



Guided Self-Help for People with Chronic Pain: Integrated Care in a Public Tertiary Pain Clinic—A Pilot Study

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ABSTRACT

Introduction: Globally, chronic pain affects more than 30% of people worldwide and is the leading cause of disability and health care utilisation. Access to timely, person-centred, cost-effective programs is unattainable for most. People living in regional, rural and remote areas are disproportionately affected due to scarcity of services and qualified, multidisciplinary health and medical professionals. Caring and supporting people with chronic pain involves a range of interventions that incorporate a multifaceted bio-psychosocial approach. Tertiary and primary chronic pain services are optimally placed to deliver integrated

models of care. This pilot study explored the effectiveness of an integrated Guided Self-Help (GSH) program within a multidisciplinary tertiary pain unit in a public hospital in Australia.

Methods: A service delivery evaluation was undertaken and a pilot study implemented to determine feasibility and useability of an integrated GSH program for people with chronic pain. A single-group pre–post evaluation was provided to a convenience sample of 42 people referred to the Flinders Medical Centre Pain Management Unit (FMC PMU). Delivered via telehealth or in person by postgraduate students, a manualised GSH workbook was utilised to support adherence and fidelity. Content included goal setting, pain conceptualisation, psychoeducation, activity scheduling, pacing and cognitive strategies. The purpose of the integrated GSH pilot program was to support participants in gaining increased pain literacy, knowledge of effective physical and psychological strategies and enhance self-management of their chronic pain. Levels of psychological distress (PHQ-9 and GAD-7), pain catastrophising (PCS), and pain severity/interference (BPI) were assessed at the beginning and end of support. Integrating the program within a multidisciplinary pain unit intended to facilitate and provide participants with an understanding of their pain through a psychosocial lens, build self-efficacy, and recognise the benefits of other non-medical supports to manage their chronic pain in the future. Outcome data were routinely collected as part of FMC PMU usual practice for clinical and

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quality assurance purposes, then analysed retrospectively. Thus, under the National Health and Medical Research Council (NHMRC) Ethical Considerations in Quality Assurance and Evaluation Activities guidelines (NHMRC, 2014), and verified by the Southern Adelaide Local Health Network (SALHN) Research Committee (our institutional review board) via email (dated 10/09/2020), ethical review and approval were not required for this project as it constituted a quality improvement activity – specifically, a service delivery evaluation. This project is registered with the SALHN Quality Library (for quality assurance activities that are exempt from ethical approval) (Quality Register ID 3390).

Results: Participants showed statistically significant improvements on the PHQ-9 [i.e., mean drop of 2.85 ($t = 3.16$)], GAD [mean drop of 2.52 ($t = 2.71$)], and PCS [mean drop of 7.77 ($t = 3.47$)] with small-to-moderate effect sizes. BPI scores did not change. Results were similar when stratifying analyses by those who completed 2–5 versus 6–12 sessions.

Conclusion: Integrating a GSH program for people with chronic pain into a multidisciplinary tertiary pain clinic is an efficacious and scalable way to increase access to effective strategies that can increase self-efficacy and self-management. Novel, scalable, and effective solutions are needed to improve quality of life and address disparities for people with chronic pain. The psychological shifts and benefits observed support efficacy towards self-management strategies that can increase autonomy and quality of life.

PLAIN LANGUAGE SUMMARY

Globally, chronic pain affects more than 30% of people worldwide and is the leading cause of disability and healthcare use. Access to available, effective, and individualised programs is unattainable. People living in regional, rural and remote areas are disproportionately affected due to scarcity of services and qualified, multidisciplinary health and medical professionals. Scalable solutions are needed to increase access to effective, evidence-based care options and reduce inequities for people with chronic pain.

Caring and supporting people with chronic pain requires effective, multifaceted bio-psychosocial approaches that are tailored to individual needs. Using ‘coaches’, a manualised Guided Self-Help (GSH) program was integrated within a multidisciplinary tertiary pain unit in a public hospital in Australia, which showed promising solutions to increasing access and availability of timely, cost-effective supports that can be delivered via mobile devices. This pilot study explored the effectiveness of offering a GSH program to people with chronic pain integrated into a hospital-based, public, pain management unit to see if it increased people’s understanding of their pain and strategies that would support self-management. Coaches working in multidisciplinary teams can support people with information and strategies for their chronic pain, which can free up higher-trained health and medical professionals to care for people with greater complexity and ensure that timely access to support is received by matching need to level and type of support.

