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A comparison of social prescribing approaches across twelve high-income countries☆

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A R T I C L E I N F O

Keywords:
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A B S T R A C T

Background: Social prescribing connects patients with community resources to improve their health and well-being. It is gaining momentum globally due to its potential for addressing non-medical causes of illness while building on existing resources and enhancing overall health at a relatively low cost. The COVID-19 pandemic further underscored the need for policy interventions to address health-related social issues such as loneliness and isolation.

Aim: This paper presents evidence of the conceptualisation and implementation of social prescribing schemes in twelve countries: Australia, Austria, Canada, England, Finland, Germany, Portugal, the Slovak Republic, Slovenia, the Netherlands, the United States and Wales.

Methods: Twelve countries were identified through the Health Systems and Policy Monitor (HSPM) network and the EuroHealthNet Partnership. Information was collected through a twelve open-ended question survey based on a conceptual model inspired by the WHO's Health System Framework.

Results: We found that social prescribing can take different forms, and the scale of implementation also varies significantly. Robust evidence on impact is scarce and highly context-specific, with some indications of cost-effectiveness and positive impact on well-being.

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Conclusions: This paper provides insights into social prescribing in various contexts and may guide countries interested in holistically tackling health-related social factors and strengthening community-based care. Policies can support a more seamless integration of social prescribing into existing care, improve collaboration among sectors and training programs for health and social care professionals.

1. Introduction

Growing evidence suggests that the social determinants of health, the conditions in which people live, work, and age [1], play a major role in shaping health outcomes ([2–4]; WHO, n.d.). These determinants range from education and housing conditions to social inclusion and social support. Social isolation, defined as a lack of social contact or support (CDC, n.d.) significantly increases the risk of premature death from all causes (Ibid) as well as the risk for several physical and mental conditions such as high blood pressure, anxiety, depression, and cognitive decline [5,6]. Loneliness and social isolation are a growing public health concern and exacerbated by the COVID-19 pandemic, where repeated and prolonged lockdowns and shifts from in-person to online interactions deprived individuals of the fundamental need for human connection [7].

Traditional disease-centred models of healthcare focus predominantly on medical interventions and less often address the social determinants of health. However, it is increasingly recognised that medical care should take a more holistic perspective of patients and their environment and focus more on health and well-being promotion rather than just treating illness [8]. To achieve this, health care systems must shift toward a more integrated, equitable and person-centred care model [4, 8–11]. The need for better-integrated services to address the increasingly complex health needs of the population requires addressing the social determinants of health that impact an individual's ability to live a healthy life [12].

In response to the call for a person-centered care approach that addresses social determinants, social prescribing has received recent attention. The practice of social prescribing, based on the biopsychosocial model of health and illness, attends to all domains of health including physical, psychological, and social well-being. While there is no consistent, international definition of social prescribing, a common definition given by the Kings' Fund is "social prescribing, also sometimes known as community referral, is a means of enabling health professionals to refer people to a range of local, non-clinical services care" (The King's Fund, 2020). Others have refined this definition to differentiate social prescribing as "a mechanism for linking patients with nonmedical sources of support within the community" [13]. Ultimately, the goal of social prescribing is to help people with a variety of social, emotional, lifestyle-related or practical issues. Social prescribing can be also seen as a facilitator for self-determination, intended as a person's ability to make their own choices concerning their health and wellbeing. Many programmes are geared toward enhancing mental and physical welfare (The King's Fund, 2020). If implemented correctly, social prescribing could potentially deliver cost savings by reducing the utilization of primary care while improving patient health and well-being [14,15]. In addition, as the main characteristic of social prescribing is to connect patients to programmes that are often already accessible in their communities, there is a potential to make a difference at rather low cost. Indeed, numerous studies have assessed the social prescribing model's cost-effectiveness and provided evidence of long-term savings [16–18]. In 2023, the National Academy for Social Prescribing (NASP) has released 13 evidence publications affirming that social prescribing holds the potential to reduce costs and alleviate pressure within the healthcare system [19].

Other studies have assessed the effects of social prescribing on patient outcomes. Research has indicated that social prescribing may enhance psychological health, lessen anxiety, and raise the perceived quality of life [20]. However, this evidence is highly context-specific.

While the definition of social prescribing is still evolving, it is generally thought of as a process within a healthcare system that uses a formal pathway to refer patients to locally available resources, though different models exist. Some social prescribing schemes use a link worker (also known as community navigator) who works together with health professionals to refer individuals to local sources of support while other schemes use general practitioners for referrals. Social prescribing schemes can address various needs, including healthy behavior promotion, social support, and economic needs through connections to programs or activities offered by government agencies, volunteer or community sectors. This may include a referral to a housing program or to activity groups that include for example art making (substantial evidence shows that arts can improve wellbeing, WHO, 2019), garden and culinary activities, group learning, healthy eating guidance, and a variety of sports (Fig. 1).

