14.3	14.0	-0.3	(5.0)
Self Determination Scale (Unweighted)				
Average Score	4.7	3.2	-1.5	(0.7)
Negative Score (%)	9.8	26.9	17.1 **	(5.3)
Zero or Positive Score (%)	90.2	73.1	-17.1 **	(5.3)
High Score - 12 points or more (%)	54.9	36.5	-18.4 *	(6.9)
Compared to Baseline				
Average score change	0.8	-0.3	-1.1	(0.8)
Improved (%)	46.9	36.0	-10.9	(7.1)
Regressed (%)	34.7	44.0	9.3	(7.0)
Remained the same (%)	18.4	20.0	1.6	(5.7)
Scale of Employment Constraints				
Average Score (1-5)	2.9	3.0	0.1	(0.1)
Distribution of the constraint score (%)				
No clarity (1 to 1.8)	2.2	2.2	0.0	(2.2)
Very little constraints (1.8 to 2.6)	31.1	26.7	-4.4	(6.8)
Moderate constraints (2.6 to 3.4)	44.4	42.2	-2.2	(7.5)
Much constraints (3.4 to 4.2)	17.8	26.7	8.9	(6.2)
Complete constraints (4.2 to 5)	4.4	2.2	-2.2	(2.7)
Compared to Baseline				
Average score change	-0.1	0.0	0.1	(0.1)
Improved (%)	53.1	38.9	-14.2	(8.8)
Regressed (%)	37.5	52.8	15.3	(8.8)
Remained the same (%)	9.4	8.3	-1.0	(5.1)

Sources: MIPP Follow-up Survey and Baseline Survey.

Notes: There are 55 and 55 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

Table 16 Impacts on participant employment and education outcomes – follow-up survey

	Control Group Mean	Program Group Mean	Difference	Standard Error
Work status at follow-up (%)				
Working part-time	2.0	9.4	7.5	(3.3)
Starting to work soon	0.0	0.0	0.0	(0.0)
Not working	98.0	90.6	-7.5	(3.3)
Compared to Baseline				
Net change of working status	-2.0	5.9	7.8 **	(2.7)
Studied in the past 3 months (%)				
Did not study	90.6	87.3	-3.3	(4.4)
Studied in a program	9.4	12.7	3.3	(4.4)
Apprenticeship, Trade school, or college dip./cert.	5.7	0.0	-5.7 *	(2.2)
PSE Degree	0.0	0.0	0.0	(0.0)
Other program (including ESL)	3.8	12.7	9.0 *	(3.8)

Sources: MIPP Follow-up Survey and Baseline Survey.

Notes: There are 55 and 55 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

Table 17 Impacts on participant health and well-being – follow-up survey

	Control Group Mean	Program Group Mean	Difference	Standard Error
Health				
Excellent (%)	0.1	0.1	0.0	(0.0)
Very Good (%)	0.0	0.0	0.0	(0.0)
Good (%)	38.5	24.5	-13.9	(6.4)
Fair (%)	23.1	34.0	10.9	(6.3)
Poor (%)	17.3	18.9	1.6	(5.4)
Activity Limitations (%)				
With any activity limitation	59.5	81.1	21.6 **	(7.4)
At home				
No activity limitation	31.4	17.3	-14.1 *	(6.0)
Sometimes	31.4	23.1	-8.3	(6.3)
Often	37.3	59.6	22.4 **	(6.9)
At work or school				
No activity limitation	43.9	23.7	-20.2 *	(7.3)
Sometimes	19.5	26.3	6.8	(6.6)
Often	36.6	50.0	13.4	(7.8)
In other activities				
No activity limitation	34.0	25.5	-8.5	(6.5)
Sometimes	26.0	21.6	-4.4	(6.1)
Often	40.0	52.9	12.9	(7.1)
Life Satisfaction Score				
Average Score (1-10)	5.3	5.2	0.0	(0.3)
Distribution of the Life Satisfaction Score (%)				
Very dissatisfied (1 to 3)	20.4	14.8	-5.6	(5.2)
Dissatisfied (4 to 5)	40.7	50.0	9.3	(6.8)
Satisfied (6 to 7)	25.9	22.2	-3.7	(5.9)
Very satisfied (8 to 10)	13.0	13.0	0.0	(4.6)
Compared to Baseline				
Average score change	-0.9	-0.2	0.6	(0.4)
Improved (%)	38.9	35.8	-3.0	(6.6)
Regressed (%)	42.6	47.2	4.6	(6.8)
Remained the same (%)	18.5	17.0	-1.5	(5.2)

