



**MINISTRY OF SOCIAL
DEVELOPMENT**

TE MANATŪ WHAKAHIATO ORA

Cost-effectiveness of intensive case management services (from October 2012 to July 2017)

Evaluation report

June 2019

Author

Marc de Boer, Principal Analyst, Ministry of Social Development (MSD)

Acknowledgements

I would like to thank Steven Johnston for his advice on the analysis, and Michelle Bly, Jared Forbes, Daniel Stoner, Jayne Russell, Antony Harvey, Freddy Ernst, Eleonora Sparagna, Angelique Praat, Bryan Ku, Hugh Webb, Ross Mackay, Tim Maloney and **Deborah O’Kane** for their comments and feedback on earlier versions of this report.

Disclaimer

The views and interpretations in this report are those of the researchers and are not the official position of MSD.

Citation

Suggested citation de Boer, M. (2019) *Cost-effectiveness of intensive case management services (from October 2012 to July 2017): Evaluation report*, Ministry of Social Development, Wellington.

Published

Ministry of Social Development
PO Box 1556
Wellington
www.msd.govt.nz

Published in June 2019

ISBN

Online 978-1-98-854183-9

Contents

Acronyms.....	iv
Glossary.....	vi
Summary.....	1
What are intensive case management services?	1
Summary of key findings.....	2
Purpose of this report	5
Why did we investigate wROI?	5
About welfare return on investment and intensive case management	6
What is wROI?	6
What is intensive case management?.....	7
Important limitations to be aware of	15
Welfare return on investment across services	16
Welfare return on investment by subgroup	20
Welfare return on investment by individual case management service	35
Work Focused Case Management General.....	35
Work Focused Case Management Health Condition and Disability	44
Work Focused Case Management Integrated Support.....	51
Work Focused Case Management Integrated Support for ex-Youth Service	55
Work Search Support.....	59
Work Focused Case Management Intensive Client Support (Early Entrant)	68
Work Focused Case Management Intensive Client Support (Entrenched)	72
Mental Health Employment Service trial	75
Sole Parent Employment Service trial.....	78
Work Focused Case Management pilot	84
Work Search Support pilot.....	92
Background to our analysis.....	101
Case management services	101
The goal of service streaming	103
Evaluation of the effectiveness of WFCM and Work Search Support.....	104
Participants excluded from the impact analysis.....	105
Related research on the Service Delivery Model.....	105
Works cited	107

Acronyms

CBA	Cost-Benefit Analysis
EA	Employment Assistance
FT	Full-time
GCM	General Case Management
HCD	Health Condition or Disability
IA	Investment Approach
ISE	Income Support Expenditure
IT	Information Technology
JS	Jobseeker
JS FT	Jobseeker with full-time work obligations
LET	Liability Estimation Tool (statistical risk model)
LLTBR	Likelihood of Long-Term Benefit Receipt (statistical risk model)
LTC	Low Trust Client
MHES	Mental Health Employment Service trial
MSD	Ministry of Social Development
NSDM	New Service Delivery Model
PPT	Percentage point
PT	Part-time
RCT	Randomised Control Trial
SDM	Service Delivery Model
SP	Sole parent
SP FT	Sole parent with full-time work obligations
SPES	Sole Parent Employment Service trial
SPS	Sole Parent Support
WFCM	Work Focused Case Management
WFCM General	Work Focused Case Management General
WFCM Health	Work Focused Case Management Health Condition or Disability
WFCM Intensive (Early)	Work Focused Case Management Intensive Client Support Early Entrant

WFCM Intensive (Entrenched)	Work Focused Case Management Intensive Client Support Entrenched
WFCM IS	Work Focused Case Management Integrated Service
WFCM Integrated (Youth)	Work Focused Case Management Integrated Support for ex-Youth Service
WR	Work-ready
wROI	Welfare return on investment
WSS	Work Search Support
YP	Youth Payment
YPP	Young Parent Payment

Glossary

Actual service	A service a person is assigned to each week. People may change services for unobserved reasons such as becoming ineligible or exiting main benefit.
Assigned service	A service a person is explicitly assigned to by meeting set eligibility criteria for the service that are observed by the researchers. It is the assigned service allocation that is evaluated in this analysis.
Case management	Case management is a general term for a period where a staff member works with individuals to help meet their needs and achieve their goals. For the Ministry of Social Development (MSD), the focus of case management is on meeting people's income needs and assisting them into employment.
Common support	The extent to which two groups are similar in their make-up, eg age, gender, work history, where they live and family circumstances. Common support is important when looking at service participants and those in the comparison group
Control group	Within a randomised control trial design (RCT), the control group are those who are assigned to the group which does <u>not</u> receive the intervention that is the subject of the RCT. Note, control group members generally receive alternative forms of assistance, rather than being denied any assistance at all.
Counterfactual service	The alternative case management service that the service is being compared against. Normally, this is the lowest-intensity service (GCM). To reduce the use of jargon terms, in this report we refer to 'baseline' service in place of counterfactual service.
Employment Assistance	Employment Assistance (EA) covers any programme and service with the explicit objective of helping people prepare for, find or transition into employment. EA interventions are usually discrete interventions (ie a training programme or wage subsidy) and are provided as part of case management.
General Case Management	GCM is the default case management service people are assigned to if they have not been assigned to any other service. GCM case managers have higher caseloads than other services and they are primarily responsible for income support administration.
Holdout period	The period a person assigned to a service control group cannot be assigned to that service. The period starts from when they are

assigned to the service control group. The duration of the period varies by service and can last from one to three years.

Impact	A quantitative estimate of the change in an outcome because of an intervention (causal effect). The impact is normally estimated using a counterfactual design.
Income support	The tax-based programme of financial transfer payments to people who are not working. Income support is divided into three levels: main benefits, supplementary assistance and ad hoc payments.
Intensive case-management	Services where case managers are assigned a lower caseload than for the baseline service General Case Management (GCM). The lower caseload is designed to allow case managers to spend more time with people on their caseload than would otherwise be the case.
Jobseeker Support Health Condition or Disability	JS HCD is a main benefit that is paid at the same rate as Jobseeker Work Ready, but people on this benefit are not subject to full-time work tests. JS HCD replaced the Sickness benefit in July 2013.
Jobseeker Support Work Ready	JS WR is a main benefit for people who are seeking employment. The JS WR replaced the Unemployment benefit in 2013. Sole parents with a youngest child over 14 years old are now on Jobseeker Support, while before July 2013 they would have been on DPS-Sole Parent until their youngest child turned 18.
Liability Estimator Tool	Liability Estimator Tool (LET) is a statistical risk model that estimates a person's lifetime income support costs to the age of 65. Everyone who has been on a main benefit since 1993 is scored on a weekly basis. The LET tool at the time of this report was not being used for operational decision making.
Likelihood of Long-Term Benefit Receipt	The Likelihood of Long-Term Benefit Receipt (LLTBR) is a statistical risk model that scores everyone on a working age main benefit on the probability they will remain on benefit for the next two years. The LLTBR is updated daily and has been used for operational decision making since 2010.
Low Trust Client	People who have a history of fraud or overpayments of income support.
Main benefit	Income support is divided into three tiers. Main benefit is tier one assistance and covers the bulk of income needs for families not in paid employment.

Non-participant effects	Interventions can have impacts on non-participants. For example, increased assistance to participants to help them move into employment can mean non-participants take longer to find employment.
National Qualifications Framework	In New Zealand qualifications are ranked on the National Qualifications Framework (NQF). The NQF is from 1 (lowest) to 9 (highest), with people gaining credits at each level. Once they have sufficient credits in the right combination of subjects they gain a qualification at that level.
Outcome	A state that a person is in on a dimension of individual wellbeing. Normally outcomes refer to states that an intervention is trying to change (see impact).
Partner	Income support entitlement is based on family status. For families with more than one adult, each adult is either the primary or partner.
Primary client	Income support entitlement is based on family status. For families with more than one adult, each adult is either the primary or partner. Historically, the emphasis has been on assisting the primary client.
Service	General term to refer to a case management service.
Service streaming	The automated process of allocating people to case management services based on their characteristics as recorded in the administrative systems.
Site	A local office responsible for case managing people living in the immediate geographical area.
Sole Parent Support	SPS is a main benefit for sole parents whose youngest child is under 14 years of age. SPS replaced the DPB-Sole Parent benefit in July 2013.
Supported Living Payment	SLP is paid to people with a long-term health condition or disability or caring for someone with a long-term health condition or disability. The SLP replaced the Invalid's Benefit and the DPS Carers benefits in July 2013.
Welfare expenditure	Expenditure includes income support payments, the costs of administering income support entitlement, and the provision of employment assistance (eg staff time, contract payments and subsidy payments).

Welfare ROI (wROI)	A cost-benefit measure that only includes welfare costs. Welfare costs include income support payments, administration costs, as well as case management and employment interventions to help people move into work. These are values from a fiscal perspective (ie government accounts) and not from a wider social perspective (eg we do not take into account the cost of taxation).
Work test	People with work obligations can be required to undertake activities such as meeting with a case manager or attending a seminar. These activities constitute a test of whether a person is meeting their work obligations. Failure to undertake required activities can start a sanction process that can result in a temporary reduction in payments or even cancellation of their income support entitlement.
Work test exemption	People on work-obligated benefits can get short-term exemptions from these obligations. For example, people on Jobseeker Support can get a medical certificate that gives them the status of Health Condition or Disability.
Young Parent Payment	A main benefit paid to teen parents up to the age of 19.
Youth Payment	A main benefit paid to young people aged under 18 who no longer receive the support of their caregivers.
Youth Service	A programme in which all people receiving a Young Parent Payment or Youth Payment must participate. Contracted providers who run the Youth Service programme help participants gain educational qualifications and move into employment.

Summary

This report summarises the welfare return on investment (wROI) for a range of intensive case management services targeted at people receiving income support.

What are intensive case management services?

In October 2012, the Ministry of Social Development introduced a centralised process that allocated people receiving income support into one of up to 10 different case management services. Each week, local offices would receive a list of people assigned to each service. Offices were then given the responsibility to assign individuals to case managers within each service.

Case management services differed in the following ways:

- Caseload: the number of people assigned to each case manager. The lower the caseload, the more time the case manager could spend with individual participants.
- Caseload make-up: how similar the people on the caseload were to each other (eg did they all receive the same type of main benefit or were they in the same age group).
- In-house or contracted-out: for two services, participants were case managed by an external provider.

See Table 1 for a description of the specific services covered in this report.

The objectives of allocating people to case management services were to better target assistance to those with higher needs or who were more likely to benefit from the service. These changes were made in response to the Welfare Working group (Rebstock, 2011) which found most employment assistance went to those unlikely to remain on welfare long term.

Key questions addressed by this report

The questions the analysis in this report tried to answer were:

- Have we seen a shift in investment towards those people expected to remain on benefit long term?
- Did we see a shift in investment towards people assigned to intensive case management services?
- Were case management services cost-effective?
- How long should participants spend on case management services?
- Are there particular groups who benefit more, or less, from services?

Summary of key findings

Have we seen a shift in investment towards those people expected to remain on benefit long term?

We have seen an overall shift in assistance towards non-jobseekers and those at risk of long-term welfare receipt

Between 2011 and 2017 we have seen an increase in the level of employment and case management assistance towards groups such as sole parents as well as people at higher risk of long-term benefit receipt. However, there was no corresponding reduction in the intensity¹ of case management and employment assistance for the groups who traditionally received high levels of assistance; namely: work-ready jobseekers under the age of 25.

Did we see a shift in investment towards people assigned to intensive case management service?

Service allocation had a modest influence on who case managers worked with

Our analysis found that service allocation had a moderate influence on which **individuals'** case managers worked with. When we examined the time staff spent with individuals, case managers spent a considerable amount of their time working with people outside of their service caseload. Working with people outside of their caseload was often driven by other priorities, such as assessing and processing income support assistance or meeting performance targets.

Additional investment was higher, but not large in absolute terms

The additional investment in intensive case management service above the baseline service (GCM) was, in many cases, relatively small in absolute terms. For the main in-house services,² the additional expenditure on assistance was between \$3.32 and \$11.52 extra for each week a participant was in the service.³ But, these figures did represent a large increase in percentage terms over the GCM baseline service. On average, the GCM baseline expenditure was between \$15.48 and \$23.13 a week.

Within services, jobseekers and lower risk participants continued to receive relatively more assistance

Within each service, the level of assistance was generally higher for lower-risk, younger jobseekers, compared with higher-risk groups, such as sole parents or those with health conditions or disabilities. This result in part can be explained by the fall in the intensity of assistance with longer duration in the service. Service intensity is defined as how much is spent on employment, case management, and income support administration

¹ The amount of assistance a person receives over a specific period (eg assistance for each week in a service).

² Excluding the trial services (Mental Health Service, Sole Parent Service and WFCM Intensive) and WFCM Integrated (Youth) whose baseline was WFCM General.

³ These figures include staff costs, as well as contract and subsidy payments for employment interventions.

expenditure while in the service. Since those less likely to exit benefit remain in the service for longer, the intensity of case management will be lower for this reason alone.

Were case management services cost-effective?

Most services were cost-effective after two years

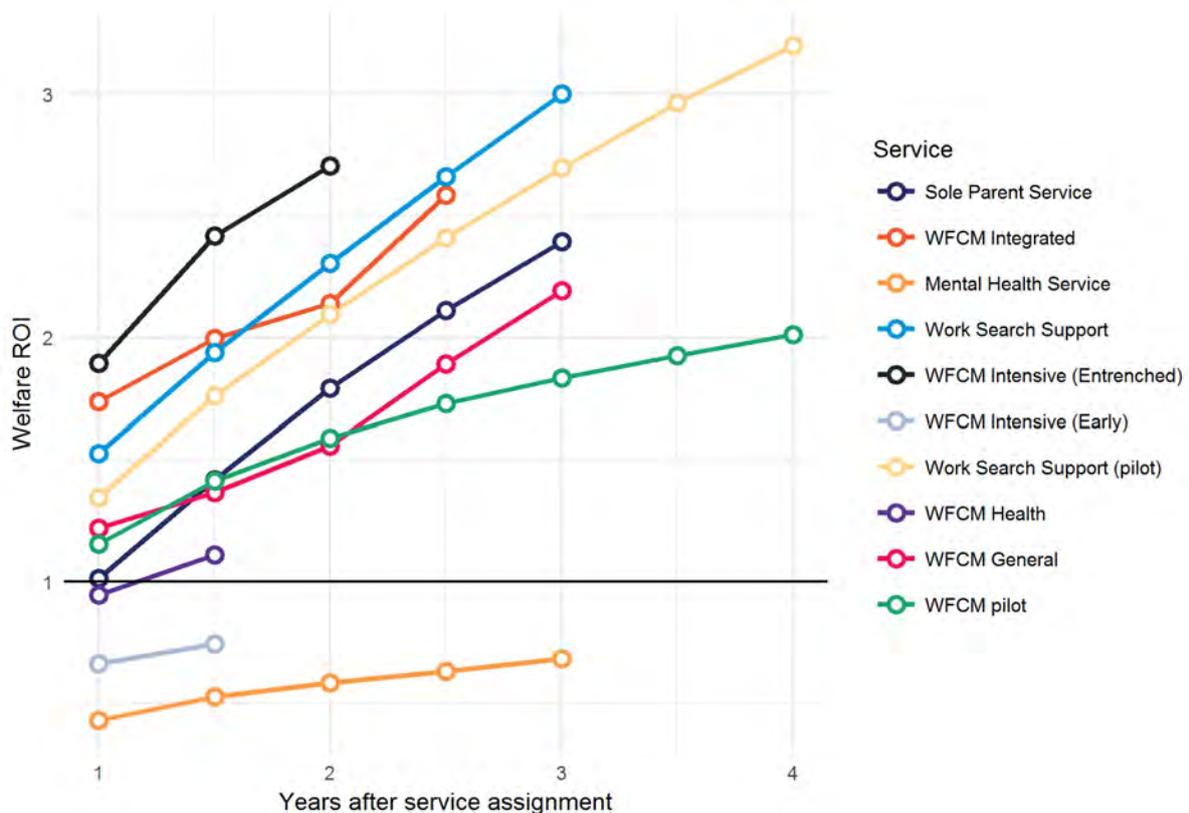
wROI is a cost-benefit measure that only includes welfare costs. It does not include wider fiscal or social costs or benefits.

Return amount (per person) <i>saved</i> by an intensive case management service in income support + avoided case management costs	÷	Investment amount (per person) <i>invested</i> in that intensive case management service	=	wROI
---	---	---	---	------

We acknowledge that looking only at welfare costs and benefits is a narrow lens by which to judge the social value of these interventions. We plan to expand the analysis to include other outcomes in subsequent updates to this report.

Figure 1 below shows wROI for the 10 intensive case management services included in this report. Each line shows how the wROI changes as we measure the costs and benefits of the service over progressively longer follow-up periods. For most services, the wROI increases with follow-up period because the investment costs are incurred early, while the returns accumulate over longer periods.

Figure 1: wROI for case management service by time after assignment to the service



- Of the nine services with at least two years of results, seven are cost-effective.
- At this point, the two Work Search Support services (the turquoise and light green lines) are showing the highest wROI.
- The two services at the bottom of the graph are unlikely to break even: Mental Health Service and Work Focused Case Management (WFCM) Intensive (Early).

Note that wROI continues to rise with time because the *costs* of providing each service are highest at the beginning (under two years), while *returns* are realised later. We have not observed the full return for any service to date. The upward trends of wROI in Figure 1 **shows those services whose wROI's continue to increase as we include the returns that occur over longer follow-up periods.**

How long should participants spend on case management services?

Intensive case management has the most impact on people in the first six to 12 months after starting the service

- People likely to respond to the service do so relatively soon after starting the service. Services are most effective at helping people to exit benefit in the first six to 12 months after they start.
- For most services, there was no noticeable advantage from people staying in the service past one-and-a-half years. The exceptions were WFCM General and WFCM Integrated where people were still more likely to exit from benefit one-and-a-half years than if they had been in the baseline service.

Services for sole parents are the most cost-effective

- Services targeted at sole parents showed the highest wROI. This is especially true for sole parents with part-time or full-time work obligations.
- Services targeted at jobseekers with a health condition or disability showed low wROI.
- Services targeted at work-ready jobseekers also showed lower wROI.

Purpose of this report

This report summarises the welfare return on investment (wROI) for a range of intensive case management services targeted at people receiving income support. These services include:

- Work Focused Case Management (WFCM) services
- Work Search Support (WSS)
- Investment Approach (IA) trials.

We used service streaming to evaluate the cost-effectiveness of different services. To achieve this, we included an RCT design in the process of allocating people to different services. Specifically, the RCT design allowed us to estimate whether assigning people to each intensive case management service had a net benefit in reducing welfare expenditure and how this varied over time. The results of that analysis are covered in this report.

Why did we investigate wROI?

Understanding the wROI for each service will help when deciding:

- which services to continue, discontinue, or invest in further, and at what point in time
- how to better allocate people to each service
- who we can improve the effectiveness of case management services for.

We acknowledge that wROI is a very narrow measure of the possible costs and benefits of intensive case management services. In future updates of this analysis, we plan to look at other outcomes and measure them from a social and fiscal perspective.

About welfare return on investment and intensive case management

In this section, we define welfare return on investment (wROI) and briefly outline the range of case management services included in our analysis.

What is wROI?

wROI is a cost-benefit measure that only includes welfare expenditure. It does not include wider fiscal or social costs or benefits.

How is wROI calculated?⁴

Return amount (per person) <i>saved</i> by an intensive case management service in income support + avoided case management costs	÷	Investment amount (per person) <i>invested</i> in that intensive case management service	=	wROI
---	---	---	---	------

Return includes:

- reduction in income support payments through people leaving benefit sooner under the service relative to the baseline service (GCM)
- avoided case management expenditure (both during and after the period in the intensive case management service).

Investment includes:

- expenditure on staff time while on the service
- contract and subsidy payments for employment assistance while on the service.

How is wROI expressed and what does it show us?

wROI is expressed as a ratio value.

- wROI of one or more indicates a cost-effective service (ie the value of the return exceeds that of the investment)
- wROI of under one indicates a service that is not cost-effective.

In addition, dollars are inflation-adjusted to March 2017 dollar values and discounted by two percent per annum flat rate. Unless stated otherwise, we have excluded indirect expenditure such as property, IT and national office expenditure from this analysis.

⁴ The ROI uses gross investments as the denominator, with the avoided case management costs included as part of the return. ROI can also be calculated as a net-investment (where the avoided case management costs are subtracted from the cost of the case management service).

What is intensive case management?

Intensive case management means allocating people to different case management services based on their characteristics (for example, whether they are sole parents, young parents, people suffering depression or stress, or people with a health condition or disability). This type of allocation is known as service streaming. The goal is to better target assistance towards people who face greater barriers to finding work and who are likely to benefit from more assistance. See **the 'Background' section later in this report** for details on how we allocated clients to services.

Below are short descriptions of each case management service we investigated, as well as the General Case Management (GCM) service we used as the baseline comparison service.

General Case Management (GCM)

Caseload: Unlimited	Type: Individual	Delivery: In-house
Description	Service was primarily designed to meet the income support entitlements for people on main benefits. People were assigned to GCM if they had not been allocated to more intensive case management services, such as WFCM General, and can remain on this service indefinitely. The high caseload ratios meant case managers did not have much time to provide active case management for people assigned to GCM.	
Target group	Anybody not in an intensive case management service. People in GCM are mainly those with no work obligations	

Caseload: the maximum number of people assigned to a case manager in each service.

Type: individual where case managers work with people individually on how to help them prepare for and find employment.

Sole Parent Employment Service (Sole Parent Service) trial

Caseload: ~	Type: Individual	Delivery: External
-------------	------------------	--------------------

Description	The Sole Parent Employment Service (Sole Parent Service) trial was a voluntary contracted case management service to provide employment support to sole parents on Jobseeker Support benefit for whom returning to full-time work was possible as their youngest dependent child was over 13 years old. Contracted case management providers delivered employment-related case management and assistance in overcoming barriers to full-time work, including employment placement and post-placement support. Providers were to tailor their case management activities to the individual needs of participants. Provider payments were linked to the outcomes achieved by participants.
Target group	People receiving Jobseeker Support benefit with full-time work obligations, not in a relationship and with a youngest child aged 14-17.

Caseload: the maximum number of people assigned to a case manager in each service.
Type: individual where case managers work with people individually on how to help them prepare for and find employment.

Mental Health Employment Service (Mental Health Service) Trial

Caseload: ~	Type: Individual	Delivery: External
-------------	------------------	--------------------

Description	The Mental Health Employment Service (Mental Health Service) trial was a voluntary contracted case management service to support participants with common mental health conditions to gain work and achieve sustainable employment. Providers were to achieve these aims through the provision of employment-related case management, placement and post-placement support, integrated with the participant's clinical support. The target group for the service were jobseekers who were willing to undertake full-time employment but were limited in their capacity to look for or be available to work because of common mental health issues such as anxiety, stress or depression. Providers were to tailor their case management activities to the individual needs of participants. Provider payments were linked to the outcomes achieved by participants.
Target group	People receiving Jobseeker Support benefit with part-time or deferred work obligations and any medical incapacity due to depression or stress.

Caseload: the maximum number of people assigned to a case manager in each service.
Type: individual where case managers work with people individually on how to help them prepare for and find employment.

Work Focused Case Management General (WFCM General)

Caseload: 121	Type: Individual	Delivery: In-house
Description	<p>A mandatory case management service where each case manager had a caseload of no more than 121 people who were the primary recipient of a main benefit. Case managers were responsible for proactively engaging with people who needed support to take steps towards gaining and sustaining employment. Case management included: (i) creating a plan to help people move towards employment, (ii) regular meetings to help make progress on the plan, (iii) providing income support administration (excluding benefit grants), and (iv) managing any other requirements from people on the case manager's caseload.</p> <p>Participants with work obligations had to attend meetings. If they were absent without good reason then their income support payments would be suspended, reduced and ultimately cancelled.</p>	
Target group	<p>WFCM General participants were mainly made up of sole parents, jobseekers and a small proportion of jobseekers with a health condition or disability (with part-time work obligations).</p>	

Caseload: the maximum number of people assigned to a case manager in each service.
 Type: individual where case managers work with people individually on how to help them prepare for and find employment.

Work Focused Case Management Health Condition or Disability (WFCM Health)

Caseload: 100	Type: Individual	Delivery: In-house
Description	<p>An employment-focused case management service for people with a health condition or disability. WFCM HCD involved specialised case management support for people with a health condition or disability to help them prepare for work and resolve any specific barriers to work they might have. WFCM: HCD caseloads were capped at 100 people who were the primary recipient of a main benefit for each case manager. Case managers were responsible for proactively engaging and providing case management to people who needed support to take steps towards employment, including: (i) creating a plan to help people move towards employment, (ii) regular meetings to help make progress, (iii) providing income support administration (excluding benefit grants), and (iv) managing any other requirements from people on the case manager's caseload.</p>	
Target group	<p>Jobseekers with a Health Condition or Disability.</p>	

Caseload: the maximum number of people assigned to a case manager in each service.
 Type: individual where case managers work with people individually on how to help them prepare for and find employment.

Work Focused Case Management Intensive Client Support (WFCM Intensive)

Caseload: 40	Type: Individual	Delivery: In-house
Description	<p>A mandatory internal case management service with a caseload of no more than 40 people for each case manager. WFCM ICS case managers worked with people who had complex issues or barriers to gaining employment.</p> <p>Case managers were responsible for proactively engaging with and providing case management to people who needed support to take steps towards employment, including: (i) creating a plan to help people move towards employment, (ii) regular meetings to help make progress, and (iii) managing any other requirements from people on the case manager's caseload. Apart from providing hardship assistance, ICS case managers did not undertake income support administration; this was done by GCM case managers.</p> <p>Participants with work obligations had to attend seminars and meetings. If they were absent without good reason then their income support payments would be suspended, reduced and ultimately cancelled.</p>	
Target group	<p>WFCM Intensive had two target groups:</p> <p>Early entrants — people who first entered the benefit system aged 16 or 17, or as young parents, and were now aged between 18 and 29.</p> <p>Entrenched — people who first entered the benefit system under the age of 20, had typically spent a significant time on benefit and were now aged between 30 and 39.</p>	

Caseload: the maximum number of people assigned to a case manager in each service.

Type: individual where case managers work with people individually on how to help them prepare for and find employment.

Work Focused Case Management Integrated Service (WFCM Integrated, WFCM Integrated (Youth))

Caseload: 80	Type: Individual	Delivery: In-house
Description	<p>A mandatory one-to-one intensive case management service for up to 100 people on a main benefit as a primary recipient for each case manager. Eighty of these primary beneficiaries were allocated to case managers and were people who had left Young Parent Payment and Youth Payment benefits, followed by jobseekers under the age of 25. In addition, up to 20 primary beneficiaries and their families who had complex needs and were not eligible for WFCM IS could be referred or selected by case managers for inclusion into the WFCM IS service.</p> <p>Case managers were responsible for proactively engaging with and providing case management to people who needed support to take steps towards employment, including: (i) creating a plan to help people move towards employment, (ii) regular meetings to help make progress, (iii) providing income support administration</p>	

(excluding benefit grants), and (iv) managing any other requirements from people on the case manager's caseload.

Participants with work obligations had to attend meetings. If they were absent without good reason then their income support payments would be suspended, reduced and ultimately cancelled.

Target group

People who were aged under 25 and had received a benefit before turning 19, but were not receiving a Health Condition or Disability (HCD) related benefit. Priority was given to people who received a Youth Payment or Young Parent Payment (WFCM Integrated (Youth)). In addition, up to 20 primary beneficiaries and their families with complex needs and who were not eligible for WFCM IS could be referred or selected by case managers for inclusion into the WFCM IS service.

Caseload: the maximum number of people assigned to a case manager in each service.

Type: individual where case managers work with people individually on how to help them prepare for and find employment.

Work Focused Case Management pilot (WFCM pilot)

Caseload: 121

Type: Individual

Delivery: In-house

Description

A mandatory case management service that ran in 24 selected sites. Each WFCM case manager had a caseload of no more than 121 people who were the primary recipient of a main benefit. Case managers were responsible for proactively engaging and providing case management to people who needed support to take steps towards employment, including: (i) creating a plan to help people move towards employment, (ii) regular meetings to help make progress, (iii) providing income support administration (excluding benefit grants), and (iv) managing any other requirements from people on the case manager's caseload.

Participants with work obligations had to attend meetings. If they were absent without good reason then their income support payments would be suspended, reduced and ultimately cancelled.

Target group

Full-time and part-time work-obligated jobseekers and sole parents.

Caseload: the maximum number of people assigned to a case manager in each service.

Type: individual where case managers work with people individually on how to help them prepare for and find employment.

Work Search Support (WSS)

Caseload: 217	Type: Seminar	Delivery: In-house
Description	<p>A mandatory one-to-many case management service targeted at people likely to gain employment. WSS provided different levels of support based on benefit duration, with people under six weeks on benefit undertaking self-direct job search, supported by outbound calling contact between weeks seven and 10. After week 11, participants attended a series of job search seminars. WSS case managers were also responsible for (i) providing income support administration (excluding benefit grants), and (ii) managing any other requirements from participants.</p> <p>Participants with work obligations had to attend the seminars and meetings. If they were absent without good reason then their income support payments would be suspended, reduced and ultimately cancelled.</p>	
Target group	Full-time and part-time work-obligated jobseekers and sole parents.	

Caseload: the maximum number of people assigned to a case manager in each service.
Type: participants attend a series of seminars covering job search and related issues.