Keywords: Chronic pain; Guided self-help; Integrated care; Cognitive behavioural therapy; Telehealth; Behavioural health coach; Knowledge translation; Self-management

Key Summary Points

Integrated, diversified healthcare delivered via telehealth can increase access for millions of people who have chronic pain.

Guided-self-help supports fidelity and maintains scope of practice for newly trained and emerging health professionals to deliver high-dose narrow-bandwidth interventions with people for chronic pain.

Increasing access to supports that combine physical and mental health strategies is needed.

Novel and scalable solutions are needed to increase access to effective, evidence-based care options and reduce inequities for people with chronic pain.

INTRODUCTION

Chronic pain is prevalent, life restricting and costly. Approximately 1 in 5 Australians aged 45 and over have chronic pain. The annual expense for the direct and indirect treatment costs are reported to be more than AUD \$139 billion [1]. People with chronic pain often experience significant negative impacts to their physical and emotional wellbeing, sleep quality, employment and overall psychosocial functioning [2, 3]. Several factors impede timely and effective treatment access, which has significant consequences in terms of social disadvantage, poverty, engagement with training and work and service utilisation [1, 4]. In Australia, 66% of people with chronic pain live in regional areas where access to specialist pain services and qualified health professionals is scarce, and 45% experience comorbidity or multi-morbidity [5].

Most Australian public tertiary pain units employ multidisciplinary allied health and medical professionals to address the physical and psychological complexities associated with chronic pain. These health professionals offer multifaceted, evidence-based approaches, including cognitive behavioural therapy (CBT), to enhance self-efficacy, increase literacy around the mind-body connection (e.g., psychoeducation about the pain cycle, pain catastrophising and fear avoidance), and utilise strategies like pacing, graded exposure, behavioural experiments and activity scheduling [6]. Psychological interventions underpinned by CBT are empirically supported in the context of pain management to reduce the multifaceted impacts and complexities associated with chronic pain and improve people's quality of life [7]. With established and efficacious treatments and services, issues arise in relation to access and timely response of freely available, public pain management units to meet growing demand and enable access to a range of effective support options. The current misalignment of supply and demand results in long wait lists, and appointments only accessible across extended timeframes [8, 9]. Consequently, this prolongs suffering and compounds the disadvantages and distress that delayed access to

evidence-based care derives for the millions of people and their families affected by chronic pain. Improving access to pragmatic, effective and integrated models of care require new ways of delivering clinical services and new workforce capabilities that task shift specific responsibilities and roles away from qualified health and medical professionals toward a specifically trained health workforce [10, 11].

Integrating stepped care models that yield a diverse, multi-skilled workforce that shifts, redistributes and extends the provision of evidence-based psychosocial treatments to non-specialist health workers such as community health workers, peer or lived experience persons, and other frontline health workers as opposed to psychiatrists and psychologists has emerged as a highly promising approach to increase access to treatments [12, 13]. Despite the growing body of evidence and the demonstrated outcomes of implementing scalable GSH programs for people with various non-communicable and chronic health conditions, both within and outside of Australia, there is inconsistent implementation and scarcity of GSH provisions in tertiary chronic pain services [14–18]. It is proposed that the implementation of a GSH program within a tertiary chronic pain service addresses existing gaps through the provision of a high-dose, narrow-bandwidth treatment provision that matches a person's readiness and need to treatment type, dose and intensity. Utilising a newly trained and supervised workforce to deliver guided psychosocial, skills-based, health behaviour change interventions has numerous benefits. Firstly, it ensures that people requiring a comprehensive multidisciplinary level of care receive it in a more timely and responsive way. Secondly, it shifts the focus to active mechanisms of behaviour change through a personalised 'coaching' program that serves to reduce stigma and de-medicalise effective ways to manage chronic pain. It supports an economically viable and timely solution to existing service shortfalls that can be scaled and sustained. Finally, it facilitates a responsive, agile and tailored model of care and supports through integrated pathways to increase or decrease multi-level support provisions [19].

