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### Article

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## Review

# 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

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### What is known about this topic

- People with long-term conditions can experience physical, psychological and social problems making the overall management of their health complex.
- Formal health services are unable to sufficiently address patients' psychosocial well-being.
- Social prescribing allows referrals to voluntary and community sector services, broadening the scope for supporting patients with psychosocial difficulties.

### What this paper adds

- The roles of health professionals and intervention facilitators are vital for legitimising social prescribing as a health management strategy.
- Participation in wider community-based activities has a positive impact on patients' psychosocial well-being.
- A methodologically flexible approach is required for assessing the impact of social prescribing as empirical evidence is limited.

### Abstract

The prevalence of people living with long-term conditions is increasing, accompanied by an increased expectation that patients will become more involved in self-management. Long-term conditions are associated with increased social isolation and poor physical and mental health. But there remains a gap in health provision between providing medical treatment and effectively addressing psychosocial well-being. One potential way of addressing this gap is by utilising social interventions which *link* patients from health services to community-based sources of support. However, the mechanisms involved in the delivery of interventions providing that *link* and their effectiveness remain unclear. This review adopted the methodological framework for conducting scoping studies, searching for both academic and grey literature on social interventions which *link* people from healthcare settings to a range of community and voluntary sector organisations. A literature search between May and June 2013, involving five electronic databases, hand searching of two journals and the use of Google search engine, identified seven studies relevant to the review question. In terms of key characteristics and mechanisms of the interventions, mental health conditions and social isolation were the most common reasons for referral to the interventions, and referrals were usually made through general practices. Almost all the interventions were facilitator-led, whereby the facilitator worked to identify and *link* participants to appropriate community-based resources. In regard to health and social outcomes and their cost-effectiveness, studies reported improvement to participants' psychological and social well-being as well as their decreased use of health services, although there were limited measures of participants' physical health outcomes. Interventions for *linking* patients from healthcare setting to community-based resources target and address psychosocial needs of participants. The review identified involvement of health professionals in aiding the referral of patients to the intervention and the role of the intervention facilitators as key components of the interventions.

**Keywords:** access to support, community, long-term condition, primary care, social intervention

## Introduction

Primary and secondary care services are under increasing pressure to meet the needs of over 15 million people in England who live with a long-term condition. Long-term conditions are chronic health conditions such as coronary heart disease or diabetes which are presently incurable and managed by medication and other therapies (NHS Confederation 2012). The notion of 'self-management' has become central to addressing the growing burden of long-term conditions, moving the day-to-day responsibility of managing health from the state to the individual, families and social groups (Von Korff *et al.* 1997, Wagner *et al.* 2001, Bodenheimer *et al.* 2002). The needs of people living with long-term conditions are often associated with increased social isolation impacting on their physical and psychological well-being, social functioning and their ability to 'self-manage' (MACC 2010, Morris *et al.* 2011). Responding to psychosocial problems is often beyond the capacity of health professionals whose support for patients focuses on diagnosis and health advice (Popay *et al.* 2007, Cawston 2011). Because of these limitations, health services struggle to effectively assist patients with psychosocial problems and the challenge of incorporating long-term condition management activities into their contemporary everyday lives (Clark *et al.* 1991).

Although recognition of psychological and social dimensions of long-term condition management is well documented, it has remained on the periphery of health interventions (Blickem *et al.* 2011). One possible means of addressing the gap between the demands of patients and the ability of traditional health services to deliver appropriate, holistic support would be to engage with the voluntary and community sector, where many health-related services such as exercise classes and support groups are provided (Wilson 1999). Furthermore, socially disadvantaged groups suffer disproportionately from chronic conditions, such as diabetes and heart disease (Eakin *et al.* 2002, Glover *et al.* 2004), but are often unable to make the most of available health provisions. Barriers people face are associated with access, language, cultural appropriateness, transportation, finance and health literacy (Glazier *et al.* 2006, Lamb *et al.* 2012). To overcome these barriers, it has been suggested that community settings may be a more appropriate setting for health support (Grant *et al.* 2000, Wagner *et al.* 2001). For instance, community health workers and peer supporters have been used to improve chronic disease care and health outcomes (Gary *et al.* 2003, Brownstein *et al.* 2005, Embuldeniya *et al.* 2013).

However, it is unfeasible for health professionals to keep up to date and to identify appropriate community-based resources for patients within the time constraints of a consultation (Graham 1995, Grant *et al.* 2000). Community and voluntary groups therefore often work in parallel, without explicit links with primary care.

Social interventions which facilitate access from health services to appropriate community-based resources have potential for longer term health benefits. For instance, social prescribing is an approach which has gained momentum over recent years (South *et al.* 2008) and is defined as:

...enabling primary care services to refer patients with social, emotional or practical needs to a range of local non-clinical services. (Brandling & House 2007, p3)

Accessing a broad range of community-based services is increasingly identified as having the potential to address the limited 'one-size-fits-all' approach to long-term condition management (Jerant *et al.* 2005, Trappenburg *et al.* 2013).

This review focuses on identifying key components and benefits of social interventions, including social prescribing schemes, which facilitate access from healthcare settings to a range of community-based resources for patients and service users to improve their health and well-being.

## Methods

This review identified the literature on social interventions which *link* participants from healthcare services to a range of community-based resources. To date, the literature on interventions of this nature is scarce and not conducive to systematic reviews. To examine the extent, range and nature of research activity in this area, scoping reviews are more suitable as they incorporate both published and grey literature. To guide our review process, we adopted Arksey & O'Malley (2005) methodological framework for conducting scoping studies. The framework suggests five stages within the review process: (i) *Identifying the research question*, where the authors identify all aspects of the research area, i.e. population, intervention or outcomes, that is most important to the review. They then iteratively focus and redefine the research question as they became more familiar with the existing literature; (ii) *Identifying relevant studies*, using a comprehensive strategy involving different sources, to identify and thoroughly map existing primary studies and reviews relevant to the research question; (iii) *Study selection*, whereby authors

develop a mechanism to screen and eliminate studies from the search results that do not address the central research question; (iv) *Charting the data*, which involves extracting and sorting information from individual studies, according to key issues and themes; (v) *Collating, summarising and reporting results*, to present an overview of all material reviewed. The flexible and reflexive nature of the five stages enabled this review to achieve a broad range of results using studies with various designs and quality.

