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Characteristics of knowledge translation platforms and methods for evaluating them: a scoping review protocol

Bey-Marrie Schmidt ,[1] Sara Cooper ,[2] Taryn Young,[3] Nasreen S Jessani[3,4]

¹School of Public Health, Faculty of Community and Health Sciences, University of the Western Cape, Cape Town, South Africa
²Cochrane South Africa, South African Medical Research Council, Cape Town, South Africa
³Centre for Evidence-based Health Care, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa
⁴Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA

Correspondence to
Dr Bey-Marrie Schmidt;
bschmidt@uwc.ac.za

ABSTRACT

Introduction Knowledge translation platforms (KTPs) are intermediary organisations, initiatives or networks whose intent is to bridge the evidence into action divide. Strategies and tools include collaborative knowledge production, capacity building, information exchange and dialogue to facilitate relevant and timely engagement between researchers and decision-makers and other relevant stakeholders. With the wide range of definitions and descriptions of KTPs, there is a need to (1) provide a nuanced understanding of characteristics of KTPs and (2) assess and consolidate research methods used in mapping and evaluating KTPs to inform standardised process and impact evaluation.

Methods and analysis This scoping review will follow the recommended and accepted methods for scoping reviews and reporting guidelines. Eligibility for inclusion is any conceptual or empirical health-related qualitative, quantitative and/or mixed method studies including (1) definitions, descriptions and models or frameworks of KTPs (including those that do not self-identify as KTPs, eg, university research centres) and (2) research methods for mapping and/or evaluating KTPs. Searches will be carried out in PubMed, Scopus, CINAHL, Embase, Global Health and Web of Science using a predetermined search strategy, without any date, language or geographical restrictions. Two reviewers will independently screen titles and abstracts. One reviewer will complete data extraction for all included studies, and another will check a sample of 50% of the included studies. The analysis and synthesis will provide (1) an understanding of the various characteristics of KTPs; (2) insight into characteristics or factors that make them resilient and/or adaptive to facilitate impact (ie, influence policy and practice); and (3) an overview of the various methods for mapping and evaluating KTPs. We will explore enhancing an existing framework for classifying KTPs, or perhaps even developing a new framework for identifying and monitoring KTPs if necessary and relevant.

Ethics and dissemination This scoping review does not require ethics approval, as we will only include information from previously conducted studies and we will not involve human participants. The results will be submitted to a peer-reviewed scientific journal for publication and as conference presentations.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ This scoping review will identify different qualitative, quantitative and mixed methods that can be used or combined to develop robust evaluations of knowledge translation platforms (KTPs).
⇒ The analysis and synthesis will guide the review authors in enhancing an existing framework for classifying KTPs or developing a new framework for identifying and monitoring KTPs if necessary and relevant.
⇒ This scoping review will include a consultation of authors of included studies and/or experts in the field, as well as other knowledge translation researchers and practitioners, to ensure its relevance and applicability.

universal health coverage (UHC) has resulted in an increased demand for research evidence to inform policy and practice.[1 2] SDG 3 is about ensuring healthy lives and promoting well-being at all ages, which is closely linked with the aims of UHC.[3] UHC aims to ensure that all people have access to needed and effective health services (including prevention, promotion, treatment, rehabilitation and palliation) of sufficient quality, without exposing users to financial hardship.[4] However, despite the widely agreed SDGs and the UHC model, there is limited use of high-quality research on the effectiveness, acceptability and cost implications of health system, healthcare or public health interventions to inform policy, practice and implementation.[5] Although research evidence on health-related interventions and systems is increasingly available, there are challenges around translating research evidence into policy and practice.[5–8]

Translating research evidence into policy and practice, or knowledge translation (KT), entails a 'dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products and strengthen the healthcare system'.[9] Limited institutional

