Open access Original research

# BMJ Open Collaboration between general practitioners and social workers: a scoping review

Cornelia Löwe 👵 , Patrick Mark, Samira Sommer, Birgitta Weltermann

**To cite:** Löwe C, Mark P, Sommer S, *et al.* Collaboration between general practitioners and social workers: a scoping review. *BMJ Open* 2022;**12**:e062144. doi:10.1136/ bmjopen-2022-062144

➤ Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2022-062144).

Received 23 February 2022 Accepted 08 May 2022



© Author(s) (or their employer(s)) 2022. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BM.I.

University Hospital / Institute of General Practice and Family Medicine, Rheinische Friedrich-Wilhelms-Universitat Bonn, Bonn, Germany

#### **Correspondence to**

Cornelia Löwe; cornelia.loewe@ukbonn.de

#### **ABSTRACT**

**Objectives** Aim of the study is to present an overview of collaboration structures and processes between general practitioners and social workers, the target groups addressed as well the quality of available scientific literature.

**Design** A scoping review following the guidelines of the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews).

Included sources and articles According to a prepublished protocol, three databases (PubMed, Web of Science, DZI SoLit) were searched using the participant-concept-context framework. The searches were performed on 21 January 2021 and on 10 August 2021. Literature written in English and German since the year 2000 was included. Two independent researchers screened all abstracts for collaboration between general practitioners and social workers. Articles selected were analysed regarding structures, processes, outcomes, effectiveness and patient target groups.

Results A total of 72 articles from 17 countries were identified. Collaborative structures and their routine differ markedly between healthcare systems: 36 publications present collaboration structures and 33 articles allow an insight into the processual routines. For all quantitative studies, a level of evidence was assigned. Various measurements are used to determine the effectiveness of collaborations, for example, hospital admissions and professionals' job satisfaction. Case management as person-centred care for defined patient groups is a central aspect of all identified collaborations between general practitioners and social workers.

**Conclusion** This scoping review showed evidence for benefits on behalf of patients, professionals and healthcare systems by collaborations between general practitioners and social workers, yet more rigorous research is needed to better understand the impact of these collaborations. **Trial registration number** www.osf.io/w673g.

#### INTRODUCTION

A 2021 bulletin of the WHO attributes 30%–55% of health outcomes to social determinants of health (SDH). Social factors are relevant as risk and protective factors. For example, longitudinal data associated with the German Socio-Economic Panel Study from 1995 until 2005 including 31 800 adults

#### STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ Using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) extension for Scoping Reviews, this study provides a detailed view of interprofessional collaborations between general practitioners (GPs) and social workers.
- Measurements allowing for the evaluation of collaborative models are outlined.
- Articles included refer to the involvement of social workers in care processes for patients together with GPs without addressing social work from a bigger perspective.
- ⇒ Despite the systematic approach, a risk of bias in the appraisal of the data cannot be fully excluded.

showed a remarkably lower healthy life expectancy for low income compared with high income: stratified by gender a reduction of 10 years for women and more than 14 years for men is described.<sup>2</sup> The 2008 Japan Public Health Center-based Prospective Study with 44152 individuals demonstrated a 1.45-fold higher risk of stroke mortality for socially isolated men and women.<sup>3</sup> All social stressors enhance the risk of strain-related diseases.<sup>4</sup> Thus, the appropriate address of SDH is fundamental for improving health and reducing inequities that require collaborative action through all sectors.<sup>1</sup>

General practitioners (GPs) treat patients with various social issues and different social contexts.<sup>5</sup> Cross-sectional studies outlined common psychosocial problems that are frequent in general practice: for example, job problems, unemployment, intrafamilial problems or loneliness.6 GPs report that patients with SDH require higher consultation times.<sup>6 7</sup> In recent qualitative research, German GPs reported feeling helpless when confronted with SDH which results in unmet care needs.<sup>8 9</sup> In the last years, cooperation structures between GPs and social care professionals are emerging and range from pilot projects to routine implementations in selected countries or districts. 10-13



Collaborations between GPs and social workers (SWs) are especially promising as both professions provide low-threshold, person-centred support. Like medicine, social work is based on the interaction of individuals and organisations dedicated to welfare in the state and society. <sup>14</sup> As human rights profession, it has a political and anti-discriminatory function that can strengthen social justice. <sup>15</sup> Social work professionals have a long tradition of cooperation with the medical profession in various healthcare institutions, for example, hospitals. <sup>16</sup> <sup>17</sup>

A 2018 systematic review by Fraser *et al* outlined the potential of collaborations between SWs and GPs based on 26 randomised control trials: integrated care improved patients' behavioural health outcomes and care processes significantly compared with routine primary care services without SW. According to a 2017/2018 survey of 80 German SWs, SWs believe that their patient-related work will be improved by collaborations with GPs. Similarly, GPs are interested in cooperations with SWs, but various barriers exist. Internationally, different forms of collaborations between SWs and GPs exist, yet no review is available. This scoping review addresses collaborations between GPs and SWs, focusing on their structures, processes, patient target groups and effectiveness.

## **METHODS**

This scoping review followed the Joanna Briggs Institute methodology for reviews<sup>21–23</sup> and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR).<sup>24</sup> The format of a scoping review was chosen because the available literature is heterogenous regarding content and methodologies, which does not allow for a systematic review or meta-analysis.

# **Protocol and registration**

A protocol was registered prior to the review in Open Science Framework.

# **Eligibility criteria**

This review aims at the wide range of interprofessional cooperation between GPs and SWs. Therefore, all study types published in English and German since 2000 were included.

# Information sources and search strategy

Search parameters were defined based on the 'P-C-C'-approach (Population—Concept—Context). 21 24 The following search terms were selected on a meta-level:

- 1. Population:
  - a. Professional group #1: general practitioners.
  - b. Professional group #2: social worker.
- 2. Concept:
  - a. Collaboration.
- 3. Context:
  - a. Dimension, for example, setting, community.
  - b. Known structures, for example, integrated care.