### Stage 1: identifying the research question

For this review, a social intervention was defined as: *an intervention whose primary aim is to improve health and/or well-being by facilitating contact with other people, groups and community organisation*. The review therefore focused on the *linking* mechanisms of social interventions which facilitate access to a range of community-based resources.

#### Research question and objective

What are the types and benefits of *linking* mechanisms, adopted by social interventions to support people in healthcare settings access wider community-based resources?

In addressing the above question, the review aimed to consider the following objectives:

- 1 To identify key components of social interventions *linking* participants from healthcare settings to community groups and services.
- 2 To identify facilitators and barriers to delivering an intervention of this nature.
- 3 To identify key benefits provided to participants in relation to their health and well-being.

### Stage 2: identifying relevant studies

The literature search was initially conducted between February and September 2011. Because of problems with resources, the review took longer than expected to complete, and a second literature search was conducted between May and June 2013 to ensure that the papers included were up to date. On both occasions, the researchers used the following databases: Ovid Medline (1950 to current), EMBASE (1974 to current), ScienceDirect (1995 to current), CINAHL (1981 to current) and SpringerLink (1990 to current). Further studies were identified by searching reference lists of all articles and systematic reviews considered relevant, and hand searching the following journals: *Social Science and Medicine* and *Chronic Illness*. Grey literature was identified using the internet search engine Google.

A pilot scoping exercise of peer models of support and community interventions for self-management identified 11,887 papers. Through discussions with co-authors, the review was refined to focus on community interventions where individuals are *linked* from healthcare settings to a range of community resources. This was termed as either social intervention or social prescribing, yielding an initial 959 papers. Specified search terms (“social intervention” OR “social prescribing”) were used to search all databases during the initial search in 2011, while a slightly broader search strategy (social intervention OR social prescri\* AND health) was adopted when updating the literature search in 2013, to ensure that any potentially relevant studies were not excluded.

### Stage 3: study selection

Titles and abstracts of 2695 identified studies were assessed for relevance, and full text copies of 43 studies were obtained. RM and RLM applied the inclusion and exclusion criteria to their reading of titles, abstracts and full texts of papers (Figure 1).

#### Eligibility criteria

All studies, in which participants were referred from a health and social care setting to an intervention that aimed to support them in accessing a range of community-based resources, were eligible. Electronic journals were searched from their commencement to the present date for literature published in any country written in English. No restrictions were placed on study design or type of long-term health condition.

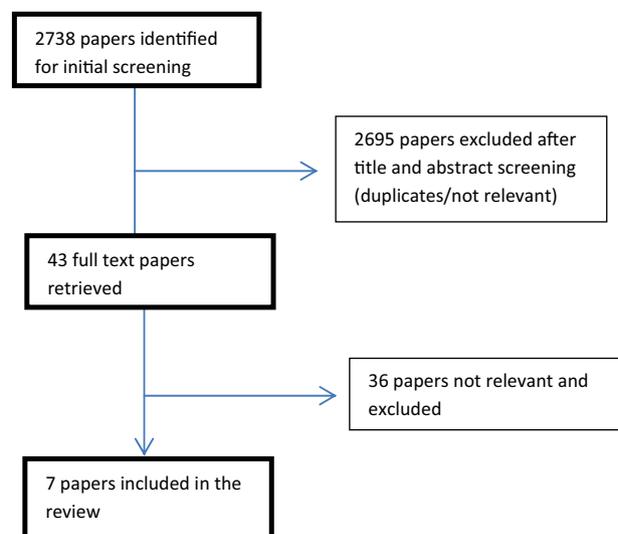


Figure 1 Review process.

After removal of duplicates and studies found to be irrelevant, a total of four peer-reviewed articles and three reports (including one feasibility study) were included (Figure 1).

#### Stage 4: charting the data

Data were extracted and charted using Microsoft Excel spread sheet by RLM. Recorded information consisted of named authors, year and country of publication, target population, inclusion and exclusion criteria, description of intervention, outcome measures and its principle findings (Table 1). The data extraction plan also included reported barriers and facilitators to delivering the intervention, while further ideas and themes such as the role of the health professionals and intervention facilitators emerged in the course of our familiarity with the literature.

#### Stage 5: collating, summarising and reporting results

The findings are presented in two ways: First, a tabulation of information regarding study population and intervention delivery and outcomes (Table 2). Second, key themes that emerged from the narrative accounts within the literature were used as sub-headings.

## Results

### Overview of results

A total of 2738 papers were identified through initial search of journal databases and grey literature. Full texts of 43 papers were retrieved and screened, and the findings from seven of these papers were included in the review. Three of the seven papers present findings from randomised controlled trials (RCT), two population-focused interventions (Andersson 1985, Clarke *et al.* 1992) and the other a referrals facilitator intervention within primary care (Grant *et al.* 2000). Three papers provide evaluations of interventions, one which is a cohort study (Grayer *et al.* 2008) and the other two are reports of social prescribing schemes (Woodall & South 2005, White *et al.* 2010). One other paper discusses findings from an action research project, aimed to develop a business case to seek further funding for a local social prescribing service (Brandling & House 2007).

Information extracted, charted and reported from the papers relates to intervention population, intervention delivery, health outcomes, social outcomes, impact on health services, facilitators and barriers, and cost-effectiveness.

### Target population

The interventions target a variety of different populations and conditions including mental health (Grant *et al.* 2000, Woodall & South 2005, Grayer *et al.* 2008, White *et al.* 2010), social isolation in the elderly people (Andersson 1985, Clarke *et al.* 1992) and frequent service users in general practices (Brandling & House 2007). Brandling and House (2007) found that for patients who had three or more hospital referrals in the last 12 months, the strongest indicators for suitability for social prescribing were poor social support mechanisms, psychological difficulties and vague or unexplained symptoms. Another study reported that most patients (36%) referred to the social prescribing health trainers (SPHTs) had a mental health issue, followed by lifestyle issues (21%) and social isolation (16%) (White *et al.* 2010). In the evaluation report of the social prescribing scheme called the community health advice team (CHAT), social isolation was also the most common reason for referral (Woodall & South 2005).