BACKGROUND

The global focus on achieving the sustainable development goals (SDGs) and implementing

support or buy-in from leadership and relevant stakeholders for KT has been linked to several challenges,[10–14] for example, poor infrastructure and inadequate financial and technical resources specifically for KT; inadequate soft skills, relationships and networks among evidence producers; evidence users' negative attitudes and poor knowledge about what KT is and how to do it; and scarce local research evidence relevant to microlevel policy and practice, among others.[10–14]

Knowledge translation platforms (KTPs) are intermediary organisations, initiatives or networks whose intent is to overcome a range of inter-relationship and contextual challenges (see previous examples) using a multitude of strategies and tools.[15 16] These include collaborative knowledge production, capacity building, information exchange and dialogue to facilitate relevant and timely engagement between researchers and different health decision-makers (eg, patients, health practitioners, healthcare managers, policy-makers and funders). There are currently a wide range of definitions and descriptions[17–27] as well as models and frameworks[28 29] of KTPs in the literature. However, there is only one published systematic review on KTPs by Partridge *et al*, which primarily synthesised the lessons learnt about activities, outputs, outcomes and impacts from KTPs specifically in low-income and middle-income countries.[30]

First, there is a need to synthesise the different definitions and descriptions of KTPs in the literature so as to provide a common and nuanced understanding of what KTPs are. This is necessary for planning and carrying out comparisons and evaluations of KTPs as one mechanism for strengthening their overall usefulness. Second, there is a need to synthesise a wider range of characteristics of KTPs beyond those characteristics explored in the Partridge review; for example, strengths and limitations of different KTP models, funding and sustainability of KTPs, current operational status (determined using evidence from the scoping review and institutional websites), and the relationship between design and implementation factors or characteristics and successful functioning of KTPs and their influence to policy and practice. Having a better understanding of the different characteristics and types of KTPs can inform funders and governments about their implementation, sustainability and overall support for evidence-informed policy and practice. Additionally, identifying the different types of KTPs that can support evidence-informed policy and practice in local settings is critical, especially in the context of many public health and health system interventions for achieving UHC and the SDGs. For example, in the case that a KTP exists at the local level, decision-makers need to understand what KTPs are (including what KT is in general) and their role in supporting UHC decision-making processes. Third, there is a need to synthesise the research methods used in the literature for mapping and evaluating KTPs. Identifying the different qualitative, quantitative and mixed methods used for mapping and evaluating KTPs is an important step in exploring how different methods can

be used or combined to address the gap for more robust evaluations of KTPs. At a practical level, mapping KTPs can help like-minded organisations to identify opportunities that avoid duplication and amplify collaboration, particularly in settings where there are limited resources and expertise.

This scoping review therefore aims (1) to provide a more nuanced understanding of the characteristics of KTPs and (2) to assess and consolidate research methods used in mapping and evaluating KTPs to inform standardised process and impact evaluation. The review authors intend to use the review findings to inform a future research study on mapping, evaluating and strengthening KTPs that can support UHC policy, practice and implementation in South Africa.

IDENTIFYING THE RESEARCH QUESTIONS

This scoping review is on the characteristics and methods for mapping and evaluating KTPs. The specific objectives of the scoping review are

► To identify and synthesise definitions as well as characteristics of KTPs (eg, activities, processes, outputs, purpose, functions, models, stakeholders, positioning, funding, strengths, limitations, monitoring, impact and status).

► To identify and synthesise the design and implementation factors or characteristics that facilitate and/or hinder the successful functioning of KTPs and their influence to policy and practice.

► To identify and summarise the various research methods for mapping and evaluating KTPs (ie, qualitative, quantitative and mixed) and where evaluations were conducted, to synthesise their outcomes (eg, impact, success or failure).

► To explore the potential for developing a new or enhancing an existing framework for classifying KTPs.

IDENTIFYING RELEVANT STUDIES

We will use the scoping review methods outlined by Arksey and O'Malley.[30] The proposed steps are identifying the research question; identifying relevant studies; study selection; charting the data; collating, summarising and reporting the results; and consultation (ie, seeking insights beyond those in the literature from content experts). To report our review findings, we will follow the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews: Checklist and Explanation (see online supplemental file 1).[31] We aim to conduct the proposed steps by February 2023.