A combination of keywords was selected to link both professions or contexts to the concept. The details on keywords and their combinations are provided as online supplemental material 1 (Search strategy). Three wellknown databases were searched: PubMed, DZI SoLit and Web of Science. PubMed was chosen as one of the most important databases for medicine worldwide. DZI SoLit is one of the most important libraries for social work in German-speaking countries and is curated by the German Central Institute for Social Issues (DZI) in Berlin. In the Web of Science Core Collection, the 'Social Work' category was searched to identify international evidence in the area of social work practice. A pilot search in the database PubMed provided an enormous data volume; therefore we changed from a 'MesH Terms' to a 'Title/ Abstract' search. The same key term combination was applied in the Web of Science. In the German Central Institute for Social Issues, a librarian searched the internal database according to our keyword combinations. The search was piloted on 21 January 2021, the final search was conducted on 10 August 2021.

# Study selection, data charting and methodological quality appraisal

After removing duplicates, two reviewers jointly developed a template for preselection: all abstracts were screened using the P-C-C criteria: population, collaboration concept, context. The two reviewers charted the data independently and discussed the results thereafter. Following the study protocol, all selected articles were analysed in full-text and categorised regarding the following five aspects:

- ► Collaboration structure/model.
- ▶ Patient population addressed (target group).
- ► (Functional) Impairment of patients.
- ► Setting/country.
- Measurements used to describe a collaboration's effectiveness.<sup>25</sup>

Classifications of all articles were documented using a literature management program (QSR CITAVI V.6.10). All quantitative studies were rated for their methodology using the Agency for Health Care Policy and Research (AHCPR) levels of evidence<sup>26</sup> by two researchers with a final review of a senior researcher.

## Summarising and reporting the results

Our qualitative content analysis clustered every source regarding 'structure' (eg, general practice, primary care centre), 'process' (eg, collaboration frame, roles, responsibilities) and 'target groups' (eg, vulnerable groups, functional health). This summary allows for a correlative view of single articles and thematic clusters.

#### Risk of bias assessment

This scoping review does not intend to appraise the risk of bias of the studies analysed.<sup>27</sup>

# Patient and public involvement

No patient involved.



#### **RESULTS**

# Selection of sources of evidence, exclusion criteria and study characteristics

The searches retrieved 1136 references. After removing duplicates, 1119 references remained for preselection of which 882 were excluded for the following reasons (exclusion criteria):

- 1. References addressing diseases or temporary life circumstances that typically do not require social work intervention (eg, maternity care, chronic obstructive pulmonary disease);
- 2. References describing inter professional collaboration on a metalevel without addressing GPs and SWs specifically;
- 3. References about SW practices without collaborations with GPs, and
- 4. References from patients' perspective not addressing collaborations.

The remaining 227 articles were imported into a literature management programme for full-text analysis. During this process, all articles beyond the focus of this scoping review also were excluded:

- 1. Articles that describe social interventions without SWs (n=56),
- 2. Descriptions of health and social structures without collaboration between GPs and SWs (n=37),
- 3. Articles not involving the GP settings: in-hospital setting (n=17), paediatric setting, including child protection and child/youth psychiatry (n=18), emergency setting (n=5) and nursing homes (n=12).

The flow chart (figure 1) summarises the process of article selection.

Seventy-two articles from 17 countries were included in the review; 37.5% of the articles originated from North America (n=27), 26.4% from the UK (n=19) and 15.3% from German-speaking countries (n=11). In descending order, the article types were: qualitative studies (n=24, 33.3%); programme/project descriptions (n=11, 15.3%), mixed-methods studies (n=10, 13.9%), quantitative studies (n=8, 11.1%), narrative reviews/expert opinion (n=7, 9.7%), feasibility studies (n=5, 6.9%), systematic or scoping reviews (n=5; 6.9%), one reference book and one study protocol. Nearly half of all articles were published since 2018. The study characteristics are outlined in online supplemental table 1.

# Levels of evidence (AHCPR) and measurements

An evidence level was assigned to 25 studies and 3 systematic reviews. The latter showed a level Ia evidence. <sup>18</sup> <sup>28</sup> <sup>29</sup> Additional 4 studies had high levels of evidence: a randomised controlled trial with mixed-methods design <sup>30</sup> was marked with level Ib. A level IIb was assigned three times: for a longitudinal cohort study, <sup>31</sup> an interventional non-randomised cohort study <sup>32</sup> and a quasi-experimental study. <sup>33</sup> For the remaining 44 articles, the level of evidence grading was not applicable.

Overall, studies used different measurements. In 23 studies, instruments to measure processes and/or

outcomes were mentioned. Nine of 12 studies used standardised instruments to measure patients' psychosocial needs and/or physical functioning, 30 33-40 while the remaining 3 studies did not specify the instruments used. Eight studies measured patients' healthcare utilisation including hospital (re-)admissions and the frequencies of emergency department visits. 30-33 37 38 41 42 In addition, characteristics of collaborative processes were measured, for example, the number of referrals, 37 39 43 44 team climate, team development 32 45-47 and professionals' job satisfaction. 31-33 46 48 49 Cost-effectiveness measurements were addressed in three studies.

# Collaboration structures and the degree of implementation

Collaborations between SWs and GPs differ markedly between healthcare systems. We categorised collaborations in: collaboration within the same practice/institution (eg, community health centre, interprofessional practice) (n=17) $^{35}$   $^{38}$   $^{40}$   $^{46}$   $^{48}$   $^{50-61}$  and collaboration of GPs and SWs from separate institutions (eg, GPs from a practice collaborating with SWs employed by a public institution) (n=21).  $^{8}$   $^{20}$   $^{35}$   $^{41}$   $^{42}$   $^{44}$   $^{45}$   $^{52}$   $^{62-74}$ 

The degree of routine implementation of the several collaborations varies between healthcare systems. The two most advanced collaborations are realised in the UK and Canada. Routine enactment is implemented in the UK, in particular established with social prescribing<sup>66 75</sup> and Primary Care Networks<sup>76</sup> embedded in the National Health Service (NHS) Long Term Plan.<sup>77</sup> In Ontario, Canada, Family Health Teams provide community-oriented primary health services. 43 55 78 In Germany, GPs and SWs collaborate in specialised practices, for example, for patients with addiction disorders including alcohol dependency, 44 69 yet there are no routine collaborations between GPs and SWs. Regional models for special patient groups like patients with addiction are also emerging in Switzerland. 67 Primary Care Social Work as part of primary healthcare teams is also described from Ireland<sup>49</sup> as a community-oriented implementation.<sup>79</sup> Table 1 outlines the details for the respective publications.

