

Research agenda for integrated knowledge translation (IKT) in healthcare: what we know and do not yet know

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INTEGRATED KNOWLEDGE TRANSLATION (IKT)

In the health sector, considerable resources are deployed for knowledge translation (KT) to ensure that stakeholders are aware of, and use research to inform policies, programmes and practices, leading to improved health.¹ However, commonly used strategies, often based on one-way communication of research syntheses or summaries, have had inconsistent impact on the actual use of research and associated outcomes such as improved healthcare delivery and health gains.² IKT represents an alternative approach for promoting research use in which research users function as active partners to generate research from conceptualisation to implementation, rather than passive recipients of research or research products.^{3 4} Sometimes referred to as engaged scholarship, participatory research, co-production of knowledge or mode 2 research, IKT appears to enhance researcher understanding of the research user context and needs, thereby enhancing the relevance of the generated research, and increasing research user understanding of the research process, awareness of the research, and appreciation for how and when it can be applied.^{3 4}

The imperative to optimise patient and population outcomes is driving a growing interest in IKT among those who fund and deliver health programmes and services. The UK instituted Collaborations for Leadership in Applied Health Research and Care, and the Netherlands implemented Academic Collaborative Centres for public health to integrate research, policy and practice, with the overall aim of improving health.^{5 6} Funders of research also promote IKT by stipulating that research teams include research users.⁷ As a result, syntheses of studies that describe and evaluate research–research user

collaboration have emerged. For example, we conducted a scoping review of 13 studies published between 2005 and 2014 on IKT involving researchers and healthcare policymakers or managers.⁸ Camden *et al*⁹ conducted a scoping review of 19 studies on stakeholder engagement in rehabilitation research published between 2003 and 2013. Cook conducted a systematic review of 20 studies published from 1995 to 2005 involving participatory research in the USA to address health disparities in environmental and occupational health.¹⁰ Reviews such as these provide valuable insight into what we do and do not yet know about IKT. Few pressing themes that emerged from these reviews are discussed here for the purpose of identifying issues warranting ongoing research.

PROCESSES

Interaction between researchers and researcher users was achieved through one or more meetings of research teams, committees, steering groups or working groups.^{8 9} Meetings were referred to as planning meetings, group discussions, workshops and conferences; often in person and sometimes by teleconference; and frequently supplemented with print, web and media communication of data or research summaries. In previous research we demonstrated how mixed-methods workshops that engaged researchers and researcher users prioritised health service and policy needs, and generated research questions.^{11 12} Our review⁸ and the Camden review⁹ found that time, travel expenses, competing professional demands and geographic distance influenced participation in meetings, therefore further research should identify and evaluate processes or methods other than traditional meetings that may be more conducive to researcher–research user collaboration. Examples include concept mapping, deliberative dialogue or formal consensus techniques that can be conducted in person or remotely, in a synchronous or asynchronous manner, using various types of communication technologies.¹²

ROLES

In our review, research users were largely involved in early (establishing or prioritising research questions, research planning) and later (dissemination, implementation) activities, with little involvement in other aspects of research such as recruitment, data collection or interpretation.⁸ Research users similarly held a largely consultative role in both the Camden and Cook reviews.^{9 10} This raises questions about the appropriate role for research users—perhaps the current vision of an absolute partnership is not attainable or even necessary—or perhaps optimal IKT processes have not yet been established. The Cook review found that research user engagement and impact appeared to be greater when partnerships were initiated by the affected communities.¹⁰ We observed no such trend in our review;⁸ however, ongoing research should investigate the impact of IKT models that vary according to the degree of research user engagement in terms of what works, for whom and under what conditions.

DETERMINANTS

Key factors that positively or negatively influenced stakeholder engagement in the Camden review were establishing a common language, and roles and expectations.⁹ Our review, in which all teams had been in place for a minimum of 2 years, also identified these and other determinants of interaction including differing needs and priorities among participants, attitudes about research, incentives for participation, funding and space for activities, and the actions of leaders and facilitators.⁸ These findings clearly distinguish a lengthy early phase during which the capacity for collaboration is established. Our previous research found that capacity included conditions and interventions at both the individual and organisational levels.^{13 14} Further research is needed to establish the most effective incentives and interventions to foster and support IKT across different phases of research, from initiating a partnership, developing a research proposal, undertaking the research project, to ongoing research partnership.

IMPACT

Most studies in our review⁸ and the Camden review⁹ assessed outcomes related to partnership formation, for example, value for different perspectives or mutual understanding of language, work style, needs and constraints. Fewer studies evaluated intermediate (ie,

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identification of research questions, conduct of research) or long-term outcomes (ie, use and impact of research). This again highlights the considerable time and effort needed to establish functional partnerships before collaborative research generation and then implementation can occur. Further research is needed to validate measures of IKT-related immediate, intermediate and long-term outcomes so that, in future, we can more consistently and reliably assess the processes, determinants and impact of researcher–research user collaborations. Our previous research found that such measures might differ for new versus mature partnerships.¹⁵ To date, investigations of researcher–research user collaboration have focused on isolated improvements in specific services or programmes, perhaps because the IKT concept is relatively new and not commonly practiced. Future research should focus on how IKT can be embedded in health system planning to achieve action oriented, whole system impact on community or population health.

RESEARCH DESIGN

The quality of studies included in each review was not formally assessed; however, they all noted that studies were usually mixed methods or qualitative in design, and none used either theoretical or standardised measures for evaluation. Overall, studies were difficult to find, given the variable terms used to describe researcher–research user collaboration, and few studies were eligible.^{8–9} Although it may prove controversial and challenging, there may be merit in further research to achieve consensus on terminology so that researchers pursue complementary research and published research is subsequently easier to retrieve. Our review found that IKT processes and research user involvement in research-related decisions or activities were not well described.⁸ It is imperative that, in future research, IKT design and activities are thoroughly described so that the findings can be easily interpreted and replicated.

CONCLUSION

Select reviews discussed here show that IKT represents a promising means of

influencing research use in multiple contexts. However, ongoing research is needed to establish common terminology, effective processes for partnership formation and collaboration, appropriate participant roles, enabling individual and organisational conditions and interventions, and measures of impact including whole systems change. The key finding that partnership formation is a lengthy and complex process must be conveyed to agencies that support research so that funding opportunities based on an IKT model acknowledge and accommodate this preparatory phase, perhaps by providing small grants for planning meetings with research users, or multiyear grants that specifically support the processes and infrastructure needed to develop flourishing partnerships.

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