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Barriers and enablers to pharmacist involvement in social prescribing: a protocol for a systematic review of qualitative studies

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ABSTRACT

Introduction Social prescribing is an innovative approach to healthcare that involves referring patients to non-medical services and activities in the community to improve health and well-being. Pharmacists are well-positioned to contribute to social prescribing initiatives given their accessibility and expertise, but their involvement remains limited. Qualitative studies have explored pharmacists' perspectives and experiences regarding social prescribing, but their findings have not been systematically synthesised. This protocol outlines a systematic review of qualitative studies to identify and synthesise the barriers and enablers influencing pharmacist involvement in social prescribing.

Methods and analysis We will conduct a comprehensive search of electronic databases (PubMed, Web of Science, Embase, CINAHL, MEDLINE, The Cochrane Library, PsycINFO, Scopus) and grey literature sources for qualitative studies published in English from each database inception to January 2025 that explore barriers and facilitators to pharmacist involvement in social prescribing. Two reviewers will independently screen titles, abstracts and full texts for eligibility based on predefined criteria. Eligible studies will include those that use qualitative methods (eg, interviews, focus groups, observations) to explore the perspectives of pharmacists on factors influencing their involvement in social prescribing initiatives. Data will be extracted using a standardised form and synthesised using thematic analysis. The methodological quality of included studies will be appraised using the Critical Appraisal Skills Programme Qualitative Checklist. Confidence in the review findings will be assessed using the Grading of Recommendations Assessment, Development and Evaluation-Confidence in the Evidence from Reviews of Qualitative research approach.

Ethics and dissemination Ethics approval is not required as this study will merely synthesise data from published studies. The results will be disseminated through peer-reviewed publications as well as conference presentations.

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STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ This systematic review employs a comprehensive search strategy across multiple databases and grey literature sources to capture the full range of qualitative evidence on pharmacist involvement in social prescribing.
⇒ The use of established frameworks (Critical Appraisal Skills Programme and Grading of Recommendations Assessment, Development and Evaluation-Confidence in the Evidence from Reviews of Qualitative Research) will ensure rigorous quality assessment and confidence evaluation of the synthesised findings.
⇒ The inclusion of stakeholder consultation in the validation phase will enhance the practical relevance and applicability of the review findings.
⇒ The restriction to English-language publications may miss relevant studies published in other languages.
⇒ The focus on qualitative studies only, while allowing for in-depth exploration of barriers and enablers, excludes quantitative evidence that might provide complementary insights.

INTRODUCTION

Social prescribing has emerged as an innovative approach to healthcare that recognises the significant influence of social determinants on health outcomes. This model involves the referral of patients to non-clinical services and activities—such as exercise programmes, art classes and social support groups—to improve their health and well-being.[1–3] By addressing the broader psychosocial needs of patients, social prescribing complements traditional medical interventions while empowering individuals to take an active role in managing their own health.[4 5]

The concept of social prescribing has gained momentum in recent years as healthcare systems increasingly acknowledge the limitations of a purely biomedical approach to health and the importance of addressing the wider determinants of health.[6] Social prescribing initiatives have been implemented in various countries, including the UK, Canada, Australia and the USA, with promising results in terms of improved health

outcomes, reduced healthcare utilisation and enhanced patient satisfaction.[7–9]

Pharmacists are uniquely positioned to contribute to social prescribing given their accessibility, frequent interactions with patients and expertise in medication management.[10] As trusted healthcare professionals, pharmacists often serve as the first point of contact for health-related concerns in the community, build relationships with patients,[11] thus being able to provide a more comprehensive and holistic approach to health management. Moreover, pharmacists' knowledge of pharmacotherapy and potential drug interactions can inform the appropriateness and safety of social prescribing recommendations.[12] By reviewing patients' medication profiles and considering potential interactions with prescribed social activities, pharmacists can provide valuable input to ensure that social prescribing recommendations are appropriate and do not pose any risks to patients' health.[13–16] For example, if a patient is prescribed a new exercise programme as part of social prescribing, pharmacists can assess whether any of their medications may affect their ability to participate safely or require dose adjustments.[17] They are increasingly recognised as valuable members of interprofessional healthcare teams, contributing to chronic disease management, medication therapy management and patient education.[18] The integration of social prescribing into pharmacy practice represents an opportunity for pharmacists to further expand their scope of practice to provide more comprehensive patient care.

