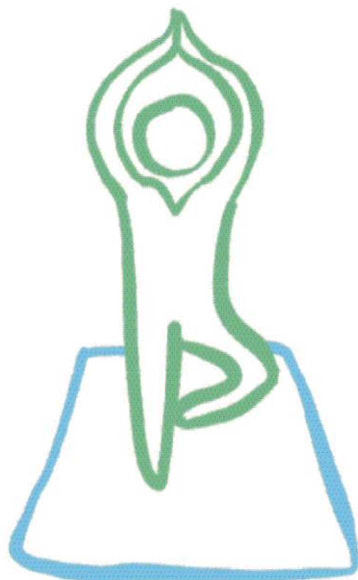
Plus Social

An evaluation of the clinical, social, and economic impacts of the Plus Social program

for people with work-related injuries and psychosocial difficulties



October 2019

Primary & Community Care Services Limited

Southern Cross University

Prepared for:

Primary & Community Care Services
icare Foundation

Authors:

Christina Aggar	PhD GCHE BN(Hons) RN
Theresa Caruana	MPH MSW GDPsych GCEP BA(Hons)
Tamsin Thomas	MSc BPsych(Hons)
J.R. Baker	PhD MPsych MAPS GAICD

Submission date:

9 October 2019

Contact:

James Baker
Chief Executive Officer
Primary & Community Care Services
T +61 2 9477 8700
E jbaker@pccs.org.au

The Plus Social program for injured workers and evaluation report were funded by icare Foundation.

Contents

Executive summary iii
Introduction 1
Psychosocial issues in workplace injury and rehabilitation 1
The Plus Social program 3
Background to social prescribing 5
Systematic reviews 5
Program evaluations 6
Evaluation methods 9
Participants 9
Quantitative 10
Questionnaire items 10
Biopsychosocial assessment tools 11
icare data 11
Data analysis 11
Qualitative 12
Link worker reports 12
Participant interviews 12
Program satisfaction survey responses 12
Data analysis 12
Results 13
Demographic information 13
Program participation and link worker role 17
Employment readiness and capacity to work 20
Social participation 25
Biopsychosocial wellbeing 29
Health service utilisation 33
Program satisfaction 36
Suggestions for program improvement 42
Summary 43
Discussion 45
Evaluation strengths and limitations 46
Conclusion 46
References 47

Appendices

Appendices 50

A Information Collection Consent Form 51

B Psychometric Assessment Tools and Questionnaire 52

C Program Satisfaction Survey 70

D Qualitative Data Collection Guide 72

List of figures

Figure 1. Plus Social program: 6 step process. 4

Figure 2. Plus Social program participant questionnaire information. 10

Figure 3. Age group and gender proportion of quantitative evaluation participants. 15

Figure 4. Link worker referrals: PCCS groups and external services or activities. 17

Figure 5. Current ability to work in paid employment: Percentages of participant responses at baseline and follow-up. 21

Figure 6. Return to work confidence: Percentages of participant responses at baseline and follow-up. 22

Figure 7. Frequency of social activities (per week): Percentages of participant responses at baseline and follow-up. 26

Figure 8. Hospitalisation in previous three months: Percentages at baseline and follow-up. 34

Figure 9. Frequency of contact with health services: Percentages at baseline and follow-up. 35

Figure 10. How services received compared to participant expectations. 39

List of tables

Table 1. Participant demographic and occupational characteristics (baseline) 14

Table 2. Referral source 16

Table 3. Time from injury to program commencement and total time off work 16

Table 4. Mean Certificate of Capacity hours over time 23

Table 5. Work status changes over time 23

Table 6. Work status improvement and return to work by time off work 23

Table 7. Mean wellbeing scores at baseline and follow-up including within-group significance tests 29

Table 8. Mean wellbeing score improvements from baseline to follow-up 30

Table 9. Overall program satisfaction and likelihood of recommendation 36

Table 10. Program satisfaction indicator ratings 37

Table 11. Summary of program satisfaction comments 37

Executive Summary

Background

Psychosocial interventions that encourage optimism and connectedness can promote workplace injury recovery and improve the overall wellbeing of injured workers. Social prescribing is a model of care that involves wellbeing professionals assessing and referring participants to services that assist in reducing isolation and disadvantage, and has been shown to increase the quality of life for a range of people with health and psychosocial needs. Plus Social for injured workers with psychosocial difficulties is a social prescribing program operating in the greater Sydney area that aims to improve wellbeing and social participation. The Plus Social program was evaluated using quantitative measures and qualitative accounts to describe and analyse program outcomes.

Methods

A mixed-methods, exploratory study design measured changes to social and economic participation, biopsychosocial indicators of needs and wellbeing, and health service utilisation for Plus Social program participants, and provided information on the effectiveness of program processes.

- Participant questionnaire quantitative and qualitative information (up to n = 200 per item at baseline and n = 175 at follow-up)
- Work capacity and claims-related data from insurance scheme agencies (n = 177 at baseline and n = 136 at follow-up)
- Qualitative information from and about participants (including 178 link worker reports, 167 program satisfaction surveys, and 44 semi-structured interviews)

Major Findings

The Plus Social program was found to be beneficial to and well-received by most participants. Significant and meaningful improvements were made in all measures of biopsychosocial wellbeing, as well as in work readiness, Certificate of Capacity hours, social participation, and in reducing health service utilisation. Participant qualitative information identified a range of personal improvements attributable to the program, including greater self-awareness, social supports, and ability to cope with the effects of their workplace injury and employment loss. Program satisfaction ratings indicated that most participants found the program to be useful in, or central to, their recovery. Valued aspects of the program were the quality of the link worker's support in meeting practical and emotional needs, in the opportunity and encouragement to participate in social and therapeutic activities that increased empowerment and social connectedness, and generally, in feeling listened to and understood.

Recommendations

Continuation and extension of the Plus Social program is supported by participants; suggestions were made to increase the accessibility, frequency, and range of activities, as well as extend the program period. Further consideration of participant injury and workplace characteristics may improve the program's ability to address barriers to economic and social participation. Systematic data collection needs to be continued and enhanced to inform program development and enable future impact assessments. Future evaluations could further consider the needs and experiences of participants who benefit most from the program, as well as the experiences of the link workers and others involved in providing rehabilitative support, to enable better understanding of program suitability and effectiveness.

Introduction

Plus Social is a social prescribing and linking program for people living in the community with work-related injuries and psychosocial difficulties including isolation, despondency, and work incapacity. The program addresses wellbeing needs by providing regular contact and activity planning with a link worker, and encouraging engagement in social groups and therapeutic classes such as painting, weaving, and relaxation. Southern Cross University was commissioned to undertake an independent evaluation using quantitative and qualitative program data collected from Plus Social program participants between July 2017 to March 2019. This evaluation report will describe Plus Social program outcomes, and summarise the information collected with reference to the program aims and social prescribing model of care.

The program evaluation consists of:

- Statistical analysis of pre– and post–intervention psychosocial measures; frequency data pertaining to social and economic participation, and hospitalisation utilisation ($n = 175$).
- Quantitative descriptive information of participant characteristics and program appraisal ($n = 175$).
- Quantitative data from insurance scheme agents on work capacity status changes over time, and claims-related data including referral source, time from injury to program commencement and total time off work, and work status improvement and return to work by time off work ($n = 136$ to 171).
- Qualitative program satisfaction information from participants ($n = 167$).
- Qualitative participant activity reports from link workers ($n = 178$).
- Illustrative qualitative accounts (collected via semi-structured interviews) of individual experiences, including identification of the psychosocial effects of injury and employment loss, and of personal improvements that the program helped contribute to ($n = 44$).

Psychosocial issues in workplace injury and rehabilitation

In 2016–2017, 89% of serious workers' compensation claims in Australia were due to physical injury and musculoskeletal disorders, with mental health conditions accounting for 7%, and other diseases 4% (Safe Work Australia, 2018). A collaborative approach to workplace injury treatment and rehabilitation is recommended by physicians (involving the person, their employer and insurer, the treating doctor, and any rehabilitation or support providers), giving consideration to any psychosocial barriers and needs that may hinder recovery (Fenner, 2013).

Having strong family relationships and social connections, an adaptive and optimistic attitude, and a capable and resilient sense of self have been shown to be conducive

to a quicker return to work after injury (McLinton, McLinton, & van der Linden, 2018). Workplace features, such as feeling effective and supported in one's work role, and having a strong workplace culture (that does not include bullying, excessive performance expectations, or unsafe practices) also contribute to injury prevention and recovery (Bailey, Dollard, McLinton, & Richards, 2015). Aspects that may reduce motivation to return to work after injury include being of older age, having younger children, experiencing family problems, and having a perception of the workplace as dangerous or of the employer as being unable or unwilling to allow for work role modifications (Bunzli et al., 2017).

The injured person's experiences of the injury and its contributing causal factors, their beliefs and expectations about recovery, and their motivation to return to work also need to be considered in rehabilitation processes. A Dutch study of 299 workers with lower back pain found that those who had higher job satisfaction and higher expectations of treatment returned to work earlier than those who did not (Heymans et al., 2006). A similar Canadian study of 1566 workers (with soft tissue injuries to the back or legs) found that recovery expectations accounted for one-sixth of the variance in time off work, and positive recovery expectations were associated with pain reduction and functional improvements (Cole, Mondloch, & Hogg-Johnson, 2002).

An Australian study of 174 workers with musculoskeletal injuries found that despite high rates of desire or perceived social advantages in returning to work, specific psychological barriers including "fear of pain and re-injury, catastrophizing, and emotional distress" delayed or prevented return (Dunstan, Covic, & Tyson, 2013, p.25). The authors stressed the importance of communication: physicians and other people involved in the injured person's rehabilitation need to avoid language that reinforces disability or low expectations of recovery as this can have a formative influence on the injured person's own self-beliefs (Dunstan et al., 2013).

Psychosocial interventions can be effective in promoting workplace injury recovery. For example, a pain management education and counselling intervention tested on 34 Americans (who were unable to return to work due to back pain and fear and avoidance behaviours) found that compared to an equivalent control group, the intervention group had a significantly lower amount of time off work (Godges, Anger, Zimmerman, & Delitto, 2008). Ideally, if the goal is to increase the likelihood and expediency of returning to work, interventions should target both intrapersonal aspects (such as coping strategies and supports) and characteristics of the workplace (such as stress, conflict, and safety) that engender or function as psychosocial barriers (Sullivan, Feuerstein, Gatchel, Linton, & Pransky, 2005).

The Plus Social program

Plus Social for injured workers is a social prescribing program operating in the greater Sydney area, delivered by the not-for-profit health organisation Primary & Community Care Services (PCCS) with support from the icare Foundation. The program aims to improve wellbeing and social connectedness. It is offered free to people who have been unable to return to work after a work-related injury, or who have returned to work on reduced hours, and are living in the general community (i.e. not in a residential care or health service facility). It requires a current Certificate of Capacity from the NSW Workers Compensation Scheme, and targets those injured workers with identified psychological, social, and practical needs that are impacting their quality of life.

The program runs for twelve weeks and is provided by a qualified and experienced Link Worker, who is typically a social worker, occupational therapist, nurse, psychologist, or overseas trained doctor. The program intervention involves a holistic needs assessment, customised care planning, linkage and referral to appropriate locally-based health and social services, enrolment in social and therapeutic activities, and follow-up contact (see Figure 1). Activities organised for Plus Social participants include art classes (Art Group), craft classes (Reclaim and Reuse), yoga and relaxation classes (Relax and Revive), equine therapy, and social groups. Referrals are made to external organisations for services such as financial counselling, relationship counselling, and housing and other assistance. Activities are run by PCCS or in partnership with local providers, and participation is voluntary (PCCS, 2015, 2018). A range of program and participant data is routinely collected, including psychosocial assessments (pre- and post- program intervention), link worker activity reporting, and participant evaluation interviews.

Figure 1. **Plus Social program**: 6 step process.

Background to social prescribing

Social prescribing uses a person-centred model of care that involves wellbeing professionals assessing and referring participants to non-medical activities and services that can assist in addressing barriers to healthier thoughts and behaviours, and to improving overall quality of life (Langford, Baeck, & Hampson, 2013). Internationally, social prescribing has generally targeted people living with chronic physical or mental health issues or disabilities, and who have limited social and financial resources to maintain their health and wellbeing. The evidence suggests that whilst health service contact is responding to psychosocial needs (psychological, social, emotional, and/or spiritual) and structural factors (such as poverty, unemployment, etc.), health services are generally not able to address these needs and inequities effectively (Kilgarriff-Foster & O'Cathain, 2015; Legg, 2011).

Social prescribing aims to empower people to increase behaviours that promote physical and psychosocial health, including exercising, practising positive thinking, and participating in social activities, and by doing so increase their confidence, sense of control, and health (Thomson, Camic, & Chatterjee, 2015). It also acts to link people with services and education that can help address the structural disadvantages that they are experiencing (Duggan, Chislett, & Calder, 2017).

A range of social prescribing studies and evaluations were reviewed to provide a comparative basis for considering the outcomes of the Plus Social program; findings are presented below. Note that an internet search did provide evidence that a number of social prescribing programs are being trialled in Australia but no evaluations were found, and a search of CINAHL and MEDLINE databases with the terms 'social prescribing' and 'Australia' did not return any records.

Systematic reviews

The majority of peer-reviewed published social prescribing studies were systematic reviews of program evaluations conducted in the United Kingdom. General benefits were identified across programs in each study, including increased social participation, decreased health service usage, and greater empowerment and confidence. A number of programs identified the link worker role as a key feature of success, particularly in their frequent and supportive contact. However, many limitations in program evaluations were also identified, including small sample sizes, and a lack of valid measures and longitudinal designs. Summaries of four illustrative systematic reviews are as follows:

- A scoping review of seven social interventions that linked people with mental illness and social isolation to community activities found each noted multiple indicators of improved psychosocial wellbeing, such as decreased feelings of

loneliness and reduced use of health services. The participant's connection to their facilitating worker was strongly linked to participant engagement and program efficacy, but there was limited information regarding physical health improvements (Mossabir, Morris, Kennedy, Blickern, & Rogers, 2015).