In 2019, the Flinders Medical Centre Pain Management Unit (FMC PMU) in South Australia and the Discipline of Behavioural Health at Flinders University developed, implemented and evaluated a GSH program as part of a redesigning care initiative. The GSH program was delivered by trained postgraduate students undertaking Masters-level training in CBT (referred to as ‘coaches’ herein) under the supervision of mental health clinicians. Within this partnership, an evidence-based coach training and a GSH workbook was developed [20]. The aim of the GSH program was to increase access to a range of high-dose, narrow-bandwidth, psychological strategies that could increase pain-related health literacy and provide practical skills that could improve the individual’s self-efficacy and self-management capacity.

The Current Study

With rapidly increasing access to and use of digital technologies and non-traditional healthcare, new opportunities to support non-specialist health workers and increase capacity, capability and reach of a reconfigured health workforce exist. The aim of this pilot study was to examine the effectiveness and feasibility of a GSH program for people with chronic pain referred to the FMC PMU, to improve both pain-related and psychological self-reported outcomes.

METHODS

Participants

A convenience sample of individuals attending the FMC PMU was used. Data were obtained from participants if they (a) attended the FMC PMU within an 18-month period across 2018–2019, (b) participated in the GSH program, and (c) had completed at least two GSH sessions (i.e., a first and a last). People were referred to the program by an FMC PMU consultant/clinician if they were considered cognitively able to engage with the program and were not suicidal. While 51 people commenced

therapy during this period, 42 completed at least two sessions. Outcome data were collected as part of routine measurement for clinical quality and efficacy, then analysed retrospectively.

The GSH Program

The GSH program was delivered by three postgraduate students (i.e., ‘coaches’) undertaking placement under the supervision of university clinical supervisors and experienced allied health and medical staff in the FMC PMU. The program involved 6–8 weekly sessions face-to-face or via telephone, ideally over 8–10 weeks (to allow for missed appointments). The first session (recommended as a face-to-face appointment to build rapport and for assessment purposes) was approximately 45 min long, with subsequent sessions being approximately 30 min in duration. A workbook for chronic pain management – *Rethinking Pain* [20] – was developed and used to scaffold the programs’ content, support fidelity and adherence to the selected high-dose narrow-bandwidth strategies shown to be effective for chronic pain self-management. In the first and second sessions, planning and personal goals were collaboratively identified between the coach and participant. In subsequent sessions, psychoeducation was offered that aligned with the participants’ existing understanding of their pain support needs and enhanced motivation to engage in new strategies. Participants were introduced to a multidimensional, personalised pain conceptualisation, learnt about their medication, the role of avoidance and catastrophising in the maintenance of chronic pain, the importance of pacing behavioural interventions and relapse prevention. The GSH workbook contained strategies including activity scheduling, activity pacing, relaxation and thought restructuring. Specific session content and pace was tailored in collaboration with the participants. The coaches discussed all clinical matters with their supervisors during 1-h weekly supervision sessions that involved case discussions, clinical case note reviews and

listening to audio recordings for auditing and fidelity checks.

Measures

Demographic Variables

Coaches recorded participant demographic information at session one (e.g., age, sex, marital status, education and pain duration) and therapy fidelity measures throughout the program (e.g., sessions attended, withdrawal and drop-out).

Outcome Variables

Several pain-related and psychological scales were used to determine participants' clinical progress/deterioration and measure pre-post program outcomes. These measures were administered in the first session as a part of the initial assessment, and at the final session over the telephone.

Patient Health Questionnaire-9 (PHQ-9) The Patient Health Questionnaire (PHQ-9) is a nine-item screen which measures symptoms related to depression [21]. Scored on a 4-point Likert scale, an individual is asked to indicate how often they have been affected by the symptoms listed in the last 2 weeks. Response options range from 0 'not at all' to 3 'nearly every day'. Scores are summed and used to categorise individuals as having no symptoms (0–4), mild (5–9), moderate (10–14), moderately severe (15–19) or severe depression (20–27). Score changes of five or more points constitute clinically significant change [21]. The PHQ-9 has shown to be a reliable and validated measure in clinical samples, with Cronbach's alpha ranging from 0.84 to 0.89 [21].