### Intervention delivery

Participants were recruited from general practices (Clarke *et al.* 1992, Grant *et al.* 2000, Woodall & South 2005, Brandling & House 2007, Grayer *et al.* 2008, White *et al.* 2010) and social care services (Andersson 1985). Referrals to the *linking* scheme were made by a variety of health and social care professionals. In one study, social workers/home help assistants visited and interviewed participants, and organised the intervention (Andersson 1985), while referrers in other interventions were usually general practitioners (GPs) providing less input in regard to its delivery (Grant *et al.* 2000, Grayer *et al.* 2008). Self-referral was encouraged in combination with referral from a health professional in two interventions (Woodall & South 2005, White *et al.* 2010). Clarke *et al.* (1992) recruited participants to their intervention using the findings from a survey of elderly patients from 12 general practices, without the involvement of a health professional.

All of the interventions except one were facilitator-led. Identification of appropriate community resources and ways to engage in the local community took place through group discussions by participants in the Ageing and Loneliness Project (Andersson 1985). Clarke *et al.* (1992) used 'lay community workers' situated in the community as opposed to a healthcare setting. The remaining five interventions used facilitators whose role was specifically developed as part of the intervention: graduate primary

**Table 1** Data extraction

| Authors, year, country   | Study aim and design  | No. of participants   | Inclusion criteria   | Exclusion criteria  | Intervention   | Outcome measures   | Principal findings  |
|--------------------------|---|---|--|---|--|--|---|
| Andersson (1985), Sweden | To strengthen the social network of participants based on three psychological concepts:<br>(i) availability of a confidant;<br>(ii) social comparison; and<br>(iii) personal control<br>RCT | Recruited:<br>$n = 108$<br>Intervention:<br>$n = 68$<br>Control: $n = 40$ | Women aged 60–80 years on a waiting list for senior citizen apartment and receiving less than 5 hours of home help (hypothesised as having problems in coping with loneliness) | Male, physical disability necessitating referral to institution | Participants combined into small neighbourhood groups (3–5 persons) to meet 4 times – the first and last times with the home help assistant present. A particular subject decided by the interventionists (residential area, role of retiree, social and medical services, summary of previous meetings) was discussed at each meeting | <p><b>1</b> Loneliness: UCLA Loneliness Scale-short version</p> <p><b>2</b> Social contact: number of contact with family and friends</p> <p><b>3</b> Alienation: Gardell and Weslander Meaninglessness Scale, Neal and Seaman's Powerlessness Scale</p> <p><b>4</b> Psychological resources: Gardell and Weslander Self-Esteem Scale and Inability to Trust Scale</p> <p><b>5</b> Health changes: psychosomatic complaints, subjective health, number of drugs, BP</p> <p><b>6</b> Participation in activities: organised activities (checklist) and leisure activities</p> | Intervention group: significantly less loneliness, lower systolic and diastolic blood pressure, felt less meaninglessness, had higher self-esteem, more social contacts and more ability to trust, participated more in organised activities and were more likely to have taken a vacation at the 6 month follow-up compared to baseline. Group reported less use of drugs for elevated blood pressure too<br>Control group: significantly less leisure activities than at baseline |

Table 1 (continued)

| Authors, year, country              | Study aim and design  | No. of participants  | Inclusion criteria  | Exclusion criteria | Intervention | Outcome measures  | Principal findings   |
|-------------------------------------|---|--|---|--------------------|--------------|---|--|
| Branding and House (2007), Bath; UK | To examine the feasibility of a social prescribing service in primary care services in Keynsham<br>Published report | Interviewees:<br><i>n</i> = 21<br>Patients:<br><i>n</i> = 11<br>Stakeholders:<br><i>n</i> = 2<br>Health Staff:<br><i>n</i> = 8 | High resource users/patients, community stakeholders and primary care health staff (GPs, practice staff and others) | Not specified      | N/A          | Thematic analysis generated the following common themes in the accounts of patients, staff and stakeholders:<br><br><ol style="list-style-type: none"> <li>1 Who needs social prescribing?</li> <li>2 Benefits of social prescribing</li> <li>3 Barriers to social prescribing</li> <li>4 Drawbacks of social prescribing</li> <li>5 Structuring a social prescribing service</li> <li>6 Previous experience</li> </ol> | Patients' accounts: can help people who are lonely or isolated, easily accessible, can reduce waiting time for a GP appointment and more personalised support (including counselling to expertise on residential homes/community transport) allowing people to discuss issues at a much deeper level. A repository of community and voluntary groups and a source of social support. Currently, patients reported not knowing where to get information and that the surgery was a central point to access it. However, standards and confidentiality of services, seeking help from an unknown source, the facilitator would have to be a link between themselves and the unknown to make it less daunting<br><br>Clinicians' accounts: useful for the lonely or isolated and some recognised the impact of physical or mental well-being on patients. Currently, services lack a comprehensive knowledge of local and national community and voluntary services or unable to distinguish between 'commercial' and genuine support' services |

**Table 1** (continued)

| Authors, year, country                          | Study aim and design  | No. of participants   | Inclusion criteria   | Exclusion criteria  | Intervention  | Outcome measures   | Principal findings   |
|---|---|---|--|---|---|--|--|
| Clarke <i>et al.</i> (1992), Leicestershire; UK | To test the effect of social intervention over 3 years among elderly people living alone to enhance their social contact<br>RCT | Recruited:<br><i>n</i> = 523<br>Intervention:<br><i>n</i> = 190<br>Control:<br><i>n</i> = 189 | Men and women aged 75 years and above and living within a defined geographical area (Melton Mowbray) | Living in an institution or warden-controlled accommodation | Individual package of support (social and social services visits, outings, home help, meals and wheels; financial benefits and pensions; housing-safety chains, gardening, decorating; medical appointments and liaison with GPs) | <ol style="list-style-type: none"> <li>1 Measure of activities of daily living</li> <li>2 Orientation score: measure of cognitive impairment/dementia</li> <li>3 Wenger's Loneliness Scale</li> <li>4 Wenger's modification of Morris and Sherwood Philadelphia Geriatric Morale Scale</li> <li>5 Tunstall Social Contact Score</li> </ol> | 50% of intervention participants declined intervention – they were more physically independent and had more social contacts than those who accepted<br>Intervention group: significant difference in perceived health status with the largest difference between 'fair' at baseline in 1985 to 'good' at follow-up in 1988. But no significant difference found between pre- and post-intervention scores for physical health status, Activities of Daily Living Index or change in physical health status. At follow-up, no statistical difference found in the median change to social contact, perceived loneliness or morale between control and intervention groups, and 88% of control group and 80% of experimental group who were independent in 1985 were still independent in 1988 |