- A scoping review of 24 social prescribing studies from the United Kingdom found that whilst all studies discussed the benefits of the intervention, only ten were supported with empirical evidence, and most of these used small participant samples. Findings included reduced demand on primary health care services, improved wellbeing including symptom reduction, and personal goal attainment in most of the assessed empirical studies. This review highlighted the need for more high-quality evaluations of social prescribing to support its effectiveness (Kilgarriff-Foster & O'Cathain, 2015).

- A systematic review of findings from 86 social prescribing studies in the United Kingdom from 2000–2015 reported differences in study methods and quality, noting a lack of large samples (most were 10–50 participants), validated tools, inferential statistics, control groups, and longitudinal measures (Chatterjee, Camic, Lockyer, & Thomson, 2018). These findings were consistent with an earlier systematic review of 15 studies, which also identified that most social prescribing studies contained biases, for instance, not considering confounding factors (such as concurrent interventions) and failing to collect and/or report on the characteristics and experiences of participants who ceased the intervention early (Bickerdike, Booth, Wilson, Fairley, & Wright, 2017).

Program evaluations

Nine individual social prescribing program or intervention evaluations were reviewed for this report, all of which were based in the United Kingdom and conducted within the last decade. Programs were selected for having aims and interventions that were relevant to the Plus Social program, in that they were primarily focused on holistic improvement of overall wellbeing, and not just physical health or health service utilisation indicators. Studies that included larger samples, longer time periods, and/or comparative statistical analyses were preferred. Information about each selected program and unique or significant insights from their evaluation are presented below.

- Rotherham Social Prescribing Service (2012–2015): Received referrals from general practitioners (GPs) for people with complex, long-term conditions and non-clinical needs, and assessed and referred these people to 24 community activities/services including volunteer opportunities, art and exercise sessions, and social support groups. Program benefits included: sustained wellbeing improvements, especially in reduced isolation and increased independence and community engagement; and cost-benefits over time, especially where people

continued social participation activities beyond initial prescriptions (Dayson & Bashir, 2014; Dayson, Bashir, Bennet, & Sanderson, 2016).

- Wellspring Healthy Living Centre Wellbeing programme: A holistic social prescribing service for people with low level mental health issues involving GP referral, twelve weeks of one-to-one support, and twelve months of group activities. Pre- and post-intervention measures showed significant reductions in depression, anxiety, and isolation scores, and significantly increased wellbeing scores (*n* = 70, at 3 months' follow-up). GP attendance data indicated 60% of participants had reduced their visits (Kimberlee, Ward, Jones, & Powell, 2014).

- Ways to Wellness: A social prescribing intervention that targeted middle-aged people with chronic illnesses who lived in areas of socioeconomic deprivation. This qualitative study of 30 adults with multiple long-term medical conditions found that the link worker role was integral to the effectiveness of the social prescribing intervention, particularly in their holistic approach, attention to practical needs, and their use of relevant cognitive and behavioural change therapeutic methods. Key improvements were reported in the frequency and enjoyment of exercise, healthier food intake, increased socialisation, higher self-esteem, and greater ability to self-manage problems (Moffatt, Steer, Lawson, Penn, & O'Brien, 2017). Link worker feedback was largely positive overall, but difficulties were identified in assessing participant and activity suitability, insufficient initial training for role, and balancing service quality with workload targets (Laing et al., 2017).

- Wigan Community Link Worker: Working from primarily GP and acute care services, link workers provided case management and referral to community activities. The evaluation consisted of worker reports for 784 participants and interviews with 26 service managers, community link workers, patients, and representatives from participating community organisations. Whilst the program was considered to be effective overall, limitations were found in service consistency. Recommendations included improving systematic data collection (for service monitoring/quality improvement and to demonstrate impact) and creating opportunities for workers to informally compare and reflect on practice, as well as build shared expectations of the service processes and role (Innovation Unit, 2016).

- Artlift (2009–2016): Participants with health or psychosocial difficulties (*n* = 1297) were referred to a structured arts program by their GP. Post-intervention wellbeing measures showed significant improvement from baseline, and participants with multiple medical conditions were found to have greater likelihood of attendance and completion (Crone et al., 2018).

- Open Arts: A twelve-week structured art program that promoted recovery for people with mental health issues. Significant improvements in wellbeing were measured in the participant post-intervention group (n = 26) compared with a waitlist control group (n = 32); two-thirds of the control group later went on to do the program and also recorded significantly improved wellbeing measures (Margrove, Heydinrych, & Secker, 2013).

- Ecominds: Nature-based interventions (ecotherapy) for people with mental health problems that included community gardening and land regeneration. Researchers of a study involving 130 UK ecotherapy interventions found that participation frequency and enjoyment was higher in older and male participants, which was theorised to be related to the practical and productive nature of the activity and reduced perceptions of stigma compared to other mental health interventions (Bragg, Wood, & Barton, 2013).

- Broadway Skills Exchange Time bank for the homeless and unemployed: Community skill development and sharing facilitated through structured and meaningful engagement (including creative, workplace training, and service delivery activities), with the aim of increasing confidence and personal competence towards attaining employment. A proportion of participants were successful in gaining employment or commencing formal education, attributable in part to positive experiences with the program. Flexibility was crucial to its delivery, in that it catered to a cohort with varied employability and levels of social functioning, as was adequate staffing to provide supervision, promotion, and problem-solving (Bretherton & Pleace, 2014).

All social prescribing programs reported effectiveness at some level in enhancing social inclusion, promoting healthier living, and improving self-esteem and wellbeing; and all interventions were largely positively received by participants. Features that were favourably rated or commented upon across programs included: the use of a flexible, person-centred approach; having trained, competent, and compassionate staff; conducting thorough eligibility screening; and having adequate resources and services available to match participants. These findings align to insights from the perspective of social prescribers: in one study, link workers identified that program efficacy was improved by strong community links, a person-centred approach, and clear boundaries and eligibility criteria (Langford et al., 2013).

Evaluation methods

The broad aims of the Plus Social program were to provide a social prescribing intervention to reduce psychosocial difficulties and increase wellness for people who had been injured at work. Retrospective analysis of de-identified data collected by Primary & Community Care Services and the icare Foundation was used to evaluate the program. Ethics approval was granted by Southern Cross University Human Research Ethics Committee (ECN-17-151).

Program evaluation utilised a mixed method approach and measured changes over time. Baseline information on presenting issues and psychosocial status was taken at the participant's initial meeting with their link worker. Psychosocial status information was collected again at the end of the program period, and a program satisfaction survey was completed. Link workers collected information about participant referral and engagement in prescribed activities throughout the program, and some participants partook in a semi-structured interview to explore their experiences in more detail. De-identified work status and claims-related participant data was provided to icare actuaries, gathered from insurance scheme agents.

Research Questions

For individuals with a work-related injury and psychosocial difficulties living in the community, can the Plus Social program:

1. increase social and economic participation?
2. improve psychological wellbeing including distress, health perception, loneliness, and quality of life for individuals?
3. decrease hospital utilisation?

Participants

Plus Social program participation eligibility criteria:

- Aged 18 to 65 years;
- Have a work-related injury, acquired between six months and three years ago;
- Live in the community;
- Experience psychosocial difficulties, as identified by their GP;
- Likely to benefit from increased social participation and group activities, and from increased support and coordination in at least one biopsychosocial domain (for example, psychological wellbeing, or in activities of daily living);
- Have a nominated GP to support mental and physical health needs; and
- Reside in the greater Sydney metropolitan area (from Newcastle to Wollongong).

Exclusion criteria included receiving acute inpatient treatment, having significant cognitive impairment, or participating in an alternative program for injured workers.

Quantitative

Quantitative study design involved retrospective analysis of de-identified pre- and post-program data collected by the PCCS link worker (consent form is provided at Appendix A) and icare actuaries.

PCCS participant information was gathered using five validated psychometric assessment tools, and questionnaires comprised of demographic, occupational, social inclusion, health, and program satisfaction questions (see Appendices B & C; note that demographic information on country of birth, language spoken at home, and employment status/benefit details were extracted from the participant's referral and do not appear in the assessment tools). A dataset of 254 Plus Social participants was provided for analysis, with substantive baseline recorded against 200 participants, and additional follow-up data recorded for 175 participants.

Questionnaire items

Additional quantitative program participant information collected at baseline and follow-up, and used in this analysis, are presented in Figure 2.

Baseline	Follow-up
Demographic information	Program satisfaction survey responses
Occupational information: details of employment (pre- and post-injury), injury-related time off work, satisfaction with worker's compensation claim, and confidence and capacity for work	Occupational information: details of current employment, satisfaction with worker's compensation claim, and confidence and capacity for work
Social inclusion information: frequency of social and volunteer activities, satisfaction with social support, and number of 'people I can count on'	Social inclusion information: frequency of social and volunteer activities, satisfaction with social support, and number of 'people I can count on'
Health information: pre-injury disabilities and psychological treatments, and hospitalisations and contact with health services in previous three months	Health information: hospitalisations and contact with health services in previous three months

Figure 2. **Plus Social program participant questionnaire information**.

Biopsychosocial assessment tools

- World Health Organisation Quality of Life (WHO-QOL-BREF): Overall quality of life and health satisfaction across physical, psychological, social, and environmental domains (WHO, 1996).
- Camberwell Assessment of Need Short Appraisal Schedule (CANSAS): Welfare and support needs (Slade, Thornicroft, Loftus, Phelan, & Wykes, 1999).
- EQ-5D-5L Health Thermometer: Perceived health, social life, and work readiness statuses (van Reenen & Janssen, 2015).
- The Kessler Psychological Distress Scale (K10): Agitation, fatigue and depression (Kessler et al., 2002).
- UCLA 3-item Loneliness Scale: Feelings of being left out, isolation, and lacking companionship (Hughes, Waite, Hawkley, & Cacioppo, 2004).
- Pain Scale: Pain intensity (Nelson et al., 2004).

icare data

Aggregated extant summary claims information was gathered by icare actuaries from data reported by icare's insurance scheme agents to the State Insurance Regulatory Authority (SIRA) as additional information to evaluate the effectiveness of the Plus Social program. The dataset included claims-related data for 171 Plus Social participants from commencement of the Plus Social program until 1 March 2019 and Certificate of Capacity hours and work status rankings (for 136–177 participants over three time periods). The claims-related data included referral source, date of injury relative to program commencement, changes in work status (where a worker's ability to perform duties demonstrates an upgraded capacity to do so in their Certificate of Capacity), claim closure status (where claims are closed due to a participant fully returning to work), and cohort service costs over time. Work status data provided by icare contained information from the nominated treating doctor on the Certificate of Capacity which describes a person's ability to work based on the following 3 categories: no capacity, some capacity, and full capacity (fit for pre-injury work). This data was compiled and updated by the scheme agent managing the claim every 28 days.

Data Analysis

Quantitative data were checked for normality and analysed per distribution characteristics in SPSS 25. Within and between-group analysis was conducted and significant differences were considered when $p < .05$ (two-tailed). Within-group differences across time (changes in social and economic participation, work status, wellbeing scores, and health service usage) were analysed using paired-samples *t*-tests and Wilcoxon signed-rank tests for non-parametric data. Differences in hours on Certificate of Capacity by time off-work (three categories) and within-group differences over time were analysed using one-way between-groups analysis of variance (ANOVA). Multiple comparisons were not corrected: the probability of Type I error was not considered a major concern due to the nature of the study being exploratory and for clinical evaluative purposes.

Qualitative

Descriptive information on participant referrals and activities, and narratives describing participant experiences in having a workplace injury and in engaging in the Plus Social program, were documented by link workers and provided for evaluation, along with qualitative responses to the program satisfaction survey.

Link worker reports

Link workers documented the services they provided to Plus Social program participants, including information given, referrals made to PCCS groups or external services and activities (e.g. walking groups, financial counselling), and groups or activities that were attended. A dataset comprising 178 participants was provided for analysis. Reasons for program withdrawal or non-participation were recorded against a further 51 people.

Program satisfaction survey responses

Up to twelve written or verbal (transcribed) comments and responses were given by each respondent to the program satisfaction survey ($n = 167$); completed at the time of the follow-up questionnaire.

Participant interviews

Typed transcripts of 44 semi-structured interviews were provided for analysis (see Appendix D for interview tool). Interviews were conducted by the participant link worker via phone ($n = 23$), face-to-face ($n = 17$), self-completion ($n = 1$), or a combination of these ($n = 3$).

Transcripts included verbatim and summarised information about participant personal circumstances and experiences, including:

- the nature and impacts of their injury or illness, and psychosocial effects resulting from work loss;
- activities suggested by the link worker and/or activities attended; and
- psychosocial improvements they have experienced that are attributable (largely, or in part) to participation in the Plus Social program.

Data Analysis

Qualitative data were thematically analysed according to the framework developed by Braun and Clarke (2006), where repeating patterns of meaning were delineated into themes to be described in the evaluation findings and illustrated using representative data extracts.

Results

Demographic information

A dataset of 254 participants was provided by PCCS; 54 did not have substantive baseline information (beyond ID, date and age or gender) and were removed from analysis. Baseline data was collected from July 2017 to January 2019 for 200 Plus Social program participants (79%). Of these, 175 participants had follow-up data recorded, so it is assumed that 25 participants (12.5%) left the program early or were uncontactable upon its completion.

Mean ages were almost identical within groups (lost to follow-up mean age = 51.22, SD = 11.14, n = 23, range 27 to 72 years old; followed up mean age = 51.15, SD = 10.15, n = 157, range 27 to 71 years old). Other participant characteristics are provided in Table 1. Participants lost to follow up were more likely to be: female; born outside of Australia; speak a language other than English; work full-time or be unemployed (rather than not looking to work); and have had more than two years of injury-related time off work.

