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Tensions and opportunities in Social Prescribing. Developing a framework to facilitate its implementation and evaluation in primary care: a realist review

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Title:

Tensions and opportunities in Social Prescribing. Developing a framework to facilitate its implementation and evaluation in primary care: a realist review.

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Abstract:

Background: Social prescribing (SP) involves linking patients in primary care with services provided by the voluntary and community sector. Despite growing interest within NHS primary care, it remains unclear how and under what circumstances SP might contribute to good practice.

Aim: To define 'good' practice in SP by identifying context-specific enablers and tensions. To contribute to the development of an evidence-based framework for theorizing and evaluating SP within primary care.

Design and setting: Realist review of secondary data from primary care-based SP schemes.

Method: We searched for qualitative and quantitative evidence from academic articles and grey literature following the Realist and Meta-narrative Evidence Syntheses-Evolving Standards (RAMESES).

We characterised common SP practices in three settings (general practice, link workers and community sector) using archetypes which ranged from best to worst practice.

Results: A total of 140 studies were included for analysis. We characterised common SP practices in three settings (general practice, link workers and community sector) using archetypes which ranged from best to worst practice. We identified resources influencing the type and potential impact of SP practices and outlined four dimensions in which opportunities for good practice arise: 1) individual characteristics (stakeholder's buy-in, vocation, knowledge); 2) interpersonal relations (trustful, bidirectional, informed, supportive, transparent and convenient interactions within and across sectors); 3) organisational contingencies (the availability of a predisposed practice culture, leadership, training opportunities, supervision, information governance, resource adequacy and continuity and accessibility of care within organisations); and 4) policy structures (bottom-up and coherent policymaking, stable funding and suitable monitoring strategies). Findings where synthesised in a multi-level, dynamic and usable SP Framework.

Conclusion: Our realist review and resulting framework revealed that SP is not inherently advantageous. Specific individual, interpersonal, organisational and policy resources are needed to ensure SP best practice in primary care.

Keywords: social prescribing, primary care, general practice, realist review

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How this fits in:

Despite widespread policy support and proliferation, evidence for the effectiveness of social prescribing is methodologically weak. Our realist review contributes to this much-needed evidence base by identifying 'how' and 'under what circumstances' this intervention might best be considered. These findings suggest that specific resources at individual, interpersonal, organisational and policy levels appear to condition the type and potential impact of social prescribing practices in primary care. Our resulting framework may prove particularly useful for end users when implementing, adapting and evaluating new or existing social prescribing initiatives.

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Main text:

INTRODUCTION:

Social prescribing (SP) involves linking patients in primary care with services provided by the voluntary and community sector (VCS)(1). Community-based resources may be aimed at addressing employment, food insecurity, housing or financial problems, as well as 'healthy lifestyle' interventions, such us cooking classes, weight management or exercise programmes(1). The link between the health and the third sectors is often provided by a 'social prescriber' (also called 'link worker'), whose role ranges from signposting to more intensive approaches involving patients' needs assessments, ongoing support and recommendations of relevant VCS services(2,3). Community-based activities are typically non-medicalised, provided locally and more likely to be culturally appropriate to the local communities(4).

Social Prescribing (SP) is being widely adopted in the UK, including at policy-level within the National Health Service (NHS) 'Long Term Plan'(5). Proponents of SP suggest it may contribute to address the social and behavioural determinants behind escalating burden of long-term conditions and health inequalities(6). It is also argued that SP could improve the efficient use of health and social care resources, by enhancing self-care and community support networks(7). However, recent systematic reviews have failed to prove consistent health, service utilization or cost benefits (8–13), in part due to the use of methods and research designs not suited for the evaluation of such complex interventions(14,15). Further research is also needed on the applicability of SP to specific areas of health need and contexts(16,17).

In this paper, we use a realist approach to synthesise current evidence on SP implementation and delivery. Previous realist reviews on SP have mainly focused on the role of link workers in developing connections between stakeholders(18) and identified some preconditions for enhancing patients' enrolment, engagement and adherence(19). However, no previous studies have investigated SP in the context of complex (and often conflicting) interpersonal (micro), organisational (meso), social and policy (macro) relationships, nor their influence on service delivery. Our review seeks to define 'good' practice in SP by identifying both context-specific enablers and tensions that may hinder efforts. Building on these findings we aim to synthesise a comprehensive, complexity-informed framework that could potentially be used for theorizing and evaluating SP in primary care and applied to areas of specific health need. The review is part of a broader empirical study and will be followed by a realist evaluation that will

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explore the applicability of the framework to type 2 diabetes prevention in populations at high risk(20).

