KTE in Action

Terms • Theory • Facilitation Strategies

This document was originally prepared as a companion to the 'Knowledge Transfer and Exchange in Action' session presented at the SHRTN Collaborative 2010 Annual Assembly Knowledge Exchange Learning Day on April 29, 2010 in Toronto, Ontario.

The purpose of this document is to provide an overview of some common Knowledge Transfer and Exchange definitions, theory and facilitation strategies as well as relevant recommended resources to support KTE in action.

To learn more about these KTE terms, theories and facilitation strategies, review the list of references and recommended resources outlined in this document.

Each of the resources are hyperlinked enabling you to click on the text outlining the resource, which will open up your web browser and take you to it's online location. Where references are open source, the link will take you to the pdf of the complete article.

If you are a caregiver, you can access the suggested articles for free by contacting a SHRTN Information Specialist at www.shrtn.on.ca

Recommended Reference:

Lusk E. and Harris M. (2010, April 29). Knowledge Transfer and Exchange (KTE) in Action. Presentation companion document for the SHRTN Collaborative 2010 Annual Assembly Knowledge Exchange Learning Day, Toronto, ON.

shrtn collaborative

A network of networks on seniors' health

The SHRTN Collaborative is a network of networks – a partnership that includes the Seniors Health Research Transfer Network (SHRTN), the Alzheimer Knowledge Exchange (AKE) and the Ontario Research Coalition (ORC). These three partners work together to improve the health and health care of seniors in Ontario.

KTE Terms

IDEA IN BRIEF | Many definitions exist for Knowledge Transfer and Exchange terms (1); below are definitions that were either defined by Canadian institutions or were most often referred to in the literature.

Knowledge can be defined as information in action (2). Knowledge can be explicit (i.e. available in written form or oral history), tacit (i.e. information not in written form), and potential (i.e. knowledge buried in data that is collected but not yet used) (3).

Knowledge Translation is the exchange, synthesis and ethically-sound application of knowledge – within a complex system of interactions among researchers and users – to accelerate the capture of the benefits of research for Canadians through improved health, more effective services and products, and a strengthened health care system (4). Knowledge translation is sometimes referred synonymously as knowledge transfer.

Knowledge Transfer is the process of moving knowledge into practice. This process is successful when research and practice-based evidence is clear and relevant, the context shares the characteristics of a learning organization, and facilitation mechanisms are appropriate to the needs of the community of practice members (5).

Knowledge Exchange is the mutual sharing of research and data knowledge (i.e. explicit knowledge) and/or of practice and experience based knowledge (i.e. tacit knowledge) for the purpose of improving practice. Knowledge exchange can take place face-to-face, over the telephone, or online in real-time, or it can take place by capturing and sharing stories. The sharing of evidence via knowledge exchange is an important contributor to the success of knowledge transfer (5).

Integrated Knowledge Translation (IKT) approach is a different way of doing research that involves knowledge users in the research process itself. Researchers and knowledge users work together to identify research questions, decide on methodology, interpret findings, and disseminate findings. IKT aims to produce research results that are highly relevant and likely to be used by knowledge users to improve health and the health system (6).

End of Grant Knowledge Translation, the researcher develops and implements a plan for making knowledge users aware of the findings from a research project once available (6).

Knowledge Mobilization is the process of moving knowledge into active service for the broadest possible common good (7).

Knowledge Diffusion is the process by which an innovation is communicated through certain channels over time among members of a social system (8).

REFERENCES AND RECOMMENDED RESOURCES

The KTE Terms section is adapted from:

Harris M and Lusk E. The road ahead: a knowledge bank progress report. Background paper shared at the Seniors' Mental Health and Dementia Accelerating Knowledge Transfer and Exchange Think Tank. Ottawa: Canada; 2009.

1. Thompson GN, Estabrooks CA, Degner LF. Clarifying the concepts in knowledge transfer: A literature review. J Adv Nurs 2006, Mar;53(6):691-701.
2. Dubois, N., Wilkerson, T. (2008), Knowledge management: Background paper for the development of a knowledge management strategy for public health in Canada. National Collaborating Centre for Methods and Tools.
3. Carlile LW. Knowledge management and training: The value of collaboration. Performance Improvement 2002;41(4):35-41.
4. Canadian Institutes of Health Research. About Knowledge Translation [Online]. 2005 [cited 2010 Apr] Available from: URL: http://www.cihr.irsc.gc.ca/e/29418.html
5. Rycroft-Malone J. Theory and knowledge translation: Setting some coordinates. Nurs Res 2007;56(4 Suppl):S78-85.
6. Canadian Institutes of Health Research. End of Grant Knowledge Translation and Integrated Knowledge Translation [Online]. 2009 [cited 2010 Apr] Available from: URL: http://www.cihr-irsc.gc.ca/e/38654.html
7. Social Sciences and Humanities Research Council of Canada. Knowledge Impact in Society: A SSHRC Transformation Program [Online]. 2008 [cited 2010 Apr] Available from: URL: http://www.sshrc.ca/site/apply-demande/program_descriptions-descriptions_de_programmes/knowledge_impact-impact_savoir-eng.aspx
8. Canadian Cancer Control Strategy. Canadian strategy for cancer control, Draft synthesis report. Ottawa, Ontario: Canadian Cancer Control Strategy, 2001.