Work Search Support (WSS) pilot

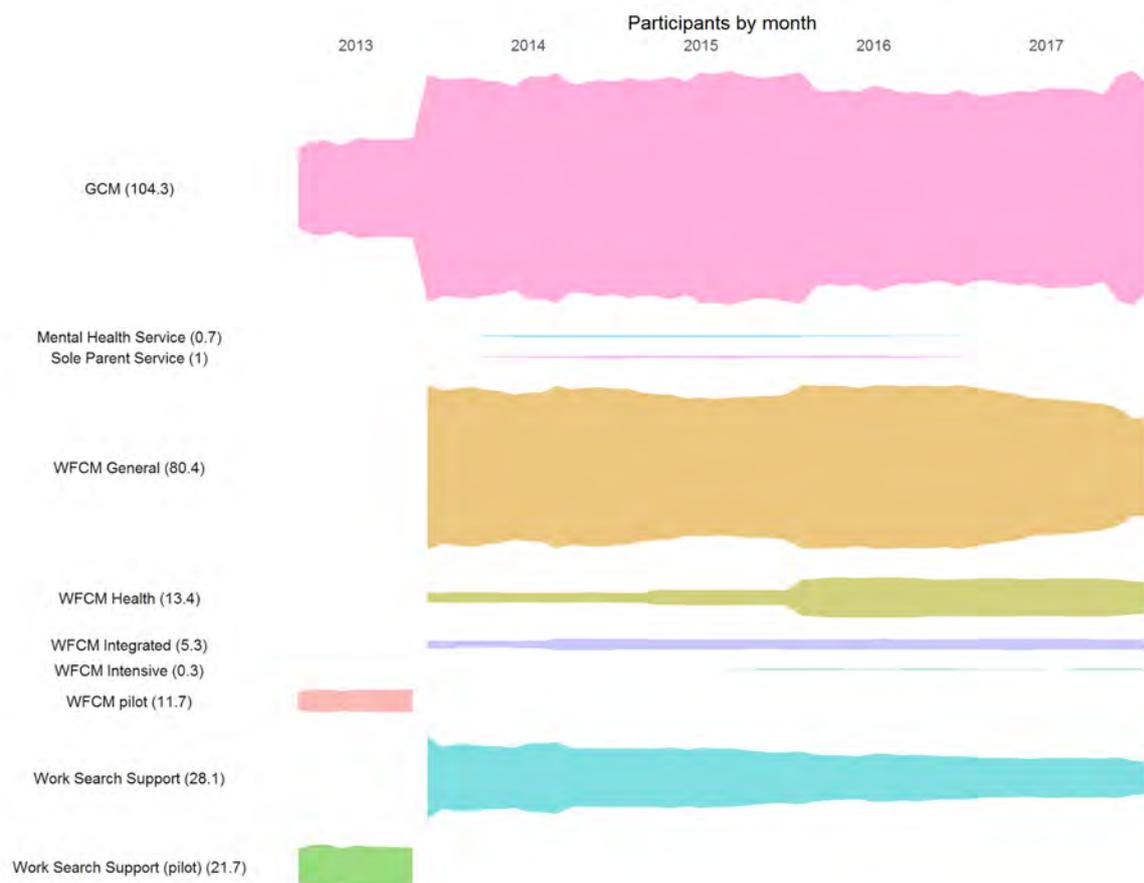
Caseload: 218	Type: Seminar	Delivery: In-house
Description	<p>A mandatory one-to-many case management service, in which each case manager had a caseload of no more than 218 people who were the primary recipient of a main benefit. WSS involved a structured sequence of job search seminars with clients. In addition to job search assistance, people on WSS also participated in employment programmes and services. Participants on main benefit for less than seven weeks were left to manage their own job search. WSS case managers could also undertake income support administration when required.</p> <p>Participants with work obligations had to attend the seminars and meetings. If they were absent without good reason then their income support payments would be suspended, reduced and ultimately cancelled.</p>	
Target group	Full-time and part-time work-obligated jobseekers and sole parents.	

Caseload: the maximum number of people assigned to a case manager in each service.
Type: participants attend a series of seminars covering job search and related issues.

Figure 2 summarises the relative size of each case management service from the start of the pilots in September 2012 to the end of the analysis period in 2017.⁵ From Figure 2 we can see that GCM was the largest service overall. One reason for its size was that GCM included people ineligible for intensive case management services. For example, people on Supported Living Payment (SLP, previously called the Invalid's Benefit) were not eligible for the case management services included in this report.

Of the intensive case management services, WFCM General was the largest single service, followed by Work Search Support. By comparison the two contracted-out trial services, Mental Health Service and Sole Parent Service, had a relatively small number of participants and stopped operating in 2017.

Figure 2: Average number of people assigned to case management services by month



The ribbons in the above chart show the number of people in each service at the end of each calendar month. The purpose of the chart is to give a sense of the relative size of the case management services compared to each other and how numbers changed over the analysis period. To provide an idea of the absolute size of each service, the number in the brackets after the service name is the average number (in thousands) of people in the service over the entire period.

⁵ Prior to 2012 individual sites had discretion over who they would case manage more or less intensively.

Case management before the New Service Delivery Model 2012

MSD operated different forms of case management services in the period before 2012.

Case management before the Service Delivery Model (SDM) was a mix of locally determined strategies (ie individual sites deciding which groups to work with more intensively) and nationally mandated interventions. Examples of the latter include:

Job Search Service (2006-2010) was a compulsory job search programme targeted at people who had spent less than 13 weeks on an unemployment related benefit. JSS was split into two parts. In the first week, participants completed a work assessment and attended a Work for You seminar. For the remaining 12 weeks, JSS required participants to undertake group job search activities, with a reassessment of progress at six and 12 weeks. Reassessments may have resulted in a referral to a different group-based job search activity (eg Search4WRK, In2WRK), a contracted service (eg Training Opportunities, Straight2WRK) or to be case managed on a one-to-one basis (Marc de Boer, 2010).

Enhanced Case Management (ECM) for DPB-WB (2002-2005) was a voluntary case management service to support people on domestic purposes and widow's-related benefits into employment, as their individual circumstances and parental responsibilities allowed. The Enhanced Case Management approach to promoting employment drew on the previous COMPASS model (DSW, 1997). ECM was supported by a reduction in the number of sole parents seen by each case manager and the introduction of specialist DPB and WB case managers. ECM involved the introduction of the Journal case management tool, which helped ensure a more systematic and comprehensive assessment of participants' needs and employment barriers. Personal Development and **Employment Plans (PDEP) were also introduced to identify and record recipients'** training, employment and personal development goals and agreed on action steps. Assessment and planning for the future began within six weeks of the grant of benefit (MSD, 2006).

New Service Model (2005-2006) involved a change at benefit application from assessing entitlements to determining work readiness. Determining work readiness involved pre-assessing benefit applicants and, if appropriate, referring them at an early stage to employment programmes and services (including work brokers) as well as work-focused planning with case managers.

The New Service Model involved the introduction of new services to better support people with health-related barriers to work. Services included: Preparing for Work assessments, targeted health interventions and a new employment co-ordinator role. Participants would be regularly re-assessed when their circumstances changed (Marc de Boer, 2006; Ramasamy et al., 2006). In 2008-2009, as a result of the global financial crisis, the number of people coming on to main benefit rapidly increased. Over this period, the caseload levels increased and, therefore, case management activities were mainly focused on main benefit entitlements. The introduction of the SDM in 2012-2013 represented an increase in the level of case management experienced by people on main benefit when compared with the earlier period from 2009 through to 2012.

Important limitations to be aware of

Errors in the randomisation process make us cautious about some findings

The findings for three services are less robust than findings for other services. The three services are:

- Work Focused Case Management Integrated Service (WFCM Integrated)
- Sole Parent Employment Service (Sole Parent Service)
- Mental Health Employment Service trial (Mental Health Service).

The reduced robustness of these findings is due to differences in the control and treatment groups of our investigation. We do adjust for observed differences, such as what type of benefit people are on in the analysis, but there is a possibility that unobserved differences remain.

We have reported the findings in this report for transparency. We discuss the possible implications of the imbalance in the summary profile for each service later in this report.

We did not investigate the overall effectiveness of the Service Delivery Model

We focused on the difference intensive case management makes over and above general case management (the lowest intensity service). We did not test whether the overall case management model was more effective than the case management practice in place before July 2013.

We didn't investigate improvements in wellbeing

We confined our analysis to the impact of intensive case management services on a subset of welfare outcomes⁶ (time off benefit, income support payments, and the expenditure on managing cases and helping with employment). We do not know whether these outcomes reflect genuine improvements in the wellbeing of participants and society overall.

We plan to extend the analysis to cover non-welfare outcomes in subsequent updates to this analysis and to calculate an ROI from a wider social perspective.

We did not investigate effects on people not in intensive case management

We were unable to examine whether intensively case managing some people affected other groups (ie employment gained by service participants came at the expense of someone in the baseline service). We do not know whether equivalent people in General Case Management spent more time on benefit because they did not receive assistance that was instead given to people in intensive case management. If this sort of effect occurred, it would (at least partially) offset some of the positive impacts set out in this report.

⁶ For example, **we did not evaluate individuals' direct experience of case management**, nor did we examine whether people received their full and correct entitlement.

Summary of key findings

In this section, we look at the overall results across all intensive case management services. We also draw some general conclusions about how the introduction of service streaming has changed which groups received assistance.

Welfare return on investment across services

Table 1 summarises the welfare return on investment (wROI) for the services covered in this report. For each service, the table shows the maximum period they could spend in the service, the follow-up period for which we have assessed wROI, and the baseline service that provides the comparison for calculating wROI.

Table 1: Welfare ROI for intensive case management services

Service	Maximum participation period (years)	Analysis period (years)	Baseline service	Welfare ROI	Investment	Return
WFCM General	2.0	3.1	GCM	*2.26	\$1,343	\$3,027
WFCM Health	1.9	1.9	GCM	1.20	\$1,272	\$1,526
WFCM Integrated	2.0	2.6	GCM	*2.65	\$1,480	\$3,920
WFCM pilot	0.7	4.4	GCM	*2.06	\$788	\$1,618
Work Search Support	1.0	3.3	GCM	*3.21	\$637	\$2,037
Work Search Support (pilot)	0.7	4.4	GCM	*3.37	\$515	\$1,739
WFCM Intensive (Early)	1.7	1.7	GCM	0.78	\$1,125	\$877
WFCM Intensive (Entrenched)	2.0	2.0	GCM	*2.71	\$1,296	\$3,520
Mental Health Service	1.0	3.2	GCM	0.70	\$1,320	\$923
Sole Parent Service	1.0	3.2	GCM	*2.49	\$1,432	\$3,562

All dollar values are inflation-adjusted to Quarter 1 2017 dollar values and discounted at 2% per annum flat rate. Departmental expenditure excludes indirect expenditure (ie property, IT and National Office).

All values are shown as a per participant average.

In all but one instance, the baseline service was GCM. We could not use GCM for WFCM Integrated (Youth) as no ex-Youth Service participants were assigned to GCM therefore these results are not shown.

The wROI is the ratio between the values in the Investment and Return columns.

wROI values with an * are significantly different from 1.00 (with 95% confidence).

Seven case management services showed wROI significantly greater than 1.00

Of the nine services for which we have at least two years of results, seven showed wROI significantly greater than 1.00. Of the remaining services, it was too soon to make a definitive judgement about whether WFCM Intensive (Early) will achieve a positive wROI.

For the Mental Health Service trial, we conclude the service is unlikely to achieve a positive wROI.

Summary of results for each intensive case management service

Below is a summary of the seven services, two trials, and two pilots discussed in-depth throughout this report.

Work Focused Case Management General (WFCM General)

WFCM General service showed a positive wROI after seven months. The service reduced the time to exiting benefit and increased the time spent off main benefit after exit. While on the service, participants had a slightly higher rate of income support than if they had been in GCM. The benefits of being on the service reduced substantially after about one-and-a-half years after participants started WFCM General. After this period, there was no difference in the likelihood of exiting benefit between being on WFCM General or GCM.

Work Focused Case Management Health Condition or Disability (WFCM Health)

After nearly two years, this service was breaking even. It achieved only a small reduction in the time participants spent on main benefit. Unlike most case management services, this reduction came largely from participants remaining off main benefit for longer after exiting WFCM Health than for the GCM scenario.

Work Focused Case Management Integrated Service (WFCM Integrated)

This service showed a similar wROI to WFCM General. However, because of problems with the randomisation for this service, we are somewhat cautious about the results.

Work Focused Case Management Integrated Support for ex-Youth Service (WFCM Integrated (Youth))

The wROI of this service has to be interpreted differently, as the baseline service is WFCM General rather than GCM. Overall, we conclude no difference between assigning ex-Youth Service participants to either service. They received the same level of assistance and achieved an almost identical level of income support payments.

Work Focused Case Management pilot (WFCM pilot)

After four years, this pilot achieved a positive wROI through reduced time to benefit exit but was offset by those exiting benefit returning to benefit sooner. Four years after starting WFCM pilot, we find a decreasing impact of the service on the likelihood of being off benefit. In other words, participation resulted in a short-term increase in the probability of being off benefit but did not result in a long-term increase.

Work Search Support

This service showed one of the fastest returns, with a positive wROI after two months, due to its low cost. The service both reduced the time to benefit exit and increased the time off benefit after exit. The benefits of Work Search Support occurred within the first six months after starting the service. After six months of the service, participants were no more likely to exit benefit if in Work Search Support than if they had been in GCM.

Work Search Support pilot

Over the long term, due to its low cost, this pilot achieved the highest wROI in the analysis. The impact of Work Search Support pilot was primarily through reducing the time to benefit exit, with a smaller contribution from increased time off benefit after exit. Even after four years, participants in Work Search Support pilot are slightly more likely to be off main benefit than if they had been in GCM. The national Work Search Support service is expected to achieve a similar long-term wROI as the pilot.

Work Focused Case Management Intensive Client Support Early Entrant (WFCM Intensive (Early))

As this service had operated for only just over one-and-a-half years, it was too early to assess its long-term wROI. The level of investment was among the highest of any service, once we standardised for the duration of the service. But we also found very high investment if the participants had otherwise been in GCM.

We found no impact on reducing the time to benefit exit or the time spent off benefit after exit. Accordingly, WFCM Intensive (Early) did not produce any significant increase in avoided income support payments.

Work Focused Case Management Intensive Client Support Entrenched (WFCM Intensive (Entrenched))

Older WFCM Intensive (Entrenched) participants are showing faster returns compared with their younger counterparts (WFCM Intensive (Early)). At two years after starting the service, WFCM Intensive (Entrenched) has a significantly positive wROI. On the other hand, WFCM Intensive (Early) is unlikely to break even over the medium to long term.

The level of investment in WFCM Intensive (Entrenched) was lower than for WFCM Intensive (Early) controlling for the duration of the service. But, the difference in investment between WFCM Intensive (Entrenched) and the baseline service (GCM) was the highest of all the in-house case management services covered in this report.

WFCM Intensive (Entrenched) primary impact was on participants leaving benefit sooner than if they were on GCM, with a much smaller impact on increasing the time off benefit after exit. We also found that participants received a slightly higher benefit rate than would have been the case if they were in GCM.

Mental Health Employment Service trial (Mental Health Service)

This trial achieved the lowest long-term wROI of all the services covered in this report. It did not break even. The only returns came from avoided case management expenditure, with no decrease in income support payments. The differences in the profiles of the participant and control groups are unlikely to explain this result, as the control group had a lower risk of staying on benefit long term than the participant group.

Sole Parent Employment Service trial (Sole Parent Service)

This trial achieved a significant positive wROI, but was also the most expensive service controlling for the duration of the service.

However, for the same target group, WFCM General achieved a higher wROI. The difference in wROI between the in-house and contracted-out service was caused mainly by the Sole Parent Service costing more than WFCM General for the same group. The

Sole Parent Service also suffered from a high drop-out rate, meaning only a small proportion of participants stayed on the service for one year.

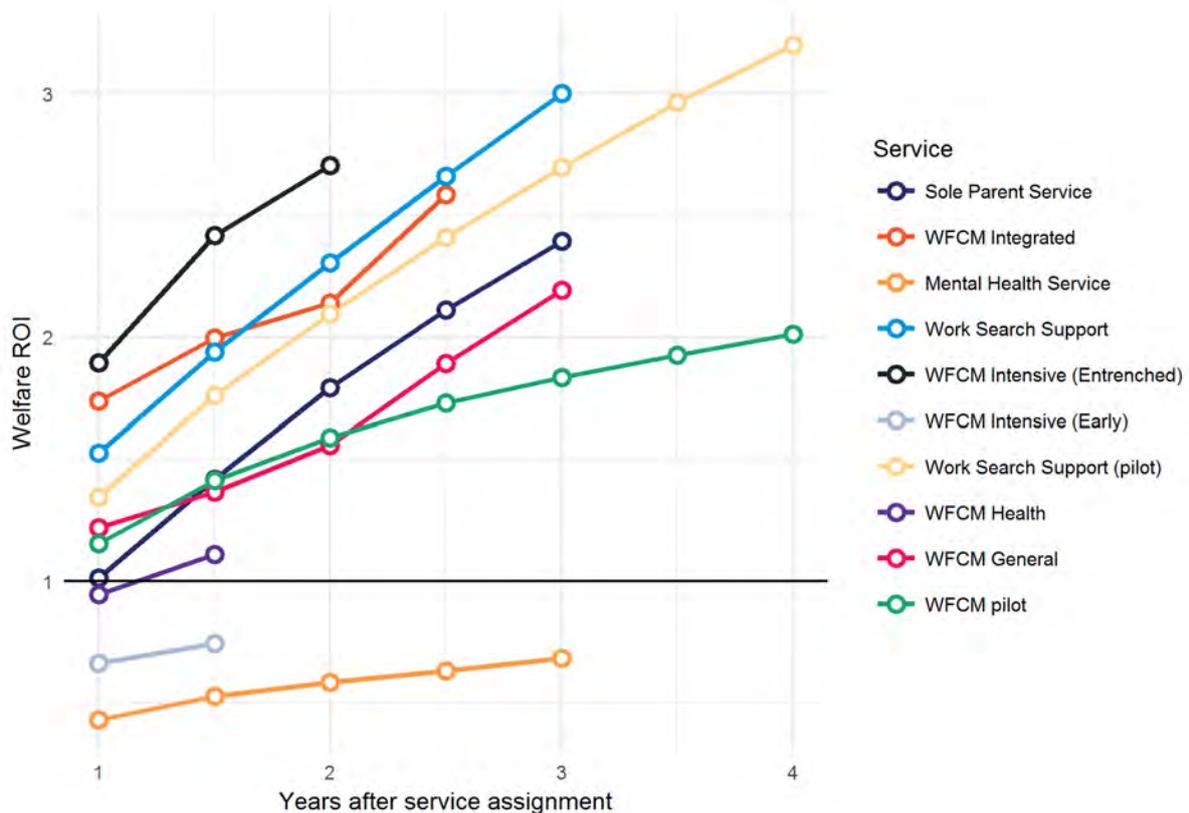
wROI tends to increase with time

While reporting the wROI at end of the analysis period, as shown in Table 1, is useful in understanding individual service performance, it makes it difficult to compare services. To enable service comparison, Figure 3 shows the wROI at six-monthly intervals from service start.

The general pattern is for the wROI to increase with time. This is because the investment in the service occurs sooner than the returns. If the wROI of a service stabilises, then we can conclude that we have seen the full impact of the service. WFCM Integrated (Youth), the WFCM pilot and the Mental Health Service are the three services where the trend indicates we can observe their final wROI.

Two years after service assignment is the longest follow-up period we had for comparing most of the main services. Of the current services, Work Search Support, WFCM Intensive (Entrenched) and WFCM Integrated showed the highest wROI at two years. But, as noted already, we are cautious of the WFCM Integrated result.

Figure 3: Welfare ROI at six-month intervals after service start



All dollar values are inflation-adjusted to Quarter 1 2017 dollar values and discounted at 2% per annum flat rate.

Intensive case management seems to be most effective in the first six-to-12 months after participants start a service

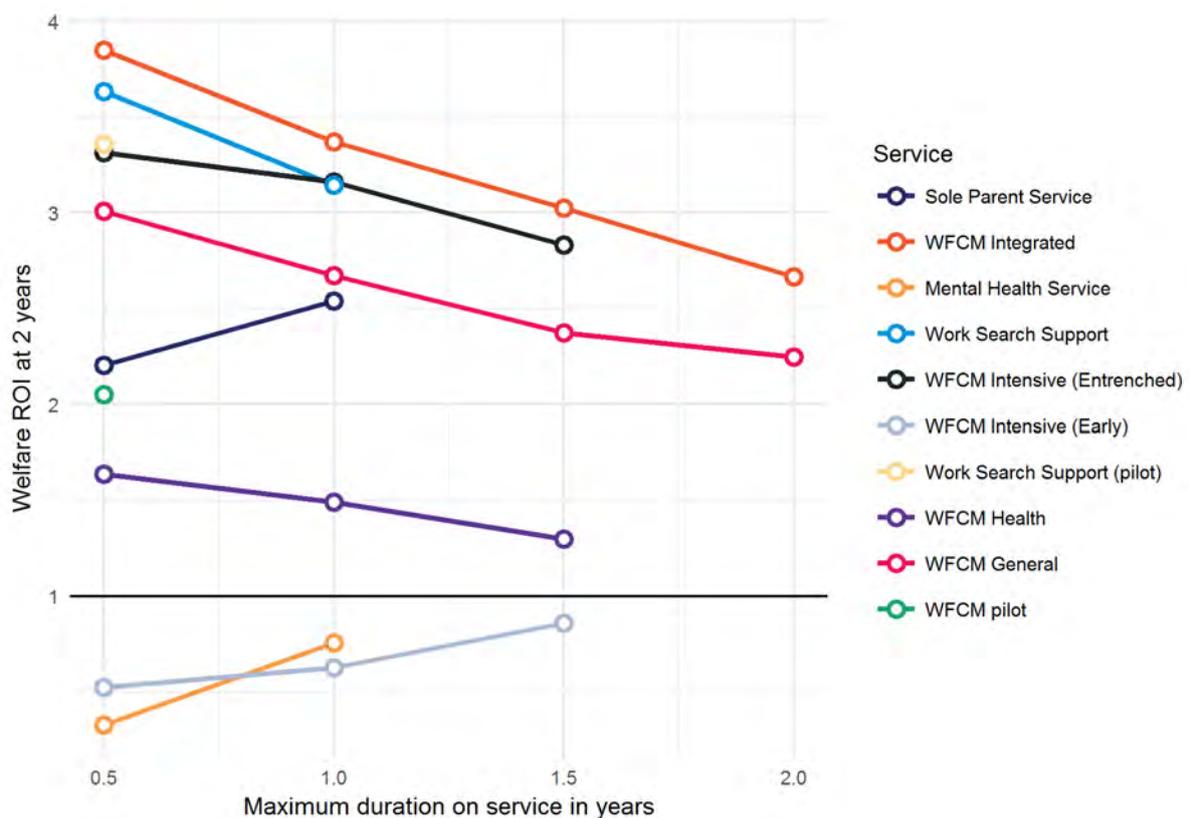
Because people can remain on services indefinitely, we are interested in whether the duration of the service has an impact on the welfare return on investment (wROI).

Figure 4 shows the expected wROI if we limit the time that participants can stay on the service. For example, if we limit the duration on WFCM General to six months at most, then we can estimate a wROI of *3.01 compared with 2.26 for the full two-year participation period.

The wROI of most services generally fell as we allowed participants to remain on the service for longer periods. For example, if we limit the time participants can spend on Work Search Support to six months, we estimate the service would have achieved a wROI of 3.63 at two years after service start. In contrast, if we allow participants to stay on Work Search Support for up to one year, then the expected wROI falls to 3.15.

There were two reasons for the fall in wROI with increased duration on the service. The first reason was that the average expenditure of the service increased with duration. The second reason was that the impacts of the service on participants' benefit exits fell with increased duration. We interpreted the falling impact with service duration as showing that participants who were likely to respond to the service, generally responded to the service early. We saw no evidence that subsequently longer periods of case management produced gains sufficient to offset the extra expenditure.

Figure 4: Welfare ROI at two years after service start by maximum duration on the service



All dollar values are inflation-adjusted to Quarter 1 2017 dollar values and discounted at 2% per annum flat rate.

Welfare return on investment by subgroup

We also examined the wROI of service by a small number of subgroup characteristics at the start of the service period. Here we show only those subgroups where we found consistent differences. Some services did not have enough observations to produce

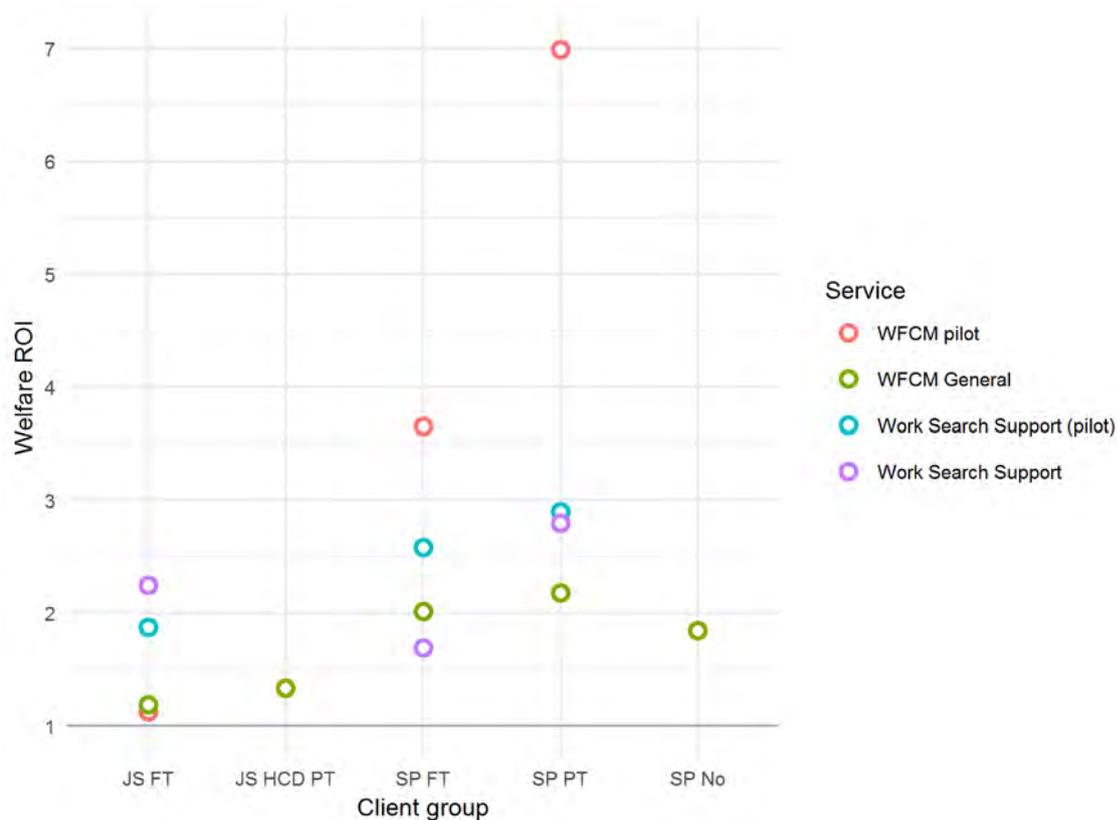
results at the subgroup level. In addition, we wanted to compare the wROI during the same period after starting the service. We chose to use two years, as this struck a balance between giving enough time to observe impacts while also including as many services as possible.

Type of recipient affects welfare return on investment

Figure 5 compares the wROI for services split by whether a person was a sole parent (SP), had a health condition or disability (JS HCD) or was a work-ready jobseeker (JS). These groups are further split by work obligation status; full-time work (FT), part-time work (PT), or none (No).

In Figure 5, we find that services had generally higher wROI for sole parents, especially with those with PT and FT work obligations. Conversely, the wROI was lower for jobseekers with an HCD. The wROI of jobseekers with full-time work obligations (JS FT) tended to be lower than for sole parents. The difference in wROI was driven by the intensity of investment between client groups: JS FT had a higher level of investment while on services than sole parents. We pick up this issue in the next section.

Figure 5: Welfare ROI by client group and work obligations at two years after starting the service



All dollar values are inflation-adjusted to Quarter 1 2017 dollar values and discounted at 2% per annum flat rate.

JS: Jobseeker; JS HCD: jobseeker with a Health Condition or Disability; SP: sole parent; FT: full-time work obligations PT: part-time work obligations; No: No work obligations, All: all obligation types or groups combined (because of a small number of observations).

The other reason for higher wROI for sole parents is because they are paid a higher rate of income support than jobseekers. Accordingly, an equivalent reduction in the time on

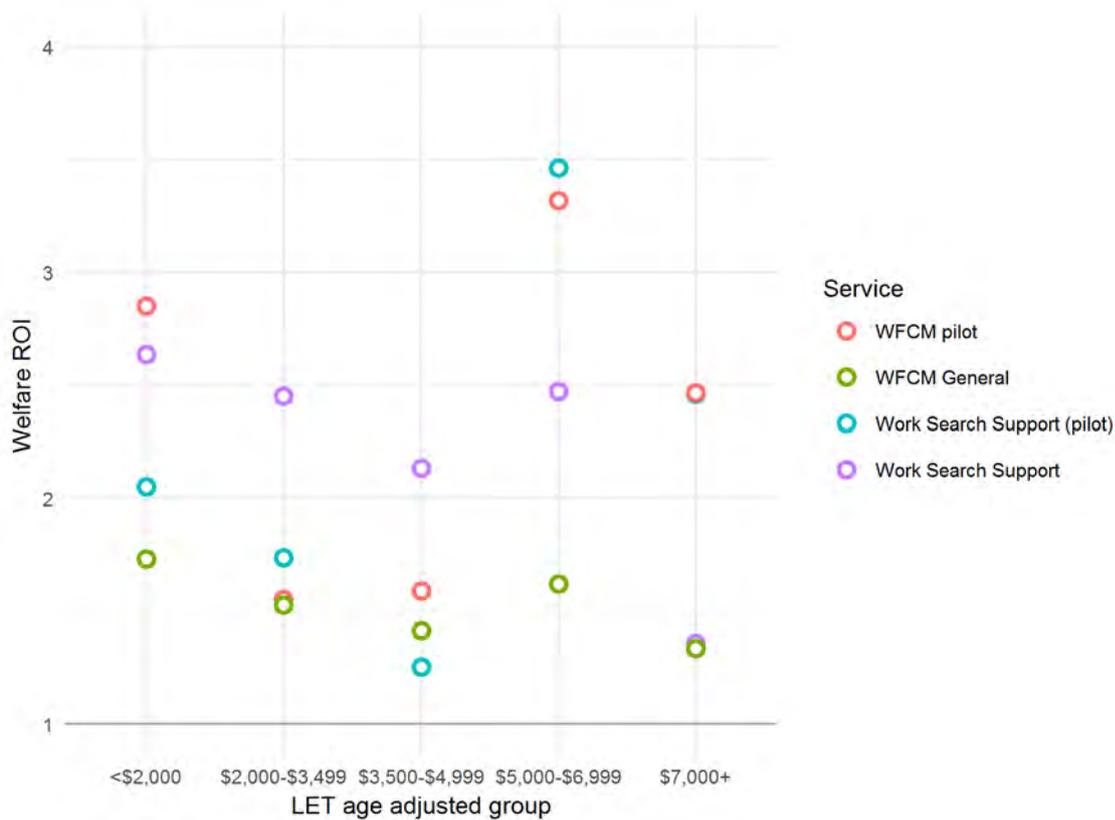
benefit resulted in larger reductions in income support payments for sole parents compared with jobseekers. Figure 7 (page 24) shows this effect quite clearly.