Social prescribing has been gaining more attention in recent years. The first International Social Prescribing Day took place in 2019, recognising the importance of community involvement, dedicated support from workers, and the promotion of cross-sector partnerships. However, it is not a new concept. The NHS in England has used social prescribing since the mid-1980s and 1990s. However, the practice was mostly performed in local areas and remained largely unacknowledged by national NHS agencies (The Kings' Fund, 2020). Although different countries may have less formal definitions of social prescribing than England, this paper focuses on the practice in countries in which social prescribing is emerging. The twelve countries discussed in this paper, identified in two phases (see Methods) are Australia, Austria, Canada, England, Finland, Germany, Portugal, Slovak Republic, Slovenia, the Netherlands, the United States and Wales. Table 1 highlights some general characteristics of the countries included.

This article aims to add to the literature on global developments of social prescribing by providing a detailed description of the scope and breadth of programmes, supply/workforce, financing, and early evidence on outcomes across the twelve countries.

Source: 1) World Bank, 2021; 2) UKpopulation.org; 3): GovWales; 4) OECD

Notes: CHE: Current Health Expenditure; SHI: Statutory Health Insurance; NHS: National Health Service

2. Methods

This article originated from a research proposal pitch through the Health Systems and Policy Monitor (HSPM) network (https://eurohealthobservatory.who.int/monitors/health-systems-monitor/network). This was followed by desk research to identify relevant social prescribing programmes globally. Seven countries were identified through this search (Australia, Canada, England, Germany, Portugal, the Netherlands, and the United States). For the seven countries identified, country experts and members of the Health Systems and Policy Monitor (HSPM) network and experts on social prescribing beyond HSPM were asked to participate in a survey and agreed to collaborate between February and June 2022. In May 2022, five additional countries (Austria, Finland, Slovenia, Slovak Republic, and Wales) were identified through a dialogue with the EuroHealthNet Partnership. Experts from these countries agreed to participate, which provided a more extensive overview of social prescribing practices. This resulted in a sample that covers different geographies (Australia, Europe, North America) and different types of health systems (tax-financed, health-insurance based, and mixed systems).

The data presented in this paper was collected through a survey containing twelve open-ended questions (Table 2).. Following the conceptual model inspired by the WHO's Health System Framework (WHO, 2007. The questions aimed to contribute to the literature on social prescribing by focusing on five main topics:, 1) Framing social prescribing and links to the health system; 2) Scale and scope of social prescribing programmes; 3) Workforce; 4) Financing; and 5) Evaluation and evidence.

Only countries with established social prescribing practices in pilots and programmes were included. To ensure the relevance of the selected programmes, given the lack of a universal definition of social prescribing programmes, the survey included a working definition of social prescribing. Email exchanges with local experts were also conducted to identify initiatives at the country level.

Responses were submitted for all countries,and collated in one table in Excel to facilitate analyses. Responses were supplemented with a review of the available literature, as well as with findings from the EuroHealthNet Country Exchange Visit on Social Prescribing in May 2022 in cooperation with the National Institute of Health Doutor Ricardo Jorge in Lisbon, Portugal.

3. Results

Table 3 presents an overview of the results, based on the five topics identified in the conceptual framework.

Each topic will be discussed in further detail in the following sections.

3.1. *Framing social prescribing: definition; relationship with other efforts to address social determinants of health; links to the health care system*

Overall, most of the countries surveyed had no common definition of social prescribing. However, an often-used definition in England and Australia is the King's Fund definition of social prescribing (see Introduction), and Austria is currently adopting a working definition inspired by Polley et al. [17]: 'Social prescribing is a means by which healthcare professionals seek to address the non-medical causes of ill health with non-medical interventions'. Social prescribing in Wales is defined as 'connecting citizens to community support to better manage their health and well-being' (Rees et al., 2019).

When asked to provide distinctions between programs that address social determinants of health and social prescribing, most countries noted that there were distinctions, but these two concepts were interconnected. Programs to address social determinants were generally thought of on a broader scale and over the entire life course. Additionally, programs addressing social determinants of health typically involved other government policies and government priorities at the population level (England, Finland, Slovakia, and Wales). In comparison, social prescribing programs occur at the individual level and involve personalized plans that take into consideration the needs of individuals and the availability of resources in the community (Canada, Germany, the Netherlands, Portugal, the US). Other countries noted additional components of social prescribing including having a systematic process (Austria) as well as coordination across multiple sectors (Australia, England, Germany, Portugal, Canada, the US).

While a clear, individualized process that involves self-determination is an inherent component of social prescribing, the entry point into the process can vary. For example, this process starts within the health care system for some countries (Austria, Canada, US), such as in the primary care setting or in the hospital setting. However, in the Netherlands, this process is organized through the municipalities because individualized programs focused on social determinants are considered prevention activities and are mainly funded through the Social Support Act and the Youth Act. Similarly, in Slovenia, certain social needs (such as available social assistance services) are addressed through a network of social care centres, which operate under the Ministry of Labour, Family, Social Affairs and Equal Opportunities, while the "community health approach" (Slovenia's terminology for social prescribing) is organized and financed through its health sector. Last, the third sector (defined as non-governmental and non-profit-making organizations or associations, including charities, voluntary and community groups) in Wales provides a starting point for the social prescribing process [21].

