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Health System Sustainability
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Social prescribing:

A rapid literature review to inform primary care policy in Australia

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EXECUTIVE SUMMARY

Social prescribing (SP) is "a mechanism for linking patients with non-medical sources of support within the community." [1] As Australia develops its 10 Year Primary Health Care Plan and considers whether or not to adopt the practice of SP, it is important to understand the evidence for the implementation and outcomes of SP for patients, for health professionals, health systems and for the community organisation sector.

In order to support potential policy development, we have synthesised current evidence on the effectiveness of social prescribing programs in this rapid literature review. We limited our search to peer-reviewed papers published between 2017-2019 with a focus on the most recent literature and published literature reviews. We identified six literature reviews and 24 empirical studies that met our study criteria.

As social prescribing is a relatively new area, the types of programs and how patients and health care professionals engage with SP is constantly developing. Most studies reviewed by us originated in the UK, with some also from Ireland, the Netherlands and Spain. We found no empirical studies of SP evaluations, nor any literature reviews from Australia. Programs in other countries may exist but were potentially not included in our rapid review because they were published in the reports, guidelines or other grey literature.

In our rapid review, we found little consistency around how social prescribing is defined. However, we did identify eight general types of SP: Arts on Prescription, Books on Prescription/Bibliotherapy, Education on Prescription, Exercise Referral/Exercise on Prescription, Green Prescriptions, Healthy Living Initiatives, Signposting/Information Referral, and Supported Referral. The most common social prescriptions included referrals for exercise or other physical activities or art or craft related activities. Interestingly, the use of comprehensive individualised referrals designed together with the patient and facilitated by a person who spanned the boundary between primary health care and community services was the approach reported by most of the studies.

The role and what to call the people who operationalise social prescribing (e.g. "navigators" or "link-workers") and span the boundaries between primary health care provided by General Practitioners (GPs) and other health care professionals (HPs) and the community services and voluntary sectors was similarly nebulous. Link-workers could range from a person in a purpose-built paid role working in the health system or within another organisation, such as a commissioning trust, to a volunteer working in a charity organisation or a community group. Despite the diversity, the role of the navigator was viewed as a crucial enabler to the success of SP programs.

Overall, GPs were the professionals who initiated social prescribing referrals most often, although all types of health professionals and even patients were mentioned as potential referrers. Interestingly, in some cases, GP practice receptionists were tasked with diverting patients away from GP appointments to community services.

SP was recommended for people with a wide variety of conditions, including mental health disorders, or with psychosocial problems or social isolation, those with long-term conditions (with or without mental health concerns) or with co-morbidities. The elderly, especially those with the above conditions, were amongst those listed as potentially benefitting from SP.

Regarding the impact on patients, GPs, link-workers, community care organisations, and on the health system, our review found mixed results with some positive, mixed and negative outcomes reported. This highlights the uncertainty and difficulty in assessing the effectiveness of SP, as reported in the peer reviewed literature. Quantitative outcome studies were few and showed inconsistent results. This may be because the quantitative measures used for evaluation of outcomes tended to focus on health-related outcomes and may not adequately capture more complex concepts, such as community connectedness, social engagement, confidence, willingness to give and receive peer-support, and confidence to access services and self-determination and self-care. These hard to quantify concepts were captured in qualitative studies, which predominantly reported positive outcomes for patients.

The included studies reported enablers of implementation of SP programs including: a phased roll-out with clear and appropriate organisation, infrastructure and management. Strong stakeholder engagement from all relevant sectors, good communication and a clear understanding of shared goals were also cited. Identified barriers included a lack of coordination and collaboration among stakeholders, and limited understanding of SP and limited engagement with frontline health professionals including GPs.

Concerns about sustainable funding for community services and equitable access for patients were considered important for the sustainability of SP programs.

Our rapid review reveals the emerging state of SP. It highlights the need for long-term quantitative and qualitative evaluations. This rapid literature review only covered studies published in the peer-reviewed literature. This is a limitation because the implementation of SP programs is often led by health services or not-for-profits and non-governmental organisations, and evaluations tend to be published in policy documents, unpublished reports, and guidelines that do not appear in peer-reviewed journals. Therefore, this rapid review of the peer reviewed literature should be supplemented by a review of the grey literature.

RECOMMENDATIONS

Based on our literature review, we have developed a set of recommendations that should be implemented if Australia were to adopt SP.

1. The RACGP, CHF and the Australian Department of Health should work together in consultation with the National Social Prescribing Roundtable to include social prescribing in the 10 Year Primary Health Care Plan and the National Preventive Health Strategy.

2. Funding is needed for the development, implementation and evaluation of Australian SP.

3. The development of models should be co-designed with all relevant stakeholders.

4. Models of SP should involve a navigator/link worker whose role is clearly defined but flexible enough to enable creativity and individual tailoring of needed interventions for patients.

5. The role and personal skills and attributes of navigators/link-workers should be defined.

6. Developed models should undergo rigorous evaluation using robust implementation science and systems science approaches and mixed methods research (qualitative and quantitative) to ensure sufficient depth of understanding of what worked, why it worked and in what contexts, to support future scaling up and spreading of successful models.

7. That any models of SP developed in the Australian context consider model sustainability at the core of evaluations.

INTRODUCTION AND RATIONALE

Social prescribing (SP) is "a mechanism for linking patients with non-medical sources of support within the community." [1] As Australia develops its 10 Year Primary Health Care Plan and considers whether or not to adopt the practice of SP, it is important to understand the evidence for the implementation and outcomes of SP for patients, for health professionals, health systems and for the community organisation sector. As the practice of social prescribing is developing, scaling up, and spreading, robust evaluations are increasingly being published in peer-reviewed literature, especially in the last three to four years.

