

IPS implementation manager evaluation

Final report

August 2017



**Te Pou o te
Whakaaro Nui**

Acknowledgements

This report has been written by Te Pou o te Whakaaro Nui. The authors of the report include Heather Kongs-Taylor and Helen Lockett.

External peer review was provided by Associate Professor David Menkes from The University of Auckland.

Te Pou o te Whakaaro Nui sincerely thanks all the ADHB, CMDHB and Workwise staff who generously contributed their time to this report and the evaluation overall.

Contents

Acknowledgements	3
List of tables.....	6
List of figures.....	6
Executive summary	7
Background.....	7
Evaluation goals and objectives.....	7
Methods.....	7
Key findings.....	8
Programme Background.....	8
Evaluation approach and method	11
Data collection methods.....	11
Data analysis	11
Limitations	12
Results	12
Changes to health professionals’ attitude, knowledge and/or behaviour.....	13
HPPE surveys	13
“Let’s Talk about Work” training evaluations.....	13
Document review.....	15
Fidelity Review.....	15
Client characteristics, referrals, and employment outcomes	20
Client characteristics	20
Referrals.....	21
Employment	22
Discussion.....	24
Programme fidelity	25
Health Providers’ attitudes and knowledge.....	25
Referrals.....	26
Employment Outcomes.....	26
Overall fidelity changes	27
Conclusions.....	27
Appendix A: Evaluation goal, objectives and questions	28
Appendix B: Evaluation approach and method.....	29

Appendix C: HPPE surveys and “Let’s Talk about work” training evaluation results and surveys.....	30
HPPE surveys	30
“Let’s Talk about Work” training evaluations.....	34
References.....	43

List of tables

Table 1: Fidelity score classification (Becker, Swanson, Bond, & Merrens, 2008).....	15
Table 2: Fidelity review sub-scale description	16
Table 3: Mean DHB fidelity scores, by year and subscale	16
Table 4: ADHB CMHC fidelity score comparison.....	18
Table 5: CMDHB CMHC fidelity score comparison.....	19
Table 6: Proportion of ADHB Workwise clients with or without a diagnosis of psychosis.....	21
Table 7: Proportion of CMDHB Workwise clients with or without a diagnosis of psychosis.....	21
Table 8: People who obtained employment, number of unique employers, average time to first job and average hourly rate, ADHB	23
Table 9: People who obtained employment, number of unique employers, average time to first job and average hourly rate, CMDHB.....	24
Table 10: Returned surveys by CMHC.....	30
Table 11: Average numbers of years worked in mental health and number of active clients, by discipline ADHB & CMDHB.....	31
Table 12: Average per cent of clients able to work full-time by CMHC	31
Table 13: Average proportion of clients able to work part-time, by CMHC.....	32
Table 14: Average proportion of clients who can work full or part-time, by discipline ADHB & CMDHB	32
Table 15: Proportion of clients whose employment goals discussed, by discipline ADHB & CMDHB.....	33
Table 16: Professionals' average per cent of confidence in EC's ability to succeed, by CMHC	33
Table 17: "Let's Talk about Work" evaluation form responses	35
Table 18: Should volunteer work be the first step on someone's work journey?	36

List of figures

Figure 1: <i>Programme logic for IPS Implementation Manager project</i>	10
Figure 2: Comparison of total and accepted referrals for ADHB and CMDHB.....	22
Figure 3: Per cent of clients who health professionals thought might want to work	35
Figure 4: Health professionals' confidence in asking clients about work.....	35
Figure 5: Health professionals' confidence in asking about employment in the right way.	36
Figure 6: CMDHB health professionals' frequency of asking about work.....	37
Figure 7: How often ADHB health professionals ask about work aspirations.....	37

Executive summary

This evaluation report is the second and final report examining the role of the Individual Placement and Support (IPS) implementation manager in New Zealand.

Background

In May 2015 Workwise, Auckland and Counties Manukau District Health Boards (DHBs) began piloting an IPS Implementation Manager (IIM) role. The role is based on the U.S. State trainer role and UK regional trainer. The purpose of the role is to provide dedicated on-site technical assistance to help Workwise and the DHBs improve implementation fidelity. Implementation fidelity measures how well a programme has been implemented compared to its design (Mihalic, 2002). Good IPS fidelity is positively associated with employment outcomes (Drake, Bond, & Becker, 2012; Lockett, Waghorn, Kydd, & Chant, 2016)

Initial funding for the pilot was through a grant for one year from Janssen Cilag. Further funding was provided by Auckland DHB (ADHB), Waitematā DHB (WDHB) and Counties Manukau DHB (CMDHB), and the Ministry of Health in order to expand¹ and extend the project until June 2017. Workwise is a non-government organisation contracted through DHB planning and funding to provide integrated employment support services aligned to IPS principles. The DHBs provide clinical mental health services through adult community mental health centres (CMHC).

In August 2016 an interim evaluation report found the IIM was influential in raising the profile of fidelity to IPS practices. The IIM also supported an improvement in perceptions of the overall value of employment for people using mental health services and the partnership between the DHBs and Workwise (Te Pou o te Whaakaro Nui, 2016).

Evaluation goals and objectives

The primary goal of this evaluation is to identify any effect of the IIM role on the CMHCs' IPS fidelity. Additionally, any relationship between IPS fidelity and the performance of the IPS partnership generally, including referrals and employment outcomes, will be identified and explored.

The objectives of this evaluation include:

- Identifying any changes in health professionals' beliefs (eg knowledge and behaviour) regarding employment for people using mental health services during the pilot.
- To determine how the presence of the IIM affects CMHCs' fidelity scores
- To determine how the presence of the IIM affects client access to the IPS services
- To determine how the presence of the IIM affects enrolled clients' employment outcomes in relation to fidelity.

Methods

This outcome evaluation utilised quantitative data from:

¹ The Ministry of Health added Waitematā DHB to the work in Dec 2016. Given the late addition, data from Waitematā DHB was not examined in this evaluation.

- a pre- and post-Health Professional's Perspectives of Employment (HPPE) survey (Gladman, Wishart, Waghorn, & Dias, 2015); a review of fidelity reports and fidelity scores; and analysis of client characteristics, referrals and employment outcomes from the two years prior to the IIM's start, and one year after they began. The fidelity review results are considered against the IIM's activities identified in the interim process evaluation report (Te Pou o te Whaakaro Nui, 2016).

Key findings

The IIM undertook baseline fidelity reviews confirming IPS services were being delivered at all ADHB and CMDHB CMHCs and identifying areas where improvements could be made. Through change management activities, including training and on-site coaching and mentoring, with the DHBs, CMHCs and Workwise, the IIM effectively supported significant IPS fidelity improvements. The IIM's training focussed on improving health professionals' attitudes and knowledge toward their role in employment. As a result of the training some health professionals are more willing to consider competitive employment for a greater number of people and discuss employment more frequently.

The changes in health professional attitudes and significant fidelity improvements led to an increase in referrals at both DHBs during the 2015/16 year. The number of people using services with a diagnosis of psychosis has increased at CMDHB, indicating programme reach is improving. There was an association between improved fidelity scores and increased employment outcomes at ADHB but not at CMDHB. This finding suggests while programme fidelity is important, there are other factors affecting IPS programme performance.

Programme Background

Individual Placement and Support (IPS) is an evidence-based practice that can successfully support people with experience of mental health issues to gain and maintain competitive jobs (Drake et al., 2012). The approach has been tested and proven to be effective in New Zealand (Browne, Stephenson, Wright, & Waghorn, 2009; Browne & Waghorn, 2010; Nepe, Pini, & Waghorn, 2011). Workwise is the primary provider of partially or fully integrated IPS services at six DHBs, as well as in primary care and Department of Correction services in New Zealand. In 2015 Workwise, Auckland and Counties Manukau DHBs decided to pilot the IPS Implementation Manager (IIM) role. This role is based on the U.S. State trainer role. The main purpose of the IIM role was to assess and improve the fidelity of IPS services at the two DHBs as assessed at each Community Mental Health Centre (CMHC). CMHCs are location based and people are assigned to one according on their place of residence. ADHB CMHCs include: Cornwall House, Lotofale, Manaaki House, St. Lukes, and Taylor Centre. CMDHB CMHCs include: Āwhinatia, Lambie Drive, Te Rawhiti and The Cottage.

The IPS fidelity scale measures the key principles of IPS at the programme level. It is a quality improvement tool to help both mental health and vocational services teams identify strengths and areas for service delivery improvement. The scale assesses the degree of co-location and integration between employment staff and clinical staff. It also reviews several structural elements of IPS programme implementation, including key skills and competencies of the overall culture of the mental health team including employment consultants, administrative and clinical staff (Becker, Smith, Tanzman, Drake, & Tremblay, 2001). Regular assessment and feedback to teams against the IPS fidelity scale improves programme performance. Both the IPS-15 and IPS-25

scales have to have good inter-rater reliability and predictive validity (Lockett et al., 2016). To assist rapid implementation during the implementation phase and to quickly address identified barriers, six-monthly reviews are recommended until good fidelity is achieved, with yearly reviews thereafter (Bond, McHugo, Becker, Rapp, & Whitley, 2008). Workwise and the DHBs had conducted few post-implementation fidelity reviews.

Programme logic

A programme logic is a tool to help identify and visualise the relationship between the resources put into the programme, the activities, outputs and expected outcomes. The inputs in Figure 1 on the following page outline the characteristics needed by the IIM. These characteristics include both IPS-specific and general clinical experience in mental health. The interim report also found the IIM needed to be able to work across multiple stakeholder levels and have the ability to tailor information to the audience (Te Pou o te Whaakaro Nui, 2016).

