PROFESSION AND SOCIETY

Methods to Succeed in Effective Knowledge Translation in Clinical Practice

Alison L. Kitson, RN, BSc(Hons), DPhil, FRCN, FAAN, FAHMS¹, & Gillian Harvey, BNurs, PhD²

1 Professor and Dean of the School of Nursing, University of Adelaide, South Australia, and Associate Fellow, Green Templeton College, University of Oxford, LIK

2 Professorial Research Fellow, School of Nursing, University of Adelaide, Adelaide, South Australia and Professor, Health Management Group, Manchester Business School, University of Manchester, Manchester, UK

Key words

Evidence-based practice, facilitation, knowledge translation

Correspondence

Dr. Alison L. Kitson, University of Adelaide School of Nursing, North Terrace, SA 5005, Australia. E-mail: alison.kitson@adelaide.edu.au

Accepted: February 27, 2016

doi: 10.1111/jnu.12206

Abstract

Purpose: To explore the evidence around facilitation as an intervention for the successful implementation of new knowledge into clinical practice.

Organizing Construct: The revised version of the Promoting Action on Research Implementation in Health Services (PARIHS) framework, called the integrated or i-PARIHS framework, is used as the explanatory framework. This framework posits that evidence is a multidimensional construct embedded within innovation and operationalized by clinicians (individuals and within teams), working across multiple layers of context. Facilitation is the active ingredient that promotes successful implementation.

Findings: An emerging body of evidence supports facilitation as a mechanism to getting new knowledge into clinical practice. Facilitation roles are divided into beginner, experienced, and expert facilitators. Facilitators can be internal or external to the organization they work in, and their skills and attributes complement other knowledge translation (KT) roles. Complex KT projects require facilitators who are experienced in implementation methods.

Conclusions: Facilitation is positioned as the active ingredient to effectively introduce new knowledge into a clinical setting. Levels of facilitation experience are assessed in relation to the complexity of the KT task. Three core facilitation roles are identified, and structured interventions are established taking into account the nature and novelty of the evidence, the receptiveness of the clinicians, and the context or setting where the new evidence is to be introduced.

Clinical Relevance: Roles such as novice, experienced, and expert facilitators have important and complementary parts to play in enabling the successful translation of evidence into everyday practice in order to provide effective care for patients.

Knowledge translation (KT) is the generic term used to describe the process by which knowledge moves from where it was first created and refined to where it has to get to in order to make an impact on clinical practice and patient care. Many different terms have been used to describe this process, ranging from knowledge utilisation to translational research, dissemination of research findings, implementation science, and evidence-based practice or healthcare (McKibbon et al., 2010).

Historically, models representing the KT process have tended to depict it as a "pipeline" that moves from knowledge generation through a process of synthesis to uptake and implementation in practice (Haines & Jones 1994). This is based on an assumption that producers and users of research are two separate groups or communities and that translation occurs in a rational, linear way to move knowledge from producers to users (Landry, Amara, & Lamari, 2001). When KT appears to

Table 1. Elements of the PARIHS Framework and the i-PARIHS Framework

Successful implementation in the original PARIHS framework	Successful implementation in the revised i-PARIHS framework
$\overline{SI = f(E,C,F)}$	$SI = Fac^{n}(I + R + C)$
SI = successful implementation	SI = successful implementation
f = function (of)	Achievement of agreed implementation/project goals
E = evidence	The uptake and embedding of the innovation in practice
C = context	Individuals, teams, and stakeholders are engaged, motivated, and "own" the innovation
F = facilitation	Variation related to context is minimized across implementation settings
	Fac ⁿ = Facilitation
	I = innovation
	R = recipients (individual and collective)
	C = context (inner and outer)

Note. i-PARIHS framework = Promoting Action on Research Implementation in Health Services integrated framework; PARIHS framework = Promoting Action on Research Implementation in Health Services framework.

be slow or incomplete, the metaphor of "translational gaps" is used, and various bridging strategies are proposed to try to close the gap. However, evidence from KT research repeatedly highlights the complexity of the process and the multifaceted factors that determine whether and how research-based knowledge finds its way into healthcare policy and practice (Kitson, Harvey, & McCormack, 1998). These factors include the negotiated and contested nature of evidence in healthcare decision making, meaning that good research is not sufficient in itself to ensure its uptake in practice (Rycroft Malone et al., 2004), and the significant impact of context on the way knowledge is taken up (Damschroder et al., 2009; McCormack et al., 2002). Systematic reviews also indicate that socalled "multifaceted" or complex interventions are more effective than "single" or simple interventions (Harvey & Kitson 2015a), but there is no consensus on what constitutes a complex intervention, how it's done, who should do it, or indeed how it would be evaluated.