METHODS:

The review followed the Realist and Meta-narrative Evidence Syntheses-Evolving Standards (RAMESES)(21,22). Realist reviews have the potential to extend beyond decontextualized analysis to explore and explain 'why', 'for whom', and 'in what circumstances' interventions might (or might not) work while following a systematic process(22). Explanations focus on mechanisms and the contexts required to trigger them, resulting in the development, refinement and testing of context-mechanism-outcome configurations (CMOCs) (see Box 1 for definitions). This theory-driven, evidence-based methodology is increasingly being used in health services research and the evaluation of complex interventions, such as, SP (23–25).

[Box 1]

As summarised in Box 2, the review followed four iterative stages: (A) Data searches, (B) Study selection and quality assessment, (C) Data extraction and analysis, and (D) Data synthesis and conclusions. A detailed description of the review methods has been included in Supplementary File (p1-3) and published elsewhere(20).

[Box 2]

The review was performed between September 2019 and May 2020, and was registered with PROSPERO (CRD42020196259). Throughout, we shared and discussed the study objectives and emerging findings with our stakeholder group, comprising health professionals, relevant members of the VCS and charitable organisations, and wider stakeholders (e.g., related to Clinical Commissioning Groups, Public Health England). Input from the stakeholders' advisory group proved particularly relevant at the later stages ('data synthesis and conclusions') to contrast and further refine our literature-based, theory informed propositions with their practical real-world experience.

RESULTS:

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The PRISMA diagram (Figure 1) illustrates the screening and selection process in our evidence synthesis. Of the 140 references included in the review, 40 used qualitative methods, 37 used quantitative methods, 36 were mixed-methods studies, 25 were literature reviews and there were also a SP research-based toolkit and an evaluability assessment study. The quality appraisal resulted in 21 papers being classified as highly relevant, conceptually rich and rigorous. The characteristics and quality of the studies included are further described in Supplementary Tables 1 and 2, respectively.

Study outcomes: SP archetypes

Following the analytic approach proposed by Papoutsi C and colleagues(26), the first stage of the realist analysis involved defining our outcomes: 'good' practice in SP. This was undertaken through the identification of SP archetypes across three settings: general practice, link workers and the VCS. Within each setting, we identified common SP practices, which were then grouped into 6 different evidence-based, theory-informed SP archetypes (two per study setting) (27,28). Archetypes in each setting were conceptualised along a spectrum (ranging from best to worst practice) in order to encompass the range of phenomena observed in the reviewed literature and the exposure of tensions within service delivery and implementation.

1. General practice: 'Holistic' vs 'Fragmental' SP archetypes

In a 'holistic' SP model, general practice workers understand, consider and integrate patients' social needs, and recommend community resources with the collaboration of other stakeholders (e.g., link workers). Within a 'fragmental' model, patients' needs (including 'non-medical' ones) are demarcated, triaged and allocated to appointed stakeholders (e.g., link workers). In this fragmental model, clinicians might become less aware of their patients' wider social and community context, and hence unable to provide integrated, contextualized, high-quality clinical care(29,30). We, therefore, considered 'holistic' SP best practice.

2. Link workers: 'Relational' vs 'Transactional' SP archetypes

Within a 'relational' model, ongoing and open-ended interactions allow link workers to assess, adapt and respond iteratively to patients' ever-changing needs and make appropriate recommendations. In contrast, within a 'transactional' model, the service to be exchanged (e.g., assessment of patients' needs and referral to community-based interventions) has pre-

established limits (e.g., a maximum of 6 session with a 'Wellbeing Coordinator'(7)) resulting in a lack of dynamism and flexibility that may hinder the co-production and customization of care provision(31,32). Therefore, we considered 'relational' SP best practice.