Sources: MIPP Follow-up Survey and Baseline Survey.

Notes: There are 55 and 55 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

Table 18 Impacts on employment readiness assessments – follow-up survey

	Control Group Mean	Program Group Mean	Difference	Standard Error
URICA Assessment				
Average Score	34.4	26.1	-8.3 **	(2.6)
Pre-contemplation (%)	23.5	32.7	9.2	(6.3)
Contemplation (%)	23.5	32.7	9.2	(6.3)
Preparation (%)	52.9	34.5	-18.4 *	(6.9)
Compared to Baseline				
Average categorical change	0.0	-0.1	-0.1	(0.1)
Improved (%)	11.4	19.2	7.9	(5.5)
Regressed (%)	15.9	32.7	16.8 *	(6.5)
Remained the same (%)	72.7	48.1	-24.7 **	(7.2)
Work Readiness Scale				
Pre-contemplation (%)	35.8	55.6	19.7 **	(6.8)
Contemplation (%)	39.6	32.1	-7.5	(6.6)
Preparation (%)	24.5	13.2	-11.3	(5.4)
Compared to Baseline				
Average categorical change	0.1	0.1	0.0	(0.1)
Improved (%)	21.6	21.6	0.0	(5.8)
Regressed (%)	13.7	13.7	0.0	(4.9)
Remained the same (%)	64.7	64.7	0.0	(6.8)

Sources: MIPP Follow-up Survey and Baseline Survey.

Notes: There are 55 and 55 observations in the control and program groups, respectively. Sample sizes vary for individual measures because of missing values. Two-tailed Student t-tests were applied to differences between the program and control groups. Statistical significance levels are indicated as: *=10%, **=5%, ***=1%.

6. Implications of findings

a) The potential of MI for income assistance recipients in employment services settings

The project found that integrating MI into client interactions significantly raised employment rates for long-term IA recipients over the three-month period, by 7.8 percentage points relative to the control group (Table 16): the proportion in the control group working declined from 4.0 to 2.0 per cent, while the proportion working in the MI-stream increased from 3.5 to 9.4 per cent. Integrating MI also produced modest impacts on the types of education clients sought over the period. However, there were no significant impacts on IA or employment services use over this period.

It was far from clear in the results from assessment tools included in the three-month follow-up survey that employment readiness, attitudes and activities with respect to job search changed positively as a result of interaction with MI. Possibly the assessment tools are not performing effectively and the pattern of results from these scales can be ignored. Alternatively, they may indicate a segment of the MI-stream group becoming more disillusioned with their lives and job search as a result of being targeted for MI. This might occur because participants are becoming more aware of their low level of readiness for change or more aware of other barriers they face, through interaction with MI.

Notably, however, the population of long-term IA recipients targeted normally makes virtually no net progress towards employment, in the absence of a new intervention. This is despite the project sampling only those the Ministry designated “employment-obligated”. Anecdotally, EP-EAWs and case managers reported many participants to have physical or mental health, housing or addiction issues that needed resolution before employment became a realistic proposition. Quantitatively, the follow-up survey found more than seven in ten reported activity limitations that affected their ability to work. Health problems appeared more acute among those in the MI stream: just a quarter said their health was “good” or “very good” at the time of follow up. It would appear that many long-term IA recipients face multiple barriers to seeking work. The additional MI-induced employment may actually represent quite an achievement, given the presence of these barriers.