In order to support potential policy development, we have synthesised current evidence on the effectiveness of social prescribing programs in this rapid literature review. As the notion of social prescribing is relatively new across the world, and there is limited Australian literature on social prescribing programs and their evaluations, we aimed to describe the methodological approaches and challenges of conducting evaluations of social prescribing programs, including identifying frameworks, and validated tools.

Understanding the latest literature about what types of SP interventions have been developed and implemented, which groups of patients have been targeted, which outcomes have been measured and whether there are significant benefits of SP is important to inform future development of SP programs. This information will be particularly valuable if trials of social prescribing programs are undertaken in Australia in the future.

There is little consistency around how social prescribing is defined, what to call the people (e.g. "navigators" or "link-workers") who operationalise social prescribing and span the boundaries between primary health care provided by General Practitioners (GPs) and other health care professionals (HPs) and the community services and voluntary sectors. For the purposes of this review, we will refer to the SP coordinators, facilitators or SP practitioners as navigators/link-workers as these are the most common emerging terms. Although general opinion is that navigators/link-workers are essential to make social prescribing happen, there are few descriptions of the front-line role that they perform. Furthermore, there is inadequate information about the attributes, attitudes, and skills that navigators/link workers require to perform their role.

The views and experiences of General Practitioners and other Health care Professionals with regards to SP are extremely important as it is usually GPs and other HPs who initiate SP referrals.

Knowledge about the barriers and enablers of SP implementation is also needed to support future implementation strategies, whilst maximising enablers and overcoming known barriers as early as possible.

Research Questions:

1. How is social prescribing defined in the recent literature?
2. What theories or frameworks are used to underpin studies on social prescribing?
3. Who initiates social prescriptions and are care navigators/link-workers always involved?
4. Which groups of patients or people are targeted for social prescribing?
5. What interventions are included under social prescribing?
6. What outcomes measures or tools have been used for patients/clients, health care professionals, care navigators/link-workers, community service providers and health and community service systems?
7. What impacts, outcomes or effects of social prescribing have been reported for patients, health professionals, navigators/link workers, community services, and health and community service systems?
8. What are the barriers and enablers for the implementation of social prescribing programs?

METHODS

We conducted a rapid review for studies relevant to social prescribing according to the strategy described in Text Box 1 and inclusion and exclusion criteria (Table1). We included published literature reviews and empirical published studies.

Table 1. Inclusion and exclusion Criteria

	Inclusion	Exclusion
Date	2000-2019	Not 2000-2019
Language	English	Other language
Databases	Medline, Scopus	Other databases
Study type	Peer-reviewed published research or evaluation study or report, or literature review	Grey literature
Study Methods	Qualitative or quantitative methods	Published opinion pieces or descriptions that do not report any qualitative or quantitative data
Study details relevant to the research questions	Reports on an SP program or presents a review of studies that report on SP programs	Does not report on an SP program
	Describes an implemented SP program	Describes an SP model or program that has not been implemented
	Reports data (qualitative or quantitative) about the impacts or outcomes of SP program(s) for patients, providers, or health and community care systems	Does not report outcomes

The search strategy (Text Box 1) was developed by the medical librarian. As this is a rapid literature review [2], only three databases were searched, the search terms were focussed on social prescribing, and only peer-reviewed papers published during a limited time period were included.

Text Box 1. Search strategies

RESULTS

Included studies

One hundred and twenty-three articles were identified in the search. There were six relevant literature reviews, all published 2017-2019. The six reviews covered articles published in the last 15-20 years. There were 43 potentially relevant journal articles published between 2008 and 2019. Most (30; 70%) were published 2017-2019 (Figure 1). We therefore focussed our analysis only on the last three years, 2017-2019, to ensure that we captured the state of current knowledge, while providing synthesised data for earlier years through the six reviews.

On full-text review, we all six literature reviews and 24 journal articles met our inclusion and exclusion criteria and were included in analysis, (Table 2A, 2B).

Figure 1. Number of journal articles reporting on SP programs identified in the search per annum
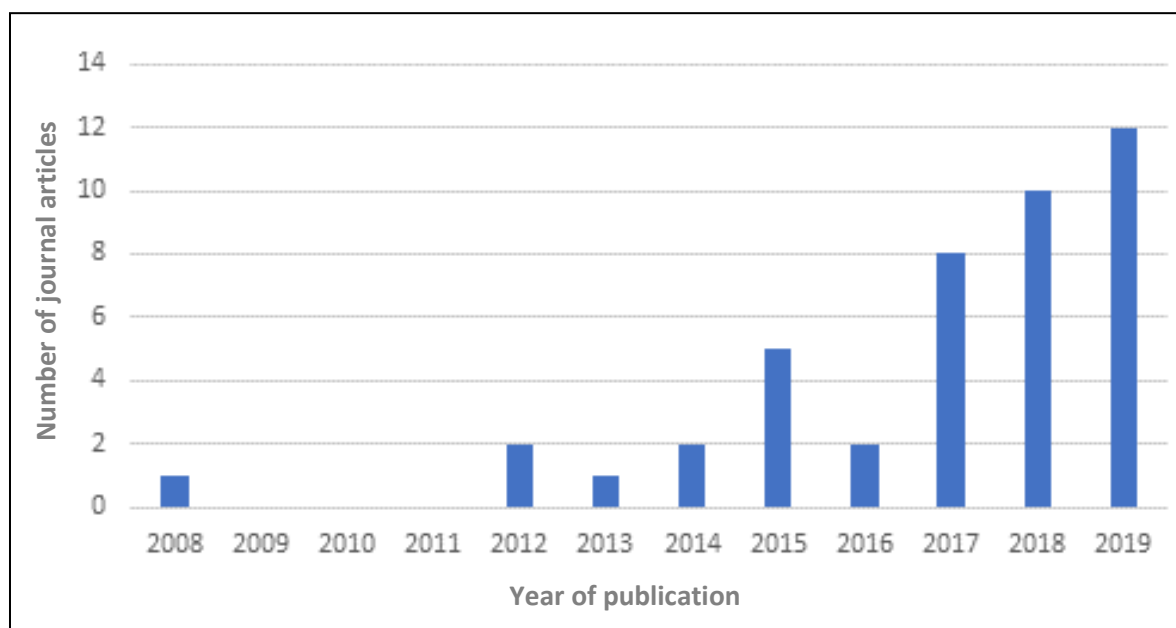
Table 2A. Characteristics of the included literature review articles