3. The VCS: 'Redistributive' vs 'Non-redistributive' SP archetypes

A 'redistributive' SP model involves a varied and sustainable local community network able to address the diverse and changing priorities and issues (including social and economic) of those patients in greatest need. Within a 'non-redistributive' model, the availability of SP services varies inversely with the need of the population served. Murphy et al, for instance, showed how uptake and adherence to an Exercise on Prescription scheme was systematically lower in deprived areas, as car ownership was a predictive factor for participation(33). SP interventions risk exacerbating health inequalities when access is contingent on certain social or economic conditions(34,35). 'Redistributive' SP was, therefore, considered best practice.

Contexts and mechanisms:

Using a realist approach, we explored how resources and conditions (mechanisms) available in specific individual, interpersonal, organisational and policy environments (context) make these archetypical practices (outcomes) more (or less) likely. Such an analysis enabled us to build broad sets of context–mechanism–outcome configurations (CMOCs) as represented in Figure 2 and described with data extracts in Supplementary Table 3. In the following section we expand on the identified contexts and mechanisms that facilitate 'holistic', 'relational' and 'redistributive' SP practices:

Individual characteristics:

People are not 'passive recipients of innovations'(36). Rather, they have values, preconceptions, allegiances, commitments that influence their response to innovations. If general practice workers have significant 'buy-in' towards SP and believe that link workers and VCS organisation can play a role in addressing patients' needs, it is more likely that they will engage in collaborative work and undertake a holistic SP(37–39). Likewise, link workers' and community stakeholders' previous life and work experience seems relevant in equipping them with valuable skills that facilitate SP delivery, such as knowledge of available initiatives,

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communication and a person-centric approach(40). Their level of vocation also increases the dedication and commitment towards the service(41).

General practice and link workers' degree of knowledge of patient's circumstances, the SP scheme and the local community organisations seems key in prompting informed discussions with patients and appropriate referrals(39,42–48) . Link workers' area of expertise may extend to welfare support services, which contributes to widen the scope of the intervention by potentially addressing socioeconomic concerns (instead of narrowly focusing the intervention on lifestyle issues)(2). Through the understanding and acknowledgement of the specific contexts and challenges that different stakeholders face, link workers seem to be able to 'negotiate the communication' across sectors and bring them closer(46).

 Interpersonal relations:

Trust is developed through sustained, unhurried and non-judgmental relationships, and seems to be a prominent mechanism for patient engagement, satisfaction and partnership sustainability(44,48). Personalised interactions allow the design of interventions tailored to patients' needs, enhancing service appropriateness(18,49). Although informed discussions with patients (concerning the referral process and the characteristics of the activities on offer) help accommodate expectations (18,50) and temper the 'fear of the unknown'(19), additional emotional and practical support is often needed to overcome (or cope with) the barriers that prevent uptake and engagement(47,48,50–54). Patients are more likely to participate when link workers contact them directly after receiving the referral, make regular follow up phone calls, or even come along with them to the planned activities(49,55). In the community, ongoing supervision by activity leaders is identified as a relevant factor promoting service users' adherence(56–60). Support from peers in similar circumstances also enhances patients' motivation by providing positive exemplars of progress and contributes to validate their personal experiences(61–63).

Across sectors, collaboration can often be threatened by lack of trust, especially where link workers and the VCS are not considered as an appropriate route to addressing patients' needs, or when one party interacts with the other for an ulterior and/or covert motive (also referred to as 'strategic action'(64))(65,66). Regular feedback to referring clinicians provides reassurance, encourages further referrals and improves the way in which the service is used(67,68). Additionally, if the initial contact with the SP programme is easy and simple for

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primary care workers (e.g. IT integration, lack of red tape, single point of contact, physical co-location), it is more likely that they will initiate collaborative work and share relevant information on patients' needs and background with link workers and community organisations(53,66). Practice staff should however be able to develop and refine their own referral system so that it can fit into existing practice routines and preferences. The system becomes convenient to the extent that it adapts to new challenges and is customized to workplace specificities(69).

<u>Organisational contingencies:</u>

The shared beliefs, priorities and values of the primary care team as a whole (practice culture) influence the attitude of individual members(68). Some primary care workers may be more strategically placed than others and, hence, have greater capacity to drive SP forward. The endorsement of the programme by GPs, for instance, gives credibility to the scheme and increases other professionals' engagement because of their *'professional and social standing'* (70).