KTE Theory

IDEA IN BRIEF | **Theoretical models or frameworks for knowledge transfer, translation or exchange attempt to explore and explain the determinants, processes, and results of KTE (Jacobson, 2007). There are several KTE theories, models and frameworks, though, below is a high level overview of four of the more widely referenced and endorsed theories applied in the Canadian healthcare system (Harris and Lusk, 2009).**

The PARiHS Framework (Promoting Action on Research Implementation in Health Services)

suggests that successful knowledge transfer is a result of the interplay between three key factors: evidence, context and facilitation.

Evidence: including research, caregiver experience, and person/consumer experience as it relates to seniors health and health care and knowledge gaps

Context: in which the evidence is being implemented, such as the context of seniors' healthcare or specific target audiences within, and the context of existing networks or stakeholders that could support knowledge transfer and exchange

Facilitation: including current best practices and effective strategies to support knowledge transfer and exchange that are appropriate to the needs of the situation

The Knowledge to Action Framework

conceptualizes the relationship between knowledge creation and action, with each concept comprised of ideal phases or categories (CIHR Website, 2009). Certain milestones have been identified as necessary in bridging the knowledge-to-action gap. For practical purposes, these milestones are described as a series of steps in a process or cycle.

A knowledge creation "funnel" conveys the idea that knowledge needs to be increasingly distilled before it is ready for application. The action part of the process can be thought of as a cycle leading to implementation or application of knowledge. The action cycle represents the activities that may be needed for knowledge application.

Network Analysis Theory

can guide how individuals and groups build collaborative advantage for knowledge exchange, and ultimately practice change (Horgan, 2009). The key planning and development strategies of this network analysis theory by Horgan (2009) is:

Building Connections: establish knowledge exchange framework

Building Leadership: inter-provincial, inter-sector, cross-cycle representation, and central core and periphery development

Building Innovation: facilitate national 'calls to action'

Building Collaborative Advantage: establish a national reference group

Building Supportive Infrastructures: create a formal infrastructure, and facilitate national knowledge exchange opportunities

The Knowledge Transfer Cycle

is a non-linear approach, which can be used in conjunction with the PARiHS framework and consists of the following:

Knowledge Generation: building reciprocal linkages between the researcher, educator, caregiver and policy maker to inform seniors' health research agendas.

Knowledge Translation: working in partnership with network members and relevant stakeholders to identify opportunities for knowledge translation and develop practical, evidence-based resources to facilitate the transfer of knowledge into practice.

Knowledge Awareness and Access: leveraging technology in order to provide researchers, educators, caregivers and policy makers with awareness of and access to relevant resources and explicit and tacit knowledge in the field of seniors' health.

Knowledge Use: facilitating the use of knowledge (transfer of knowledge into practice) by providing knowledge exchange support and resources to network members.

Knowledge Accumulation and Retrieval: accumulating 'stories', conducting evaluative research, and collecting knowledge in other forms, in order to build on successes and facilitate the development of new partnerships.

RECOMMENDED RESOURCES

PARiHS Framework

Jacobson N. Social epistemology: Theory for the "fourth wave" of knowledge transfer and exchange research. Science Communication 2007;29(1):116.

Kitson A, Harvey G, McCormack B. Enabling the implementation of evidence based practice: A conceptual framework. Quality in Health Care 1998;7(3):149.

Rycroft-Malone J, Kitson A, Harvey G, McCormack B, Seers K, Titchen A, Estabrooks C. Ingredients for change: Revisiting a conceptual framework. Quality and Safety in Health Care 2002;11(2):174.

Kitson AL, Rycroft-Malone J, Harvey G, McCormack B, Seers K, Titchen A. Evaluating the successful implementation of evidence into practice using the PARiHS framework: Theoretical and practical challenges. Implement Sci 2008;3:1.