Fig. 2 illustrates how (and if) social prescribing is linked to the health system. In Australia, Austria, Canada, England, Germany, Portugal, and Slovenia, social prescribing programmes are in primary and community care. In Germany, social prescribing programmes are also available in secondary outpatient care. In the Slovak Republic and the United States, social prescribing can take place at the primary, secondary and inpatient levels. In Finland, it is mostly in in primary care. In Wales, social prescribing can be defined as a mixed model, where the third sector plays a key role, in addition to local authorities and primary care [21]. In the Netherlands, social prescribing is outside of the health system, as it is linked to the work of municipalities.

3.2. *The scale and scope of social prescribing: which services are available and for whom?*

The scale of implementation of social prescribing across the twelve countries varies significantly. It ranges from pilots (e.g., Australia, Austria, Canada, Finland, Portugal, the Slovak Republic, the US) to initiatives implemented in many municipalities across the territory (e.g., Germany, the Netherlands), to a wider country-wide roll-out (e.g., England, Slovenia, Wales, the US). Countries are also looking at how to understand the place of social prescribing in policy, for example an ongoing feasibility study of non-clinical prescribing n Australia being conducted for the Commonwealth government.

In general, the needs that can be addressed by social prescribing range from structural determinants (food, housing), psycho-social support networks (eg. bereavement groups, patients' self-help

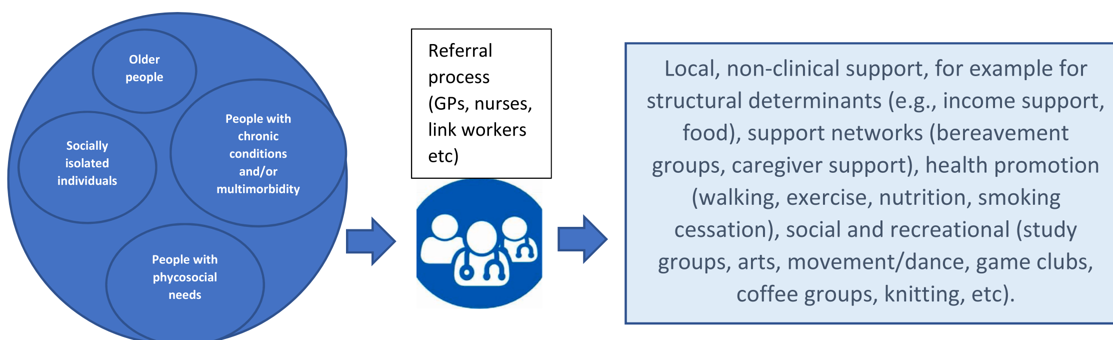

Fig. 1. Examples of social prescribing: for whom, how, and what.
Source: Authors' own

organisations), health promotion (e.g., walking), and social and recreational supports. Although most countries include programs for social support, these services are uncommon in US social prescribing schemes. Services that individuals can be referred to in all countries include those in almost every sector, including government programs, voluntary, community and social enterprise groups (see Fig. 1), although services can vary between local areas.

Overall, social prescribing programs have been considered appropriate for individuals with a wide range of conditions, but each specific program usually involves a targeted population. In Canada, England, the US, and the Slovak Republic, social prescribing can be used for individuals with various attributes or needs (e.g., with long-term conditions; mental health issues; lonely or isolated). One example of such programmes is GreenSpace in Nottingham and Nottinghamshire (UK), which aims at improving people's mental health through nature-based activities and green groups, projects, and schemes. People are usually referred by a link worker based at a GP practice or another primary care professional. The programme is available to everyone. It will offer specific initiatives to support some of the most underserved groups that have been disproportionately impacted by the coronavirus crisis, including people with long-term conditions, particularly older people, Black, Asian, and Minority Ethnic (BAME) communities, and those without access to gardens, balconies, or green space. [22]

Still, there may be differences in regional conditions and priorities of the participating institutions. In Austria, AmberMed is a Viennese primary care centre for persons who are not covered by Austrian health insurance. The project aims to address various social, economic, political, medical, and psychological stresses in a holistic and patient-centered way through the Social Prescribing Project. AmberMed now comprises over 50 volunteers, including GPs, specialists, physical therapists, and psychotherapists. Three full-time social workers took on the role of link workers. Patients undergo an initial assessment with the social workers after joining at AmberMed. Then, follow-up visits are scheduled, or a (return) referral to the extended link network is made if necessary. There, the patient and the contact points or offers relevant to the particular case are discussed in detail. On-site native-language counselling or case-related interpreters are provided to all patients. In the Viennese social and service landscape, this process is complemented by long-term networking by project managers and link workers to reduce and anticipate bottlenecks. (https://amber-med.at/)

Current programmes in Australia assist those with specific health or social conditions such as mental illness, cardiovascular diseases or isolation, while the pilot in Finland targets adults with specific health and social conditions. Other programs in England and the US focus on individuals who use care frequently regardless of their medical conditions. Beyond medical conditions and utilization, some programs focus on individuals with socioeconomic risks. For example, programmes in Slovenia mostly target vulnerable or at-risk groups, such as the economically disadvantaged, and in Germany, programmes are implemented especially in deprived urban areas. Pilots in Portugal focus on communities with a high proportion of migrants. Most social prescribing in Wales relates to adult populations, but approaches for young people are emerging, particularly in England and the US. Additionally, programs in the US focus on individuals with particular health behaviours such as individuals who smoke.