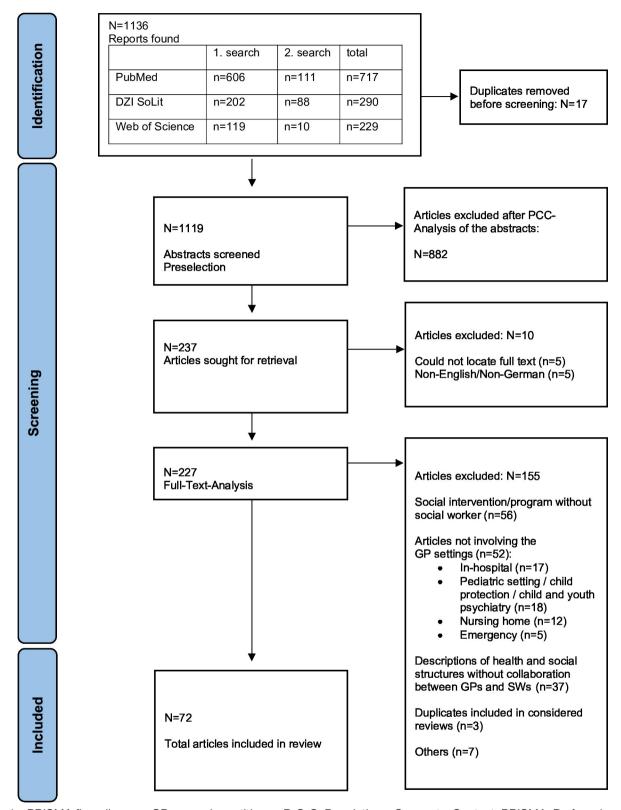
#### **Processes of collaboration**

All collaborations between GPs and SWs target special patient groups in form of the case and care management which were described in more detail in 49 of these 72 articles.

Specific formats of collaborations were identified in 33 articles:

- 1. Joint discussions, for example, round tables and team meetings  $(n=21)^{18\ 28\ 30\ 32\ 38\ 42\ 43\ 45\ 47\ 52\ 58\ 60\ 65\ 67\ 70-72\ 74\ 80-82}$ ;
- 2. Referrals from GP practice or interprofessional groups to SWs (n=11), 32 41 44 52 54 58 59 66 69 80 83 which sometimes is phrased as 'social prescribing' in the literature;
- 3. Vice versa, referral from SWs to the primary care setting/GP practice (n=5). 34 51 63 84 85

Surprisingly, these processes are already implemented routinely in some countries, for example, the UK. Details are presented in table 2.



**Figure 1** PRISMA flow diagram. GP, general practitioner; P-C-C, Population—Concept—Context; PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses; SW, social worker.

It is remarkable that the majority of articles from the category 'referral from social worker to general practice or interprofessional groups' were published since 2019. We used the term 'referral' to describe any recommendation to contact and/or interact with another

healthcare professional. In some settings, the term 'social prescribing' is used instead. For example, social prescribing is a key component of universal personalised care in the NHS<sup>11</sup> and a prime example of collaboration between GPs and SWs. Also, different terms are used to



 Table 1
 Structures of collaboration between general practitioners and social workers, n=36

Categories		Method	Level of evidence (AHCPR)	Publication year	Country of origin	Ref
General practitioners and social workers/ social care professionals in the same practice/institution, n=17	Interprofessional collaboration in practices, n=10	Mixed-methods study	III	2005	UK	40
		Quantitative study	III	2020	USA	35
		Quantitative study	III	2019	USA	51
		Qualitative study	n.a.	2021	UK	52
		Qualitative study	n.a.	2017	USA	53
		Qualitative study	n.a.	2010	USA	54
		Description of a care model	n.a.	2019	Germany	55
		Narrative review	n.a.	2012	Germany	56
		Description of a care model	n.a.	2009	Netherlands	57
		Description of a care model	n.a.	2000	USA	58
	Primary care centres/ community health centres, n=7	Mixed-methods study	III	2019	Mexico	48
		Quantitative study	III	2017	Canada	46
		Quantitative study	III	2016	USA	38
		Quantitative study	IV	2018	Finland	59
		Qualitative study	n.a.	2021	Spain	60
		Study protocol	n.a.	2018	USA	61
		Programme description	n.a.	2005	USA	50
ractice and social	eneral practitioners in workers/social care parate institutions,	Mixed-methods study	III	2018	Netherlands	44
		Mixed-methods study	III	2014	UK	41
		Mixed-methods study	IV	2003	UK	73
		Quantitative study	III	2020	USA	35
		Quantitative study	III	2007	Germany	44
		Quantitative study	IV	2013	Australia	42
		Qualitative study	n.a.	2021	Denmark	62
		Qualitative study  Qualitative study	n.a.	2021 2021	Denmark UK	62 52
		·				
		Qualitative study	n.a.	2021	UK	52
		Qualitative study Qualitative study	n.a. n.a.	2021 2020	UK Denmark	52 63
		Qualitative study Qualitative study Qualitative study	n.a. n.a. n.a.	2021 2020 2020	UK Denmark Germany	52 63 8
		Qualitative study Qualitative study Qualitative study Qualitative study	n.a. n.a. n.a. n.a.	2021 2020 2020 2019	UK Denmark Germany UK	52 63 8 20 64 65
		Qualitative study Qualitative study Qualitative study Qualitative study Qualitative study	n.a. n.a. n.a. n.a.	2021 2020 2020 2019 2018	UK Denmark Germany UK Netherlands	52 63 8 20 64 65 66
		Qualitative study	n.a. n.a. n.a. n.a. n.a.	2021 2020 2020 2019 2018 2018	UK Denmark Germany UK Netherlands UK	52 63 8 20 64 65
		Qualitative study	n.a. n.a. n.a. n.a. n.a. n.a. n.a. n.a.	2021 2020 2020 2019 2018 2018 2017	UK Denmark Germany UK Netherlands UK UK	52 63 8 20 64 65 66
		Qualitative study	n.a. n.a. n.a. n.a. n.a. n.a. n.a. n.a.	2021 2020 2020 2019 2018 2018 2017 2015	UK Denmark Germany UK Netherlands UK UK UK	52 63 8 20 64 65 66 68
		Qualitative study	n.a. n.a. n.a. n.a. n.a. n.a. n.a. n.a.	2021 2020 2020 2019 2018 2018 2017 2015 2013	UK Denmark Germany UK Netherlands UK UK UK UK	52 63 8 20 64 65 66 68 70
		Qualitative study	n.a. n.a. n.a. n.a. n.a. n.a. n.a. n.a.	2021 2020 2020 2019 2018 2018 2017 2015 2013	UK Denmark Germany UK Netherlands UK UK UK UK UK UK Canada	52 63 8 20 64 65 66 68 70
		Qualitative study	n.a. n.a. n.a. n.a. n.a. n.a. n.a. n.a.	2021 2020 2020 2019 2018 2018 2017 2015 2013 2013 2003	UK Denmark Germany UK Netherlands UK UK UK UK UK UK UK	52 63 8 20 64 65 66 68 70 71