Table 1.
Participant demographic and occupational characteristics (baseline)

Characteristic	Followed up		Lost to follow-up	
	%	*n*	%	*n*
Gender		174		23
Male	56.3		30.4	
Female	43.7		69.6	
Country of birth		135		14
Australia	62.2		35.7	
China	5.2		–	
Other (*n* other countries listed)	32.6	(25)	64.3	(8)
Language spoken at home		142		16
English	85.2		62.5	
Mandarin	3.5		–	
Korean	1.4		–	
Other (13 languages given)	9.9		37.5	
Indigenous identity		165		22
Aboriginal	4.8		–	
Torres Strait Islander (TSI)	1.2		–	
Neither Aboriginal nor TSI	95.7		100	
Current employment status		124		14
Full-time	4.0		14.3	
Part-time	8.9		–	
Unemployed	37.1		78.6	
Income support, not looking to work	50.0		7.1	
Worker's compensation	46.0		14.3	
Time in workforce		168		21
< 1 year	3.0		–	
1 to 3 years	5.4		4.7	
3 to 5 years	5.4		–	
5 to 10 years	9.5		14.3	
> 10 years	76.7		81.0	
Injury-related time off work		166		20
< 1 year	31.9		25.0	
1 to 2 years	30.7		20.0	
> 2 years	37.4		55.0	

Follow-up data was collected from 31 October 2017 to 27 March 2019 (*M* = 146 days after baseline, *SD* = 68 days, range 27 to 457 days). Age groups and proportional gender are presented in Figure 3: all age groups had an equal or higher proportion of men except for 60–69 years which consisted of two-thirds' women.

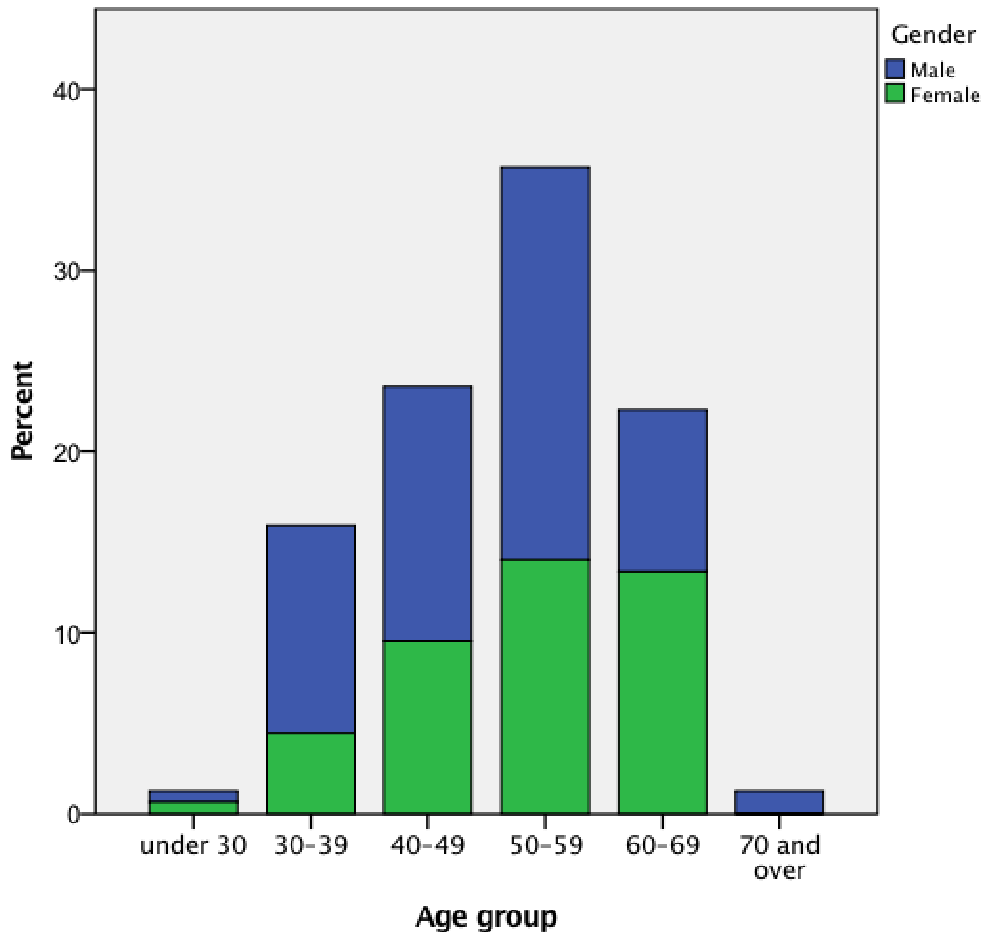


Figure 3. **Age group and gender proportion of quantitative evaluation participants** (*n* = 157).

Information on referral source and time off work was derived from icare data. Referrals were mostly received from insurance scheme agents, with similar proportions received from rehabilitation providers, GPs, and by self-referral (see Table 2). Most participants recorded less total time off work than time from injury to commencing program, with nearly half of participants taking more than two years from injury to program commencement (see Table 3).

Table 2. ***Referral source***	%
Workers' compensation insurance scheme agent	29%
Rehabilitation provider	26%
Self-referred	24%
General Practitioner	19%
Other sources	2%

Table 3. ***Time from injury to program commencement and total time off work***

Weeks	Time from injury to commencing program (*n* = 148)	Total time off work (*n* = 168)
Less than 13 weeks	1%	17%
Less than 26 weeks	–	8%
26 to 52 weeks	20%	11%
52 to 78 weeks	18%	12%
78 to 104 weeks	12%	12%
More than 104 weeks	49%	40%

Plus Social program participants who were interviewed identified that they were mostly referred by their insurance companies or GPs, but some identified self-referral through encountered promotional materials. Interviewees were of diverse backgrounds and circumstances and included Aboriginal people, people from non-English speaking backgrounds, and refugees, as well as single and partnered people, and people with a range of family roles.

As interview transcripts did not record participant ID and interviewees were encouraged to only share personal information that they were comfortable with, some participants did not have any demographic information recorded. Participants were aware that their information would be used for research purposes, but had the option of consenting to whether their stories would be shared. Ten people did not give this consent, and as such their responses informed overall descriptive results but are not included as data extracts in this report.

Program participation and link worker role

Link worker reports provided participant referral information. Over 50% of participants ($n = 92$) for which data was recorded had received referrals to five or more services. Brief attendance and outcome data was collected against each participant, indicating that at least one link for social or other support was successfully made for all participants. Although it was not possible to accurately quantify the uptake and continuance of activities from these reports, all participants had followed up on at least one service or activity referral, with some participating in as many as twelve referrals or activities. Half of the participants ($n = 89$) attended at least one PCCS group (see Figure 4 for a list of PCCS groups and types of external referrals made).

PCCS group referrals	Types of external referrals
• Chill Art (art classes) • Relax and Revive (yoga and meditation) • Reclaim and Reuse (weaving and craft with recycled materials) • Equine Therapy • Social group	• Community gardening • Women's Centre • Men's Shed • Community Centre • Mental health support groups • Community volunteering opportunities (e.g. Meals on Wheels) • Free or low cost food providers • Counselling services (including financial, relationship, and hotline) • Legal aid • Computer and technology classes • Cultural groups and services • Meditation • Welfare services • National Disability Insurance Scheme providers • Continuing education providers

Figure 4. **Link worker referrals**: PCCS groups and external services or activities.

Non-participation or program withdrawal information was provided for a further 51 participants:

- 38 people declined to participate in the program after initial contact;
- 2 were ineligible to participate;
- 4 undertook initial assessment but declined to participate in follow-up data collection; and
- 7 withdrew after starting the program: 2 due to mental health issues, 2 due to physical health issues, 1 due to alcohol and other drug issues, 1 due to domestic violence issues, and 1 due to a family death.

Program referrals and attended services or activities were discussed by 42 (88%) of the participants interviewed. While most described positive experiences with these, there were some issues in accessing activities, largely due to a lack of transport or in having social anxiety problems. Other factors that impact on access to program activities included:

- self-perceived unsuitability due to personal characteristics such as gender, age, impaired mobility, or pain; or
- activities not aligning to personal interests.

Participants described benefits in participating in program activities including:

- reduced social isolation;
- better ability to communicate and relate with others;
- increased confidence; and
- a sense of belonging.

Florist and arborist, male

Before being a part of the groups, I did not talk to anyone and just stayed home. After being involved in the groups, I was motivated to do things I wanted to do. Having someone constantly contact me helped a lot. Even when I felt down, I had people to talk to and that lifted my mood up. I feel like I'm building myself back up. Having a new 'support crew' which has not only enabled me to address my social and emotional needs but has also given me the confidence to explore a variety of new work opportunities and careers. I feel that my recovery is under control and I can start planning for a new future.

Aged care worker, female

I must say, after joining up with Plus Social Group I have gained more confidence and self-belief in myself and [am] looking forward to what is ahead of me. The program has helped lessen my anxiety and built self- confidence. I have the sense of belonging. I am more positive with the recovery process and hopeful that I can get back to my job or find another suitable job. Before the program, I was struggling to get out of my comfort zone and make new friends because I don't trust people… I feel I have made a significant progress with meeting new people at Plus Social activity groups… The link worker understood and listens to my needs and requirements and connected me to social network groups, activity groups, provided information about other vital services for my recovery process. I am very grateful and so thankful for the Plus Social Program which has helped me to this stage of my recovery process. The changes I have experienced: I have more confidence in myself and I can now trust people without the fear of getting hurt. I have increased my social connections and support network. I feel more self-sufficient and have the courage to try new groups in my area.

Participants spoke highly of the support and expertise of the link workers, with many designating this as the most valuable component of the Plus Social program:

No personal details provided

My utmost of gratitude goes to my link worker. You have been my saviour. There is not enough paper… to put in words my appreciation for your hard work, past and ongoing. To believe in myself, to want and search for change, and one thing I have always considered and my link worker has instilled in me forever is to give back to others what I have gained.

Self-employed tradesperson, male

One of the very important consistencies I found was the link worker's support. She would phone me and meet me face to face. She allowed me to be a mess. It was accepted and dealt with really professionally and compassionately… It was a major part of what has helped me get through.

Sales showroom worker, male

Link worker educated me on the use of assistive technology to help me perform activities of daily living more comfortably, which positively impacted my family relationships.

54-year-old

Before I met my link worker I couldn't face each day. I didn't know how to carry on with day to day life because I was in so much pain and had severe depression and anxiety. I thought that my injury was a death sentence, it felt like my life had ended at age 54. When I would talk about my pain, whether physical or mental, my link worker would always remind me that things might not be going my way now, but that maybe tomorrow or in a week or a month they would be. My link worker helped me to change my mindset.

Catering worker, female

When I was connected to my link worker she gently made me understand that my son had a right to a good education. She made me realise I was safe and this helped lower my anxiety. When my son joined the local school, he came home smiling. I had not seen my son smile for over a year. His smile made me feel confident that I could trust my link worker and trust myself that I can give my son good opportunities. Having a good listener by my side and having someone to connect me to the right services that I did not know I needed, helped me create a better future for myself.

Public sector communication worker, female

Link worker was genuine, compassionate, empathetic, kind, nurturing and provided heartfelt care… I felt supported to find solutions to some of my 'lifestyle' problems – financial, counselling, etc.… She's provided me with information to enable me to help myself. She was able to point me to really great services. She gave me suggestions of books and people to look up in relation to meditation and psychological aspects of my situation. She gave me support, guidance, suggestions, and pointers in the right direction. She was qualified, very intelligent, had a lot of experience under her belt, and understands people in challenging situations. She had the systems knowledge around how things work and was able to help me with things like what I was entitled to through Centrelink, financial aid, and accessing my super. I was in good hands.

Home renovator

The change for me happened simply because my link worker listened to me and showed a genuine interest in my life. That's all it took for me to feel that I was connected with someone.

Employment readiness and capacity to work

Three quarters of participants had been in the workforce for over ten years before their injury (Table 1). Participants had worked an average of 43 hours per week prior to their injury (range 4 to 84 hours). The most frequently reported occupational categories were:

- manual labour (24%);
- tradesperson (16%);
- professional, technical, or managerial (10%); and
- desk-based sales/marketing (8%).

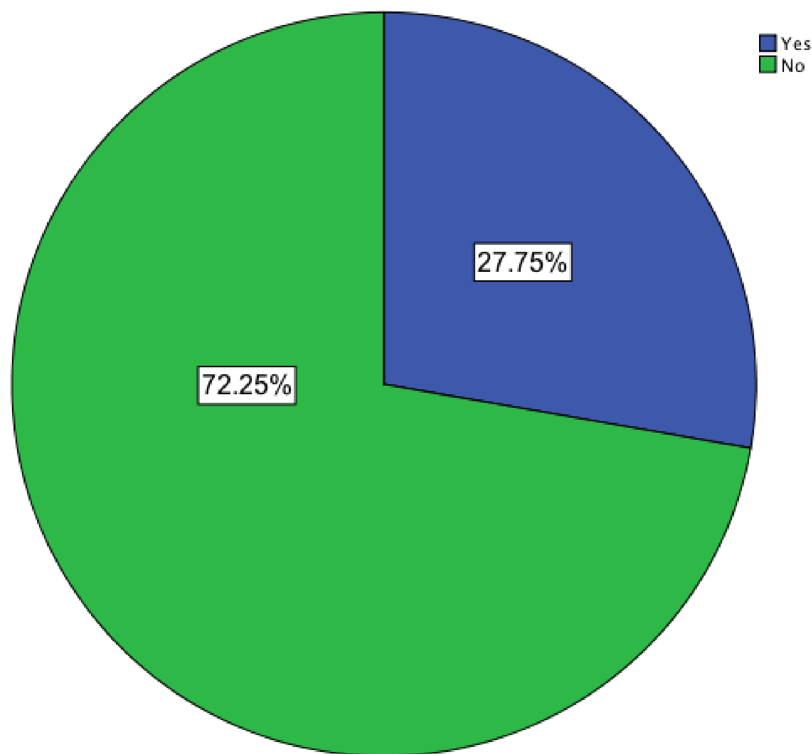
Current self-reported ability to work in paid employment increased significantly by 15% from baseline ($n = 173$) to follow-up ($n = 171$; $Z = -4.60$, $p < .001$; see Figure 5). Confidence in being able to return to work in the future also increased significantly: there was an 18% reduction in those reporting 'unconfident' or 'very unconfident', and 7% increase in those reporting 'confident' or 'very confident' ($Z = -4.85$, $p < .001$; see Figure 6).