The expanding role of pharmacists in primary care and public health further underscores their potential to contribute to social prescribing.[19] Pharmacists have demonstrated their value in chronic disease management, health promotion, medication therapy management and patient education, with studies showing improved health outcomes and reduced healthcare costs associated with pharmacist-led interventions.[20 21] Integrating social prescribing into pharmacy practice aligns with this evolving role and provides an opportunity for pharmacists to further demonstrate their value as integral members of the healthcare team.[22]

However, despite the potential benefits, pharmacists' involvement in social prescribing remains limited.[23] Various factors, such as lack of awareness, time constraints and insufficient training may hinder pharmacists' participation in this emerging practice.[24] Understanding the barriers and enablers to pharmacist involvement in social prescribing is crucial for developing strategies to overcome challenges and facilitate their engagement.[23 24]

Studies have explored the perspectives and experiences of various interest-holders, including patients, general practitioners and link workers, regarding social prescribing.[25–27] These studies have highlighted the potential benefits of social prescribing, such as improved mental health, reduced social isolation and increased patient activation.[2 28] However, they have also identified challenges, such as limited awareness of available services, difficulties in navigating referral pathways and concerns about the sustainability of social prescribing programmes.[3 24]

While these studies provide valuable insights into the overall implementation and impact of social prescribing, the specific barriers and enablers influencing pharmacist involvement in social prescribing have not been systematically investigated. Given the unique role and expertise of pharmacists, it is essential to understand their perspectives and experiences to inform the development of strategies and interventions that can effectively support their engagement in social prescribing.[29]

A comprehensive synthesis of qualitative evidence on this topic is needed to inform the development of strategies and interventions to support pharmacist engagement in social prescribing.[30] By exploring pharmacists' perspectives, experiences and attitudes towards social prescribing, this review aims to identify the key factors that facilitate or hinder their involvement and provide recommendations for policy, practice and future research.[31]

Objectives

The objectives of this systematic review are to:

1. Identify and synthesise qualitative evidence on the barriers and enablers influencing pharmacist involvement in social prescribing.
2. Explore pharmacists' perspectives, experiences and attitudes towards social prescribing.
3. Inform the development of strategies and interventions to support pharmacist participation in social prescribing initiatives.

METHODS

Eligibility criteria

The eligibility criteria for this systematic review will be defined using the PICo (Population, phenomenon of Interest, Context) framework for qualitative research. This framework, specifically designed for qualitative evidence synthesis, provides a structured approach to defining our review scope.[32] The PICo framework components have been carefully delineated to avoid overlap and ensure clear categorisation. This clear delineation ensures each component is distinct and avoids the duplication of concepts across categories.[33]

Population

The population of interest is pharmacists from any practice setting, including community pharmacies, hospital pharmacies and primary care settings; practising as individuals or being part of a trans/multidisciplinary team.[3 4]

Phenomenon of interest

The phenomenon of interest is pharmacist involvement in social prescribing implementation and delivery in pharmacy settings. This includes pharmacists' perspectives, experiences, attitudes and behaviours related to social prescribing activities, such as patient assessment, referral and follow-up. Studies that discuss barriers,

enablers, facilitators or challenges influencing pharmacist participation in social prescribing will be included.

Context

The context of the review is any healthcare setting where pharmacists may be involved in social prescribing, including community pharmacies, hospitals, primary care clinics and integrated healthcare systems. Studies conducted in any geographical location or healthcare system will be eligible for inclusion. This broad context will allow for a comprehensive understanding of pharmacist involvement in social prescribing across diverse settings and populations. However, the authors acknowledge that regional differences in healthcare systems and pharmacist roles may influence the barriers and enablers identified. These differences will be considered during the data synthesis process, with attention paid to the context of each study and how it may impact the transferability of findings.

Study design

This systematic review will include qualitative research studies that explore pharmacist perspectives, experiences and attitudes related to social prescribing. Eligible study designs include, but are not limited to, in-depth interviews, focus groups, ethnographic studies and qualitative case studies. Mixed-methods studies with a qualitative component will also be considered for inclusion, as they can provide valuable insights into pharmacists' experiences alongside quantitative data. However, only the qualitative data from these studies will be extracted and synthesised, as the focus of this review is on understanding the barriers and enablers from a qualitative perspective. Quantitative studies, editorials, commentaries and review articles will be excluded, as they do not provide the rich, in-depth data necessary to understand pharmacists' experiences and perspectives.