Generalized Anxiety Disorder Seven-Item Scale (GAD-7) The Generalized Anxiety Disorder Scale-7 (GAD-7) is a seven-item screen which measures symptoms associated with anxiety [22]. An individual is asked to indicate how often they have been bothered by the symptoms listed over the past 2 weeks. Response options range from 0 'not at all sure' to 3 'nearly every day'. Scores are summed and used to

identify individuals with minimal (0–4), mild (5–9), moderate (10–14) or severe anxiety (15–21) [22]. The GAD-7 is a widely used, free, and well-validated tool, with a Cronbach's alpha of 0.92.

Brief Pain Inventory (BPI) The Brief Pain Inventory (BPI) is a widely used measure for chronic pain [23]. The 11-item measure assesses both pain severity (4 items) and the degree of pain interference in seven life domains (7 items). Individuals rate the severity of their pain (at its least and worst in the past week, on average, and right now) on a 0 (no pain) to 10 (pain as bad as you can imagine) scale. Individuals then rate the degree of interference pain has had in the past week on their general activity, mood, walking ability, normal work, relations with others, sleep and enjoyment of life, on a 0 (does not interfere) to 10 (completely interferes) scale. The scores for the severity and interference scales are calculated by averaging their corresponding items' scores, with higher scores indicating greater pain severity and interference, respectively. Severity scores can also be classified as mild (0–4), moderate (5–6) or severe (7–10) [23]. The BPI has demonstrated both reliability and validity cross-culturally and in differing pain conditions, and is used worldwide for clinical pain assessment and epidemiological and effectiveness research [23–25].

Pain Catastrophising Scale (PCS) The Pain Catastrophising Scale (PCS) [26] is a 13-item measure widely used to assess pain-related catastrophic thinking that is commonly experienced by people with chronic pain. Individuals are asked to indicate the degree to which they have 13 thoughts and feelings when they are experiencing pain, on a 5-point Likert scale (0 'not at all' to 4 'all the time'). Scores are summed to generate a total score, with higher scores indicating greater pain catastrophising, and scores above 19 and 30 indicating high and severe catastrophising levels, respectively. A change in score of six or more points, combined with movement to a different severity category, indicates clinically significant change. The PCS has shown good levels of test-retest and

internal consistency reliability as well as convergent, discriminant criterion and factorial validity [27, 28].

Analysis

All analyses were conducted in SPSS version 24 [29] by AS, a researcher with no affiliation with the intervention. A series of paired-samples *t*-tests were conducted to determine any changes in scores on outcome measures from the first to the last session (regardless of how many sessions participants' therapy entailed). Analyses were then stratified by the number of therapy sessions participants completed to determine whether number of sessions made a difference to pre- to post-program change. Participant outcomes for those who completed the recommended minimum number of six sessions for 'complete treatment' were compared with those who did not meet this minimum number of sessions. A series of McNemar's tests (repeated measures chi-squared tests) were then conducted to examine differences in the proportion of participants classified above cutoffs on these same outcome variables, at the beginning of the program compared with the end of therapy. For all inferential analyses, we used a conventional alpha level of $p < 0.05$ to indicate statistical significance of findings. However, given this is a pilot study with a small sample size, we placed greater value on general patterns and effect sizes [30, 31]. Relatedly, we did not adjust for the number of tests conducted.

RESULTS

Preliminary Analyses

As scores on the outcome variables were slightly skewed, we conducted both parametric and non-parametric testing (using the related-samples Wilcoxon signed-rank test). However, as the results from non-parametric testing did not appreciably differ from parametric testing approaches, only the parametric results are reported here for ease of interpretation.