Reference	Location	Study type	Methods included	Outcomes, impacts for patients	Outcomes, impacts for GPs, HPs or Navigators	Outcomes, impacts for the health care system	Other outcomes or impacts	If other, what?
Bickerdike et al. 2017	UK	R	QL, QT, MM	X	X	X		
Chatterjee et al. 2018	UK	R	QL, QT, MM	X		X		
Husk et al. 2019	UK	R	QL, QT	X	X	X		Patient enrolment, engagement and adherence - SP programming
Pescheny et al. 2018	UK	R	QL				X	Facilitators and barriers to SP implementation
Pescheny et al. 2019	UK	R	QL	X				
Pilkington et al. 2017	UK and Ireland	R	QL, QT, MM	X		X		

R= Review; QL=Qualitative methods; QT=Quantitative methods; MM=Mixed methods

Table 2B. Characteristics of included peer reviewed studies reporting primary data

Reference	Location	Study type	Methods	Outcomes impacts for patients	Outcomes impacts for GPs, HPs or navigators	Outcomes impacts for the health care system
Bertotti et al. 2018	UK	EM	MM - Realist approach	X	X	
Carnes et al. 2017	UK	EM	MM	X		
Chesterman and Bray 2018	UK	EM	QL - Action Research	X	X	
Elston et al. 2019	UK	EM -	QT before and after study	X		X
Hamilton-West et al. 2019	UK	EM	MM, Evaluability assessment	X		X
Hanlon et al. 2019	UK	EM	QL	X		
Heijnders and Meijs 2018	Netherlands	EM	QL	X		
Loftus et al. 2017	UK	EM	QT		X	X
Moffatt et al. 2017	UK	EM	QL	X		
Pescheny et al. 2018	UK	EM	QL	X	X	
Pescheny et al. 2019	UK	EM	QT	X		
Pons-Vigués et al. 2019	Spain	EM	QL	X	X	
Redmond et al. 2019	UK	EM	QL	X		
Skivington et al. 2018	UK	EM	QL	X	X CP	
Southby and Gamsu 2018	Northern England	EM	QL		HP, CP	X
Sumner et al. 2019	England	EM	QT	X		
Swift 2017	England	ED	QL	X		
Thomson et al. 2018	England	EM	QT	X		
Tierney et al. 2019	UK	EM	QT	X		
White et al. 2017	UK - Scotland	EM	QL	X	X	X
Whitelaw et al. 2017	UK - Scotland	EM	QL - interpretivist approach	X	X	X
Wildman et al. 2019	UK	EM	QL		X	?
Wildman et al. 2019	England	EM	QL	X	X	
Woodall et al. 2018	England	EM	MM	X		

1. How is social prescribing defined in recent literature?

The Social Prescribing Network definition was used in one literature review to support study selection and analysis, and in four journal articles (Table 3). The Social Prescribing Network provides a comprehensive definition: "Social Prescribing is a means of enabling GPs and other frontline health care professionals to refer patients to a link worker - to provide them with a face-to-face conversation during which they can learn about the possibilities and design their own personalised solutions, i.e. 'co-produce' their 'social prescription'- so that people with social, emotional or practical needs are empowered to find solutions which will improve their health and wellbeing, often using services provided by the voluntary and community sector. It is an innovative and growing movement, with the potential to reduce the financial burden on the NHS and particularly on primary care." [3]

Most commonly, the definition included at its core the referral by a GP or another health professional to non-medical services, community services or social care organisations and most definitions mentioned referral via a link-worker, coordinator or care navigator (Table 3).

Table 3. Definitions of SP included in the six literature reviews and 24 empirical studies

Definition categories*	Literature Reviews (N=6)	Empirical studies (N=24)
No definition provided	-	7
Social Prescribing Network definition	1	4
Referring by GPs or other health professionals to non-medical services, community services or social care organisations with or without referral to a link worker or navigator	5	12
Mentions developing action plans	-	2
Mentions addressing or helping with social or economic factors specifically	2	5
Mentions building resilience or ability to self-care or independence for the patient	-	3
Other**	-	3

*Some publications provided wide ranging definitions that included multiple categories
**Other includes use of exercise prescriptions, or various art activities, clubs, or prescribing reading books for pleasure

2. What theories or frameworks are used to underpin studies on social prescribing?

Frameworks and theories were seldom reported in the included articles. The review articles mainly aimed to examine the impacts and effectiveness of SP programs, schemes, or practices for patients, or for health professionals or community providers. One review focussed on identifying factors that help or hinder the implementation and delivery of SP programs, but they did not mention a particular framework. [4]

Only one of the six literature reviews reported using a framework to support their review synthesis. Husk et al. (2019) used program theory and a realist synthesis approach to underpin their research questions. [5] They formulated a number of "if-then" statements to guide their review, for example: "IF the transit to first session is supported, THEN the patient may be more likely to attend." [5]

3. Who initiates social prescriptions and are care navigators/link-workers always involved?

General practitioners were the professionals who initiated social prescribing referrals most often (Table 4). GPs tended to refer to link-workers or care navigators who were based in the GP practice or in a local community health service or a local non-health community organisation. Other health workers included GP practice nurses, community nurses, allied health professionals and rarely hospital discharge teams or multidisciplinary teams looking after people with long-term conditions. In some instances, GP practice receptionists were tasked with diverting patients away from an appointment with a GP to a more suitable community service, however, the effectiveness of this strategy was not well-evaluated. Staff from community organisations or staff working in community care organisations also sometimes referred patients into SP programs and in some instances, patients could self-refer.