In sum, the project has found that the integration of MI into client interactions in IA and ESC settings is a feasible intervention but it is inconclusive with respect to its impacts. There is evidence that additional clients were able to transition into employment by virtue of being in the program group. However, alternative explanations for the modest employment impacts cannot be ruled out. The project has not determined precisely how MI increased employment, because the hypothesized increased participation in employment services as an intermediate step did not occur in the period observed. Furthermore, EP-EAWs struggled to secure clients’ attendance at their scheduled MI appointments, meaning that a substantial proportion of the target group – possibly as many as half – remained untreated. A plausible explanation is that MI encouraged the more cooperative and able clients to enter the labour market directly and quite quickly, but was not immediately effective for those facing barriers in addition to their motivation to seek employment. As outlined below, it can be hypothesized that more conclusive results would be obtained by making adjustments to the treatment: (a) through refinement of targeting on clients most likely to respond to MI alone, (b) through combining MI focused

on employment transitions with other approaches to tackle housing, health and addictions barriers (approaches that might also include MI focused on these topics) and (c) through mandating participation in motivational interviews, a practice that was not possible in the current project.

b) Considerations for replication given understanding of the client population

The fundamental considerations for using MI to support IA recipients in making progress with their employment plans are initial targeting and ongoing assessment. MI is hypothesized to be effective in increasing employment-seeking behaviour for those clients at particular stages of change with respect to seeking employment, primarily those assessed as in “contemplation.” MI trainees are furthermore trained to assist clients in formulating ambivalence and thus moving from “pre-contemplation” to contemplation, where MI can then help further their advancement through the stages of change. Clients who have reached “preparation” may not require MI but may “recycle” back to contemplation, such that MI is again required. However, the success of MI may be tempered if other barriers, such as lack of permanent housing, physical or mental health issues or addictions are present. Such barriers may need to be tackled first, before ambivalence with respect to the job search itself can be tackled.

The long-term IA recipient population contains many who face additional barriers beyond motivation, even among those officially-classified as “employment obligated.” Therefore, it may prove efficient to screen clients for such barriers prior to introducing MI, or at least to include interventions specifically to tackle these barriers, before expecting MI to generate changes in employment-related behaviour. Since MI can be used as part of treatment for addictions and mental health issues, among others, the interventions may in fact include MI, but with a different initial focus than job search.

Unless MI is to be offered universally, caseworkers will require effective assessment tools to position clients accurately with respect to stage of change reached. It is far from clear given the experience with MIPP that commonly-used assessment tools accurately perform this job. More than a third of clients were initially assessed in “preparation” and thus technically not eligible for MI (even though the project rules did require at least one session). Yet only a handful of participants in the MI-stream and none in the control group with this assessment secured employment within three months of this assessment. Furthermore, scores were inconsistent across tools and clients and moved in different directions according to different measures. During initial training sessions, the trainer encouraged caseworkers to ignore assessment tool outcomes that did not match the caseworkers’ subjective assessment of the client’s actual position. Taking these observations together, it seems critical that further work be undertaken to refine and validate the tools so that they can support effective classification of clients with respect to need for MI in employment service settings.

c) Considerations for replication in the service delivery system

Typically, as is the case in British Columbia, income-assistance clients interact with different professionals to implement their employment plans. First, they interact with staff at their EIA office and then at ESCs. To test MI within regular service delivery for IA clients, therefore, the project sought to integrate MI into client interactions in both settings. However, clients may later interact with other service providers. Ideally, to reduce ambivalence at each step of the way and minimize “recycling” all professionals supporting these clients progress towards securing employment would need training in

assessing the need for MI, and also in how to use MI. This ideal “universally-available MI” situation may not be practical, as the chain of professionals requiring training could become quite diffuse (expanding to college instructors or job developers, for example).