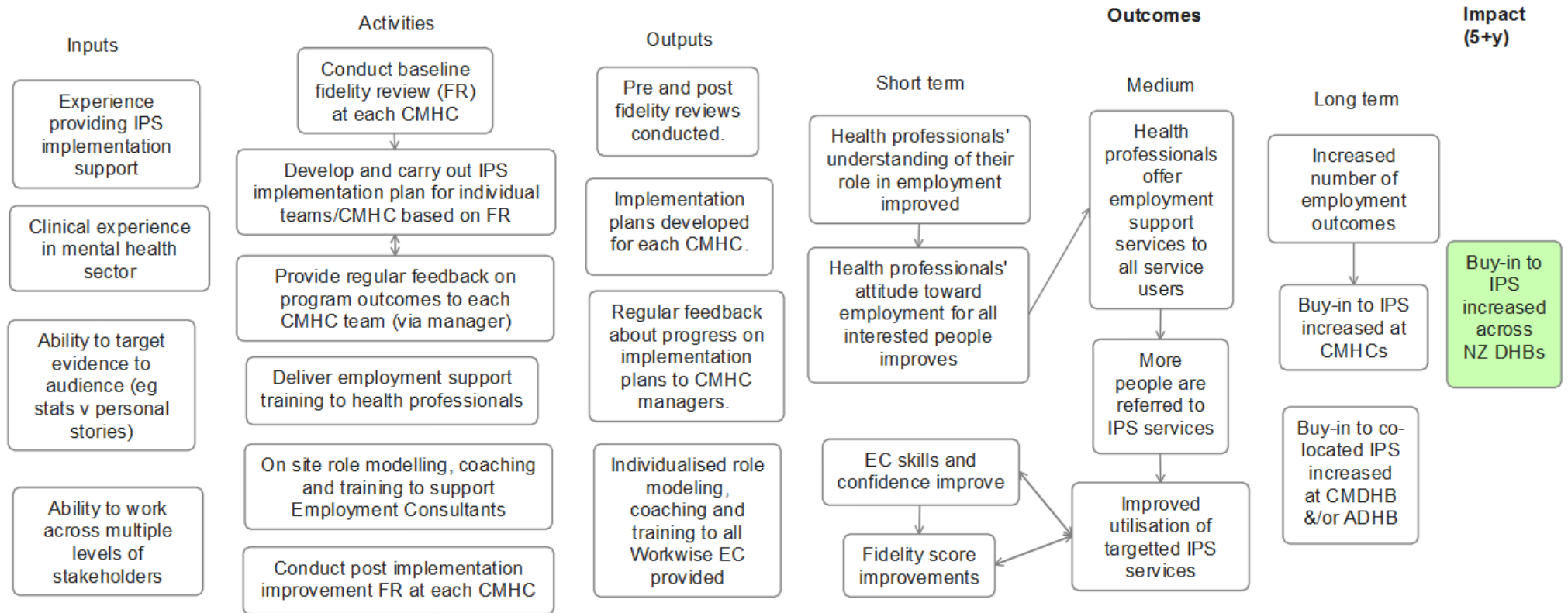
IIM activities needed to be aimed at the levels of individual practitioners, CMHC and the DHB more widely. As shown on the programme logic, these activities included conducting baseline and post implementation fidelity reviews, developing and supporting IPS implementation plans, and delivering employment support training to health professionals. Additionally, the IIM needed to provide role modelling, coaching and training to the employment consultants (ECs). The outputs demonstrate the completion of the activities.

The outputs in the programme logic were expected to lead to short, medium and longer term outcomes. The short-term outcomes show that the IIM's activities were expected to lead to: better fidelity, improvements in health professionals' understanding and attitudes about the importance of employment, and an improvement in EC's skills and confidence.

These short-term outcomes are anticipated to lead to medium term outcomes such as more employment conversations, increased referrals and improved utilisation of the IPS services. Increased IPS utilisation by people who face greater barriers to gaining competitive employment was also expected to reinforce ECs' skills and confidence in delivering the service.

In the longer term as IPS utilisation improves it was anticipated that employment outcomes will increase and buy-in for these evidence-based practices will improve across CMHCs and DHBs. These anticipated relationships rest on assumptions outlined at the bottom of the programme logic. If key DHB and CMHC staff did not engage in the fidelity improvement process, through changing their attitudes and behaviours, and responding to identified structural issues, the impact of the overall fidelity improvements would be limited.

IPS Implementation manager pilot for CMDHB & ADHB



Assumptions:

- Key DHB and CMHC staff engage in the implementation improvement process, making changes to improve fidelity
- Employment consultant staffing relatively stable at each CMHC during the pilot
- Low rate of manager and health professional staff turnover
- Implementation manager is consistent throughout implementation improvement pilot

Figure 1: Programme logic for IPS Implementation Manager project

Evaluation approach and method

Outcome evaluation examines whether or not any programme changes have been caused by the intervention being evaluated. It focuses on identifying what, if any, changes have occurred and whether or not these can be linked to programme activities. The evaluation approach, including data analysis and reporting, has been informed by a scan of the peer-reviewed IPS literature and grey literature published by Dartmouth, US and the UK's Centre of Mental Health, as well as the evaluator's ongoing contact with the programme and engagement with key staff and other stakeholders. This evaluation was underpinned by utilisation and programme theory-driven methodologies, which are outlined in more detail in Appendix B.

The goal of this evaluation is to identify any effect of the IIM role on CMHCs' IPS fidelity. Additionally, any relationship between IPS fidelity and the performance of the IPS partnership generally, including referrals and employment outcomes, will be identified and explored.

The objectives of this evaluation include:

- Identifying any changes in health professionals' beliefs (eg knowledge and behaviour) regarding employment for people using mental health services during the pilot.
- To determine how the presence of the IIM affects CMHCs' fidelity scores
- To determine how the presence of the IIM affects client access to the IPS services
- To determine how the presence of the IIM affects enrolled clients' employment outcomes in relation to fidelity.

These objectives were developed by the Te Pou evaluator. Workwise reviewed and provided feedback on the proposed objectives before they were finalised.

Data collection methods

The data collection methods for this report included a survey of health professional attitudes to employment using the Health Professionals Perceptions of Employment Scale (HPPE) (see Appendix C) validated in Australia (Gladman et al., 2015). The baseline survey was conducted in 2015 at all CMHCs involved in the pilot. The repeat survey was conducted at all sites one year later.

Data from key project documents, including the baseline and follow up fidelity reviews, monthly scorecards and the annual report, were reviewed to provide further information on the project activities. The scorecards are a record of the IIM's monthly activity and internal feedback to the project group. Additionally, data was collected from Workwise's client management record system, Recordbase, to understand client characteristics, referrals and employment outcomes.

Data analysis

The data from the HPPE was analysed using standard descriptive quantitative analysis techniques for 2015, 2016 and comparative data. Given the low number of returns, tests of statistical significance were not conducted.

Fidelity reviews were conducted by the IIM and a Workwise team leader from another DHB region. Data sources included:

- a document review of employment service and clinical records;
- agency policy and procedures; review of the management information system;
- interviews with clients, employment specialists, mental health staff, families or employers;
- observation of mental health team meetings, employment consultants and mental health staff;
- and reviews of individual employment plans.

There are 25 fidelity review items with a possible score of 1-5 each, for a total possible score of 125. The 25 items are separated into three sub-scales: staffing, service and organisation. The IIM participated in the fidelity review training provided by Dartmouth in the U.S. and is an experienced fidelity reviewer.

Each DHB's and CMHC's fidelity data was examined for changes in overall fidelity scores and in each subscale. Paired t-tests of statistical significance were conducted. These tests helped determine whether or not any observed changes could have been affected by the IIM's activities.

Workwise client demographic data, referrals and employment outcome data was summarised and examined for changes before and after the IIM began.

Limitations

The total number of HPPE surveys returned for 2016 were lower than 2015, and overall response rates were low. Therefore the results may not accurately capture health professionals' perceptions about employment or the differences between the two years.

Fidelity reviews were conducted at nine CMHC total. These small samples may limit the generalisability of the findings.

The project documents reviewed included the annual report compiled by the IIM and completed in September 2016, monthly scorecards and fidelity review reports for each CMHC. These may emphasise achievements over negative results.

The client data for referrals and employment only represents those people who were referred to or used Workwise services. People who gained employment after exiting from Workwise's employment services and other people using DHB services who obtained employment as a result of a shift in health professionals' knowledge and attitudes, but who did not use Workwise's services, are not captured.

Results

This section includes a summarised review of the evidence for any changes to health professionals' attitude, knowledge and behaviour. Changes to CMHC fidelity scores before and after the IIM began are analysed and

presented. Grouped client data, including characteristics, referral and employment outcomes from people who used Workwise services before and after the IIM began is analysed and presented.

Changes to health professionals' attitude, knowledge and/or behaviour

As identified in the programme logic (Figure 1, p 10), it was anticipated the combination of the IIM's training about employment for health professionals and mentoring to ECs would lead to an increased focus on employment at each CMHC and improvements to EC's skills. These activities were expected to lead to outputs including: improvements in health professionals' understanding of their role in employment; an increase in their willingness (beliefs and attitude) to discuss employment with all interested people; and more frequent initiation of employment in discussions. These improvements were expected to lead to an increase in the number of people who were offered employment support and contribute to increased referrals.

Data came from HPPE surveys from 2015 and 2016, "pre" and "post" evaluations from the IIM's "Let's Talk about Work" training for health professionals, and project documents including the September 2016 annual report compiled by the IIM, monthly scorecards and fidelity review reports. These were analysed for evidence of any changes to health professionals' attitudes, knowledge and behaviour throughout the project. The results from these analyses are summarised next, with the full results and the surveys presented in Appendix C.

HPPE surveys

HPPE surveys were conducted at all referring CMHCs in 2015 and a year later in 2016. A total of 104 surveys were returned in 2015 and 77 were returned in 2016. According to the fidelity reviews, a combined FTE of 335 health professionals from both DHBs were able to refer people to Workwise services. Therefore, the 2015 responses represented the views of approximately 31 per cent of health professionals, and the 2016 responses represented 23 per cent.

The HPPE surveys demonstrated all respondents understood they had a co-located EC and most believed employment was very important or not to be overlooked. Respondents to the 2016 survey believed a greater proportion of clients could work full or part-time than 2015 respondents and more employment conversations were reported.

Health professionals were generally confident the ECs could support people. This was lower where there had been turnover in the EC role. A new EC needed more time to develop the necessary relationships with clients and health professional teams. Health professionals wanted more EC support, identifying that the ECs' high workloads often resulted in long waiting lists. This could cause people to lose motivation while they were waiting for their appointment.

"Let's Talk about Work" training evaluations

The IIM delivered "Let's Talk about Work" training sessions to health professionals at each CMHC. These training sessions:

- helped health professionals identify the health and social benefits gained from work,

- provided a forum to discuss why health professionals might not ask all people about employment,
- established good practice ways of having an employment discussion, supported by various clinical tools,
- and established next steps to try the tools and ask everyone on their caseload about their employment goals.

The evaluator observed one training session in April 2016. At that training the IIM facilitated a discussion between the health professionals about their viewpoints, challenging their assumptions with a mixture of statistics, stories, personal clinical experience and reference to the IPS evidence base and principles. During discussions some attendees identified they had been holding people back from work and/or giving mixed messages by providing sick notes, suggesting an individual was not ready, or suggesting “work preparation” activities when a client asked about employment. Clinicians also noted the long waiting lists at sheltered workshops and realised it was an indication people were not moving out of those sheltered training situations.

These types of discussions demonstrated the usefulness of the training as a reflective space and of health professionals’ changes in attitude and knowledge. The IIM skilfully concluded the training by re-emphasising personal autonomy and choice. Further trainings were conducted at four CMHCs in late 2016 to reinforce the information and for those who missed the first training. Both CMDHB and ADHB made plans to centralise training to capture all new staff beginning in May 2017.

A total of 60 evaluation forms were received from CMDHB health professionals, with approximately 90 per cent returning the “pre” questionnaire, two-thirds returning the “post” questionnaire and just over half returning both. A total of 33 forms were received for ADHB participants, with around half returning a “pre” questionnaire, two-thirds returning a “post” questionnaire and half returning both.