Table 2
Survey questions.

1.	Social prescribing can exist in many different forms and names. Is there a common definition for social prescribing in your country?
2.	How widespread is social prescribing in your country? (e.g., only pilots, adopted nationally)
3.	Does social prescribing target specific groups or is it available in general?
4.	Which (non-clinical) services are offered?
5.	What is the role of care navigators/link workers?
6.	Who is tasked with SP (e.g., is there a formal role for care navigators/link workers)? Do they require specific training/qualifications?
7.	Which professionals (GPs, nurses, social workers) can initiate the referrals to the care navigator/ link worker?
8.	Is social prescribing linked to a specific part of the system? (e.g., Primary care, emergency)
9.	From which source is social prescribing funded? And how are Social Prescribers remunerated?
10.	Are evaluation schemes for social prescribing in place?
11.	Is there evidence on impact?
12.	Did COVID-19 play a role in the implementation of SP? Is it being used/ promoted more during the pandemic?

3.3. *Workforce: the role and training of care navigators/link workers; referral process*

There are differences in link workers among the countries surveyed. A specific role for link workers/social prescribers was only reported in a few countries. For example, in Canada and the US, some pilots have funding for a dedicated link worker role while other pilots use existing staff (e.g., nurse, nurse practitioner, settlement worker, health promoter, social worker, etc). In Portugal, the link worker is a social worker. A few programs are using trained volunteers as link workers, for example in the US. In England, social prescribers are now additional roles in primary care (i.e., distinct from other roles such as nurses, health care assistants, etc.); the NHS Long Term Plan has committed to adding 1,000 new social prescribing link workers and that at least 900,000

Table 1
Characteristics of the twelve countries surveyed.

	Australia	Austria	Canada	England	Finland	Germany	Portugal	Slovak Republic	Slovenia	The Netherlands	United States	Wales
Type of health system	Public/ private state/ territory	SHI	NHS	NHS	NHS	SHI	NHS	SHI	SHI	SHI	Public-private mix	NHS
Population size (2022) [1]	25.9 million	9.0 million	38.9 million	56.4 million[(2)]	5.5 million	84.0 million	10.3 million	5.4 million	2.1 million	17.7 million	333.2 million	3.2 million [(2)]
% of population over 65 years of age (2022) [1]	17%	20%	19%	19% (UK value)	23%	22%	23%	17%	21%	20%	17%	21% [(3)]
CHE as % of GDP (2021) [1]	10.6% (2020)	12.1%	11.7%	11.9% (UK value)	9.6% (2020)	12.8%	11.2%	7.3% (2020)	9.1%	11.2%	18.8% (2020)	11.9% (UK value)
Social spending (Public, % of GDP, 2022 or latest available) [4]	20.5% (2019)	29.4%	24.9% (2020)	22.1% (2021,UK value)	29.0%	26.7%%	24.6%	19.1%	22.8%	17.6%	22.7% (2021)	22.1% (2021,UK value)

Table 3
Overview of survey results across the twelve countries.

	Australia	Austria	Canada	England	Finland	Germany	Portugal	Slovak Republic	Slovenia	The Netherlands	United States	Wales
Links to the health system	primary and community care				Primary, care	Primary and secondary outpatient care	Primary and community care	Primary, secondary and inpatient levels	Primary and community care	Outside the health system	Primary, secondary and inpatient levels	Primary care, local authorities and third sector
Scale	Pilots			Wider country-rollout	Pilots	Wider country-rollout	Pilots	Pilots	Wider country-rollout	In different municipalities	Wider country-rollout	Wider country-rollout
Scope	Individuals with specific health or social conditions such as mental illness, cardiovascular diseases or isolation	Individuals with specific health or social conditions (e.g., loneliness) with some differences based on regional conditions and priorities of participating institutions	Individuals with specific health or social conditions	Individuals with specific health or social conditions	Individuals with specific health and social conditions	Mostly in deprived urban areas	Mostly migrant populations	Individuals with specific health or social conditions	Mostly vulnerable or at-risk groups, such as the economically disadvantaged	Individuals with specific health or social conditions with some differences based on regional conditions and priorities of participating institutions	Individuals with specific health or social conditions orwith certain health behaviors	Mostly adult population
Workforce (who does the referrals?)	Mainly GPs	All healthcare professional	Any clinical or interprofessional health provider	Several professionals in social prescribing connector schemes with integrated working	All healthcare professionals	GPs and specialists	GPs, family nurses or psychologists	All healthcare professional	GPs, primary care paediatricians, primary care nurses, social workers at social care centres, and workers at employment centres	GPs, practice and district nurses, social workers	GPs, health insurance companies, or individuals themselves	All healthcare professionals, and individuals themselves
Financing	Philanthropic and charitable organisations, and some state government funding	Funding calls from the Ministry of Social Affairs, Health, Care and Consumer Protection	Some funding from the provincial Ministry of Health and other funding from private donors/ foundations	NHS England pays 100% reimbursement of the salary of a full-time social prescribing link worker	Ministry of Social Affairs and Health	Health insurances are the primary funder for link workers' salaries	Link workers' salaries are funded through the budget allocated to the FHU and supported by the municipality	N/A	Funding can be from the Ministry of Health and/or municipalities, the National Health Insurance Fund, or the Ministry of Labour, Family, Social Affairs and Equal Opportunities	Municipalities	Grants or research funds	Most link workers are employed on fixed-term contracts paid for by the integrated care fund, GP cluster funding, health boards or local authorities