Capacity for work, as assessed by the participant's treating medical practitioner, was given as three categories: no capacity, some capacity, and full capacity (fit for pre-injury work). Where a person was assessed as having some capacity for work, a number of hours per week was listed on their certificate. Changes in work status were classified into three ordinal categories (negative change, no change, positive change), and mean differences in Certificate of Capacity hours between time points were calculated as indicators of economic participation progression. Data for 177 Plus Social program participants at Time 1 (baseline) and Time 2 (post-intervention, 12 weeks after baseline) was provided by icare, and 145 had data also provided for Time 3 (follow up, 24 weeks after baseline). At baseline, eleven participants were assessed as having full capacity for work, and nine retained this status post-intervention; as their data does not contribute to measuring program effectiveness these nine participants were excluded from findings related to changes over time.

Mean Certificate of Capacity hours (see Table 4) significantly increased over time for the 136 participants that had data at all three time points, $F(1.5, 198) = 63.25$, $p < .001$, partial $\eta^2 = .32$. Pairwise comparisons showed that the mean difference in Certificate of Capacity hours was significantly higher (all $p < .001$) at each later point in time:

- increase of 7.41 hours ($SD = 11.90$) between Time 1 and Time 2
- increase of 2.54 hours ($SD = 7.44$) between Time 2 and Time 3
- increase of 10.76 hours ($SD = 13.95$) between Time 1 and Time 3

Baseline



Follow-up

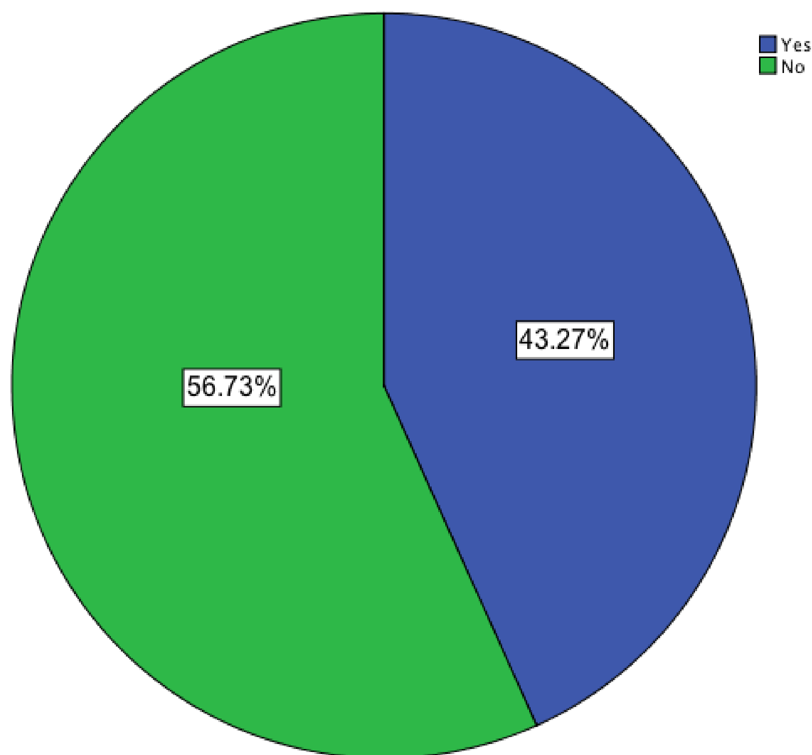
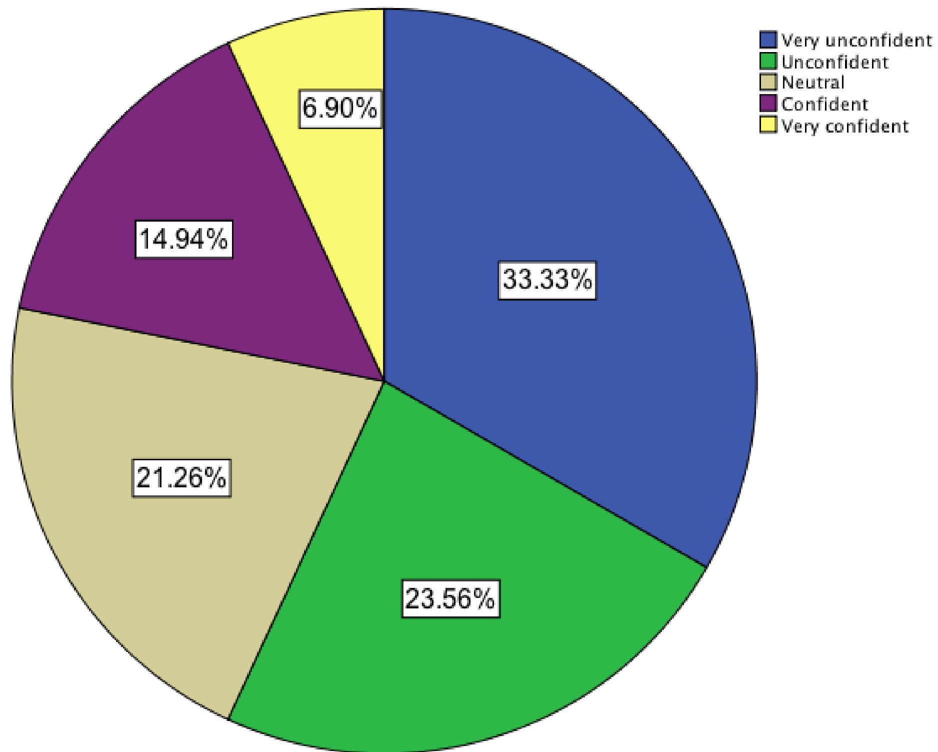


Figure 5. **Current ability to work in paid employment**: Percentages of participant responses at baseline and follow-up.
Baseline



Follow-up

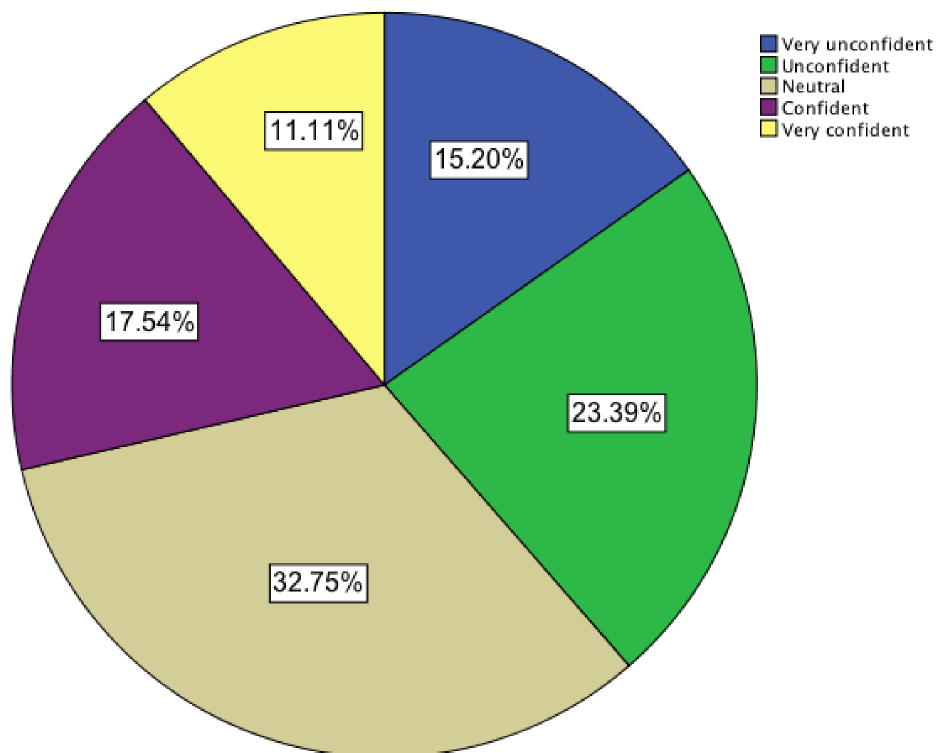


Figure 6. **Return to work confidence**: Percentages of participant responses at baseline and follow-up.

Table 4. ***Mean Certificate of Capacity hours over time***

	M	*SD*	*n*
Time 1 (baseline)	7.08	11.91	177
Time 2 (post-intervention)	12.77	14.42	168
Time 3 (follow up)	16.77	16.07	136

Participant work status rankings also improved significantly over time (see Table 5):

- Time 1 to Time 2 ($Z = -6.91$, $p < .001$):
  48.2% positive change, 3.0% negative change, 48.8% no change
- Time 2 to Time 3 ($Z = -2.86$, $p = .004$):
  13.2% positive change, 2.2% negative change, 84.6% no change
- Time 1 to Time 3 ($Z = -6.98$, $p < .001$):
  58.1% positive change, 4.4% negative change, 37.5% no change

Table 5. ***Work status changes over time***

		n (%)
Time 1 (baseline)	No capacity	114 (64.4%)
	Some capacity	52 (29.4%)
	Full capacity	11 (6.2%)
Time 2 (post-intervention)	No capacity	69 (41.1%)
	Some capacity	76 (45.2%)
	Full capacity	23 (13.7%)
Time 3 (follow up)	No capacity	46 (33.8%)
	Some capacity	58 (42.6%)
	Full capacity	32 (23.5%)

Almost a third of injured workers with six months to two years off work had a work status improvement, which was double the rate of injured workers with more than two years off work; the proportions of those returning to work was similar across these two timeframes (see Table 6).

Table 6. ***Work status improvement and return to work by time off work***

Time off work	Work status improvement (%)	Return to work (%)	Total *n*
Less than 26 weeks	1 (100%)	1 (100%)	1
26 weeks to 104 weeks	17 (29%)	7 (12%)	58
More than 104 weeks	16 (14%)	15 (13%)	112

Participants described how losing their ability to work had led to social isolation, loss of identity and purpose, diminished dignity, financial issues, relationship problems, unhealthy lifestyle and/or behaviours, increased anxiety and/or depression, and suicidal ideation.

Showroom sales worker, male

The loss of my job, financial stability and the meaning it provided me, led to feeling a loss of hope and dignity.

Participants who were either not planning or not able to go back to work described barriers such as severity of injury, ongoing pain and/or mobility issues, older age, and generalised or specific fears. Some interviewees spoke about how they had lost hope in ever working again, but participating in Plus Social had helped to restore their sense of self-efficacy and self-worth despite any current incapacities, and others described successful experiences in returning to work or retraining:

Construction worker, male

I had been working in the construction industry for over 20 years until I suffered a serious back injury in 2015. I stopped working immediately. Due to the increasing physical pain and decline in my function/mobility, my mental health was getting negatively affected. My mental state deteriorated to the extent of wanting to end my own life. Six months following my injury, I finally got access to help, including a psychologist whom I still work with to this day. The loss of my job and level of function led to feeling a loss of meaning and purpose. Nevertheless, I am trying to stay hopeful in climbing back up the ladder.

Marketing worker, male

I have now returned to work and our finances have improved, the way I communicate now has changed my marriage for the better. We have been on a lovely family holiday and have started to connect to other parents and build our friends together. I feel better about my future and I felt heard, understood and supported with the Plus Social program.

Factory worker, female

I am hopeful of a new career and it will be the first time that a member of my family has a certificate in higher education. I have a new pride in my ability and a hopeful future.

Some respondents to the satisfaction survey indicated that they wanted the program to be more focused on preparing them for work, or helping them to find a job that could accommodate their current functional abilities.

Social participation

The number of people that participants could count on increased significantly from a baseline mean of 3.45 (SD = 4.17) to a follow-up mean of 4.19 (SD = 2.22), $t(172) = -2.41$, $p = .017$. Satisfaction with social support also increased significantly: 27% indicated some level of satisfaction at baseline (i.e. greater than a 'neutral' response), which doubled to 60% at follow-up ($Z = -8.09$, $p < .001$). Thirty-nine percent of the cohort indicated that they never participated in social activities at baseline; this significantly decreased to 9% at follow-up ($Z = -6.78$, $p < .001$; see Figure 7).

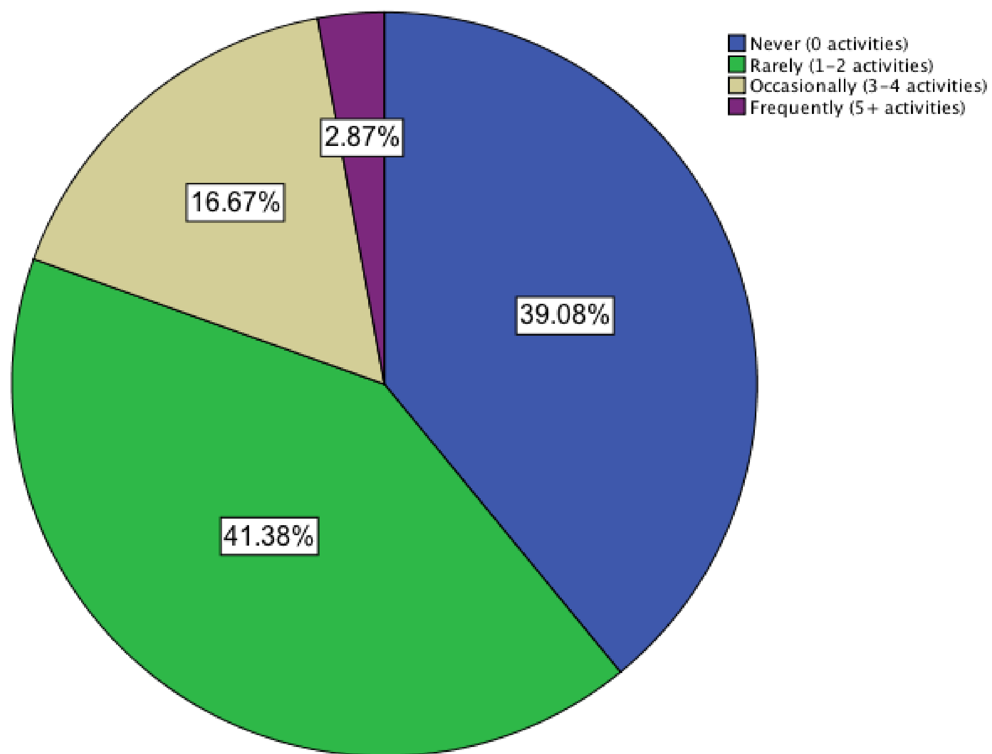
Participants described a range of improvements to their social life, from making new friends and enjoying new social activities, to strengthening of current friendships and improving family or partner relationships. This was consistent with responses from the program satisfaction survey: many expressed appreciation for and value in the program's focus on improving social supports and community engagement.