In framing this article, we have drawn on several years' experience in working with groups of clinicians and researchers in trying to understand the nature of such complex interventions and how new knowledge moves into practice. Our work has been around developing, testing, and refining the Promoting Action on Research Implementation in Health Services (PARIHS) framework (Kitson et al., 1998; Kitson et al., 2008; Rycroft-Malone et al., 2002). The PARIHS framework is a widely used approach to creating a structured method to introduce KT principles into practice. It has been used as an organizing framework (Helfrich et al., 2010) and as an evaluation tool within research studies (Gibb, 2013).

From its inception, PARIHS argued that successful implementation (SI) of evidence into practice was a function of the quality and type of evidence (E), the characteristics of the setting or context (C), and the way in which

the evidence was introduced or facilitated (F) into practice. Each of these elements was subdivided into discrete dimensions that helped to explain the complexities and interdependencies in action when new knowledge was being put into practice (Rycroft-Malone et al., 2002). It has recently been refined and the new framework, called the i-PARIHS framework, contains a practical set of instructions for people wishing to use it (Harvey & Kitson, 2015b).

Facilitation as the Active Ingredient in KT

The i-PARIHS framework has refined the dimensions around evidence (E); refined the context elements (C); and added a new dimension around the individuals and teams who have to decide how they want to use the new knowledge or evidence (termed recipients or [R] in the framework). **Table 1** provides a summary of the original PARIHS formula and the new i-PARIHS approach. The core constructs of the i-PARIHS framework are facilitation (F), innovation (I), recipients (R) and context (C), with facilitation represented as the active element assessing, aligning, and integrating the other three constructs.

In i-PARIHS, the term innovation describes the focus or content of the implementation effort. It has been extended to encompass what we know about innovation theory and how individuals react to characteristics of new knowledge in addition to its evidence base. It is the role of the facilitator, working with the clinical team and other stakeholders, to work out what the nature of the new knowledge is that is being translated into practice. Is it the implementation of existing evidence such as a clinical guideline or results or a systematic review, or is it a service change or improvement that has less evidence to support it? Who or what is driving the proposed change

Effective Knowledge Translation Kitson & Harvey

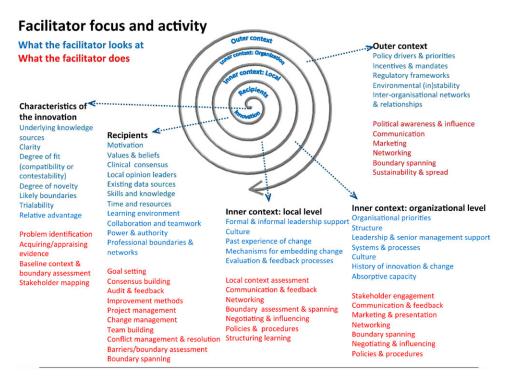


Figure 1. The Promoting Action on Research Implementation in Health Services integrated framework (i-PARIHS framework): facilitation as the active ingredient (reprinted with permission from Harvey & Kitson, 2015).

will also influence how other clinicians respond to the implementation process, and the degree of novelty between the new knowledge and what teams currently do will influence individual and team reactions.

After considering the characteristics of the proposed "innovation," the facilitator next considers the "recipients" of the new knowledge and how they will respond to the changes required to implement the innovation. The term recipient within the i-PARIHS framework refers to staff, support services, and patients that will be directly involved in and affected by the implementation process. The facilitator will explore issues related to individual and team motivation and their ability to change behavior in relation to the new knowledge and work with them to make those necessary changes.

A further dimension of the facilitation process within the i-PARIHS framework is developing an understanding of contextual factors and how best to handle these, both within and outside of the organization, in terms of their potential impact on the success of the KT process. Contextual factors include local characteristics such as leadership style, culture, past experience of change and mechanisms used to embed change, and routine methods of providing feedback on performance. By contract, the characteristics at the organizational level of context include consideration of organizational priorities and the amount of alignment to the new KT initiative, leadership

and senior manager understanding and support of the initiative, history of successful innovation and improvement, and the amount of capacity the organization has to cope with innovation.