Table 4. People who initiate social prescriptions

Person initiating referral*	Literature reviews (N=6)	Empirical Studies (N=24)
GPs	5	21
Other health workers (e.g. community health workers, practice nurses)	1	6
Community organization staff or social care staff (not community health staff)	1	4
Self-referral	1	4
Allied Health Professionals	2	2
Other GP practice staff (e.g. receptionists)	2	1
Hospital staff or Multi-Disciplinary Teams	-	1
Not specified	1	2

*Multiple referrers were reported by some individual studies

4. Which groups of patients or people are targeted for social prescribing

In the literature review articles, a wide variety of patient groups were identified that might benefit from social prescribing, [6, 7] including people with mental health disorders, such as anxiety and mild to moderate depression or low mood, [5, 8, 9] people of all ages with psychosocial problems or social isolation, and people with long-term conditions with or without accompanying mental health disorders. [10, 11] Elderly people were identified as a specific group that would benefit from social prescribing, especially those who had long-term conditions, multi-morbidity, mild to moderate mental health problems, psychosocial problems, socio-economic issues, or people experiencing social isolation. People experiencing recent life changing circumstances, such as bereavement or receiving a diagnosis of a long-term condition, were also identified as a group that would benefit from social prescribing. [5, 12, 13] We found only one literature review focussed on people with a single condition – type-2 diabetes. [14]

Among the 24 journal articles, 16 reported on the patients or clients of social prescribing services. The target groups identified in these 16 studies included those identified in the review articles and described above. However, additional target groups included carers of patients with long-term conditions or disabilities, [13] "people who had medical causes of their problems ruled out," [15] and people with polypharmacy of five or more repeat medications. [16] Several papers reported referring people according to need without identifying any particular target conditions or issues, or simply any person identified by the GP as having social issues that impact on their wellbeing. [17]

5. What interventions are included under SP?

The systematized review by Chatterjee et al. (2018) described the different types of SP which we summarise briefly below. Although this list is not exhaustive, it provides a broad overview of the types of interventions that may be prescribed. [7]

Arts on Prescription: referring people with physical or mental health problems to programs that offer creative activities such as painting or drawing, crafts, dance, drama, or music.

Books on Prescription/Bibliotherapy: health professionals recommending self-help books in addition to cognitive behaviour therapy, or advising reading for leisure or joining a book club.

Education on Prescription: referring people to structured learning programs, such as literacy and basic life skills classes (e.g. money management, cooking, organisational skills, learning a new language) depending on individual needs and interests.

Exercise Referral/Exercise on Prescription: referring individuals to structured exercise activities, such as gym, yoga, swimming and other sporting activities.

Green Prescriptions: supporting people to increase contact with nature including walking in parks, gardening or participating in community gardens, and spending time in other natural spaces, such as at the beach or in national parks.

Healthy Living Initiatives: targeting populations living with disadvantage by engaging people in structured health programs in order to increase equitable access to health care; for example, by providing free health checks and by supporting healthy living through healthy eating programs and stop-smoking programs. Such programs are often developed by community health workers including community nurses.

Signposting/Information Referral: pointing or "signposting" patients to helpful information about local health and welfare services, such as financial advice, housing support, community health programs, or peer support groups. Information is provided by linking patients with websites or providing pamphlets with contact details of services.

Supported Referral: focusing on enabling people to access support to meet their individual needs, which are usually assessed by a link-worker or care navigator who co-produces a tailored social prescription program or action plan with appropriate and achievable goals. The link-worker may then work with the patient to support them as they work through their plan to reach the goals while helping the patient overcome barriers, building confidence, and providing moral support and encouragement. This type of social prescription may include any combination of social prescriptions described above.

Among the included studies in our review the most common social prescriptions included referrals to exercise or other physical activities or art or craft related activities. Interestingly, the use of comprehensive individualised referrals designed together with the patient and facilitated by a navigator/link-worker was the approach reported by 17 of the 24 studies (Table 5).

Table 5. Services used for referral in social prescriptions

Services referred to*	Literature reviews (N=6)	Empirical studies (N=24)
Comprehensive individualised co-designed interventions facilitated by a navigator/link-worker	2	17
Art and craft activities	5	10
Exercise and other physical activities	7	7
Social clubs, lunch clubs or volunteering	3	7
Financial advice, debt management, and legal	2	7
Social care services (housing, employment, welfare agencies)	2	6
Adult education and literacy	4	5
Counselling, psychological services, cognitive behaviour therapy, self-help, and peer support	4	4
Green prescriptions (gardening, community gardens, nature walks)	4	4
Lifestyle interventions for weight loss, smoking cessation, or alcohol services	2	3

*Studies reported multiple services

Role of the navigator/link-worker

The role of the navigator/link-worker was central to the social prescribing initiatives described in all six of the literature reviews and in 17 of the 24 empirical studies.