Table 2 Processes of collaboration between general practitioners and social workers. n=33

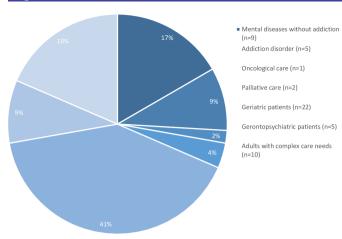
		Level of	Dublication		Process routine		
Categories	Method	evidence (AHCPR)	Publication year	Country of origin	Pilot projects	Established practice	Re
- - - -	Systematic review	la	2018	USA		Χ	18
	Systematic review	la	2015	Netherlands		X	28
	Mixed-methods study	lb	2018	UK	X*		30
	Quantitative study	lla	2015	USA		X	32
	Mixed-methods study	III	2019	Canada	X		43
	Mixed-methods study	III	2018	Netherlands	X		45
	Quantitative study	III	2016	USA	Χ		38
	Mixed-methods study	III	2013	Australia		X	42
	Quantitative study	IV	2017	UK	Χ		47
loint discussions,	Qualitative study	n.a.	2021	UK		X <sup>*</sup>	52
for example, team meetings, round tables, n=21	Qualitative study	n.a.	2021	Spain		X	60
	Qualitative study	n.a.	2019	USA	X		81
	Qualitative study	n.a.	2018	UK		Χ	65
	Qualitative study	n.a.	2013	Canada		X	71
	Qualitative study	n.a.	2013	UK		X	70
	Qualitative study	n.a.	2003	UK		Χ	72
	Qualitative study	n.a.	2000	USA	X		74
	Narrative review	n.a.	2015	Switzerland		Χ	67
	Narrative review	n.a.	2014	USA		X	80
	Narrative review	n.a.	2014	USA	X		82
	Narrative review	n.a.	2000	USA		X	58
Referral from general practice or interprofessional groups to a social worker, n=11	Quantitative study	lla	2015	USA		X	32
	Mixed-methods study	III	2014	UK		X	41
	Quantitative study	III	2007	Germany		X	44
	Quantitative study	IV	2018	Finland		X	59
	Qualitative study	n.a.	2021	USA		X	83
	Qualitative study	n.a.	2021	UK		X*	52
	Qualitative study	n.a.	2017	UK		X*	66
	Qualitative study	n.a.	2010	USA	X		54
	Reference book	n.a.	2013	Germany	X	X	69
	Narrative review	n.a.	2014	USA		X	80
	Narrative review	n.a.	2000	USA		X	58
interprofessional	Mixed-methods study	III	2021	USA	X		34
	Quantitative study	 III	2019	USA		X	51
	•	n.a.	2020	Denmark		X	63
	Qualitative study	n.a.	2012	USA		X	85
groups, n=5	Narrative review	n.a.	2019	UK		X	84

describe the roles of SWs, for example, 'informal broker'85 or 'accompaniment'.63

# **Target groups**

According to our synthesis, collaborative care is targeting special patient groups with high needs, such as geriatric patients and those with mental health problems. The frequencies of the various target groups addressed

are presented in figure 2 based on a total of 46 articles. In five of these publications, several target groups are addressed. Geriatric patients are focused in 22 articles  $^8$  <sup>28–30</sup> <sup>32</sup> <sup>33</sup> <sup>35</sup> <sup>38–40</sup> <sup>51</sup> <sup>52</sup> <sup>54</sup> <sup>64</sup> <sup>65</sup> <sup>68</sup> <sup>70</sup> <sup>71</sup> <sup>74</sup> <sup>80</sup> <sup>86</sup> <sup>87</sup> with additional five articles specifically addressing geropsychiatric patients.<sup>36</sup> 43 45 84 88 Other risk groups are adults with complex care needs  $(n=10)^9$  38 51 52 59 61 62 78 89 90 as well



**Figure 2** Target groups of collaboration between general practitioners and social workers, n=46.

as those requiring palliative  $(n=2)^{34}$  and oncological (n=1) care.<sup>37</sup> Mental diseases are addressed in nine articles, <sup>36</sup> <sup>42</sup> <sup>48</sup> <sup>50</sup> <sup>63</sup> <sup>72</sup> <sup>82</sup> <sup>84</sup> <sup>91</sup> while an additional five articles detail collaboration issues for patients affected by addiction. <sup>44</sup> <sup>67</sup> <sup>69</sup> <sup>92</sup> <sup>93</sup>

#### DISCUSSION

Our scoping review showed that patient-centred case management is central in professional collaborations between GPs and SWs from various countries. However, otherwise, such collaborations differ by structure, process and patient target groups. Also, the degree of scientific evaluation and evidence of the effectiveness, as well as the routine implementation of the described collaborations, varies markedly.