The final part of context within i-PARIHS is the outer context. This is where the facilitator assesses the wider policy drivers and proprieties that might influence the KT initiative locally, incentives and mandatory requirements, regulatory frameworks, and interorganizational networks and relationships. **Figure 1** summarizes the new i-PARIHS dimensions in terms of what the facilitator focuses upon and consequently what they have to do.

Why Facilitation?

Facilitation is defined as a process of enabling individuals, groups, or teams to work effectively together to achieve a common goal (Schwarz, 2002). Facilitation as a method is derived from three philosophical traditions: therapeutic, client-centered approaches (Rogers, 1969); group learning experiences (Heron, 1989; Reason, 1988), and action science (Argyris & Schon, 1996). These traditions emphasize the importance of shared, experiential learning in order to achieve individual and organizational change. Argyris and Schon's work in particular recognized the importance of acknowledging the individual in the system and how, by unlocking their ability to

Table 2. Core Activities of Facilitators Within the i-PARIHS Framework (adapted from Harvey & Kitson, 2015)

Facilitator	Skills and experience	
Novice	Beginning to build up repertoire of comparing organizational contexts and cultures	
	Learning how to speed up/refine certain processes	
	Networking people across sites and building capacity	
	Embedding innovations into organizational infrastructure Understanding how to sustain the innovation and promote its spread across the system	
	Knowing how to measure impact	
Experienced	In-depth understanding and knowledge of the organization or organizations they are working with	
	Awareness of competing tensions and how to manage these around innovations	
	In-depth understanding of individual motivations and productivity	
	Knowledge of team motivation and productivity	
	Experienced and knowledgeable in local context evaluation	
	Able to assess system-wide activities and influence actions	
	Aware of wider contextual issues and confident in terms of managing boundaries and political tensions	
Expert	Coordinating facilitation networks	
	Working with systems to improve implementation success	
	Working across academic, service, and other organizational boundaries to integrate facilitation and research activity	
	Developing and testing theories of implementation, innovation, and facilitation	
	Evaluating interventions	
	Generating new knowledge	
	Refining and improving learning materials and mentoring processes	
	Running workshops and advanced master classes on facilitation approaches	

Note. i-PARIHS framework = Promoting Action on Research Implementation in Health Services integrated framework.

reflect on their everyday practices, they could improve what they did. Within the i-PARIHS framework, the reflective process enabled by the facilitator is to help individuals and teams think creatively about how their performance could be improved by utilizing the new knowledge being introduced. The connection between reflection and action leading to improvements naturally links facilitation to quality improvement activity and to theories of innovation and organizational change.

There is growing empirical evidence that facilitation, as a KT approach, is effective in primary care settings (Baskerville, Liddy, & Hogg, 2012; Harvey et al., 2015; Knox et al., 2011), in community development programs (Eriksson & Wallin, 2015), and in a number of acute and sub-acute care settings (Wiechula, Shanks, Schultz, Whitaker, & Kitson, 2015). In further developing and refining the evidence base around facilitation as a successful intervention, it is important to provide guidance on the role of facilitators; their selection, preparation, and support; and how their interventions can be evaluated.

Facilitation Roles

The i-PARIHS framework has identified three distinct facilitator roles: the beginner or novice facilitator, the experienced facilitator, and the expert facilitator. **Table 2** summarizes the key elements of each facilitator role, the mentoring and support mechanisms around them, and

what they are expected to be able to achieve. The beginning or novice facilitator may be someone from within the organization (clinician, manager, or administrator) who has been involved in a small improvement or research project and who has demonstrated a set of interpersonal and interactive skills that equip them to become more effective KT facilitators. Effective novice facilitators are able to clarify the task in hand; identify key stakeholders; clarify who needs to be part of the KT team; demonstrate the specific skills required to get the team working effectively; know how to engage emotionally as well as intellectually with the proposed change; and be able to engage team members as individuals, recognizing their particular learning and development needs.

The i-PARIHS framework operates by building on the facilitation skills found in individual healthcare professionals across systems. The challenge is to identify local novice facilitators who can then be mentored and supported to lead KT projects, first in their units and then across departments and ultimately across the whole organization. The facilitator's role is to enable and encourage individual clinicians to think in a systematic way and to help them create a way of working that embraces continuous improvement of their practice based on the best available evidence.