Information sources

A comprehensive search strategy will be employed to identify relevant studies. The following electronic databases will be searched from their inception to January 2025: PubMed, Web of Science, Embase, CINAHL, MEDLINE, The Cochrane Library, PsycINFO and Scopus. This timeframe ensures comprehensive coverage while maintaining currency of findings. The search will be limited to studies published in English from the inception of each database to January 2025 due to resource constraints and the team's linguistic capabilities. While this may introduce language bias, previous research suggests that language restrictions in systematic reviews focusing on healthcare interventions do not typically result in systematic bias.[34–36] In addition to the electronic database search, grey literature sources will be explored to capture relevant unpublished studies, conference proceedings and reports. Following the CADTH Grey Matters checklist approach, we will systematically search: government and regulatory websites (eg, health departments, pharmacy boards); professional organisation websites and repositories; clinical trial registries; conference proceedings databases; theses and dissertation repositories (including OpenGrey and ProQuest dissertations and theses global); Google Scholar.

Each grey literature source will be searched using standardised terms derived from our main search strategy, adapted for the specific platform's requirements. This structured approach ensures comprehensive coverage of non-peer-reviewed literature while maintaining systematic rigour. Hand searching of reference lists from included studies and relevant review articles will also be conducted to identify any additional studies that may have been missed in the electronic searches.

The systematic review will be conducted over a 12-month period, commencing March 2025 with expected completion by February 2026, with the following timeline: database searching and initial screening (2 months), full-text review and data extraction (3 months), quality assessment (2 months), data synthesis and analysis (3 months) and manuscript preparation and revision (2 months). This timeline allows for thorough execution of each phase while maintaining feasibility.

Search strategy

The search strategy will be developed in consultation with a medical librarian and will include a combination of keywords and controlled vocabulary terms (eg, Medical Subject Headings terms) related to pharmacists, social prescribing, and qualitative research. The search terms will be adapted for each database to ensure comprehensive coverage.

The following search string template will be used and adapted for each database:

((‘pharmacist*’ OR ‘pharmacy personnel’ OR ‘community pharmacy’ OR ‘hospital pharmacy’) AND (‘social prescribing’ OR ‘social prescription’ OR ‘community referral’ OR ‘non-medical referral’ OR ‘social needs’ OR ‘social determinants of health’ OR ‘social care needs’) AND (‘barrier*’ OR ‘facilitat*’ OR ‘enabler*’ OR ‘challeng*’ OR ‘perspective*’ OR ‘experience*’ OR ‘attitude*’ OR ‘view*’ OR ‘opinion*’ OR ‘perception*’ OR ‘belief*’ OR ‘knowledge’ OR ‘understanding’) AND (‘qualitative’ OR ‘interview*’ OR ‘focus group*’ OR ‘case study’ OR ‘ethnograph*’ OR ‘grounded theory’ OR ‘thematic analysis’ OR ‘content analysis’ OR ‘phenomenolog*’ OR ‘discourse analysis’))

The complete search strategies for each database, including all search terms, Boolean operators and field codes, are provided in Supplementary File (online supplemental appendix B). These strategies are adapted according to each database's specific syntax requirements while maintaining consistent search concepts across all sources.

Study selection

The study selection process will involve two stages: title/abstract screening and full-text review. In the first stage,

two reviewers will independently screen the titles and abstracts of all retrieved records against the eligibility criteria. Records deemed potentially relevant by either reviewer will be included for full-text review.

In the second stage, the full-text articles of the selected records will be independently assessed by two reviewers for inclusion. Any disagreements between the reviewers will be resolved through discussion or by consulting a third reviewer if necessary. Reasons for exclusion at the full-text stage will be documented.

Any disagreements between reviewers during the screening and selection process will be resolved through detailed discussion and consensus-building. If consensus cannot be reached after thorough discussion, a third reviewer will be consulted to make a final decision. Inter-rater reliability between reviewers will be assessed using Cohen's kappa coefficient at both the title/abstract screening and full-text review stages. This quantitative assessment of reviewer agreement ensures transparency and rigour in the selection process. The third reviewer will independently review the disputed material and provide their assessment, with their rationale documented. This process ensures transparency and rigour in study selection while minimising potential bias.