In the included studies, we identified at least 18 separate terms used to describe navigators/link-workers:

1. Link Worker
2. Referral Agent/Worker
3. Navigator
4. Care Navigator
5. Facilitator
6. Coordinator
7. Social Prescriber
8. Social Prescribing Coordinator
9. Well-being Coordinator
10. Holistic Link Worker
11. Community Wellbeing Advisors
12. Sign-Poster
13. Single Point of Contact (SPOC)
14. Link Worker
15. Community Link Practitioner (CLP)
16. Community Link Worker
17. Well-being Coach
18. Community Welfare Officer (CWO)

Furthermore, Tierney et al. (2019) reported 75 different terms used for the navigator/link worker when they surveyed clinical commissioning groups (CCGs) across the UK.

In the same study, the role of navigator/link-worker was often reported to be undertaken by an upskilled, existing staff member working at the general practice, most often the receptionist. [18] The practice receptionist was upskilled to divert people seeking an appointment with the GP by sign-posting them to another service or source of information, when they phoned for an appointment. [18] The main goal of sign-posting by receptionists was to reduce the number of presentations to the GP, especially for people who presented frequently, however, we found no information about the effectiveness of this type of SP for patients, although there were reductions in GP presentations. [18]

Commonly mentioned roles of the navigators/link-workers included signposting people to relevant information and supporting initial links with a variety of non-health community services and programs (Table 6). They acted as a bridge between primary care health services and community organisations. The roles of the navigators/link-workers varied according to a) the program being implemented, b) whether the navigator/link worker was an existing GP practice staff member, c) a specifically designated new employee embedded in the GP practice, or d) embedded in the community service(s), or whether the person worked as a volunteer. Existing practice staff tended to signpost people to information only, while volunteers tended to provide an initial link with a service or activity, sometimes with ongoing informal support. Paid staff specifically designated as navigators/link-workers tended to provide a more comprehensive, co-designed, individualised and ongoing service for patients including developing action plans and goals according to specific individual needs and following up on referrals. [4, 6, 7, 10, 13, 14, 19-22] Face-to-face support was perceived to improve effectiveness of the intervention and was highly valued by patients and by the navigators/link-workers. [5-7]

Table 6. Commonly described roles of navigators/link-workers in included literature reviews and empirical studies

Roles of the navigators/link-workers	Literature Reviews (N=6)	Empirical Studies (N=24)
Act as a bridge between primary care and community organisations	6	17
Signpost patient to a suitable community service	4	17
Met with patient to discuss/identify needs	3	17
Ongoing face-to-face support	2	5
Followed up referrals	1	6
Develop action plans	-	5

6. What outcomes have been measured and reported for patients/clients, health care professionals, care navigators/link-workers, community service providers and volunteers?

Measures and tools used to assess outcomes and impacts for patients

Among the six literature reviews, measures included self-reported health and wellbeing, quality of life, life-style changes, social functioning, self-concepts and feelings, and day-to-day functioning. Social prescribing program effectiveness was also measured in terms of engagement with the program and adherence to the social prescription(s). Table 7 list the wide variety of quantitative tools used to assess outcomes and impacts of SP for patients

Table 7. Specific quantitative tools used to measure outcomes in patients

Tool
Warwick-Edinburgh Mental Wellbeing Scale (WEMWS) or the short version SWEMWS
Hospital Anxiety and Depression Scale
General Anxiety Disorder - 7 Scale
Patient Health Questionnaire - 9
Clinical outcome in routine evaluation - outcome measure (CORE-OM)
General Health Questionnaire
SF-36 (Short Form Survey - 36 for quality of life)
COOP/WONCA Functional Status Health and Wellbeing
Work and Social Adjustment Scale
Social Isolation Index
Delighted-terrible faces test
Duke UNC Functional Social Support Questionnaire
Physical activity questionnaire
Physical activity – Timed Up n Go test
Patient Activation Measure (PAM)
Well-being Star - Outcomes Star for adults self-managing health conditions

In addition to using specific tools, many studies also analysed experiences and perceived benefits, barriers and enablers by conducting before and after interviews and focus groups with patients.

Outcomes for GPs, other HPs and navigators/link-workers were also mainly assessed through qualitative methods and provided data on perceptions, attitudes and experiences of participating in SP schemes and when reflecting on outcomes of SP schemes.

Measures used to report impacts on services and systems included changes in the number of GP consultations GP referrals to secondary care, and hospital episode statistics including emergency department attendances and hospital admissions. [6, 14] Few studies reported economic measures such as affordability, cost and benefit analysis or cost effectiveness of SP interventions. [6, 7]

Impact on community services was also measured in terms of number of referrals received, number of patients engaged, and number of encounters with community services as well as measures of satisfaction with the service received.

7. What impacts, outcomes or effects of SP have been reported for patients, health professionals, navigators/link workers, community services, and health and community service systems?

Outcomes for patients

Positive outcomes reported in qualitative studies, included perceptions by patients that they are better connected to the community, they have better self-esteem, confidence and ability for self-care. They reported better wellbeing, higher mood and feeling more positive after accessing SP programs. Patients valued the role of the navigator/link-worker in helping patients identify problems and in providing practical solutions that suited their specific needs. Goal setting together with the navigator/link-worker and ongoing longer-term support, e.g. over several months, according to need, were viewed as key enablers to achieving co-designed goals. As expected, patients referred to SP programs used community services more often. Some described being supported through the gradual behaviour change transition as key to developing confidence and empowerment to "go-it-alone", while others worried about the ability to access SP programs and services over the long term. Programs that provided individualised services and took time to identify individual needs were highly valued by patients.