The Knowledge to Action Framework

Canadian Institutes of Health Research Website: www.cihr-irsc.gc.ca

Graham I, Logan J, Harrison MB, Straus SE, Tetroe J, Caswell W, Robinson N. Lost in knowledge translation: Time for a map? The Journal of Continuing Education in the Health Professions 2006;26:13-24.

Kitson A, Straus SE. The knowledge-to-action cycle: Identifying the gaps. CMAJ 2010, Feb 9;182(2):E73-7.

Straus SE, Tetroe J, Graham ID. Knowledge translation in health care : Moving from evidence to practice. illustrated ed. Chichester, UK ; Hoboken, NJ: John Wiley and Sons; 2009.

Network Analysis Theory

Horgan, S. Enabling Collaborative Advantage: A Developmental Process Evaluation. Prepared for the National Seniors' Mental Health and Dementia Accelerating Knowledge Transfer and Exchange: Networking the Networks Initiative. June, 2009.

Provan KG, Milward HB. Health services delivery networks: What do we know and where should we be headed? Healthc Pap 2006;7(2):32-6; discussion 68-75.

Huerta TR, Casebeer A, Vanderplaat M. Using networks to enhance health services delivery: Perspectives, paradoxes and propositions. Healthc Pap 2006;7(2):10-26.

The Knowledge Transfer Cycle

Sullivan MP, Kessler L, Le Clair JK, Stolee P, Berta W. Defining best practices for specialty geriatric mental health outreach services: Lessons for implementing mental health reform. Can J Psychiatry 2004, Jul;49(7):458-66.

KTE Facilitation Strategies

IDEA IN BRIEF | **KTE facilitators are evidence-informed processes or structures that will make easier and increase the likelihood of knowledge transfer and exchange enabling a strategic and deliberate approach. Facilitators can help groups, or individuals, to learn, find a solution, or reach a consensus, without imposing or dictating an outcome. As with KTE theory, a significant number of KTE facilitators have been identified. Below is a short and non-exhaustive list of KTE facilitators that have been adopted in the Canadian healthcare system and implemented across the SHRTN Collaborative.**

Networks and networking in health care facilitate the successful flow of knowledge required for the development, dissemination and delivery of innovation to enable the system, its components and people working within to meet the transformational challenge required for effective and efficient care.

RECOMMENDED RESOURCES

Conklin, Stolee. A model for evaluating knowledge exchange in a network context. CJNR 2008;40(2):116-24.

Consoli D, Ramlogan R. Scope, Strategy and Structure: The Dynamics of Knowledge Networks in Medicine. MPRA Paper 12791, University Library of Munich, Germany 2009.

National Collaborating Centres for Public Health (NCCPH): www.nccph.ca

Network Weaving, June Holley: www.networkweaving.com

Robeson RN, MScN. Networking in Public Health: Exploring the Value of Networks to the National Collaborating Centres for Public Health 2009, Apr.

Scott C, Hofmeyer A. Networks and social capital: A relational approach to primary healthcare reform. Health Res Policy Syst 2007;5:9.

SHRTN Collaborative:

- SHRTN: www.shrtn.on.ca
- AKE: www.akeontario.org
- ORC: www.shrtn.on.ca

Knowledge Exchange Platforms provide people with an opportunity to connect and share their experiences with one another to learn and improve practice. Knowledge exchange platforms can include both in-person and online opportunities. These systems could be communities of practice, interactive resource centre's, or user-friendly websites – the key is that the system is elegant, simple and effective in providing the user with quick online access to relevant knowledge and a means to share experiences with others. Online and toll-free teleconference technology can enhance accessibility and increase reach, however, in-person knowledge exchange can significantly accelerate relationship building between stakeholders, the development of a community of practice, or the advancement of innovations.

RECOMMENDED RESOURCES

Best Online Collaboration Tools 2009 - Robin Good's Collaborative Map: www.mindmeister.com/12213323

Beth's Blog: How Nonprofit Organizations Can Use Social Media to Power Social Networks for Change by Beth Kanter: beth.typepad.com

CPsquare, The Community of Practice on Communities of Practice: cpsquare.org

Garcia, Dorohovich. The truth about building and maintaining successful communities of practice. Defense Acquisition Review Journal 2005;10:18-33.

Kerno Jr SJ. Limitations of communities of practice: A consideration of unresolved issues and difficulties in the approach. Journal of Leadership & Organizational Studies 2008;15(1):69.

Knowledge Translation KT+: plus.mcmaster.ca/kt

Li LC, Grimshaw JM, Nielsen C, Judd M, Coyte PC, Graham ID. Evolution of Wenger's concept of community of practice. Implement Sci 2009;4:11.