Before the training health professionals at both DHBs believed half to two-thirds of people experiencing serious mental health issues over lengthy periods² currently on their caseload would want to work. After the training there was an increase in this percentage, from 66 per cent to 69 per cent at CMDHB and from 57 per cent to 74 per cent at ADHB.

Health professionals’ self-reported confidence in asking about employment also increased slightly after the training. Health professionals’ self-rated ability to ‘ask about employment in the right way’ greatly increased at both DHBs, from 68 per cent to 86 per cent at CMDHB and 73 per cent to 86 per cent at ADHB. More health professionals at both DHBs stated they would now ask people about employment monthly, increasing from 40 per cent to 66 per cent at CMDHB and from 53 per cent to 76 per cent at ADHB (see Appendix C).

Overall, health professionals at both DHBs reported that after the training, they were more confident in asking about employment and would ask about employment more frequently.

² IPS is an intensive employment service designed to meet the needs of people with complex employment barriers related to long-term serious mental health issues. People of all backgrounds and experiences use the services.

Document review

The annual report compiled by the IIM and completed in September 2016 and monthly scorecards were reviewed to identify any reported changes in health professionals' knowledge, attitudes or behaviours. As anticipated, the IIM conducted "Let's Talk about Work" trainings with local team members at each CMHC in 2015 and 2016. Training attendance at each CMHC varied between 50-95 per cent, with representatives from a number of different disciplines.

The IIM's annual project report identified that many clinicians were now considering employment for everyone on their caseload. It also indicated a culture change at some CMHCs, where team members challenged each other around considering employment for people, a change from the team's previous reliance on the EC to remind them of the possibility. Clinical employment champions have been established within each CMHC mental health team to provide ongoing support for this culture change. Evidence of this emerging culture change was also outlined in the process report (Te Pou o te Whaakaro Nui, 2016).

Fidelity Review

As previously identified the fidelity reviews were conducted using the 25-item scale. As shown in Table 1 below, the total possible score for a fidelity review was 125. Scores are further classified to show whether the programme fidelity is exemplary, good, fair, or does not meet the minimum criteria to be a supported employment programme.

Table 1: Fidelity score classification (Becker, Swanson, Bond, & Merrens, 2008)

Degree of implementation	Fidelity score range
Exemplary fidelity	115 – 125
Good fidelity	100 – 114
Fair fidelity	74 – 99
Not supported employment	73 and below

The 25-item fidelity scale is separated into three sub-scales: staffing, service and organisation. Descriptions for each sub-scale are included in Table 2.

Table 2: Fidelity review sub-scale description

Fidelity sub-scale	Maximum score	Fidelity item descriptions
Staffing	15 (3 items)	Items measure EC caseload, how much time the EC spends on employment services or general case management, and whether or not the EC is carrying out all phases of the employment service.
Organisation	40 (8 items)	Items measure EC's integration and function with the mental health team, client access and DHB executive support. They also measure the EC's collaboration with Work and Income and the relative strength of the employment unit (ie the team of ECs at Workwise).
Services	70 (14 items)	Items measure EC skills on supporting clients with: a rapid, individualised job search, finances (benefits), disclosure, and time-unlimited follow up support. They also examine the EC's outreach attempts to clients; the diversity and types of jobs obtained by clients; and the quality and amount of time the EC spent in the community meeting clients or engaging with employers.

As shown in Table 3, the total average fidelity score improved for both DHBs. Auckland DHBs' average total score improved from 83 to 95, with a significant p -value of $< .001$. This level of overall fidelity shows a movement from the midpoint of the "fair" scale in 2015 to the top in 2016. There were also changes in the average fidelity score for all three sub-scales. The average ADHB staffing sub-scale score fell by one point; this change was not statistically significant. The average organisation sub-scale fidelity score improved from 21 to 27, with a significant p -value of $< .001$. The average ADHB fidelity score for the services subscales score were also statistically significant, improving from 48 to 55, with a p -value of $< .001$.

Counties Manukau DHB's average total score improved from 93 to 103, with a significant p -value of $< .001$. This change was from an average of "fair" fidelity implementation to "good" fidelity implementation. There were also changes in the average fidelity score for all three sub-scales. The average CMDHB staffing sub-scale score improved by one point approaching significance with a p -value of .054. The average organisation sub-scale fidelity score improved by seven points to 32, with a significant p -value of .005. The services subscale score improved from 55 to 58; however, the change was not statistically significant.

Table 3: Mean DHB fidelity scores, by year and subscale

	Auckland DHB			Counties Manukau DHB		
	2015	2016	p -value	2015	2016	p -value
Staffing (15)	14	13	.082	13	14	.054
Organisation (40)	21	27	$< .001^*$	25	32	$< .001^*$
Services (70)	48	55	$< .001^*$	55	58	.1239
Total (125)	83	95	$< .001^*$	93	103	$< .001^*$
Note: * p -value significant at the 5% level ($< .05$), indicating the change in fidelity score is not likely due to chance.						

When the individual CMHCs' fidelity scores are examined (Table 4), four of the five ADHB CMHCs' total fidelity score improved. Cornwall House, Lotofale and Taylor Centre had large significant improvements to fidelity, moving from the bottom half to the top half of the 'fair' category. Manaaki's movement from "fair" to "good" fidelity was also statistically significant. St. Luke's was stable between the two years. Overall, staffing subscale fidelity scores had little change between the years, with many significant gains being related to items on the organisation and services subscales.

Table 4: ADHB CMHC fidelity score comparison

	Cornwall			Lotofale			Manaaki			St. Lukes			Taylor Centre		
	2015	2016	p value	2015	2016	p value	2015	2016	p value	2015	2016	p value	2015	2016	p value
Staffing (15)	14	13	.423	14	13	.423	14	13	.423	14	14	n/a	14	14	n/a
Organisation (40)	18	25	.021*	18	27	.007*	28	33	.049*	21	23	0.451	20	28	.007*
Services (70)	42	55	.001*	43	55	.002*	53	58	.137	55	52	0.272	46	50	.104
Total (125)	75	93	< .001*	75	98	< .001*	95	104	.036*	90	89	0.788	80	92	.003*
<p>Note: *p-value significant at the 5% level (< .05), indicating the change in fidelity score is not likely due to chance.</p> <p>Note: Lotofale, a Pasifika cultural service, and Cornwall House share the same EC. However, separate reviews were conducted and separate reports produced in 2015 and 2016. The fidelity scores in 2015 were identical but the narrative was different, reflecting the evidence reviewed/staff attitudes at the time. There was a small difference in the 2016 services score, due to differences in the behaviour of the clinical teams.</p>															

Review of the organisation subscale data showed several individual items improved over the year. Gains were made in: the EC's frequency of contact with their integrated mental health team, the ECs' collaboration with vocational rehabilitation (Work and Income), and executive team support for supported employment. Limited gains were made in the areas of zero exclusion and agency focus on competitive employment. However, the overall integration of the EC with the mental health unit, as shown by the number of mental health teams able to refer to the EC, remained low scoring (2/5) and stagnant for all CMHCs except Manaaki House (5/5).

Most of the ADHB CMHCs also experienced improvements in items on the services subscale. These item gains were variable between the centres and included:

- comprehensive work incentives (benefits) planning
- managing personal information (disclosure)
- individualised in-work support
- meeting with people in the community, and
- assertive engagement and outreach to client, through meeting the client together with their clinical team, key worker and/or whānau.

Examination of CMDHB CMHCs' fidelity scores (Table 5), shows three of the four CMHCs' total fidelity score improved. Lambie Drive and Te Rawhiti both had statistically significant improvements in their overall scores, moving "fair" to "good" fidelity. The Cottage's overall score moved from the bottom to the top half of "good" fidelity, though this was not statistically significant ($p = .010$). The overall score for Āwhinatia dropped slightly in the two years, but maintained "fair" fidelity. The drop was not statistically

significant. Overall, staffing subscale fidelity scores were generally stable with a notable improvement at Lambie Drive. Most statistically significant gains were related to items on the organisation and services subscales.

Table 5: CMDHB CMHC fidelity score comparison

	Āwhinatia			The Cottage			Lambie			Te Rawhiti		
	2015	2016	<i>p</i> value	2015	2016	<i>p</i> value	2015	2016	<i>p</i> value	2015	2016	<i>p</i> value
Staffing (15)	13	14	.423	14	14	n/a	11	14	.225	13	14	.422
Organisation (40)	26	27	.685	27	33	.048*	24	33	.026*	24	33	.026*
Services (70)	58	53	.266	59	62	.512	52	62	.027*	49	54	.137
Total (125)	97	94	.559	100	109	.095	87	109	< .001*	86	101	.005*
Note: * <i>p</i> -value significant at the 5% level (< .05), indicating the change in fidelity score is not likely due to chance.												

Individual items on the organisation subscale that improved included: the EC's frequency of contact with their integrated mental health team, the EC's collaboration with vocational rehabilitation, ensuring services were offered to everyone interested in work as per the zero exclusion policy, an overall focus on competitive employment at the CMHC, and executive team support for supported employment. In contrast to ADHB, all CMHC scored 5/5 on integration of the EC with the mental health unit, as shown by the number of teams able to refer to the EC.

Many CMDHB CMHC also experienced improvements in items on the services subscale. Most gained in rapid job search for competitive jobs; job development in terms of frequent employer contact; individualised in-work support; and assertive engagement and outreach to client, through meeting the client together with their clinical team, key worker and/or whānau. Āwhinatia was the only CMHC to improve the frequency at which ES services were offered in the community rather than the CMHC, with the other three CMHC experiencing losses on this item.

Both DHBs experienced significant changes to fidelity, as shown by the improvements in the services and organisation domains.

Client characteristics, referrals, and employment outcomes

Workwise records were examined for changes to client characteristics, referrals and employment outcomes for each DHB. The data was summarised into three groups based on the date the person was referred to Workwise. The three groups were people referred from 01 July 2013 to 30 June 2014, those referred from 01 July 2014 to 30 June 2015, and those referred from 01 July 2015 to 30 June 2016. Each group included all individuals referred regardless of whether their referral was received on the first or last day of that time period.

The employment outcomes are reported for the identified group, regardless of when the job was secured and each group was followed until mid-March 2017. This means people in the first group (referred between July 2013 and June 2014) were followed for the longest time, and those referred in the second time period (July 2014 and June 2015) were followed for longer than the third group. These groups were constructed for this report to help identify any changes in client characteristics, referrals and employment outcomes before and after the IIM began in May 2015. Therefore the potential benefit people received as a result the IIM's activities would only apply to those who were receiving services after the IIM's start, will vary within each group. It may also be dependent on how long people had been using services.

Client characteristics

Limited analysis was conducted on accepted Workwise client characteristics, including gender, age, ethnicity, and clients diagnosed or not diagnosed with psychosis. Diagnosis of psychosis or not was used to help measure project reach and whether or not health professionals were discussing employment with everyone on their caseload.