Currently, the highest evidence for effective collaborations between GPs and SWs is described in a longitudinal US cohort study published in 2019 which included 4230 patients with 167 care professionals including both professional groups. Higher connectedness and higher access to other providers in the community significantly reduced inpatient hospitalisations and emergency department visits. Also in the USA, similar results were achieved by the 2014 adaption of the 'Geriatric Resources for Assessment and Care of Elders (GRACE)' model, which increased patients' quality of life and decreased hospitalisation rates. Bereits of the community of life and decreased hospitalisation rates.

Aiming at the best possible integrated care for various patient groups, many studies address the roles and interactions of the participating professionals. <sup>35</sup> <sup>46</sup> <sup>64</sup> <sup>86</sup> Schultz *et al* emphasise the need to clearly define the roles of all professionals involved to ensure integrated care in the best possible way. <sup>62</sup> This requires appropriate interprofessional education. <sup>52</sup> <sup>64</sup> <sup>78</sup> <sup>80</sup> <sup>84</sup> Knowledge about each other creates an increased awareness of the importance of collaborative skill development which needs to be reflected in curricula for GP and SW education. <sup>95</sup> <sup>96</sup> Within and between institutions, and organisational learning culture is needed to support integrated care by interprofessional teams. <sup>97</sup>

Our literature review showed that current collaborative models mainly target geriatric and psychiatric patients. However, SDH are much broader, and even highly prevalent problems such as functional health, loneliness, debts, family problems and violence have not been addressed in studies although these are known to negatively influence health outcomes. <sup>98–100</sup>

## **Strengths and limitations**

A detailed search and analysis of the heterogenous articles retrieved were carried out following the PRISMA-ScR guideline. Based on the P-C-C approach, a detailed view of various aspects of collaborations between GPs and SWs was presented. Various formats for collaborative, personcentred care processes were highlighted. Measurements allowing for the evaluation of collaborative models were outlined. Articles included refer to the involvement of SWs in care processes for patients together with GPs without addressing SW from a bigger perspective. Despite the systematic approach, a risk of bias in the appraisal of the data cannot be fully excluded.

# **Conclusion and perspectives**

This scoping review outlined models and strategies to improve SDH by collaborations between GPs and SWs. For transferability, the described best practice models need to be shaped for the respective healthcare system. Although a lack of rigorous research in this field was documented, there is profound evidence of benefits on behalf of patients, professionals and healthcare systems by close collaborations between GPs and SWs. Future research needs to measure the impact of different forms of collaboration in healthcare systems.

Acknowledgements We thank the librarian of the German Central Institute for Social Issues, Mrs Lingott, for the good collaboration.

Contributors CL and BW developed the research question and study design. CL curated the data. CL and PM reviewed all records and analyzed the data. CL, PM, SS and BW interpreted the data and results. BW supervised the process and functions as guarantor. All authors read and approved the final manuscript.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which



permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

#### **ORCID iD**

Cornelia Löwe http://orcid.org/0000-0003-4455-1405

#### **REFERENCES**

- 1 WHO. Social determinants of health. Available: https://www.who.int/health-topics/social-determinants-of-health#tab=tab\_1 [Accessed Oct 30 2021].
- 2 Lampert T, Richter M, Schneider S. Soziale Ungleichheit und Gesundheit. Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz:153–65.
- 3 Ikeda A, Iso H, Kawachi I. Social support and stroke and coronary heart disease: the JPHC study cohorts II. Stroke 2021:768–75.
- 4 Siegrist J. Soziale Stressoren und stressbedingte Erkrankungen. In: Fuchs R, Gerber M, eds. *Handbuch Stressregulation und sport*. Berlin, Heidelberg: Springer, 2018: 79–92.
- 5 Rosendal M, Vedsted P, Christensen KS, et al. Psychological and social problems in primary care patients - general practitioners' assessment and classification. Scand J Prim Health Care 2013;31:43–9.
- 6 Zimmermann T, Mews C, Kloppe T, et al. Soziale probleme in der hausärztlichen versorgung – häufigkeit, reaktionen, handlungsoptionen und erwünschter unterstützungsbedarf AUS der Sicht von hausärztinnen und hausärzten. Z Evid Fortbild Qual Gesundhwes 2018;131-132:81-9.
- 7 Jobst D, Joos S. Soziale Patientenanliegen eine Erhebung in Hausarztpraxen. *ZFA I Z Allg Med* 2014;90.
- 8 Stumm J, Peter L, Sonntag Ü, et al. Nichtmedizinische aspekte der versorgung multimorbider patient\*innen in der hausarztpraxis. welche unterstützung und kooperationen werden gewünscht? fokusgruppen MIT berliner hausärzt\*innen. Z Evid Fortbild Qual Gesundhwes 2020;158-159:66-73.
- 9 Lang C, Gottschall M, Sauer M. Da kann man sich JA totklingeln, geht JA keiner ran'- Schnittstellenprobleme zwischen stationärer, hausärztlicher und ambulant-fachspezialisierter Patientenversorgung AUS sicht dresdner hausärzte. Gesundheitswesen 2019;81:822-30.
- 10 Ministry of health, Ministry of long-term care. family health teams, 2021. Available: https://www.health.gov.on.ca/en/pro/programs/fht/ [Accessed 09 Feb 2022].
- 11 National Health Service (NHS) England. Social Prescribing. Available: https://www.england.nhs.uk/personalisedcare/social-prescribing/ [Accessed 29 Nov 2021].
- 12 Government United Kingdom. Departement of health North Ireland. Available: https://www.health-ni.gov.uk/articles/primary-care-multi-disciplinary-teams-mdts [Accessed 09 Feb 2022].
- 13 Social Work Service to Support GPs. For patients with chronic or complex health care conditions, 2022. Available: https://sydneyno rthhealthnetwork.org.au/about-us/commissioning/social-workservice-to-support-gps/ [Accessed 09 Feb 2022].
- 14 Wendt WR. Geschichte Der Sozialen Arbeit 1. Wiesbaden: Springer Fachmedien Wiesbaden, 2017.
- 15 Staub-Bernasconi S. Die Menschenrechte vom Kopf auf die Füße stellen. In: Menschenwürde - Menschenrechte - Soziale Arbeit. Barbara Budrich, 2019.
- 16 Reinicke P. Sozialarbeit im gesundheitswesen. In: geschichte, dokumente, lebensbilder. Berlin: Eigenverlag des Deutschen Vereins für Öffentliche und Private Fürsorge, 2008.
- 17 Goldberg EM. Social work in general practice. Milton: Taylor & Francis Group, 1972.
- 18 Fraser MW, Lombardi BM, Wu S, et al. Integrated primary care and social work: a systematic review. J Soc Social Work Res 2018:9:175–215.
- 19 Jobst D, Coppola A. Sozialarbeit und hausärztliche medizin: ein exploratorischer survey über kontakte und kooperationen. ZFA | Z fur Allg 2021;97.
- 20 Naqvi D, Malik A, Al-Zubaidy M, et al. The general practice perspective on barriers to integration between primary and social care: a London, United Kingdom-based qualitative interview study. BMJ Open 2019;9. doi:10.1136/bmjopen-2019-029702. [Epub ahead of print: 20 Aug 2019].
- 21 Peters M, Godfrey C, McInerney P. JBI manual for evidence synthesis, 2020.