The study selection process will be reported using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram[37] (figure 1). The screening process will be facilitated using Covidence systematic review software[38] to ensure systematic and transparent documentation of decisions at each stage. This software will support the independent review process and help manage disagreements between reviewers.

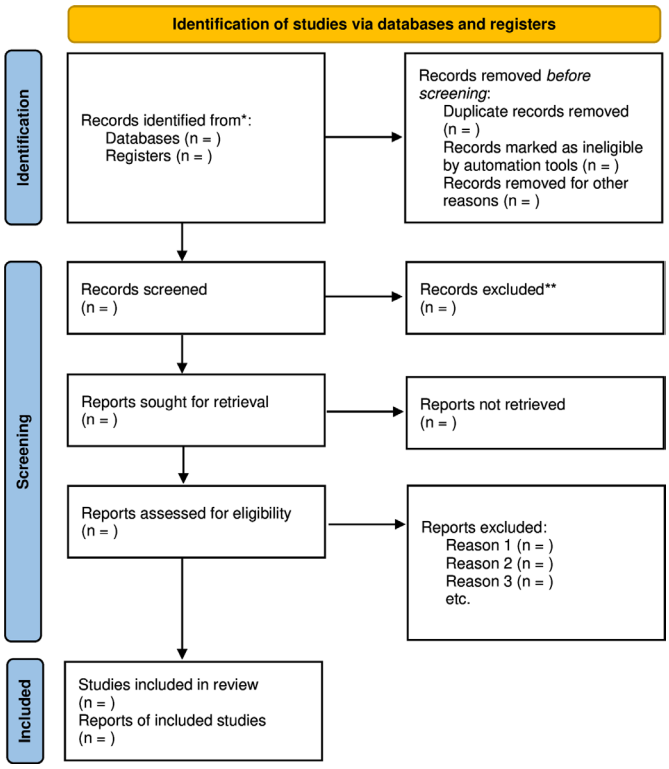

Figure 1 Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram.

Data extraction

A comprehensive data extraction process will be implemented using a standardised form that will undergo pilot testing on a sample of included studies for refinement. Two independent reviewers will extract data from each study, with any disagreements resolved through discussion or third-reviewer consultation. To ensure transparency and reproducibility, a detailed data extraction form containing specific fields and categories has been developed (see online supplemental appendix A). This form will be included in the final review publication, along with a clear description of the data extraction and synthesis processes, to allow for replication and scrutiny of the review methods. If any information is unclear or missing from the primary studies, the reviewers will attempt to contact the study authors for clarification or additional details.

The extraction will encompass multiple dimensions of each study, including fundamental study characteristics such as authorship, publication year, country and study design. To maintain clear conceptual distinctions in our analysis: enablers/barriers refer to actual factors empirically identified as influencing implementation in practice; perceived benefits/challenges refer to stakeholder perceptions and expectations about social prescribing, which may or may not manifest as actual enablers or barriers. This distinction allows us to differentiate between experienced implementation factors and anticipated outcomes. Participant-specific information will focus on pharmacists' practice settings and their professional experience. The process will document details of social prescribing programmes or initiatives, along with the identification of barriers and enablers influencing pharmacist involvement. Pharmacists' perspectives, experiences and attitudes towards social prescribing will be carefully recorded, along with the study's key themes and findings. While key themes will be extracted from individual studies, these will serve as data points for synthesis rather than predetermined outcome categories. The thematic synthesis will integrate these extracted themes to develop higher-order analytical constructs that represent patterns across the included studies. Additionally, the extraction will capture contextual elements such as healthcare systems, policies and regulations that may impact pharmacist participation in social prescribing, ensuring a comprehensive understanding of the findings' transferability across different settings.

Assessment of methodological quality and trustworthiness

The methodological quality and trustworthiness of included studies will be assessed using the Critical Appraisal Skills Programme (CASP) Qualitative Research Checklist.[39] This widely used tool evaluates various aspects of qualitative research, including the appropriateness of the research design, the rigour of data collection

and analysis and the credibility and transferability of the findings.