**Table 1** (continued)

| Authors, year, country               | Study aim and design  | No. of participants  | Inclusion criteria   | Exclusion criteria   | Intervention   | Outcome measures   | Principal findings   |
|--------------------------------------|---|--|--|--|--|--|--|
| Grant <i>et al.</i> (2000), Avon; UK | To compare outcome and resource utilisation among patients referred to the Amalthea Project RCT | Recruited:<br><i>n</i> = 161<br>Intervention:<br><i>n</i> = 90<br>Control: <i>n</i> = 71 | Patients aged over 16 years with psychosocial problems who GPs thought might benefit from contact with voluntary sector services | Patients unable to complete questionnaires because of language difficulties, illiteracy or learning disability | Amalthea Project is a liaison organisation commissioned by GPs to facilitate contact between local/national voluntary organisations and patients referred by GPs during routine care | <p><b>1</b> Hospital Anxiety and Depression Scale (anxiety and depression)</p> <p><b>2</b> DUKE-UNC Functional Social Support Scale (confidant and affective support)</p> <p><b>3</b> COOP/WONCA Functional Health Assessment chart (pain, physical fitness, feelings, daily activities, social activities, change in health, overall health)</p> <p><b>4</b> Delighted-terrible faces</p> <p><b>5</b> Number of: contact with primary care, prescriptions, mental health referrals and referrals</p> <p><b>6</b> Cost of: contact with primary care, prescriptions, referrals and Amalthea Project facilitators</p> | <p>Intervention group: patients felt more positive about their health, life in general and ability to carry out everyday activities. There was a significant improvement in anxiety, but symptoms of depression benefitted equally from usual care and referral to the project. Intervention group had fewer referrals to other agencies, including mental health agencies, although they received more mental health prescriptions</p> <p>The total cost of care in the intervention group was significantly greater than in usual care</p> |

**Table 1** (continued)

| Authors, year, country                  | Study aim and design  | No. of participants   | Inclusion criteria   | Exclusion criteria  | Intervention  | Outcome measures  | Principal findings  |
|---|---|---|--|---|---|---|---|
| Grayer <i>et al.</i> (2008), London; UK | To evaluate the accessibility and effectiveness of graduate primary care mental health workers facilitating access to voluntary and community sector services for patients with psychosocial problems<br>Cohort study | Recruited:<br><i>n</i> = 146<br>Intervention:<br><i>n</i> = 108 | Patients 18 years old or over with psychosocial problems (common mental health problems – anxiety/depression, social problems – isolation, relationship, housing and financial difficulties) who were registered with 6 of the participating general practices | Suicide risk, psychotic symptoms, already in contact with mental health services, requiring specialist services, housebound, GP retracted referral or already receiving similar service | After conducting a semi-structured assessment of patient's psychosocial needs, the facilitators researched and advised patients about potential community resources to help meet their identified needs | <p><b>1</b> General Health Questionnaire-12 (mental and emotional distress)</p> <p><b>2</b> Clinical Outcomes in Routine Evaluation Outcomes Measure (global distress)</p> <p><b>3</b> Work and Social Adjustment Scale (impact of problem on work, home management, private and social life)</p> <p><b>4</b> Client Satisfaction Questionnaire (amount, effectiveness and quality of the service)</p> <p><b>5</b> Community Link Evaluation (service satisfaction and utilisation of community sector services)</p> <p><b>6</b> Primary care utilisation (number and types of consultations, prescriptions and referrals – 3 months post-baseline)</p> | Patients were moderately satisfied with the service according to the mean total score on Customer Satisfaction Questionnaire (24.18/32, SD = 5.54). Over half of the patients (58%) reported accessing at least one of the services suggested to them with almost two-thirds still attending the services at 3 months. Number of patients who scored 2 or more on GHQ-12 at baseline was halved at follow-up and there was a significant reduction in the recorded number of patient appointments with GPs and other practice staff ( $z = 2.90, P = 0.003$ ). Also a significant reduction in the mean number of consultations recorded as having a psychosocial aspect ( $z = 3.03, P = 0.002$ ) but an increase in the proportion of patients referred to mental health services by primary care |

Table 1 (continued)

| Authors, year, country                   | Study aim and design  | No. of participants   | Inclusion criteria   | Exclusion criteria            | Intervention   | Outcome measures  | Principal findings   |
|--|---|---|--|-------------------------------|--|---|--|
| White <i>et al.</i> (2010), Bradford; UK | To review the Bradford Health Trainer and Social Prescribing Service over 9 months, which aims to target hard to reach groups, increase healthy behaviour and uptake of preventative services, provide opportunities to gain skills and employment and reduce health inequality<br>Published report | Interviewees: $n = 22$<br>Patients: $n = 12$<br>Health staff: $n = 10$<br>Intervention: $n = 484$ | One of the following: mild mental health problem, socially isolated, relationship difficulties, financial/housing or employment problems, carer/parent in need of support, struggling to come to terms with disability/long-term condition, wish to adopt healthier lifestyle, struggling with bereavement | Severe mental health problems | Health trainers spend time listening to patients referred to their service and then help them to work out coping strategies or ways of dealing with their problems using a personal health action plan where appropriate | <p><b>1</b> Do the health trainers enable practices to offer better quality service to patients as part of the mental healthcare pathway?</p> <p><b>2</b> Do 'frequent practice attendees' make more appropriate use of GP practice after referral to a health trainer?</p> <p><b>3</b> Do the health trainers enable practices to more effectively signpost patients who need social support?</p> <p><b>4</b> Is the referral system between the practice and health trainers working well?</p> <p><b>5</b> Have the health trainers been successful in supporting patients make healthy lifestyle changes?</p> <p><b>6</b> How do patients view the service?</p> <p><b>7</b> Is there anything distinctive about the health trainers and the way they work that enables them to successfully support patients?</p> <p><b>8</b> What are the important factors determining the success/failure of the Health Trainer Social Prescribing Service?</p> | 68% of patients came from two of the most deprived quintiles and many unemployed (37%). Mental health issues were the most common reason for referral (general stress/anxiety, low self-confidence, social isolation) to the service. 48% of patients made a personal health action plan, 51% signposted to community services and 87% made progress. Patients became more physically active, involved in voluntary work and reported less visits to the GP and in some cases a reduction in their medication. Practice staff found the service to save them and GPs' time and saw it as an important part of the mental healthcare pathway to which patients can be referred by any primary care team members. Two main concerns reported by the health trainers were the long waiting lists of referrals and the number of inappropriate referrals to the service (usually because of severity of the mental health problem) |