In theory, MI should make a difference to service take up. Its implementation should create additional demand for employment services, because it motivates more to seek support for their employment transitions. In turn more clients motivated by MI to seek help should increase demand for MI-trained service delivery professionals. However, MIPP did not see such increased demand and MIPP is not able to show where (i.e., delivered by whom) MI made the most difference to client outcomes. It detected some impact on employment from the integrated model, but quite possibly the impact could have been the result of the activity of one group of professionals only. The sample size is too small to discern the precise stage of delivery where MI had its impact. More work is needed with a larger sample size, before recommendations can be made with respect to where MI training should be most effectively directed.

7. Conclusions

a) What has MIPP achieved?

MIPP has supported and added to knowledge generated by the *Stages of Change Research Project*, a previous Canadian experiment, that MI has a role to play in supporting IA clients to make progress towards employment (Swibaker, 2011). The project has shown that it is possible – through MI training – to change the nature of client interactions in the broad continuum of employment services, from clients' first point of contact with respect to their employment plans at provincial welfare offices through to the non-governmental agencies' case managers delivering employment services to whom they will often be referred. It has shown the potential for such integrated intervention to generate employment that would not have happened over the same time frame without MI.

At the same time, MIPP has revealed some challenges to using MI efficiently as an intervention to support employment. Clients can have many barriers to employment and MI focused on employment transitions may thus be a sufficient intervention only for some. Furthermore, many long-term IA clients may lack sufficient motivation even to attend motivational interviews in situations (like MIPP) where these are voluntary. For caseworkers, mastering MI requires time and commitment. Assessment tools may need additional refinement and validation before they can support MI delivery effectively.

b) What is the new knowledge achieved?

MIPP generated new knowledge about the effectiveness of MI in new settings. It sought to work with a group of clients for whom MI had a good chance to make a difference. Prior to MIPP, long-term IA recipients had not been the focus of a MI study. Unlike new applicants to IA who are often motivated to return to work quickly, long-term IA recipients have very slow (close to zero) rates of return to employment. Due to the duration of unemployment, many are hypothesized to have lost motivation to seek employment. The project found that MI does increase employment for some longer-term recipients, but unwillingness or inability to engage in in-person interviews may hamper the effectiveness of the approach. Similarly, such clients face additional barriers that may need to be addressed first.

c) What further investigation is needed?

Integrating MI into employment-focused client interactions for IA recipients has been found a promising intervention. To determine its role in future service delivery will require additional investigation on several fronts:

- Determining the agency by which it achieves its impacts;
- Appropriate targeting of the treatment to those who most can benefit;
- Conditional on targeting, identifying additional interventions necessary to bundle with or to precede MI, to tackle additional barriers to seeking employment;

- Work to improve employment readiness assessments; and
- Investigation of the possibility of mandating participation in motivational interviews.

While practitioners can continue to make use of MI and the approach will likely still yield impacts, more research on the above topics will be needed to maximize the benefit from this potentially powerful approach to improve client outcomes.

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Appendix A: Work Readiness Scales Rooted in the Stages of Change Model

All scales presented in Table A1 are rooted in the Stages of Change (SOC) model. Whereas the first four are adaptations of the original URICA scale with a number of items representing the discrete stages of change, the ladder/ruler type scales are designed as continuous measures of readiness. Table A2 presents some of the key advantages and disadvantages associated with these three styles of measures.

