

Facilitators, Barriers, and Strategies for Health-system Guidance Implementation: A Protocol for a Critical Interpretive Synthesis

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Keywords: Health-system guidance, Implementation, Facilitators, Barriers, Strategies, Theoretical framework

Posted Date: December 18th, 2020

DOI: <https://doi.org/10.21203/rs.3.rs-127473/v1>

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Abstract

Background: As systematically developed statements about possible courses of action, health-system guidance (HSG) can assist with making decisions and developing policies to address problems or achieve goals in health systems. However, there are conceptual and methodological challenges related to HSG implementation due to the complexity of health systems and policymaking, the diversity of available evidence, and vast differences in contexts. To address these gaps, we aim to develop a theoretical framework for supporting the implementation of HSG as part of an effort to promote evidence-informed policymaking about health systems.

Methods: To develop a theoretical framework about facilitators, barriers, and strategies to the implementation of HSG, we will apply a critical interpretive synthesis (CIS) approach to synthesize the findings from a range of relevant literature. We will search eleven electronic databases and grey literature websites to identify relevant published and grey literature. We will check the references of included studies and papers recommended by experts. Finally, we will conduct purposive searches to identify literature that fills any identified conceptual gaps. We will use relevance and a general five-items quality criteria to assess included papers. A standardized form will be developed for extracting information. We will use an interpretive analytic approach to synthesize the findings from included papers, including the constant comparative method throughout the analysis. The literature screening and relevance assessment will be conducted by two independent reviewers and disagreements will be resolved through discussion. Data extraction and synthesis will be extracted by the principal investigator and the sample of extracted data will be checked by a second reviewer for consistency and accuracy.

Discussion: A new theoretical framework about facilitators, barriers, and strategies for HSG implementation will be developed using the CIS approach. The HSG implementation framework could be widely used for different HSG with varied topics and in different contexts (including low-, middle-, high-income countries and settings). In later work we will develop a tool for supporting HSG implementation based on the theoretical framework.

Systematic review registration: PROSPERO CRDXXXX (Pending)

Contributions To The Literature

- Current implementation frameworks and tools for health guidelines are not appropriate for the health-system guidance (HSG) because the implementation context for HSG is more multi-layered and complex due to the characteristics of policymaking process about health systems. Therefore, it is necessary to develop a comprehensive, systematic, well-organized theoretical framework for supporting the implementation of global HSG at national or sub-national levels.
- A critical interpretive synthesis (CIS) approach will help develop a theoretical framework through an interpretive and iterative process building on a large and complex literature with varied methodologies.

- The theoretical framework will cover all facilitators, barriers, and strategies related to HSG implementation at the individual, organizational, community and system level, which will provide strong theoretical support for developing an HSG implementation tool, but also contribute to the research community of HSG and/or implementation.

Background

Health systems can be understood and conceptualized from numerous perspectives. According to the World Health Report 2000 issued by World Health Organization (WHO), health systems have been defined as “all the activities whose primary purpose is to promote, restore or maintain health” (WHO, 2000), which often were specifically categorized in six “building blocks”: 1) service delivery, 2) health workforce, 3) health information systems, 4) access to medical products, vaccines and technologies, 5) financing, and 6) leadership and governance (WHO, 2007). To better clarify health systems and support the conduct of related research with a more comprehensive and operational theoretical framework, a panel commissioned by the WHO Alliance for Health Policy and Systems Research (HPSR) systematically analyzed current frameworks about health systems and proposed a new way to define health systems, which refers to “the governance, financial and delivery arrangements for health care and public health services, implementation considerations for reforming or strengthening these arrangements, and broader economic, legal, political and social contexts in which these arrangements are negotiated and operate” (Hoffman et al., 2012).

However, only defining health systems in a sound and conceptual way is not going far enough for achieving the “quadruple aim” (namely, improving patient experiences, improving population health, keeping per capita costs manageable, and keeping providers satisfied) (Bodenheimer and Sinsky, 2014) or the health targets of the Sustainable Development Goals (SDGs). According to the World Health Statistics 2019, there were some improvements in health-related SDG indicators, for example, the increase of global and healthy life expectancy (separately by 5.5 and 4.8 years), and vaccination coverage rates; the decrease in neonatal deaths and deaths in children aged under 5 years, etc. However, there were still some disparities and inequities in health outcomes among low-, middle-, and high- income countries, some health gaps in different genders, and some room for greater improvements (WHO, 2019).