Training opportunities within primary care organisations also increase workers '*capability'* to successfully incorporate SP into daily practice(66,71). In order for learning to be purposeful and applicable to day-to-day work, it should combine the concrete and practical experience with discussion with peers(8). An environment offering supervision and peer support allow link workers, for instance, to discuss difficult patients and learn from challenging situations(40,41). Training of the VCS staff equates to service quality by primary care stakeholders and increases their reliability on the service(19,65).

Across sectors, integrated information governance strategies and ongoing access to regular care providers seem key in enabling connected and coherent SP services(38,70). The availability of a named link worker connected to a geographical area (including the GP practices, patients and community organisations within its remit) facilitates the embedding of the service within the local primary care infrastructure(72) and the development of knowledge on (and engagement with) support services within the local community(70). SP users value knowing that support is available '*for when it is needed'*(55). This 'open door' nature of the SP service allow link workers to provide ongoing care, experience patients' changing circumstances and needs, and adapt relevant services accordingly(69).

Conversely, increased workload and time pressures in primary care lead health professionals to prioritise patients' specific reasons for consultation and/or incentivised activities, making it difficult to bring alternative community-based approaches into the conversation(47,73). Insufficient link worker staffing levels can lead to long waiting times to be assessed and subsequently pose a greater risk for non-engagement(74). Within a context of scarce resources, link workers may end up in prioritising immediate and urgent demands (*'fire-fighting' approach*(46)*)* and not have enough capacity for innovative community engagement initiatives or to support individuals with enduring and complex health and social needs(18). As for the VCS, resource availability should be aligned with service demand, otherwise SP activities may end up congested and/or less accessible (47,75). Access to the VCS is also determined by the cost(76), timing(62), location(44), variety(7) and social and cultural appropriateness(77) of the activities, and is both a condition for equity and a service quality component(78).

Policy context:

Bottom-up policymaking approaches tend to emphasise participation, making it easier for local communities to raise their concerns, prioritise goals and select the means of achieving them(79). Supporting policy and guidance that are receptive to local knowledge and boost existing capacities and autonomy tend to enhance ownership and the 'embedded' nature of change (68,72). Likewise, mutually reinforcing policy actions undertaken across different departments and agencies are more likely to create synergies towards 'holistic', 'relational' and 'redistributive' SP. This involves developing policy strategies targeted at strengthening each of the three settings (general practice, link workers and the VCS). Representatives from the VCS, however, often raise concerns over the '*unprecedented'* level of budget deficits for social care and community organisations, which affect the sustainability and capacity of their services (3,47). Similarly, general practice workers often highlight underinvestment in primary care and resulting increased workload as main barriers to appropriate service delivery(69,70). The often short-term nature of contracts and the constant threat of funding withdrawal or reduction lead to significant turnover of the workforce(66) and the activities being delivered(3) with a consequential negative impact on stakeholders' expectations and commitment towards the service (57,69).

Payments to SP providers, as well as service evaluation, often rely on monitoring metrics that should prove relevant (so they can be used to improve local services and not just to enforce

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the contract), flexible (so they can be negotiated and adapted to local circumstances and emerging approaches) and feasible (so they can be attained and provided without excessive administrative burden). However, Lowe T. et al provide evidence on how the process of generating data to meet the performance indicators can distort practice, be resource intensive, stressful and encourage 'creaming' of clients (working with certain patient groups considered easiest to help)(80). Further studies highlight that excessive administrative burdens may create challenges particularly for smaller organisations and those with limited capacity(81,82). Where payments are tightly linked to the achievement of predefined targets (e.g., targets related to health service utilisations, numbers of people recruited onto the programme, the speed with which referrals are seen, etc.) and provider success defined by such metrics, it is more difficult to develop trustful relationships across sectors(82) and use data for reflective learning and discussion(83).

Synthesis: developing a multi-level, dynamic and usable SP Framework

The proposed Framework for Theorizing and Evaluating SP in Primary Care is shown in Figure 3. It comprises three settings (general practice, link workers and the VCS) and the previously described 20 mechanisms (Buy-in, Vocation, Knowledge, Trust, Bidirectional and Informed interactions, Support, Transparency, Convenience, Predisposed practice culture, Leadership, Training opportunities, Supervision, Information governance, Continuity of care, Resource adequacy, Accessibility, Bottom-up policymaking, Policy coherence, Stable funding and Suitable monitoring) in four interconnected contexts (individual, interpersonal, organisational and policy).