Table A1 Readiness Scales Reviewed by SRDC

Name of Scale	Construct measured	Response format	Subscales and number of items
1. University of Rhode Island Change Assessment Scale (URICA) (McConaughy, Prochaska, & Velicer, 1983)	Stages of change (in the change process occurring in psychotherapy).	Likert-type, 5-point response format (1 = Strongly disagree to 5 = Strongly agree).	(32 items in total) <ul style="list-style-type: none"> Pre-contemplation – 8 items Contemplation – 8 items Action – 8 items Maintenance – 8 items (discrete and composite index)
2. Readiness to Respond to Intervention Scale (Mitchell, Brooke, & Strain, 2011) – Based on URICA	Readiness to Respond to an intervention	Likert-type, 3-point response format (1 = Disagree, 2 = Undecided, 3 = Agree).	(24 items in total) <ul style="list-style-type: none"> Pre-contemplation – 8 items Contemplation – 9 items Action – 7 items (discrete and composite index)
3. URICA-Vocational Counseling (URICA-VC; Mannock, Levesque, & Prochaska, 2002) – Based on URICA	Readiness of clients with disabilities to engage in job seeking behaviours	Likert-type, 5-point response format (1 = Strongly disagree to 5 = Strongly agree).	(12 items in total) <ul style="list-style-type: none"> Pre-contemplation – 4 items Contemplation – 4 items Action – 4 items (discrete and composite index)
4. Work Readiness Assessment (WRA URICA - Modified URICA for the employment development field (tool used in The Stages of Change Research Study, Swibaker, 2011)	Readiness of client to change his job situation	Likert-type, 5-point response format (1 = Strongly disagree to 5 = Strongly agree).	(12 items in total) <ul style="list-style-type: none"> Pre-contemplation – 4 items Contemplation – 4 items Preparation – 4 items (discrete and composite index)
5. Lam Assessment on Stages of Employment Readiness (LASER) (Lam et al., 2010) - Based on URICA	Welfare recipients' employment readiness	Likert-type, 5-point response format (1 = Strongly disagree to 5 = Strongly agree).	(14 items in total) <ul style="list-style-type: none"> Pre-contemplation – 6 items Contemplation – 4 items Action – 4 items

Name of Scale	Construct measured	Response format	Subscales and number of items
Name of Scale	Construct measured	Response format	Subscales and number of items
6. Contemplation ladders (variety of measures applied to different settings).	Readiness to go to the dentist; Readiness to quit smoking; readiness to abstain from drinking alcohol; Readiness to abstain from drinking alcohol and using illegal drugs.	One-choice response on a continuous measure of readiness. The scale is depicted as a ladder; the participant chooses the rung (the item) on the ladder that best matches his or her thoughts/attitude about the target behaviour.	<ul style="list-style-type: none"> Single score based on a continuous measure of readiness In principle, these scales can identify the stage of change.
7. Alternative 3-item scale developed by Allan Zuckoff (composed of three single-item ladder type scales)	<ul style="list-style-type: none"> Perceived readiness Importance Self-efficacy 	3 separate items assessed on a scale from 0 to 10.	<ul style="list-style-type: none"> 3 items assessing: readiness, importance and self-efficacy. Can be combined to assess readiness

Table A2 Advantages and Issues Associated With the Different Types of Readiness Measures

Type of scale	Advantages	Disadvantages/issues
1. Scale based on URICA assessing discrete stages of change	<ul style="list-style-type: none"> Can be easily adapted to different target behaviours because of the generic manner in which items are written. Can (in theory) be used to assess the different/discrete stages of change that the client is in, as well as a general level of readiness from a composite score of the subscales. The use of the WRA URICA scale (Swibaker, 2011) allows comparison of results with those 	<p>General Issues</p> <ul style="list-style-type: none"> The original URICA assessed four stages of change despite the fact that the model specifies an additional stage (Preparation). Many scales now focus on three stages only, a departure from the original SOC model. The scales have been criticized for containing ambiguous and confusing statements (Littell & Girvin, 2004) and using arbitrary time frames to separate the stages (Carey, Purnine, Maisto, & Carey, 1999). Differences between the various scales could lead to individuals being allocated to different stages depending on the scale being used (Lechner, Brug, De Vries, van Assema, & Muddle, 1998; Williamson et al., 2003).