Table 1 presents demographic characteristics. The sample ($N = 42$) was mostly composed of females (64.3%) with a mean age of 51.21 years (SD 8.88; range 29–67 years). These age and gender characteristics are representative of the clients seen by the FMC PMU more broadly, and of patients attending all Australian pain units contributing to the national electronic persistent pain outcomes collaboration (ePPOC) [32]. Participants attended an average of 5.83 sessions, over an average of 10.52 weeks. Thus, the average dosage (i.e., sessions per week, ideally sitting around one) was 0.63. Predictably, given the clinical nature of the sample, the majority of participants were in the moderate-to-severe ranges on the pain-related and psychological measures used at baseline.

Main Analyses – Continuous Outcomes

Table 2 presents descriptive statistics and results examining change on the five outcome variables from pre- to post-therapy. From the start to the end of therapy, statistically significant improvements were noted on the PHQ-9 [pre $M = 14.21$ (SD 7.11), post $M = 11.36$ (7.74), the GAD-7 pre $M = 11.38$ (SD 6.67), post $M = 9.31$ (SD 7.03), and the PCS, pre $M = 29.59$ (SD 12.67), post $M = 21.82$ (SD 16.05)], with small-to-moderate effect sizes. However, both severity and interference scores on the BPI showed neither sizeable nor significant change from pre- to post-program.

Subsidiary analyses were conducted on stratified subsamples: those completing at least six sessions ($n = 22$) versus those completing less than six sessions ($n = 20$). However, results for these two subsamples were not appreciably different from one another, and thus resembled results for the total sample (except for some slight reductions in statistical significance, which is to be expected when halving a small sample).

Main analysis – Binary Outcomes

Figure 1 shows results of McNemar's tests, which compared the proportion of those scoring above clinical cutoff scores on the key outcome measures at pre- and post-therapy. This

Table 1 Demographic, treatment-related and baseline functioning variables ($n = 42$)

Variable	<i>M (SD) or % (n)</i>
Age (years)	51.21 (8.88) (range 29–67)
Sex, female	64.29% (27)
Number of sessions	5.83 (2.89) (range 2–12)
Duration of therapy (weeks)	10.52 (8.10) (range 2–38)
Dose (average sessions per week)	0.63 (0.25) (range 0.2–1)
PHQ-9 ≥ 10 (at least moderate)	71.43% (30)
GAD-7 ≥ 10 (at least moderate)	64.29% (27)
PCS > 30 (severe)	50.00% (21)
BPI severity ≥ 7 (severe)	21.40% (9)

pattern of results essentially followed that of the continuous analyses. For the PHQ-9, the proportion of participants with scores above the ‘moderate’ cutoff point reduced from the first to last sessions (71.4% versus 54.8%, although this only approached statistical significance, $p = 0.065$). Additionally, 38.1% demonstrated clinically significant change on the PHQ-9, although only 31% of people showed clinically

significant improvement (as a small proportion showed worse scores). For the GAD-7, the proportion of participants with scores above the ‘moderate’ cutoff point significantly reduced from the first to last sessions (64.3% versus 47.6%, $p < 0.05$). For the PCS, the proportion of scores above the ‘severe’ cutoff point significantly reduced from the first to the last session (54.5% versus 27.3%, $p < 0.05$). Additionally, 31.8% of people demonstrated clinically significant improvement. As BPI scores did not have associated cutoff points, they could not be analysed using McNemar’s tests.

DISCUSSION

A novel GSH program involving postgraduate student coaches was integrated within the FMC PMU in the hope that it would improve both pain-related and psychological outcomes for people with chronic pain, as well as to determine the feasibility of such a program within a multidisciplinary tertiary pain clinic. Results indicated small-to-moderate improvements on measures of depression, anxiety and pain catastrophising, but no improvement on pain severity or pain interference scores.