Nearly all of the participants who were interviewed identified isolation as a problem prior to the program, with many linking this to their loss of work and/or to the biopsychosocial effects of their injury including pain, impaired mobility, or increased symptoms of depression or anxiety. Many participants described the loss of social connections in the workplace, including the loss of trust, decreasing personal confidence in engaging with other people and social activities generally:

Florist and arborist, male

I had a good bond with work colleagues and lost it after I stopped working. I felt left out and gradually, no one called me out. The social groups brought me back into touch. I was able to meet great people in the social group. I have new friends in my life that have the same interests and we do things that are not too physical. I have increased my confidence to reach out for support and connect to new activities and community groups. My family relationships have changed to more positive and we are spending more enjoyable time together. As a family, we are now bonding through activities that require more communication and teamwork including wood turning and community gardening.

Baseline



Follow-up

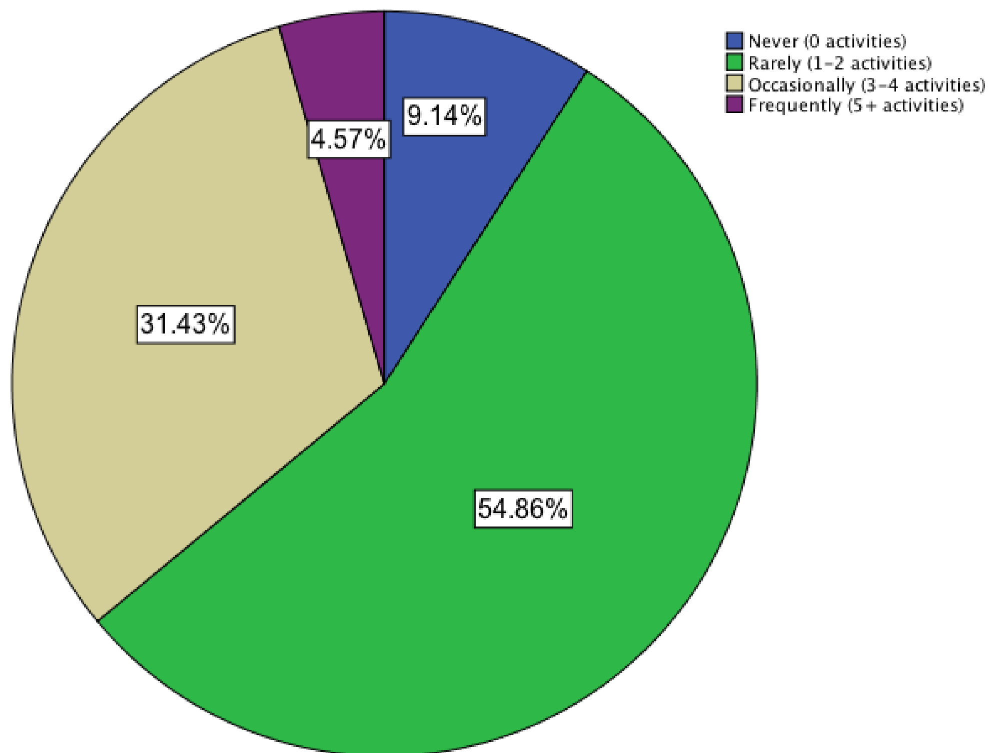


Figure 7. **Frequency of social activities (per week)**: Percentages of participant responses at baseline and follow-up.

For some, their experience in the program helped to address psychosocial issues that were preventing healthy friendships and relationships with the people in their lives:

No personal details provided

Before the program, I was a shell of myself, I didn't talk to anyone and I didn't leave my house. The link worker's encouragement and support has helped me to become more socially connected and to deepen friendships. My link worker encouraged me that even if I was in too much pain to go out, that it would be good for me to call my friends on the phone. I call my friends on the phone a lot now, I also go out walking and exercise.

Mother

I joined Plus Social as I wanted some connection and create heathy relationships. I was craving connection, my link worker supported me in a family meeting to explore my situation and set some healthier boundaries. After exploring my gender role with my link worker, I began to understand why I was in the situation I was in. I was in a violent relationship with a boyfriend and I was unravelling due my drive to have some love in my life. I was given an opportunity to explore my needs and have someone to listen and understand my situation.

Sales worker, female

I am no longer sitting at home worried, stressed and isolated. I have developed good strategies to keep my anxiety at bay and I have been able to reduce my depression medication. I am more mobile now and I feel that I am communicating my needs more with my husband. I am looking after my granddaughter once a week, I was not able to do this when I was having anxiety attacks and sleeping all day on my medications. My granddaughter is the apple of my life and brings me wonderful joy and love. I feel without Plus Social, I would still be in hospital, lost, alone and without my granddaughter in my life.

Aboriginal elder, chef, grandmother

I was referred to Plus Social and my life changed, I felt heard and supported. My link worker showed me a better way of communicating and I built my communication skills. I was able to re-negotiate better repayment plans for outstanding bills. My link worker built my confidence and I was able to communicate with friends that I had lost contact with. I now have supportive friends that have helped me gain a vehicle that has improved my sociability… I am connecting back to my Aboriginal community. I now know I can now figure out my own journey to financial independency, social connections, and mobility supports…I am not lost in the system, I am connected to support groups and I feel confident in my journey ahead.

Participants described learning and strengthening interpersonal communication skills, including the abilities to relate and self-advocate, and gaining a sense of the value of social connections and activities, particularly with people who may have had similar experiences and setbacks to themselves:

Mother

Social skills are a muscle that needs to be exercised. Experience with groups in the Plus Social program… it all helps build that muscle. I really needed a gentle introduction to this exercise and my Plus Social link-worker was great at pulling me into the journey out of isolation.

Construction worker, male

Overall, I do not feel as upset and down as I used to prior to being involved in this program. I believe this is because I have become more understanding of what happened to me. I have developed a more positive outlook to life as a result of socialising and being around other people who have gone through similar experiences to me. Furthermore, I do not shut myself out as much as I used to and have realised I feel a bit better when I am around others. I have established new friendships through this program which has been encouraging as we are all here for the same reason.

32-year-old female

Since the injury, my social life and relationships have deteriorated. No longer am I able to drive, so getting out to connect with others is limited and often stressful. Attending a Plus Social class provided me with the opportunity to connect socially with others who had had similar experiences. I found myself enjoying the company in a safe and relaxed setting.

Social work student

Learning that I am capable at doing art was a great confidence builder and my connection with others in the group also reinforced the need to reach out to others and build mutual support networks/rapport. I got to observe effective group work aimed at recovery in action and the benefit it gave to others – not just myself. I watched other people learn that they weren't alone, to relax, enjoy, build confidence in their ability to make art and begin to open up to the people around them. It was a joy to be a part of that process.

Florist and arborist, male

I was always a positive guy, but the past 18 months was tough. I feel like I'm in more control now. Having a supportive link worker who was able to listen without judgement meant that I gained confidence and trust that they would connect to things that were in my capability. The link worker connected me to groups that had other people with work related injuries, this boosted my confidence to talk to people as they understood my situation and that I did not have to repeat myself. They understood when I did not want to speak and just were very supportive. I had people in my life that cared about me and not what I could do for them. Throughout my involvement in the Plus Social program, I have had several operations, and this has limited my connections to community groups. The link worker was supportive in ensuring I was not isolated and took me to the social groups so that I could still keep the connections with other group members. Having people support my needs made me feel needed and valued. I now have a good support network that check in with me. I built my confidence to try new things with my family and we have discovered a passion for community gardening. I now in the process of having another operation but I know I am not on my own.

Biopsychosocial wellbeing

All positive wellbeing indicators in the quantitative assessment tools improved significantly (*p* <.001) from baseline to follow-up (WHOQoL, CANSAS Met Needs, EQ-5D-5L), and all negative wellbeing indicators (CANSAS Unmet Needs, K10, UCLA 3-tem Loneliness Scale, Pain Scale) were significantly reduced (*p* <.001; see Table 7). These findings are strong evidence for the Plus Social program meeting its aim of addressing some of the psychosocial barriers to improved wellbeing for participating injured workers.

Table 7.
Mean wellbeing scores at baseline and follow-up including within-group significance tests

Scale	Baseline	Follow-up	Paired-samples t-test		
	M(SD)	*M(SD)*	*t*	*df*	*p*
WHO-QOL-BREF (Quality of life)					
Overall Quality of Life *(1 item)*	2.48 (0.89)	3.17 (0.82)	-10.24	172	<.001
Overall Health Satisfaction *(1 item)*	2.13 (0.89)	2.80 (0.88)	-10.01	172	<.001
Physical Quality of Life	18.82 (2.79)	21.12 (2.85)	-11.38	172	<.001
Psychological Quality of Life	16.42 (3.44)	18.67 (4.21)	-8.05	172	<.001
Social Relationships Quality of Life	7.74 (2.46)	9.31 (2.25)	-9.59	172	<.001
Environment Quality of Life	23.68 (5.05)	28.31 (5.30)	-12.26	172	<.001
Total Quality of Life	62.23 (13.18)	76.29 (14.82)	-14.21	172	<.001
CANSAS (Welfare needs and support)					
Met Needs	10.79 (4.96)	14.17 (5.37)	-7.54	174	<.001
Unmet Needs	6.36 (3.53)	3.05 (3.33)	11.49	174	<.001
Total Needs*	17.15 (4.59)	17.22 (4.55)	-0.16	174	.873
EQ-5D-5L (Health-related quality of life)					
Health Status	41.43 (21.48)	52.65 (20.51)	-9.23	173	<.001
Social Life Status	28.57 (22.44)	44.43 (23.26)	-9.07	173	<.001
Work Readiness Status	25.85 (26.47)	38.09 (30.89)	-7.22	173	<.001
K10 (Psychological distress)	33.19 (8.84)	26.77 (8.09)	12.87	172	<.001
UCLA 3-item Loneliness Scale	6.99 (1.97)	5.82 (1.78)	8.89	169	<.001
Pain Scale	5.63 (1.83)	4.77 (2.10)	5.47	172	<.001

Note. *CANSAS Total Needs assists in interpreting changes in met and unmet needs, but is not a wellbeing indicator in itself.

Wellbeing mean score improvements as a percentage from baseline mean score are presented in Table 8. The strongest improvements (as a proportion of the indicator scale) were in social life status, work-readiness status, and in the reduction of unmet needs.

Table 8. ***Mean wellbeing score improvements from baseline to follow-up***

Scale	Mean Change
WHO-QOL-BREF (Quality of life)	
Overall Quality of Life *(1 item)*	+28%
Overall Health Satisfaction *(1 item)*	+29%
Physical Quality of Life	+12%
Psychological Quality of Life	+14%
Social Relationships Quality of Life	+20%
Environment Quality of Life	+20%
CANSAS (Welfare needs and support)	
Met Needs	+31%
Unmet Needs	-48%
Total Needs*	0%
EQ-5D-5L (Health-related quality of life)	
Health Status	+27%
Social Life Status	+56%
Work Readiness Status	+47%
K10 (Psychological distress)	-20%
UCLA 3-item Loneliness Scale	-16%
Pain Scale	-15%

Note. *CANSAS Total Needs assists in interpreting changes in met and unmet needs, but is not a wellbeing indicator in itself.

Participants described many improvements to their physical and mental health and their experiences of pain and/or distress. For many, it was having link workers that understood their experiences and challenges, who could help them in overcoming negative thought patterns (such as hopelessness or anger) and develop more beneficial coping strategies. Emotional support was identified by many participants as having the most significant impact on their improved quality of life:

Plant nursery worker, male

The most significant change for me has been my change in attitude and having confidence to engage in supports and services that can help me. Being heard and understood meant that my link worker connected me to the right services, and understanding that I do not need to use anger to express myself meant that I can engage and express myself better.

Florist and arborist, male

I was severely injured and spent 18 months in hospital and home. I felt very down and was sceptical when I first met with [my link worker]. After being involved in the Plus Social program, I was more motivated. It was nice to know that someone does care because [my link worker] went above and beyond. I felt more uplifted and had a direction for the future. I accepted my injury. I don't feel lost and know that things will get better, overall… Before Plus Social, I was just sitting at home alone or just going to health appointments. Now, I am more social, mobile and content. I do things now that I like to do, rather than only the things I have to do, such as medical appointments. Plus Social helped me understand that the more my isolation and depression increased, my pain and hopelessness also increased. The program is a little like natural pain relief for your mind and body. I have developed a positive structure to my week, so much so that I now look forward to what each new week brings… My quality of life is a lot better, positive, happier. I have better relationships with my kids. It has improved my life and the people around me. I am not negative anymore so my relationships have been working out.

Aged care worker, female

The most significant change I have experienced is knowing I can get through with whatever life offers. I am more confident and less anxious. I feel my future is a lot brighter and I am optimistic about my future. I have developed skills to overcome negative thoughts and I believe in myself. The program has shown me that I can get through tough times and I can create new and positive things in my life. I do not have to keep focussing on the negative and change my focus. Whenever I think of the program I have a smile on my face and the confidence to move forward.

Sales worker, female

My link worker and the art class teacher have a positiveness that make you want to be you again and make you want to become something. They give the groups a positive energy. My link worker motivates us. I now feel like 'if you try, you can achieve anything in life'… My link worker actually understands how it is to live with a work injury. My insurer tells me to look for a job and my case manager writes up action plans without having ever seen me. They don't really understand. I don't know how I'm supposed to do what is in the action plans and I'm losing out on jobs because of my injury. The understanding of the link worker and program participants is so important for injured workers… I have changed from feeling negative about my situation and changed from being isolated to being more sociable. I am becoming more positive, optimistic, and calmer. I am stronger and capable of managing my pain and mental health issues. I now feel that I can recover from my injury journey and move forward to a brighter future. I do not see myself as an injured worker who is stuck, depressed, heavily medicated, and lost. I see myself with an injury that limits my mobility but not my myself.