Two reviewers will independently assess the methodological quality for each included study using the CASP checklist. Any disagreements will be resolved through discussion or by involving a third reviewer. The assessment will focus on aspects such as clarity of research aims, appropriateness of methodology, rigour of data collection and analysis, and clarity of findings presentation. The results of the quality assessment will be presented in a table, and the strengths and limitations of each study will be narratively summarised.

This quality assessment will inform the interpretation of the review findings and the confidence in the synthesised evidence. Studies with significant methodological limitations may be given appropriate consideration in the synthesis, and the potential impact of any quality concerns on the review conclusions will be transparently reported.

Data synthesis

A thematic synthesis approach will be employed to analyse and synthesise the qualitative data from the included studies.[40–44] This approach was chosen for its ability to generate new insights and interpretations beyond the primary studies while maintaining a transparent and systematic process. The thematic synthesis will involve three main stages: coding the text, developing descriptive themes and generating analytical themes.[41]

In the first stage, the findings sections of the included studies will be carefully read and line-by-line coding will be performed to identify relevant concepts and ideas. The codes will be inductively derived from the data and will capture the key barriers, enablers and experiences reported by pharmacists.

In the second stage, the codes will be examined for similarities and differences, and related codes will be grouped together to develop descriptive themes. The development of descriptive themes will involve systematically comparing and translating existing themes from primary studies into one another, rather than generating entirely new constructs. This approach maintains the systematic nature of the review while allowing for meaningful synthesis of qualitative findings. These descriptive themes will preserve the key concepts from the primary studies while facilitating cross-study comparison and synthesis. These themes will provide a more condensed and organised representation of the coded data, while staying close to the original findings of the primary studies.

In the third stage, the descriptive themes will be further analysed and interpreted to generate higher-order analytical themes. These analytical themes will go beyond the primary studies and provide new conceptual understandings of the barriers and enablers influencing pharmacist involvement in social prescribing. The analytical themes will be developed through an iterative process of discussion and reflexivity among the review team, drawing on their expertise in pharmacy practice, social prescribing and qualitative research.

When encountering contradictory or dissonant findings across studies, these will be carefully examined rather than excluded, as they may reveal important contextual differences or implementation challenges. Contradictory findings will be explicitly acknowledged and explored through the following approaches: (1) checking whether methodological differences explain the contradictions, (2) examining whether contextual factors (such as healthcare setting, geographical location or timing) account for the differences, (3) considering whether different participant characteristics explain varying perspectives and (4) assessing whether theoretical frameworks used in different studies contribute to divergent findings. This systematic approach to handling contradictory data will enhance the review's comprehensiveness and trustworthiness while providing valuable insights into the complexity of pharmacist involvement in social prescribing.

Throughout the data synthesis process, constant comparison methods will be used to explore the similarities and differences across studies, settings and participant characteristics. Attention will be paid to any regional differences in healthcare systems and pharmacist roles that may influence the barriers and enablers identified. These differences will be actively considered during the synthesis process, with themes being systematically identified and developed through rigorous analysis of the data by the review team. When different stakeholder perspectives present conflicting viewpoints, we will employ a matrix approach to analyse and present these variations systematically. This will involve creating a framework that maps different perspectives against key themes, allowing for clear visualisation of where views align or diverge. We will explore potential explanations for these differences, considering factors such as professional role, organisational context and cultural or systemic influences. This approach ensures that diverse perspectives are represented while maintaining analytical rigour and transparency in how conclusions are drawn from divergent viewpoints.

The findings of the thematic synthesis will be presented in a narrative summary, organised using the Consolidated Framework for Implementation Research (CFIR). This framework provides a comprehensive structure for categorising and analysing identified barriers and facilitators across five key domains: intervention characteristics (features of social prescribing), outer setting (external influences and context), inner setting (pharmacy environment and culture), characteristics of individuals (pharmacist attributes and attitudes) and implementation process (planning and execution factors). Within each CFIR domain, analytical themes developed through our synthesis will be presented and discussed. The narrative summary will be enriched with illustrative quotes from the primary studies to provide rich, detailed descriptions of pharmacists' perspectives and experiences. Additionally, tables and figures will be used to visually represent the relationships between themes and demonstrate how they align with and extend

beyond the CFIR framework, particularly in capturing unique aspects of pharmacy-based social prescribing. This structured approach ensures systematic categorisation of implementation factors while maintaining flexibility to capture emergent themes specific to the pharmacy context.