**Table 1** (continued)

| Authors, year, country                 | Study aim and design  | No. of participants   | Inclusion criteria   | Exclusion criteria | Intervention   | Outcome measures   | Principal findings  |
|--|---|---|--|--------------------|--|--|---|
| Woodall and South (2005), Bradford; UK | To evaluate the development of the CHAT social prescribing scheme in 2 GP practices from the perspectives of service users and health staff<br>Published report | Interviewees:<br>n = 18<br>Patients:<br>n = 10<br>Health staff:<br>n = 8<br>Intervention:<br>n = 81<br>(January–September 2013) | Patients 16 years old and over with psychosocial issues and registered at one of the two participating general practices | Not specified      | The CHAT workers are referred patients with non-clinical needs by primary care health professionals to facilitate access to community groups or courses. They spend longer with patients than primary care staff are able to, offering 45 minute appointments to enable them to discuss issues affecting their health and explore a variety of solutions | <ol style="list-style-type: none"> <li>1 Understanding and expectations of CHAT</li> <li>2 Process and delivery of service</li> <li>3 Has CHAT delivered appropriate voluntary sector services?</li> <li>4 Communication and feedback</li> <li>5 Benefits for staff</li> <li>6 Benefits for patients</li> <li>7 Monitoring data frequency, source and reasons for referrals</li> </ol> | <p>Patients were referred for a range of psychosocial issues – mainly social isolation (39%) and housing issues (18.8%). 66% of referrals were female. 36% of patients were referred by GPs, 31% by nurses, 14% by health visitors and nurse practitioners, 12% were self-referrals and 1% by reception teams. CHAT was seen as a vehicle to provide contact with the community by a majority of patients, and the CHAT workers were cited as a fundamental aspect of the service. There were mixed perceptions to whether CHAT delivered appropriate voluntary sector services relevant to patient's needs, but key benefits reported by patients were: provision of qualification, alleviation of depressive symptoms, social inclusion, companionship and better awareness of local services. A number of barriers experienced by patients were associated with literacy and travel issues and often patients did not feel well informed of the service at the time of referral. Health staff appreciated the additional resource, the single point of contact and speed of processing the referrals</p> |

RCT, randomised controlled trial; GP, general practitioner; CHAT, community health advice team.

The Dartmouth COOP Functional Health Assessment charts/WONCA (COOP/WONCA charts) are the adaptation of the Dartmouth COOP Functional Health Assessment Charts for use in General Practices. They cover the domains of Physical Fitness, Feelings, Daily Activities, Social Activities, Change in Health and Overall Health, providing a generic, patient-oriented instrument.

DUKE-UNC Functional Social Support Scale measures a person's satisfaction with the functional aspects of social support. Intended for clinical use in general practice settings to identify people at risk of isolation, and in research to examine the interactions between social support and other determinants of health.

Table 2 Intervention characteristics

| Authors, year (intervention)  | Initial/baseline assessment | No. of intervention-related contacts  | Nature of support   | Support/follow-up period |
|---|-----------------------------|---|---|--------------------------|
| Anderson (1985)<br><i>Ageing &amp; Loneliness Project</i>               | 2 Home visits               | Up to 4<br>Length of visits not specified   | 1 Facilitator prepared 4 meetings for participants, but facilitated 2   | 6 month follow-up        |
| Clarke et al. (1992)<br><i>Social Intervention &amp; the Elderly</i>    | 1 Home visit                | Not specified (varied according to participant needs)<br>Length of visits not specified | 1 Support varied from arranging appointments and outings to making regular home visits and accompanying them to other organisations when necessary<br>2 Number of items of assistance per person ranged from 1 to 73 with a median of 3.5 | 1.25–2 years             |
| Grant et al. (2000)<br><i>Amalthea Project</i>                          | General practice            | 1.7 appointments per patient (mean)<br>Length of visits not specified                   | 1 Advice on local and national community resources  | 4 month follow-up        |
| Grayer et al. (2008)<br><i>Community Link Project</i>                   | General practice            | 1–2 appointments per patient<br>Length of visits not specified                          | 1 Advice on community resources<br>2 Accompanying patients to organisations   | 3 month follow-up        |
| White et al. (2010)<br><i>Social Prescribing Health Trainer Service</i> | General practice/home visit | 1–6 appointments per patient<br>Up to 1 hour visits                                     | 1 Advice on local organisations<br>2 One to one problem-solving<br>3 Developing personal action plans (48%)<br>4 Accompanying patients to organisations (27%)   | 9 months                 |
| Woodall and South (2005)<br><i>CHAT Project</i>                         | General practice/home visit | Up to 3 appointments<br>40 minute visits  | 1 Advice on local organisations<br>2 Home visits<br>3 Accompanying patients to organisations  | Not specified            |

CHAT, community health advice team.

care mental health workers (GPCMHWs) (Grayer *et al.* 2008), SPHTs (White *et al.* 2010), the CHAT workers (Woodall & South 2005) and Amalthea Project facilitators (Grant *et al.* 2000).