Any published, empirical and conceptual, health research studies from anywhere on KTPs will be eligible. Qualitative, quantitative and/or mixed method studies are eligible for inclusion as long as they include a definition or description of what a KTP is and/or include one or more methods for mapping and/or evaluating KTPs. Eligible participants are KTP staff and users, for example, researchers, knowledge brokers, policy-makers, health

practitioners and managers, patients and community representatives, and journalists. KTPs can exist within and between different settings, for example, universities, research councils, professional bodies, civil society organisations, community organisations and government.[15 16]

The search will identify all relevant studies without data, language or geographical restrictions. We will search the following electronic databases: PubMed, Scopus, CINAHL, Embase, Global Health and Web of Science. Search strings will include keywords and Medical Subject Headings (MeSH) terms related to KTP (concept A) (eg, policy brief, deliberate dialogue and knowledge exchange) and evidence-informed decision-making (concept B) (eg, health policy and policymaking). We have developed a preliminary search strategy in the PubMed database (see online supplemental file 2). To finalise our search strategy, we will apply an iterative approach to check whether known articles that meet our eligibility criteria were found by the search. We will also identify missing keywords and MeSH terms to add to our search strategy from the iterative process. In addition to the electronic searches, review authors will search the reference lists of all included studies and key references (eg, relevant systematic reviews) and contact authors of included studies and/or experts in the field for additional references.

STUDY SELECTION
The search across databases will identify titles and abstracts of relevant studies. The search results will be merged in the EndNote reference management programme where duplicates will be removed. The titles and abstracts will then be uploaded to an electronic programme, such as Covidence or Rayyan, for screening and data extraction. An eligibility form will be developed before screening starts. The following inclusion criteria will be used.

Focus of studies
▶ Definitions and characteristics of KTPs (eg, activities, processes, outputs, purpose, functions, models, stakeholders, positioning, funding, strengths, limitations, monitoring, impact and status).
▶ Factors or characteristics that facilitate and/or hinder the successful functioning of KTPs and their influence to policy and practice.
▶ Research methods for mapping and evaluating KTPs (ie, qualitative, quantitative and mixed).
▶ Evaluation outcomes of KTPs (eg, impact, success or failure).
▶ Existing frameworks for classifying KTPs.

The outcomes of KTPs (success or failure) will be based on what the KTPs themselves aim to achieve through their activities and processes. Where a KTP has been evaluated, the review team will use the evaluation results to determine which factors or characteristics contributed to its success or challenges. Where a KTP has not been evaluated, the review team will explore what the primary

authors deem as important factors or characteristics that facilitate and/or hinder its successful functioning and influence on policy and practice

Participants
KTP staff and users (eg, researchers, knowledge brokers, policy-makers, health practitioners and managers, patients and community representatives and journalists).

Setting
KTPs can exist within and between different settings (eg, research centres or departments, universities, research councils, professional bodies, civil society organisations, community organisations and government).

Two review authors will independently screen the titles and abstracts to determine their eligibility for full-text screening. We will retrieve full texts for titles and abstracts deemed relevant. One review author (B-MS) will screen all full texts and make a final decision about inclusion. Another review author will check the eligibility of a random sample of 50% of the full texts. Conflicts will be resolved with a third reviewer. The study selection process will be summarised using a Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram.