- 22 Peters MDJ, Marnie C, Tricco AC, et al. Updated methodological guidance for the conduct of scoping reviews. JBI Evid Synth 2020;18:2119–26.
- 23 von EE, Schreiber G, Haupt CC. Methodische anleitung für scoping reviews (JBI-methodologie). Z Evid Fortbild Qual Gesundhwes 2019:143:1–7.
- 24 Tricco AC, Lillie E, Zarin W, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. Ann Intern Med 2018;169:467–73.
- 25 Löwe C, Sommer S, Mark P. Study protocol: collaboration between general practitioners and social workers – a scoping review, 2021. Available: https://osf.io/ba3dr/
- 26 Agency for Health Care Policy and Research (AHCPR). Evidenzklassen nACh Der AHCPR-Publikation 92-0032; 1992: 100-7.
- 27 Tricco AC, Lillie E, Zarin W. A scoping review on the conduct and reporting of scoping reviews. BMC Med Res Methodol 2016;16:15.
- 28 Schepman S, Hansen J, de Putter ID, et al. The common characteristics and outcomes of multidisciplinary collaboration in primary health care: a systematic literature review. Int J Integr Care 2015;15:e027.
- 29 Stokes J, Panagioti M, Alam R, et al. Effectiveness of case management for 'at risk' patients in primary care: a systematic review and meta-analysis. PLoS One 2015;10. doi:10.1371/journal. pone.0132340. [Epub ahead of print: 17 Jul 2015].
- 30 Bower P, Reeves D, Sutton M. Improving care for older people with long-term conditions and social care needs in Salford. In: The classic mixed-methods study, including RCT. Southampton UK, 2018.
- 31 Ostovari M, Yu D. Impact of care provider network characteristics on patient outcomes: usage of social network analysis and a multi-scale community detection. *PLoS One* 2019;14. doi:10.1371/journal.pone.0222016. [Epub ahead of print: 9 Sept 2019].
- 32 Reckrey JM, Soriano TA, Hernandez CR, et al. The team approach to home-based primary care: restructuring care to meet individual, program, and system needs. J Am Geriatr Soc 2015;63:358–64.
- 33 Vedel I, de SM, Bergman H. A novel model of integrated care for the elderly. COPA, Coordination of Professional Care for the Elderly 2009.
- 34 Ross H, Dritz R, Morano B, et al. The unique role of the social worker within the hospital at home care delivery team. Soc Work Health Care 2021;60:354–68.
- 35 Berrett-Abebe J, Donelan K, Berkman B, et al. Physician and nurse practitioner perceptions of social worker and community health worker roles in primary care practices caring for frail elders: insights for social work. Soc Work Health Care 2020;59:46–60.
- 36 Burroughs H, Bartlam B, Bullock P. Non-traditional support workers delivering a brief psychosocial intervention for older people with anxiety and depression. In: *The NOTEPAD feasibility study*. Southampton UK, 2019.
- 37 Schouten B, Bergs J, Vankrunkelsven P, et al. Healthcare professionals' perspectives on the prevalence, barriers and management of psychosocial issues in cancer care: a mixed methods study. Eur J Cancer Care 2019;28. doi:10.1111/ecc.12936. [Epub ahead of print: 09 Oct 2018].
- 38 Ritchie C, Andersen R, Eng J, et al. Implementation of an interdisciplinary, team-based complex care support health care model at an academic medical center: impact on health care utilization and quality of life. PLoS One 2016;11. doi:10.1371/journal.pone.0148096. [Epub ahead of print: 12 Feb 2016].
- 39 Drennan V, Iliffe S, Haworth D, et al. The feasibility and acceptability of a specialist health and social care team for the promotion of health and independence in 'at risk' older adults. Health Soc Care Community 2005;13:136–44.
- 40 Davey B, Levin E, Iliffe S, et al. Integrating health and social care: implications for joint working and community care outcomes for older people. J Interprof Care 2005;19:22–34.
- 41 Hanratty B, Lowson E, Grande G. Transitions at the end of life for older adults – patient, carer and professional perspectives. In: A mixed-methods study. Southampton UK, 2014.
- 42 Happell B, Platania-Phung C, Scott D. Mental health nurse incentive program: facilitating physical health care for people with mental illness? *Int J Ment Health Nurs* 2013;22:399–408.
- 43 Lee L, Hillier LM, Gregg S. Partnerships for improving dementia care in primary care: extending access to primary care-based memory clinics in Ontario, Canada. *Health Soc Care Community* 2019;27:1574–85.
- 44 Ulbricht S, Coder B, Röske K, et al. Die Überweisung von Patienten mit Abhängigkeitserkrankungen in die ambulante und stationäre professionelle Suchtkrankenhilfe - Ergebnisse einer repräsentativen