ADHB

At ADHB there has been a slight shift to a near equal percentage of males (51%) and females (49%) in 2013/14 to an increase of males (57%) over females (43%). The ages of ADHB clients varied slightly over the years, with most clients (68-76%) between 26-55 years. Between 20-24 per cent were aged 18-25 and five to seven per cent over 56. Ethnic ratios among ADHB clients were relatively steady, with 10-14 per cent of accepted clients Māori and 15-17 per cent Pacific. Most of the remaining 70-75 per cent were Pākehā or Asian.

As shown in , the proportion of clients diagnosed with psychosis dropped to 33 per cent in 2015-16 from around 40 per cent the previous two years. Given there was a corresponding large jump in the per cent of missing mental health data, and the number of clients not diagnosed with psychosis remained steady around 60 per cent, the actual per cent of clients with a diagnosis of psychosis may be higher.

Table 6: Proportion of ADHB Workwise clients with or without a diagnosis of psychosis

	Per cent of clients diagnosed with psychosis	Per cent of clients not diagnosed with psychosis	Missing mental health data
2013-14	38%	62%	0%
2014-15	41%	57%	2%
2015-16	33%	58%	9%

Most ADHB clients were aged 26-55 years, with a shift to a slightly higher number of males than females. It is not clear whether or not the recent drop in the per cent of clients diagnosed with psychosis is accurate, or reflective of the missing mental health data.

CMDHB

The proportion of male to female clients accepted at CMDHB was roughly equal and steady over the years, between 49-52 per cent male and 47-51 per cent female. The age mix of CMDHB clients was fairly steady in 2013/14 to 2014/15, with 75 per cent aged between 26-55 years. Interestingly in 2015/16 this figure dropped to 64 per cent and the proportion of clients aged 18-25 increased from 19 to 29 per cent. Between six to eight per cent of clients were over 56 years. Ethnic ratios among CMDHB clients were relatively steady, with 14-17 per cent of accepted clients Māori and 15-20 per cent Pacific. Most of the remaining 65-70 per cent were Pākehā or Asian.

As shown in Table 7, the proportion of clients diagnosed with psychosis increased to 41 per cent in 2015-16 from around 25 per cent the previous two years. There was also a large drop in the number of clients not diagnosed with psychosis, to 48 per cent from around 67 per cent previously. However, given the per cent of missing mental health data has remained relatively steady around 10 per cent, the increase in the proportion of clients with a diagnosis of psychosis is likely accurate.

Table 7: Proportion of CMDHB Workwise clients with or without a diagnosis of psychosis

	Per cent of clients diagnosed with psychosis	Per cent of clients not diagnosed with psychosis	Missing mental health data
2013-14	27%	68%	5%
2014-15	26%	65%	9%
2015-16	41%	48%	11%

At CMDHB the age mix changed over the years, with an increase in those aged 19-26. Roughly 25% of CMDHB clients were Māori or Pacific. Client characteristics at both DHBs are generally representative of area populations. At CMDHB there appears to be an increase in the per cent of clients diagnosed with a psychosis.

Referrals

Referrals for each group were analysed to help identify any changes after the IIM's start in May 2015. Short term fidelity improvements were expected to lead to an increase in referrals outcomes in the medium term. An increase in referrals would help identify whether or not health professionals were discussing employment with more people and support the findings from the HPPE survey.

As outlined anyone referred in the 2013/14 group could have been using services longer and thus had more opportunity to obtain a job than those referred in the later groups. All employment outcomes obtained when using services are shown in the data. However, this may be undercounted as some people may have obtained a job after they were no longer using Workwise services.

As shown in Figure 2 the total referrals to Workwise services steadily increased at both ADHB and CMDHB each year. In 2015/16 referrals from ADHB increased by 66 from 2014/15. CMDHB health professionals referred 111 more people to Workwise in 2015/16 than the previous year. At ADHB the number of accepted referrals increased, with 37 more referrals accepted in 2015/16 than in 2014/15. The number of accepted referrals at CMDHB stayed relatively steady all three years.

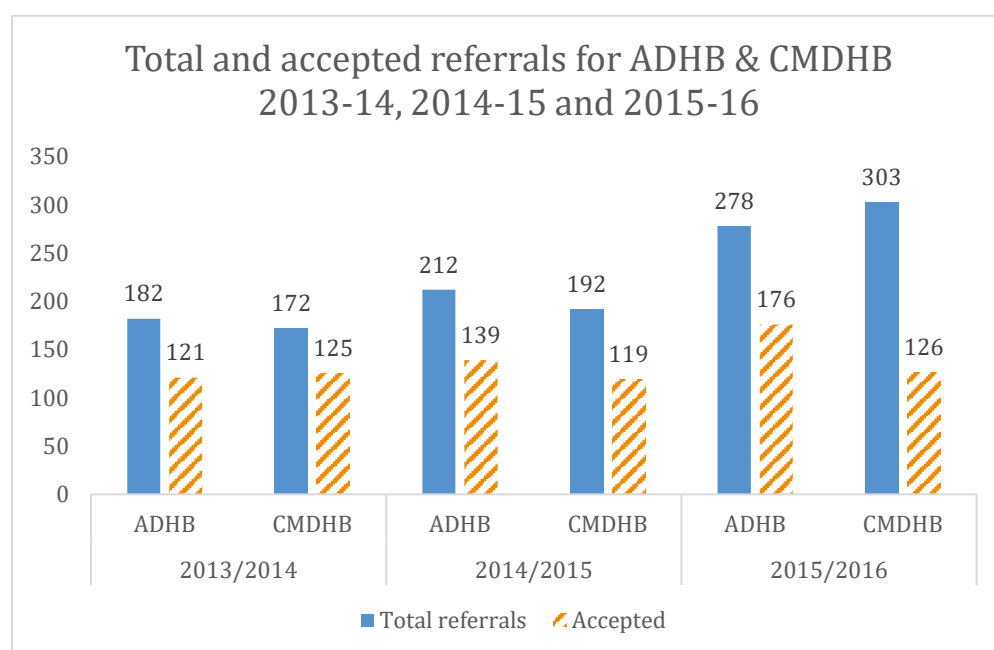


Figure 2: Comparison of total and accepted referrals for ADHB and CMDHB

A large increase in referrals occurred as anticipated. This also supports health professionals' self-reported increase in employment discussions. The total number of accepted referrals climbed in ADHB, but not in CMDHB. Acceptance of referrals depends on the appropriateness of the referrals and EC caseload. Given the six-month vacancy in one CMDHB EC role, it is unsurprising the number of accepted referrals did not increase.

Employment

As identified in the programme logic on page 10, competitive employment is a long-term outcome, expected to occur after fidelity improvements led to an increase in referrals and improvements in service utilisation. Competitive employment rates are also influenced by a number of factors external to IPS fidelity (Lockett et al., 2016). Therefore the relationship between fidelity and employment outcomes is not a straightforward linear relationship. Although some fidelity items are likely to be directly linked to employment outcomes, such as frequency of contact with employers, other items may be related to other aspects of programme performance, such as the zero-exclusion item. Improvements to the zero exclusion item and other similar items would likely result in improved programme reach, but may not lead directly

to an increase in new employment. Employment rates were examined at this stage in the evaluation to help identify whether or not they were influenced by CMHC fidelity improvements. Year groups, as outlined on page 20, were analysed to identify any changes to competitive employment outcomes.

The number of people at ADHB who started employment increased steadily each year, from 58 in 2013-14, to a total of 69 in 2015-16. In the 2014-15 group 58 of the 64 people obtained a job after the IIM started. As shown in Table 8, people using Workwise services obtained jobs with a variety of employers, demonstrating the ECs did not rely on particular employers or direct people into set-aside jobs. Jobs varied widely and included solicitors, café workers, support workers, retail assistants, manual labourers, and cleaners.

There was a clear reduction in the time to first job over the years, reducing from over three months to about two. This likely indicates improvements in EC skills. Across the three years the percentage of people working at least 16 hours remained above 75 per cent. Average hourly rates were well above minimum wage each year, indicating the jobs were competitive employment (Employment New Zealand, 2016). As 11 people from the 2014-15 and 2015-16 groups are still currently being supported by Workwise to obtain a job, the number of people gaining an employment outcome for these groups may increase.

Table 8: People who obtained employment, number of unique employers, average time to first job and average hourly rate, ADHB

	2013-14	2014-15	2015-16
People who obtained a job	58	64	69
Number of unique employers ¹	82	75	83
Average days to first job	96	100	64
Per cent of people working 16 hours or more	84.2%	83.1%	75.4%
Average hourly rate	\$17.16	\$18.05	\$18.51
Note: ¹ Some individuals have multiple employers while using Workwise services.			

Table 9 shows that the number of people in CMDHB using Workwise's services who obtained a job was steady at just under 50 in 2013-14 and 2014-15. The total number of people dropped to 36 in 2015-16. This number was likely affected by the six month vacancy in one EC role, as the new EC would have required time to develop relationships and settle into the role. In the 2014-15 group 45 of the 49 clients obtained a job after the IIM started.

The table shows people using Workwise services obtained jobs with a variety of employers, demonstrating the ECs did not rely on particular employers or direct people into set-aside jobs. Jobs varied widely and included health workers, drivers, cleaners, baristas, retail assistants, telemarketers, plumbers, and business development managers. There was a reduction in the time to first job over the years, reducing from almost five months to four months. The percentage of people working at least 16 hours was above 65 per cent for each of the three years. Average hourly rates were well above minimum wage each year, indicating the jobs were competitive employment (Employment New Zealand, 2016). Nine people from the 2015-16 group are still currently being supported by Workwise to obtain employment.

Table 9: People who obtained employment, number of unique employers, average time to first job and average hourly rate, CMDHB

	2013-14	2014-15	2015-16
People who obtained a job	48	49	36
Number of unique employers ¹	60	66	45
Average days to first job	143	131	120
Per cent of people working 16 hours or more	87.5%	75.5%	66.7%
Average hourly rate	\$17.99	\$17.63	\$17.96
Note: ¹ Some individuals had multiple employers while using Workwise services.			

At ADHB the number of people obtaining jobs increased. The time to first job decreased at both DHBs, indicating that ECs were supporting people to obtain work quickly. At CMDHB the total number of people obtaining jobs decreased, likely due to the EC vacancy. The large variety of positions and employers indicates that people obtained competitive jobs.

Discussion

The purpose of the evaluation was to examine the establishment of the role of the IPS Implementation manager in New Zealand and understand the relationship between this role and CMHC IPS fidelity. Associations between IPS fidelity and enrolled clients' employment, a long term outcome, were also explored.

The interim report examined the establishment of the IIM role in New Zealand. The key finding was that the IIM undertook critical fidelity improvement activities using a change-management approach, which added value to the IPS implementation and integration at ADHB and CMDHB mental health services (Te Pou o te Whaakaro Nui, 2016). This report examined changes to IPS fidelity at ADHB and CMDHB CMHCs, health professionals' attitudes and knowledge about employment, and enrolled clients' characteristics, referrals and employment outcomes.