The four interlinked arrows highlight the dynamic nature of the framework by illustrating how different mechanisms may relate to each other and mutually reinforce one another within and across contexts. The existence of a 'social ethos of SP' within the practice (referred to as 'predisposed practice culture' at the organisational level), for instance, seems to foster acceptance and enthusiasm amongst general practice workers ('buy in' at the individual level)(68). Similarly, general practice workers' understanding of the scheme ('knowledge' at the individual level) is enhanced by the availability of accessible and updated directories of VCS resources ('information governance' at the organisational level) and regular feedbacks from link workers ('bidirectional and informed interactions' at the interpersonal level)(65).

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The overlapping of layers represents the adaptation of and interaction between the different mechanisms over time. Primary care workers' 'knowledge', for instance, is nurtured through the accumulation of episodic encounters that provide clinicians and link workers with relevant personal information about the patient and their context (44,71,84). The range of activities available through SP ('accessibility' at the organisational level) may also widen over time, as link workers iteratively adapt existing resources to patients' needs and develop new activities where deficiencies are identified (85). The progression of the Framework over time cannot, however, be predicted in advance and remains necessarily open. We have used indistinct shadows to represent its nonlinear nature and potential unintended consequences.

DISCUSSION

Summary of findings

Building on the reviewed literature, this study has developed a new framework that allows for the characterisation of different (and often conflicting) SP practices and the identification of conditions and resources across settings (general practice, link workers, VCS) and systems (micro, meso, macro) that contribute to 'good' SP practice in primary care.

Strengths and limitations

Our framework has been developed systematically, following rigorous methodological guidance for realist reviews as described in the RAMESES quality standards(21,22). The iterative nature of the realist approach has enhanced the scope and practical relevance of our framework, by incorporating relevant studies that would have not been identified through predefined search strategies. In addition, the consideration of different and interrelated settings and systems has allowed the analysis of SP practices in all their complexity and divergence, potentially increasing the applicability and transferability of findings. Limitations include being reliant on the evidence that is available. Some studies narrowly focused on intervention effectiveness (and magnitude of effect), without providing enough detail on how these results had been achieved, and therefore could not contribute to programme theory development or refinement.

Comparison with existing literature

Previous studies have explored the role of SP in enhancing patients' wellbeing and collaboration across sectors, and identified relevant preconditions to intended

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outcomes(3,7,18,50,66,70). Our review extends beyond lists of barriers and facilitators to critically understand what 'good' practice in SP looks like and how and in what contexts this might be best achieved. Our paired archetypes reveal that SP is not inherently advantageous. In the absence of specific individual, interpersonal, organisational and policy resources, interventions could adversely lead to the fragmentation of primary care services, stakeholder disengagement and greater health inequalities.

We have identified relevant individual characteristics, such as the degree of 'buy in', vocation and knowledge, that influence not only stakeholders' attitude towards SP, but also the way in which they use, consolidate or even modify the intervention. Our review and resulting framework also highlight that SP does not happen in a vacuum, but it is rather developed, sustained and shaped by a dynamic set of interactions across and within sectors. Mutual reliance and the development of trustful, supportive and ongoing relationships seem central to the success of SP interventions(2,44,47,65,69,86). This idea of interdependence conflicts with the prevalent representation of SP programmes as unidirectional and linear referral pathways towards patient's 'activation' or 'independence'(3,87). Our triangle-shaped framework conceptualises SP as a network comprising multiple kinds of relationships (therapeutic, administrative, professional) that potentially link stakeholders (general practice workers, link workers, members of the VCS) with one another in an overarching, integrated and ongoing purpose of caring for the patient being referred. Our findings could help to explain why evaluative approaches that conceptualize and measure effectiveness in terms of reduced service utilization (as a proxy for patients' activation(88)) often fail to prove the value and potential impact of SP.