Psychological improvements were small to moderate in effect size, and somewhat smaller than those reported in other studies [17, 18]. Whilst some participants did not experience improvements, scores significantly reduced overall. Additionally, most participants

Table 2 Results of paired samples t -tests examining mean differences on the five outcome variables from pre- to post-therapy ($n = 42$)

Variable	Mean (SD)		Mean diff	t	d
	First session	Final session			
PHQ-9	14.21 (7.11)	11.36 (7.74)	2.86 (5.87)	3.16**	0.38 (small)
GAD-7	11.83 (6.67)	9.31 (7.03)	2.52 (6.04)	2.71**	0.37 (small)
PCS ($n = 22$)	29.59 (12.67)	21.82 (16.05)	7.77 (10.50)	3.47**	0.54 (moderate)
BPI severity ($n = 40$)	5.53 (1.60)	5.46 (1.75)	0.07 (1.61)	0.27	–
BPI interference ($n = 40$)	6.58 (2.07)	5.88 (2.42)	0.70 (2.27)	1.95	–

** $p < 0.01$

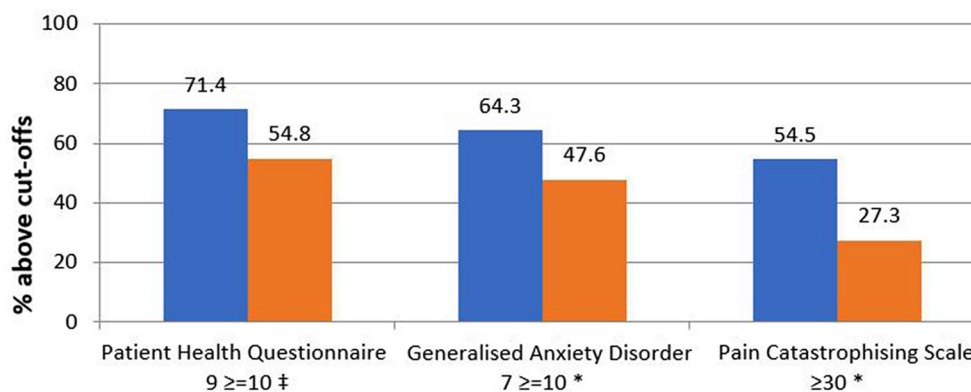


Fig. 1 Proportion (%) of participants scoring above clinical cutoffs at first and last program sessions ($n = 42$). Note: ‡ $p = 0.65$; * $p < 0.05$. Results of McNemar's tests, which compared the proportion of those

scoring above clinical cutoff scores on the key outcome measures at pre- and post-therapy. Blue colour shaded bar denotes first session and orange shaded bar denotes last session

commenced therapy with high levels of psychological distress, consistent with similar studies (18.17), and a sizeable proportion still met this threshold at the end of the program (even if their scores had reduced). Participant feedback indicated that they found the guided self-help strategies useful and the opportunity to increase their understanding and literacy on chronic pain beneficial. Importantly, there were other benefits to consider, which could be captured through outcome measures relating to increased knowledge and self-efficacy rather than with a sole focus on rates of psychological 'recovery'. Even small gains in these areas can provide people with the motivation to implement self-management skills. These improvements may also enhance engagement with PMU staff and support access the multidisciplinary supports available.

Worth noting is that whilst psychological outcomes improved (as per previous comparable GSH studies [17, 18], pain-related outcomes (severity and interference) did not. This result was not unexpected given the program did not focus directly on pain reduction, but rather on self-management and quality of life with chronic pain. Emphasising and focusing on improving quality of life domains may change the experience of pain (especially interference, if not severity) and be a secondary gain of an integrated GSH program.

Notably, even participants undertaking 2–5 sessions (with a mean of 3.4) showed similar benefits to those undertaking 6–12 sessions as reported in similar studies [33]. In the first two sessions, participants went through a multi-dimensional conceptualisation of pain and identifying and defining a specific area(s) of that conceptualisation to be addressed through the development of goals and a self-management plan. Perhaps if this is established, people can gain psychological benefits from having their interpretation and meaning of chronic pain recognised and understood, increase their knowledge of the bio-psychosocial impacts of pain, and develop a manageable care plan. This, combined with purely psychological (and not pain-related) improvements, may speak to the well-known therapeutic mechanisms of engagement and validation [33]. An important part of supporting people with chronic pain is building rapport, understanding their experiences and recognising how chronic pain impacts their lives and those around them. This is especially so considering that people with chronic pain often feel misunderstood by health professionals and feel dismissed that their pain is 'all in their head' [34].