Tools used to *link* intervention participants to community groups and organisations are only reported by one study. The GPCMHWs used directories, telephone enquiries and other sources to identify appropriate services for patients (Grayer *et al.* 2008). Grant *et al.* (2000) describe the Amalthea Project as having been funded by the NHS to collect information about the voluntary sector, which was used to refer patients to local and national voluntary organisations. However, details of how the information was collected, organised and used to map patients' needs to voluntary organisations, were not provided. Similarly, White *et al.* (2010) and Woodall and South (2005) describe the role of the facilitators as continually keeping up to date with all the activities and services in the local community, but do not provide any description of the processes involved and the format in which the information was collected and utilised.

Two papers report the proportion of participants referred to other organisations and services. SPHTs signposted 51% ( $n = 247$ ) of patients to other organisations including literacy courses at colleges, volunteering and community allotments, line dancing and Citizen Advice Bureau (White *et al.* 2010). The GPCMHWs from the Community Link Scheme (Grayer *et al.* 2008) are reported to have signposted 88% ( $n = 95$ ) of their patients to community services. In the Amalthea Project, 97% ( $n = 71$ ) of participants were reported to have received an initial assessment and 80% ( $n = 58$ ) further contact and signposted to one or more community organisations (Grant *et al.* 2000). However, the exact numbers utilising community and voluntary groups were not reported. In the RCT conducted by Clarke *et al.* (1992), only 101 participants out of 260 randomised into the intervention arm received support, but there were no details of the groups and services they were referred to.

Only one paper reported the number of participants continuing to access organisations they were referred to by the intervention. Grayer *et al.* (2008) reported that nearly two-thirds of the 58% of participants, who accessed at least one service, were still attending a 3-month follow-up. Overall, it was unclear as to the extent to which participants in these interventions had found the community-based resources they were referred to, relevant to their needs. Grayer *et al.* (2008) reported client satisfaction to be moderate among intervention participants at the 3 month follow-up, with satisfaction being higher among participants who contacted services they were

referred to, than those who did not. The service evaluations of the two social prescribing schemes (Woodall & South 2005, White *et al.* 2010) alluded to qualitative findings of participant satisfaction, which varied from very positive (White *et al.* 2010) to quite mixed perceptions (Woodall & South 2005) of the appropriateness of community-based resources individual were referred to.

### Health outcomes

Two studies reported reduction in either depression (Grant *et al.* 2000), psychological distress or probable mental health problems (Grayer *et al.* 2008). Grant *et al.* (2000) reported that improvements in depression measured by the Hospital Anxiety and Depression Scale were not significantly different between the intervention and the control groups. However, as anxiety and stress were the most common reasons for referral to the project, the intervention focused primarily on addressing these issues rather than on depression. They, therefore, reported a significantly greater reduction in symptoms of anxiety in the intervention group than in the control group. Grayer *et al.* (2008) reported that four-fifths of patients were cases with 2 (+) scores for mental or emotional distress on the General Health Questionnaire-12 at baseline, which was reduced to half post-intervention.

Three studies reported changes in the number of medications taken by patients (Grant *et al.* 2000, Grayer *et al.* 2008, White *et al.* 2010). Patients reported a reduction in the number of medications they were taking, particularly antidepressants, as a result of seeing a SPHT because they felt more confident in dealing with social issues (White *et al.* 2010). Grayer *et al.* (2008) also found a reduction of 15.8% in the proportion of patients taking psychotropic medication who were supported by the GPCMHWs, according to their medical records. The intervention patients in the Amalthea Project, however, were found to have received more prescriptions for all drugs, particularly mental health drugs (Grant *et al.* 2000).

While the primary focus of all studies addressed psychosocial problems, three studies reported measuring physical health status. For instance, a majority of the patients (84%) in one study decided to focus on their mental health and well-being (White *et al.* 2010) and very little is reported on changes to patients' physical health status. Clarke *et al.* (1992) reported no statistically significant difference in mortality and changes in physical status measured by the Activities of Daily Living Index at 2 years. However, a significantly greater proportion of intervention participants (20%) perceived their health status to have

improved compared to control participants (11%). Grant *et al.* (2000) also reported a number of physical health outcomes in their trial. Using the COOP/WONCA Functional Health Assessment chart, they reported greater improvement in pain ( $P = 0.005$ ), feeling ( $P = 0.003$ ), daily activities ( $P = 0.001$ ), change in health ( $P = 0.03$ ) and overall health ( $P = 0.003$ ) in the intervention group than in the control group. However, statistical significance was not found for improvement in physical fitness on the assessment chart.

### Social outcomes

Reduction in social isolation and feelings of loneliness were reported by four studies (Andersson 1985, Clarke *et al.* 1992, Woodall & South 2005, White *et al.* 2010). Andersson (1985) found a statistically significant improvement in the frequency of social contacts ( $P < 0.05$ ) and number of leisure activities ( $P < 0.01$ ) in the intervention group participants. Loneliness, using the Wenger Loneliness Scale, and frequency of social contacts were also measured by Clarke *et al.* (1992). Although neither measure of loneliness was statistically significant, the median, minimum and maximum social contact scores for the intervention group increased compared to the control group. The DUKE-UNC Functional Social Support scale used by Grant *et al.* (2000) found no beneficial effect on intervention patients' perceived social support. Grayer *et al.* (2008) recorded 28.7% of their referrals to be socially isolated, but did not monitor changes to social isolation post-intervention.

Furthermore, White *et al.* (2010) reported that some participants took up volunteering in the community as a result of participating in the intervention. This was a socially significant outcome for a substantial proportion of their participants who were either unemployed (37%) or long-term sick/disabled (9%). Similarly, 74% ( $n = 79$ ) of referrals to the Community Link Service (Grayer *et al.* 2008) were unemployed and the intervention improved patients' work and social adjustment scores, from 25.63 at baseline to 21.94 at the 3 month follow-up. Increased social support, companionship, courage, motivation and awareness of local services were also identified as key achievements of interventions in the qualitative findings of studies exploring participants' experiences (Woodall & South 2005, White *et al.* 2010).