Acceptability of SP programs to patients was high, although patients in several qualitative studies reported that they did not know what social prescribing was, although they were happy that they had been referred to a navigator/link-worker. In one study patients reported that GPs spent more time with them. The review by Pescheny et al. (2019) reported that most quantitative studies included in their literature review (N=16) showed no significant change on quantitative measures, such as levels of social support, and functional health assessment charts, however patients accessing the SP intervention improved on the Friendship Scale. [13]

Patients referred to healthy eating, exercise or smoking cessation interventions reported feeling healthier and fitter, with a higher overall wellbeing. Other SP programs designed to improve mental health, coping and community connections also resulted in perceptions of better wellbeing, improved ability to undertake activities of daily life, ability to network with peers, confidence and empowerment. [11, 22-24]

There were few studies (N=4) that reported quantitative outcomes for patients. Results from these studies were a mix of positive, negative or no change findings. Studies reported improvements in fitness including increases in energy expenditure due to exercise activities including walking (41.6% increase) or undertaking vigorous exercise (107% increase in energy expenditure). [8] There were also reports of SP programs having significant effects on the wellbeing measures WEMWBS or SWEMWBS, Well-beingStar, patient activation measure (PAM), and in scores on measures of depression and anxiety in patients with mild to moderate depression and/or anxiety. [17, 22, 25, 26] The literature review by Chatterjee et. al., which included 16 papers confirmed positive outcomes in

wellbeing, self-care, mental health (depression and anxiety scores), connection to community, quality of life and lifestyle preventative behaviours (exercise and healthy eating). [7]

However, several studies reported no change in wellbeing, anxiety, depression or engagement in activities. Few studies had follow-up times longer than 12 weeks and few studies reported the level of patient engagement after referral to an activity under SP programs. One study reported that 17% of patients had 2 or more contacts with the SP service and this was deemed inadequate to support behavioural change. [22] One study reported that four out of 12 patients reported no change in their ability to perform activities of daily life. [27]

The six literature review papers included in our review showed that uptake of SP referrals was variable 50% and 79% of people referred to a link-worker actually had an initial appointment with the link worker. [6] Only two studies included in their review reported attendance at activities/services that patients were referred to 58% and 100%, with most studies reporting that a referral had been made without following up whether the person actually attended. [6]

The literature reviews showed that the outcomes of SP are mixed. Some literature review papers showed positive quantitative outcomes in terms of measures of quality of life, wellbeing, healthy behaviours, coping, mental health, wellbeing, and social engagement among patients. However, several others showed that quantitative outcome measures used in studies included in their reviews mainly reported no significant improvements for patients. [13, 14]

Qualitative studies included in the review articles, on the other hand, showed benefits such as positive experiences of SP, feelings of confidence and developing self-reliance and ability to care for self while making connections and friendships with peers who in turn provide support. [7, 13]

Outcomes for GPs and other HP

The perceptions of GPs and other HPs were mixed. Some studies reported that GPs and HPs had positive perceptions of SP. [17, 21, 28] They felt that they were enabling care for the whole person without spending too much time beyond the initial referral to an navigator/link-worker. Some studies reported that GPs felt that SP has little or no effect on their patients and on their practice and that SP did not reduce GP and emergency department attendances. [25, 29] Some GPs reported referring patients and then not being fed-back any information about the community activities that the patient engaged with nor the effects of these. [7] Closing the feedback loop is an important aspect of any new program that aims to change the system to improve care. [30] The improvement cycle needs to be complete and may need to be repeated several times to optimise programs and to support the understanding of outcomes and learning for future programs. GPs who understood the purpose of SP and had developed relationships with navigators had high levels of satisfaction with SP. [21, 24]

Outcomes for Navigators/Link-Workers

Navigators felt that their role was significant in ensuring that the patient is supported, that problems are adequately described for the individual patient and that support and onward referral matches individual patient needs. Navigators/link workers valued SP and came to recognise the need to empower patients to become confident and independent rather than developing dependency with the outcome that navigators need to strike a careful balance when providing support.

Existing GP practice staff, such as receptionists and practice nurses, felt that their training was not adequate to undertake their role. And their understanding of SP was often relatively limited with the express goal of diverting patients from the GP practice to reduce attendances and waiting times.

This is a very narrow view of SP and the best that can be done for patients who ring for an appointment is to sign-post them to some local services. This sign-posting to other services may be adequate for patients who have relatively simple problems however, it is unlikely to be satisfactory for those who have complex medical, psychosocial or socio-economic problems that impact their health and wellbeing. There was little evidence of positive outcomes for patients, GPs nor practice staff working in such models.

Outcomes for navigators included difficulties in engaging with GPs and GP practices, including spending large amounts of time on education and engagement at the expense of providing direct assistance to patients. This was exacerbated when navigators working under some SP schemes were set quotas of patients to recruit into the service, and the quotas were difficult to achieve especially in areas where the GP engagement had been minimal, resulting in additional work for navigators/link-workers. [19, 28, 29, 31] On the other hand, where the SP programs were well understood and valued by GPs and HPs, there was sometimes a lack of capacity to deal with all referred patients. [19] In one study, the health professionals perceived very little difference after an SP project began - for them it was "business as usual." [25]

Outcomes for the Health system

Only one study reported quantitative data about changes in demand for medical services. Loftus et al. (2017) showed no difference in GP contacts (visits to GP, home visits or telephone calls) nor in the number of new repeat prescriptions after a 12-week SP intervention. [16] This may be because the evaluation assessed only short-term outcomes.