On the one hand, policymakers, managers, providers, patients/citizens, researchers, and other stakeholders at global, national and local levels have continuously and collaboratively worked together to make efforts to achieve these health goals and targets. Moreover, more and more effective, safe, and cost-effective health interventions are becoming available. However, some key actions still need to be proposed and implemented, such as investments in health information systems, and measures that make health systems more responsive and resilient (WHO, 2019). Multiple studies showed that weak health systems could hinder the delivery and implementation of effective interventions (Bhutta et al., 2010; Travis et al., 2004).

Just as physicians use clinical guidelines in practice, policy makers can develop or revise policies with the help of health-system guidance that generally contain proposed options and their supporting evidence. Health-system guidance has been defined as “systematically developed statements produced at global or national levels to assist decisions about appropriate options for addressing a health system challenge in a range of settings and to assist with the implementation of these options and their monitoring and evaluation” (Bosch-Capblanch et al., 2012). Given the early phase of health-system research and HSG, there were great varieties in terms that being used in the titles of HSG documents, such as “policy guidance”, “policy recommendations”, “guideline”, “guidance”, “recommendations”, “policy”, “opinions”, etc. Therefore, when identifying HSG documents, the recommendations should be reviewed rather than the titles (i.e. whether the recommendations focused on one or many aspects of health-system arrangements). In our study, we adopted the above definition of HSG from Bosch-Capblanch et al. to identify HSG documents and categorized them according to development process and the proportion of recommendations related to health-system arrangements.

HSG is expected to use research evidence to inform policies about strengthening health systems (Bosch-Capblanch et al., 2012; Lavis et al., 2012; Lewin et al., 2012). Bosch-Capblanch et al. assessed the demand for HSG and found that it was explicitly proposed as one strategy for improving quality of care in some national statements (Bosch-Capblanch et al., 2012). On the one hand, WHO commissioned experts to produce the handbook to help improve the amount and quality of HSG development (Bosch-Capblanch et al., 2011); on the other hand, several principles and strategies were proposed to avoid the waste of guidance development, and to promote the use of effective approaches and tools to support the adaptation and implementation of HSG from global level to national or subnational level (Lavis et al., 2012).

Considering the complexity of health systems (its components and their multidirectional interactions), diversity of available evidence about health systems, vast differences in contexts, and multifactorial policymaking process about health systems (Gauvin, 2014), a group of experts identified and analyzed the existing conceptual, methodological and practical challenges of HSG (Bosch-Capblanch et al., 2011; Bosch-Capblanch et al., 2012). A growing number of researchers and stakeholders from different institutions and governments, worked together to develop transparent and rigorous processes and approaches to ensure the high-quality process of development (Ako-Arrey, 2015) and contextualization (Alvarez, 2016). The rigorous development and appropriate contextualization of HSG precedes the implementation of guidance at national or sub-national levels, which are certainly prerequisites of successful implementation of HSG.

When HSG is produced at the global level, it is generally used to support decisions or policies by national (or sub-national) governments and by global organizations. For example, WHO produces HSG to be used by its member states as well as its own staff in their work with member states. Lavis et al. argued that HSG can present key features of related health and political systems. Also, they called for a complementary research agenda on analyzing more system and political considerations to ensure policy development is informed by HSG (Lavis et al., 2012). In addition, the HSG development handbook panel

proposed that the HSG implementation was not only related to national (or sub-national) needs, priorities and resources, but also need to consider implementation facilitators, barriers, and supporting strategies, even some of which should be early considered by global guidance developers and local guidance users (Bosch-Capblanch et al., 2011).