Entrepreneur, male

The most significant change I have experienced is that I am not only thinking about my injury anymore. I used to think of my injury all the time and got frustrated when I felt it was not getting any better. I realized that I could have so much to do instead of staying at home being frustrated.

Construction worker, male

I have become more understanding of what happened to me and my injury. I definitely still have my bad days. However, those days are not every single day like it used to be. I now have good days as well.

For some participants, quality of life and mood improvements occurred by taking steps with their link worker to acknowledge and address their difficulties, and then making the effort to engage in social activities and in life generally:

Showroom sales worker, male

I also joined the Plus Social art and relax and revive groups and met people with similar journeys. The Plus Social group facilitators are really supportive, professional and understand the impact of pain, I had a great time working together and connecting to people like me.

Dental practice manager, mother

The link worker suggested I try the Relax and Revive group. I have been enjoying participating in this class once a week for over six months… the Relax and Revive instructor was really nice, supportive and understood my situation... similarly, the link worker was caring, understood where I am coming from and went out of her way to inform me about things that she thought could be helpful… Plus Social have taught me to take a breath before my anger erupts, my family relationships are getting better and I am hopeful for a better future.

Health service utilisation

Prior to their workplace injury, 9% of participants reported an existing disability and 18% reported having had received psychological treatment. Forty-eight people reported having spent time in hospital (range of 0 to 60 days) in the previous three months at baseline (M = 7.84 days, SD = 17.04) whereas only 19 reported hospitalisations at follow-up (M = 6.60 days, SD = 9.52) which was a significant reduction (Z = -3.94, p <.001; see Figure 8). The frequency of contact with health services also reduced significantly (Z = -6.69, p <.001), with the proportion of participants indicating frequencies of weekly or more dropping from 56% at baseline (n = 172) to 29% at follow-up (n = 170; see Figure 9).

Health service utilisation was not directly addressed with participants during interviews. However, a number of participants implied or spoke of physical and mental health improvements that were either attributable to the Plus Social program, or more suitable health service use:

Showroom sales worker, male

When the link worker first met me, I was unemployed, suffering every day from excruciating physical pain, isolated, poor sleep, and financially stressed. I am connected to the right health services and have the right equipment [assistive technology for mobility] which has improved my life and health.

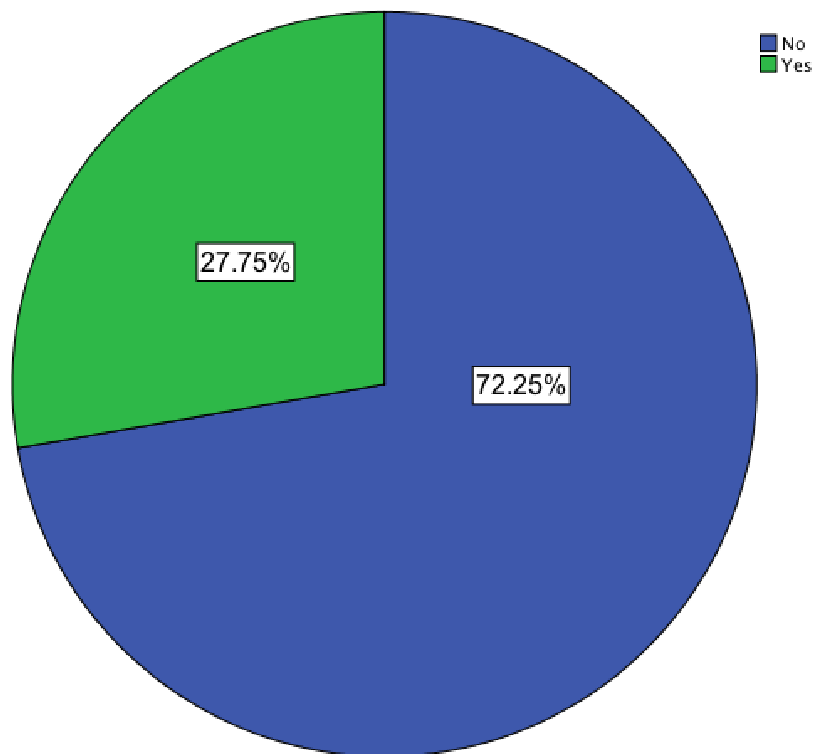
Aboriginal elder, chef, grandmother

Since my work injury, I have been left with limited mobility and this impacted my sociability. I am medically retired and can no longer work… My link worker listened to my needs and connected me to the right services to meet my disability, social and health needs. I realise that my anger was holding me back and limiting my communication in expressing my needs… Plus Social connected me to the right services that meet my needs. I am connected to Aboriginal support and health services that understand my life and needs. I now have a cleaner and I have support workers that visit me.

Sales worker, female

The change in my anxiety and depression, since being on the Plus Social program, I have not been to hospital and I have not had any anxiety attacks. I did feel sad when it came to the end of the program, as I had to say goodbye to my link worker. However, having an action plan with the variety of groups means I have the information to move forward. I have never had anyone to support me or anyone that has focused on my needs.

Baseline



Follow-up

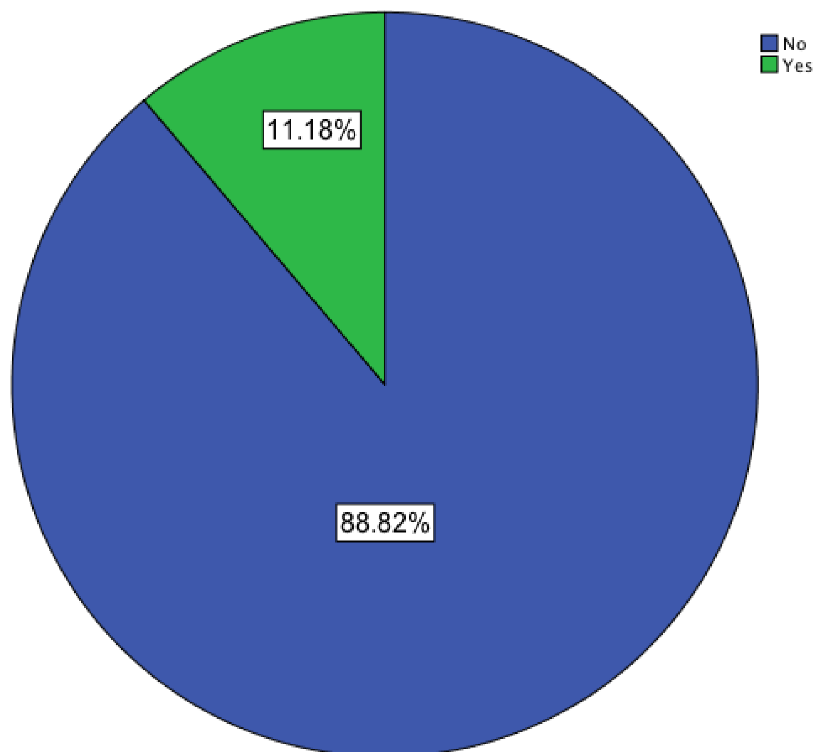
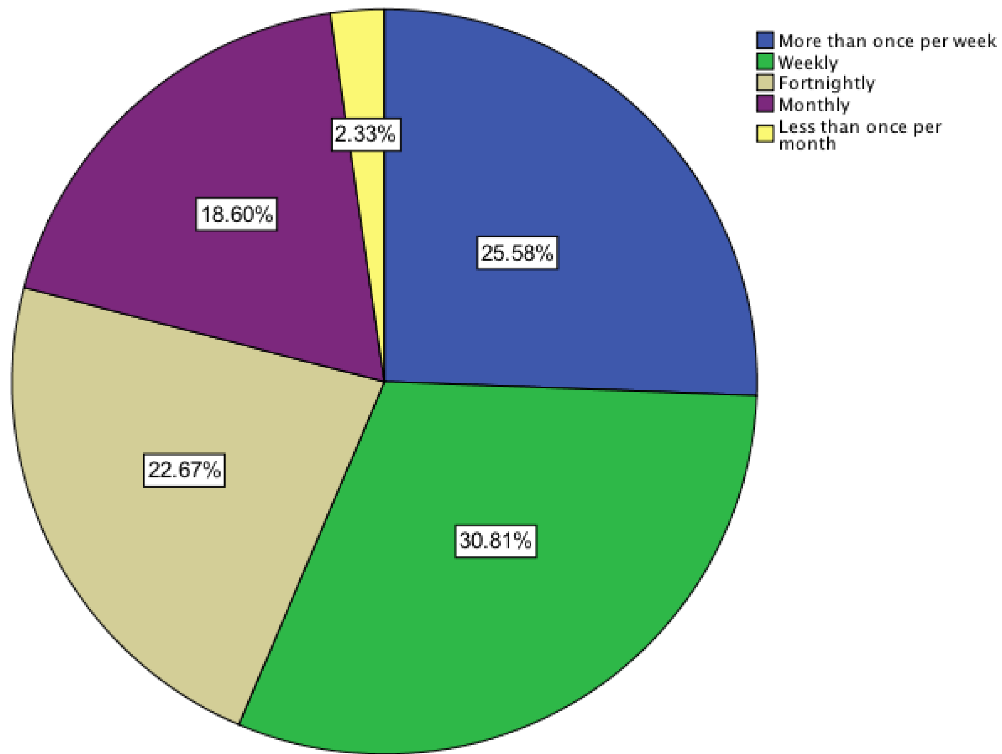


Figure 8. **Hospitalisation in previous three months**: Percentages at baseline and follow-up.

Baseline



Follow-up

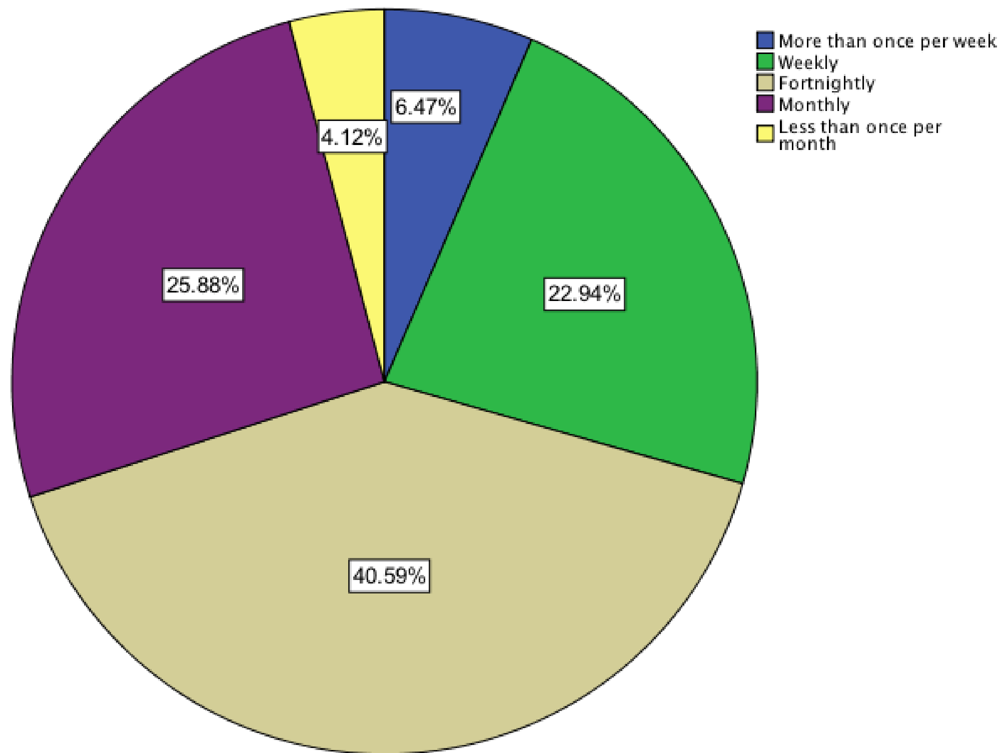


Figure 9. **Frequency of contact with health services**: Percentages at baseline and follow-up.

Program satisfaction

Overall high levels of program satisfaction were recorded by participants completing the Plus Social program satisfaction survey (*n* = 167; see Table 9).

Table 9. ***Overall program satisfaction and likelihood of recommendation***

Program satisfaction indicator	Gave highest rating (10)	Rated above midpoint (<5)	*M*	*SD*
Overall satisfaction with program	45%	92%	8.45	1.85
Likelihood of recommending the program to another injured worker	48%	93%	8.59	1.83

The most common reasons given for high overall satisfaction ratings were:

- quality and quantity of link worker support;
- provision of education in coping with pain and psychological distress;
- development of stronger self-awareness and confidence;
- ability to form new support networks;
- voluntary nature of participation;
- safe environment for social interaction; and
- access to beneficial and enjoyable activities, with effective group facilitators.

Reasons given for lower overall satisfaction scores were mostly linked to difficulties in participation, due to:

- health impairments (including pain and mental health issues);
- accessibility, including distance and transport issues;
- unwanted changes in link worker;
- a lack of time;
- a perceived lack of structure or planning of group activities;
- and a desire for more link worker contact.

All program elements and outcomes were generally rated highly (see Table 10), with comments indicating positive and negative aspects (see Table 11).