A programme logic (Figure 1, p 10) demonstrates how the IIM's activities were expected to lead to programme outputs and short, medium and long-term outcomes. Evidence from both the interim report and this report demonstrate the IIM undertook these activities:

- conducting baseline and fidelity reviews
- developing implementation plans and providing feedback about implementation improvement
- delivering "Let's Talk about Work" training and
- providing role modelling and coaching to the ECs.

The implementation plans, in the form of Partnership Improvement Plans, were developed at a strategic DHB level with centre management input, rather than with CMHCs/teams as first anticipated. The following paragraphs will discuss how these activities relate to results outlined in this report and the expected outcomes identified in the programme logic.

Programme fidelity

Assessing and improving programme fidelity at each CMHC and the DHBs in general has been the key focus of the IIM. Understanding a programme's fidelity is necessary to determine how well it has been implemented according to its design (Mihalic, 2002). Programme outcomes are related to their design and poor implementation and adherence to model design can create programme drift, reducing the effectiveness of the intervention (Mihalic, 2002). The IPS fidelity scale was developed to provide a description of programme elements required to produce an IPS programme and has been tested and validated internationally and in New Zealand (Drake et al., 2012; Nepe et al., 2011). As demonstrated in the results, overall fidelity scores across both DHBs increased significantly at the five per cent level ($p < 0.05$). These significant changes demonstrate the IIM's activities led to improved fidelity of IPS at most CMHCs.

Analysis of the organisation and services fidelity sub-scales show the IIM's activities were targeted to the areas where the baseline review showed low scores. Notable gains were made in many measures and overall. However, some measures in ADHB, such as integration of the ECs with the mental health team—the number of teams which the EC is assigned to—did not change, or remained low scoring at most CMHCs. Review of the scores highlights the limitations of the IIM's ability to directly change these system factors. The number of teams an EC is assigned to, for example, is determined through DHB contracts. While the IIM attempted to influence this item by identifying the changes needed to improve the score in a report to the DHB, the associated decisions reside with DHB decision-makers and is outside the IIM's control. Evidence suggests that further improvements to fidelity are likely to require structural changes such as reallocating existing resources, realigning policies and procedures to become more consistent with the IPS model or additional funding to increase EC resource (Drake et al., 2012).

Health Providers' attitudes and knowledge

A key area of IIM activity was improving the fidelity measure related to the IPS principle of zero exclusion—eligibility based on client choice (Drake et al., 2012). Given health professionals are responsible for referring people to services at both DHBs, they can present barriers to implementation and fidelity when they implicitly or explicitly screen people out. This can occur when health professionals do not discuss people's employment goals, are unwilling to refer people to IPS services or believe that someone's diagnosis makes them unable to work (Gladman et al., 2015; Swanson et al., 2011).

Comparison of the baseline and follow up Health Professional's Perspectives of Employment (HPPE) surveys indicated health professionals planned to discuss employment with more of their caseload more frequently. It also indicated they were more confident about asking people about employment in the right way. The IIM's evidence-based approach to providing on-site training and giving practical ideas to help health professionals change their daily practice were important factors in changing health professionals' attitudes and behaviours (Swanson et al., 2011). The fidelity reviews show improvements in zero exclusion at many of the CMHCs, which may indicate health professionals are screening less and better understand that diagnosis is not a good predictor of employment success. However, to continue to improve this and maintain practice changes health professionals will need to be supported by CMHC managers' commitment to an employment-focussed culture, improved integration of ECs into the teams

and refresher training to reinforce concepts (Bond et al., 2014; Gowdy, Carlson, & Rapp, 2004; Uppal, Oades, Crowe, & Deane, 2010).

Referrals

As per the programme logic it was expected as health professionals' attitudes and understanding changed, they would discuss employment with more people on their caseload, leading to more referrals. Given employment rates among people with serious mental health issues remain low and employment services are underutilised, an increase in referrals is the first measure of improved access (Morgan et al., 2017). This increase occurred as anticipated, with ADHB services receiving 1.5 times as many referrals in 2015/16 compared to 2013/14. CMDHB received 1.8 times as many referrals in 2015/16 compared to 2013/14. The overall increase in referrals provides further evidence that health professionals' understanding of their role in employment conversations and attitudes toward employment have improved as a result of the IIM's training to health professionals and development of employment champions within CMHC teams.

The increase in referrals occurred in both DHBs as anticipated. Interestingly, more referrals were accepted at ADHB without any increase in EC resource and remained steady at CMDHB despite staff turnover in the EC role during 2015/16. As referrals increase it is expected that utilisation of IPS services will also continue to improve. While measuring utilisation was outside the scope of this evaluation, there are some indications that programme utilisation was improving in CMDHB, with more people diagnosed with psychosis being referred to IPS services. Additionally, the decrease in time to first job seen at both DHBs likely indicates improvement in ECs' skills, also improving programme utilisation.

Employment outcomes

Understanding the relationship between the IIM's activities, changes to fidelity and any changes to employment were the goals of this evaluation. It was expected that short and medium-term improvements would lead to improvements in employment outcomes in the longer term. The evidence shows the IIM's activities led to fidelity improvements. However, the evidence did not show a direct link between fidelity improvements and an increase in employment outcomes³—ADHB's employment outcomes did increase, but employment outcomes at CMDHB did not. Research published since the start of the evaluation demonstrated that good fidelity, as measured by the IPS fidelity scales, is only one factor in achieving good competitive employment outcomes (Lockett et al., 2016). Although it was important to examine any early shifts in employment outcomes, the expected increase is a longer term outcome. Given the pilot's relatively short length of time, and the number of underlying factors related to obtaining

³ Benchmarking standards have been developed for competitive employment programmes, with quarterly competitive employment rates of 33 per cent considered minimum standard and 45 per cent indicative of a good competitive employment programme (Becker, Drake, & Bond, 2011). These benchmarks are a different measurement to the cohort reporting used in this report. When reported by cohorts, as done in this evaluation, programmes that reach 100 or more on total fidelity measured by the IPS-25 scale would expect 44 per cent of programme participants to start competitive employment (Lockett et al., 2016).

employment, is unsurprising a significant shift has not yet been demonstrated. Longer-term follow up may help demonstrate any impact of improved fidelity on competitive employment outcomes.

Overall fidelity changes

While it is clear the IIM was able to positively affect a number of fidelity measures, improving the fidelity overall, it is also apparent the IIM's ability to influence some of the fidelity factors was restricted by current contracts and historical practice. At the time of the second fidelity reviews the IIM had been in the post for less than 18 months. This is unlikely to be enough time to overcome historical practice and to create and sustain organisational change across all CMHC (Bond et al., 2014; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

The contribution of individual items on the fidelity scale to employment outcomes has not been examined in detail and is therefore largely unknown (Lockett et al., 2016). A low score on the zero exclusion fidelity scale item, for example, would likely negatively impact on employment outcomes as it indicates that health professionals are rarely discussing employment and/or only discussing it with certain people. It may also indicate health professionals do not understand their role in supporting a person's return to work, negatively impacting employment outcomes and job retention. Additionally, there appear to be connections between fidelity items on the organisational sub-scale, such as the agency focus on competitive employment, adherence to zero exclusion principles and the integration of the EC with the mental health teams. These factors may also impact items on the services sub-scale, such as providing IPS services in community settings rather than the CMHC or Workwise's offices, and the time an EC has available to provide assertive outreach services. Individual items within the service sub-scale also appear to have a relationship. If people are not supported by both the EC and health professionals to manage their personal information (disclosure) it limits the ways in which an EC can engage with employers, provide in-work support and, likely affects job retention. To understand how the IIM's activities can achieve maximum impact it will be important to identify and measure these relationships.

Conclusions

The IIM's primary role was to improve fidelity to evidence-based practices in supported employment at both DHBs. The evidence presented shows their activities led to direct, significant improvements in programme fidelity at both DHBs. Improved fidelity led to an increase in referrals at both DHBs, also signalling an improvement in health professionals' knowledge and attitudes around their role in supporting people with their employment goals. These changes to fidelity were not directly associated with an increase in employment outcomes at the time of the evaluation, though there does appear to be an association between improved fidelity and reduced time to first job.

Further work is required to establish the relationship between individual fidelity scale items, to understand the changes required to gain the most benefit from the IIM's technical assistance and move ADHB from "fair" to "good" fidelity and ensure that CMDHB sustains "good" fidelity overall further improving the effectiveness of IPS programmes.

Appendix A: Evaluation goal, objectives and questions

Evaluation goal: to examine the establishment of the role of the IPS manager in New Zealand and to identify any effect of the IIM role on CMHC IPS fidelity. Additionally, any relationship between IPS fidelity and enrolled clients' employment outcomes will be identified and explored.

Evaluation Objectives	Evaluation Questions
1. To outline the characteristics and activities of the IPS manager.	<p>1a. What activities does the IPS manager undertake in the role?</p> <p>1b. What characteristics does the IPS manager display in their role?</p>
2. To identify any changes in health professionals' perceptions, knowledge and behaviour regarding supported employment opportunities during the pilot.	<p>2a. In what ways do health professionals' (HP) self-reported behaviour regarding supported employment opportunities change through the course of the pilot?</p> <p>2b. How does HPs' self-reported frequency of employment discussions change?</p> <p>2c. How does HPs' facilitation of access to supported employment programmes for people using services change?</p>
3. To determine how the presence of the IPS manager affects teams' fidelity scores.	<p>3a. How do the IPS manager's activities contribute to changes in the teams' fidelity scores, including specific items on the scale, throughout the pilot?</p> <p>3b. How do the IPS manager's activities contribute to any team and emerging organisational level changes aimed at fidelity improvements?</p>
4. To identify barriers and facilitators experienced by the IPS manager and other key stakeholders in the IPS improvement process.	<p>4a. What activities by the IPS manager and/or key stakeholders facilitate or hinder the IPS implementation improvement process?</p> <p>4b. What organisational factors facilitate or hinder the IPS implementation improvement process?</p>

Appendix B: Evaluation approach and method

This outcome evaluation drew on theory-based evaluation and utilisation method theory approaches. They support both the developmental and learning focuses of the evaluation and allow changes to be identified and captured. These approaches guided the framing of the evaluation questions as well as methods chosen to collect and analyse the evaluation data. A brief description of each approach and how it shaped the evaluation follows.

Outcome evaluation

Outcome evaluation examines whether or not any programme changes have been caused by the intervention being evaluated. It focuses on identifying what, if any, changes have occurred and whether or not these can be linked to programme activities (Davidson, 2005).

Theory-based evaluation

A theory-based evaluation approach (Chen, 1990; Funnell & Rogers, 2011) builds from an understanding of how an intervention is expected to work. It requires identification and understanding of the activities and mechanisms that are expected to lead or contribute to intended outcomes of an intervention (i.e. the programme's theory). Mapping how an intervention is expected to work, including how medium term outcomes lead to longer term outcomes, guides the development of appropriate evaluation questions. It also helps identify criteria for assessing quality, how well the intervention was designed and delivered and what outcomes occurred and with what impact. It seeks to explore why a programme is working or not working as expected, rather than simply describing whether or not the intended outcomes were achieved.