Qualitative studies reported "less demand for medical services" as perceived by GPs and other HPs. [28]

In their review, Bickerdike et al., reported that there was some evidence for reduced referral to secondary care, reduced hospital admissions and ED attendances and GP face-to-face contact but no change in the number of phone contacts. [6] One evaluation included in the review by Pilkington et al. (2017) showed reduced hospital admissions due to a diabetes-specific SP intervention. [14] The literature review by Chatterjee et al. (2018), also reported reduced attendances at general practices. [7]

Financial impacts were generally not reported, however in one study included in Bickerdike et al. (2017) there was an apparent half-a-million GBP reduction but the start-up costs were 1.1 million GBP to set up and run the SP program. [6] A lifestyle intervention reported by Munro in 2004 and included in the review by Chatterjee et al. (2018), was shown to be cost effective in terms of Quality Life Years Saved (QALYS) with a cost of €17,172 per QALY. [7, 32]

Outcomes for community care organisations

Several papers reported increased demands for community services and raised concerns about capacity to keep up with demand, especially with recent cuts to community services. Community organisations also found that they had better access to people who needed their support via SP programs and felt they were filling the gaps in care that medical services cannot. [31, 33] There was an increased use of health and community services which was viewed positively. [10, 34] Increasing costs for community services were highlighted as a potential problem, especially in schemes where patients with significant frailty and multi-morbidity conditions were referred. [10] Community organisations found it difficult to engage with GPs and were more likely to work with practice

managers, which they felt was not ideal when providing holistic care that supplements care delivered by the GP.

8. Barriers and enablers of implementation of social prescribing programs

The literature review by Pescheny et al., (2018) was the only paper specifically focussed on barriers and enablers of implementation of SP programs. [4] Important facilitators of successful implementation of SP programs included: phased roll-out, clear and appropriate organisation and management of the program, shared understandings and attitudes among stakeholders and front-line workers across service sectors, strong relationships and open communication, organisational readiness to implement the SP intervention(s), integration of navigators/link-workers into primary care teams, institutional support, and adequate local infrastructure needed to make the program work. For example, availability of local community services that were easily accessed by patients and had capacity to provide the needed services as the SP programs ramped up, avoiding long waiting times for access. [19, 29] Local infrastructure, such as adequate and appropriate local transport services, to enable people who had been referred to easily access the services and low- or no-cost for patients was also important. [5, 24, 29]

Pescheny et al., (2018) also identified a number of barriers including delays to starting dates because multi-sector collaboration and relationship development take time, rushed "go live" dates when programs are not quite ready, turnover of staff involved in social prescribing resulting in a lack of continuity, lack of understanding of the program across sectors, lack of engagement with GPs at the front lines, lack of patient engagement, and long waiting lists to access prescribed services. [4]

In Table 8, we list the barriers and enablers as experienced by patients, GPs and HPs, navigators/link workers, and community service providers while involved in SP programs.

Table 8. Barriers and enablers identified in peer reviewed empirical articles

Enablers	Barriers
For GPs and other health professionals	
Having awareness of SP programs in the local area – more likely to engage	Working in a medical paradigm – 7-minute consultation and treating presenting medical condition
Having a clear understanding of the SP programs and the GPs role in SP	Lack of awareness of SP and benefits of SP
GPs who received some training on SP are more likely to engage	Inadequate training in SP and criteria for referral
More likely to refer to programs that have a formal recognition or "statutory" standing and are stable, sustainable and well funded	Lack of capacity to refer – time constraints
Trusting relationships with the navigator/link-worker	Perception that community providers are "less expert" than health professionals
SP referral embedded in GP software - routinized	Perception that SP is not part of the GPs' or HPs' role
	Referring people to services that may not be sustainable
Navigators/Link-workers and community organisations	
Role of the navigator seen as critical boundary-spanner by GPs, Navigators/link-workers themselves, community services and patients	Lack of recognition by GPs and other HP of the importance of the N/LW role and lack of awareness of SP

Flexibility to refer to a variety of services	Threats from funding cuts to community service provider organisations
Clearly outlined roles and responsibilities	Unclear roles e.g. N/LW spending time engaging with and educating GPs rather than working with patients
Trusting relationships with GPs and GP practice staff	Opposition from GPs and other Health professionals who do not see SP as part of their role
Wide knowledge of local social and community services and networks	Difficulties in finding appropriate locale services to meet the needs of patients
Appropriate training, ability to apply strength-based approach foster empowerment rather than dependency	Limited training and lack of understanding of the role by L/-V themselves and those they must work with i.e. GPs, other HP, community providers, patients and trusts
Capacity to spend time with patients in co-design and for ongoing support	Lack of capacity to provide services to all people referred, need to meet quotas when referrals are low
Understanding of what people need to "live well"	Limited capacity to engage with people with complex and specific needs
For patients	
Awareness of SP programs and perception of their benefits	Lack of awareness of SP programs and their purpose
Trust in GP to refer appropriately to SP	Expectation that medical care will always be provided by GP not referral to social or community support
Having ongoing contact with the navigator/Link-worker	Expectations that changes will happen quickly without ongoing support
Access to local services- minimum travel	Difficulties accessing services e.g. too far to travel
Low cost or free services	Additional costs
Developing networks, family and peer support and becoming more independent	Specific environmental factors and peer pressure e.g. everyone smoking during breaks
Sustainable services not just projects	Lack of continuity; one or two contacts with the navigator inadequate for some
Flexibility of access and choice of services that suit their needs	Busy lives – people who are employed find it more difficult to engage with SP programs
N/LW filled the gaps that GPs and HPs couldn't (5)	
Related to systems	
Robust and clear governance structures with delineated roles	Confusing project governance structures and lack of clarity about roles and poor leadership
Alignment with existing policy	Lack of supporting policy to provide legitimacy for action
Having a common understanding and expectations among GP, Community organisations, navigators/link-workers,	Limited engagement of needed stakeholders
Networks – building on existing network and supporting development of new networks for SP	Staff turn-over results in loss of sustainable links within networks
SP program visibility and ease of access – e.g. single point of contact	Lack of visibility of SP projects or several projects operating at once
	Lack of knowledge, capacity and funding to evaluate SP programs to inform future implementations

DISCUSSION AND CONCLUSIONS

Current literature on the impacts of social prescribing is mixed, with both positive and negative outcomes being reported. There are very few robust, well-designed long-term evaluations of the impacts of SP on patients, on GPs and other health professionals, on navigators and community services and on health systems. On balance however, there are some promising reports showing significant improvements in patient wellbeing and community connections. Other studies have demonstrated positive behavioural changes in terms of increasing healthy living behaviours including healthy eating and exercise. Reductions in anxiety and depressions and increases in community engagement and feelings of empowerment, confidence for self-care and resilience to manage health and psychosocial problems.