(*continued on next page*)

Table 3 (*continued*)

	Australia	Austria	Canada	England	Finland	Germany	Portugal	Slovak Republic	Slovenia	The Netherlands	United States	Wales
Evaluation & evidence	Schemes for the evaluation of social prescribing projects are developing	The project call was evaluated externally	Evaluations are in place for each pilot or programme	Government, individual providers and independent think tanks have funded recent evaluations of social prescribing	Evaluations are in place	N/A	Developed a research group	Currently no evaluation schemes	Currently developing an evaluation platform for social prescribing services	Limited evaluation in place	There are evaluations of individual projects or pilots both at the federal and state level, and clinical trials	Schemes for the evaluation of social prescribing projects are developing

Notes: N/A- not available; GP- General Practitioner; FHU- Family Health Unit

people will be referred to social prescribing by 2023/2024 [23]. Link worker roles in Wales are most commonly based within the third sector, GP practices or local authority venues, and in some cases in universities.

In general, no specific training/qualifications are required for care navigators/link workers. However, in Austria, as part of a pilot program, health professionals underwent a 4-day training to introduce them to the concept and process of social prescribing (including information on health determinants, and motivational interviewing). In Slovenia professionals who serve as link workers have specific training in health promotion and disease prevention. In Wales, a national competency/capability framework and training programme is being developed.

Many countries noted that health care professionals were the point of referral into the program. In the Netherlands, GPs may refer someone as well as practice nurses (from GP practices), district nurses, and social workers. This is also the case in Finland, where all health professionals initiate referrals. . In the US, connections to link workers are made through GPs, health insurance companies, or the patient themselves. In Germany, both GPs and specialists can refer individuals. In Austria and the Slovak Republic, all healthcare professionals can do referrals, in addition to Wales, where individuals can also self-refer to programmes. In Australia, referrals may come from GPs, allied health or others such as community referrals, and patients may also self refer into support.This is similar to Canada, where programmes tend to have an open referral structure where any clinical or interprofessional health provider can make a referral, though there is a strong emphasis on encouraging the clinicians to do so. Also, in Slovenia referrals can be made by GPs, primary care paediatricians, primary care nurses, social workers at social care centres, and workers at employment centres. In England, in current social prescribing connector schemes operating through integrated working, members of multi-disciplinary teams can all refer to the link worker, as can social workers, allied health professionals, local authorities, hospital discharge schemes, police and fire services, pharmacies, job centres, housing associations and other voluntary, community, and social organisations. In Portugal, referral into the social prescribing program takes place at the GP office at the Family Health Unit (FHU), after evaluation by either the GP, the family nurse or the psychologist. The situation is reported and described in an internal platform and the patient is referred to the link worker. Then the social worker from the FHU, together with available partners in the community, finds the best response for the patient.

3.4. *Financing: sources of funding and workforce remuneration*

Different funding mechanisms have been exploited for social prescribing programs such as philanthropic funding, government funding, health insurance reimbursements, and research funds. In Australia, funding comes from a mixture of philanthropic and charitable organisations, as well as some state government funding. Similarly, in Canada funding sources differ based on the project with some funding from the provincial Ministry of Health and other funding from private donors/foundations. In Austria, social prescribing is funded by funding calls from the Ministry of Social Affairs, Health, Care and Consumer Protection. Similarly, in the US, most of the funding has been obtained through grants or research funds for randomized control trials, testing the effectiveness of social prescribing. Generally, health insurance companies do not provide these services in the US, although state Medicaid Managed Care Organizations have started to pay for link workers.