Development of programme theory is ideally a collaborative process that draws on the views and experiences of key stakeholders. The programme theory was developed at a project level utilising IPS implementation literature and wider literature information. Workwise stakeholders had the opportunity to provide feedback on the draft programme logic. It has been reviewed and updated throughout the evaluation to reflect improved understanding of the programme.

Utilisation evaluation methodology

Utilisation focused evaluation (UFE) is based on the principle that evaluation should be judged on usefulness to the intended users (Patton, 2008). UFE is a guiding framework and does not prescribe to any specific content method or theory; it can include a wide variety of methods and paradigms (Ramirez & Brodhead, 2013). UFE facilitates an evaluation and learning process in which evaluation findings are applicable to the real world and the stakeholders involved in the programme. Those that benefit from the evaluation, or the intended users, are important to the process and must be identified and involved in the decision making process of the evaluation (Patton, 2008; Ramirez & Brodhead, 2013).

This evaluation applied UFE by identifying the partners contributing to the programme and considering how they might benefit from the evaluation. Workwise, provided input and feedback on the evaluation goals and objectives. The findings and conclusions resulting from this evaluation will contribute to establishing any value of IPS technical assistance as provided by the IIM.

Appendix C: HPPE surveys and “Let’s Talk about work” training evaluation results and surveys

HPPE surveys

A total of 104 surveys were returned in 2015 and 77 were returned in 2016. According to the fidelity reviews, a combined FTE of 335 health professionals from both DHBs can refer people to Workwise services. Therefore, the 2015 responses represent the views of about 31 per cent of health professionals, and the 2016 responses represent only 23 per cent. Table 10 shows Auckland District Health Board (ADHB) community mental health centres (CMHCs) had a slightly higher response rate (46) than Counties Manukau District Health Board (CMDHB) CMHCs (31).

Table 10: Returned surveys by CMHC

ADHB		CMDHB	
Cornwall House	5	Āwhinatia	5
Lotofale	11	Lambie Drive	7
Manaaki House	15	Te Rawhiti	10
St. Lukes	9	The Cottage	9
Taylor Centre	6		
Total	46		31

All seventy-seven surveys were returned with one or more demographic or quantitative questions incomplete. The most frequent demographic question not answered was ‘years worked in mental health’ (11 missing), followed by age (7 missing). Three respondents did not answer all the following questions: “per cent of active clients”, “per cent able to work part-time or full-time” and “discussion of vocational goals”.

Demographics and caseload

Just under two-thirds of respondents were female. Most were in the age brackets 20-29 years old and 40-49 years old. Just over one-third of respondents were male with nine in the 50-59 year old age bracket.

Respondents wrote in their discipline rather than choosing from options, and many gave this as a generic “mental health”. Where further information was provided in the position title, eg “nurse” the discipline response was reclassified to match, eg “nursing”. The average active caseload size was 28 and on average respondents had worked in mental health for 13 years, though numbers varied by discipline and many respondents did not answer these questions. Nurses were a third of respondents and returned the largest number of surveys.

As shown in Table 11 below, demographics and caseloads were comparable across both DHBs. Standard deviations (SD) are reported to show the degree of variability in the responses. When comparing ADHB to CMDHB, psychiatrists had almost three times the average number of active clients. At CMDHB there was a roughly even spread of caseloads across nursing, occupational therapy and social work. The large

overlapping standard deviations within and between the CMHCs and DHBs indicate a high degree of variability in professionals' caseloads.

When asked how many years worked in mental health and the number of active clients, thirty-two respondents did not answer the average number of active clients and eight did not answer the average years worked in mental health.

Table 11: Average numbers of years worked in mental health and number of active clients, by discipline ADHB & CMDHB

Health Discipline	Average years worked in mental health (SD)	Average number of active clients (SD)
Mental health	13 (9)	15 (4)
Nursing	16 (13)	25 (13)
Occupational therapy	6 (5)	22 (9)
Psychiatry	17 (6)	72 (35)
Psychology	15 (11)	15 (4)
Social work	11 (10)	23 (10)

Health professionals' perceptions of clients' ability to work

As shown in the following tables health professionals' perceptions of the proportion of their clients who can work was variable between CMHCs and the two DHBs. Generally, respondents from CMDHB thought a higher proportion of their clients would be able to work full-time. Overall health professionals from Te Rawhiti thought more than forty-five per cent of their clients would be able to work full-time. Professionals from Cornwall House had the least confidence in their clients' ability to work full-time, with only 14 per cent confidence. However, the large standard deviations within and between the CMHCs and DHBs indicate a high degree of variability in professionals' confidence.

Table 12: Average per cent of clients able to work full-time by CMHC

Average per cent of clients who can work full-time (SD)			
Cornwall House	14 (10)	Āwhinatia	23 (18)
Lotofale	33 (29)	Lambie Drive	28 (28)
Manaaki	32 (23)	Te Rawhiti	49 (31)
St. Lukes	17 (22)	The Cottage	25 (16)
Taylor Centre	29 (23)		

Overall, health professionals thought a higher proportion of their clients would be able to work part-time than full-time. The results between ADHB and CMDHB were comparable, with St. Lukes and Āwhinatia, Lambie Drive and Te Rawhiti respondents reporting about 50 per cent of clients being able to work part-time. Respondents from Cornwall House reported the lowest confidence in 2016, with only 23 per cent of clients being capable of part-time work.

Table 13: Average proportion of clients able to work part-time, by CMHC

Average per cent of clients who can work part-time (SD)					
ADHB	2015	2016	CMDHB	2015	2016
Cornwall House	30 (22)	23 (15)	Āwhinatia	37 (24)	49 (19)
Lotofale	49 (22)	54 (21)	Lambie Drive	51 (17)	46 (18)
Manaaki	42 (26)	39 (22)	Te Rawhiti	33 (17)	52 (27)
St. Lukes	30 (20)	49 (27)	The Cottage	37 (24)	52 (18)
Taylor Centre	39 (18)	33 (11)			

When health professionals' views were analysed by discipline some variations were apparent. People with a generic "mental health" discipline indicated they believed only 22 per cent of clients could work full-time, down by half from 44 per cent in 2015. When comparing the data between 2015 and 2016, people who classified their discipline as mental health reported 54 per cent of clients can work part-time in 2016, an increase of ten per cent.

Those who identified as occupational therapists and psychiatrists reported the largest proportion of their clients could work full-time (38-43%). Psychiatrists felt more of their clients could work full time, nearly doubling from 24 per cent in 2015 to 43 per cent in 2016. When comparing across all the health disciplines psychologists reported the highest average per cent of clients who were able to work part-time—62 per cent in 2016, 1.6 times higher than in 2015. Nurses reported the lowest proportion of clients (35%) able to work part-time in comparison to other health disciplines. In 2016 across all the health disciplines the percentage of clients who respondents felt could work part-time increased by 18 per cent from 2015.

Table 14: Average proportion of clients who can work full or part-time, by discipline ADHB & CMDHB

Discipline	Average per cent of clients who can work full-time (SD)		Average per cent of clients who can work part-time (SD)	
	2015	2016	2015	2016
Mental health	45 (47)	22 (13)	44 (30)	54 (21)
Nursing	23 (23)	23 (20)	30 (22)	35 (15)
Occupational therapy	39 (18)	38 (24)	46 (18)	51 (17)
Psychiatry	24 (13)	43 (32)	46 (23)	44 (28)
Psychology	27 (23)	25 (21)	38 (12)	62 (25)
Social work	25 (17)	29 (34)	37 (19)	40 (19)
Overall	28 (24)	30 (25)	38 (21)	45 (22)

All but four of the 77 respondents, slightly more than in 2015, stated they discussed employment goals with current clients. Sixty-two per cent indicated they discussed employment goals with at least three quarters of their clients, a small increase from 2015. Table 15 shows these results by discipline.

Table 15: Proportion of clients whose employment goals discussed, by discipline ADHB & CMDHB

Discipline	Proportion of clients whose employment goals were discussed			
	0-24%	25-49%	50-74%	75-100%
Mental health	0	2	0	5
Nursing	3	3	7	9
Occupational therapy	0	2	3	8
Psychiatry	0	1	3	6
Psychology	0	0	2	8
Social work	1	0	1	9
Total	4	8	16	45

Almost ninety per cent of respondents indicated competitive employment was either, “important enough to need discussing with all clients” or “very important, not to be overlooked”. Five respondents indicated competitive employment was “sometimes important but only if the client requests vocational assistance”. Across all respondents in 2016, only five respondents from three CMHCs in the ADHB region answered, “sometimes important but only if the client requests vocational assistance”.

Results between the DHBs in 2015 differed slightly, with about half of respondents from CMDHB indicating that competitive employment was “important enough to need discussing with all clients”, compared to more than half from ADHB indicating it was “very important, not to be overlooked”. In 2016 the results showed half of respondents from CMDHB and more than half of ADHB (61 per cent) indicating that competitive employment was “very important, not to be overlooked”. This shows respondents’ views of the importance of competitive employment in clients’ recovery plans at CMDHB shifted from important to very important.

Knowledge of co-location, confidence and support for ECs

All respondents were aware their CMHC has a co-located employment consultant. Respondents’ confidence in the EC’s ability to “succeed in helping all referred clients to gain and maintain competitive employment” was generally high with an average score of nine of ten at both DHBs in 2016. The highest confidence in the EC’s ability to succeed came from Cornwall and Taylor Centre, which also had the lowest variability of responses. The lowest confidence in the EC’s ability to succeed came from St. Lukes with a score of 7 in 2016, which is a decrease from 9.6 in 2015. The drop at St. Lukes is likely due to a change in the EC role during 2015.

Table 16: Professionals' average per cent of confidence in EC's ability to succeed, by CMHC

Average per cent of confidence in ECs (SD)					
CMHC	2015	2016	CMHC	2015	2016
Cornwall	84 (24)	95 (7)	Āwhinatia	76 (25)	78 (26)
Lotofale	74 (17)	88 (24)	Lambie Drive	77 (22)	78 (19)
Manaaki	90 (15)	78 (22)	Te Rawhiti	75 (19)	86 (11)
St. Lukes	90 (14)	60 (16)	The Cottage	81 (28)	84 (9)
Taylor Centre	70 (25)	93 (10)			

Two-thirds of all survey respondents provided reasons why they did not have 100 per cent confidence the EC could achieve employment outcomes for all referred clients. They replied that the EC was “new to the role”, had a “long waiting list”, “not flexible to meet client where they are” and/or “the only EC in a high caseload team”. Respondents also identified “client issues and loss of motivation” and “competitive employment market” as reasons why they did not have 100 per cent confidence. Responses were consistent from both DHBs.

Practical support

Respondents offered many ideas on how they could provide more practical support to clients or to the employment consultant.

Key themes included:

- Discussion of recovery and vocational goals, eg understanding the clients’ history and skills to offer into the workforce.
- Importance of employment and vocational education, eg mock interviews, support at the job interviews, dress codes.
- Voluntary work placements as a form of gradual exposure to workplace to help clients transition into part-time and full-time employment.