### Impact on contact with health services

The impact of interventions on health service use was variable. Grayer *et al.* (2008) reported a significant

reduction in the recorded number of patient appointments with GPs and other practice staff ( $z = 2.90$ ,  $P = 0.003$ ), mean number of consultations with a psychosocial aspect ( $z = 3.03$ ,  $P = 0.002$ ) and proportion of patients with prescriptions for psychotropic medicine (difference = 15.8%) at 3 months post-intervention. In the studies by White *et al.* (2010) and Woodall and South (2005), patients and practice staffs reported a reduction in primary care attendance, particularly from high consulters, and a decrease in social issues brought up in consultations. Grant *et al.* (2000), however, reported equal numbers of primary care contacts for control and intervention arms.

While Grant *et al.* (2000) reported fewer referrals of intervention patients to other services, including mental health services, Grayer *et al.* (2008) observed a significant increase in referrals to mental health services in the intervention group from 8% to almost 20%. The authors suggested that this increase was suggestive of an improvement in the detection and treatment of mental health in primary care as a result of the intervention. Similarly, the role of SPHTS was woven into an existing stepped care system, allowing referral between the scheme and other services within the mental healthcare pathway. Clarke *et al.* (1992) reported that contact with GPs remained the same, but highlighted a slight increase in patients' use of district nurses, home helps and home delivery of meals, which they related to changes in the provision of health and social services, and the wider socio-economic environment beyond the control of their study.

### Facilitators to implementing social interventions

In six of the seven studies, it was a health or social care professional, including GPs, social workers and practice nurses, who screened patients for suitability before referring them to the intervention for further assessment. The only study in which patients were recruited through direct contact by intervention staff reported a much higher percentage (50%) of participants refusing to take part in the intervention (Clarke *et al.* 1992).

All papers discussed the role of the facilitator and the relationships they established with participants. Key characteristics of facilitators identified in the studies were skills in tailoring activities to the needs and preferences of participants (Clarke *et al.* 1992), and the ability to encourage attendance and flexibility in their approach (Woodall & South 2005). Engagement of participants was achieved by the relationship facilitators developed with them through being flexible, trustworthy, empathetic and accessible (Andersson 1985, Woodall & South 2005,

Brandling & House 2007, White *et al.* 2010). Home visits to participants unable to attend appointments, and accompanying participants to community organisations, was an example of the flexibility demonstrated by SPHTs and CHAT workers in the social prescribing schemes (Woodall & South 2005, White *et al.* 2010). The SPHTs were purported to be skilled in communicating with the public, empowering people to come up with their own solutions to problems and providing personalised care (Woodall & South 2005, Brandling & House 2007, Grayer *et al.* 2008, White *et al.* 2010). Developing relationships with both clinicians and voluntary and community groups was also considered an important responsibility for the facilitators to develop the profile of the intervention (Woodall & South 2005, Brandling & House 2007, White *et al.* 2010).

The single point of contact provided by facilitators based within the general practice was reported by healthcare staff as making the referral process easy and straightforward (Woodall & South 2005). The physical placement of facilitators was important in ensuring effective engagement of healthcare staff, as staff at the general practice hosting the CHAT social prescribing scheme felt reassured that confidential information did not leave the practice upon referral of patients to the scheme (Woodall & South 2005). Adequately staffed interventions based within healthcare settings enabled facilitators in both the Amalthea Project and CHAT social prescribing scheme to see patients within 7 days of referral.

### Barriers to implementing social interventions

Barriers to the implementation of social interventions included: ambiguity of facilitator role when based in GP surgeries (White *et al.* 2010); inappropriate referrals to the services (White *et al.* 2010); clinicians' apprehensions about referring to voluntary organisations and the sustainability of services (Brandling & House 2007). Playing a dual role, SPHTs expressed conflicting pressure of integrating with the practice team and also continually engaging and keeping up to date with community groups and activities (White *et al.* 2010). Similarly, some SPHTs did not feel fully accommodated by primary care services in terms of provision of reasonable physical space and clinical supervision (White *et al.* 2010). Also, while one study reported reservations on the part of GPs in referring their patients to the intervention (Grant *et al.* 2000), another reported inappropriate referrals of patients with very severe mental health problems to the social prescribing scheme (White *et al.* 2010). Grayer *et al.* (2008) reported that 21 of 255 referrals made to

GPCMHW were inappropriate, with half of these referrals ( $n = 11$ ) requiring specialist service. The referral process was briefly addressed by Brandling and House (2007) who found two out of three practices unable to identify frequent attendees using their practice computer system to determine patients' suitability for social prescribing. Although two of the studies (Grant *et al.* 2000, Woodall & South 2005) provide encouraging evidence of efficiently responding to patients, the GPCMHWs saw patients after a mean waiting time of 22.18 days post-referral (Grayer *et al.* 2008). The SPHTs had so many referrals; there was an 8-week waiting list at one practice, while referrals were temporarily halted at another (White *et al.* 2010).

Engagement and retention of participants proved a challenge in some of the studies. Clarke *et al.* (1992) reported that over 50% ( $n = 130$ ) of participants in the intervention arm either refused, died or moved away before taking part. Similarly, drop-out rates of intervention participants were at 35% ( $n = 83$ ) and 41% ( $n = 28$ ) in the studies by Grayer *et al.* (2008) and Andersson (1985) respectively. However, all patients ( $n = 90$ ) in the intervention arm of the Amalthea Project attended baseline assessment and only 18% dropped out in the first month of receiving support. Clarke *et al.* (1992) explained that participants who refused the intervention were among those who were physically most independent, and perhaps perceived the intervention as irrelevant to their needs. A smaller proportion of participants who either moved away or died were on the other hand, highly dependent due to the severity of their illness and were already in contact with many services. Drop-out rates in the two studies targeting the elderly population (Andersson 1985, Clarke *et al.* 1992) were relatively higher than those targeting a younger population with a mean age between 40 and 50 years (Grant *et al.* 2000, Grayer *et al.* 2008, White *et al.* 2010). The elderly population, targeted by Clarke *et al.* (1992) and Andersson (1985) were less inclined to make lifestyle adjustments unless it was directly warranted by declining health, but were also often too restricted by ill-health to take part in activities outside the home. The rate of withdrawal in the study by Grayer *et al.* (2008) was higher than that in the study by Grant *et al.* (2000), although they both targeted a similar patient population in terms of age, gender, and clinical and social problems. Possible explanations for this are that patients referred to the GPCMHW service (Grayer *et al.* 2008) had a mean waiting time of nearly 23 days before their initial appointment, compared to a maximum of 7 days in the Amalthea Project (Grant *et al.* 2000).