Type of scale	Advantages	Disadvantages/issues
	<p>observed in The Stages of Change Research Study.</p> <p>Psychometric properties:</p> <ul style="list-style-type: none"> Construct validity of readiness is supported – in particular, research supports a three-factor structure of the URICA type scales (e.g., URICA-VC, LASER). These factors include: Pre-contemplation, Contemplation and Preparation/Action. Internal consistency of the LASER subscales is good (less so the case for the WRA URICA or the URICA-VC). The URICA has demonstrated adequate convergent and concurrent validity with respect to smoking cessation (Amodei, & Lamb, 2004). Discriminant validity of URICA-VC is supported (Gervery, 2010) – the three factors discriminate between individuals with varying levels of interest and involvement in vocational rehabilitation services. Demonstrate some predictive validity, but the evidence is mixed. For example, the URICA-VC predicted persistence in employment-related activities, but not employment status or drop-out of program (Gervery, 2010). The LASER (Lam et al., 2010) predicted employment outcomes six months after the program exit. 	<p>Psychometric Properties:</p> <ul style="list-style-type: none"> Application of URICA type tools is relatively new to the employment development sector. The modified Work Readiness (WRA) URICA created for the Stages of Change Research Study in Manitoba has not been formally validated (Swibaker, 2011). According to the developer of the WRA URICA, Cronbach alphas for the pre-contemplation, contemplation, and preparation subscales were 0.67, 0.74, and 0.71 respectively. Cronbach alphas calculated with fewer items per subscale (as is the case with the short-form WRA URICA – going from 8 items to 4 items per subscale) usually produce lower internal consistency coefficients. Cronbach alphas below .70 are considered inadequate. Similarly, internal consistency of the URICA-VC subscales is low for two of the three subscales (Gervery, 2010). Predictive validity of the composite scores of the URICA as it relates to behaviour change in patients with drug and alcohol dependence is limited (Field et al., 2009). <p>Practical issues:</p> <ul style="list-style-type: none"> Items of the WRA URICA are designed to assess a client's present "job situation", which includes a number of employment statuses such as unemployed. Since the items have different meanings according to a client's employment status, the scale scores cannot be accurately interpreted. SRDC reformulated the items assuming a specific target group (e.g., only for clients who were unemployed). Some of the tools include double-barreled items (two statements within one item that allow for one answer only). Participants who agree with one statement but not the other could not respond accurately to such items.

Type of scale	Advantages	Disadvantages/issues
		<ul style="list-style-type: none"> Original URICA type scales are quite long and time consuming to complete (even the short versions are too long for some clients).

Type of scale	Advantages	Disadvantages/issues
2. Ladder type scales – single choice item based on a continuous measure of readiness (visual analogue)	<ul style="list-style-type: none"> ▪ This format is shorter and easier for participants to complete, especially individuals with low literacy skills. ▪ Easy to assess and interpret client's progression of readiness with the passage of time. ▪ Adequate convergent and concurrent validity with respect to smoking cessation (Amodei, & Lamb, 2004) and substance use disorder (Hogue et al., 2010). ▪ Good discriminant, convergent, concurrent and predictive validity with substance use disorder sample (Hogue et al, 2010). 	<ul style="list-style-type: none"> ▪ Although it is possible to extrapolate the stage of change a client is in based on his score, in principal, these tools have been designed to produce a continuous measure of readiness. ▪ No measure currently exists for the employment development sector. Creating one may require items that are too transparent for the purposes of measurement among welfare recipients who are not likely to respond honestly to the scale because their income assistance relies on a minimal "work readiness" designation. ▪ These tools typically include double-barreled items (two statements within one item but that allow for one answer only). Participants who agree with one statement but not the other cannot respond accurately to such items.
3. Alternative 3-item measure proposed by MI trainer (Roxanne Sawatzky) and Allen Zuckoff	<ul style="list-style-type: none"> ▪ Easy to respond quickly to this scale (limits response burden on participant) ▪ Informally validated in the field by employment centre staff based on their intake discussions with clients; this scale seems to more accurately identify the stage of change than the WRA URICA (personal communication with Roxanne Sawatzky, June 20, 2012). ▪ Easier for individuals with low literacy skills to respond to. 	<ul style="list-style-type: none"> ▪ Has not yet been formally validated. ▪ Assesses three different indicators of readiness, namely: readiness, importance, and self-efficacy. Self-efficacy could be viewed as a predictor of readiness rather than readiness per se.