Other themes included:

- Ongoing liaison with the employment consultant and follow-up appointments to track clients’ progress in the workplace.
- Assessing the strengths and weaknesses of the client to help discover the right employment for them.
- Assistance with transport
- Identifying clients’ readiness to work
- More “hands-on” interview help and follow-up with client, and referring to the employment consultant during interview process and once in work-force.
- Providing more practical help such as routines, travelling to work and dress code.
- More ECs to reduce the waiting list

“Let’s Talk about Work” training evaluations

The IIM conducted “pre” and “post” evaluations at the “Let’s Talk about Work” training sessions delivered to health professionals at each CMHC (see surveys on p 39-40). A total of 60 evaluation forms were received from CMDHB participants. As shown in Table 17 approximately 90 per cent of CMDHB health professionals filled in the “pre” questionnaire, with only two-third returning the “post” questionnaire and just over half returning both. A total of 33 forms were received for ADHB participants, with around half returning a “pre” questionnaire, two-thirds returning a “post” questionnaire and half returning both.

Table 17: "Let's Talk about Work" evaluation form responses

	Total	Pre	Post	Both
CMDHB	60	54	40	36
ADHB	33	18	22	17

Health professionals were asked to rate the percentage of clients' "with severe and enduring mental health issues" desire to work and who might consider work currently.

Figure 3 shows health professionals believed people currently on their caseload may want and feel capable of working increased after the IIM's training. Before the training health professionals at CMDHB thought about two-thirds of people currently on their caseload would want to work. There was a small increase to 69 per cent after the training. There was a larger increase at ADHB, from 57 per cent before the training, to 74 per cent afterward.

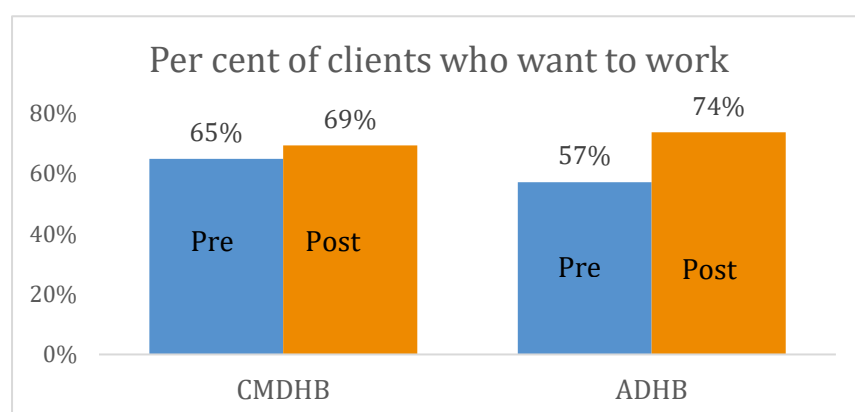


Figure 3: Per cent of clients who health professionals thought might want to work

Health professionals were asked to indicate their confidence in asking clients about work. Confidence was generally high prior to the training, with health professionals rating themselves at 86 per cent (CMDHB) and 84 per cent (ADHB) confident prior to the training. Figure 4 shows a small increase in health professionals overall confidence at both DHBs.

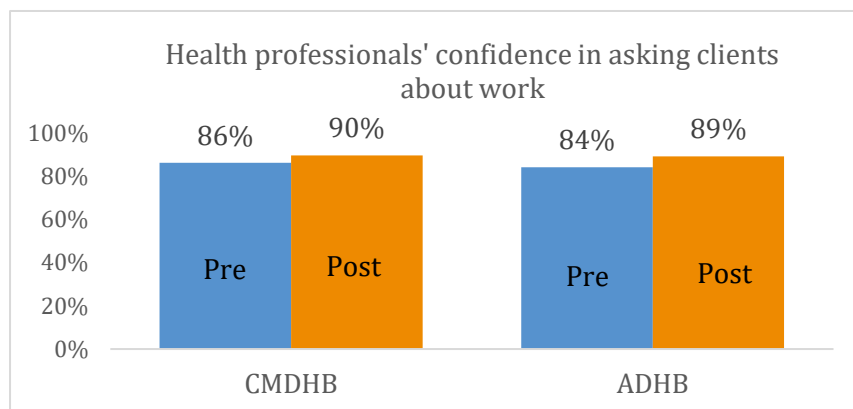


Figure 4: Health professionals' confidence in asking clients about work

Interestingly, when asked how confident clinicians felt to ask about work in the “right way”, their initial confidence was much lower. CMDHB health professionals were only 68 per cent confident on average, and ADHB health professionals 73 per cent confident. As shown by

Figure 5, health professionals felt more confident after the training, with an increase to 86 per cent among both ADHB and CMDHB participants.

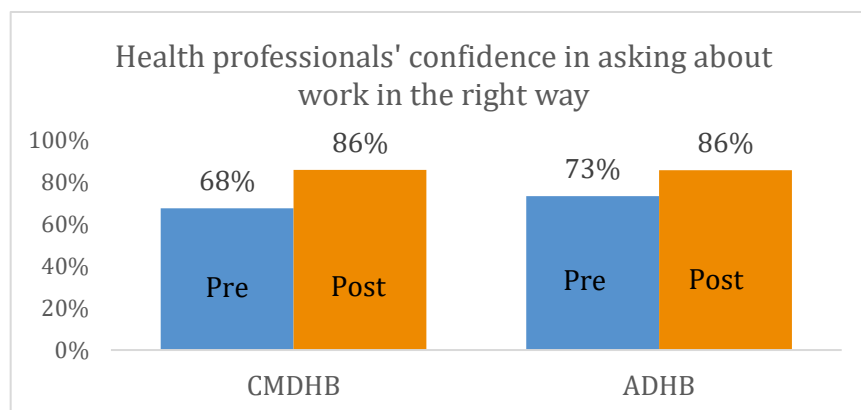


Figure 5: Health professionals' confidence in asking about employment in the right way.

Health professionals were asked to consider when volunteering should be considered on a person’s work journey. As shown in Table 18 most respondents answered “sometimes” both before and after the training. One person at each DHB shifted from “always” to “sometimes” and one person at CMDHB shifted from “sometimes” to “never”.

Table 18: Should volunteer work be the first step on someone’s work journey?

CMDHB		ADHB	
Pre	Post	Pre	Post

Always	8	7	5	4
Sometimes	23	23	11	12
Never	0	1	0	0
Responses without both pre and post answers were excluded to enable a direct comparison. CMDHB n=31; ADHB n=16				

Health professionals were asked to indicate how often they asked people about their desire to work. They could choose “never”, “yearly”, “every six months”, “every quarter” or “every month”. At CMDHB health professionals typically asked every quarter (48%) or every month (40%), though 12 per cent asked only every six months. As shown by Figure 6, health professionals reported they would ask more frequently, with two-thirds stating they would now ask monthly, an increase of 26 per cent.

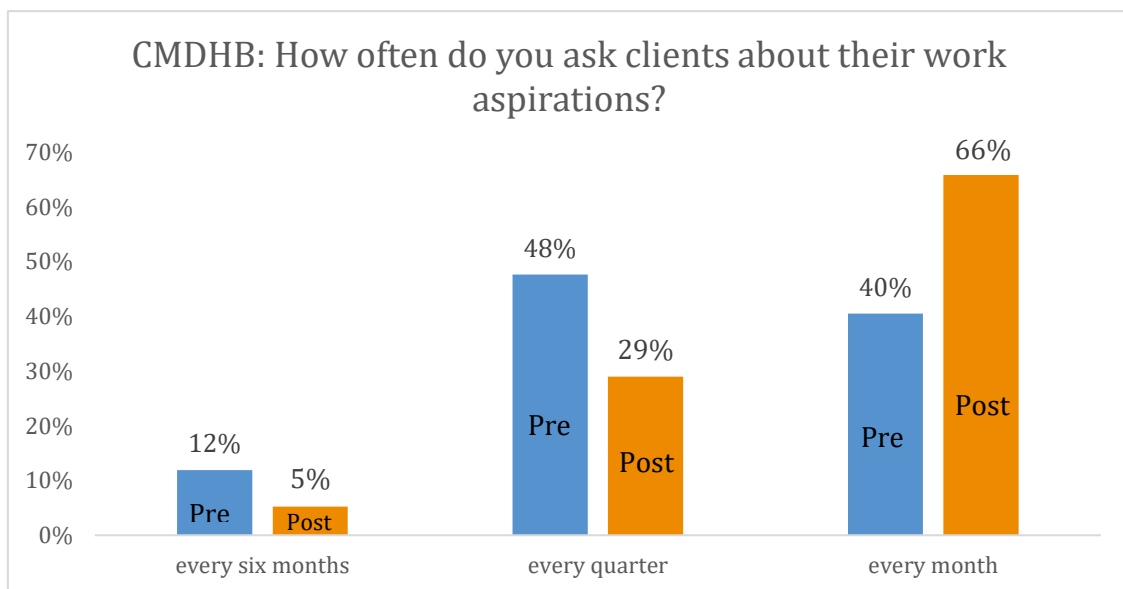


Figure 6: CMDHB health professionals' frequency of asking about work

A similar pattern is seen among respondents from ADHB. Before the training 53 per cent of respondents stated they asked monthly, with a third asking quarterly and 16 per cent asking every six months. As shown by Figure 7 three-quarters of health professionals, an increase of 23 per cent, now planned to ask about work monthly.

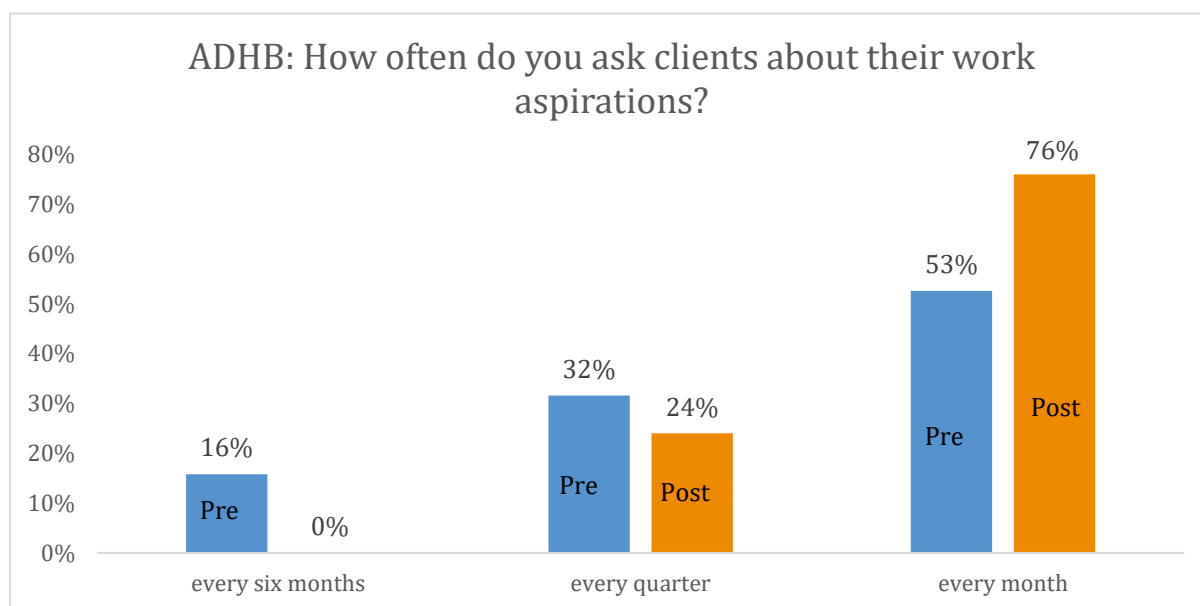


Figure 7: How often ADHB health professionals ask about work aspirations

Health professionals' perceptions of employment survey

This survey is the revised Health professionals' perceptions of employment (Gladman et al., 2015), with modifications on the cover page to reflect New Zealand's mental health sector structure.