On the basis of the overall findings from this pilot study, integrated GSH programs delivered by trained and supervised coaches as part of multidisciplinary teams which support people

to access evidence base care that facilitates greater self-efficacy, self-management, chronic pain literacy and psychological strategies can reduce wait lists as well as the strain on tertiary pain services, which are currently unable to meet the needs of those living with chronic pain in a timely and tailored way [35]. Additionally, results suggest that supporting people with chronic pain to engage in a GSH program that targets behaviour change may not require specialist-level training. GSH programs (and coaches) do not replace allied health professionals, but rather optimise scarce and expert resources by addressing behavioural health factors that impact self-management of chronic pain. These integrated GSH programs may address issues related to experiences of deconditioning, helplessness and hopelessness that are experienced by people who are 'waiting in pain' [9].

Coach-delivered GSH is also an efficient option, enabling medical and health professionals to 'do more with less'; for every hour of student supervision a pain unit health professional provides, a student can support ten people a week. Consequently, the GSH program in part contributed to the reduction of the psychology wait list by 4 months across the first year of implementation. Moreover, GSH could be considered a more inclusive treatment approach as participants do not need to travel for telehealth appointments. For this reason, GSH for pain management is well suited to rural and remote outreach models that offer access to treatment for those living in remote areas of Australia.

LIMITATIONS

Findings must be interpreted within the constraints of some methodological limitations. Importantly, with no control group (and no random assignment) we cannot say with any certainty that the GSH program alone caused the psychological improvements. Supposing the interventions did produce these changes, we do not have any data pointing to specific elements of the program or underlying mechanisms which might be responsible for these changes.

As we did not conduct follow-up assessments, we do not know whether the reported improvements were maintained or for how long post-care. Our convenience sample represented self-selected participants and people who were pre-screened by doctors who were interested and motivated to engage in a coaching program. Whilst some inclusion considerations were necessary for this pilot study, future studies could be offered more broadly to all to determine if the same outcomes are achievable across a wider group. Finally, given the newness of both the GSH program and the coaches, there was greater than ideal variability in program fidelity, including but not limited to issues relating to the amount of active treatment received by the people accessing the support. However, there were no sizeable differences in participant outcomes, and despite this variability, participants reported post-care benefits.

CONCLUSIONS

Evidence from this pilot study suggests that GSH programs for chronic pain, delivered by trained and supervised coaches, is acceptable and efficacious when integrated in a tertiary pain service. The inclusion of coaches into multidisciplinary teams supports task shifting of care so that health and medical staff can prioritise complexity of care needs through the devolution and redistribution of specific tasks. Further implementation and knowledge translation of ways to incorporate diversified care pathways through task shifting approaches that enhance self-management are important inclusions in care provisions for people with chronic pain.

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Disclosures. Paula Redpath, Fiona Glover, Cindy Wall and Anthony Venning developed the GSH workbook used in the pilot study – 'Rethinking Pain'. Fiona Glover and Cindy Wall provided clinical supervision for the coaches in the FMC-PMU. Amelia Searle and Peter Herriot have nothing to disclose. Tassia Oswald is now affiliated with Kings Together Public Mental Health Initiative Psychological Medicine, Institute of Psychiatry, Psychology & Neuroscience. King's College London. London.

Compliance with Ethics Guidelines. Outcomes data were routinely collected as part of FMC PMU usual practice for clinical and quality assurance purposes, then analysed retrospectively. Thus, under the National Health and Medical Research Council (NHMRC) Ethical Considerations in Quality Assurance and Evaluation Activities guidelines (NHMRC, 2014), and verified by the Southern Adelaide Local Health Network (SALHN) Research Committee (our institutional review board) via email (dated 10/09/2020), ethical review and approval were not required for this project as it constituted a

quality improvement activity – specifically, a service delivery evaluation. This project is registered with the SALHN Quality Library (for quality assurance activities that are exempt from ethical approval) (Quality Register ID 3390).

Data Availability. The datasets generated and analysed during the current study are available from the corresponding author on reasonable request.

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