National Collaborating Centre for Methods and Tools (NCCMT): www.nccmt.ca

Performance Improvement is a method for analyzing performance problems and setting up systems to ensure good performance. PI is applied most effectively to groups of workers within the same organization or performing similar jobs.

RECOMMENDED RESOURCES

Broad ML. Beyond transfer of training: Engaging systems to improve performance. illustrated ed. San Francisco: John Wiley and Sons; 2005.

Cross J. Informal learning: Rediscovering the natural pathways that inspire innovation and performance. illustrated ed. San Francisco: John Wiley and Sons; 2006.

International Society for Performance Improvement: www.ispi.org

Langley GL, Nolan KM, Nolan TW, Norman CL, Provost LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance.

Rummler GA, Brache AP. Improving performance: How to manage the white space on the organization chart. San Francisco: Jossey-Bass Publishers; 1990.

Rummler GA, Ramias AJ, Rummler R. White space revisited: Creating value through process. San Francisco: John Wiley and Sons; 2009.

Quality Improvement (QI) is the first step on the path to enhancing care for patients and practice for staff. It provides basic tools and knowledge that healthcare settings can use to implement QI initiatives and improve care, satisfaction, and clinical outcomes (OHQC, 2010). Batalden and Davidoff (2007) propose defining QI as "*the combined and unceasing efforts of everyone—healthcare professionals, patients and their families, researchers, payers, planners and educators—to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development.*"

RECOMMENDED RESOURCES

Batalden PB. Building knowledge for quality improvement in healthcare: An introductory glossary. J Qual Assur 1991;13(5):8-12.

Institute for Healthcare Improvement: www.ihi.org

Kates. Learning collaboratives and the improvement model 29 September 2009: Available from: http://chspr.queensu.ca/qiip.php. Accessed 1 April 2010.

Ontario Health Quality Council: www.OHQC.ca

PDSA Cycle: The Plan-Do-Study-Act (PDSA) cycle was originally developed by Walter A. Shewhart as the Plan-Do-Check-Act (PDCA) cycle. W. Edwards Deming modified Shewhart's cycle to PDSA, replacing "Check" with "Study." [See Deming WE. The New Economics for Industry, Government, and Education. Cambridge, MA: The MIT Press; 2000.]

Quality Improvement & Innovation Partnership: www.qiip.ca

Knowledge Brokering is the act of linking people to people or people to information in order to share learning, better understand each other's goals or professional cultures, influence each other's work, and forge new partnerships (CHSRF, 2009). Knowledge brokering helps to bridge the 'know do' gaps and promote evidence-informed decision-making (Lomas, 2007, van Kammen et al., 2006).

RECOMMENDED RESOURCES

Dobbins M, Robeson P, Ciliska D, Hanna S, Cameron R, O'Mara L, et al. A description of a knowledge broker role implemented as part of a randomized controlled trial evaluating three knowledge translation strategies. Implement Sci 2009;4:23.

Harris M and Lusk E. Knowledge Brokering in the Canadian Mental Health and Dementia Health Care System (info sheet). Canadian Dementia Knowledge Translation Network. Canada; 2010.

Harris M and Lusk E. Knowledge Brokering in the Canadian Mental Health and Dementia Health Care System: Canadian Knowledge Brokering Core Competency Framework. Canadian Dementia Knowledge Translation Network. Canada; 2010.

Kelder J, Turner P, Lueg C. Supporting community knowledge brokers: Information system challenges in breast screening; HIC 2008 Australia's Health Informatics Conference. Health Informatics Society of Australia Ltd (HISA); 2008.

Lomas J. The in-between world of knowledge brokering. BMJ 2007, Jan 20;334(7585):129-32.

Martinez NR, Campbell D. Using knowledge brokering to promote evidence-based policy-making. Bull World Health Organ 2007, May 5:A.

Mercier C, Bordeleau M, Caron J, Garcia A, Latimer E. Conditions facilitating knowledge exchange between rehabilitation and research teams--a study. Psychiatr Rehabil J 2004;28(1):55-62.

The Theory and Practice of Knowledge Brokering in Canada's Health System (2003, December). Canadian Health Services Research Foundation.

van Kammen, de Savigny, Sewankambo. Using knowledge brokering to promote evidence-based policy-making: The need for support structures. Bull World Health Organ 2006;84:608-12.

Ward VL, House AO, Hamer S. Knowledge brokering: Exploring the process of transferring knowledge into action. BMC Health Serv Res 2009;9:12.