Table 10. ***Program satisfaction indicator ratings***

Program satisfaction indicator	% per response category					Median response
	Not at all	Slightly	Somewhat	Moderately	Extremely	
Helpfulness of link worker	0.6	–	10.2	26.5	62.7	Extremely
Met individual needs	2.4	5.4	19.8	32.9	39.5	Moderately
Meaningful activities	2.4	2.4	18.0	30.5	46.7	Moderately
Support to actively direct goals	2.4	4.2	14.5	31.3	47.6	Moderately
Improved general wellness	4.2	5.4	24.0	29.3	37.1	Moderately
Improved social connectedness	5.4	6.6	26.3	32.3	29.3	Moderately
More confidence in work/community	13.8	7.8	31.7	23.4	23.4	Somewhat

Table 11. ***Summary of program satisfaction comments***

Program satisfaction indicator	Comment summary	Illustrative quotes
Helpfulness of link worker	Link workers were generally highly regarded. Positive comments were made regarding the amount of effort, empathy, and care that link workers showed, their professionalism in responding and regularly communicating, their patience and attentive listening, and their expertise in providing advice, information, and linking to appropriate services. Two participants were unhappy in having an unexpected change of link worker, and one wanted more contact with their link worker.	“Friendly, easy to communicate with no barriers, felt comfortable.” “Connected me to the right services.” “Very patient and instructive.” “She has all the answers for my questions.” “She was constrained in what she could do for me.”
Met individual needs	Most indicated that they were happy with the services that they had been referred to, with some stating that the quality of support they were now receiving was much improved. Other benefits identified were improved confidence and mental stability.	“I have learn[ed] about myself and have a positive journey ahead.” “[Needed] better explanation of why and how activities are beneficial and what skills it works on.”

Table 11. ***Summary of program satisfaction comments*** [cont.]

Program satisfaction indicator	Comment summary	Illustrative quotes
Meaningful activities	Program participation gave participants the confidence and direction to access needed resources (such as National Disability Insurance Scheme, aged care, and women's health services) or participate in wellbeing activities within their local community (such as exercise classes). Limitations to participation included being unwell, in pain, or having a disability; as well as issues with transport and paid parking.	"Relaxation [group], "it was gold" able to reach deep sleep." "I wish I had more time to continue it." "Hearing loss held back with fully interacting with group." "Program had more areas of interest than my schedule allowed me time to attend."
Support to actively direct goals	Almost all comments were positive. A few limitations were identified by participants in their personal capacity to engage in in decision-making, goal setting, and action planning.	"[I now] have a 'can do attitude' which grew from being in a supported and empowering environment". "Not sure what my personal goal is, however, I felt moderately supported."
Improved general wellness	Positive comments noted improvements in social connections, quality of sleep, ability to cope with pain and/or stress, being open to trying new things, and access to needed resources such as financial and housing assistance. Areas described by participants as not improving were related to medical conditions and physical ability.	"Wellness of the mind and opportunity to exercise." "Yoga was very encouraging." "improves my health in psychological aspect[s]." "Did not improve my medical condition and physical ability."
Improved social connectedness	Most found the program supportive in improving social connectedness. For some, this was limited by mental health and pain issues, low attendance in groups or attendees being mainly of a different age or gender to participant, and costs in attending some external services.	"It helped me ignore or get past bad days and looked forward to connecting with others like me." "Increased my confidence to socialise with others." "More people should come to groups."
More confident in ability to return to work or engage in community	Comments indicated that there was higher confidence in engaging in the community than in returning to work. Limitations to work readiness included pain, health issues, legal processes and ensuing stress from these, and retirement plans.	"Yes, I am looking to start my own business." "I unfortunately had a setback and was not able to stay at my RTW and found the support of the group profoundly helpful."

In comparing the service received to the participant's expectations, 69% indicated that it was better or far better than they were expecting (see Figure 10).

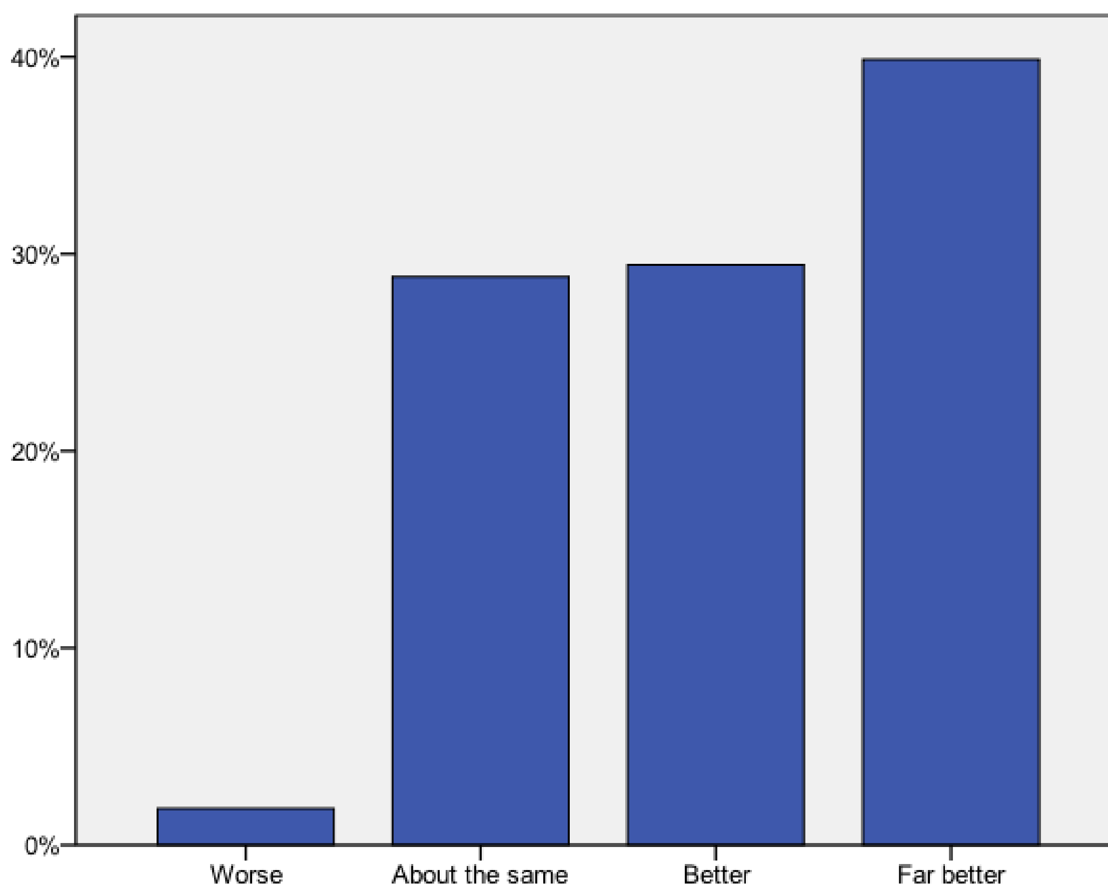


Figure 10. **How services received compared to participant expectations**

Participants indicated that past experiences with services had set low expectations or that they had little previous engagement with services and did not know what to expect. Many described the program as being more helpful than they expected, with information provision, a caring and flexible approach, and the level of support noted as strengths. Some noted that the activities were not to their liking, were difficult to get to, or under attended, and one participant stated that they had expected to obtain work through the program. Positive comments included “I was amazed at how many great programs were available”, “I found it more nurturing than expected”, “I have learned to trust people”, and “I felt really supported”.

Participants most frequently nominated the link worker support and encouragement, social and creative opportunities, and obtaining needed resources as the aspects they liked most about the program. Link workers were praised for their professionalism, knowledge, friendly/empathetic approach, and listening abilities. Aspects of the program that participants identified as beneficial included:

- the variety of groups available;
- the ability to do home visits;

- having a Chinese-speaking link worker;
- the range of support resources available (including electronic);
- meeting other injured workers who understand (reducing loneliness);
- learning new skills (e.g. relaxation and technology);
- having activities and encouragement to assist in getting out of the house; and
- getting back into a routine that prioritises self-care.

Of the 44 interviewed participants, 39 were appraised as having positive changes and substantial benefit from participating in the Plus Social program, three were appraised as having only minor benefit, and two as not receiving any benefit. Positive outcomes mainly referred to receiving needed services and empathetic care, which contributed to improvements in sense of self and/or quality of life:

Catering worker, female

I am more financially secure, confident as a parent and I have a better outlook.

Aged care worker, female

I feel I have been put back as a whole person, not just fixing my injury and returning to work. I am more confident as a person.

Florist and arborist, male

The program helped me get off my back. All my challenges were in my head and it was difficult to be positive. I was in a shell and it was hard going through this change in life when I had to stop what I was doing for 30 years. Through this program, I was able to find more hope.

40-year-old parent

I am more confident in my ability to adapt to my situation. I was so depressed when the injury happened and hopeless. But now I can see a future where I can work again. It has made me a stronger person and helped me to realise that there is hope after hardship. I have so much more hope that whatever happens, it's going to be okay, that I'll be able to manage.

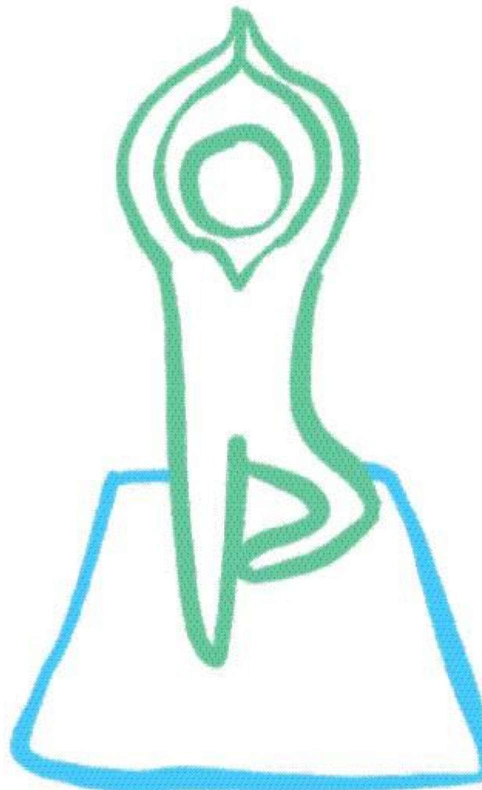
Some noted that the holistic, caring approach of the link worker had helped them to feel valued and heard, which contributed to their psychosocial improvements:

Social work student

My biggest thing was seeing how this program reminded me that I am not my injury: I am a whole person who happens to have an injury. And I felt that I was cared about as an individual rather than a number that needed to be processed.

Public sector communication worker, female

One of the biggest issues for me was that I felt completely and utterly alone. Having the program and support gave me reassurance that there is an organisation and a group of people who are solely focussed on reconnecting people. It restored my faith in the fact there are people and organisations out there that are genuinely there to help. The program was an amazing human-focused, altruistic, genuine program that I felt benefit from... [Compared to experiences with insurance provider] Plus Social felt more human. Having a person who comes to you and makes the time to meet you in your space and environment; who spends the time to get to know you as a person including your situation, history, current circumstances and issues that come up; someone on your side who has the skills, training and understanding of the system who knows me personally, my experience and situation, and has ability to give me the power to take steps, make decisions, or reach out to different organisations for assistance was very empowering. I didn't know that I didn't know my rights and I didn't know the things I was entitled to in terms of treatments and services. [My link worker] empowered me. Her support has been priceless. She gave me the opportunity to speak openly and freely in a holistic environment. I could be 100% open and completely trust her.



Suggestions for program improvement

Although program satisfaction was very high, a range of suggestions for improvement were made in the program satisfaction survey, including:

- make more groups available, both generally and in the local area;
- broader variety of activities, including outdoor activities, cooking, skill development in coping strategies, computer classes, and knitting;
- assistance in facilitating transport to the activities;
- financial support for activities that had a cost (e.g. exercise classes);
- extension of program and/or class time;
- more contact with link workers;
- more people participating in the program;
- organise ongoing peer support groups;
- more flexibility in activity schedule (e.g. weekend);
- groups for younger or single-gender cohorts;
- more structure in activities;
- child-minding facilities;
- more assistance in obtaining employment;
- more tailoring of program to individual needs (including health or physical restrictions); and
- engage program participants sooner after their work injury/cessation.

Further suggestions were to provide payment for group attendance, to have specific groups for cultural communities (e.g. Chinese, Muslim women), organise online peer support groups (e.g. Facebook), have less paperwork, and for the program to provide financial relief. One participant objected to being asked questions about their sexual relationships (in WHO-QOL-BREF and CANSAS tools). Another requested "more education on our rights as injured workers".

Participants who were interviewed also supported the idea of making the program available to injured workers sooner after their work injury/cessation:

Clerical worker, female

I didn't know there were things out there for injured workers. Recovery might have been easier if I'd done something like this earlier.

Sales worker, female

I would recommend they do the program in the earlier stages rather than the later stages of a work injury so they don't experience that negativity, don't become lazy, don't block people out of their lives and so they feel more motivated. I would tell them the program changes your life. It makes you more positive and you don't think about your injury so much. You're actually doing something for yourself in a positive way. It shows you that you can do different things in life and can achieve things that you've never done before.

Summary

The Plus Social program was beneficial to, and well-received by, participants. The social prescribing intervention was found to have been associated with significant improvements in:

- participant work readiness and economic participation: self-reported confidence in returning to work in the future, self and GP-reported current ability to work in paid employment, and hours on Certificate of Capacity;
- social inclusion/support: frequency of social activities, number of people who could be counted on, and satisfaction with social support;
- all measures of biopsychosocial wellbeing, indicating reduced participant distress, loneliness, and increased health perception and quality of life; and
- in the number of participant hospitalisations and frequency of contact with health services.

Quantitative evaluation results were supported by qualitative participant information, with numerous personal accounts attributing greater biopsychosocial functioning to program participation including greater self-awareness, social support, and ability to cope with the effects of their workplace injury and employment loss.

Program satisfaction ratings indicated that the majority of participants found the program to be effective in meeting their needs, encouraging meaningful activity, and improving general wellness and social connectedness.

The majority of participants also reported that their link worker was helpful, the service was better than they had expected, and their confidence in returning to work had increased.

Participants reported that the most valued aspects of the program were:

- the link workers' high quality and effective support;
- participation in social and therapeutic activities that helped to reduce loneliness and increase positivity; and
- development of stronger understanding and skills in managing pain, distress, and psychosocial difficulties.

Recruitment of suitably qualified and competent link workers and selection of therapeutic activities and activity leaders appear to be key to a successful program.

Suggestions for improvement mostly focused on

- extending the program scope, including activities, accessibility, frequency of contact, and length; and
- facilitating access to the program soon after workplace injury.