- Befragung unter Hausärzten in Mecklenburg-Vorpommern. Gesundheitswesen 2007;69:306–10.
- 45 van Dongen JJJ, van Bokhoven MA, Goossens WNM, et al. Suitability of a programme for improving interprofessional primary care team meetings. Int J Integr Care 2018;18. doi:10.5334/ ijic.4179. [Epub ahead of print: 13 Dec 2018].
- 46 Rayner J, Muldoon L. Staff perceptions of community health centre team function in Ontario. Can Fam Physician 2017;63:335–40.
- 47 Risi L, Brown J, Sugarhood P, et al. The Handy Approach Quick Integrated Person Centred Support Preparation. BMJ Qual Improv Rep 2017;6. doi:10.1136/bmjquality.u214461.w5681. [Epub ahead of print: 07 06 2017].
- 48 Saavedra NI, Berenzon S, Galván J. The role of social workers in mental health care: a study of primary care centers in Mexico. *Qualitative Social Work* 2019;18:1017–33.
- 49 Ní Raghallaigh M, Allen M, Cunniffe R, et al. Experiences of social workers in primary care in Ireland. Soc Work Health Care 2013;52:930–46.
- 50 Bauer D, Batson R, Hayden W, et al. Integrating behavioral health services within a primary care center in a rural setting. Families in Society 2005:86:63–70.
- 51 Buhr G, Dixon C, Dillard J, et al. Geriatric resource teams: equipping primary care practices to meet the complex care needs of older adults. Geriatrics 2019;4. doi:10.3390/geriatrics4040059. [Epub ahead of print: 21 Oct 2019].
- 52 Dambha-Miller H, Simpson G, Hobson L, et al. Integrating primary care and social services for older adults with multimorbidity: a qualitative study. Br J Gen Pract 2021;71:e753–61.
- 53 Leach B, Morgan P, Strand de Oliveira J, et al. Primary care multidisciplinary teams in practice: a qualitative study. BMC Fam Pract 2017;18. doi:10.1186/s12875-017-0701-6. [Epub ahead of print: 29 Dec 2017].
- 54 Ferrante JM, Cohen DJ, Crosson JC. Translating the patient navigator approach to meet the needs of primary care. J Am Board Fam Med 2010;23:736–44.
- 55 Ulrich L-R, Pham T-NT, Gerlach FM. Family health teams in Ontario vorstellung eines kanadischen primärversorgungsmodells und anregungen für deutschland. Gesundheitswesen 2019;81:492–7.
- 56 Beushausen J, Caby A. Soziale Arbeit in der ärztlichen praxis: Optimierung der ärztlichen Versorgung. Theorie und Praxis der Sozialen Arbeit 2012;63:125–3131.
- 57 de Jong FJ, van Steenbergen-Weijenburg KM, Huijbregts KML, et al. The depression initiative. description of a collaborative care model for depression and of the factors influencing its implementation in the primary care setting in the Netherlands. Int J Integr Care 2009;9:e81.
- 58 Lesser JG. Clinical social work and family medicine. In: *A partnership in community service*, 2000.
- 59 Vehko T, Jolanki O, Aalto A-M, et al. How do health care workers manage a patient with multiple care needs from both health and social care services? - A vignette study. Int J Care Coord 2018;21:5–14. doi:10.1177/2053434517744070
- 60 García-Quinto M, Briones-Vozmediano E, Otero-García L, et al. Social workers' perspectives on barriers and facilitators in responding to intimate partner violence in primary health care in Spain. Health Soc Care Community 2022;30:102–13.
- 61 Chan B, Edwards ST, Devoe M, et al. The Summit ambulatory-ICU primary care model for medically and socially complex patients in an urban federally qualified health center: study design and rationale. Addict Sci Clin Pract 2018;13. doi:10.1186/s13722-018-0128-y. [Epub ahead of print: 14 Dec 2018].
- 62 Schultz R, Brostrøm Kousgaard M, Davidsen AS. "We have two different agendas": the views of general practitioners, social workers and hospital staff on interprofessional coordination for patients with chronic widespread pain. *J Interprof Care* 2021;35:284–92.
- 63 Davidsen AS, Davidsen J, Jønsson ABR, et al. Experiences of barriers to trans-sectoral treatment of patients with severe mental illness. A qualitative study. Int J Ment Health Syst 2020;14. doi:10.1186/s13033-020-00419-x. [Epub ahead of print: 30 Nov 2020]
- 64 Grol SM, Molleman GRM, Kuijpers A, et al. The role of the general practitioner in multidisciplinary teams: a qualitative study in elderly care. BMC Fam Pract 2018;19. doi:10.1186/s12875-018-0726-5. [Epub ahead of print: 10 Mar 2018].
- 65 Riste LK, Coventry PA, Reilly ST, et al. Enacting person-centredness in integrated care: a qualitative study of practice and perspectives within multidisciplinary groups in the care of older people. Health Expect 2018;21:1066–74.