CHARTING THE DATA
Data extraction or 'charting of data' will be carried out once we have a final list of all the studies to be included in the review. Data extraction will be conducted by one review author (B-MS) who will collect, sift and sort data according to the objectives. The review author will extract information on the study and author details; research type and study design; research setting and participants; definitions, descriptions and characteristics of KTPs; and methods used for mapping and/or evaluating KTPs. A second review author will check data extraction of all included studies. Data extraction will be done in Excel to allow for comparison of key items across studies and to allow for synthesis within and across data items. Once all the data have been extracted and checked, studies will be categorised or 'charted' according to the following criteria: (1) what is a KTP? and/or (2) what methods are used to map and/or evaluate a KTP? Additional categories may be identified during the data extraction process, in consultation with the review team. We will not assess the methodological quality of the included studies, as that is the convention for such scoping reviews.[29 30]

COLLATING, SUMMARISING AND REPORTING THE RESULTS
One review author (B-MS) will conduct data analysis using manual coding and data synthesis methods on the extracted and charted data. A second review author will check the data analysis work on an ongoing basis to ensure quality of the process. We will synthesise the data according to variation (breadth) and key components (depth) across definitions, characteristics and methods of

KTPs. The analysis will combine quantitative and qualitative syntheses to provide an overview of our findings. First, we will conduct a numerical analysis of all the included studies according to different categories, for example, study design (qualitative, quantitative and mixed), participants (KTP staff vs users), KTP characteristics (model, function and institution), and income level of country (low, middle and high). Second, we will conduct a qualitative narrative synthesis of the definitions, characteristics and methods of KTPs by looking for the key components across the data. The numerical and narrative syntheses will provide (1) an overview of the key aspects of KTP studies, (2) definitions and conceptualisations of KTPs, and (3) research methods for mapping and/or evaluating KTPs.

CONSULTATIONS

As mentioned earlier, to identify additional relevant studies, we will contact authors of included studies and/or experts in the field. We will engage with other KT researchers (ie, those undertaking scientific research in the KT field) and KT practitioners (ie, those designing, implementing, monitoring and evaluating KT interventions) as we carry out different stages of this scoping review to ensure its relevance and applicability. It is an advantage that our review team is made up of both KT researchers and practitioners who have the appropriate content and method expertise to ensure scientific rigour of the review. We will shape the review process and findings according what we know is most useful from experience and also draw on colleagues working in the field to validate the findings and extract key messages or implications for research and practice.

PATIENT AND PUBLIC INVOLVEMENT

There was no patient or public involvement in the design of this protocol.

DISCUSSION

To our knowledge, this is the first scoping review of the evidence on KTPs globally. Our synthesis will be on the wide range of definitions, descriptions and characteristics of KTPs and aims to provide a better understanding of the relationship between some of the characteristics of KTPs (eg, we will explore the relationship between KTP design, success factors and effectiveness or impact). A key methodological strength of the scoping review is that we will scope for both conceptual and empirical studies, using any study design, and without applying any date, language or geographical restrictions.

Mapping KTPs in this scoping review can help researchers and other stakeholders leading KTPs identify opportunities for collaborating with other KTPs in their local setting or globally. Collaborations among KTPs can potentially reduce duplication of efforts and optimise the use of already-limited resources and expertise to effectively engage decision-makers. Additionally, a synthesis of the characteristics of KTPs can help researchers and other stakeholders leading KTPs compare and evaluate the usefulness and effectiveness of different KTPs in relation to theirs. Evidence on the usefulness and effectiveness of KTPs, areas of improvement and the gaps in research can guide government and funding agencies' agendas. Further, the review findings can help decision-makers identify KTPs to collaborate with and provide them with an understanding of how KTPs can support decision-making processes. Lastly, the synthesis will guide review authors in developing a matrix or framework for classifying KTPs and inform the design of a future study to map and evaluate KTPs that can support UHC policy, practice and implementation in South Africa.

ETHICS AND DISSEMINATION

This is a scoping review of completed studies. As such, our research does not require ethics approval, as we do not involve human participants. The results will be submitted to a peer-reviewed scientific journal for publication and as conference presentations.

ORCID iDs
Bey-Marrie Schmidt http://orcid.org/0000-0003-1363-171X
Sara Cooper http://orcid.org/0000-0001-9894-236X

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