Some countries pay for link workers through a salaried position. Starting in 2019, NHS England has paid 100 % reimbursement of the salary of a full-time social prescribing link worker for every 13,000 patients. With this, link workers became salaried employees of primary care practices. In Germany, health insurances are the primary funder for link workers' salaries (e.g., for Hamburg/Billstedt four large health insurance funds are partners). In Slovenia, health-related NGOs are funded by the Ministry of Health and/or municipalities, while primary health care services, including health promotion centers, are funded by the

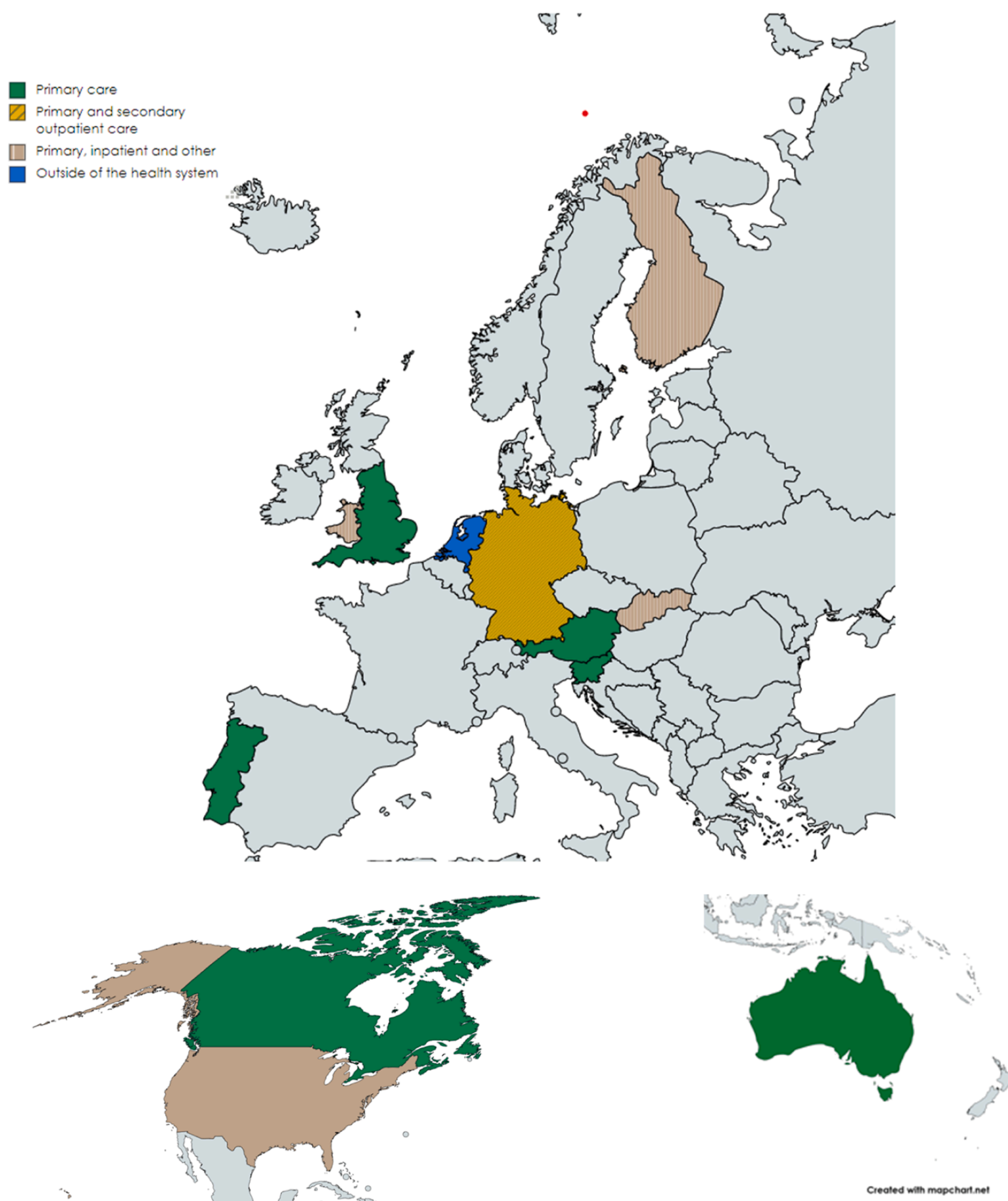

Fig. 2. Social prescribing links to health systems in the twelve countries surveyed.
Source: Authors' own

National Health Insurance Fund. Workers in the social sector are funded through the Ministry of Labour, Family, Social Affairs and Equal Opportunities. In Wales, most link workers are employed on fixed-term contracts paid for by the integrated care fund, GP cluster funding, health boards or local authorities [21]. The pilot project in Lapland, Finland, is funded by the Ministry of Social Affairs and Health. In Portugal, link workers' salaries are funded through the budget allocated to the FHU and supported by the municipality, requiring no additional remuneration. Similarly, in the Netherlands, link workers are funded exclusively by municipalities.

3.5. Evaluation & evidence: evaluation schemes for social prescribing and evidence on the impact

In Australia and Wales, schemes for the evaluation of social prescribing projects are developing, although overarching coordination is limited [24]. Similarly, Slovenia is currently developing an evaluation platform for social prescribing services at the National Institute of Public Health, and in Portugal, a research group has been formed at the National School of Public Health, NOVA University Lisbon. In Canada and Finland, evaluations are in place for each pilot or programme. In particular, during the year-long Rx community pilot in Ontario, CA, the 11 participating Community Health centres provided over 1,100 clients with about 3,300 social prescriptions, and found that: 1) Clients reported improved mental health and a greater ability to self-manage their

health, reduced loneliness and a stronger sense of community; 2) Social prescribing is beneficial to healthcare providers in terms of boosting client well-being and reducing repeat visits. Providers understood the importance of the care navigator role and saw a need for extra support where it wasn't there; and 3) Through co-creation, social prescribing facilitated deeper integration between clinical treatment, interprofessional teams, and social support, as well as increased community capacity. For example, clients were encouraged to become volunteer Health Champions and help organise activities.