- 66 White JM, Cornish F, Kerr S. Front-line perspectives on 'joined-up' working relationships: a qualitative study of social prescribing in the west of Scotland. *Health Soc Care Community* 2017;25:194–203.
- 67 Gadient M. Gelebte Kooperation Suchtberatung und Hausarztmedizin, 2015.
- 68 Kassianos AP, Ignatowicz A, Greenfield G. 'Partners rather than just providers...': a qualitative study on health care professionals' views on implementation of multidisciplinary group meetings in the North West London integrated care pilot 2015.
- 69 Oliva H, Walter-Hamann R. Suchthilfe in Netzwerken: Praxishandbuch zu Strategie und Kooperation. 1st edn. Lambertus: Freiburg, 2013.
- 70 Harris M, Greaves F, Gunn L, et al. Multidisciplinary integration in the context of integrated care - results from the North West London Integrated Care Pilot. 13, 2013.
- 71 de Stampa M, Vedel I, Bergman H, et al. Opening the black box of clinical collaboration in integrated care models for frail, elderly patients. Gerontologist 2013;53:313–25. doi:10.1093/geront/gns081
- 72 Bowers L, Clark N, Callaghan P. Multidisciplinary reflections on assessment for compulsory admission: the views of Approved social workers, general practitioners, ambulance crews, police, community psychiatric nurses and psychiatrists. Br J Soc Work 2003;33:961–8.
- 73 Coleman A, Rummery K. Social services representation in primary care groups and trusts. J Interprof Care 2003;17:273–80.
- 74 Netting FE, Williams FG. Expanding the boundaries of primary care for elderly people. *Health Soc Work* 2000;25:233–42.
- 75 England NHS. Social prescribing and community-based report, 2020. Available: https://www.england.nhs.uk/wp-content/uploads/ 2020/06/social-prescribing-summary-guide-updated-june-20.pdf [Accessed 03 Dec 2021].
- 76 Batchelor P, Kingsland J. Improving the health of the homeless and how to achieve it within the new NHS architecture. *Int J Environ Res Public Health* 2020;17. doi:10.3390/ijerph17114100. [Epub ahead of print: 08 Jun 2020].
- 77 National health service (NHS) England long term plan: version 1.2, 2019. Available: https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf [Accessed 29 Nov 2021].
- 78 Ashcroft R, McMillan C, Ambrose-Miller W, et al. The emerging role of social work in primary health care: a survey of social workers in Ontario family health teams. Health Soc Work 2018;43:109–17.
- 79 Irish Association of Social Workers. The Role of Social Work in Primary Care in Ireland:Social Workers in Primary Care Special Interst Group of the IASW, 2011. Available at:. https://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjlz7zj-4P2AhX1\_7sIHesUDc8QFnoECAoQAw&url=https%3A%2F%2Fwww.iasw.ie%2Fdownload%2F279%2FThe\_Role\_of\_the\_Social\_Worker\_in\_Primary\_Care.pdf&usg=AOvVaw0m0d0LCKDED4GpmVz3u\_x
- 80 Reckrey JM, Gettenberg G, Ross H, et al. The critical role of social workers in home-based primary care. Soc Work Health Care 2014;53:330–43.
- 81 Sotomayor CR, Gallagher CM. The team based biopsychosocial model: having a clinical ethicist as a facilitator and a bridge between teams. *HEC Forum* 2019;31:75—83.
- 82 Pollard RQ, Betts WR, Carroll JK, et al. Integrating primary care and behavioral health with four special populations: children with special needs, people with serious mental illness, refugees, and deaf people. Am Psychol 2014;69:377–87.
- 83 Williams VN, Lopez CC, Tung GJ, et al. A case study of care coordination between primary care providers and nurse home visitors to serve young families experiencing adversity in the northwestern United States. *Health Soc Care Community* 2021. doi:10.1111/ hsc.13470. [Epub ahead of print: 11 Jun 2021].
- 84 Wang XM, Agius M. The role of care coordinators versus doctors in the management of chronic mental illness in the community. Psychiatr Danub 2019;31:622–5.
- 85 Shanske S, Arnold J, Carvalho M, et al. Social workers as transition brokers: facilitating the transition from pediatric to adult medical care. Soc Work Health Care 2012;51:279–95.
- 86 Keefe B, Geron SM, Enguidanos S. Integrating social workers into primary care: physician and nurse perceptions of roles, benefits, and challenges. Soc Work Health Care 2009;48:579–96.
- 87 Kharicha K, Levin E, Iliffe S, et al. Social work, general practice and evidence-based policy in the collaborative care of older people: current problems and future possibilities. Health Soc Care Community 2004;12:134–41.
- 88 Draper B, Low L-F, Brodaty H. Integrated care for adults with dementia and other cognitive disorders. *Int Rev Psychiatry* 2018;30:272–91.



- 89 GTS Y, Kannan P, Lee ES. Community case managers' challenges collaborating with primary care when managing complex patients in the community: a qualitative study in Singapore. *Health Soc Care Community* 2021. [Epub ahead of print: 12 July 2021].
- 90 Stokes J, Riste L, Cheraghi-Sohi S. Targeting the 'right' patients for integrated care: stakeholder perspectives from a qualitative study. *J Health Serv Res Policy* 2018;23:243–51. doi:10.1177/1355819618788100
- 91 Ashcroft R, Kourgiantakis T, Fearing G, et al. Social Work's Scope of Practice in Primary Mental Health Care: A Scoping Review. Br J Soc Work 2019;49:318–34.
- 92 Nielsen H-W. ¬Die¬ Begegnung und den Diskurs suchen die Rolle der Medizin in einer Suchtberatungsstelle / kompetente Teams aus verschiedenen Berufsgruppen bilden. PARTNER-Magazin 2002;4:26–9.
- 93 Wahler EA, Sullivan WP. There's no time like the present: improving the current system of care for low-income substance abusers with comorbid health conditions. *Fam Soc* 2017;98:292–9.
- 94 Counsell SR, Callahan CM, Clark DO, et al. Geriatric care management for low-income seniors: a randomized controlled trial. JAMA 2007;298:2623–33.

- 95 Abramson JS, Mizrahi T. Understanding collaboration between social workers and physicians: application of a typology. Soc Work Health Care 2003;37:71–100.
- 96 Saxe Zerden Lde, Lombardi BM, Jones A. Social workers in integrated health care: improving care throughout the life course. Soc Work Health Care 2019:58:142–9.
- 97 Lalani M, Bussu S, Marshall M. Understanding integrated care at the frontline using organisational learning theory: a participatory evaluation of multi-professional teams in East London. Soc Sci Med 2020;262:113254.
- 98 Martín-María N, Caballero FF, Miret M, et al. Differential impact of transient and chronic loneliness on health status. A longitudinal study. Psychol Health 2020;35:177–95. doi:10.1080/08870446.2019 .1632312
- 99 WHO. Multi-country study on women's health and domestic violence against women, 2005.
- 100 Lahelma E, Martikainen P, Laaksonen M, et al. Pathways between socioeconomic determinants of health. J Epidemiol Community Health 2004;58:327–32.