There were multiple studies about implementation factors and strategies of health guidelines (Francke et al., 2004; Grimshaw et al., 2004; Wang et al., 2015). Also, some frameworks and tools related to implementation of health guidelines have been developed and validated (Brouwers et al., 2015; Gagliardi et al., 2011; Gagliardi et al., 2014; Moberg et al., 2018; RNAO, 2012; Shiffman et al., 2005). One such framework (Moberg et al. 2018) provides the Evidence to Decision (EtD) framework to support the process of moving from evidence to decisions/recommendations in health systems and public health, and integrating the implementation considerations embedded in the available evidence, such as equity, acceptability, and other factors at organizational, political, social and resource levels. Compared to clinical practice guidelines and public health guidance, the implementation context for HSG is more multi-layered and complex due to the characteristics of policymaking process about health systems, among other factors. Therefore, current guideline implementation frameworks and tools might not be suitable for relatively complex HSG implementation (Bosch-Capblanch et al., 2011).

There is a need for a comprehensive, systematic, well-organized theoretical framework and practical tool to support the implementation of global HSG at national or sub-national levels. The first step to the program of research, and the focus of the paper, is to conduct a knowledge synthesis of the published studies and grey literature to identify facilitators, barriers, and strategies—at the individual, organizational, community and system level—related to HSG implementation. The synthesis results are used for providing the foundational elements of HSG implementation theoretical framework for the research community.

The objective of our study is to develop a theoretical framework by iteratively and flexibly examining literature and interpreting results, which makes CIS an optimal approach. The compass question that guides an iterative and qualitative synthesis approach is a key feature of the CIS approach. Our overarching objective is to develop a theoretical framework about the facilitators of, barriers to, and strategies of HSG implementation at different levels (individual, organizational, community and system) based on the following two compass questions:

1. What factors – at the individual, organizational, community and system level – facilitate or hinder HSG implementation processes and outcomes?
2. What strategies – at the individual, organizational, community and system level – can leverage facilitators and address barriers to HSG implementation processes and outcomes?

Methods

We will use a CIS approach to develop a theoretical framework that incorporates all facilitators, barriers, and strategies about HSG implementation, explores relationships among the above factors and

strategies, and provides an overall explanatory theory for HSG implementation.

CIS, as one type of knowledge synthesis, was developed to address the limitations of traditional systematic review methodology (such as pooling data based on the comparability and homogeneity) by combining with the qualitative inquiry technique (Dixon-Woods et al., 2006). The CIS is used to identify and develop concepts and theories through an inductive, interpretive, and iterative process. The output of a CIS will be the theory grounded in included studies from a large, diverse, and complex body of literature, rather than data aggregation. Therefore, a CIS is conceptual in both its process and output (Dixon-Woods et al., 2004; Dixon-Woods et al., 2006; Schick-Makaroff et al., 2016).

Since Dixon-Woods et al. introduced the CIS method with an example of access to healthcare by vulnerable populations (Dixon-Woods et al., 2006), the CIS approach has been applied by more and more researchers to generate or revise theories or theoretical frameworks, especially in fields with a large and complex literature informing it. For example, Ako-Arrey and his colleagues used a CIS approach to identify and organize 30 concepts related to HSG appraisal (Ako-Arrey, 2015). Bullock and her colleagues used the approach to build the theoretical framework to understand the implementation process of evidence-informed policies and practices in a policy lens (Bullock, 2019). Also, Khalid et al. developed a framework about using evidence in crisis context with the approach (Khalid et al., 2020).

A CIS approach is particularly appropriate for our study for the following reasons. First, CIS is suitable for analyzing and synthesizing findings from diverse and complex types of literature with varied methodologies, such as quantitative empirical studies, qualitative studies, conceptual or theoretical papers, commentaries, etc. (Dixon-Woods et al., 2006; Schick-Makaroff et al., 2016). The literature related to HSG is highly heterogeneous with diverse study designs. Also, as a nascent domain, HSG is often mixed in clinical practice guidelines or public health guidance, or included in “general” guidelines (Ako-Arrey, 2015). Second, CIS is used for developing concepts and/or theories based on a detailed inspection of literature, an iterative and flexible process of inquiry, and an inductive interpretation for developing concepts and theory (Dixon-Woods et al., 2006). Compared with CIS, traditional systematic reviews prefer to follow a pre-determined protocol to aggregate data or integrate results, and scoping reviews are mainly conducted when examining evidence distribution, boundaries, and gaps (Schick-Makaroff et al., 2016).