The identified meso and macro level dimensions highlight that neither SP nor the individuals who deliver and use the service can be studied effectively in isolation from the complex organisational, social and policy context in which they are embedded. Previous studies on SP have consistently recognised relevant organisational resources for effective service implementation, such as the availability of a vibrant VCS, information governance arrangements, or a conducive institutional ethos(47,68,70,89). In our case, the input from the stakeholder's group and the additional literature search enabled us to expand on these dimensions by also characterising and incorporating higher-level policy contexts, priorities and decisions ('bottom-up policymaking', 'stable funding', 'suitable monitoring' and 'policy coherence') that shape SP delivery.

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Implications for Research and/or Practice

This study generates an actionable framework for SP implementation and evaluation, readily available for end users and policymakers. It builds on a burgeoning body of evidence on complex-system approaches to evaluation, by identifying outcomes and potential actions across systems and at different levels(14,15,90). We anticipate that this evidence-based, theory-informed framework could prove particularly useful for the design and roll-out of new SP interventions, and to identify relevant features (at micro, meso and macro levels) that could facilitate optimisation of existent programs. The framework is not intended to be used as checklist when implementing or evaluating SP programmes. Rather, we believe it could guide, inform and potentially predict (but never in a deterministic way) 'localised' and 'contextually sensitive' implementation and evaluative efforts.

The multi-level framework arising from this realist review can also be usefully tested, refined and expanded by applying it to specific patient groups. The researchers involved in this study are already exploring the applicability of the framework in populations at high risk of type 2 diabetes, and where existing preventative interventions have low uptake(20). We strongly encourage other research groups to explore the applicability of the framework in different settings and areas of health need, and to adapt and extend it as appropriate.

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Figure caption/legend:

Figure 1. PRISMA Flow Diagram

Figure 2. Context–mechanism–outcomes identified in the literature reviewed

Figure 3. A Framework for Theorizing and Evaluating Social Prescribing in Primary Care

Box 1. Definition of realist concepts

Context: Refers to the background of a programme. Pawson suggests that contexts can be understood and illustrated diagrammatically as a set of concentric ovals surrounding the intervention. He distinguishes the following 4 contextual layers: 1) individual characteristics and capacities of the various stakeholders involved; 2) interpersonal relationships between the stakeholders; 3) the institutional (or organisational) rules, norms and routines local to the intervention; 4) the wider social, cultural, policy infrastructure. Some aspects of these contexts might enable (or hamper) particular mechanisms to be triggered.
Mechanism: Refers to the resources and conditions, which operate in particular contexts to generate outcomes of interest. They are the 'agents of change', usually hidden and sensitive to variations in the context.
Outcome: Refers to the intended, unintended or unexpected impact or behaviours resulting from the interaction between mechanisms and contexts.
Context-mechanism-outcome configuration (CMOC): It is a hypothetical explanation that the intervention works (or does not work) (O) because of the action of some underlying mechanisms (M), which only come into operation in particular contexts (C).