The very high wROI for WFCM pilot for Sole Parents with part-time work obligations applies to those already in part-time work at assignment. The wROI for WFCM General is a more representative result for the general sole parent population with part-time work obligations.

No clear pattern exists between wROI and participants' expected future welfare payments

Figure 6 shows the same wROI results as in Figure 5 above but broken down by the age-adjusted LET score. LET is a statistical risk profiling tool that estimates the expected welfare payments and related costs for an individual up to the age of 65 (MSD, 2016c). In this analysis, we divide the LET score by the number of years until a person reaches 65.⁷ The age-adjusted LET score is the estimated amount of welfare payments a person is expected to receive in each year up to the age of 65 (Figure 6).

Figure 6: Welfare ROI by age-adjusted LET score and work obligations at two years after starting the service



LET age-adjusted group: the expected average yearly welfare payments and related costs for an individual from their current age until they reach 65.

⁷ Because of discounting included in the LET, the age-adjusted values are not strictly equivalent, as the long-term welfare costs for a young person will have been discounted more than an older person. Therefore, older people will tend to have slightly higher age-adjusted LET scores than an equivalent younger person.

We found no clear pattern in wROI by age-adjusted LET score among services. One reason for this complex picture was for the trend in investment and return to move in different directions. Looking at the investment side, the intensity of investment decreased **with a person's** future expected welfare payments. Returns, on the other hand, either moved in the opposite direction or did not vary by age-adjusted LET.

Return

The return of the wROI is made up of two components:

1. avoided case management expenditure
2. net income support payments.

Of the two, we are most interested in net income support payments, as the measure reflects a substantial change in a **participant's** circumstances due to them being assigned to intensive case management services. We also looked at avoided case management expenditure when we examine the difference in the level of investment when assigned to different services, including GCM.

Increase in avoided income support payments was largest for sole parents

Figure 7 shows the average reduction in income support payments at two years after assignment to a service by client group. We found avoided income support payments were generally largest for sole parents. The larger decrease in income support payments for sole parents came from (i) a larger reduction in days on benefit for this group, and (ii) the higher rate sole parents are paid when on benefit.

Avoided income support payments were also higher for some people with high expected future welfare payments

Figure 8 shows the avoided income support payments by age-adjusted LET decile. In this case, we see a U-shaped pattern, with the smallest reduction in income support expenditure for the middle of the age-adjusted LET scores. It is not immediately obvious why this pattern has emerged.

Figure 7: Avoided in income support payments two years after service assignment by client group

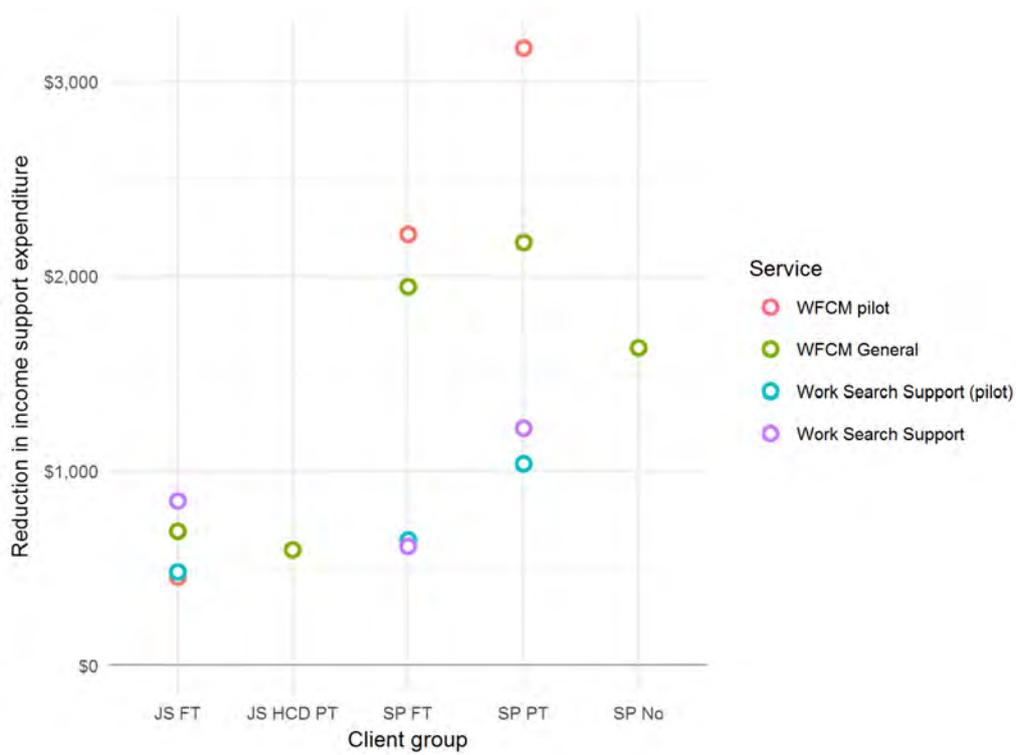
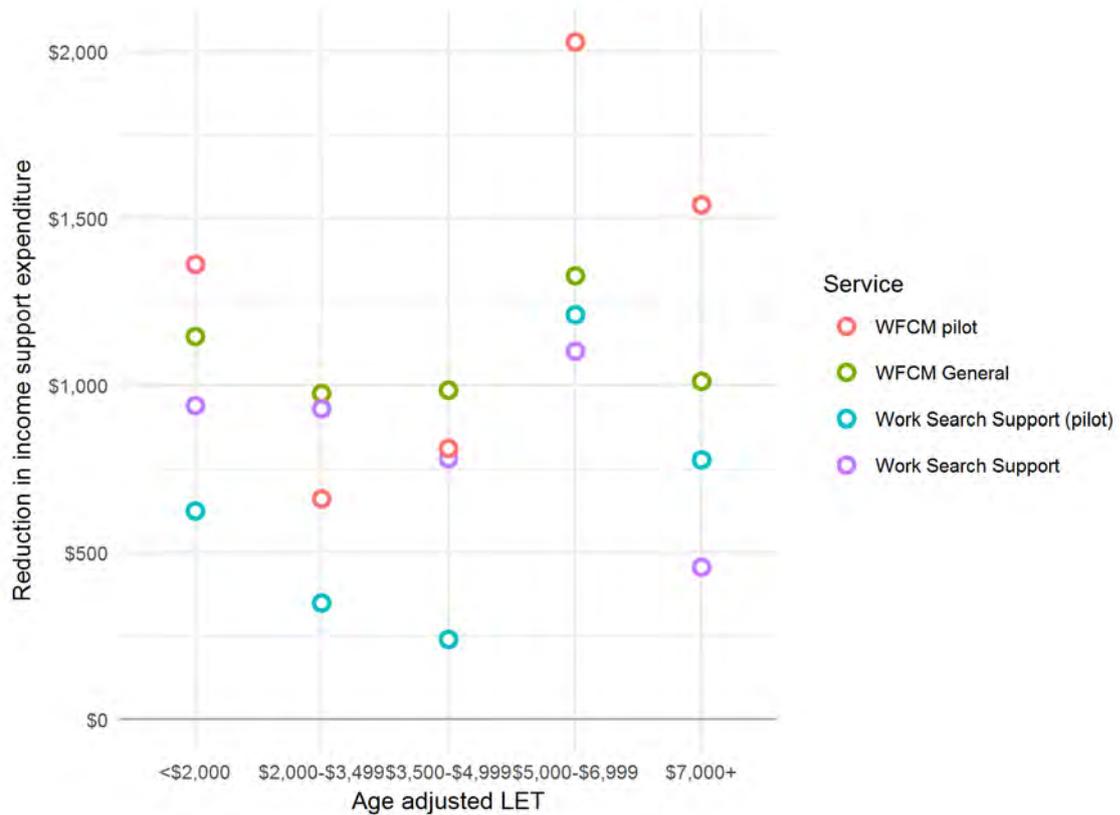


Figure 8: Avoided in income support payments two years after service assignment by LET group



Investment

The introduction of service streaming was part of a wider set of reforms to the welfare system, referred to as Welfare Reform. In preparation for these reforms, an independent review of the welfare system by the Welfare Working Group (WWG) concluded there was a mismatch between the people who received employment assistance and those expected to remain on benefit long term (Rebstock, 2011, p. 83). The review recommended that MSD better align the level of employment assistance to the expected future liability of the people receiving income support (Rebstock, 2011, p. 87).

In response to this recommendation, streaming people to different case management services aimed to target case management with an employment focus at specific groups. One important goal was to shift investment in employment and case management away from people with low expected lifetime welfare liability towards those with higher liability. This goal was based on the argument that people expected to remain on benefit over the long term will need more help to move into employment.

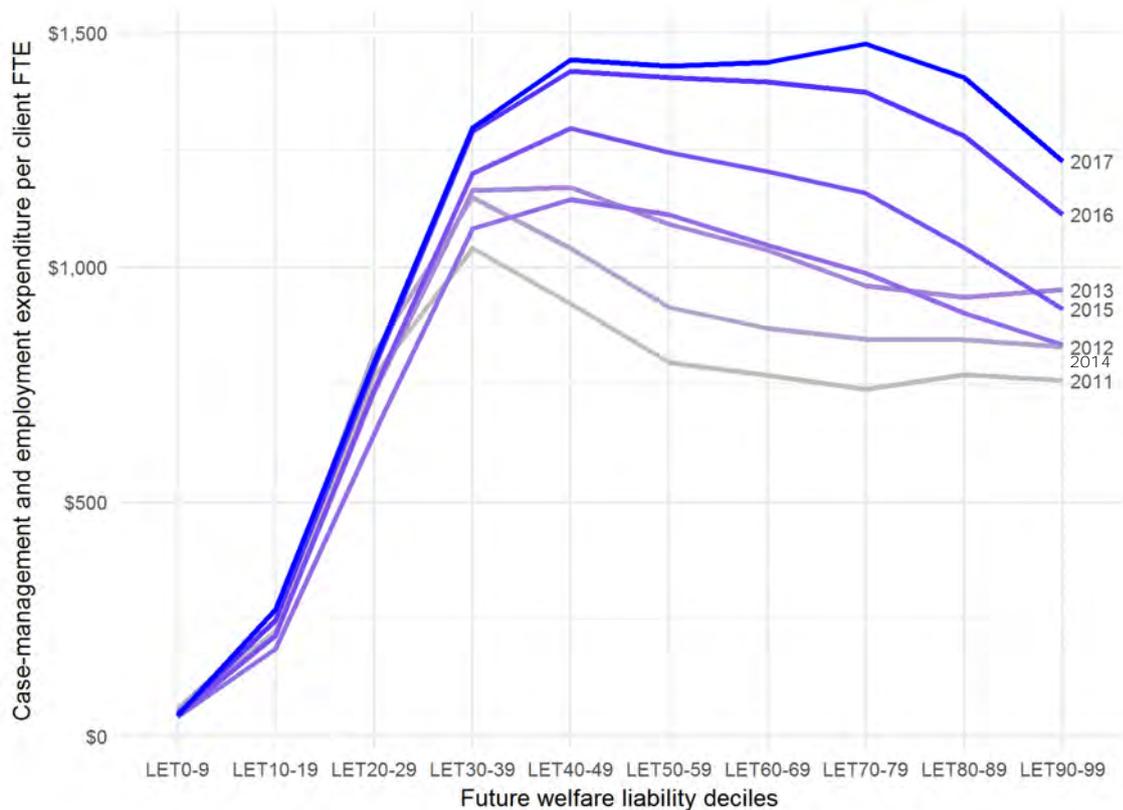
We have seen an increase in investment in sole parents and those with higher expected future welfare payments

Before looking at the relative level of investment by services, it is worthwhile to first examine the overall trend in which groups receive employment-related case management.

Figure 9 shows the intensity of employment assistance and case management (EA/CM) investment⁸ by expected lifetime liability band for each year from 2011 onwards. The expenditure value in Figure 9 is the total EA/CM expenditure divided by FTE (ie a person on benefit for a full year) and represents the average yearly active investment in real dollars. For example, for people in the LET 30-39 band in 2017, we estimate they would receive \$1,250 on average in EA/CM assistance per year on benefit.

⁸ In this metric, we exclude income support administration costs.

Figure 9: Intensity of employment assistance and case management (EA/CM) expenditure by expected lifetime welfare expenditure (LET)



LET: Liability Estimation Tool, estimates the expected lifetime welfare payments for an individual at a given point in time to the age of 65. In the chart LET scores have been converted into deciles, with higher decile values corresponding to higher expected future welfare payments.

Intensity: Total employment assistance and case management costs divided by the total duration on main benefit in a calendar year. Costs are inflation-adjusted to 2017 dollars.

FTE: A person on main benefit for a full year.

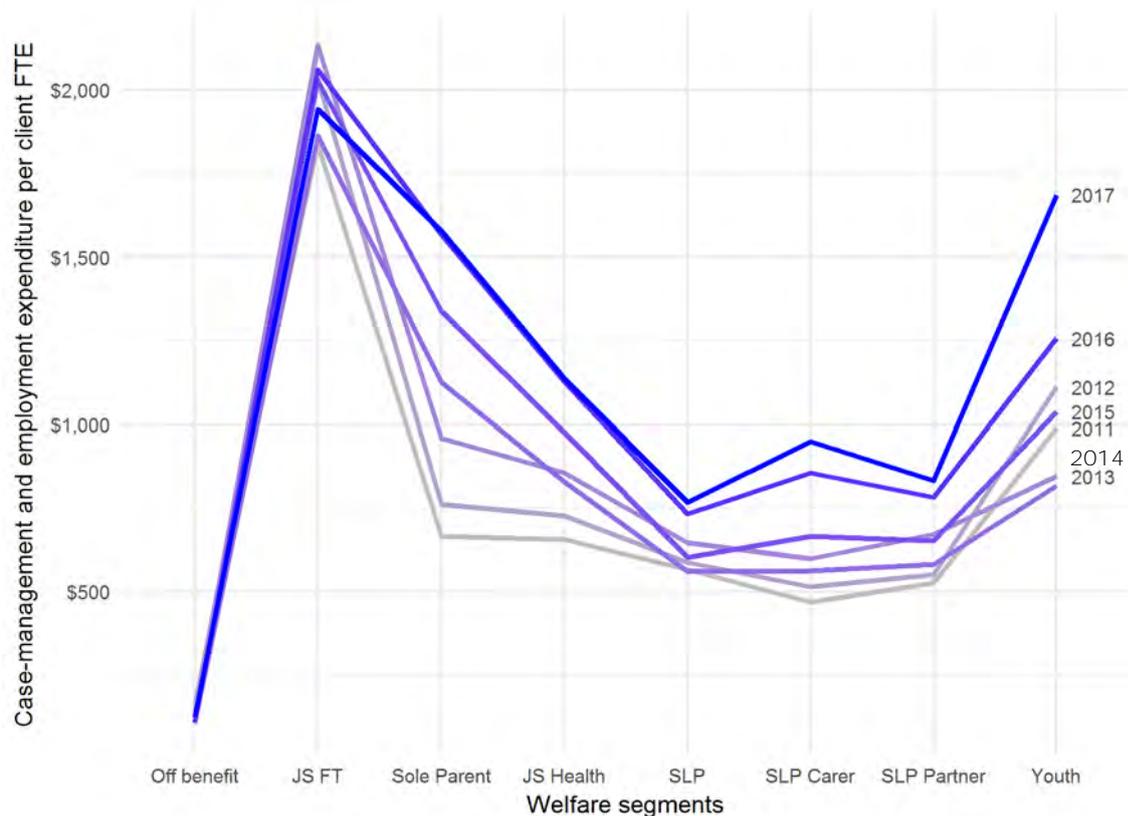
From Figure 9 we can see the average EA/CM spend peak has shifted from LET 30-39 to those in the 40-49 LET band (with 2017 having a peak at 70-79). The high investment in people with low LET scores before 2013 is consistent with the WWG finding that employment assistance has traditionally been spent on people expected to be on benefit short term. It also appears that the welfare reforms have succeeded in increasing the level of EA/CM assistance for people expected to remain on benefit long term. For each year after 2012, we can see that the level of EA/CM expenditure increased for people in the higher LET bands.

Having said this, this shift did not occur because average expenditure on the 30-49 LET bands decreased. Indeed, the intensity of EA/CM expenditure for these bands also increased.

Employment-focused case management has increased for sole parents

Here, we repeat the same analysis in Figure 9 above but look instead at EA/CM spending by client group instead. Figure 10 shows the level of EA/CM by welfare segment group from which we can begin to understand the circumstances of those receiving additional assistance.

Figure 10: Intensity employment assistance and case management (EA/CM) expenditure by income support group



Welfare segments: JS FT: jobseeker with full-time work obligations, Health: jobseekers with a health condition or disability, SLP: Supported Living Payment, SLP Partner: partner of an SLP, SLP Carer: caring for someone with a severe health condition or disability, Youth: Youth-related benefit.

Intensity: Total employment and case management expenditure divided by the total duration on main benefit in a calendar year. Expenditure values are inflation-adjusted to 2017 dollars.

FTE: A person on main benefit for a full year.

From Figure 10 we find the intensity of EA/CM is highest for JS FT and has remained so throughout the analysis period. The groups that have experienced the largest increase in EA/CM assistance have been sole parents and youth. More modest increases occurred for those in the JS Health and SLP groups.

Service streaming had a modest influence on targeting employment assistance

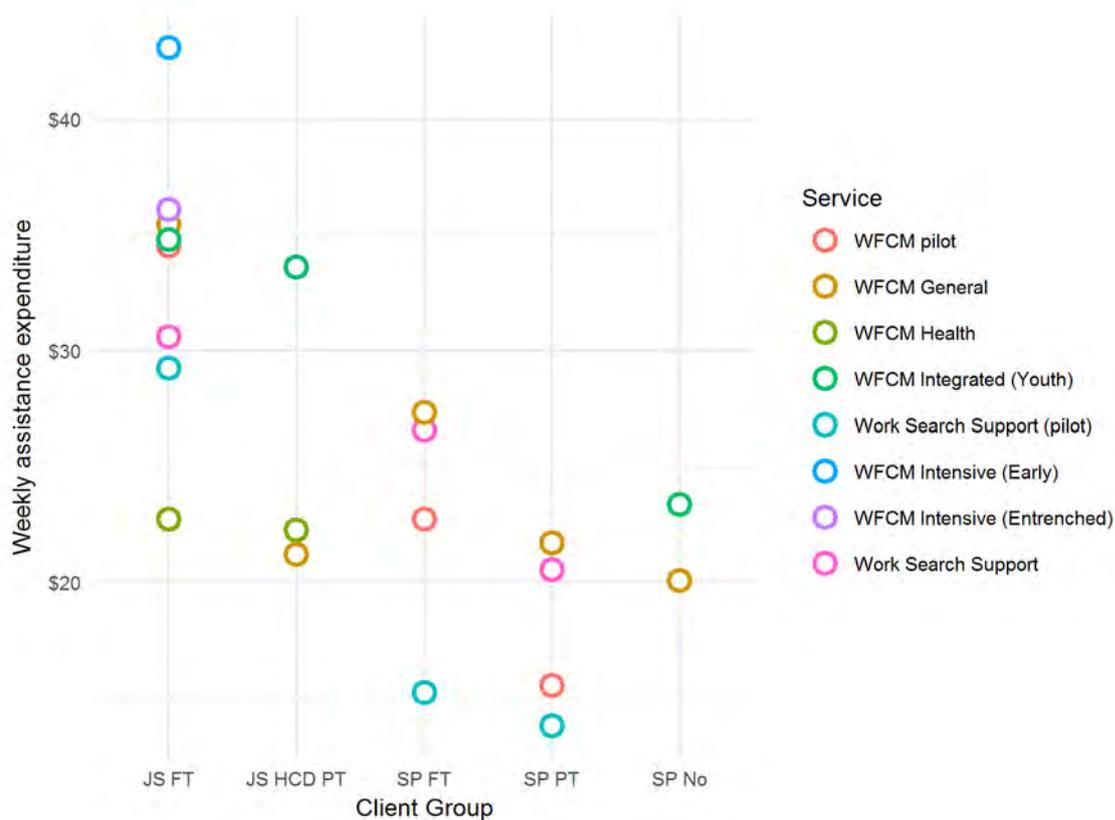
The above results show a shift over time in who receives employment assistance while receiving income support. The next question is how effective was service streaming in

shifting EA/CM investment towards those assigned to intensive case management services.

Overall, we conclude that service streaming had a modest influence in determining who receives employment assistance. The one notable feature that emerged from this analysis was a persistent pattern of higher investment in lower-risk groups. In particular, we found continued high investment in the traditional target group for employment assistance: under-25-year-old, low-risk, jobseekers with full-time work obligations. To illustrate this pattern, Figure 11 summarises the intensity of case management investment for each service by client group.

Figure 11 shows the average level of service intensity while on each service expressed as weekly assistance expenditure. Along the x-axis, we have the different client groups from jobseekers on the left through to sole parents on the right. Each dot on the chart is the average weekly expenditure by client group and service.

Figure 11: Intensity of service investment by client group



Service intensity: Weekly employment assistance, case management and income support administration expenditure while in the service

Investment was highest for work-obligated jobseekers irrespective of service

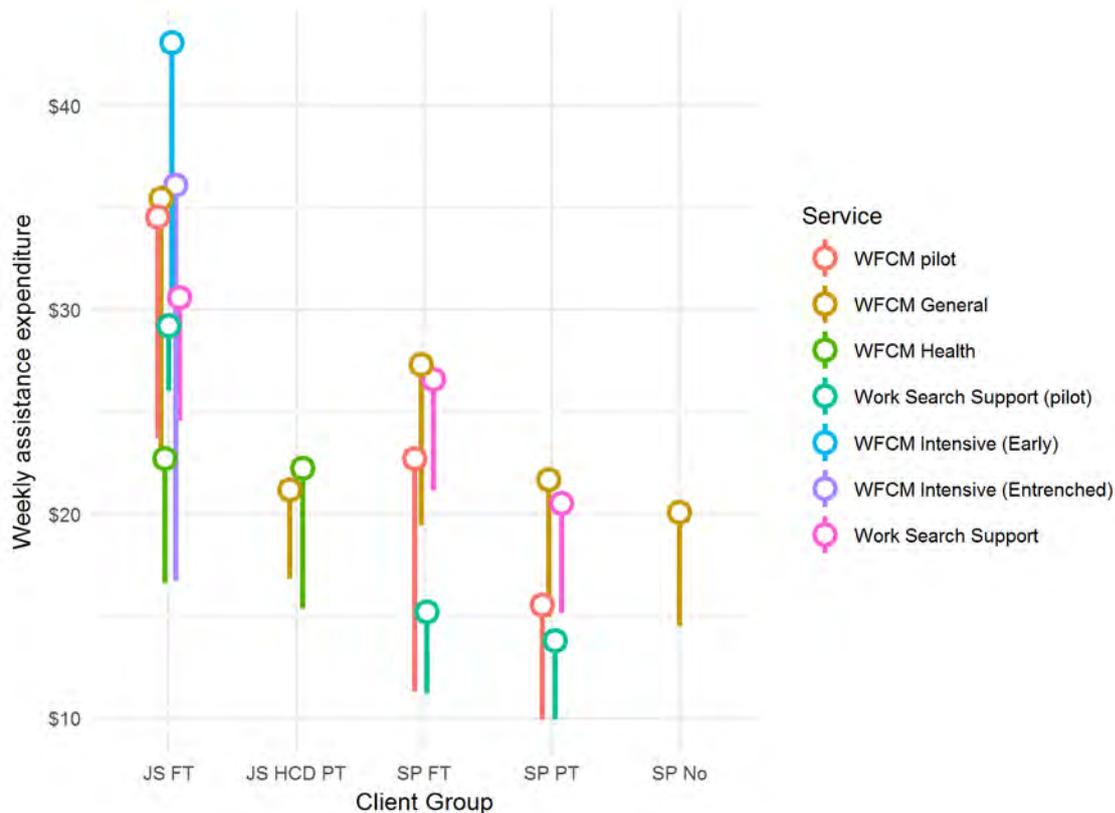
From Figure 11 we see the weekly case management expenditure for JS FT was consistently higher irrespective of case management service. In other words, within each service, staff put more resources into JS FT while they were on the service. By contrast, the weekly investment in sole parents and people with an HCD was comparatively modest.

Increase in investment between service and GCM was largest for jobseekers

Another perspective is to examine the difference in weekly expenditure between each service and the baseline (GCM). Figure 12 is an extension of Figure 11, and shows how much the service investment is above that of the baseline service. The length of the line indicates the size of the relative increase. For example, for sole parents with full-time work obligations (SP FT) the weekly expenditure on assistance increased from \$19.22 in GCM to \$26.95 in WFCM General.

Here, the group that generally experienced the greatest increase in case management help was JS FT. By contrast, the groups that traditionally had not received active assistance showed relatively modest increases in weekly investment above the baseline service.

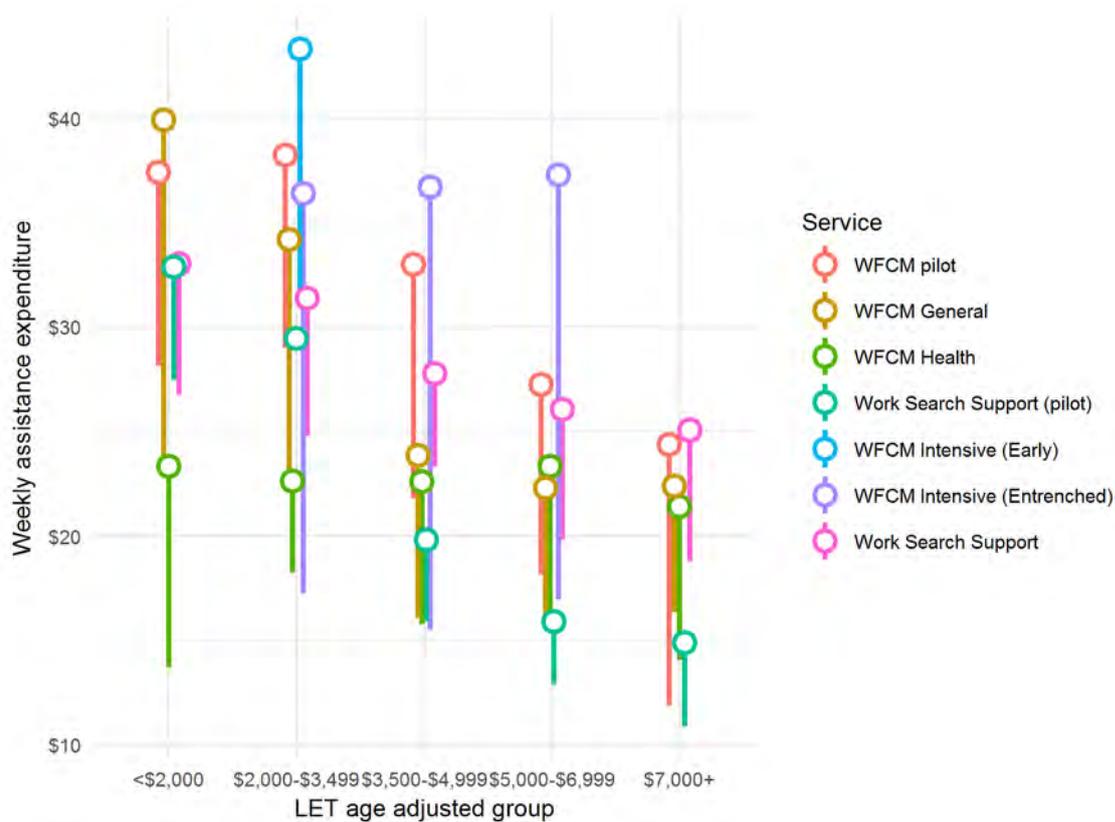
Figure 12: Intensity of baseline service investment by client group



Investment was higher for lower-risk groups

Figure 13 summarises the relative investment in each service and the GCM baseline by the risk of long-term benefit receipt. In general, we see the level of investment fell with the average risk level. The smallest variation was for WFCM Health, but this was because this group had a relatively low overall investment irrespective of the risk group. Likewise, for WFCM Intensive (Entrenched) we saw substantive increases in the intensity of investment to a similar level irrespective of age-adjusted LET score. We attribute this result to the very low caseloads for WFCM Intensive (Entrenched) that mean case managers have little scope in choosing who they worked within their caseload.

Figure 13: Relative intensity of investment between services and baseline scenarios by LET group



Service intensity: Weekly employment, case management and income support administration expenditure while in the service.

Baseline service: The baseline service was GCM.

Differences in service duration may help explain differences in the average intensity of assistance between low-and high-risk groups

One reason for the lower intensity of assistance for groups expected to remain on benefit long term was the general pattern of decreasing intensity with increasing duration in the service. In other words, case managers work less with people who have been on their service for longer. We plan to test whether this conjecture is correct in subsequent updates to this report.⁹

Case managers work with people outside their caseload

The GCM service was designed to meet people’s income support requirements, but the high caseload levels meant a limited case management focus on providing employment-focused assistance. However, from Figure 12 and Figure 13 we see unexpectedly high levels of expenditure on people assigned to GCM, especially for JS FT and those with lower age-adjusted LET scores. Further, this expenditure was made up of staff time and

⁹ The alternative explanation for higher intensity early in a participant spell is that case managers target lower-risk participants on their caseload, and these people tend to be on the service for relatively short periods.

employment assistance in the form of contract and subsidy payments. This raised the question of how far the service allocation was followed in practice. Specifically, how much time did WFCM General case managers spend with people streamed into WFCM General service?

Figure 14 summarises the proportion of staff time¹⁰ that we can link to individuals. For each individual, we identified the case management service they were on when the case manager worked with them. From the HR payroll system, we identified each case manager's service role (ie they were a WFCM General or a WSS case manager). That information was only available from June 2016 and did not always accurately align with the case manager's actual role. One reason was the lag in updating roles in the HR system. For this reason, we are cautious about some of the results for the smaller services, such as WFCM Intensive, where such errors can have a disproportionate effect.

The diagonal in Figure 14 shows the proportion of staff time spent on people assigned to their service. For example, we estimate WFCM General case managers spent 54 percent of the linked time with people assigned to the WFCM General service. WFCM Intensive case managers spent the least time on people assigned to their service (27 percent), followed by Work Search Support case managers (30 percent).