The CIS approach will be conducted by following five steps:

1.1 Identifying potentially relevant articles

We will conduct the literature search in phases while being guided by the two compass questions. The search strategy, including the search sources and terms, was developed through multiple consultations with a librarian.

We will search eleven electronic databases: Chinese Biomedical Literature Database (CBM), CNKI (China National Knowledge Infrastructure), Cochrane Library, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Embase, Google Scholar, HealthSTAR, Health Systems Evidence, PubMed, WANFANG

Data, and Web of Science. Also, we will search the following grey literature websites for unpublished literature: BIGG (international database of GRADE guidelines), Guidelines International Network (GIN), Health Systems Global (HSG), National Institute for Health and Clinical Excellence (NICE), National Institutes of Health (NIH), Scottish Intercollegiate Guidelines Network (SIGN), and World Health Organization (WHO). We will check the references of included studies and papers recommended by experts. Finally, we will conduct purposive searches to identify literature that fills any identified conceptual gaps (Wilson et al., 2014).

The search terms were seen in Box 1. The detailed search strategy for each electronic database was provided in Appendix 1.

1.2 Selecting potentially eligible articles

All reviewers (QW, XJC, YZ, JYZ) will conduct the pilot screening for reaching consensus on inclusion and exclusion criteria. If necessary, the inclusion and exclusion criteria might be changed based on pilot screening results and discussion with the program members. All paired reviewers will independently screen titles and abstracts, full texts of all identified literature against our criteria to classify each article as directly relevant literature, indirectly relevant literature, and excluded literature. The direct and indirect literature will be included in our sample pool of literature, from which we will select our purposive sample for the synthesis. Disagreements will be resolved through discussion or consulting a third reviewer.

While a qualitative synthesis approach like CIS does not typically involve the use of a quantitative measure like Kappa, to improve reflexivity, we will use Kappa to calculate interrater reliability for measuring the agreement among reviewers. We will accept Kappa value 0.61-0.80 as “substantial” agreement and 0.81-1.00 as “perfect” agreement for literature screening in our CIS. (McHugh, 2012) During the pilot screening phase, if the Kappa result is below 0.61, it shows the reviewers need a meeting for discussing eligibility criteria and pilot screening for another sample before formal screening. After reaching “substantial” agreement, we will start formal screening.

We will include all empirical and non-empirical articles on their study content, i.e. those related to the facilitators of, barriers to, and strategies to supporting HSG implementation at any level (individual, organizational, community and system). In case there is scarce literature directly relevant to HSG implementation processes based on the initial search and opinions of content experts, we will consider including the papers relevant to the implementation factors and/or strategies of clinical practice guidelines (CPG) or public-health guidance (PHG). We will call the former “direct literature” and the latter “indirect literature”. The implementation object or research subject of potentially included papers can be categorized as follows:

- HSG focused: meet the HSG definition proposed by Bosch-Capblanch et al. (as mentioned above); or all or most of recommendations were related to health systems, i.e. the recommendations can be coded with Health Systems Evidence Database’s taxonomy of governance, financial and delivery arrangements in health systems (hereinafter referred to as "HSE framework", Appendix 2).

- “Formal” HSG focused: developed using a robust process, such as WHO guidance. Several HSG examples developed by WHO are shown in Table 1.
- “Informal” HSG focused: organization documents and/or reports, such as World Health Assembly (WHA) documents.
- HSG relevant: CPG or PHG that including health-system recommendation(s) or containing a chapter or a section about health systems.

Moreover, to achieve a comprehensive search result, we will not place any restrictions in the following aspects:

- time frame,
- context (including low-, middle-, high-income countries and settings),
- study design (including peer-reviewed publication, conference abstracts, thesis and dissertation, editorials, comments, opinions, letters, correspondence, etc.), and
- language.