Confidence in the review findings

The Grading of Recommendations Assessment, Development and Evaluation - Confidence in the Evidence from Reviews of Qualitative Research (GRADE-CERQual) approach will be used to assess the confidence in the review findings.[45] GRADE-CERQual is a transparent and systematic method for assessing the level of confidence that can be placed in the findings from qualitative evidence syntheses.[46]

The GRADE-CERQual assessment will be conducted for each review finding to evaluate the trustworthiness and confidence in the evidence. This assessment will consider four components: methodological limitations (quality and trustworthiness of individual studies), coherence (how well the data support the finding), adequacy of data (richness and quantity of evidence) and relevance (applicability to the review context). Methodological limitations refer to the extent to which the primary studies contributing to a finding have methodological concerns that may reduce the confidence in the finding. Coherence assesses the degree to which the primary studies provide consistent and cohesive evidence to support a finding. Adequacy of data evaluates the richness and quantity of data supporting a finding. Relevance examines the extent to which the primary studies are applicable to the context and setting of the review question.[45]

For each component, the review team will assign a judgement of 'no or very minor concerns', 'minor concerns', 'moderate concerns' or 'serious concerns'.[47] These judgements will be based on a careful assessment of the primary studies contributing to each finding, and will be supported by detailed explanations and justifications.[48]

An overall GRADE-CERQual assessment will then be made for each review finding, resulting in a judgement of 'high confidence', 'moderate confidence', 'low confidence' or 'very low confidence'.[49] This overall judgement will reflect the degree of confidence that the review finding is a reasonable representation of the phenomenon of interest.[50]

The GRADE-CERQual assessments will be presented in a summary of findings table, along with the review findings and the explanations for each CERQual component.[51] This transparent reporting of the confidence in the review findings will help users of the review to interpret the findings and make informed decisions about their applicability and relevance to their specific contexts.[52]

Patient and public involvement

None.

Ethics and dissemination

Ethics approval is not required as this study will merely synthesise data from published studies. The results will be disseminated through peer-reviewed publications, conference presentations and engagement with key interest-holders including clinicians, policymakers, healthcare organisations and patient advocacy groups. The review findings will inform strategies and interventions to support pharmacist involvement in social prescribing, while also identifying gaps for future research.

Stakeholder consultation and validation

Following the initial synthesis, we will conduct a validation exercise with key stakeholders including practising pharmacists, social prescribing link workers, and healthcare managers. This consultation will be conducted as a separate study with appropriate ethical approval obtained prior to commencement. The process will involve: structured feedback sessions on the synthesised findings; assessment of practical relevance and applicability; validation of interpretations and conclusions; and identification of implementation considerations. This stakeholder consultation phase will be conducted following institutional ethical guidelines and will require separate ethical approval. The findings from this consultation will be reported as a distinct component of the review, clearly differentiated from the primary synthesis of published literature.

DISCUSSION

This systematic review protocol outlines a rigorous approach to synthesising qualitative evidence on the barriers and enablers influencing pharmacist involvement in social prescribing. Despite the growing recognition of the potential benefits of social prescribing and the unique role that pharmacists can play in its implementation, there is a lack of comprehensive evidence on the factors that hinder or facilitate pharmacist engagement in this emerging practice.

Existing studies have primarily focused on the perspectives and experiences of other interest-holders, such as patients, general practitioners and link workers,[25–27 53] leaving a gap in understanding the specific challenges and opportunities faced by pharmacists in relation to social prescribing. This systematic review aims to address this gap by providing a detailed synthesis of qualitative research on pharmacists' perspectives, attitudes and experiences.

Recent studies[13 54 55] have explored the role of pharmacists in social prescribing, but only a limited number have examined their involvement in detail. While these studies offer valuable insights, they do not employ a systematic approach to synthesising qualitative evidence. To address these gaps, our systematic review will adopt a rigorous methodology to focus on the key factors shaping pharmacist involvement in social prescribing.

The review will explore a range of pharmacist perspectives, experiences, attitudes and behaviours related to social prescribing. This may include their understanding and awareness of social prescribing, their perceived role and responsibilities, the factors that encourage or discourage their involvement and their experiences of facilitating social prescribing referrals in practice. Studies will be assessed for inclusion based on their relevance to the review question and their use of qualitative methods to explore pharmacists' perspectives. When synthesising the data and drawing conclusions, reviewers will need to consider the context of each study, the richness and depth of the data and any potential biases or limitations in the primary studies.