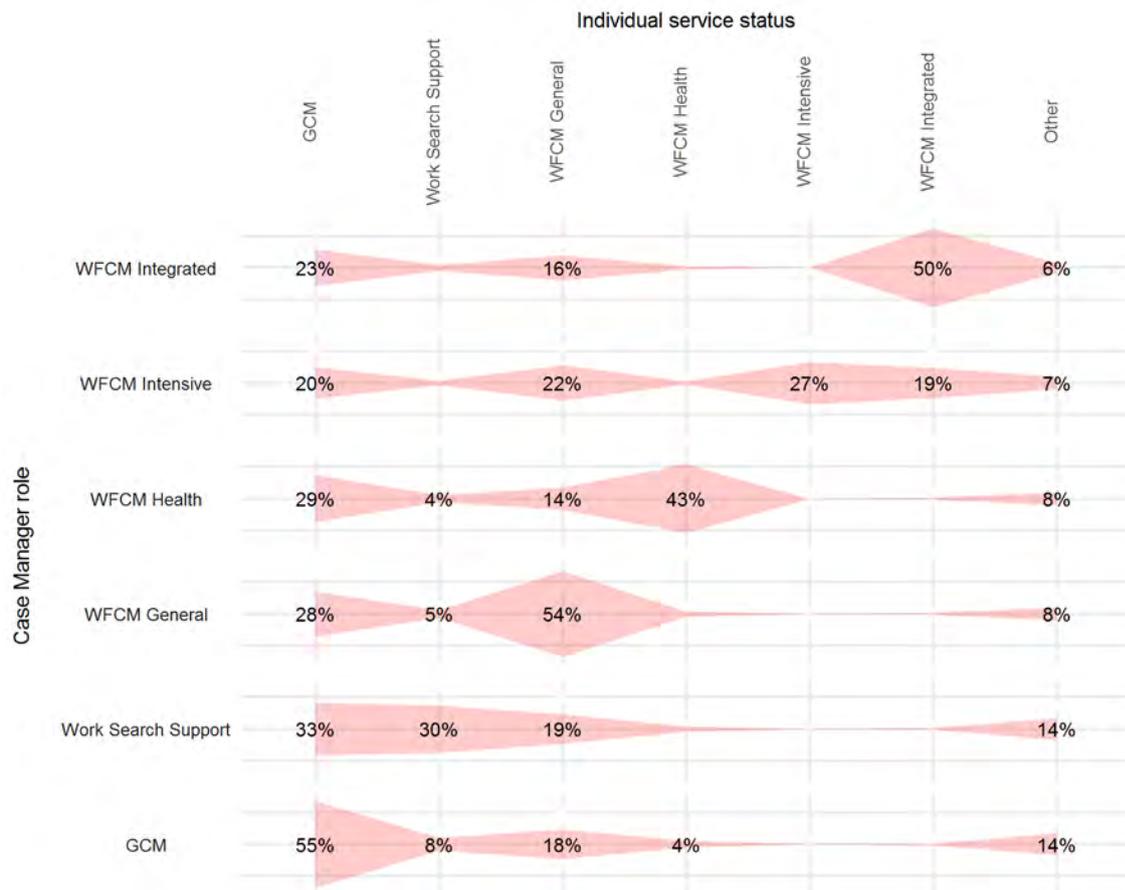
From Figure 14 it is clear that case managers do not spend their time only with people assigned to their caseload. Instead, we found case managers often worked with people assigned to a range of other services. One reason for this is the need to cover periods of high demand, such as applications for income support. This outcome may explain the time that many case managers of intensive cases spent with people on GCM or those with no service allocation.¹¹

Another consideration is that the staff time datasets used in this analysis may have a bias because they are based on timestamps for staff actions on the frontline information technology (IT) applications. Some types of case management, such as income support administration, involve a large number of IT system interactions (eg inputting application details and updating entitlements). Yet staff contact with clients on the phone or by email would not generate as many interactions on these systems. This means that more activities focused on employment may be under-represented compared with activities such as income support administration.

¹⁰ Staff time was measured by tracking each staff member's transactions on MSD administrative systems (MSD, 2016a).

¹¹ These will be people asking about income support, applying for main benefits, receiving New Zealand Superannuation, or receiving supplementary assistance only and who have not been assigned to any service.

Figure 14: Estimated staff time by both case manager role and participant service status



Time only includes periods where we could identify that a staff member was working with a person. Any staff time not linked to a person (such as team meetings or breaks) was not included in the percentage total.

Case managers with dual service roles are excluded.

Other services include no service allocation, Mental Health Service and Sole Parent Service, WFCM Integrated, and Youth Service.

To test the possible extent of measurement bias, we compared the proportion of total staff time that could be allocated to activities. Table 2 shows the proportion of staff time allocated to high-level activity types by case manager role. Here we are interested in how the mix of staff time differs between GCM and intensive service case managers. As expected, GCM case managers spent most of their time on case management and income support administration. For the other roles, the proportion spent on employment assistance was higher (although still the minority activity, except for Work Search Service case managers).

Table 2: Proportion of staff time by activity and case manager role

Activity	GCM	WFCM General	WFCM Health	WFCM Intensive	WFCM Integrated	Work Search Support
Case management	23%	22%	22%	21%	22%	18%
Income support administration	35%	24%	23%	20%	21%	15%
Employment assistance	5%	16%	17%	18%	18%	26%
Non-contact time	34%	36%	37%	39%	37%	38%
Other	2%	2%	2%	2%	2%	3%
Total	100%	100%	100%	100%	100%	100%

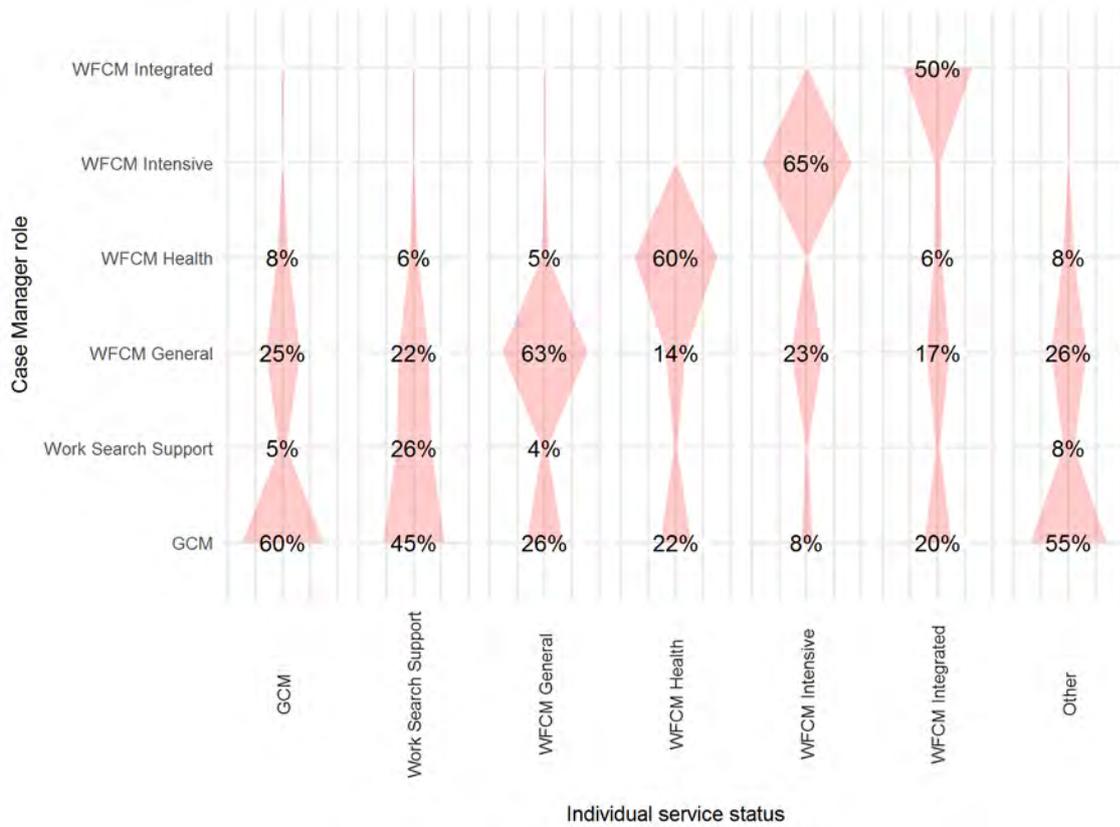
In terms of a measurement bias, we can see that a high proportion of intensive time for case managers was allocated to non-contact time (an average of 37 percent compared to 34 percent for GCM). This difference may indicate contact with clients not shown in the system transactions of non-GCM case managers. This opinion is further supported by the larger difference in non-contact time for the more intensive services such as WFCM Integrated and WFCM Intensive.

Case managed clients have the most contact with their service case manager

While the preceding analysis examined staff time from a case manager perspective, we can use the same data to look at staff time from a participant perspective. For example, how much time do people in a given service **spend interacting with the service's case managers**? To highlight the participant perspective, Figure 15 uses the same data as Figure 14 but shows the percentage values by client service.

Figure 15 generally shows that people in a given service mostly had contact with case managers in the same service. For example, people in WFCM General spent 63 percent of their time with WFCM General case managers. The exception was participants on Work Search Support who spent most of their time with GCM case managers. The likely reason for this pattern was that Work Search Support participants interacted with their Work Search Support case manager by attending seminars. In the staff-time allocation model, seminar time is apportioned by the number of participants. This means a 60-minute seminar with six participants would result in 10 minutes of staff time allocated to each participant. The use of seminars by Work Search Support case managers helps to explain the low per participant expenditure and subsequent high wROI of this service.

Figure 15: Estimated staff time by case manager role and clients' service status



Time only includes periods where we could identify that a staff member was working with a person. Any staff time not linked to a person (such as team meetings or breaks) is not included in the percentage total.

Case managers with dual service roles are excluded.

Other services include no service allocation, Mental Health Service trial and Sole Parent Service, WFCM IS, and Youth Service.

Welfare return on investment by individual case management service

In this section, we examine the results of each case management service in turn. We begin with the main services, WFCM and Work Search Support services, followed by the three IA trial services (WFCM Intensive, Mental Health Employment and Sole Parent Employment) and, finally, the two pilot services (WFCM pilot and Work Search Support pilot).

Work Focused Case Management General

What is Work Focused Case Management General?

Work Focused Case Management General (WFCM General) was a mandatory case management service where each case manager had a caseload of no more than 121 people who were the primary recipient of a main benefit. Case managers were responsible for proactively engaging with people who needed support to take steps towards gaining and sustaining employment. Case management included: (i) creating a plan to help people move towards employment, (ii) regular meetings to help make progress on the plan, (iii) providing income support administration (excluding benefit grants), and (iv) managing any other requirements from people on the case manager's caseload.

Summary findings

Basic facts

RCT period	Participants	Controls
June 2013-July 2016	300,627	30,266

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
40%	9%	3%	27%	18%	2%

Welfare ROI

wROI	Investment	Return
*2.26	\$1,343	\$3,027

wROI values with an * are significantly different from \$1.00 (with 95% confidence).

The service showed a positive wROI after seven months. The service reduced the time to exiting benefit and increased as well as increasing the time spent off main benefit after exit. The benefits of being on the service end about 13 months after starting WFCM General.

WFCM General demonstrated considerable variability in its wROI among participant groups. The difference is that wROI is driven mainly by an over-investment in participants who are at low risk of long-term benefit receipt, ie participants aged under 25 and work-ready jobseekers.

Works best for: Sole Parents, especially those with part-or full-time work obligations.

Does not work for: Jobseekers with a Health Condition or Disability show the lowest return and are also the group with the lowest net investment.

Welfare return on investment for WFCM General

WFCM General achieved a wROI of 2.26 at 3.1 years after participants started the service (Table 3). The direct expenditure on the service was \$1,343, a net \$316 above what we would expect if the participants had been assigned to GCM instead. Of the welfare return of \$3,027, about two-thirds came from avoided income support payments. There was no substantive difference in subsequent case management expenditure (ie case management expenditure incurred after the end of the service period).

Table 3: Welfare ROI for Work Focused Case Management General (WFCM General)

	Service		Welfare ROI
	WFCM General	GCM	
Follow-up period (years)	3.1	3.1	
Welfare ROI			*2.26
Investment	\$1,343	\$0	\$1,343
Return	\$45,764	\$48,791	\$3,027
			Difference
Investment			
Service duration (years)	2.0	2.0	
Service expenditure	\$1,343	\$1,027	\$316
Return			
Avoided case management expenditure (during service)	\$0	\$1,027	\$1,027
Case management expenditure (post service)	\$2,961	\$2,897	*-\$64
Avoided in income support payments	\$41,775	\$43,844	*\$2,068

*: Difference between WFCM General and GCM is significant at the 95% level of confidence.

wROI values with an * are significantly different from 1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Investment in WFCM General

Table 4 provides more detail on the investment in participants in WFCM General relative to the baseline service of GCM. The net additional investment of \$322 (second panel) was made up mainly of additional spending on contracts for Employment Assistance (EA; \$168), followed by staff time. If we account for time spent on the service, we find WFCM General participants received an additional \$6.05 in case management service a week compared with being in GCM. Of note is the unexpectedly high active spend in the GCM scenario. In the design of the SDM, GCM was intended to provide income support administration assistance rather than employment help such as contracted services or subsidies. These results indicate this is not what happened in practice.

Table 4: Investment in WFCM General

Metric	WFCM General	GCM	Difference
Average service expenditure (discounted)	\$1,343	\$1,027	\$316
Maximum service duration (days)	728	728	
Average duration (days)	372.1	411.9	-39.8
Average per participant expenditure			
Total	\$1,361	\$1,041	\$322
Staff	\$922	\$779	\$142
Contract	\$397	\$229	\$168
Subsidy	\$43	\$33	\$11
Average weekly expenditure while on the service			
Total	\$26	\$20	\$6.05
Staff	\$17	\$15	\$2.68
Contract	\$7	\$4	\$3.16
Subsidy	\$1	\$1	\$0.20
Staff time (minutes)			
Per participant average	728	519	209.2
Weekly contact while on service	13.7	8.8	4.9

*: Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Table 5: Welfare return for WFCM General

Metric	WFCM General	GCM	Difference
Outcome period from assignment (years)	3.1	3.1	
Return (discounted values)			
Total return	\$44,737	\$47,764	*\$3,027
Avoided in income support payments	\$41,775	\$43,844	*\$2,068
Avoided case management expenditure (during service spell)	\$0	\$1,027	*\$1,027
Avoided in case management expenditure (post service spell)	\$2,961	\$2,897	*-\$64
Benefit outcomes (days)			
Overall time on main benefit after 3.1 years	655	707	-53
Time on first benefit spell after 2.0 years	382	425	*-44
Time off benefit after 3.1 years	627	611	17
Benefit exits and returns (for every 100 starts)			
Number of benefit exits after 2.0 years	69	62	*7
Number of returns after 3.1 years	59	61	*-1.6

*: Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Welfare return for WFCM General

As noted above, about two-thirds of the welfare return from WFCM General came from a reduction in income support payments. The reduction in income support payments was driven by participants spending less time on main benefit under WFCM General than on GCM. After 3.1 years, we estimate WFCM General reduced the time on benefit by 53 days (middle panel in Table 5). This reduction in time on benefit was driven by earlier exits from benefit (44 days less) and increased time off benefit after exit (17 days longer).

Welfare return on investment for WFCM General by participant duration

As part of the analysis, we simulated the effect of reducing the maximum time participants could remain on either service. These simulations tested whether there was an ideal duration that participants should remain on the service. Table 6 shows the wROI of WFCM General under progressively longer participation periods. As the maximum allowable duration on the service was increased, we see a general fall in the wROI. This was driven by the investment expenditure increasing at a faster rate, with longer participation spells, than gains in the return through avoided income support payments and reductions in case management expenditure.

Table 6: Estimated welfare ROI by restricted duration on WFCM General

Participation Period	welfare Return on Investment	Investment	Return
All days	2.26	\$1,343	\$3,027
6 months	3.01	\$622	\$1,876
1 year	2.67	\$961	\$2,578
1.5 years	2.37	\$1,179	\$2,796
2 years	2.25	\$1,353	\$3,032

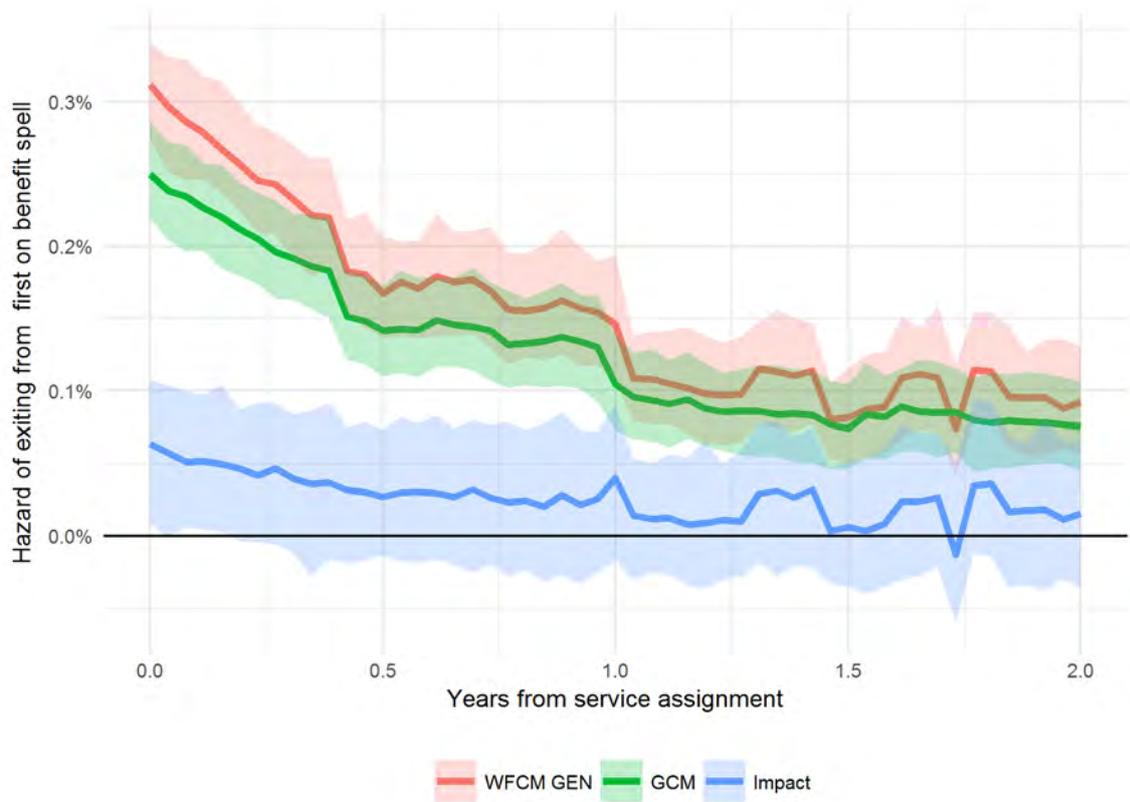
wROI values with an * are significantly different from 1.00 (with 95% confidence). Because these estimates are generated through Monte Carlo simulations, the mean values will not always be consistent (eg the '2 years' and 'All days' refer to the same follow up period, but have been simulated independently and for this reason will not have the exactly the same mean values).

To help understand what drives the falling wROI with increased duration, Figure 16 shows the impact of WFCM General on when participants exited from benefit after starting the service.

The important feature of Figure 16 is the higher probability of exiting benefit over the first year after service start if assigned to WFCM General than if assigned to GCM. However, after this point, the difference in the probability of exiting between WFCM General and GCM narrowed considerably. From an investment perspective, the higher expenditure of having a person on WFCM General during this latter period was not rewarded with the same increase in exits from benefit as in the first year of the service.

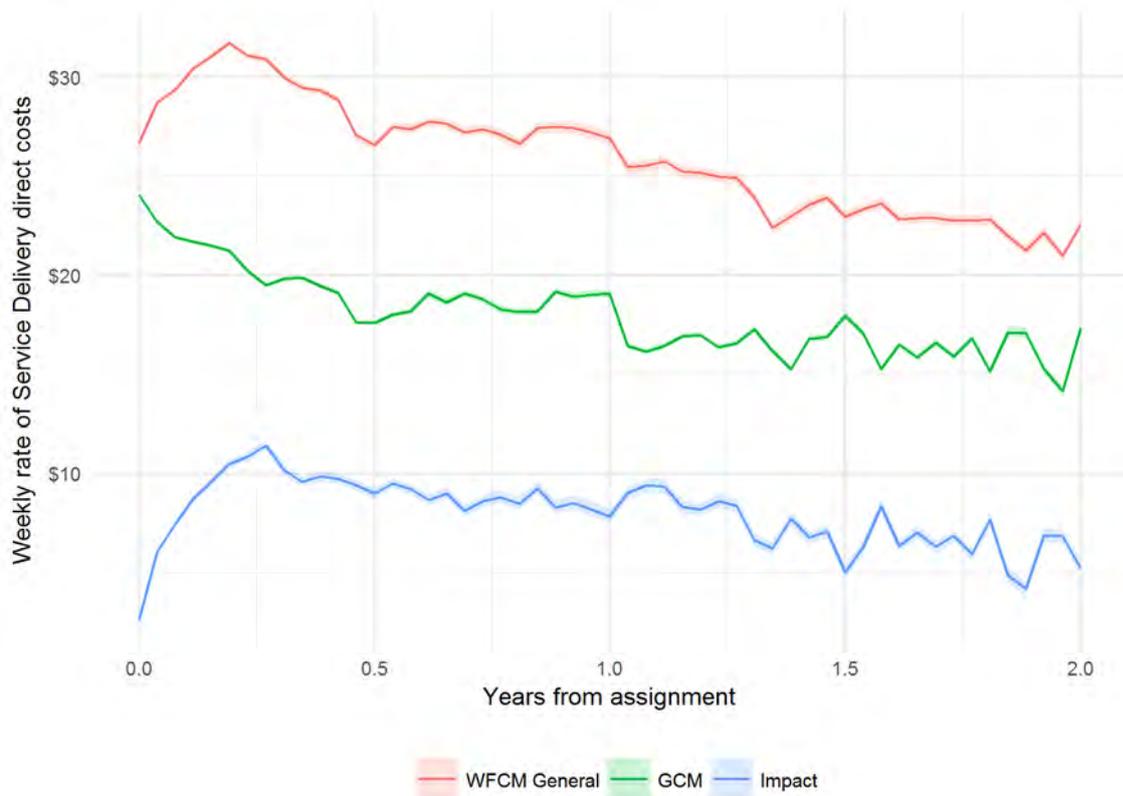
This reduction in impact on hazard of exiting was only partly related to a corresponding fall in the intensity of assistance with service duration. As Figure 17 shows, the relative intensity of assistance (blue impact line) peaks at two to three months after starting WFCM General and falls with longer duration in the service. However, in no instances does the difference in assistance between WFCM General and GCM converge over the two-year participation period.

Figure 16: Impact on hazard (likelihood) of exiting benefit while on WFCM General compared with GCM



Hazard rate: Probability of exiting benefit in each interval after starting the service. Shaded area indicates the 95% confidence interval for the estimate.

Figure 17: Intensity of assistance for participants in WFCM General or GCM



Shaded area indicates the 95% confidence interval for the estimate.

Welfare return on investment for WFCM General by subgroup

Examining the wROI by participant subgroup, we found considerable variation in the wROI of WFCM General (Table 7). The divergence on wROI is due to differences in investment (Table 8) and differences in return (Table 9).

Reasons for differences in wROI between JS and SP

We found a clear split in wROI between jobseekers (JS FT, JS HCD PT) and sole parents (SP No, SP PT, SP FT). For SP participants, we found substantially higher wROIs than for JS participants. The higher wROI for SP participants was driven in large part by the higher returns for these groups. When we broke down these returns, we found sole parents spent longer off benefit than jobseekers under WFCM General (Table 9). This difference was further increased by sole parents being paid a higher income support rate than jobseekers.

A second factor for the high wROI for sole parents was a relatively modest investment in this group compared with JS FT. Service intensity (right panel in Table 8) showed the highest overall intensity for JS FT (\$35.08 a week), which was also the highest net intensity relative to GCM at \$12.43 a week. By contrast, the SPs had lower investment intensities, both in gross and net terms. Overall assistance for SP was higher than for JS because SP remained on the service for longer than JS.

Table 7: Welfare ROI for WFCM General by subgroup

Group		wROI	Investment	Return
All	All	2.26	\$1,343	\$3,027
Client group	JS FT	1.57	*\$1,290	*\$2,036
	JS HCD PT	1.91	\$1,070	\$2,038
	SP FT	3.24	\$1,505	\$4,874
	SP PT	3.42	*\$1,456	\$4,998
	SP No	2.81	*\$1,463	\$4,113
Age group	<24	2.48	\$1,233	\$3,057
	25-34	2.26	*\$1,398	\$3,193
	35-44	2.23	\$1,412	\$3,150
	45+	1.58	*\$1,421	\$2,237
Ethnicity	Māori	2.40	*\$1,418	\$3,382
	Pākehā	1.90	\$1,303	\$2,484
	Other	2.42	\$1,246	\$3,038
	Pasifika	2.55	*\$1,344	\$3,429
LET age adj	<\$2,000	2.40	*\$1,076	\$2,601
	\$2,000-\$3,499	2.14	\$1,158	\$2,456
	\$3,500-\$4,999	2.13	\$1,271	\$2,679
	\$5,000-\$6,999	2.49	\$1,468	\$3,669
	\$7,000+	1.88	*\$1,612	\$3,020

*: Subgroup value is significantly different from the overall average.

Welfare return on investment fell by age group

The wROI for WFCM General fell by age group. Looking at the level of investment, service intensity (right panel in Table 8) showed a clear split at 25 years, where those under 25 received around \$10 a week more in assistance than participants 25 and over. In net terms, WFCM General had the lowest investment for participants aged 25 and over. For example, those aged 35-44 received an additional \$6.74 a week while on the service, compared with \$10.47 for those 24 and under (Table 8).

Table 8: Investment by WFCM General subgroup

Group		Total case management			Intensity (weekly expenditure)		
		WFCM General	GCM	Net expenditure	WFCM General	GCM	Net
All	All	\$1,343	\$1,027	\$316	\$25.27	\$17.46	\$7.82
Client group	JS FT	*\$1,290	\$985	\$305	\$35.08	\$22.65	\$12.43
	JS HCD PT	\$1,070	\$904	\$166	\$20.93	\$16.62	\$4.31
	SP FT	\$1,505	\$1,165	\$340	\$26.95	\$19.22	\$7.74
	SP PT	*\$1,456	\$1,098	\$358	\$21.36	\$14.71	\$6.64
	SP No	*\$1,463	\$1,122	\$341	\$19.75	\$14.26	\$5.49
Age group	<24	\$1,233	\$1,001	\$232	\$32.44	\$21.97	\$10.47
	25-34	*\$1,398	\$1,030	\$368	\$23.38	\$15.84	\$7.54
	35-44	\$1,412	\$1,074	\$337	\$22.83	\$16.09	\$6.74
	45+	*\$1,421	\$1,025	\$396	\$23.45	\$15.83	\$7.62
Ethnicity	Māori	*\$1,418	\$1,075	\$343	\$24.87	\$17.14	\$7.73
	Pākehā	\$1,303	\$1,017	\$287	\$25.11	\$17.78	\$7.33
	Other	\$1,246	\$924	\$322	\$27.25	\$17.69	\$9.55
	Pasifika	*\$1,344	\$1,083	\$261	\$25.94	\$18.37	\$7.57
LET age adj	<\$2,000	*\$1,076	\$813	\$263	\$39.56	\$23.24	\$16.32
	\$2,000-\$3,499	\$1,158	\$936	\$222	\$33.87	\$22.69	\$11.18
	\$3,500-\$4,999	\$1,271	\$936	\$336	\$23.54	\$15.87	\$7.66
	\$5,000-\$6,999	\$1,468	\$1,113	\$355	\$21.97	\$15.62	\$6.35
	\$7,000+	*\$1,612	\$1,248	\$364	\$22.06	\$16.10	\$5.96

*: Subgroup value is significantly different from the overall average.

Service intensity: Accounts for the time that people spend on the service and is the average weekly expenditure while they are on the service (it does not include the time they are off main benefit or have transferred to another service).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

The time off benefit (Table 9, columns with the heading of 'Main benefit') was highest for those under 24. But for income support, reduction in payments was higher for clients age 25 to 44 (likely to be because sole parents are in the older age groups).

Table 9: Return for WFCM General by subgroup

Group		Income support (\$)			Main benefit (days)		
		WFCM General	GCM	Net	WFCM General	GCM	Net
All	All	\$42,952	\$45,057	-\$2,105	655	707	-53
Client group	JS FT	\$24,262	\$25,445	-\$1,183	511	561	-50
	JS HCD PT	\$36,983	\$38,189	-\$1,206	778	819	-42
	SP FT	\$52,506	\$56,305	-\$3,799	688	757	-69
	SP PT	\$60,739	\$64,858	-\$4,119	755	827	-72
	SP No	\$65,809	\$68,892	-\$3,083	805	858	-52
Age group	<24	\$29,698	\$31,958	-\$2,260	524	590	-66
	25-34	\$51,490	\$53,843	-\$2,353	709	757	-48
	35-44	\$52,753	\$55,037	-\$2,284	723	772	-48
	45+	\$43,884	\$45,188	-\$1,304	726	766	-41
Ethnicity	Māori	\$47,763	\$50,171	-\$2,408	707	762	-55
	Pākehā	\$40,733	\$42,382	-\$1,649	632	677	-45
	Other	\$34,469	\$36,716	-\$2,247	563	623	-60
	Pasifika	\$42,761	\$45,259	-\$2,499	633	693	-60
LET age adj	<\$2,000	\$19,585	\$21,515	-\$1,930	389	456	-67
	\$2,000-\$3,499	\$25,939	\$27,555	-\$1,617	503	559	-56
	\$3,500-\$4,999	\$44,169	\$46,059	-\$1,890	673	717	-44
	\$5,000-\$6,999	\$56,033	\$58,658	-\$2,625	775	828	-52
	\$7,000+	\$59,482	\$61,407	-\$1,925	843	888	-45

*: Subgroup value is significantly different from the overall average.

Income support column refers to total payments made from assignment date until the end of follow-up period. Main benefit column refers to total days over the same period. Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Variation in welfare return on investment by ethnic group

By ethnic group, Māori, Pasifika, and Other participants had a higher wROI relative to Pākehā. These differences are driven by the returns rather than differences in the level of investment. Specifically, Pākehā participants had the smallest reduction in time on benefit and a corresponding reduction in avoided in income support payments.

Risk of long-term benefit receipt

We found the wROI varied little by age-adjusted LET score. The exception was those in the highest risk group (\$7,000+). For the latter group, we find WFCM General has the smallest impact in reducing time on benefit. In addition, because those expected to remain on benefit long term are more likely to remain on the service for the full two years, the total investment was also high.