In terms of impact, several countries reported that evidence is limited and there is a lack of systematic research evaluating social prescribing outcomes (Australia, Canada, England, Finland, Portugal, US, Wales). In Germany and the Netherlands, there is some evidence that social prescribing reduces healthcare consumption and is cost-effective, although it is difficult to generalize the conclusions to all social prescribing [25]. Austria reported early qualitative indications of the benefits of social prescribing, e.g., relief of physicians' work burden, and patient satisfaction. In the US, past work has focused on the feasibility and acceptability of link workers in different patient populations.

Finally, one survey question focused on the COVID-19 pandemic and its potential impact on social prescribing activities. While information is scarce, most countries expect that COVID-19 both challenged the progress of social prescribing while at the same time emphasising the importance of these services. In Canada, for several projects, social prescribing was stalled during COVID-19 due to clinical and health staff being redeployed. However, other projects transitioned to more virtual support and telephone check-ins. Similarly, in Australia services switched online and largely continued to operate as near-normal. In Wales, COVID-19 disrupted the previous social prescribing models but demonstrated 'remote' forms of social prescribing are an important and core feature that should be continued for many years. In Slovenia, which has been actively developing the social prescribing network for several years, activities in the health promotion centers almost ceased during the COVID-19 pandemic, as the workers were temporarily relocated to provide COVID-19-related services, while mental health support services developed considerably, driven by increased mental health needs during the COVID-19 pandemic. In Austria, the "Social Prescribing" project is part of "Health Promotion 21+" (2021) and "Agenda Health Promotion" (2022-2024), which focused on health promotion with the aim of strengthening healthy living environments and reducing the health and psychosocial impacts of the Covid 19 pandemic. The COVID-19 pandemic only had a limited impact on the scaling up of social prescribing in England, as implementation was already planned in 2019. Collectively, the COVID-19 impact demonstrated that social prescribing is necessary and allowed for innovation in delivery methods that will persist beyond the pandemic.

4. Discussion

In recognition of the importance of the social determinants of health in health promotion and person-centered care, the momentum to implement social prescribing schemes is growing internationally. Within the context of social prescribing research, it is important to recognize the dynamic nature of this field. A substantial amount of information can be found in the grey literature or remains unpublished. This paper adds to the existing literature on social prescribing by providing a detailed overview of the organization and implementation of social prescribing across twelve countries in Australia, Europe, and North America.

This paper, in line with several other publications, found that social prescribing offers a patient-centered, personalized approach to addressing the wider social determinants of health through a range of different activities and emphasizes a partnership between individuals and support schemes to improve health and wellbeing. It allows health professionals to act on some of the root causes of ill health and to capitalise on (or benefit from) diverse resources already available in the community. While a consistent definition of social prescribing may be lacking, all programmes in the countries surveyed had common elements such as an individualised approach and referrals to community resources and activities.

Social prescribing caters to different groups, such as people with long-term conditions as well as socioeconomically vulnerable groups, and offers a wide range of services for a diverse set of needs. Social prescribing encourages cooperation between individuals, families, local and federal governments, as well as the business, nonprofit, and community sectors. When implemented properly, it enables individuals to self-manage their circumstances even while they deal with psychological, emotional, and social difficulties [17]. Social prescribing can therefore be a useful support tool to empower people to overcome their specific problems and needs and help reduce health inequalities [26]. While in general social prescribing has been available mostly for adults, programmes could be expanded to include several groups that have not been historically included, such as children, given the significance of childhood experiences for health and wellbeing throughout one's life (EuroHealthNet, 2022). Interestingly, in Austria pediatric facilities are included in the current funding call for social prescribing programmes.

This paper also recognised that given the tailored approach of various social prescribing programmes serving different populations, there is no clear pattern based on type of health care (and welfare) systems. Employing social prescribing practitioners (and other *de facto* link workers) that have strong links to the community, that are able to gain patients' trust and involve them in designing services could increase the success of some programmes and add improvements over time. In general, we could posit that the implementation of social prescribing tends to be more feasible under the following conditions: 1) unified funding: social care and primary care have a common funding source, (e.g., national taxation), and funding is collected at the same level (national or both local/regional); 2)financial incentives: Primary care providers have financial motivations or incentives to embrace social prescribing; 3) urgency of social prescribing: the likelihood of successful social prescribing increases when there is a heightened urgency, e.g., in instances of heavy workload in primary care that still allows room for innovative approaches like social prescribing; 4) clear information pathways: availability of information regarding the professionals or organizations that patients can approach following a social prescription, at a more local or regional level; and 5) available infrastructure: in countries with a less established tradition of primary healthcare, where individuals tend to seek medical attention directly from hospitals, there may be fewer local infrastructures conducive to social prescribing.