To better conduct the screening, a detailed description (Table 2) about inclusion and exclusion criteria was developed based on pilot screening by the principal investigator (QW) and discussion among the research program members.

1.3 Assessing relevant articles

The relevant articles will be assessed independently by two reviewers (QW and XJC) and disagreements will be resolved through discussion or consulting a third reviewer. A critical interpretive synthesis does not typically include a quality assessment but instead uses a relevance assessment. We will use relevance and a general five-items quality criteria to assess the included papers. First, we will use a flexible relevance boundary to comprehensively include the papers that contribute to generate concepts and theory. The relevance criteria could be defined as the ability or the contribution to provide the concepts, theories, or insights to answer the compass questions. (Dixon-Woods et al., 2006) Then, given the complexity of potentially included papers, we will further exclude the fatally flawed empirical papers, which will be the second step of literature assessment. The five-items criteria (Box 2) were adapted based on the items for evaluating qualitative research developed by the National Health Service (NHS) National Electronic Library for Health (Dixon-Woods et al., 2006).

1.4 Extracting data and information

Data will be extracted by the principal investigator and the sample of extracted data will be checked by a second reviewer for consistency and accuracy.

We have developed a standardized form (Appendix 3) to extract the characteristics of each included paper, including title, publication year, last name of first author (if applicable, or development organization), publication form (journal article, or grey literature such as government or organization

report), study design (if applicable), country focus (if applicable), and the object of implementation/research subject (e.g. HSG or indirect evidence related to CPG or PHG).

We will extract key findings from each included paper by writing brief (e.g. one-paragraph) summary and extract the HSG implementation facilitators, barriers, and strategies at four different levels. The facilitators, barriers and strategies will be identified if they are explicitly mentioned or referenced in the full text. Sometimes, strategies would be deduced based on the implications of the identified facilitators and barriers and the study team's accumulated understanding or insights about HSG implementation field (Khalid et al., 2020). We will extract facilitators of, barriers to, and strategies to supporting HSG implementation and organize them in the standardized form (Appendix 3), which will further classify findings based on three frameworks (Appendix 2, 4, 5).

For the individual level, we will use the second version of Theoretical Domains Framework (TDF) (Appendix 3) to extract and categorize the findings (Atkins et al., 2017; Cane et al., 2012). As the theoretical framework of identifying determinants of behaviour change, the TDF included 14 domains with a set of variables that can help explain what factors and strategies at the individual level facilitate or hinder HSG implementation processes. For the individual level, we will focus on providers and patients/citizens.

For the organizational and community levels, we will extract all implementation facilitators, barriers, and strategies that exist or occur at the organizational or community settings. For example, the organizational level will include all organizations that being involved in health systems, such as organizations for providing care (such as hospitals, clinics, pharmacies), organizations for providing funds (such as donor agencies), and other related international and/or non-governmental organizations (such as WHO, Red Cross). We define the community as the local or district health system. Community care programs are different among different communities and/or population groups, and some examples include supportive housing, adult day programs, retirement homes, residential hospices, exercise and falls-prevention programs, etc. (Lavis, 2016).

For the system level, we will separate two sub-categories, including health system and political system. For the aspect of health system, we will use HSE framework (as a set of variables, including governance, financial and delivery arrangements within health systems and implementation strategies, Appendix 2) to extract and organize the findings at health-system level. (Lavis 2017) For the aspect of political system, we will use framework of policy development and implementation (3I+E, "Institutions, Interests, Ideas and External factors"), as a set of variables that can help explain the findings at the political system level (Appendix 4) to categorize the political-system findings (Lavis et al., 2012; Lavis 2017; Gauvin, 2014).

1.5 Synthesizing and integrating findings

We will use an interpretive analytic approach to synthesize the findings from included papers, and to develop an explanatory framework of HSG implementation processes. We will conduct a constant

comparative method (Glaser, 1965) throughout the analysis, until reaching the saturation in identifying new concepts and themes (i.e. facilitators, barriers, and strategies) and new connections among them.