The review will include studies conducted in any healthcare setting where pharmacists are involved in patient care, including hospitals, primary care and community pharmacies. While the specific barriers and enablers may vary depending on the patient population and care setting, the review aims to identify overarching themes that can inform social prescribing initiatives across contexts. When assessing the data, reviewers will need to consider how the healthcare setting and patient characteristics may influence pharmacists' perspectives and experiences, and whether any setting-specific barriers or enablers emerge.

Potential barriers and challenges that may be identified in the selected studies include lack of awareness or understanding of social prescribing among pharmacists, time constraints and competing priorities, limited training or resources to support social prescribing activities, difficulties in identifying and accessing local community services and professional boundary concerns. Reviewers will need to be attentive to the full range of barriers and challenges reported in the primary studies and consider how they may interact to influence pharmacists' involvement in social prescribing.

The term 'enablers' refers to the factors, resources or conditions that facilitate or support pharmacists' involvement in social prescribing. This is distinct from 'interest-holders', which refers to the individuals or groups who have an interest or role in social prescribing, such as patients, healthcare professionals, community organisations and policymakers. Enablers may include pharmacists' professional skills and knowledge, their relationships with patients and other healthcare providers, supportive policies and funding arrangements and access to training and resources. The review will aim to identify the key enablers that can be leveraged to optimise pharmacist involvement in social prescribing initiatives.

The findings of this review will have important implications for policy, practice and research. By identifying the key barriers and enablers, the review will inform the development of strategies and interventions to support pharmacist involvement in social prescribing.[30] This may include recommendations for training and education programmes, policy changes or the establishment of collaborative networks between pharmacists and other health and social care providers involved in social prescribing initiatives.

Furthermore, the review will highlight areas for future research, such as exploring the impact of pharmacist-led social prescribing on patient outcomes, evaluating the cost-effectiveness of pharmacist interventions or investigating the role of technology in facilitating pharmacist engagement. By providing a comprehensive synthesis of the current qualitative evidence and identifying gaps in the literature, this review will serve as a foundation for future research and practice development in this area.

One advantage of this qualitative systematic review design is its ability to provide a comprehensive and in-depth understanding of pharmacists' perspectives and experiences related to social prescribing. By synthesising data from multiple qualitative studies, the review can identify overarching themes and patterns that may not be apparent from individual studies. The use of a transparent and rigorous methodology, including a prespecified protocol, comprehensive search strategy and validated quality appraisal and data synthesis methods, strengthens the credibility and trustworthiness of the review findings.

However, there are also limitations to consider. Qualitative systematic reviews are inherently interpretive and rely on the judgments and insights of the review authors. While steps can be taken to minimise bias, such as using multiple independent reviewers and explicitly reporting review methods, the findings may still be influenced by the reviewers' backgrounds and perspectives. Additionally, the quality and quantity of available qualitative evidence may be limited, which could affect the robustness and generalisability of the review findings. By clearly reporting the review methods and limitations, readers can judge the trustworthiness and applicability of the findings to their own contexts.

Finally, the authors will consider engaging practising pharmacists and social prescribing professionals in an interest-holders consultation process to validate the synthesised findings. This may involve sharing a summary of the key themes and barriers/enablers identified with a diverse group of pharmacists and social prescribing experts and seeking their feedback on how well the findings resonate with their real-world experiences. This validation process will help ensure the review findings are grounded in practice and can inform the development of relevant and feasible strategies for enhancing pharmacist involvement in social prescribing.

In conclusion, this systematic review will provide valuable insights into the barriers and enablers influencing pharmacist involvement in social prescribing. The findings will have important implications for policy, practice and research and will contribute to the development of evidence-based strategies to optimise pharmacist engagement in this innovative approach to healthcare delivery.

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Contributors RS conceived the idea and is the guarantor of the review, developed the research question and wrote the study method. RS and AB drafted and finalised

the protocol of this systematic review. RS, AB and JL designed and tested the search strategy. All other authors contributed meaningfully to the paper through reading and editing. All authors read and approved the final protocol. RS is the guarantor.

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