Other patient-reported barriers included transport (Woodall & South 2005), literacy (Woodall & South 2005), confidentiality and disclosure in voluntary groups, and also appropriateness, availability and accessibility (including venue) of the activities (Brandling & House 2007).

### Cost-effectiveness

One study measured the cost-effectiveness of the project (Grant *et al.* 2000). In this project, they used a 'liaison organisation' called the Amalthea Project, to facilitate contact between patients in primary care with psychosocial problems and voluntary organisations. The mean cost of the intervention arm was significantly greater than the normal GP care (£153 compared to £133,  $P = 0.025$ ), but there were also significantly greater improvements in levels of anxiety, ability to carry out everyday activities, other emotional feelings, feelings about general health and quality of life.

### Discussion

Having used the scoping review framework, this review included seven papers representing both peer-reviewed and grey literature on social interventions which aimed to *link* participants from health and social care settings to community-based resources to improve their health and well-being. The findings highlight important aspects pertaining to the design and delivery of these interventions as well as patient- and service-level benefits gained.

Social interventions which propose to *link* participants from healthcare settings to community-based resources are also known as social prescribing. The interventions included in this review were all developed on the premise that tailored access from health services to wider community-based resources has the potential to address people's psychosocial problems. The interventions, therefore, generally targeted participants experiencing age-related loneliness, general anxiety and depression.

A key theme which emerged from this review was that in almost all the papers, it was found that health professionals played an important role in referring patients to the interventions and in introducing the notion of utilising community groups with aspects of health management. Perhaps, because of familiarity with the health professional and because the referral was likely to have been made within the context of regular care, this notion was legitimised from the patients' perspective. Proximity to health professionals (e.g. being located in the same building) was

therefore considered important for facilitators to develop and maintain an effective relationship with health professionals to achieve successful referrals.

The review highlights the pivotal role played by the facilitators in delivering the intervention. Facilitators were trained to screen and assess participants' needs and accordingly refer, and often accompany, them to wider community-based resources. Facilitators also needed to develop and maintain relationships with health professionals as well as community and voluntary groups.

Conducting assessments with participants ensured that discussions and identification of community resources were tailored to participants' needs and interests (Grant *et al.* 2000, Woodall & South 2005, Grayer *et al.* 2008, White *et al.* 2010). Thus, along with offering information about local groups and services, one intervention provided participants the opportunity to develop personal action plans (White *et al.* 2010). Supporting participants to find solutions to their problems was an important component of the facilitation process and enhanced the uptake of activities.

As the focus of all the interventions in this review was to address psychosocial issues, the impact of interventions on participants was measured and reported in terms of psychological and social outcomes. The most positive findings from the interventions were reduction in social isolation and increased social engagement for participants. Such interventions therefore have the potential to counteract the negative impact of long-term conditions on people's social lives. In terms of health benefits, there is evidence of a reduction in psychological problems reported as psychological distress, mental health problems or anxiety. Many of the interventions reported positive impacts on patients' use of medication and health services. Little attention was given to participants' physical health and there was mixed evidence about the effectiveness of the interventions on improving physical health status. It would have been interesting to know whether psychosocial benefits experienced by participants from engaging in community-based activities cascaded to have a similar impact on their physical health. Moreover, according to one study, potential participants' physical health can also determine their decision about whether or not to participate in the intervention in the first place, but as all the studies did not report on physical health status, it is difficult to draw any conclusions. In addition, the evaluations of interventions only measured short-term health impact. As social prescribing adopts a holistic approach to health and well-being, a longer follow-up period for the evaluation of health-related

outcomes may have alluded to more positive long-term benefits associated with community participation.

### Strengths and limitations

One strength of this review was the use of the scoping review methodology that enabled a review of a wide range of both peer-reviewed and grey literature. The iterative thematic analysis of the literature used to identify key components in the delivery of the interventions also further strengthens the review. A limitation of this review was the heterogeneity of the interventions and populations within the literature. There were also very few peer-reviewed papers that examined social interventions that aimed to *link* people from primary care to community-based resources. Similarly, two of the seven articles included in the review are comparatively old (Andersson 1985, Clarke *et al.* 1992), while one is based outside the United Kingdom. However, as this review focuses on the *linking* mechanisms of social interventions, the authors concluded that both these studies were relevant to the review despite their age and country in which they are based. Furthermore, they shared many similarities with social prescribing schemes, such as targeting socially isolated people with the aim of engaging them in their respective communities to improve their health and well-being. Finally, the articles included in the review did not differentiate between the impacts of different types of community-based resources participants were referred to.

### Conclusion

Drawing on resources within the voluntary and community sector is a potentially valuable way to support people with long-term health problems and has long been considered as a way to tackle health inequalities (Wagner *et al.* 2001, Marmot *et al.* 2010). The normality of participating in local activities and its associations with everyday life offers a potentially sustainable way for people to manage their health needs and reduce health service utilisation. However, it became apparent in the course of this review that very few social interventions, like social prescribing schemes, have been empirically evaluated. They were mainly identified through a grey literature search. A number of empirical studies were found on either arts on prescription or exercise on prescription, but these programmes did not connect participants to a range of groups which have been identified as a way to address the limits of current self-management support. Furthermore, of the four empirical studies, only

two were of interventions assessed by a RCT (Clarke *et al.* 1992, Grant *et al.* 2000), suggesting a limited evidence base for interventions of this nature.

Nonetheless, from the available evidence, this review shows some promising results which are worthy of further investigation. In particular, there appears to be some credible psychosocial benefits for patients with mental health problems who are referred to community activities. The review also highlights the *linking* mechanisms inherent in such social interventions. This could be used to inform further work for service providers who wish to take this approach to support people with long-term health problems.

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### Conflict of interest

None declared.

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