Significant barriers to the implementation of SP programs were identified and need to be addressed when planning future SP programs. These include barriers among GPs and other HPs including lack of awareness of SP programs, perception that referrals to SP programs is not part of their role, lack of capacity and time to refer, and limited training in how to refer and who to refer for SP. Some GPs and HPs also perceived that SP had little value in reducing presentation of patients to primary care or to emergency departments. This is not surprising given that there are few studies that have reported such changes. Methodologically robust studies should be undertaken to clarify the impacts of SP on GPs, HPs and health systems.

Important enablers were identified. These include having appropriate supporting health and social care policy in place to provide legitimacy for the development, implementation and evaluation of future SP programs. Developing clear common understandings among all stakeholders of SP programs about the purpose of SP and potential benefits will require education, networking and the development of governance structures and strong leadership from within the health and community sectors. Future projects must involve from the beginning of program design, all relevant stakeholders especially patient and community groups and GPs working at the frontlines and expected to refer patients for SP.

Sustainability of SP models was an identified emergent theme and stakeholders expressed concerns about sustainable funding for community services and equitable access for patients. Programs were thought to be sustainable through the development of strong functional networks, however, the high turn-over of staff across the health and community care sectors was viewed as a threat to maintaining strong networks and the sustainable delivery of SP programs. The need for adequate capacity of community services to cope with the number and wide variety of referral types was also seen as essential to the sustainability of SP programs.

The role of the navigator was viewed as a crucial enabler to the success of SP programs, however, there was an enormous amount of variability in understanding of the navigator role which could range from a person in a purpose-built paid role working in the health system, to a volunteer working in a charity organisation or a community group, or it could be a purpose-built paid role working for another organisation, such as a commissioning trust. Even the terms used to describe navigators were so varied it was impossible to know whether "navigators" did the same work as "coordinators" or "link-workers" or "social prescribers." One study reported over 70 terms used for the role. The definition of SP itself, varied significantly and many studies simply did not provide a definition for SP. The use of common language is the crux of developing a common understanding across sectors and it is therefore worth striving for common terminology and definitions in SP.

Regardless of the variety of terms used to describe navigators/link-workers their role in making SP program work cannot be denied. They are the lynch-pins boundary-spanners that link the health, community and social care sectors together. Most importantly they support patients with SP referrals, provide practical support in identifying and solving problems and build empowerment in patients. SP programs that included designated, paid navigator/link-worker roles were viewed by patients and GPs and other HPs as more effective. These workers should be included as essential to any future SP programs.

Social prescribing is a relatively new area which is constantly developing. The mixed results in this review highlight the uncertainty around the effectiveness of SP because of limited published peer-reviewed evaluations. Quantitative outcome studies are few, and some show significant positive results while others do not. This may be because the quantitative measures used for evaluation of outcomes tended to focus on health-related outcomes and may not adequately capture more

complex concepts such as community connectedness, social engagement, confidence, willingness to give and receive peer-support, and confidence to access services and self-determination and self-care. These hard to quantify concepts were captured in qualitative studies which predominantly reported positive outcomes for patients.

Our rapid literature review is limited by exclusion of the grey literature. Much of the knowledge may reside in the grey literature such as government or services reports, policy documents, masters or PhD theses or reports published in periodicals not indexed in the main medical literature databases. Therefore, this rapid literature review should be supplemented by a review of the grey literature.

Most studies reviewed by us originated in the UK, with some also from Ireland, the Netherlands and Spain. We found no empirical studies of SP evaluations, nor any literature reviews from Australia. This demonstrates that social prescribing as a concept is only now being considered for wider implementation. This is both a weakness and a strength. Implementing social prescribing in Australia will be difficult given the concept is unlikely to be widely understood. Indeed, even in the UK where social prescribing has been implemented for at least the last 10 years, studies published in 2018 and 2019 reported a lack of awareness of SP and a lack of recognition of SP by GPs and other HPs as being part of their role. However, the knowledge available from studies overseas is a considerable opportunity for Australia to learn from experience and to apply relevant knowledge to the local context.

Finally, if Australia is to adopt SP more broadly, trials or projects must be co-designed with all stakeholders while placing the needs of patients at the centre. Most importantly any implementation trials must embed in their design robust evaluations that use quantitative and qualitative methods to collect and interpret outcomes and impacts for patients, GPs and HPs, navigators/link-workers and community services.

RECOMMENDATIONS

1. The RACGP, CHF and the Australian Department of Health should work together in consultation with the National Social Prescribing Roundtable to include social prescribing in the 10 Year Primary Health Care Plan and the National Preventive Health Strategy.

2. Funding for the development, implementation and evaluation of SP models should be allocated in Australia.

3. The development of models should be co-designed with all relevant stakeholders.

4. Models of SP should involve a navigator/link worker whose role is clearly defined but flexible enough to enable creativity and individual tailoring of needed interventions for patients.

5. The role and personal skills and attributes of navigators/link-workers should be defined.

6. Developed models should undergo rigorous evaluation using robust implementation science and systems science approaches and mixed methods research (qualitative and quantitative) to ensure sufficient depth of understanding of what worked, why it worked and in what contexts, to support future scaling up and spreading of successful models.

7. That any models of SP developed in the Australian context consider model sustainability at the core of evaluations.

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