We will conceptually map the relevant papers. Specifically, we will use a 3 × 4 matrix to categorize the findings of included papers, which cross links three aspects (facilitators, barriers, and strategies) and four levels (individual, organizational, community and system). The conceptual mapping exercise will be used to categorize the literature into domains and topics of interest for further assessment, abstraction, and coding. After getting the initial results of conceptual mapping, we will probably identify some conceptual gaps, and further conduct purposive sampling to identify relevant literature. The sampling process will be stopped when reaching the saturation, i.e. the new literature cannot provide additional new content to our framework. However, the purposive searches and sampling could be considered as dynamic and iterative, i.e., the new conceptual gaps could be being identified and filled in the synthesis process and integration phase of findings (Wilson et al., 2014). During the process, the iterative discussion and feedback among the program members will be conducted.

As noted above, we will use the TDF, HSE framework and 3I+E framework to organize the findings. The analysis, synthesis and integration processes will be iteratively conducted with constant feedback from the consultation with our program team with interdisciplinary expertise and experience (Wilson et al., 2014; Khalid et al., 2020). We will use the Microsoft Excel 2010 and NVivo version 9 software during the analysis and synthesis process. This will involve:

1. identifying common themes and concepts based on included papers;
2. developing theoretical constructs based on the emerging themes and concepts;
3. critiquing the emerging theoretical constructs as a whole and with our full sample of literature to identify conceptual gaps in the available evidence in relation to our principal aims;
4. conducting additional purposive sampling of included papers and/or conducting additional purposive searches to fill conceptual gaps (if needed) until theoretical saturation is reached; and
5. integrating the theoretical constructs into a “synthesizing argument” about HSG implementation processes (i.e., an explanatory framework).

Discussion

We will use a CIS approach to develop a theoretical framework that incorporates all facilitators, barriers, and strategies about HSG implementation at four different levels (individual, organizational, community and system), explores relationships among the above factors and strategies, and provides an overall explanatory theory for HSG implementation. The study will have the following strengths and challenges.

Strengths

Firstly, a CIS approach is appropriate for developing a theoretical framework based on diverse and complex body of literature (Dixon-Woods et al., 2006). Given the characteristics of literature on

policymaking and implementation about health systems, a CIS approach could be used for generating a theoretical framework about HSG implementation. Secondly, the output of our study will be the first implementation framework specially for HSG, given the complexity of health systems and policymaking, the diversity of available evidence, and vast differences in contexts, which will fill the research gap about HSG implementation. In addition, this framework will be widely used for different HSG with varied topics and in different contexts (including low-, middle-, high-income countries and settings). Thirdly, comparing with a descriptive conceptual framework, a theoretical framework for HSG implementation that includes different factors and strategies, could provide clear relationships and connections among these elements. Finally, the development of an HSG implementation framework will not only provide strong theoretical support for developing an HSG implementation tool, but also contribute to the research community of HSG and/or implementation.

Challenges

The anticipated biggest challenge might be the process to synthesize the findings from a complex and diverse body of literature. Our response to this challenge is to enrich the CIS approach with ongoing input from interdisciplinary study team. Also, according to our pilot search and screening, the literature directly relevant to HSG might be scarce and seems not provide the comprehensive findings for the framework because the research of HSG implementation is still in the beginning stage and is just the small part of health systems research or implementation science. One response to this potential challenge is to expand to include the literature not directly relevant to HSG implementation but very closely or similarly to our focus. For example, the “indirect evidence” includes the papers relevant to the implementation of CPG and/or PHG. Again, we will rely on our study team to refine the framework based on their interdisciplinary expertise and experience.

Next step

In later work we will develop an HSG implementation tool based on the theoretical framework using adapted Delphi method and validate the tool.

List Of Abbreviations

3I + E	Institutions, Interests, Ideas and External factors
CBM	Chinese Biomedical Literature Database
CINAHL	Cumulative Index to Nursing and Allied Health Literature
CIS	Critical Interpretive Synthesis
CNKI	China National Knowledge Infrastructure
CPG	Clinical Practice Guideline
EIP	Evidence-informed Policymaking
GRADE	Grading of Recommendations, Assessment, Development and Evaluations
GIN	Guidelines International Network
HPSR	Health Policy and Systems Research
HSE	Health Systems Evidence
HSG	Health-system Guidance
NHS	National Health Service.
NICE	National Institute for Health and Clinical Excellence
NIH	National Institutes of Health
PHG	Public-health Guidance
SDGs	Sustainable Development Goals
SIGN	Scottish Intercollegiate Guidelines Network
TDF	Theoretical Domains Framework
WHA	World Health Assembly
WHO	World Health Organization

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

Not applicable.