Name (optional): _____

Date completed: _____

Mental Health District (DHB): _____

Mental Health Team (CMHC): _____

Position Title: _____

Health Discipline: _____

Number of years worked in mental health: _____

Age: _____

Gender: **M** **F** (Please circle)

***Instructions:** Please answer all questions and ensure all fields on the cover sheet (name is optional) are completed. Circle the correct answer from the list, or write the correct answer in the space provided. Your identity will be protected through secure storage of these documents and through only reporting aggregated results of this survey. This information is being collected as part of the evaluation of the IPS Implementation manager pilot. Any queries about this survey may be addressed to Heather Kongs-Taylor, Researcher. heather.kongs-taylor@tepou.co.nz or 09 3006764.*

Thank you for completing this brief survey. Your information is very important and will help to manage and develop this program.

1. Approximately how many active clients do you have on your current caseload? _____

[Note active clients are those with whom you have been in touch during the past six weeks]

2. Do you have responsibilities for supervising or mentoring other staff? Yes/No

3. Please consider your current active caseload. Of the active clients, what proportion do you consider is: *[Please express as a per cent, so that all figures add to 100%]*

a) Capable of full time work? _____

b) Capable of part time work? _____

4. Of the active clients on your caseload, with what proportion have you discussed their individual vocational goals? *[Vocational includes education, training or employment goals]*

[Express as an approximate percentage 0-100] _____ or; N/A (e.g. if you don't have a caseload).

5. Do you (or staff you supervise) have access to an employment specialist who is capable of assisting clients directly with their individual competitive employment goals?

a) Yes, there is a co-located employment specialist linked to this Mental Health team.

b) Yes, although not co-located with our mental health service, access has been arranged to employment specialist staff of suitable disability employment services in the local area.

c) No, there is no co-located employment specialist, nor is access established to staff of disability employment services in the local area.

6. If you have access to a co-located employment specialist, how confident are you that the person currently doing that job can succeed in helping all referred clients to gain and maintain competitive employment. *[Express confidence as a percentage 0-100] _____ or; N/A*

[If N/A go to Q9]

7. If you recorded less than 100% confidence on the previous question, please give an example of the problems that you have experienced when you have referred clients to the employment specialist.

8. If you have access to a co-located employment specialist, how well is that person currently accepted, supported, and valued by other members of the mental health team?

0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10

(Not at all valued or accepted)

(Very much valued and accepted)

9. Can you suggest any practical ways that you can support clients with their vocational goals, or support the employment specialist to help clients achieve their vocational goals?

a) _____

b) _____

c) _____

10. In your view, how important is competitive employment in clients' recovery plans?

- a) Not at all important or not usually relevant to their clinical recovery.
- b) Sometimes important but only if the client requests vocational assistance.
- c) Important enough to need discussing with all clients.
- d) Very important, not to be overlooked.



Training Course Evaluation – Pre-course

Training Course.....

Date..... Trainer(s).....

Name & designation..... Service.....

Please answer the following questions based on your current knowledge:

1. How many clients with severe and enduring mental health problems do you think want to work?%. (answer out of 100%)
2. How many of your current caseload of clients might consider work something they want to do or can do?%. (answer out of 100%)
3. How confident do you currently feel asking a client about their work aspirations?%. (0% no confidence- 100% very confident)
4. How confident do you feel that you are currently asking about work in the **right** way?%. (0% no confidence- 100% very confident)

Please circle the most appropriate answer for you:

5. Volunteer work should **always/ sometimes/ never** be considered as the first step on a person's return to work
6. How often do you currently ask a client about their work aspirations?

Every month / every quarter/ every six months / yearly / never



Training Course Evaluation – Post-course

Training Course.....

Date..... Trainer(s).....

Name & designation..... Service.....

Please answer the following questions based on your current knowledge:

1. How many clients with severe and enduring mental health problems do you think want to work?%. (answer out of 100%)
2. How many of your current caseload of clients might you now ask to see if work is something they want to do?%. (answer out of 100%)
3. How confident do you now feel asking a client about their work aspirations?%. (0% no confidence- 100% very confident)
4. How confident do you feel that you can now ask about work in the **right** way?%. (0% no confidence- 100% very confident)

Please circle the most appropriate answer for you:

5. Volunteer work should **always/ sometimes/ never** be considered as the first step on a person's return to work
6. How often will you now ask a client about their work aspirations?

Every month / every quarter/ every six months / yearly / never

References

- Becker, D. R., Smith, J., Tanzman, B., Drake, R. E., & Tremblay, T. (2001). Fidelity of Supported Employment Programs and Employment Outcomes. *Psychiatric Services*, 52(6), 834-836.
- Becker, D. R., Swanson, S. J., Bond, G. R., & Merrens, M. R. (2008). Evidence-based supported employment fidelity review manual. Dartmouth: Dartmouth Psychiatric Research Center.
- Bond, G. R., Drake, R. E., McHugo, G. J., Peterson, A. E., Jones, A. M., & Williams, J. (2014). Long-term sustainability of evidence-based practices in community mental health agencies. *Adm Policy Ment Health*, 41(2), 228-236. doi: 10.1007/s10488-012-0461-5
- Bond, G. R., McHugo, G. J., Becker, D. R., Rapp, C. A., & Whitley, R. (2008). Fidelity of Supported Employment: Lessons Learned from the National Evidence-Based Practice Project. *Psychiatric rehabilitation journal*, 31(4), 300-305.
- Browne, D., Stephenson, A., Wright, J., & Waghorn, G. (2009). Developing high performing employment services for people with mental illness. *International Journal of Therapy and Rehabilitation*, 16(9), 502-511.
- Browne, D., & Waghorn, G. (2010). Employment services as an early intervention for young people with mental illness. *Early Intervention in Psychiatry*, 4(4), 327-335.
- Chen, H. (1990). *Theory Driven Evaluation*. Thousand Oaks, California: Sage.
- Davidson, E. J. (2005). *Evaluation Methodology Basics*. Thousand Oaks, California: Sage Publications.
- Drake, R. E., Bond, G. R., & Becker, D. R. (2012). *Individual placement and support: An evidence-based approach to supported employment*. New York: Oxford University Press.
- Employment New Zealand. (2016). Previous minimum wage rates: Minimum wage rates from 2007-2017. Retrieved 28 March 2017
- Fixsen, D., Naoom, S., Blase, K., Friedman, R., & Wallace, F. (2005). *Implementation Research: A Synthesis of the Literature*. Tampa, Florida: University of South Florida, Louis de la Parte Florida Mental Health Institute.
- Funnell, S., & Rogers, P. (2011). *Purposeful Program Theory. Effective Use of Theories of Change and Logic Models*. San Francisco, California: Jossey-Bass.
- Gladman, B., Wishart, L., Waghorn, G., & Dias, S. (2015). Reliability of Health Professionals' Perceptions of Employment for People with Severe Mental Illness. *Journal of Rehabilitation*, 81(1), 3-8.
- Gowdy, E. A., Carlson, L. S., & Rapp, C. A. (2004). Organizational factors differentiating high performing from low performing supported employment programs. *Psychiatric rehabilitation journal*, 28(2), 150-156.
- Lockett, H., Waghorn, G., Kydd, R., & Chant, D. (2016). Predictive validity of evidence-based practices in supported employment: a systematic review and meta-analysis. 2016, 21(4), 261 - 281. doi: 10.1108/MHRJ-12-2015-0040
- Mihalic, S. (2002). The Importance of Implementation Fidelity. Boulder, Colorado: Center for the Study and Prevention of Violence.
- Morgan, V. A., Waterreus, A., Carr, V., Castle, D., Cohen, M., Harvey, C., . . . Jablensky, A. (2017). Responding to challenges for people with psychotic illness: Updated evidence from the Survey of High Impact Psychosis. *Australian & New Zealand Journal of Psychiatry*, 51(2), 124-140. doi: 10.1177/0004867416679738
- Nepe, M., Pini, T., & Waghorn, G. (2011). Enhancing mental health services through joint delivery with employment and other essential community services: Early lessons from an innovative New Zealand program. *Mental Health Review Journal*, 16(2), 64-75. doi: 10.1108/13619321111158007
- Patton, M. Q. (2008). *Utilization-focused evaluation* (4 Ed.). Thousand Oaks, CA: Sage.
- Ramirez, R., & Brodhead, D. (2013). *Utilization Focused Evaluation: A primer for evaluators*. Malasia Southbound Sdn. Bhd.

- Swanson, S. J., Burson, K., Harper, J., Johnson, B., Litvak, J., McDowell, M., & Weinstein, G. (2011). Implementation Issues for IPS Supported Employment: Stakeholders Share Their Strategies. *American Journal of Psychiatric Rehabilitation*, 14(3), 165-180. doi: 10.1080/15487768.2011.598099
- Te Pou o te Whaakaro Nui. (2016). Evaluation of IPS implementation manager role - Interim report. Auckland, New Zealand.
- Uppal, S., Oades, L. G., Crowe, T. P., & Deane, F. P. (2010). Barriers to transfer of collaborative recovery training into Australian mental health services: implications for the development of evidence-based services. *Journal of Evaluation in Clinical Practice*, 16(3), 451–455. doi: 10.1111/j.1365-2753.2009.01141.x

AUCKLAND

Level 2, 8 Nugent Street (B), Grafton
PO Box 108-244, Symonds Street
Auckland 1150, **NEW ZEALAND**
T +64 (9) 373 2125 **F** +64 (9) 373 2127

HAMILTON

293 Grey Street, Hamilton East
PO Box 307, Waikato Mail Centre
Hamilton 3240, **NEW ZEALAND**
T +64 (7) 857 1202

WELLINGTON

Level 2, 181 Thorndon Quay
PO Box 7443, Wellington South
Wellington 6011, **NEW ZEALAND**
T +64 (4) 381 6470 **F** +64 (4) 473 6849

CHRISTCHURCH

21 Birmingham Drive, Middleton
PO Box 22105, High Street,
Christchurch 8142, **NEW ZEALAND**
T +64 (3) 339 3782 **F** +64 (3) 339 3783