Social prescribing programmes can encounter several challenges. First, a critical point for the success of the programmes is the willingness of individuals to participate. As identified in the EuroHealthNet report, some individuals tend to resist the idea of committing to social prescribing activities and question their usefulness. Second, in some cases, the division between the health and social sector is so pronounced that it interferes with the true integration of services such as social prescribing. As social prescribing operates cross-sectorally between health and social care, it has to overcome differences in administration, monitoring, and budgeting, which will require changes in current structures. Clear frameworks that underpin collaboration between the health and social care sectors can also promote the use of social prescribing among health and social care professionals. Third, it is difficult to track patients throughout the referral process. In some cases, if the follow-up process is in place, it is not used appropriately (Ibid.). It will also be critical to identify a way to continue addressing needs even when the social prescribing process is theoretically complete. Digital solutions could play an important role in supporting better access for patients as for example in England and Wales through the Elemental platform. Fourth, funding is often unstable or not renumerated for social prescribers/link workers, calling into question the longevity of these programs as well as limiting the ability of community health workers to grow lasting relationships. Social prescribing activities necessitate suitable funding to facilitate cross-sector collaboration and not shift the burden on already stretched

health and social care workers. Adjusting funding mechanisms can be a facilitator to support sustainable changes in the ways of working and implementation of skill-mix innovations [27]. This paper did not assess whether activities require cost-sharing from users, which may impact the accessibility for certain groups. Last, patient screening for social prescribing needs is not consistent across countries, which may lead to issues in access. Work in the US has focused on the appropriateness and acceptability of widespread screening for these needs but that has not been a focus in other countries.

In addition, it is worth considering the strengths and weaknesses of the terminology used for social prescribing in the context of the ongoing debate on the medicalization of social issues. On one hand, the prescribing label leads to a certain degree of medicalization of socialization. On the other hand, as the activities are recommended (prescribed) by a professional, it could increase the likelihood that patients would accept them as legitimate. This prompts careful consideration of how to integrate and complement services without over-medicalizing social prescribing. Further, medicalizing socialization signals that health sector financing may be appropriate to cover service referrals and provision.

Overall, as identified in other studies on this topic, there is a lack of robust evidence in favour of the effectiveness of social prescribing (Bickerdicke et al., 2017) and, as discussed in the introduction, evidence is highly context-specific. A review by Polley et al. [28] found that social prescribing points to a potential reduction of demand for primary and secondary care, although the quality of the evidence is weak. A recent systematic review found little to no evidence of the effectiveness of link workers in people with multimorbidity and social deprivation [29]. It is also important to note that social prescribing is not an intervention in and of itself per se; the effectiveness of the services the patient is referred to is critical as it determines how well social prescribing works [26].The countries surveyed echoed this scarcity of evidence of the effectiveness of social prescribing programmes, although some evidence points to a positive impact of social prescribing in terms of improved well-being and mental health, as well as cost-effectiveness. Quality assurance is also a key element to consider (EuroHealthNet report, 2022), especially since the population referred to social prescribing programmes is likely more vulnerable [26].

Ultimately, social prescribing can play a role in addressing health inequalities, for example by improving health literacy and self-efficacy [26]. Social prescribing aims to improve health and well-being by promoting patient empowerment, supporting them to engage with their health needs and finding personalized solutions. The COVID-19 pandemic further highlighted the inequality gap, placed a high burden on many health systems around the world and exacerbated social vulnerabilities. As the COVID-19 pandemic recedes, increasing attention is being paid to the social determinants of health and mental health [30, 31].

5. Conclusions

Although the twelve countries surveyed in this paper have different health (and welfare) system contexts, all are increasingly experimenting with using social prescribing as a way to address patients' social needs more holistically and overcome the fragmentation of the health and social systems. Countries developed different approaches, with some relying more on primary care, but these usually include screening for social needs (such as social isolation or access to food), referring to community-based services, and a supporting person to guide the use of relevant services (often but not always through a care coordinator or link worker). Hence, the concept of social prescribing is (and should remain) flexible which also allows for transferability to a range of settings and countries and opportunities for scaling up. Supporting health and social care workers with the transition into new ways of collaborating, for example with clear frameworks for collaboration and adequate funding, can promote the use of social prescribing among professionals and improve the uptake of activities. This should also be backed by policies to train health and social care professionals with the skills to understand and support social prescribing activities.Ongoing discussion on medicalization of social issues, and how it raises questions about the terminology used for social prescribing, as well as the potential benefits of medicalizing socialization are needed. Further, as social prescribing is developing, scaling up, and spreading, robust evaluations are being conducted. However, further research is needed to identify the most effective type of support for certain groups, how to address needs once the support ends, the cost-effectiveness of social prescribing programmes and the sustainability of programmes. Strengthening this evidence, to which this article contributes, can help inform policymakers and countries interested in addressing individual patient needs beyond the clinical realm and bringing more integrated into routine care.

CRediT authorship contribution statement

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