Box 2. Realist Review Components

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Data searches	We carried out two distinct literature searches, under the guidance of a specialist librarian. The strategy and databases for the _main search_ are specified in the Supplementary File (p4-8). In addition to database searching, we manually retrieved citations contained in the reference lists of the articles included in the review and searched for grey literature resources. The main search was reproduced by a second reviewer (YM) for consistency and discrepancies were solved by discussion. Based on the retrieved literature, we identified policy-level mechanisms (including drivers and contractual agreements) as in need of further exploration and refinement. We undertook an _additional search_ focused on these specific areas by manually retrieving articles from the reference lists of relevant studies.
Study selection and quality assessment	We included all studies published in English, French or Spanish on interventions linking adults (>18) in primary care with VCS organisations, regardless of study design (quantitative, qualitative and mixed methods) and including all SP related outcome measures. We excluded studies focusing on specific (sub)populations with special needs (e.g., learning disabilities, sensory impairment, cognitive impairment). We assessed the relevance, rigour and richness of all studies included. For the main search, study relevance was accorded upon the involvement of link workers within the SP intervention. For the additional search, we classified studies as highly relevant if they explored the organisational and policy environment within which interventions were commissioned and delivered. We also assessed the methodological strength of included studies using study design specific validated tools (rigour), and the extent to which that source could contribute to our developing CMOCs (richness). See Supplementary File (p9) for more details on the quality appraisal criteria used.
Data extraction and analysis	The main reviewer developed conceptual diagrams and preliminary codes during an initial familiarisation stage, which focused first on the richest sources. The manual coding framework was then transferred into NVivo 10 (QSR International) and further tested and refined by applying it to the rest of the papers (deductively) or modifying it as needed to incorporate new findings coming up in the data (inductively). The analysis involved switching reflexively from data to theory as required and continued under a realist and explanatory logic: we first defined study outcomes using SP archetypes, and then identified how they responded to conditions and resources (mechanisms) available in specific environments (contexts). This analysis was repeated throughout the review, enabling us to build broad sets of context–mechanism–outcome configurations (CMOCs).
Data synthesis and conclusions	We inferred and wrote down explanations of why certain SP practices occur (abductive reasoning), which involved comparing and contrasting data from different studies (juxtaposition of data sources). Where findings across studies differed, further data were sought to identify explanations for why these differences occurred (reconciliation of disconfirming data). When findings across sources were consistent enough to develop patterns, they were incorporated into CMOCs (consolidation of sources of evidence). We further refined our CMOCs by re-scrutinising those already-included studies classified as highly relevant, conceptually rich and rigorous. COMCs were then synthesised in an initial framework that was further developed through iterative discussions within the research team.
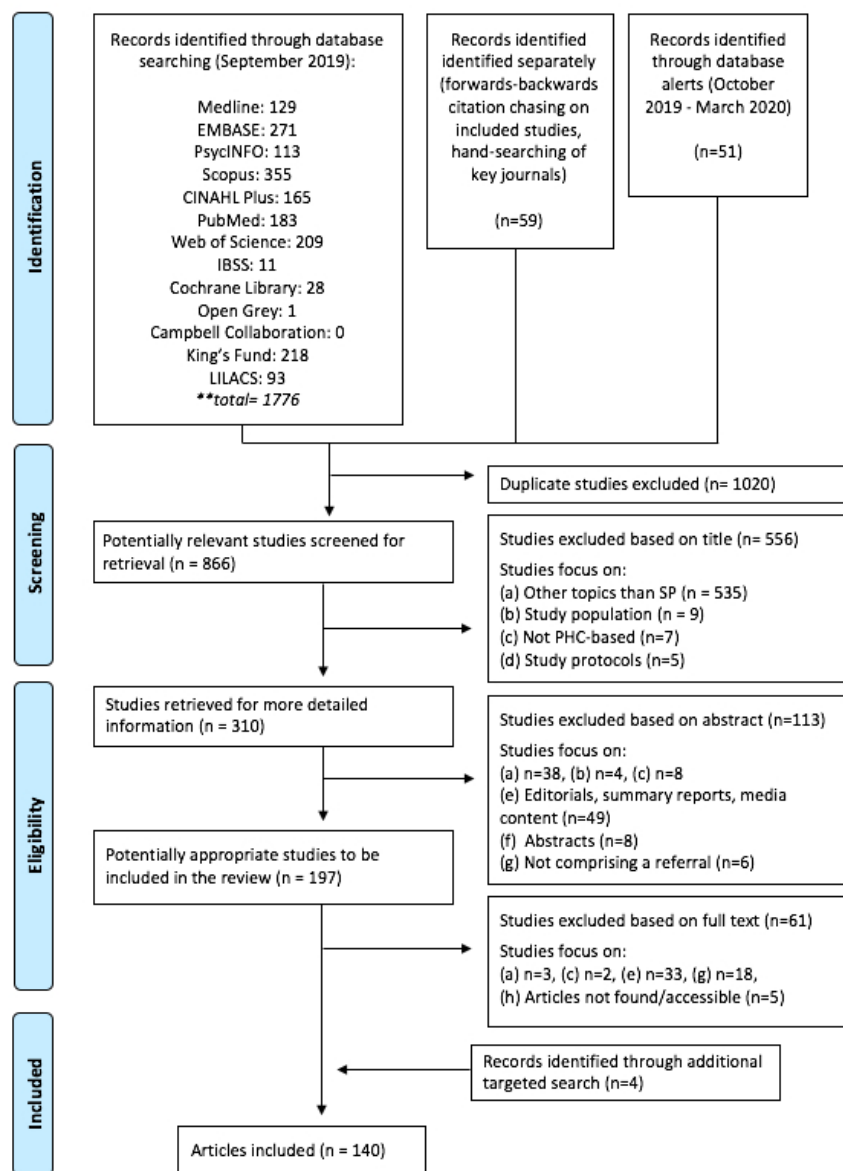
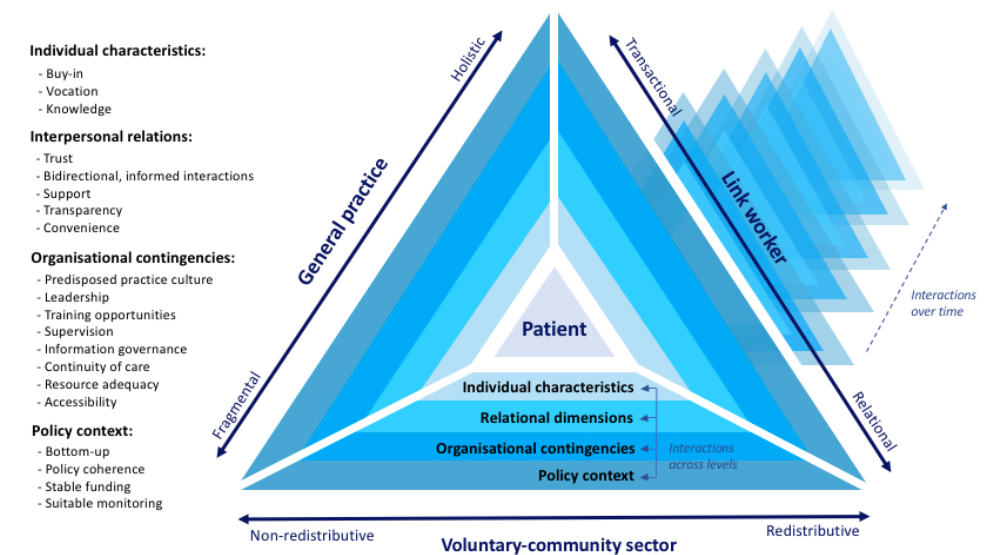Figure 1. PRISMA Flow Diagram