The net intensity of investment was highest for the lowest risk group (<\$2,000) at \$39.56 a week, and steadily falling to \$23.54 for the three highest risk groups. We see a similar trend in the net results. Here, the net intensity was \$16.32 a week for those with age-adjusted LET scores under \$2,000. The lowest net investment occurred for the

highest risk group (\$7,000+) at \$5.96 (Table 9). This trend in net intensity may be a function of the different durations each group spends on WFCM General. As Figure 17 (page 40) shows, the longer a person remains on WFCM General, the smaller the difference in service intensity between being in WFCM General and GCM.

Work Focused Case Management Health Condition and Disability

What is WFCM Health Condition and Disability?

Work Focused Case Management Health Condition and Disability (WFCM Health) was an employment-focused case management service for people with a health condition or disability. WFCM HCD involved specialised case management support for people with a health condition or disability by preparing them for work and taking steps to resolve any specific barriers to work they might have. WFCM HCD caseloads were capped at 100 people who are the primary on a main benefit for each case manager. Case managers are responsible for actively case managing people who need support to take steps towards employment, including: (i) creating a work plan, (ii) having regular meetings to help make progress, (iii) providing income support administration (excluding benefit grants), and (iv) managing any other requirements from people on the case manager's caseload.

Summary findings

Basic facts

RCT period	Participants	Controls
June 2013-March 2017	51,270	5,145

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
1%	79%	0%	5%	0%	15%

Welfare ROI

wROI	Investment	Return
1.20	\$1,272	\$1,526

wROI values with an * are significantly different from 1.00 (with 95% confidence). After two years, the service was just breaking even. WFCM Health achieved only a small reduction in the time participants spent on main benefit. The reduction in time on benefit came through reduced time to exit as well as participants remaining off main benefit for longer than for the GCM scenario.

We found little variation in the wROI for WFCM Health by participant subgroups.

Welfare return on investment for WFCM Health

WFCM Health had achieved a wROI of 1.20 1.9 years after participants started the service (Table 10). The direct expenditure on the service was \$1,272, a net \$367 above what we would expect if the participants had been assigned to GCM instead. The welfare return of \$1,526 was largely driven by avoided case management expenditure. Avoided income support payments were significant and made up around 40 percent of the return.

Table 10: Welfare ROI for Work Focused Case Management Health Condition or Disability (HCD)

	Service		Welfare ROI
	WFCM Health	GCM	
Follow-up period (years)	1.9	1.9	
Welfare ROI			1.20
Investment	\$1,272	\$0	\$1,272
Return	\$25,695	\$27,221	\$1,526
			Difference
Investment			
Service duration (years)	1.9	1.9	
Service expenditure	\$1,272	\$904	\$367
Return			
Avoided case management expenditure (during service)	\$0	\$904	\$904
Case management expenditure (post service)	\$1,889	\$1,890	\$1
Avoided in income support payments	\$22,902	\$23,522	*\$621

*: Result is significant at the 95% level of confidence.

wROI values with an * are significantly different from 1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates in the table will not always add up exactly.

Investment in WFCM Health

Table 11 provides more detail on the investment in participants in WFCM Health relative to the baseline service of GCM. The net additional investment of \$373 (second panel) was made up mainly by staff time (\$195) and additional spending on contracts for employment assistance (\$170). If we account for the duration of the service, we found WFCM Health participants received an additional \$6.45 a week in assistance compared with participants in GCM.

Welfare return for WFCM Health

The reduction in income support payments was driven by participants spending less time on main benefit under WFCM Health than in GCM. After 1.9 years, we estimate WFCM Health reduced the time on benefit by 16 days (middle panel in Table 12). This reduction in time on benefit was driven mainly by increased time off benefit after exit (37 days), followed by a much smaller reduction in the time to exit (11 days).

Table 11: Investment in Work Focused Case Management Health Condition or Disability (HCD)

Metric	WFCM Health	GCM	Difference
Average service expenditure (discounted)	\$1,272	\$904	\$367
Maximum service duration (days)	686	686	
Average duration (days)	404.8	414.5	-9.8
Average per participant expenditure			
Total	\$1,290	\$917	\$373
Staff	\$933	\$738	\$195
Contract	\$338	\$168	\$170
Subsidy	\$18	\$10	\$8
Average weekly expenditure while on the service			
Total	\$22	\$16	\$6.45
Staff	\$16	\$13	\$3.37
Contract	\$6	\$3	\$2.94
Subsidy	\$0	\$0	\$0.14
Staff time (minutes)			
Per participant average	722	468	253.9
Weekly contact while on service	12.5	7.9	4.6

*: Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Table 12: Welfare return for Work Focused Case Management Health Condition or Disability (HCD)

Metric	WFCM Health	GCM	Difference
Outcome period from assignment (years)	1.9	1.9	
Return (discounted values)			
Total return	\$24,791	\$26,317	*\$1,526
Avoided in income support payments	\$22,902	\$23,522	*\$621
Avoided case management expenditure (during service spell)	\$0	\$904	*\$904
Avoided in case management expenditure (post service spell)	\$1,889	\$1,890	\$1
Benefit outcomes (days)			
Overall time on main benefit after 1.9 years	504	520	-16
Time on first benefit spell after 1.9 years	409	419	*-11
Time off benefit after 1.9 years	344	307	37
Number of benefit exits after 1.9 years			
Number of benefit exits after 1.9 years	60	58	2
Number of returns after 1.9 years	67	73	*-5.9

*: Result is significant at the 95% level of confidence.

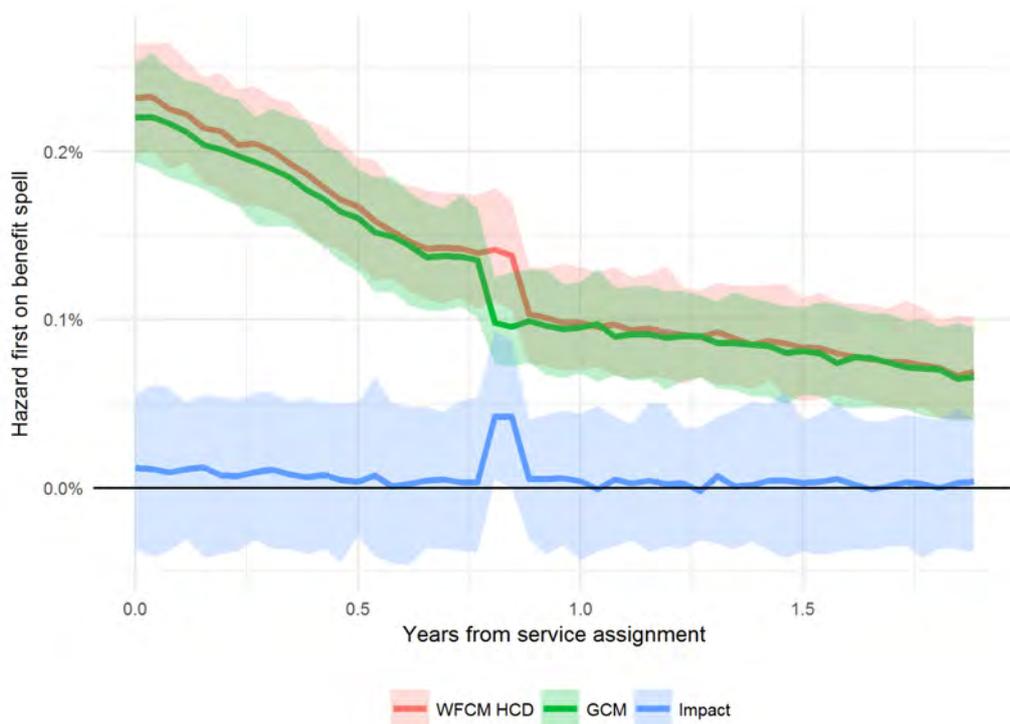
Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

WFCM Health impact is on helping participants remain off main benefit

Figure 18 shows the impact of WFCM Health when participants exited from benefit after starting the service. From Figure 18, we can see that WFCM Health had not significantly increased the probability of exiting benefit compared with being in GCM. The slight increase in the impact on the hazard in Figure 18 is an artefact of the modelling (the small difference in the timing between when the expected hazard rate falls at around 0.75 years between the WFCM Health and GCM scenarios).

Figure 19 shows the impact of WFCM Health on the hazard of returning to benefit. Here we can see that returning to benefit in the nine months after exit relative to GCM was less likely.

Figure 18: Impact on the hazard of exiting benefit while on WFCM Health compared with GCM



Hazard rate: Probability of exiting benefit in a given interval from starting the service. Shaded area indicates the 95% confidence interval for the estimate.

WFCM Health wROI by subgroup

Table 13 summarises the wROI by participant subgroup, while Table 14 provides the investment and Table 15 the return. Because jobseekers with health condition make up 90 percent of participants, we do not look at the impact of WFCM Health for other client groups (eg JS FT).

Figure 19: Impact on the hazard of returning to benefit after exiting from WFCM Health compared with GCM



Hazard rate: Probability of returning to benefit in a given interval from exiting a main benefit.

Shaded area indicates the 95% confidence interval for the estimate.

Table 13: Welfare ROI for Work Focused Case Management Health Condition or Disability (HCD) by subgroup

Group		wROI	Investment	Return
All	All	1.20	\$1,272	\$1,526
Client group	JS FT	1.56	*\$1,328	*\$2,071
	JS HCD PT	1.24	\$1,267	\$1,579
Age group	<24	1.51	\$1,203	\$1,803
	25-34	1.39	\$1,130	\$1,560
	35-44	0.97	\$1,365	\$1,327
	45+	1.05	*\$1,413	\$1,479
Ethnicity	Māori	1.21	\$1,231	\$1,497
	Pākehā	1.34	\$1,303	\$1,759
	Other	0.96	\$1,252	\$1,202
	Pasifika	1.18	\$1,175	\$1,376
LET age adj	<\$2,000	0.99	*\$1,024	\$994
	\$2,000-\$3,499	1.95	\$967	\$1,891
	\$3,500-\$4,999	1.04	\$1,144	\$1,198
	\$5,000-\$6,999	1.29	\$1,332	\$1,701
	\$7,000+	1.04	*\$1,520	\$1,587

*: Subgroup value is significantly different from the overall average.

The intensity of case management service fell with age

The wROI of WFCM Health decreased with age. The trend was driven by both higher returns for younger participants (especially those 24 years and under, Table 15) and increased expenditure for older participants. The increase in investment expenditure is explained as longer duration on the service also increases with age. Once we control for the duration in the service there is no trend in the intensity of assistance by age (Table 14).

Table 14: Investment by Work Focused Case Management Health Condition or Disability (HCD) subgroup

Group		Total case management			Intensity (weekly expenditure)		
		WFCM Health	GCM	Net expenditure	WFCM Health	GCM	Net
All	All	\$1,272	\$904	\$367	\$22.00	\$15.27	\$6.72
Client group	JS FT	*\$1,328	\$1,022	\$306	\$22.41	\$16.36	\$6.05
	JS HCD PT	\$1,267	\$895	\$372	\$21.95	\$15.14	\$6.81
Age group	<24	\$1,203	\$911	\$292	\$23.52	\$17.30	\$6.22
	25-34	\$1,130	\$912	\$218	\$22.15	\$17.35	\$4.80
	35-44	\$1,365	\$881	\$484	\$22.95	\$14.78	\$8.17
	45+	*\$1,413	\$926	\$487	\$20.56	\$13.10	\$7.45
Ethnicity	Māori	\$1,231	\$900	\$331	\$22.06	\$15.65	\$6.41
	Pākehā	\$1,303	\$910	\$394	\$22.38	\$15.23	\$7.15
	Other	\$1,252	\$863	\$388	\$20.71	\$14.31	\$6.40
	Pasifika	\$1,175	\$917	\$258	\$21.21	\$15.62	\$5.59
LET age adj	<\$2,000	*\$1,024	\$601	\$423	\$23.04	\$13.52	\$9.52
	\$2,000-\$3,499	\$967	\$827	\$140	\$22.34	\$18.03	\$4.31
	\$3,500-\$4,999	\$1,144	\$807	\$337	\$22.32	\$15.57	\$6.75
	\$5,000-\$6,999	\$1,332	\$956	\$376	\$23.03	\$16.19	\$6.84
	\$7,000+	*\$1,520	\$1,030	\$490	\$21.10	\$13.85	\$7.25

*: Subgroup value is significantly different from the overall average.

Service intensity: Accounts for the time that people spend on the service and is the average weekly expenditure while they are on the service (it does not include the time they are off main benefit or have transferred to another service).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Variation in welfare return on investment by ethnic group

By ethnic group, Pākehā showed the highest wROI, driven by the higher return. However, differences are not large and may reflect underlying differences among the groups.

Risk of long-term benefit receipt

Similar to ethnicity there was little variation in wROI by age-adjusted LET score. Those in the \$2,000-\$3,499 showed the largest wROI, driven by a large reduction in the time on benefit. However, because of the lack of a clear trend, we would not place too much weight on this finding.

Table 15: Return for Work Focused Case Management Health Condition or Disability (HCD) by subgroup

Group		Income support (\$)			Main benefit (days)		
		WFCM Health	GCM	Net	WFCM Health	GCM	Net
All	All	\$23,292	\$23,925	-\$633	504	520	-16
Client group	JS FT	\$35,447	\$36,577	-\$1,130	537	555	-18
	JS HCD PT	\$22,592	\$23,256	-\$664	502	519	-17
Age group	<24	\$20,585	\$21,485	-\$900	478	500	-23
	25-34	\$22,106	\$22,715	-\$609	477	492	-16
	35-44	\$24,524	\$24,962	-\$437	508	518	-11
	45+	\$25,933	\$26,524	-\$591	546	562	-16
Ethnicity	Māori	\$24,232	\$24,870	-\$638	510	526	-16
	Pākehā	\$22,537	\$23,346	-\$808	497	517	-20
	Other	\$22,948	\$23,315	-\$367	508	517	-9
	Pasifika	\$23,725	\$24,291	-\$566	492	508	-16
LET age adj	<\$2,000	\$18,000	\$18,362	-\$362	416	425	-9
	\$2,000-\$3,499	\$17,574	\$18,682	-\$1,108	419	448	-29
	\$3,500-\$4,999	\$22,228	\$22,673	-\$445	479	490	-11
	\$5,000-\$6,999	\$23,964	\$24,665	-\$701	510	527	-17
	\$7,000+	\$27,503	\$28,127	-\$625	574	590	-16

*: Subgroup value is significantly different from the overall average.

Income support column refers to total payments made from assignment date until end of follow-up period. Main benefit column refers to total days over the same period.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Work Focused Case Management Integrated Support

What is WFCM Integrated Support?

Work Focused Case Management Integrated Support was a mandatory one-to-one intensive case management service for up to 100 people on a main benefit as a primary for each case manager. Eighty of these primary beneficiaries were allocated to case managers and were people who had left Young Parent Payment and Youth Payment benefits, followed by jobseekers under the age of 25. In addition, up to 20 primary beneficiaries and their families who had complex needs and were not eligible for WFCM IS could be referred or selected by case managers for inclusion into the WFCM IS service.

Case managers were responsible for actively case managing participants who needed support to take steps towards employment, including: (i) creating a plan to help people move towards employment, (ii) regular meetings to help make progress, (iii) providing income support administration (excluding benefit grants), and (iv) managing any other requirements.

(Note: the impact of WFCM Integrated on ex-YP/YPP is evaluated separately – see WFCM Integrated (Youth); likewise we did not examine the impact of WFCM Integrated Support on people nominated to participate in the service).

Summary findings

Basic facts

RCT period	Participants	Controls
June 2013-August 2017	13,007	1,331

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
36%	13%	0%	3%	34%	14%

Welfare ROI

wROI	Investment	Return
*2.65	\$1,480	\$3,920

wROI values with an * are significantly different from 1.00 (with 95% confidence).

The service showed a similar wROI to WFCM General. However, because of problems with the randomisation for this service we are somewhat cautious about the results for WFCM Integrated.

Randomisation problems

As noted in the introduction of this report, we encountered errors in the randomisation process for the national roll-out of case management services. The error and solutions are covered in detail in the technical notes for this report (Marc de Boer, 2019). The WFCM Integrated was most affected by this error, in that the control and treatment groups had quite different profiles. Yet the randomisation error did not produce

unobserved selection effects from the assignment as the allocation process was algorithmically determined using only observable characteristics. Instead, the error means we had common support issues between the control and treatment groups. Common support refers to how similar the profiles two groups are to each other, where the two groups are very similar (eg in age, gender, ethnicity, human capital, social connectedness and so on), then common support is said to be high. The common support problem was most apparent for people’s benefit status, where 35 percent of the treatment group were SP without work obligations, while 46 percent of the control group were SP without work obligations.

To help improve our estimates we re-weighted the control group to better match the observed profile of the treatment group. However, the re-weighting has introduced larger variance in the impact estimates. Further, some of the subgroup results appear at odds with general patterns of impacts from other services. For these reasons, we are more cautious about interpreting the findings for WFCM Integrated.

Welfare return on investment for WFCM Integrated

WFCM Integrated had achieved a wROI of 2.65 at 2.6 years after participants started the service (Table 16). The direct expenditure on the service was \$1,480, a net \$464 above what we would have expected if the participants had been assigned to GCM instead. Two-thirds of the welfare return of \$3,920 came from avoided income support payments.

Table 16: Welfare ROI for Work Focused Case Management Intensive Support (WFCM Integrated)

	Service		Welfare ROI
	WFCM Integrated	GCM	
Follow up period (years)	2.6	2.6	
Welfare ROI			*2.65
Investment	\$1,480	\$0	\$1,480
Return	\$40,515	\$44,435	\$3,920
			Difference
Investment			
Service duration (years)	2.0	2.0	
Service expenditure	\$1,480	\$1,016	\$464
Return			
Avoided case management expenditure (during service)	\$0	\$1,016	\$1,016
Case management expenditure (post service)	\$2,842	\$2,836	-\$6
Income Support	\$36,657	\$39,565	*\$2,909

*: Result is significant at the 95% level of confidence.

wROI values with an * are significantly different from \$1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Investment in WFCM Integrated

Table 17 provides more detail on the investment in participants in WFCM Integrated relative to the baseline service of GCM. The net additional investment of \$472 (second panel) was made up mainly of contract expenditure, followed by staff time.

Table 17: Investment in Work Focused Case Management Intensive Support (WFCM Integrated)

Metric	WFCM Integrated	GCM	Difference
Average service expenditure (discounted)	\$1,480	\$1,016	\$464
Maximum service duration (days)	728	728	
Average duration (days)	372.5	432.4	-59.9
Average per participant expenditure			
Total	\$1,500	\$1,030	\$472
Staff	\$1,012	\$807	\$206
Contract	\$432	\$182	\$250
Subsidy	\$56	\$41	\$15
Average weekly expenditure while on the service			
Total	\$28	\$19	\$8.87
Staff	\$19	\$15	\$3.87
Contract	\$8	\$3	\$4.70
Subsidy	\$1	\$1	\$0.28
Staff time (minutes)			
Per participant average	830	449	382.2
Weekly contact while on service	15.6	7.3	8.3

*: Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

If we account for time spent on the service, we find WFCM Integrated participants received an additional \$8.87 a week of assistance compared with being in GCM. Of note is the unexpectedly high active spending in the GCM scenario. In the design of the Service Delivery Model, GCM was intended to provide income support administration assistance, but not employment assistance in the form of contracted services and subsidies. For the WFCM Integrated target group for we found that this was not the case.

Welfare return for WFCM Integrated

As noted above, two-thirds of the welfare return from WFCM Integrated came largely from reductions in income support payments. While one-third came from avoided case management expenditure, indicating the target group receives a high level of assistance, even in GCM.

The reduction in income support payments was driven by a reduction in the time to benefit exit (66 days after two years on the service, middle panel in Table 18). We estimate a smaller effect in participants remaining off benefit for longer (32 days after 2.6 years).

Table 18: Welfare return for Work Focused Case Management Intensive Support (WFCM Integrated)

Metric	WFCM Integrated	GCM	Difference
Outcome period from assignment (years)	2.6	2.6	
Return (discounted values)			
Total return	\$39,499	\$43,419	*\$3,920
Avoided in income support payments	\$36,657	\$39,565	*\$2,909
Avoided case management expenditure (during service spell)	\$0	\$1,016	*\$1,016
Avoided in case management expenditure (post-service spell)	\$2,842	\$2,836	-\$6
Benefit outcomes (days)			
Overall time on main benefit after 2.6 years	597	662	*-64
Time on first benefit spell after 2.0 years	387	453	*-66
Time off benefit after 2.6 years	465	433	32
Benefit exits and returns (for every 100 starts)			
Number of benefit exits after 2.0 years	68	58	*10.3
Number of returns after 2.6 years	66	70	*-3.7

*: Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Welfare return on investment of WFCM Integrated by participant duration

As part of the analysis, we simulated the impact of reducing the maximum time participants could remain on either service. The aim was to test whether there is an ideal duration that participants should remain on the service. Table 19 shows the wROI of WFCM Integrated under progressively shorter participation periods. As the duration increased we found a general fall in the wROI. This fall was driven by the investment expenditure increasing at a faster rate with longer participation periods than the return.

Table 19: Estimated welfare ROI by restricted duration on Work Focused Case Management Intensive Support (WFCM Integrated)

Participation Period	welfare Return on Investment	Investment	Return
All days	2.65	\$1,480	\$3,920
6 months	3.85	\$678	\$2,605
1 year	3.37	\$1,045	\$3,510
1.5 years	3.02	\$1,300	\$3,920
2 years	2.67	\$1,481	\$3,950

wROI values with an * are significantly different from \$1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Work Focused Case Management Integrated Support for ex-Youth Service

What is WFCM Integrated Support for ex-Youth Service?

Work Focused Case Management Integrated Support was a mandatory one-to-one intensive case management service for up to 100 people on a main benefit as a primary for each case manager. Eighty of these primary beneficiaries were allocated to case managers and were people who have left Young Parent Payment and Youth Payment benefits, followed by jobseekers under the age of 25. In addition, up to 20 primary beneficiaries and their families who had complex needs and were not eligible for WFCM IS could be referred or selected by case managers for inclusion into the WFCM IS service.

Case managers are responsible for case managing people who needed support to take steps towards employment, including: (i) creating a plan to help move towards employment, (ii) regular meetings to help make progress, (iii) providing income support administration (excluding benefit grants), and (iv) managing any other requirements from people on the case manager's caseload.

The following results are for people who had been on the Youth Service (Young Parent Payment and Youth Payment benefits) and had been allocated to WFCM Integrated.

Summary findings

Basic facts

RCT period	Participants	Controls
March 2014-August 2017	4,412	2,617

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
46%	6%	0%	0%	30%	18%

Welfare ROI

wROI	Investment	Return
1.19	\$1,336	\$1,598

wROI values with an * are significantly different from \$1.00 (with 95% confidence).

The wROI of WFCM Integrated (Youth) has to be interpreted differently from the other services, as the baseline service is WFCM General rather than GCM. Overall, we conclude there was no difference between assigning ex-Youth Service participants to either service. Namely, they received the same level of investment and achieved almost identical amount of avoided income support payments.

Welfare return on investment for WFCM Integrated (Youth)

The comparison service for WFCM Integrated (Youth) was WFCM General, rather than GCM. The reason for not using GCM was that no ex-Youth Service participants were assigned to GCM. Instead, all ex-Youth Service participants were assigned to WFCM General or WFCM Integrated (Youth).

WFCM Integrated (Youth) had achieved a wROI of 1.19 2.0 years after participants started the service (Table 20). The direct expenditure on the service was \$1,336 and was almost the same as what we would have expected if the participants had been assigned to WFCM General instead. The welfare return of \$1,598 came mostly from avoided case management expenditure, with only a small reduction from avoided income support payments. This result is not entirely surprising given the similarity in both level and type of assistance received under WFCM Integrated (Youth) and WFCM General.

Table 20: Welfare ROI for Work Focused Case Management Intensive Support for ex-Youth Service (WFCM Integrated (Youth))

	Service		Welfare ROI
	WFCM Integrated (Youth)	WFCM General	
Follow up period (years)	2.0	2.0	
Welfare ROI			1.19
Investment	\$1,336	\$0	\$1,336
Return	\$29,796	\$31,394	\$1,598
			Difference
Investment			
Service duration (years)	2.0	2.0	
Service expenditure	\$1,336	\$1,342	-\$6
Return			
Avoided case management expenditure (during service)	\$0	\$1,342	\$1,342
Case management expenditure (post-service)	\$2,671	\$2,666	-\$5
Income Support	\$25,783	\$26,043	\$260

*: Result is significant at the 95% level of confidence.

wROI values with an * are significantly different from 1.00 (with 95% confidence).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Investment in WFCM Integrated (Youth)

Table 21 provides more detail on the investment in participants in WFCM Integrated (Youth) relative to the baseline service of WFCM General. As noted the overall investment between the two scenarios was the same, as was the make-up of this investment in terms of staff, contract and subsidy expenditure.

Welfare return for WFCM Integrated (Youth)

As noted above, avoided income support payments between WFCM Integrated (Youth) and WFCM General (Table 22) were the same. Although we have only measured the returns over 2.0 years, analysis of the time to benefit exit and return indicates that we are likely to see modest, but not statistically significant, decreases in income support payments (see Figure 20).

Table 21: Investment in Work Focused Case Management Intensive Support for ex-Youth Service (WFCM Integrated (Youth))

Metric	WFCM Integrated (Youth)	WFCM General	Difference
Average service expenditure (discounted)	\$1,336	\$1,342	-\$6
Maximum service duration (days)	728	728	
Average duration (days)	327.4	335.1	-7.6
Average per participant expenditure			
Total	\$1,353	\$1,359	-\$3
Staff	\$927	\$928	-\$0
Contract	\$359	\$373	-\$15
Subsidy	\$68	\$57	\$11
Average weekly expenditure while on the service			
Total	\$29	\$29	-\$0
Staff	\$20	\$20	\$0
Contract	\$8	\$8	-\$0
Subsidy	\$1	\$1	\$0
Staff time (minutes)			
Per participant average	734	710	24.8
Weekly contact while on service	15.7	14.8	0.9

*: Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

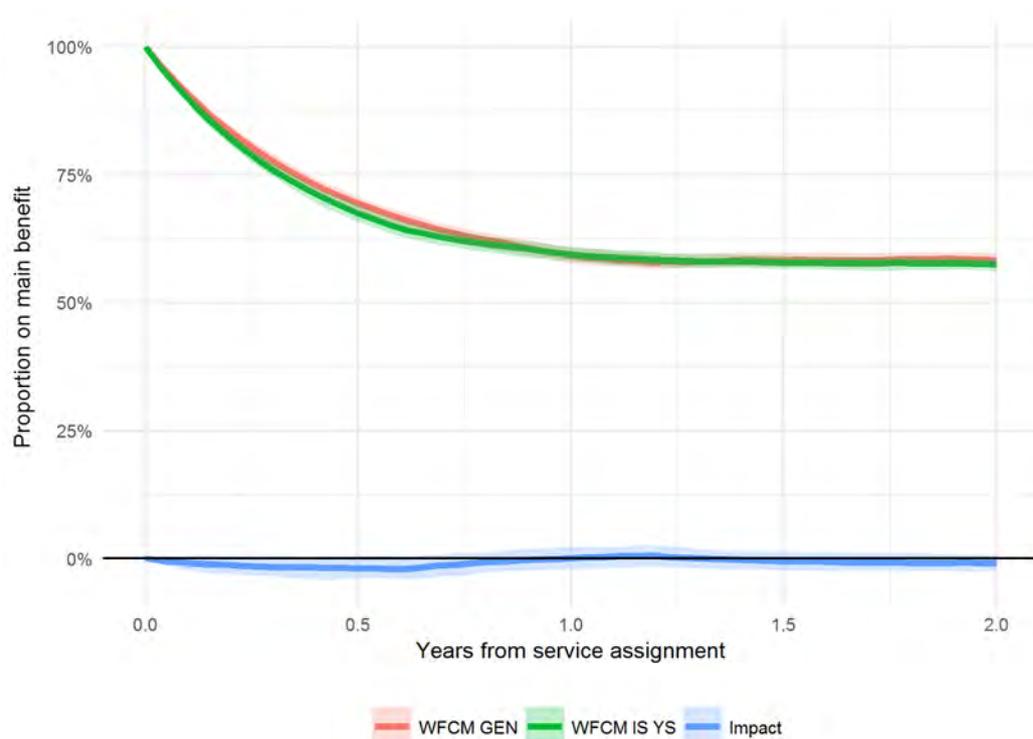
Table 22: Welfare return for Work Focused Case Management Intensive Support for ex-Youth Service (WFCM Integrated (Youth))

Metric	WFCM Integrated (Youth)	WFCM General	Difference
Outcome period from assignment (years)	2.0	2.0	
Return (discounted values)			
Total return	\$28,454	\$30,052	*\$1,598
Avoided in income support payments	\$25,783	\$26,043	\$260
Avoided case management expenditure (during service spell)	\$0	\$1,342	*\$1,342
Avoided in case management expenditure (post service spell)	\$2,671	\$2,666	-\$5
Benefit outcomes (days)			
Overall time on main benefit after 2.0 years	482	488	-5.6
Time on first benefit spell after 2.0 years	351	360	-8.9
Time off benefit after 2.0 years	303	303	0.0
Benefit exits and returns (for every 100 starts)			
Number of benefit exits after 2.0 years	74	72	1.7
Number of returns after 2.0 years	86	86	0.0

*: Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Figure 20: Proportion on main benefit after starting WFCM Integrated (Youth) and WFCM General



Shaded area indicates the 95% confidence interval for the estimate.

Work Search Support

What is Work Search Support?

Work Search Support was a mandatory one-to-many case management service targeted at people likely to gain employment. WSS provided distinct levels of support based on benefit duration, with people under six weeks on benefit undertaking self-direct job search, supported by outbound calling contact between weeks seven and 10. After week 11, participants attend a series of job search seminars. WSS case managers were also responsible for (i) providing income support administration (excluding benefit grants), and (ii) managing any other requirements from participants. Participants with work obligations had to attend the seminars and meetings. If they did not attend without good reason, then their income support payments would be suspended, reduced and ultimately cancelled.

Summary of findings

Basic facts

RCT period	Participants	Controls
June 2013-July 2016	188,675	19,009

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
83%	0%	4%	9%	1%	2%

Welfare ROI

wROI	Investment	Return
*3.21	\$637	\$2,037

wROI values with an * are significantly different from \$1.00 (with 95% confidence).

Because of its low cost, Work Search Support showed a high positive wROI. The service both reduced the time to benefit exit and well as increasing the time off benefit after exit. Increased benefit exits occurred within the first six months after starting the service.

Works best for: Sole Parents with part-time work obligations

Does not work for: no groups have been identified where Work Search Support had a welfare ROI of less than 1.00. Lowest wROI was for people with high predicted future welfare costs.