Participation and attrition rates were impacted by

- overall health and wellbeing;
- psychosocial needs;
- mobility restrictions;
- availability and suitability of groups;
- transport and activity costs; and
- expectations of outcomes.

The program evaluation demonstrates that the Plus Social program successfully promoted social and economic participation, increased psychological wellbeing, and decreased health service utilisation for individuals with a work-related injury and psychosocial difficulties, living in the community.

Discussion

The structure and delivery of the Plus Social program was consistent with other social prescribing programs discussed in the literature, where program outcomes are associated with a range of intra- and inter-personal psychosocial functioning improvements.

To date, many social prescribing program evaluations have originated in the United Kingdom, and involved general health services in either referring or providing link workers to people with long term physical or mental health issues. The aim of most social prescribing programs is to decrease the demand on health services through health promotion and self-management activities.

The Plus Social program aims to reduce health service utilisation and cost, but is also focused on the social support needs of injured workers experiencing psychosocial difficulties, with the aim of increasing rehabilitation treatment effectiveness and reducing time off work.

Unique to the Plus Social program is evaluation data exploring participant experiences of losing the capacity to work, and the associated grief and loss of dignity in becoming an unemployed, injured worker. In the existing literature, only one social prescribing program examined return to work outcomes: Time bank targets homeless people and uses a social enterprise model to build skills and connections, but quantitative data was not available to enable comparison of outcomes (Bretherton & Pleace, 2014).

Whilst Plus Social is focused on improving the wellbeing and positivity of injured workers, expediting participant ability to return to work is also dependent on workplace characteristics including the employer’s ability to adapt the tasks and environment to the needs of the injured worker, as well as protect against any further harm. Research and interventions addressing workplace characteristics that assist injured workers in returning to work (in former or new workplaces) may be a valuable area of program extension and development.

The Plus Social program incorporated features consistent with intervention efficacy in the reviewed work-related injury and social prescribing literature, including a flexible and person-centred delivery model, and the encouragement of optimism, resilience, and connection. Similar to the findings of the Plus Social program evaluation, general benefits of social prescribing across the literature include self-reported perceptions of wellbeing and of service value.

Evaluation strengths and limitations

The Plus Social program evaluation has a number of features that address some of the shortcomings of other studies, namely in having pre-/post-intervention quantitative data from a number of sources (participants and icare actuaries), a large sample size (enabling meaningful statistical analysis of changes), and in using validated tools for subjective psychosocial assessment. Limitations that this evaluation shares with other studies include not having a control group for comparison, and confounders such as treatment-related illness progression and recovery. Follow-up measures to analyse maintenance of program benefits over time were provided at twelve weeks' post-intervention for work status and Certificate of Capacity hours; for stronger evidence of effectiveness future analyses could incorporate further follow-up measures that cover other program outcomes.

Data was not provided on the nature or severity of the participants' workplace injury and any ensuing disability: this information would have enabled analysis of differences in program efficacy and suitability by injury characteristics, including level of health service need. Comparing participant activity levels and frequency/nature of link worker engagement would produce greater evidence of participant suitability and program efficacy.

The link worker conducted participant interviews which may introduce social desirability bias (as the participant may feel they should only say good things about the program to their worker). The timeframe between baseline and follow-up questionnaire data collection varied considerably between participants, and time- and condition-related health improvements or deterioration may need to be considered or controlled for in future studies.

Whilst a more robust study design would provide high level evidence of intervention attributes, the positivity of participant experience and the strong quantitative data results, including capacity for work information provided by GPs to insurance agents, provide convincing evidence of program effectiveness. The inclusion of link workers, activity leaders, and employers would strengthen future evaluation research, and further post-program evaluation would provide more evidence of program benefits sustained over time.

Conclusion

The Plus Social program is effective in increasing social participation, supporting progress towards greater economic participation, reducing health utilisation, and in improving wellbeing for people living in the community with work-related injuries and psychosocial difficulties.

References

Bailey, T. S., Dollard, M. F., McLinton, S. S., Richards, P. A. (2015). Psychosocial safety climate, psychosocial and physical factors in the aetiology of musculoskeletal disorder symptoms and workplace injury compensation claims. *Work Stress, 29*(2), 190–211. doi:10.1080/02678373.2015.1031855

Bickerdike, L., Booth, A., Wilson, P. M., Farley, K., & Wright, K. (2017). Social prescribing: Less rhetoric and more reality. A systematic review of the evidence. *BMJ Open,* 7:e013384. doi:10.1136/bmjopen-2016-013384

Bragg, R., Wood, C., & Barton, J. (2013). *Ecominds effects on mental wellbeing: An evaluation for Mind.* Stratford/London: Mind. Retrieved from http://www.mind.org.uk/media/354166/Ecominds-effects-on- mental-wellbeing-evaluation-report.pdf

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in Psychology, 3*(2), 77–101. doi:10.1191/1478088706qp063oa

Bretherton, J., & Pleace, N. (2014). *An evaluation of the Broadway Skills Exchange Time Bank*. York, UK: Centre for Housing Policy, University of York. Retrieved from http://eprints.whiterose.ac.uk/80167/1/Broadway_Time_Bank_Final_Report_1_May_2014.pdf

Bunzli, S., Singh, N., Mazza, D., Collie, A., Kosny, A., Ruseckaite, R., & Brijnath, B. (2017). Fear of (re)injury and return to work following compensable injury: Qualitative insights from key stakeholders in Victoria, Australia. *BMC Public Health, 17*(313). doi:10.1186/s12889-017-4226-7

Chatterjee, H. J., Camic, P. M., Lockyer, B., & Thomson, L. J. (2018). Non-clinical community interventions: A systematised review of social prescribing schemes. *Arts & Health, 10*(2), 97–123. doi:10.1080/17533015.2017.1334002

Cole D. C., Mondloch M. V., & Hogg-Johnson, S. (2002). Listening to injured workers: How recovery expectations predict outcomes—a prospective study. *Canadian Medical Association Journal, 166*(6), 749–754. Retrieved from https://www-ncbi-nlm-nih-gov.ezproxy.scu.edu.au/pmc/articles/PMC99453/pdf/20020319s00019p749.pdf

Crone, D. M., Sumner, R. C., Baker, C. M., Loughren, E. A., Hughes, S., & James, D. V. (2018). 'Artlift' arts-on-referral intervention in UK primary care: Updated findings from an ongoing observational study. *European Journal of Public Health, 28*(3), 404–409. doi: 10.1093/eurpub/cky021.

Dayson, C., & Bashir, N. (2014). *The social and economic impact of the Rotherham Social Prescribing Pilot: Main evaluation report.* Rotherham/Sheffield: Voluntary Action Rotherham and Centre for Regional Economic and Social Research. Retrieved from https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/social-economic-impact-rotherham.pdf

Dayson, C., Bashir, N., Bennet, E., & Sanderson, E. (2016). *The Rotherham social prescribing service for people with long-term health conditions: Summary report.* Rotherham/Sheffield: Voluntary Action Rotherham and Centre for Regional Economic and Social Research. Retrieved from http://www4.shu.ac.uk/ research/cresr/sites/shu.ac.uk/ les/rotherham-social-prescribing-annual eval-report-2016_7.pdf

Dunstan, D. A., Covic, T., & Tyson, G. A. (2013). What leads to the expectation to return to work? Insights from a Theory of Planned Behavior (TPB) model of future work outcomes. *Work, 46*(1), 25–37. doi:37.10.3233/WOR-2012-1481

Duggan, M., Chislett, W. K., & Calder, R. (2017). *The state of self-care in Australia*. Australian Health Policy Collaboration Commissioned Paper no. 02/2017. Melbourne:

AHPC. Retrieved from https://www.vu.edu.au/sites/default/files/the-state-of-self-care-in-australia.pdf

Fenner, P. (2013, April 4). Returning to work after an injury. *Australian Family Physician*, 42(4), 182–185. Retrieved from https://search-informit-com-au.ezproxy.scu.edu.au/documentSummary;dn=253224635413814;res=IELHEA

Godges, J. J., Anger, M. A., Zimmerman, G., & Delitto, A. (2008). Effects of education on return-to-work status for people with fear-avoidance beliefs and acute low back pain. *Physical Therapy, 88*(2), 231–239. Retrieved from http://ezproxy.scu.edu.au/login?url=https://search-proquest-com.ezproxy.scu.edu.au/docview/223111522?accountid=16926

Heymans, M. W., De Vet, H. C. W., Knol, D. L., Bongers, P. M., Koes, B. W., & Van Mechelen, W. (2006). Workers' beliefs and expectations affect return to work over 12 months. *Journal of Occupational Rehabilitation, 16*(4), 685–695. doi:10.1007/s10926-006-9058-8

Innovation Unit (2016, May). *Wigan Community Link Worker service evaluation*. Retrieved from https://www.innovationunit.org/ wp-content/uploads/2017/05/Wigan-CLW-service-evaluation.pdf

Hughes, M. E., Waite, L. J., Hawkley, L. C., & Cacioppo, J. T. (2004). A short scale for measuring loneliness in large surveys: Results from two population-based studies. *Research on Aging*, *26*(6), 655–672. doi:10.1177/0164027504268574

Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L. . . & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, *32*(6), 959–976. doi:10.1017/S0033291702006074

Kilgarriff-Foster, A., & O'Cathain, A. (2015). Exploring the components and impact of social prescribing. *Journal of Public Mental Health, 14*(3) 127–134. Retrieved from https://eprints.whiterose.ac.uk/96464/3/A%2520review%2520of%25 20social%2520prescribing%2520Foster%2520A.pdf

Kimberlee, R., Ward, R., Jones, M., & Powell, J. (2014). *Measuring the economic impact of Wellspring Health Living Centre's Social Prescribing Wellbeing Programme for low level mental health issues encountered by GP services.* Bristol: Wellspring. Retrieved from http://www.wellspringhlc.org.uk/reports/POV_Final_Report_March_2014.pdf

Laing, K., Steer, M., Lawson, S., Penn, L., O'Brien, N., Wildman, J., & Moffatt, S. (2017). *How Ways to Wellness social prescribing is improving the health and wellbeing of people with long term conditions: Evaluation report to the Cabinet Office.* University of Newcastle, UK: Institute of Health & Society. Retrieved from https://golab.bsg.ox.ac.uk/documents/105/Laing_et_al._2017a.pdf

Langford, K., Baeck, P., & Hampson, M. (2013). *More than medicine: New services for people powered health.* London: Nesta Innovation Unit. Retrieved from http://www.nesta.org.uk/sites/default/les/more_than_medicine.pdf

Legg, M. J. (2011). What is psychosocial care and how can nurses better provide it to adult oncology patients. *Australian Journal of Advanced Nursing, 28*(3), 61–67. Retrieved from http://www.ajan.com.au/vol28/28-3_legg.pdf

Margrove, K. L., Heydinrych, K., & Secker, J. (2013). Waiting list-controlled evaluation of a participatory arts course for people experiencing mental health problems. *Perspectives in Public Health, 133*(1), 28–35. doi:10.1177/1757913912461587

McLinton, S., McLinton, S. S., & van der Linden, M. (2018). Psychosocial factors impacting workplace injury rehabilitation: Evaluation of a concise screening tool. *Journal of Occupational Rehabilitation*, *28*(1), 121–129. doi:10.1007/s10926-017-9701-6

Moffatt, S., Steer, M., Lawson, S., Penn, L., & O'Brien, N. (2017). Link Worker social prescribing to improve health and well-being for people with long-term conditions:

Qualitative study of service user perceptions. *British Medical Journal Open, 7*:e015203. Retrieved from http://bmjopen.bmj.com/content/bmjopen/7/7/e015203.full.pdf

Mossabir, R., Morris, R., Kennedy, A., Blickern, C., & Rogers, A. (2015). A scoping review to understand the effectiveness of linking schemes from healthcare providers to community resources to improve the health and well-being of people with long-term conditions. *Health & Social Care in the Community 23*(5), 467–484. doi:10.1111/hsc.12176

Nelson, B. P., Cohen, D., Lander, O., Crawford, N., Viccellio, A. W., & Singer, A. J. (2004). Mandated pain scales improve frequency of ED analgesic administration. *American Journal of Emergency Medicine, 22*(7), 582–585. doi:10.1016/j.ajem.2004.09.003

Primary & Community Care Services. (2015). *Plus Social for injured workers.* Retrieved from https://www.pccs.org.au:8443/programs-services/plus-social-for-injured-workers

Primary & Community Care Services. (2018, July). *Plus Social for injured workers: A social prescribing program.* Retrieved from https://www.pccs.org.au:8443/custom/files/docs/plus-social-program-information-and-resources-booklet.pdf

Safe Work Australia (2018). *Australian Workers' Compensation Statistics 2016-17*. Retrieved from https://www.safeworkaustralia.gov.au/system/files/documents/1904/australian-workers-compensation-statistics-2016-17_1.pdf

Slade, M., Thornicroft, G., Loftus, S., Phelan, M., & Wykes, T. (1999). *CAN: Camberwell Assessment of Need.* London: Gaskell.

Sullivan, M., Feuerstein, M., Gatchel, R., Linton, S., & Pransky, G. (2005). Integrating psychosocial and behavioral interventions to achieve optimal rehabilitation outcomes. *Journal of Occupational Rehabilitation*, *15*(4), 475–489. doi:10.1007/s10926-005-8029-9

Thomson, L. J., Camic, P. M., & Chatterjee, H. J. (2015). *Social prescribing: A review of community referral schemes*. London: University College London. Retrieved from http://create.canterbury.ac.uk/15655/1/Social_Prescribing_Review_2015.pdf

Van Reenen, M., & Janssen, B. (2015). *EQ-5D-5L User Guide*. Retrieved from https://euroqol.org/wp-content/uploads/2016/09/EQ-5D-5L_UserGuide_2015.pdf

World Health Organisation. (1996). *WHOQOL-BREF: Introduction, administration, scoring and generic version of the Assessment.* Retrieved from https://www.who.int/mental_health/media/en/76.pdf?ua=1

Appendices

A Information Collection Consent Form

B Plus Social Psychometric Assessment Tools and Questionnaire

C Plus Social Program Satisfaction Survey

D PCCS Qualitative Data Collection Guide