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Figure 3. A Framework for Theorizing and Evaluating Social Prescribing in Primary Care
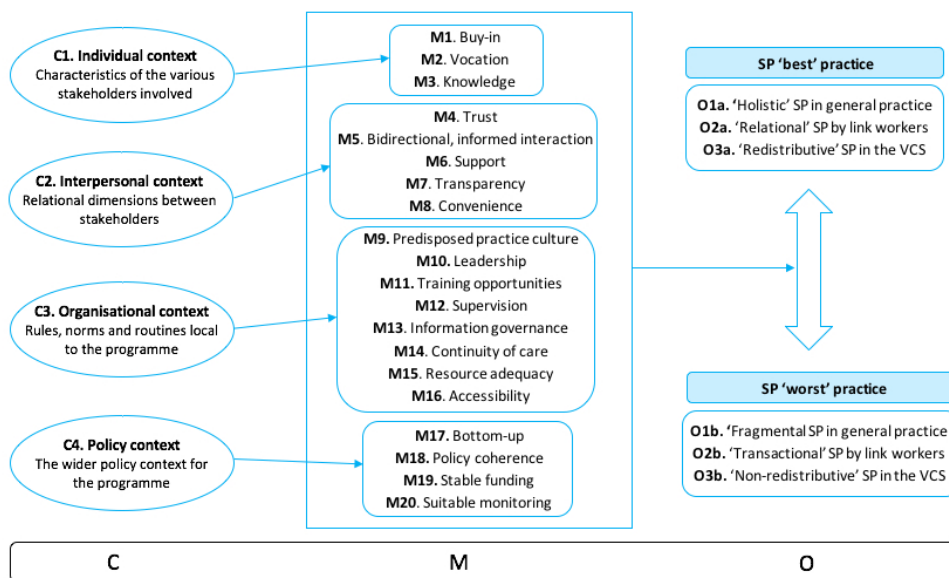
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Figure 2. Context–mechanism–outcomes identified in the literature reviewed

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