Welfare return on investment for Work Search Support

Table 23 summarises the results for the wROI for Work Search Support. Overall, Work Search Support achieved a wROI of 3.21 after 3.3 years. The expenditure for each participant on Work Search Support was \$637 – \$96 above the baseline service of GCM. Work Search Support achieved a return of \$2,037, with around three-quarters coming from avoided income support payments.

Table 23: Welfare ROI for Work Search Support

	Work Search Support	Service GCM	Welfare ROI
Follow-up period (years)	3.3	3.3	
Welfare ROI			*3.21
Investment	\$637	\$0	\$637
Return	\$34,838	\$36,875	\$2,037
			Difference
Investment			
Service duration (years)	1.0	1.0	
Service expenditure	\$637	\$541	\$96
Return			
Avoided case management expenditure (during service)	\$0	\$541	\$541
Case management expenditure (post service)	\$3,183	\$3,259	*\$76
Income Support	\$31,115	\$32,531	*\$1,416

*: Result is significant at the 95% level of confidence.

wROI values with an * are significantly different from \$1.00 (with 95% confidence).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Table 24 summarises the relative expenditure on Work Search Support compared with GCM. Overall, Work Search Support expenditure was \$96 higher than GCM over the follow-up period (second panel). However, the difference was in part influenced by the shorter time participants spent on the service in the Work Search Support scenario.

To show the intensity of case management expenditure, Table 24 also shows the average expenditure while on the service. We found that Work Search Support expenditure was an average of \$4.35 a week more than GCM. The last panel in Table 24 calculates the total time staff spent with participants. In total, staff spent an extra 78.0 minutes under the Work Search Support scenario than GCM — an average of 4.2 minutes more a week.

Table 25 summarises the impact of Work Search Support on welfare outcomes and payments and related expenditure. The first panel provides the discounted return for each item that makes up the welfare return **value**. **The second panel labelled 'Benefit outcomes (days)', summarises the cumulative time that participants spent on benefit while on each service, the time they spent off benefit if they had exited and, finally, the total time on benefit over the follow-up period. The third panel labelled 'Benefit exits and returns', summarises the number of exits from benefit while on the service and the number who have returned during the follow-up period.**

Table 24: Breakdown of service expenditure between Work Search Support and GCM

Metric	Work Search Support	GCM	Difference
Average service expenditure (discounted)	\$637	\$541	\$96
Maximum service duration (days)	364	364	
Average duration (days)	154.3	164.5	-10.2
Average per participant expenditure			
Total	\$640	\$544	\$96
Staff	\$395	\$344	\$50
Contract	\$223	\$179	\$44
Subsidy	\$23	\$20	\$3
Average weekly expenditure while on the service			
Total	\$29	\$25	\$4
Staff	\$18	\$16	\$2
Contract	\$10	\$8	\$2
Subsidy	\$1	\$1	\$0
Staff time (minutes)			
Per participant average	307	228	78.0
Weekly contact while on service	13.9	9.7	4.2

All dollar values are inflation-adjusted to Quarter 1 2017 dollar values and discounted at 2% per annum flat rate.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Table 25: Estimated impact of Work Search Support on welfare outcomes relative to GCM

Metric	Work Search Support	GCM	Difference
Outcome period from assignment (years)	3.3	3.3	
Return (discounted values)			
Total return	\$34,298	\$36,334	*\$2,037
Avoided in income support payments	\$31,115	\$32,531	*\$1,416
Avoided case management expenditure (during service spell)	\$0	\$541	*\$541
Avoided in case management expenditure (post service spell)	\$3,183	\$3,259	*\$76
Benefit outcomes (days)			
Overall time on main benefit after 3.3 years	558	590	*-31.9
Time on first benefit spell after 1.0 years	205	221	*-16.3
Time off benefit after 3.3 years	697	657	*39.7
Benefit exits and returns (for every 100 starts)			
Number of benefit exits after 1.0 years	68	63	*4.5
Number of returns after 3.3 years	57	60	*-3.8

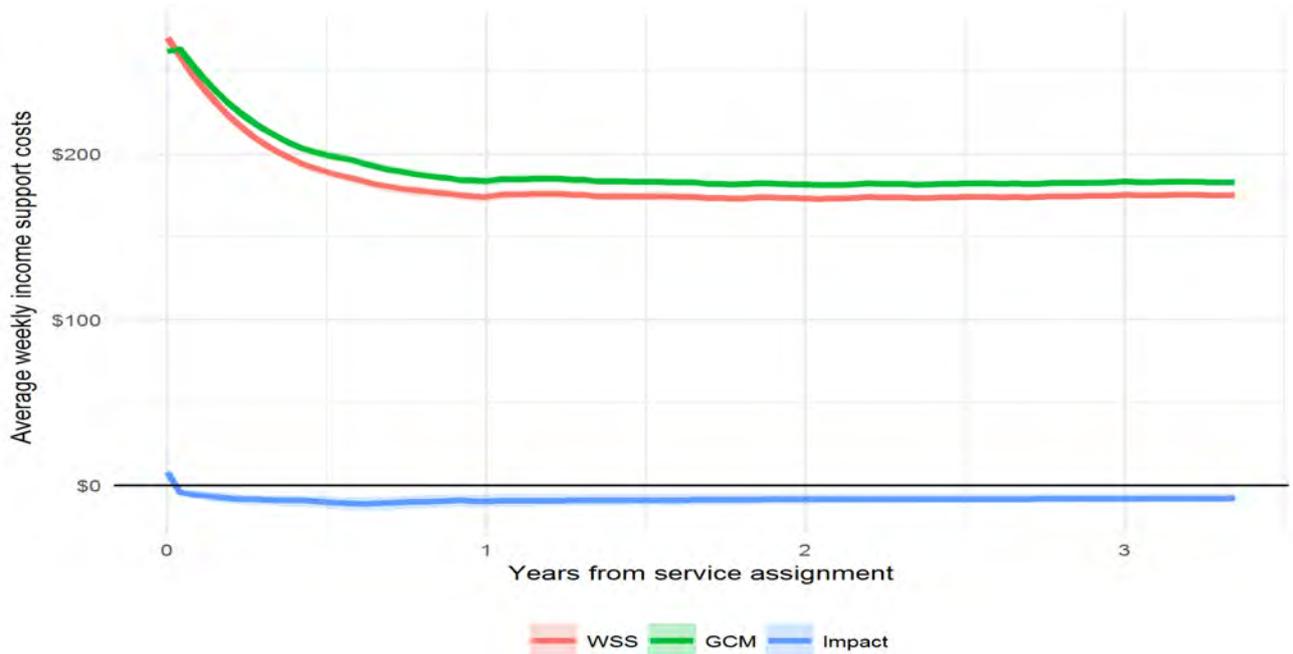
All dollar values are inflation-adjusted to Quarter 1 2017 dollar values and discounted at 2% per annum flat rate.

*: Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

For Work Search Support, about three-quarters of the return came from avoided income support payments; the rest was from avoided case management expenditure while on the service. Only a small amount of return came from reduced case management expenditure because participants in Work Search Support spent less time on benefit than if they had been on GCM. The avoided income support payments came from reduced time to benefit exit, and from increased time off main benefit after exit. Because the level of income support payments between Work Search Support and GCM still differed at the end of the follow-up period (see Figure 21), the overall return would continue to increase with a longer follow-up period.

Figure 21: Estimated average weekly income support payments for participants in Work Search Support and GCM



Welfare return on investment by duration in service

Based on our models, we can simulate whether limiting the maximum duration participants could spend on Work Search Support changed the wROI. Table 26 shows the wROI, Investment and Return under different maximum participation periods. The wROI was higher if we limited the time in Work Search Support to six months (3.63). We can see lower investment expenditure drove this increase, while the return reduced by a smaller amount.

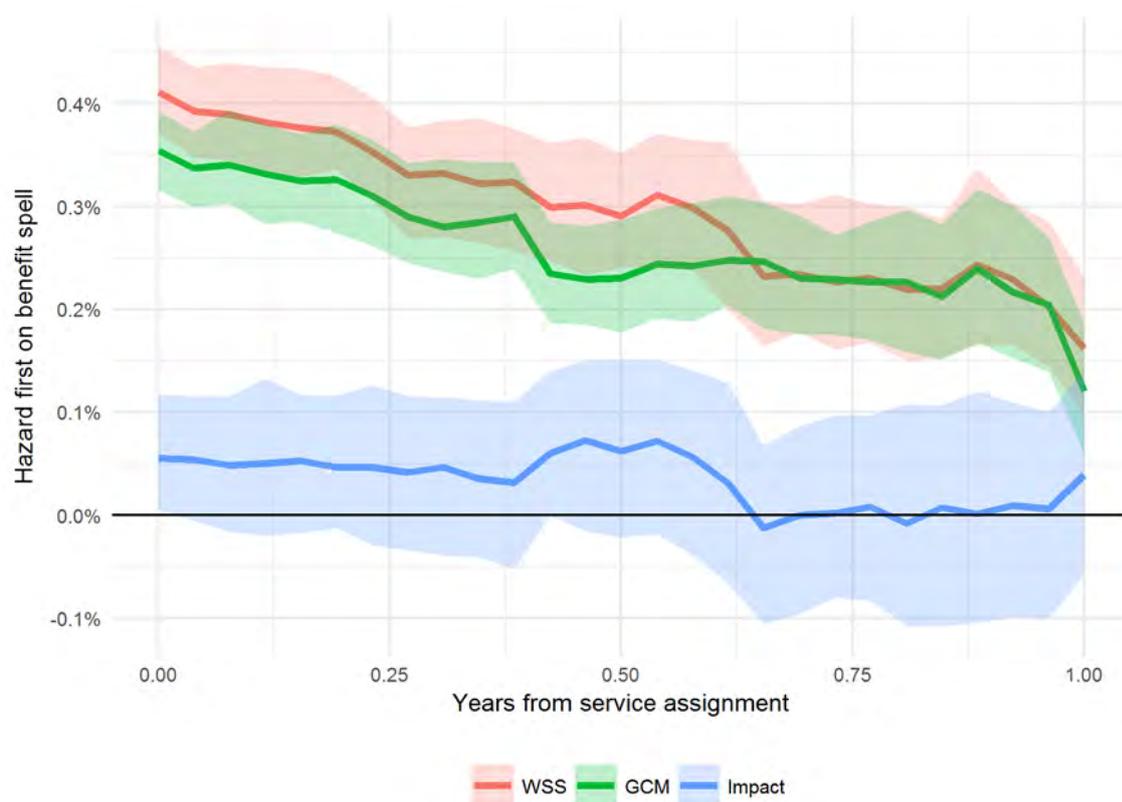
Table 26: Estimated welfare ROI by maximum duration in the Work Search Support

Participation Period	welfare Return on Investment	Investment	Return
All days	*3.21	\$637	\$2,037
6 months	*3.63	\$483	\$1,751
1 year	*3.15	\$637	\$2,007

wROI values with an * are significantly different from \$1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

The explanation of this pattern is because Work Search Support increased exits from benefit in the first six-to-seven months after assignment (Figure 22). After this point, there is no difference in the probability of exiting benefit between being in Work Search Support or GCM.

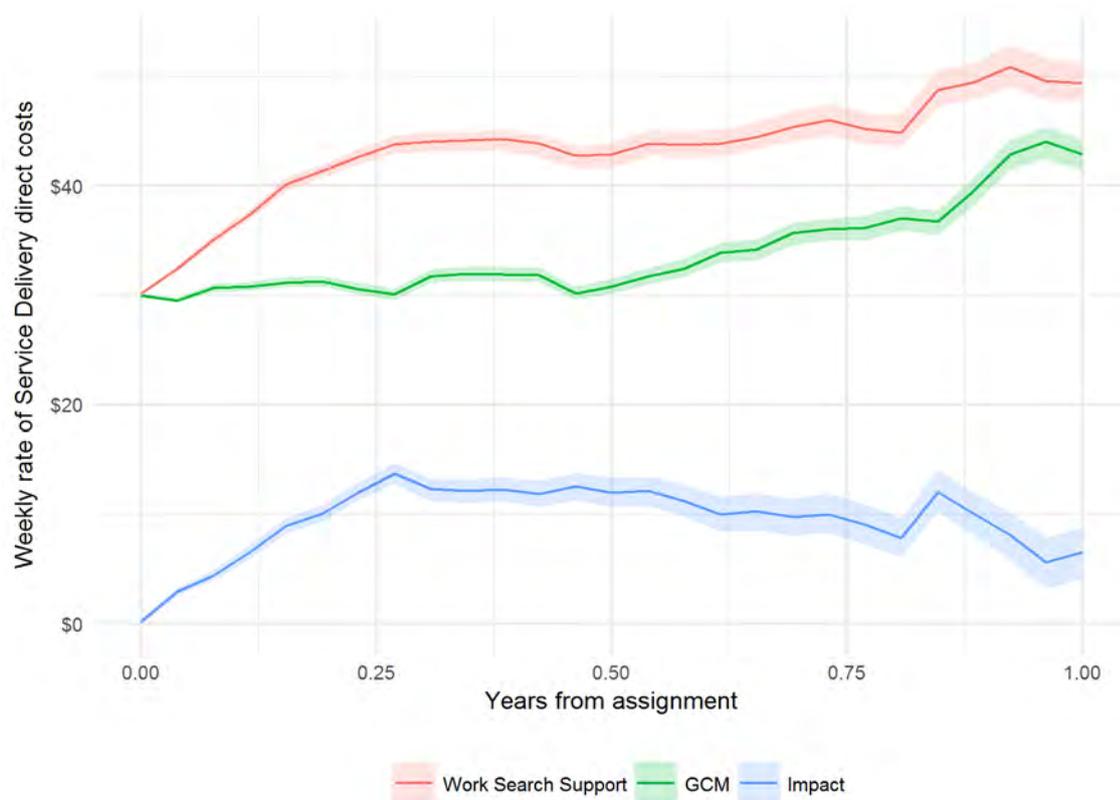
Figure 22: Estimated difference in hazard of exiting main benefit between being on Work Search Support compared with GCM



Shaded areas indicate the 95% confidence interval.

But this reduction in the probability of exiting was not because case managers stopped working with participants after six months. From Figure 23 we can see that the level of investment stayed elevated over the entire participation period. Therefore, the return from the additional investment over the last six months on Work Search Support was smaller than for the first six months.

Figure 23: Weekly investment expenditure for Work Search Support compared with GCM (baseline)



All dollar values are inflation-adjusted to Quarter 1 2017 dollar values, discounted at 2% per annum flat rate and exclude indirect expenditure (ie property, IT and national office expenditure).

Service expenditure while on the service (ie people who have exited from main benefit or transferred out of service are not included) included staff time, contract and subsidy payments.

Shaded area indicates the 95% confidence interval for the estimate.

Welfare return on investment by subgroup

Here we examine the difference in wROI by a small number of subgroups. In Table 27 we show the wROI, Investment and Return for each subgroup. Overall, the highest wROI occurred for a sole parent with part-time work obligations (SP PT) at 3.87 with the lowest return experienced for those with an age-adjusted LET score \$7,000+. Breaking down the wROI, we can see that the investment was highest for those with an age-adjusted LET score of \$7,000+, while the lowest investment occurred for people aged 24 years and under.

Table 27: Welfare ROI by subgroup

Group		wROI	Investment	Return
All	All	3.21	\$637	\$2,037
Client group	JS FT	3.12	*\$641	*\$1,995
	SP FT	2.34	\$694	\$1,621
	SP PT	3.87	\$589	\$2,281
Age group	<24	3.26	\$564	\$1,856
	25-34	3.40	*\$650	\$2,208
	35-44	3.39	\$662	\$2,229
	45+	2.68	*\$682	\$1,838
Ethnicity	Māori	3.03	\$637	\$1,930
	Pākehā	3.07	\$595	\$1,838
	Pasifika	3.40	\$721	\$2,440
LET age adj	<\$2,000	3.73	*\$567	\$2,097
	\$2,000-\$3,499	3.47	\$598	\$2,082
	\$3,500-\$4,999	2.93	*\$640	\$1,866
	\$5,000-\$6,999	3.32	\$684	\$2,277
	\$7,000+	1.72	*\$784	\$1,342

* Subgroup value is significantly different from the overall average.

To help understand the drivers of the wROI, we also present more detailed information on the Investment for each group. Table 28 shows the difference in case management expenditure between the Work Search Support and GCM scenarios. The left panel shows the total expenditure over the participation period; the right panel shows the intensity (ie the weekly expenditure while on the service).

Table 29 summarises the drivers of the Return for Work Search Support, the left panel shows the difference in income support payments between the Work Search Support and GCM. The left panel shows the overall number of days we estimate participants would have spent on main benefit if they had been assigned to Work Search Support or GCM.

Reasons for differences in ROI between JS FT and SP PT

We found a large difference in the wROI between jobseekers with full-time work obligations (JS FT) and sole parents with part-time work obligations (SP PT). The difference in wROI was driven mainly by a lower investment for SP PT compared with JS FT. The difference in investment was more marked when we examine service intensity (ie adjusting for shorter durations on the service by JS FT). The level of investment in JS FT was 15 percent higher than for SP FT and 50 percent higher than for SP PT. Finally, it is also of interest to see that under the GCM scenario we continue to see a similar difference in service intensity by client group. In other words, allocation to WSS simply increased the level of intensity but did not change the distribution of effort across client groups.

Table 28: Work Search Support and GCM case management total expenditure and intensity

Group		Total case management			Intensity (weekly expenditure)		
		Work Search Support	GCM	Net	Work Search Support	GCM	Net
All	All	\$637	\$541	\$96	\$28.87	\$23.00	\$5.87
Client group	JS FT	*\$641	\$551	\$91	\$30.43	\$24.41	\$6.02
	SP FT	\$694	\$560	\$134	\$26.41	\$21.03	\$5.38
	SP PT	\$589	\$450	\$139	\$20.40	\$15.02	\$5.38
Age group	<24	\$564	\$512	\$53	\$36.66	\$30.32	\$6.34
	25-34	*\$650	\$555	\$95	\$27.65	\$22.04	\$5.61
	35-44	\$662	\$561	\$101	\$26.78	\$21.42	\$5.36
	45+	*\$682	\$543	\$139	\$26.11	\$19.90	\$6.21
Ethnicity	Māori	\$637	\$537	\$100	\$27.72	\$22.17	\$5.55
	Pākehā	\$595	\$525	\$70	\$27.78	\$23.17	\$4.61
	Pasifika	\$721	\$568	\$153	\$33.88	\$23.92	\$9.96
LET age adj	<\$2,000	*\$567	\$505	\$62	\$32.88	\$26.62	\$6.27
	\$2,000-\$3,499	\$598	\$512	\$87	\$31.21	\$24.68	\$6.53
	\$3,500-\$4,999	*\$640	\$565	\$74	\$27.59	\$23.20	\$4.39
	\$5,000-\$6,999	\$684	\$550	\$134	\$25.89	\$19.73	\$6.16
	\$7,000+	*\$784	\$595	\$188	\$24.90	\$18.67	\$6.23

* Subgroup value is significantly different from the overall average. Not calculated for intensity measures.

Service intensity: Accounts for the time that people spend on the service and is the average weekly expenditure while they are on the service (it does not include the time they are off main benefit or have transferred to another service).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Table 29: Work Search Support and GCM income support and time on main benefit by subgroup

Group		Income support			Main benefit		
		Work Search Support	GCM	Net	Work Search Support	GCM	Net
All	All	\$32,083	\$33,544	-\$1,462	558	590	-32
Client group	JS FT	\$26,833	\$28,231	-\$1,399	518	551	-32
	SP FT	\$57,976	\$59,083	-\$1,107	740	756	-16
	SP PT	\$64,179	\$66,033	-\$1,854	797	825	-28
Age group	<24	\$24,617	\$25,903	-\$1,286	462	491	-29
	25-34	\$32,660	\$34,334	-\$1,675	567	604	-37
	35-44	\$38,347	\$40,013	-\$1,666	612	647	-34
	45+	\$35,481	\$36,724	-\$1,243	620	648	-28
Ethnicity	Māori	\$34,368	\$35,817	-\$1,450	597	628	-30
	Pākehā	\$31,630	\$32,913	-\$1,282	546	573	-27
	Pasifika	\$30,197	\$32,073	-\$1,876	527	571	-44
LET age adj	<\$2,000	\$22,189	\$23,759	-\$1,570	426	461	-35
	\$2,000-\$3,499	\$27,079	\$28,624	-\$1,546	507	542	-34
	\$3,500-\$4,999	\$34,951	\$36,244	-\$1,293	608	634	-27
	\$5,000-\$6,999	\$42,857	\$44,613	-\$1,756	681	716	-34
	\$7,000+	\$50,439	\$51,156	-\$717	769	783	-14

* Subgroup value is significantly different from the overall average.

Income support column refers to total payments made from assignment date until end of follow-up period. Main benefit column refers to total days over the same period.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Welfare return on investment was highest for those aged 25 to 44

The wROI was highest for those aged between 25 and 44. These results were due to higher returns for this group, especially in avoided income support payments rather than through reduction in days on benefit (Table 29). We think this pattern occurred because people on SP were concentrated in this age range, while jobseekers dominated the younger and older age range.

The high return for older participants was in part offset by the higher average expenditure of being on the service. The increasing trend in expenditure is likely to be driven by the longer durations on Work Search Support by age as the intensity of assistance was lower for those in the 25 to 44 age group.

Little variation in welfare return on investment by ethnic group

We saw little variation in the wROI by ethnic group. Pasifika achieved the highest wROI, through a higher return than for the other three ethnic groups. Of note is the larger increase in service intensity for Pasifika in Work Search Support over GCM, relative to **Pākehā and Māori**.

Risk of long-term benefit receipt

While the wROI by age-adjusted LET group showed no clear pattern, we did find intensity fell with risk score. Similar to age group, we found the intensity of investment while on Work Search Support or GCM fell with the age-adjusted LET (Table 29). Except for the highest risk group (\$7,000+) which showed the smallest impact, there was no clear trend in the impact of Work Search Support by age-adjusted LET score.

Work Focused Case Management Intensive Client Support (Early Entrant)

What is WFCM Intensive Client Support (Early Entrant)?

The WFCM Intensive Client Support (WFCM Intensive) was a mandatory internal case management service with a caseload of no more than 40 people for each case manager. WFCM ICS case managers worked with people who had complex issues or barriers to gaining employment.

Case managers were responsible for case-managing people who needed support to take steps towards employment. Case management included: (i) creating a plan to help people move towards employment, (ii) regular meetings to help make progress, and (iii) managing any other requirements from people on the case manager's caseload. Apart from providing hardship assistance, ICS case managers did not undertake income support administration, which was instead done by GCM case managers.

WFCM Intensive Early Entrant (WFCM Intensive (Early)) was the arm of the trial that covered those participants who started benefit aged under 18 years and were aged under 30 years when assigned.

Summary findings

Basic facts

RCT period	Participants	Controls
March 2015-August 2017	371	455

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
73%	0%	0%	1%	2%	23%

Welfare ROI

wROI	Investment	Return
0.78	\$1,125	\$877

As the follow-up period was less than two years, it was too soon to assess the long-term wROI for WFCM Intensive (Early)'s. The level of investment was among the highest of any service, once we standardised for duration. But we also found very high investment if the participants were in GCM. The trend in income support payments indicates no significant or substantive reduction in the time participants spent on main benefit. We conclude that the increase in investment in this group over an already-high level has not translated into additional time off main benefit or reductions in income support payments.

Welfare return on investment for WFCM Intensive (Early)

We could only track the wROI of WFCM Intensive (Early) for just over one-and-a-half years. This follow-up period was too short to assess **the service's** long-term wROI. Instead, the results shown below are an indicative assessment of the likely long-term cost-effectiveness of the service.

WFCM Intensive (Early) had achieved a wROI of 0.78 1.7 years after participants started the service (Table 30). The wROI was not significantly different from 1.00. The direct expenditure on the service was \$1,125, a net \$242 above what we would expect if the participants had been assigned to GCM instead. The welfare return was made up of avoided case management expenditure, with no substantial increase in avoided income support payments to date.

Table 30: Welfare ROI for Work Focused Case Management Intensive Client Support Early Entrant (WFCM Intensive (Early))

	Service		
	WFCM Intensive (Early)	GCM	Welfare ROI
Follow-up period (years)	1.7	1.7	
Welfare ROI			0.78
Investment	\$1,125	\$0	\$1,125
Return	\$20,573	\$21,451	\$877
			Difference
Investment			
Service duration (years)	1.7	1.7	
Service expenditure	\$1,125	\$883	\$242
Return			
Avoided case management expenditure (during service)	\$0	\$883	\$883
Case management expenditure (post-service)	\$2,605	\$2,382	*-\$224
Income Support	\$17,085	\$17,278	\$193

* Result is significant at the 95% level of confidence.

wROI values with an * are significantly different from 1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Investment in WFCM Intensive (Early)

Table 31 provides more detail on the investment in participants in WFCM Intensive (Early) relative to the baseline service of GCM. The net additional investment of WFCM Intensive (Early) was made up almost entirely of additional staff time. If we account for the duration of the service, we find WFCM Intensive (Early) participants received an additional \$9.20 a week compared with being in GCM. The additional staff time for each participant was the highest of any service to date, at 18 minutes a week.¹²

Table 31: Investment in Work Focused Case Management Intensive Client Support Early entrant (WFCM Intensive (Early))

Metric	WFCM Intensive (Early)	GCM	Difference
Average service expenditure (discounted)	\$1,125	\$883	\$242
Maximum service duration (days)	616	616	
Average duration (days)	184.4	202.9	-18.5
Average per participant expenditure			
Total	\$1,133	\$890	\$242
Staff	\$817	\$566	\$255
Contract	\$278	\$301	-\$23
Subsidy	\$39	\$24	\$14
Average weekly expenditure while on the service			
Total	\$43	\$34	\$9.20
Staff	\$31	\$21	\$9.69
Contract	\$11	\$11	-\$0.87
Subsidy	\$1	\$1	\$0.54
Staff time (minutes)			
Per participant average	818	383	434
Weekly contact while on service	31.0	13.2	18

* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

¹² It is worth noting that this time will not necessarily be with the same case manager. From our earlier analysis of individual contact with staff, we found that each WFCM ICS participant spent only 65 percent of their contact time with WFCM ICS case managers (Figure 15, page 43).

Welfare return for WFCM Intensive (Early)

As noted above, the welfare return from WFCM Intensive (Early) at 1.7 years came from avoided case management expenditure. We found no significant differences in the time participants spent off main benefit under WFCM ICS compared with GCM (middle panel of Table 32). After 1.7 years, we estimate WFCM Intensive (Early) reduced the time to benefit exit by 37 days but decreased the time off benefit after an exit by 28 days. Taken together, these findings indicate that WFCM Intensive (Early) is unlikely to produce an increase in avoided income support payments over the medium- to long-term.

Table 32: Welfare return for Work Focused Case Management Intensive Client Support Early Entrant (WFCM Intensive (Early))

Metric	WFCM Intensive (Early)	GCM	Difference
Outcome period from assignment (years)	1.7	1.7	
Return (discounted values)			
Total return	\$19,691	\$20,568	\$877
Avoided in income support payments	\$17,085	\$17,278	\$193
Avoided case management expenditure (during service spell)	\$0	\$883	*\$883
Avoided in case management expenditure (post-service spell)	\$2,605	\$2,382	*-\$224
Benefit outcomes (days)			
Overall time on main benefit after 1.7 years	377	384	-7.8
Time on first benefit spell after 1.7 years	246	282	-36.6
Time off benefit after 1.7 years	294	320	-28.0
Benefit exits and returns (for every 100 starts)			
Number of benefit exits after 1.7 years	84	74	*11.8
Number of returns after 1.7 years	75	70	5.1

* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Work Focused Case Management Intensive Client Support (Entrenched)

What is WFCM Intensive Client Support (Entrenched)?

A mandatory internal case management service with a caseload of no more than 40 people for each case manager. WFCM ICS case managers worked with people who had complex issues or barriers to gaining employment.

Case managers were responsible for case managing people who needed support to take steps towards employment, including: (i) creating a plan to move towards employment, (ii) regular meetings to help make progress, and (iii) managing any other requirements from people on the case manager's caseload. Apart from providing hardship assistance, ICS case manager did not undertake income support administration, this was done by GCM case managers.

WFCM Intensive (Entrenched) was the arm of the trial that covered participants who started receiving a benefit before 18 years of age and were aged over 30 at assignment.

Summary findings

Basic facts

RCT period	Participants	Controls
March 2015-August 2017	565	721

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
59%	0%	8%	4%	2%	27%

Welfare ROI

wROI	Investment	Return
*2.71	\$1,296	\$3,520

*wROI values with an * are significantly different from \$1.00 (with 95% confidence).*

Older WFCM Intensive participants are showing faster returns compared with their younger counterparts (WFCM Intensive (Early)). WFCM Intensive (Entrenched) participants left benefit sooner than if they were on GCM and also stayed off benefit for longer.

Welfare return on investment for WFCM Intensive (Entrenched)

WFCM Intensive (Entrenched) had achieved a wROI of 2.71 at 2.0 years after participants started the service (Table 33). The direct expenditure on the service was \$1,296, a net \$479 above what we would expect if the participants had been assigned to GCM instead. The welfare return of \$3,520 was primarily made up of avoided income support payments, followed by avoided case management expenditure.

Table 33: Welfare ROI for Work Focused Case Management Intensive Client Support Entrenched (WFCM Intensive (Entrenched))

	Service		Welfare ROI
	WFCM Intensive (Entrenched)	GCM	
Follow-up period (years)	2.0	2.0	
Welfare ROI			*2.71
Investment	\$1,296	\$0	\$1,296
Return	\$26,550	\$30,071	\$3,520
			Difference
Investment			
Service duration (years)	2.0	2.0	
Service expenditure	\$1,296	\$817	\$479
Return			
Avoided case management expenditure (during service)	\$0	\$817	\$817
Case management expenditure (post service)	\$2,697	\$2,497	*-\$200
Income Support	\$23,036	\$25,924	*\$2,887

* Result is significantly different from zero at 95% confidence interval.

wROI values with an * are significantly different from \$1.00 (with 95% confidence).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Investment in WFCM Intensive (Entrenched)

Table 34 provides more detail on the investment in participants in WFCM Intensive (Entrenched) relative to the baseline service of GCM. The net additional investment of WFCM Intensive (Entrenched) was made up mainly of additional spending on staff time. If we account for the duration of the service, we find WFCM Intensive (Entrenched) participants received an additional \$13 a week compared with being in GCM (an additional 15.7 minutes a week of staff time). Compared with WFCM Intensive (Early), WFCM Intensive (Entrenched) participants received more additional investment than they would have received under GCM (\$482 compared to \$242, Table 31, page 70).