Competing interests

The authors declare that they have no competing interests.

Funding

Ontario Trillium Scholarship (as salary support for the principal investigator). Major Project of the National Social Science Fund of China: "Research on the Theoretical System, International Experience and Chinese Path of Evidence-based Social Science" (Project No. 19ZDA142). The funding will not involve in the design of the study, any aspect of data collection, analysis or interpretation, or in the writing of the manuscript.

Authors' contributions

QW, JNL, MGW, and HJS conceived the study, coordinated all aspects of its conduct, and prepared this manuscript. XJC, YZ, QQG and MGK assisted with study design. XJC, YZ, QQG, MGK, AAB, YFL, JYZ helped the design of search strategy and conduct of pilot search and screening. JNL, MGW, HJS, MGK, YLC and KHY helped provide the revisions and feedback for the manuscript. All authors read and approved the final manuscript.

Acknowledgements

Not applicable.

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Tables

Table 1 Several WHO HSG examples		
No.	Title	Year
1	WHO Guideline: recommendations on digital interventions for health system strengthening	2019
2	WHO guidelines on health policy and system support to optimize community health worker programmes	2018
3	Rehabilitation in health systems	2017
4	WHO recommendation on community mobilization through facilitated participatory learning and action cycles with women's groups for maternal and newborn health	2014
5	Safe abortion: technical and policy guidance for health systems	2012
6	WHO policy on collaborative TB/HIV activities guidelines for national programmes and other stakeholders	2012
7	Optimizing health worker roles for maternal and newborn health	2012
8	Increasing access to health workers in remote and rural areas through improved retention: Global policy recommendations	2010

(Accessed by <https://www.who.int/publications/guidelines/year/en/>)

Table 2 Inclusion and exclusion criteria and examples	
Inclusion criteria and some examples	
Description: A publication with any study design in which the primary focus is to investigate:	Examples (based on pilot purposive search and screening results)
✓ The implementation process (any facilitators, barriers, strategies, etc.) of HSG (generally or specifically)	<ul style="list-style-type: none"> · Implementing health systems guidance: a workbook to support the contextualization of recommendations at the national or subnational level · Handbook for developing health systems guidance: supporting informed judgements for health systems policies
✓ The implementation process (any facilitators, barriers, strategies, etc.) of CPG and/or PHG (only generally)	<ul style="list-style-type: none"> · Barriers and strategies in guideline implementation—a scoping review · Effectiveness and efficiency of guideline dissemination and implementation strategies
Exclusion criteria and some examples	
Description: Publication on	Examples
× Implementation of a specific clinical practice guideline or public-health guidance	<ul style="list-style-type: none"> o Guideline implementation for breast healthcare in low- and middle-income countries o Successful implementation of an evidence-based clinical practice guideline: acute dysuria/urgency in adult women
× Implementation of a health-system intervention or program	<ul style="list-style-type: none"> o Barriers and facilitators to implementing shared decision-making in clinical practice: update of a systematic review of health professionals' perceptions o Factors influencing the implementation of chronic care models: A systematic literature review
× Implementation of a public-health intervention or program	<ul style="list-style-type: none"> o Implementation of a new screening recommendation in health care: the veterans health administration's approach to lung cancer screening o Implementation strategies, and barriers and facilitators for implementation of physical activity at work: a scoping review
× Implementation of a clinical intervention or program	<ul style="list-style-type: none"> o Comparative effectiveness of implementation strategies for blood pressure control in hypertensive patients: A systematic review and meta-analysis o Implementation of evidence-based treatment protocols to manage fever, hyperglycaemia, and swallowing dysfunction in acute stroke (QASC): a cluster randomised controlled trial

Supplementary Files

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