Welfare return for WFCM Intensive (Entrenched)

As noted above, WFCM Intensive (Entrenched) reduced income support payments. The reduction in income support payments was driven by participants spending less time on main benefit under WFCM Intensive (Entrenched) than in GCM. After 2.0 years, we estimate WFCM Intensive (Entrenched) reduced the time on benefit by 78 days (middle panel in Table 35). This reduction in time on benefit was driven by earlier exits (120 fewer days on benefit) from benefit and by increased time off benefit after exit (28 additional days off benefit).

Table 34: Investment in Work Focused Case Management Intensive Client Support entrenched (WFCM Intensive (Entrenched))

Metric	WFCM Intensive (Entrenched)	GCM	Difference
Average service expenditure (discounted)	\$1,296	\$817	\$479
Maximum service duration (days)	728	728	
Average duration (days)	254.9	343.7	-88.8
Average per participant expenditure			
Total	\$1,308	\$827	\$482
Staff	\$984	\$710	\$273
Contract	\$275	\$97	\$177
Subsidy	\$50	\$19	\$31
Average weekly expenditure while on the service			
Total	\$36	\$23	\$13
Staff	\$27	\$20	\$7
Contract	\$8	\$3	\$5
Subsidy	\$1	\$1	\$0
Staff time (minutes)			
Per participant average	964	528	436.1
Weekly contact while on service	26.5	10.7	15.7

* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Table 35: Welfare return for Work Focused Case Management Intensive Client Support entrenched (WFCM Intensive (Entrenched))

Metric	WFCM Intensive (Entrenched)	GCM	Difference
Outcome period from assignment (years)	2.0	2.0	
Return (discounted values)			
Total return	\$25,733	\$29,254	*\$3,520
Avoided in income support payments	\$23,036	\$25,924	*\$2,887
Avoided case management expenditure (during service spell)	\$0	\$817	*\$817
Avoided in case management expenditure (post service spell)	\$2,697	\$2,497	*-\$200
Benefit outcomes (days)			
Overall time on main benefit after 2.0 years	439	518	-78.0
Time on first benefit spell after 2.0 years	296	415	*-119.6
Time off benefit after 2.0 years	356	328	27.6
Benefit exits and returns (for every 100 starts)			
Number of benefit exits after 2.0 years	80	67	*12.5
Number of returns after 2.0 years	74	79	-4.1

* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Mental Health Employment Service trial

What is the Mental Health Employment Service?

The Mental Health Employment Service (Mental Health Service) trial was a voluntary contracted case management service to support participants with common mental health conditions to gain work and achieve sustainable employment. Providers were to achieve these aims through the provision of employment-related case management, placement and post-placement support, integrated with the **participant's** clinical support. The target group for the service were jobseekers who were willing to undertake full-time employment, but were limited in their capacity to look for or be available to work because of common mental health issues such as anxiety, stress or depression. Providers were to tailor their case management activities to the individual needs of participants. Provider payments were linked to the outcomes achieved by participants (MSD, 2016b).

Summary findings

Basic facts

RCT period	Participants	Controls
September 2013-June 2014	1,785	880

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
11%	69%	2%	4%	0%	14%

Welfare ROI

wROI	Investment	Return
0.70	\$1,320	\$923

*wROI values with an * are significantly different from \$1.00 (with 95% confidence).*

The Mental Health Service trial achieved the lowest long-term wROI of all the services covered in this report. The Mental Health Service trial did not break even. The only returns came from avoided case management costs, with no savings in income support expenditure. The differences in the profiles of the participant and control groups are unlikely to explain this result, as the control group was at lower risk of staying on benefit long term than the participant group.

Randomisation problems

We found systematic differences between the treatment and control groups of the Mental Health Service. Specifically, while the entire control group were on JS HCD when assigned, only 69 percent of the treatment group were. At least 12 percent of the treatment group appears to have no profile information recorded against their record when assigned. We have not been able to isolate the reason for this imbalance. As such, the findings are less robust than for other services covered in this report.

Having said this, the following findings cannot be explained by the likely direction of bias between the treatment and the control groups. In general, the treatment group is more advantaged (it appears to have a lower risk of long-term benefit receipt) than the control group.

Welfare return on investment for the Mental Health Service

The Mental Health Service had achieved a wROI of 0.70 3.2 years after participants started the service (Table 36). The direct expenditure on the service was \$1,320, a net \$784 above what we would expect if the participants had been assigned to GCM instead. The welfare return of \$923 was primarily through avoided case management expenditure while on Mental Health Service trial. Mental Health Service made no significant difference to the income support payments of the participant group.

Table 36: Welfare ROI for the Mental Health Employment Service (Mental Health Service) trial

	Service		Welfare ROI
	Mental Health Service	GCM	
Follow-up period (years)	3.2	3.2	
Welfare ROI			0.70
Investment	\$1,320	\$0	\$1,320
Return	\$44,172	\$45,095	\$923
			Difference
Investment			
Service duration (years)	1.0	1.0	
Service expenditure	\$1,320	\$535	\$784
Return			
Avoided case management expenditure (during service)	\$0	\$535	\$535
Case management expenditure (post service)	\$3,613	\$3,652	\$38
Income Support	\$40,023	\$40,378	\$354

* Result is significant at the 95% level of confidence.

wROI values with an * are significantly different from \$1.00 (with 95% confidence).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Investment in the Mental Health Service

Table 37 provides more detail on the investment in participants in the Mental Health Service relative to the baseline service of GCM. Because the Mental Health Service was a contracted case management service we expected the additional expenditure on the service to come mainly from contract payments (gross of \$851, net \$733). By comparison, the staff and subsidy expenditure between the Mental Health Service and GCM scenarios were the same.

Table 37: Investment in the Mental Health Employment Service (Mental Health Service) trial

Metric	Mental Health Service	GCM	Difference
Average service expenditure (discounted)	\$1,320	\$535	\$784
Maximum service duration (days)	364	364	
Average duration (days)	243.9	246.2	-2.4
Average per participant expenditure			
Total	\$1,325	\$539	\$787
Staff	\$462	\$412	\$50
Contract	\$851	\$118	\$733
Subsidy	\$13	\$9	\$4
Average weekly expenditure while on the service			
Total	\$38	\$15	\$22.60
Staff	\$13	\$12	\$1.44
Contract	\$24	\$3	\$21.04
Subsidy	\$0	\$0	\$0.13
Staff time (minutes)			
Per participant average	337	289	49.1
Weekly contact while on service	9.7	8.2	1.5

* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Welfare return for the Mental Health Service trial

As noted above, the welfare returns from the Mental Health Service came from avoided case management expenditure, with no substantive decrease in income support payments (Table 38).

Table 38: Welfare return for the Mental Health Employment Service (Mental Health Service) trial

Metric	Mental Health Service	GCM	Difference
Outcome period from assignment (years)	3.2	3.2	
Return (discounted values)			
Total return	\$43,637	\$44,560	\$923
Avoided in income support payments	\$40,023	\$40,378	\$354
Avoided case management expenditure (during service spell)	\$0	\$535	*\$535
Avoided in case management expenditure (post service spell)	\$3,613	\$3,652	\$38
Benefit outcomes (days)			
Overall time on main benefit after 3.2 years	812	820	-7.0
Time on first benefit spell after 1.0 years	279	283	-3.1
Time off benefit after 3.2 years	526	541	-17.8
Benefit exits and returns (for every 100 starts)			
Number of benefit exits after 1.0 years	42	39	2.6
Number of returns after 3.2 years	72	70	1.4

* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Sole Parent Employment Service trial

What is the Sole Parent Employment Service trial?

The Sole Parent Employment Service (Sole Parent Service) trial was a voluntary contracted case management service to provide employment support to sole parents with a youngest child 14 and over on Jobseeker Support benefit. Contracted case management providers delivered employment-related case management and assistance in overcoming barriers to full-time work, including employment placement and post-placement support. Providers were to tailor their case management activities to the individual needs of participants. Provider payments were linked to the outcomes achieved by participants (MSD, 2016b).

Summary findings

Basic facts

RCT period	Participants	Controls
September 2013-May 2017	2,273	1,121

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
4%	0%	82%	9%	0%	4%

Welfare ROI

wROI	Investment	Return
*2.49	\$1,432	\$3,562

*wROI values with an * are significantly different from \$1.00 (with 95% confidence).*

The Sole Parent Service achieved a significant positive wROI. However, for the same target group, WFCM General achieved a higher welfare ROI. The difference in ROI was because the Sole Parent Service was more expensive than WFCM General for the same group. The Sole Parent Service also suffered from a high drop-out, meaning only a small number of participants stayed on the service until the end of one year.

Randomisation problems

We have found systematic differences between the treatment and control groups of the SPES service. Specifically, while 92 percent of the control group were on Sole Parent Support (SPS) with FT obligations when assigned, only 82 percent of the treatment group were. Instead, eight percent of the treatment group had PT work obligations compared to less than one percent of the control group. We have not been able to isolate the reason for this imbalance. As such, the findings are less robust than for other services covered in this report.

Welfare return on investment for the Sole Parent Service

The Sole Parent Service had achieved a wROI of 2.49 3.2 years after participants started the service (Table 39). The direct expenditure on the service was \$1,432, a net \$1,030 above what we would expect if the participants had been assigned to GCM instead. The welfare return of \$3,562 was mainly through avoided income support payments.

Table 39: Welfare ROI for the Sole Parent Employment Service (SPES) trial

	Service		
	Sole Parent Service	GCM	Welfare ROI
Follow-up period (years)	3.2	3.2	
Welfare ROI			*2.49
Investment	\$1,432	\$0	\$1,432
Return	\$52,842	\$56,404	\$3,562
			Difference
Investment			
Service duration (years)	1.0	1.0	
Service expenditure	\$1,432	\$403	\$1,030
Return			
Avoided case management expenditure (during service)	\$0	\$403	\$403
Case management expenditure (post service)	\$4,438	\$4,553	*\$115
Income Support	\$48,001	\$51,043	*\$3,042

* Result is significant at the 95% level of confidence.

wROI values with an * are significantly different from \$1.00 (with 95% confidence).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Investment in the Sole Parent Service

Table 40 provides more detail on the investment in participants in the Sole Parent Service relative to the baseline service of GCM. The net additional investment of \$1,031 was made up of additional spending on contract payments. Such a result was expected since the Sole Parent Service was a contracted service. If we account for the duration of the service, we find that Sole Parent Service participants received an additional \$50.14 a week compared with being in GCM. But this higher weekly level of assistance occurred over a relatively short period, with participants being on the Sole Parent Service for less than six months on average.

Welfare return for the Sole Parent Service

The reduction in income support payments was driven by participants spending less time on main benefit under the Sole Parent Service than in GCM. After 3.2 years, we estimate the Sole Parent Service reduced the time on benefit by 50 days (middle panel in Table 41). This reduction in time on benefit was driven by earlier exits (28 fewer days on benefit) from benefit and by increased time off benefit after exit (126 additional days).

Table 40: Investment in the Sole Parent Employment Service (SPES) trial

Metric	Sole Parent Service	GCM	Difference
Average service expenditure (discounted)	\$1,432	\$403	\$1,030
Maximum service duration (days)	364	364	
Average duration (days)	144.0	155.3	-11.3
Average per participant expenditure			
Total	\$1,436	\$405	\$1,031
Staff	\$410	\$329	\$81
Contract	\$1,003	\$64	\$940
Subsidy	\$22	\$12	\$10
Average weekly expenditure while on the service			
Total	\$70	\$20	\$50
Staff	\$20	\$16	\$4
Contract	\$49	\$3	\$46
Subsidy	\$1	\$1	\$0.5
Staff time (minutes)			
Per participant average	270	226	44.2
Weekly contact while on service	13.1	10.2	3.0

* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Table 41: Welfare return for the Sole Parent Employment Service (SPES) trial

Metric	Sole Parent Service	GCM	Difference
Outcome period from assignment (years)	3.2	3.2	
Return (discounted values)			
Total return	\$52,439	\$56,001	*\$3,562
Avoided in income support payments	\$48,001	\$51,043	*\$3,042
Avoided case management expenditure (during service spell)	\$0	\$403	*\$403
Avoided in case management expenditure (post service spell)	\$4,438	\$4,553	*\$115
Benefit outcomes (days)			
Overall time on main benefit after 3.2 years	691	741	*-50.2
Time on first benefit spell after 1.0 years	262	290	*-28.2
Time off benefit after 3.2 years	693	568	*125.7
Benefit exits and returns (for every 100 starts)			
Number of benefit exits after 1.0 years	50	39	*10.4
Number of returns after 3.2 years	64	77	*-12.9

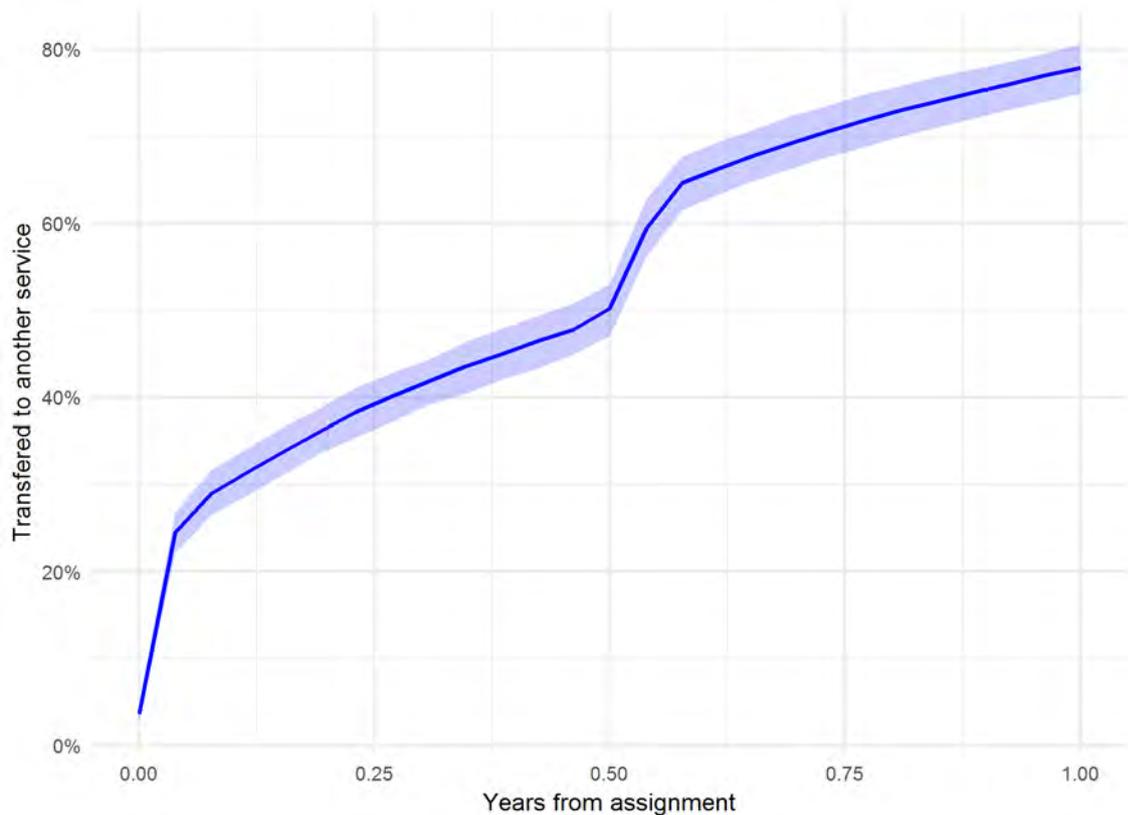
* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

The Sole Parent Service experienced a high drop-out rate

While we saw a reduction in the time to benefit exit throughout the Sole Parent Service, these reductions were restricted mostly to a relatively small number of participants. This was because the Sole Parent Service experienced a very high drop-out rate when compared with other services. From Figure 24 we can see that around 22 percent still on a benefit had stayed on the service for a full year. This percentage excludes those who had exited benefit while on the service.¹³

Figure 24: Proportion of Sole Parent Service participants who had transferred out of the service



Shaded area indicates the 95% confidence interval for the estimate.

The Sole Parent Service compared with WFCM General for the same target group

An interesting question was to test the relative wROI of internally run and contracted-out case management services. Here we compared the wROI of the Sole Parent Service with WFCM General for the same target group — sole parents referred to the Sole Parent Service. In addition, we limited the participation period for WFCM General to one year to match that of the Sole Parent Service.

¹³ In the duration model of time on service, we treated exits from benefit as right censored (ie the model accounts for the fact that not all spells result in an exit). Only transfers to another service were included as exits.

Table 42 compares the wROI of the two services. We found that WFCM General had a higher wROI than the Sole Parent Service. The higher wROI for WFCM General came from much lower expenditure (\$952 compared with \$1,476), even though SPES achieved a slightly higher return.

Table 42: Relative ROI of the Sole Parent Service and WFCM General for participants eligible for the Sole Parent Service without indirect expenditure

Metric	WFCM GEN	SPES Trial
Baseline service	GCM	GCM
Follow-up period	3.0	3.0
Return on Investment		
Welfare ROI	*2.80	1.88
Investment	\$952	\$1,476
Return	\$2,670	\$2,801
Investment		
Service duration (years)	1.0	1.0
Service expenditure	\$952	\$1,476
GCM expenditure	\$716	\$408
Net expenditure	\$236	\$1,068
Return		
Avoided in income support payments	\$1,958	\$2,344
Avoided case management	\$716	\$408
Avoided in case management expenditure (post service spell)	-\$11	\$41

wROI values with an * are significantly different from \$1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

One criticism of the results in Table 42 is that it provides an unfair comparison of in-house and contracted, as we exclude indirect expenditure for in-house expenditure incurred for each service. The contracted provider would have to include these indirect expenditures in their contract price to be viable. However, the inclusion of all indirect expenditure is likely to tip the bias the other way, in that we have not accounted for the indirect expenditure of maintaining a contracted case management service.

With these points in mind, Table 43 shows the same wROI analysis including indirect expenditures. By including indirect expenditure we find the wROI of WFCM General fell from 2.80 to 2.04, while the Sole Parent Service fell from 1.88 to 1.74. The fall in Sole Parent Service wROI is because some of the Sole Parent Service expenditure is incurred through in-house activities.

The difference in wROI between in-house and contracted-out case management is smaller when we include indirect expenditure. But, in this instance at least, the in-house service remained more cost-effective than the equivalent contracted-out service.

Table 43: Relative ROI of the Sole Parent Service and WFCM General for participants eligible for the Sole Parent Service with indirect expenditure

Metric	WFCM GEN	SPES Trial
Baseline service	GCM	GCM
Follow-up period	3.0	3.0
Return on Investment		
Welfare ROI	2.04	1.74
Investment	\$1,555	\$1,794
Return	\$3,181	\$3,144
Investment		
Service duration (years)	1.0	1.0
Service expenditure	\$1,555	\$1,794
GCM expenditure	\$1,218	\$695
Net expenditure	\$337	\$1,099
Return		
Avoided in income support payments	\$1,958	\$2,344
Avoided case management	\$1,218	\$695
Avoided in case management expenditure (post service spell)	-\$11	\$92

wROI values with an * are significantly different from 1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Work Focused Case Management pilot

What is the Work Focused Case Management WFCM pilot?

The Work Focused Case Management (WFCM) pilot was a mandatory case management service that ran in 24 selected sites. Each WFCM case manager had a caseload of no more than 121 people who were the primary for a main benefit. Case managers were responsible for case managing people who needed support to take steps towards employment, including: (i) creating a plan to move towards employment, (ii) regular meetings to help make progress, (iii) providing income support administration (excluding benefit grants), and (iv) managing any other requirements.

Summary findings

Basic facts

RCT period	Participants	Controls
September 2012-June 2013	21,199	4,854

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
73%	0%	23%	4%	0%	0%

Welfare ROI

wROI	Investment	Return
*2.06	\$788	\$1,618

*wROI values with an * are significantly different from 1.00 (with 95% confidence).*

After four years, the WFCM pilot achieved a positive welfare ROI through reduced time to benefit exit, but was offset by those exiting benefit returning to benefit sooner.

Works best for: Sole parents, older participants, and those at higher risk of long-term benefit receipt.

Does not work for: Jobseekers full-time work-obligated, younger participants, and low-risk participants, and Pākehā.

Welfare return on investment for the WFCM pilot

The WFCM pilot had achieved a wROI of 2.06 at 4.4 years after participants started the service (Table 44). The direct expenditure on the service was \$788, a net \$249 above what we would have expected if the participants had been assigned to GCM instead. The welfare return of \$1,618 was primarily made up of avoided income support payments.

Table 44: Welfare ROI for the Work Focused Case Management pilot

	Service		Welfare ROI
	WFCM pilot	GCM	
Follow-up period (years)	4.4	4.4	
Welfare ROI			*2.06
Investment	\$788	\$0	\$788
Return	\$50,571	\$52,189	\$1,618
			Difference
Investment			
Service duration (years)	0.7	0.7	
Service expenditure	\$788	\$539	\$249
Return			
Avoided case management expenditure (during service)	\$0	\$539	\$539
Case management expenditure (post service)	\$4,469	\$4,366	*-\$103
Income Support	\$45,562	\$46,740	*\$1,178

* Result is significant at the 95% level of confidence.

wROI values with an * are significantly different from \$1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Investment in the WFCM pilot

Table 45 provides more detail on the investment in participants in the WFCM pilot relative to the baseline service of GCM. The net additional investment of \$251 was made up mainly of staff time (\$131) followed by additional spending on contracts for employment assistance (\$107).

Table 45: Investment in the Work Focused Case Management pilot

Metric	WFCM pilot	GCM	Difference
Average service expenditure (discounted)	\$788	\$539	\$249
Maximum service duration (days)	266	266	
Average duration (days)	184.2	196.5	-12.3
Average per participant expenditure			
Total	\$792	\$542	\$251
Staff	\$484	\$353	\$131
Contract	\$274	\$168	\$107
Subsidy	\$34	\$21	\$13
Average weekly expenditure while on the service			
Total	\$30	\$21	\$10
Staff	\$18	\$13	\$5
Contract	\$10	\$6	\$4
Subsidy	\$1	\$1	\$0.5
Staff time (minutes)			
Per participant average	488	278	210.0
Weekly contact while on service	18.5	9.9	8.6

* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Welfare return for the WFCM pilot

As noted above, around two-thirds of the welfare return from the WFCM pilot came from a decrease in income support payments. The reduction in income support payments was driven by participants spending less time on main benefit while on the WFCM pilot than in GCM. After 4.4 years, we estimate the WFCM pilot reduced the time on benefit by 31 days (middle panel in Table 46). This reduction in time on benefit was driven by earlier exits (14 days) from benefit. But this has been offset by a reduction in the time spent off benefit after exit (54 days).

Table 46: Welfare return for the Work Focused Case Management pilot

Metric	WFCM pilot	GCM	Difference
Outcome period from assignment (years)	4.4	4.4	
Return (discounted values)			
Total return	\$50,031	\$51,650	*\$1,618
Avoided in income support payments	\$45,562	\$46,740	*\$1,178
Avoided case management expenditure (during service spell)	\$0	\$539	*\$539
Avoided in case management expenditure (post service spell)	\$4,469	\$4,366	*-\$103
Benefit outcomes (days)			
Overall time on main benefit after 4.4 years	841	872	*-31
Time on first benefit spell after 0.7 years	181	195	*-14
Time off benefit after 4.4 years	623	678	*-54
Benefit exits and returns (for every 100 starts)			
Number of benefit exits after 0.7 years	56	48	*7.8
Number of returns after 4.4 years	76	72	*3.5

* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Welfare return on investment for the WFCM pilot by subgroup

Examining the wROI by participant subgroup, we find considerable variation in the wROI for the WFCM pilot (Table 47). The divergence on wROI is due to differences in investment (Table 48) and differences in return (Table 49).

Table 47: Welfare ROI for the Work Focused Case Management pilot by subgroup

Group		wROI	Investment	Return
All	All	2.06	\$788	\$1,618
Client group	JS FT	1.08	\$831	*\$905
	SP FT	*6.42	\$701	*\$4,495
	SP PT	*11.29	*\$504	*\$5,668
Age group	<24	0.78	\$926	\$724
	25-34	0.63	\$770	\$494
	35-44	2.77	\$759	\$2,105
	45+	4.21	\$731	\$3,084
Ethnicity	Māori	2.79	*\$821	\$2,274
	Pākehā	0.87	\$778	\$680
	Other	3.15	\$687	\$2,158
	Pasifika	1.35	\$838	\$1,143
LET age adj	<\$2,000	*4.51	\$661	*\$2,990
	\$2,000-\$3,499	1.74	\$822	\$1,432
	\$3,500-\$4,999	2.44	\$820	\$2,009
	\$5,000-\$6,999	5.15	\$757	\$3,903
	\$7,000+	3.95	*\$787	\$3,126

* Subgroup value is significantly different from the overall average.

Reasons for differences in wROI between JS FT and SP

Like WFCM General, the WFCM pilot had quite different impacts between JS FT and SP. Here we find the wROI for JS was substantially lower than for SP. Examining investment, we again find the gross investment in JS (at \$34.35 a week) was twice that of SP PT (\$15.44, right panel in Table 48).

The other reason for the high wROI for SP was that the returns were substantially higher than for JS. This difference was driven by both a higher reduction in time off benefit and because SP is paid a higher rate while on main benefit (Table 49). Readers should note that SP PT WFCM pilot participants were those who were already working part-time when they were assigned to the service.¹⁴ Therefore the impacts observed in Table 47 would not reflect the likely impact of the service for all SP PT.

¹⁴ The decision to select sole parents with part-time work obligations who were also already working was based on the view that these sole parents would be more likely to benefit from more intensive case management. Note that the requirement to be already working part-time was dropped for other case management services such as WFCM General.

Table 48: Investment in the Work Focused Case Management pilot by subgroup

Group		Total case management			Intensity (weekly expenditure)		
		WFCM pilot	GCM	Net expenditure	WFCM pilot	GCM	Net
All	All	\$788	\$539	\$249	\$29.93	\$19.20	\$10.72
Client group	JS FT	\$831	\$608	\$223	\$34.35	\$23.61	\$10.74
	SP FT	\$701	\$370	\$331	\$22.58	\$11.22	\$11.36
	SP PT	*\$504	\$351	\$153	\$15.44	\$9.83	\$5.61
Age group	<24	\$926	\$825	\$100	\$43.21	\$35.21	\$8.00
	25-34	\$770	\$501	\$269	\$31.98	\$19.38	\$12.60
	35-44	\$759	\$504	\$255	\$27.58	\$17.20	\$10.38
	45+	\$731	\$400	\$331	\$24.52	\$12.62	\$11.91
Ethnicity	Māori	*\$821	\$601	\$220	\$31.82	\$21.14	\$10.68
	Pākehā	\$778	\$497	\$281	\$28.86	\$17.85	\$11.01
	Other	\$687	\$482	\$206	\$24.89	\$16.35	\$8.54
	Pasifika	\$838	\$569	\$269	\$32.28	\$20.63	\$11.65
LET age adj	<\$2,000	\$661	\$591	\$70	\$37.28	\$28.00	\$9.28
	\$2,000-\$3,499	\$822	\$696	\$126	\$38.04	\$28.88	\$9.16
	\$3,500-\$4,999	\$820	\$573	\$248	\$32.81	\$21.71	\$11.09
	\$5,000-\$6,999	\$757	\$562	\$195	\$27.10	\$18.07	\$9.02
	\$7,000+	*\$787	\$406	\$381	\$24.24	\$11.78	\$12.45

* Subgroup value is significantly different from the overall average.

Service intensity: Accounts for the time that people spend on the service and is the average weekly expenditure **while they're on the service** (it **doesn't include the time they're off** main benefit or have transferred to another service).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Welfare return on investment increased with older age groups

We found the wROI increased with age. This trend in the wROI was driven both by falling investment with age and an increasing return. It is likely that the trend in wROI by age was related to the higher proportion of JS in younger age groups and a higher proportion of SP concentrated in older age groups.

Table 49: Return for the Work Focused Case Management pilot by subgroup

Group		Income support			Main benefit		
		WFCM pilot	GCM	Net	WFCM pilot	GCM	Net
All	All	\$47,463	\$48,668	-\$1,205	841	872	-31
Client group	JS FT	\$42,075	\$42,547	-\$472	803	821	-18
	SP FT	\$60,495	\$64,696	-\$4,201	925	1,003	-78
	SP PT	\$63,677	\$69,238	-\$5,561	942	1,043	-101
Age group	<24	\$39,427	\$39,547	-\$119	743	753	-10
	25-34	\$45,000	\$45,197	-\$197	821	834	-13
	35-44	\$50,366	\$52,061	-\$1,695	862	901	-38
	45+	\$52,146	\$54,910	-\$2,764	901	963	-62
Ethnicity	Māori	\$48,045	\$49,853	-\$1,808	860	907	-47
	Pākehā	\$47,142	\$47,532	-\$390	839	848	-10
	Other	\$46,787	\$48,527	-\$1,740	822	863	-40
	Pasifika	\$46,647	\$47,412	-\$764	825	847	-22
LET age adj	<\$2,000	\$32,380	\$34,762	-\$2,382	597	656	-59
	\$2,000-\$3,499	\$39,542	\$40,374	-\$832	742	770	-28
	\$3,500-\$4,999	\$43,286	\$44,811	-\$1,525	811	847	-36
	\$5,000-\$6,999	\$50,190	\$53,635	-\$3,446	882	959	-77
	\$7,000+	\$59,827	\$62,608	-\$2,781	987	1,049	-62

* Subgroup value is significantly different from the overall average.

Income support column refers to total payments made from assignment date until end of follow-up period. Main benefit column refers to total days over the same period.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Variation in welfare return on investment by ethnic group

We did find some variation in the wROI by ethnic group, with **Pākehā** having a lower wROI than other groups. The lower wROI was not caused by higher investment in **Pākehā**. Rather, the reduction in time on benefit for **Pākehā** was less than for all other ethnic groups (Table 49).

Risk of long-term benefit receipt

There was no clear pattern in the wROI by age-adjusted LET score. Neither the level of investment nor the return showed any consistent trend by age-adjusted LET score.

WFCM pilot compared with WFCM General

We took the opportunity to compare the performance of the WFCM pilot with WFCM General (see Table 50). To make a direct comparison, we limited the participation duration in either service to six months and with the same follow-up period. From Table 50 we can see that WFCM General achieved a much higher wROI than WFCM pilot. The difference in wROI is entirely explained through the higher return achieved by WFCM General.

Table 50: Welfare ROI of WFCM pilot and WFCM General limited to a six-month participation period

Metric	WFCM GEN	WFCM pilot
Counter service	GCM	GCM
Follow-up period	3	3
Return on Investment		
Welfare ROI	*2.94	*1.87
Investment	\$622	\$621
Return	\$1,834	\$1,173
Investment		
Service duration (years)	0.5	0.5
Service expenditure	\$622	\$621
GCM expenditure	\$457	\$418
Net expenditure	\$165	\$203
Return		
Avoided in income support payments	\$1,330	\$810
Avoided case management	\$457	\$418
Avoided in case management expenditure (post service spell)	\$41	-\$59

wROI values with an * are significantly different from \$1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Work Search Support pilot

What is the Work Search Support pilot?

Work Search Support pilot was a mandatory one-to-many case management service, where each case manager had a caseload of no more than 218 people who were the primary recipient of a main benefit. WSS involved a structured sequence of job search seminars with participants. In addition to job search assistance, people on WSS also participated in employment programmes and services. Participants on main benefit for less than seven weeks independently managed their own job search. WSS case managers could also undertake income support administration when required.

Summary findings

Basic facts

RCT period	Participants	Controls
September 2012-June 2013	42,636	5,512

Participant profile

JS WR FT	JS HCD PT	SPS FT	SPS PT	SPS NoObs	Other
61%	0%	8%	31%	0%	0%

Welfare ROI

wROI	Investment	Return
*3.37	\$515	\$1,739

wROI values with an * are significantly different from 1.00 (with 95% confidence).

Over the long term, the Work Search Support pilot achieved the highest wROI in the analysis, as a result of its low cost. The national Work Search Support service is expected to achieve a similar long-term wROI as the pilot.

Welfare return on investment for the Work Search Support pilot

The Work Search Support pilot had achieved a wROI of 3.37 4.4 years after participants started the service (Table 51). The direct expenditure on the service was \$515, a net \$65 above what we would expect if the participants had been assigned to GCM instead. The welfare return of \$1,739 was primarily made up of avoided income support payments.

Investment in the Work Search Support pilot

Table 52 provides more detail on the investment in participants in the Work Search Support pilot relative to the baseline service of GCM. The net additional investment of \$66 was made up mainly of additional staff time (\$50) followed by spending on contracts for employment assistance (\$13). If we account for the duration of the service, we find that Work Search Support pilot participants received an additional \$2.67 a week compared with those in GCM.

Table 51: Welfare ROI for the Work Search Support pilot

	Service		Welfare ROI
	Work Search Support (pilot)	GCM	
Follow-up period (years)	4.4	4.4	
Welfare ROI			*3.37
Investment	\$515	\$0	\$515
Return	\$56,852	\$58,591	\$1,739
			Difference
Investment			
Service duration (years)	0.7	0.7	
Service expenditure	\$515	\$449	\$65
Return			
Avoided case management expenditure (during service)	\$0	\$449	\$449
Case management expenditure (post service)	\$4,028	\$4,085	*\$57
Income Support	\$52,375	\$53,610	*\$1,235

* Result is significant at the 95% level of confidence.

wROI values with an * are significantly different from \$1.00 (with 95% confidence).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Table 52: Investment in the Work Search Support pilot

Metric	Work Search Support (pilot)	GCM	Difference
Average service expenditure (discounted)	\$515	\$449	\$65
Maximum service duration (days)	266	266	
Average duration (days)	172.1	178.4	-6.4
Average per participant expenditure			
Total	\$517	\$451	\$66
Staff	\$346	\$296	\$50
Contract	\$151	\$137	\$13
Subsidy	\$21	\$18	\$3
Average weekly expenditure while on the service			
Total	\$21	\$18	\$3
Staff	\$14	\$12	\$2
Contract	\$6	\$6	\$1
Subsidy	\$1	\$1	\$0
Staff time (minutes)			
Per participant average	321	235	85.5
Weekly contact while on service	13.0	9.2	3.8

*: Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Welfare return for the Work Search Support pilot

More than two-thirds of the welfare return from the Work Search Support pilot came from decrease in income support payments. The reduction in income support payments was driven by participants spending less time on main benefit under the Work Search Support pilot than in GCM. After 4.4 years, we estimate the Work Search Support pilot reduced the time on benefit by 27 days (middle panel in Table 53). This reduction in time on benefit was driven by earlier exits (nine days) from benefit and by increased time off benefit after exit (four days).

Table 53: Welfare return for the Work Search Support pilot

Metric	Work Search Support (pilot)	GCM	Difference
Outcome period from assignment (years)	4.4	4.4	
Return (discounted values)			
Total return	\$56,403	\$58,142	*\$1,739
Avoided in income support payments	\$52,375	\$53,610	*\$1,235
Avoided case management expenditure (during service spell)	\$0	\$449	*\$449
Avoided in case management expenditure (post service spell)	\$4,028	\$4,085	*\$57
Benefit outcomes (days)			
Overall time on main benefit after 4.4 years	815	841	-27
Time on first benefit spell after 0.7 years	196	205	*-9
Time off benefit after 4.4 years	784	788	-4
Benefit exits and returns (for every 100 starts)			
Number of benefit exits after 0.7 years	47	42	*5.5
Number of returns after 4.4 years	65	64	*0.3

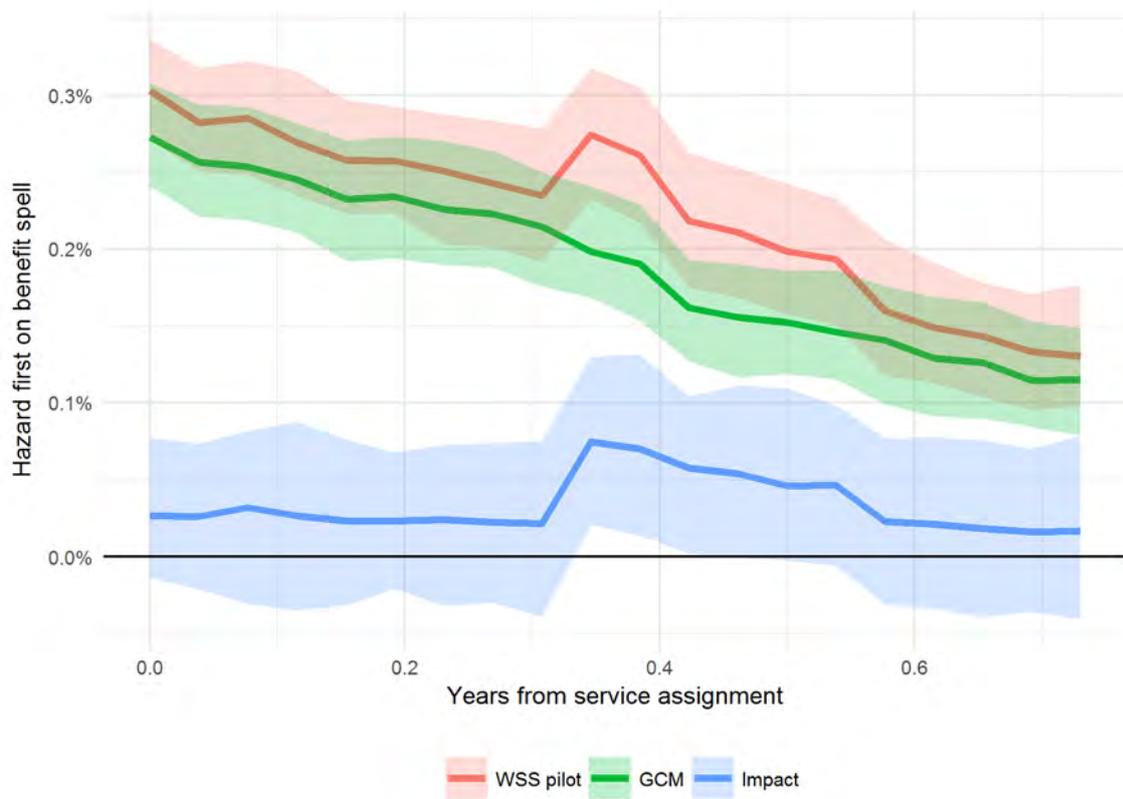
* Result is significant at the 95% level of confidence.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Work Search Support impact on benefit exits ended after five months

Figure 25 shows the impact of the Work Search Support pilot on when participants exited from benefit after starting the service. The important feature of Figure 25 is that people were more likely to exit benefit in the first four to five months after starting Work Search Support pilot than GCM. After this point, there was no difference in the probability of exiting benefit between the Work Search Support pilot and GCM scenarios.

Figure 25: Impact on hazard of exiting benefit while on the Work Search Support pilot compared to GCM



Hazard rate: Probability of exiting benefit in a given interval from starting the service. Shaded area indicates the 95% confidence interval for the estimate.

Welfare return on investment for the Work Search Support pilot by subgroup

Examining the wROI by participant subgroup, we find considerable variation in the wROI of the Work Search Support pilot (Table 54). The divergence on wROI is due to differences in investment (Table 55) and differences in return (Table 56).

Table 54: Welfare ROI for the Work Search Support pilot by subgroup

Group		wROI	Investment	Return
All	All	3.37	\$515	\$1,739
Client group	JS FT	2.92	\$551	*\$1,619
	SP FT	4.99	\$355	\$1,787
	SP PT	4.85	*\$486	\$2,362
Age group	<24	2.41	\$658	\$1,607
	25-34	2.40	\$483	\$1,159
	35-44	3.24	*\$474	\$1,541
	45+	7.46	*\$416	\$3,096
Ethnicity	Māori	3.07	*\$535	\$1,649
	Pākehā	3.71	\$490	\$1,835
	Pasifika	2.91	\$541	\$1,550
LET age adj	<\$2,000	4.11	\$577	\$2,372
	\$2,000-\$3,499	1.34	*\$562	\$763
	\$3,500-\$4,999	1.78	*\$494	\$880
	\$5,000-\$6,999	5.24	\$470	\$2,466
	\$7,000+	3.55	*\$475	\$1,679

* Subgroup value is significantly different from the overall average.

Reasons for differences in wROI between SP and JS

The Work Search Support pilot had a higher wROI for sole parents than for jobseekers. The higher sole parent wROI was driven by lower investment. In addition, sole parents with part-time work obligations (SP PT) showed a much higher return, through both more time off benefit and being paid at a higher rate than the other two groups (Table 56).

Table 55: Investment for the Work Search Support pilot by subgroup

Group		Total case management			Intensity (weekly expenditure)		
		WSS (pilot)	GCM	Net expenditure	WSS (pilot)	GCM	Net
All	All	\$515	\$449	\$65	\$20.93	\$17.63	\$3.31
Client group	JS FT	\$551	\$515	\$36	\$29.10	\$25.89	\$3.21
	SP FT	\$355	\$267	\$88	\$15.14	\$11.17	\$3.97
	SP PT	*\$486	\$361	\$126	\$13.68	\$9.88	\$3.80
Age group	<24	\$658	\$659	\$0	\$34.15	\$32.30	\$1.85
	25-34	\$483	\$396	\$87	\$18.14	\$14.52	\$3.63
	35-44	*\$474	\$383	\$90	\$16.86	\$13.30	\$3.55
	45+	*\$416	\$314	\$102	\$15.82	\$11.46	\$4.35
Ethnicity	Māori	*\$535	\$476	\$59	\$20.90	\$17.92	\$2.98
	Pākehā	\$490	\$406	\$85	\$20.21	\$16.21	\$4.00
	Pasifika	\$541	\$503	\$38	\$22.28	\$20.06	\$2.22
LET age adj	<\$2,000	\$577	\$514	\$62	\$32.46	\$27.15	\$5.31
	\$2,000- \$3,499	*\$562	\$568	-\$7	\$29.18	\$28.60	\$0.58
	\$3,500- \$4,999	*\$494	\$397	\$97	\$19.82	\$15.73	\$4.09
	\$5,000- \$6,999	\$470	\$392	\$79	\$15.61	\$12.51	\$3.10
	\$7,000+	*\$475	\$350	\$125	\$14.76	\$10.65	\$4.12

* Subgroup value is significantly different from the overall average.

Service intensity: Accounts for the time that people spend on the service and is the average weekly expenditure **while they're on the service (it doesn't include the time they're off** main benefit or have transferred to another service).

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Welfare return on investment increased with older age groups

Participants aged 34 and under showed the lowest wROI. In contrast, participants aged over 45 achieved both the highest wROI and overall return. These results may reflect the relative age distribution of jobseekers and sole parents, with a high proportion of SP participants falling into the 35 and older age group.

Table 56: Return for the Work Search Support pilot by subgroup

Group		Income support			Main benefit		
		WSS (pilot)	GCM	Net	WSS (pilot)	GCM	Net
All	All	\$54,509	\$55,780	-\$1,271	815	841	-27
Client group	JS FT	\$35,675	\$36,775	-\$1,100	655	683	-27
	SP FT	\$71,311	\$72,821	-\$1,509	968	993	-25
	SP PT	\$85,548	\$87,577	-\$2,029	1,074	1,105	-31
Age group	<24	\$35,498	\$36,326	-\$827	619	642	-23
	25-34	\$59,642	\$60,297	-\$655	864	881	-17
	35-44	\$67,486	\$68,683	-\$1,197	930	953	-23
	45+	\$61,222	\$63,994	-\$2,772	903	953	-51
Ethnicity	Māori	\$58,849	\$60,006	-\$1,157	866	890	-24
	Pākehā	\$52,757	\$54,129	-\$1,372	788	816	-28
	Pasifika	\$53,113	\$54,291	-\$1,178	793	818	-26
LET age adj	<\$2,000	\$29,933	\$31,787	-\$1,854	544	586	-42
	\$2,000-\$3,499	\$37,733	\$38,237	-\$504	664	678	-14
	\$3,500-\$4,999	\$55,579	\$56,322	-\$743	840	854	-14
	\$5,000-\$6,999	\$71,339	\$73,570	-\$2,231	979	1,017	-38
	\$7,000+	\$80,352	\$81,936	-\$1,585	1,065	1,093	-27

* Subgroup value is significantly different from the overall average.

Income support column refers to total payments made from assignment date until end of follow-up period. Main benefit column refers to total days over the same period.

Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Variation in welfare return on investment by ethnic group

wROI, Investment or Return by ethnic group showed little variation.

Risk of long-term benefit receipt

By age-adjusted LET group, the wROI showed a U-shaped pattern. This pattern in wROI was driven mainly by low returns for the mid-range risk groups (\$2,000 to \$4,999). It is unclear why this pattern has emerged.

Work Search Support compared to the Work Search Support pilot

We compared the wROI of the Work Search Support pilot and Work Search Support for the same participation duration (six months) and follow-up period (3.0 years). Overall, we found the two services achieved a similar wROI. But Work Search Support was a higher expenditure service compared with the Work Search Support pilot. The higher expenditure was compensated for by higher returns in the form of avoided income support payments.

Table 57: Welfare ROI for the Work Search Support pilot and Work Search Support limited to a six-month participation period

Metric	WSS	WSS pilot
Counter service	GCM	GCM
Follow up period	3.0	3.0
Return on Investment		
Welfare ROI	*3.38	*2.74
Investment	\$483	\$417
Return	\$1,630	\$1,134
Investment		
Service duration (years)	0.5	0.5
Service expenditure	\$483	\$417
GCM expenditure	\$402	\$360
Net expenditure	\$81	\$56
Return		
Avoided in income support payments	\$1,147	\$732
Avoided case management	\$402	\$360
Avoided in case management expenditure (post service spell)	\$80	\$45

wROI values with an * are significantly different from 1.00 (with 95% confidence). Because of rounding and the use of Monte Carlo simulations to estimate the above values, the midpoint estimates shown in the table will not always add up exactly.

Background to our analysis

In this background section, we provide a short outline of New Service Delivery Model (NSDM) and Service Delivery Model (SDM), the method to allocate clients to services and how we evaluated the effectiveness of each service. For more detail on the evaluation method, refer to the evaluation technical notes (Marc de Boer, 2019).

Case management services

New Service Delivery Model Pilot (October 2012 to July 2013)

In October 2012, 24 selected sites started the pilot of the NSDM. The NSDM involved targeting people receiving income support to different levels of case management based **on the clients' circumstances**. Work and Income had split its case management into three services:

- Work Focused Case Management (WFCM pilot): This pilot was a one-to-one case management of clients, with caseloads capped at 108 clients¹⁵ for every case manager. WFCM was targeted mainly at FT work-obligated jobseekers and sole parents. WFCM case managers provided income support, case management and could refer clients to employment programmes and services.
- Work Search Support (Work Search Support pilot): This pilot was a one-to-many case management service, with caseloads capped at 215 clients. Work Search Support was targeted mainly at FT and PT work-obligated jobseekers and sole parents. Work Search Support involved a structured sequence of job search seminars with clients, alongside administering income support. In addition to job search assistance, Work Search Support clients also participated in employment programmes and services. Clients on the main benefit for less than seven weeks were left to manage their own job search.
- General Case Management (GCM): People not in the above services were assigned to GCM. GCM had no caseload restriction. As a result, the caseloads were much higher than for WFCM and Work Search Support. GCM case managers provided both income support and employment assistance.

Service Delivery Model (July 2013 onward)

From July 2013, MSD rolled out the NSDM to all sites and renamed it the Service Delivery Model (SDM). The SDM differed from the NSDM in several respects, including the number of services offered, the caseloads within each service and the eligible population.

- Work Focused Case Management General (WFCM General): Each case manager had no more than 121 clients. WFCM General clients were mainly made up of sole parents, jobseekers and a small proportion of JS HCD (with PT work obligations).

¹⁵ Clients excludes partners. Partners were assigned to the same service as their primary.

- WFCM Health: Each case manager had 100 clients. These clients were exclusively JS HCD, who had deferred work obligations (predominantly work preparation obligations).
- WFCM IS: Each case manager in this integrated service had 80 clients. All clients were aged under 25 when assigned, and priority was given to clients exiting from Youth Payment and Young Parent Payment. In addition, the case managers could choose to work with up to 20 other clients, nominated by them or by other case managers.
- WFCM IS (ex-YP/YPP): Clients who came onto a main benefit from Youth Payment or Young Parent Payment were prioritised for the WFCM IS service but received the WFCM General service if places were unavailable.¹⁶
- Work Search Support: Caseloads were capped at 217 for this structured sequence of job search seminars with work-obligated jobseekers and sole parent clients.
- General Case Management (GCM): People not assigned to any of the above services were assigned to GCM. GCM had no caseload restriction. As a result, the GCM caseloads were much higher than for other services. GCM case managers provided both income support and employment assistance.

Investment Approach trials

MSD also trialled new approaches to delivering case management services.

- Sole Parent Employment Service trial: The aim of the Sole Parent Service was to provide employment support to those clients on Jobseeker Support benefit who had sole parent responsibilities and were returning to work. Contracted case management providers were to achieve this aim through employment-related case management and assistance in overcoming barriers to work, including employment placement and post-placement support. Providers were to tailor their case management activities to the individual needs of participants. Provider payments were linked to the outcomes achieved by participants (MSD, 2016b).
- Mental Health Employment Service trial: The aim of the Mental Health Service trial was to support people with common mental health conditions to gain work and achieve sustainable employment. Contracted case management providers were to provide employment-related case management, placement and post-placement support, integrated with the **participant's** clinical support. The target group for the service was jobseekers registered with Work and Income who were willing to undertake employment but were limited in their capacity to look for or be available to work because of common mental health issues such as anxiety, stress or depression. Similar to the Sole Parent Service, providers were to tailor their case management activities to the individual needs of clients. Provider payments were linked to the outcomes achieved by participants (MSD, 2016b).

¹⁶ While YP/YPP received the same case management service as other people assigned to WFCM IS, the allocation process did have implications for the estimation of the impact of WFCM IS on this group, since the only alternative service they could be assigned to was WFCM General.

- WFCM ICS trial: The WFCM Intensive Client Support (ICS) trial focused on improving outcomes for clients who first entered the welfare system as teenagers, and who were currently aged between 18 and 39. The trial was developed in response to welfare valuations that identified this group as having a significant share of the welfare liability and facing multiple barriers to employment. The trial started in March 2015 and was scheduled to run for three years. A key feature of the ICS trial was the use of specialised case managers (ICSMs) to provide a more intensive service than traditional case management, via a 1:40 caseload (Hall, Herdina, & Henshaw, 2016).

The trial was split into two arms with people under 30 defined as Early Entrants and those between 30 and 39 as Entrenched.

The goal of service streaming

Service streaming was the approach used to allocate people to different case management services based on their characteristics recorded in the administrative systems. The goal of service streaming was to enable better targeting of case management and employment assistance towards those people facing greater barriers to finding work. Service streaming also meant we could evaluate the cost-effectiveness of different services. To achieve this, we allocated similar people to different services and compared their outcomes.

How people were allocated to services

MSD allocated people to each service based on the eligibility and priority rules. People could not assign themselves to any service; likewise, case managers had no direct control over the assignment process. For these reasons, we observed all the factors that determined what service a person was allocated to.

How clients exited each service

Within the SDM, people exited from a service in one of four ways. They:

- exited from main benefit for more than two weeks
- transferred to a more intensive case management service (from GCM to Work Search Support to WFCM)
- became ineligible for either WFCM or Work Search Support services and returned to GCM
- moved to a site where the service was not available (this applied to WFCM and the Work Search Support pilot as well as to WFCM IS, WFCM Health, WFCM ICS, the Sole Parent Service and the Mental Health Service trial).

Neither case managers nor participants made any voluntary exits from Work Search Support or WFCM-related services. In other words, case managers could not remove people from their service. Likewise, individuals could not ask to be removed from a service.

However, case managers did have discretion about who they could work with within their caseload. Similarly, if a person was not under any work obligations, then they could decline to participate in activities requested by the case manager.

Participants exiting from services might introduce unobserved effects from assignment. For example, participants might respond to more intensive case management by either seeking a work test exemption or applying for a benefit that made them ineligible for a service. To avoid introducing unobserved assignment effects through exits, we maintained the last assigned service for each person as their current service. For example, if a client exited from benefit while on WFCM and then returned to benefit to start GCM, we defined them as being on WFCM until actively assigned to a new service (ie Work Search Support or WFCM-related service).

Evaluation of the effectiveness of WFCM and Work Search Support

Built into service allocation were randomised control trials (RCT). Each RCT ensured that for people assigned to a service, a smaller (yet equivalent) group (the control group) was not assigned. When we randomly assigned a person to a control group, they stayed in their current service (eg GCM or Work Search Support). However, they were still eligible for the other services. For example, a Work Search Support control group client in GCM could still be assigned to a WFCM service.

The combination of control group, nationally defined eligibility rules, and evaluation administered service allocation enabled us to provide reasonably robust estimates of the impact of intensive case management services on outcomes.

How long people stayed in the control group

For Work Search Support, people stayed in the control group for 52 weeks, after which they could be assigned to the service they were in the control group for (if still eligible). For WFCM services, we extended the control group period to two years. We did so to allow more time for WFCM services to have an impact on those participants facing greater barriers to employment.

While an individual was assigned to the control group they were prevented from being assigned to the service they were in the control group for (the holdout period). For example, if a person was assigned to the control group for WSS, then they could not be assigned to WSS for the following year. At initial assignment to the control group, the individual would remain in their current service. But if they were eligible for other services, then they could still be assigned to these services as well. For example, a person on GCM assigned to the WSS control group could still be assigned to WFCM General if they were eligible. Note that all these events (assignment to services) were accurately recorded in MSD administrative systems so the evaluation could account for these transfers in the analysis.

Accounting for time in different services

While the RCT design provided a sound basis for estimating the impact of each service, a simple comparison of the control and participant group outcomes did not provide a direct **estimate of the service's impact. In the findings reported in this evaluation, we** considered how long participants were in the service. For example, many Work Search Support participants were later referred to WFCM. Likewise, control group members could spend time in a range of services. We used regression models to account for how long participants and control were in each service. See the accompanying technical report for more details on the approach we used (Marc de Boer, 2019).

Participants excluded from the impact analysis

We excluded a small number of SDM participants from the evaluation. These participants were assigned to services in such a way that we could not estimate the difference the service made to their outcomes.

- Nominated WFCM IS participants: Case managers could nominate people for WFCM IS. The process of nominating individuals introduced unobserved assignment effects that we could not reliably control for in the current analysis.
- WFCM Low trust Clients: Low trust Clients (LTC) were clients with previous benefit fraud or high levels of overpayment. From October 2013, MSD required all LTC to be in the WFCM General service. The aim was to minimise the opportunity for fraud or overpayment through regular face-to-face contact with a designated case manager. The allocation of LTC was automatic and was not included in the RCT process for service assignment. As a result, we have no comparison group of LTC who were not assigned to WFCM General.

Related research on the Service Delivery Model

This analysis was not the only analysis on intensive case management services. Below is a summary of previous evaluations.

Evaluations of the pilot of WFCM and Work Search Support

In 2014, MSD completed a wROI analysis of the pilot versions of WFCM and Work Search Support (Marc; de Boer, 2014). The evaluation concluded that after one year Work Search Support had achieved a wROI of 1.48 (± 0.47), while WFCM had broken even (0.92 ± 0.27).

MSD also completed a process evaluation (Crane & Kemp, 2013) which concluded that the services were working as intended at trial sites. WFCM was found to have been implemented and operating in line with the intended design at all sites visited. However, the Work Search Support and GCM services reported being under time pressure because of their caseloads. Work Search Support case managers also reported they would have liked more one-to-one time with participants. In terms of which participants were responding to intensive case management, staff considered sole parents as a group responded well to discussions about moving back to work. Staff found participants who had been on benefit long term were more difficult to work with.

IA trials (Mental Health Service/SPES)

MSD completed an initial analysis of the off benefit outcomes for the two voluntary contracted employment placement services (Mental Health Employment Service (Mental Health Service) and the Sole Parent Employment Service (SPES)) (MSD, 2015a). In the 12 months after starting the services, treatments referred to the SPES spent about a week longer off benefit than the control group. For the Mental Health Service, the analysis found no significant difference in the time spent off benefit between the treatment and control groups. One explanation for the small impacts was the relatively short time that people referred to each service spent on the service.

In 2016 the analysis of the impact on off benefit outcomes was updated (MSD, 2016b). For both services, the evaluation concluded there was no difference in the overall time off main benefit in the two years after being assigned to the control or treatment group. In the context of the current analysis, we should state that the people in the control group for SPES were mainly in WFCM General. So, the absence of any impact indicates that the SPES was neither more nor less effective for sole parent participants than WFCM General. This was not the case for Mental Health Service, where the people in the control group were mainly in GCM and so did not receive in-house services related to intensive case management.

WFCM and Work Search Support services

The first analysis of the impact of WFCM and Work Search Support services examined the reduction in time on main benefit after one year (MSD, 2015b). The analysis found WFCM General and Work Search Support showed positive impacts on off benefit outcomes. WFCM Health also showed a smaller non-significant impact. The evaluation also included WFCM Integrated and found no difference in off benefit outcomes in the 24 weeks after starting the service. However, the evaluation pointed out that this period was too short to assess the WFCM Integrated's effectiveness.

WFCM Health

MSD completed a process evaluation of the WFCM Health service in November 2013 soon after WFCM Health started (Bandookwala, Kemp, Anderson, & Bly, 2014). The evaluation found that staff felt they needed more information, training and expert advice **on dealing with client's health conditions**. The one-to-one approach allowed staff to build rapport and trust with clients. Another issue identified was the limited number of services or training opportunities available for HCD clients.

Work brokers were often reluctant to present HCD clients to employers because they did not want to jeopardise their relationship if the placement failed. Work broker views often reflected an **employer's perception** of the high risk of hiring people with HCD.

WFCM Intensive

MSD undertook an initial evaluation of WFCM Intensive trial in 2015 that examined the operation of the service and its effects on participant outcomes (Hall et al., 2016). Analysis of the off-benefit outcomes of the WFCM Intensive participants found a larger impact for the older group (the entrenched) than the younger participants. The analysis identified the reason for this difference was that the younger control group participants received similar levels of support as the participants in the WFCM Intensive. In contrast, the level of support between the older WFCM Intensive participants and the control group was significantly different.

Interviews with WFCM Intensive case managers also found that intensive case management was important in helping participants to be ready to return to work. Many of the intensive practices worked well, including frequent contact and a flexible approach, more in-depth engagement, and continuity of case management. All these practices allowed Intensive Support Case Managers to build rapport and develop trusting relationships with participants.

Works cited

- Bandookwala, M., Kemp, C., Anderson, D., & Bly, M. (2014). *Work Focused Case Management for clients with health condition or disability (WFCM: HCD): Process Evaluation Report*. Wellington: Ministry of Social Development.
- Crane, B., & Kemp, C. (2013). *Work and Income Service Model Trial: Process Evaluation Report*. Wellington: Ministry of Social Development.
- de Boer, M. (2006). *Working New Zealand: New Service Model Prototype: Impact on client's benefit status: Update to December 2006*. Wellington, N.Z: Ministry of Social Development.
- de Boer, M. (2010). *Impact of the Job Search Service on client benefit outcomes: Update report*. Wellington: Ministry of Social Development.
- de Boer, M. (2014). *Cost-effectiveness of WFCM and WSS: one year results*. Wellington: Ministry of Social Development.
- de Boer, M. (2019). *Cost-effectiveness of intensive case management services (from October 2012 to July 2017): Technical document*. Wellington: Ministry of Social Development.
- DSW. (1997). *The Compass Programme After Three Years: A Quantitative Report*. Wellington: Department of Social Welfare.
- Hall, P., Herdina, N., & Henshaw, K. (2016). *Intensive Client Support (ICS) trial evaluation: Interim 12 month evaluation*. Wellington: Ministry of Social Development
- MSD. (2006). *The 2002 Domestic Purposes and Widow's Benefit Reform: Evaluation Report*. Wellington: Ministry of Social Development.
- MSD. (2015a). *Effectiveness of contracted case management services on off benefit outcomes: mid-trial report*. Wellington: Ministry of Social Development.
- MSD. (2015b). *Effectiveness of Intensive Case Management Services (WFCM And WSS) On Off Benefit Outcomes At One Year*. Wellington: Ministry of Social Development.
- MSD. (2016a). *Dataset Documentation: Staff time tracking*. Wellington: Ministry of Social Development.
- MSD. (2016b). *Effectiveness of Contracted Case Management Services Sole Parent Employment Service and Mental Health Employment Service Trials Evaluation: Final Report*. Wellington: Ministry of Social Development.
- MSD. (2016c). *LET v5 model information*. Wellington: Ministry of Social Development.
- Ramasamy, S., Anderson, D., Subactagin, A., de Boer, M., O'Neill, D., & Cowan, R. (2006). *New Service Model prototype evaluation: Final report*. Wellington: Ministry of Social Development.
- Rebstock, P. (2011). *Reducing long-term benefit dependency: recommendations*. Wellington: Welfare Working Group.