Experienced facilitators support the novice facilitator. Experienced facilitators will have worked as novice facilitators for a period of months or years, learning the skills and techniques of facilitation. This experience will

equip them to begin to take on larger, more organizational wide projects. Working under the supervision of an expert facilitator, they begin to develop their understanding of how wider contextual factors influence successful implementation. They will know how to manage competing tensions around innovations, be confident in dealing with individual motivation and productivity in more complex circumstances, and be able to develop and extend the range of techniques employed to keep teams working productively together and on task in terms of implementing the new evidence or innovation.

The experienced facilitation role also monitors and assesses wider system activities and ensures local initiatives are protected so they can be embedded into routine practices. Building upon the basic facilitation skill set (see **Table 2**), the experienced facilitator also develops skills related to developing capacity and sustaining change. These include knowing how to embed the new evidence or ideas into routine practices. Studies have shown that by standardizing the new evidence into an existing policy or procedure or task within the clinical setting, the innovation is more likely to be accepted and the changes maintained (Wiechula et al., 2015).

A second set of approaches relates to the experienced facilitator's ability to promote a positive attitude about the innovation to all stakeholders. This requires the experienced facilitator to know how to "sell" the benefits and illustrate how the proposed or new initiative benefits stakeholders. The third dimension the experienced facilitator works on is the embedding of audit and feedback processes for teams so they get continuous feedback on their performance. This shapes the evaluative and reflective culture of the clinical setting, moving it from what can be a hierarchical system of command and control to an approach that is interactive, dynamic, and based on evaluation of routinely collected data.

These techniques developed by the experienced facilitator have a sound theoretical basis. May and Finch's (2009) work on Normalisation Process Theory illustrates the importance of new ideas becoming part of everyday routines through processes such as sense making, collective action, and monitoring. Masso, McCarthy, and Kitson's (2014) study of how a number of innovations were introduced into aged care facilities across Australia found that it was the ability of teams to understand and share experiences that led them to "make sense" of the innovations that determined their eventual adoption and uptake. A key finding from this study was the variability of the amount and quality of the facilitation of the KT projects, which helped explain the variability in adoption and uptake.

The "expert facilitator" role acts as the overall strategic lead for the KT initiative. Providing coordination,

leadership, and high-level guidance on the four dimensions of the i-PARIHS framework, the expert facilitator tends to work across organizations and in particular work across the academic–healthcare boundary. Such "facilitation networks" have been promoted by organizations such as the Agency for Healthcare Research and Quality to promote practice facilitation networks for improving the uptake and adoption of new knowledge in the form of evidence into primary care practice (Knox et al., 2011). It is within the role and remit of expert facilitators to establish such networks both to promote the uptake of evidence into practice (Baskerville et al., 2012; Liddy et al., 2013) and using facilitation methods to promote longer-term sustainably (Hogg, Lemelin, Moroz, Sots, & Russell, 2008).

The expert facilitation role needs to be positioned at a strategic level with the authority to influence behaviors and actions across multiple systems. Expert facilitators would therefore be experienced in dealing with the outer system level contextual challenges as identified in the i-PARIHS framework, such as engaging stakeholders; understanding the politics and power relations; effective communication; and moving across and between multiple boundaries and organizational levels. In addition to these political negotiating skills, the expert facilitator is also a coach and mentor to other facilitators across the network—a technical expert in terms of "doing" facilitation and experienced in evaluation and research approaches.

The expert facilitator role can be located in academia with strong links to practice or it can be based in a healthcare organization with links to an academic institution. Applying learning from contemporary research into such partnerships (Harvey et al., 2015; Kitson et al., 2015) will help to develop more advanced understanding around the sorts of mechanisms that need to be established to enable the spread of new knowledge across systems.

One final aspect of the facilitator's role that has been discussed in the literature is whether the role is "internal" or "external" to the organization (Stetler et al., 2006). In studying the implementation of research findings within the Veterans Health Administration system, Stetler and colleagues outlined the pros and cons in having facilitators who belonged to (internal) or were outside of (external) the system. Knox et al. (2011) have also developed this idea and have identified a number of advantages and disadvantages to both the internal and external role. Such considerations would be part of the assessment and diagnostic phase of any KT project where expert facilitators (themselves perhaps external facilitators) would consider the internal capacity of the organization to recruit and use local novice and experienced facilitators.

Facilitating a KT Project

Expert facilitators would meet with the senior executive team and elicit from them information around the structure, culture, and processes of the organization. They would also explore the range of support roles available across the organization for activities such as quality improvement, safety, and professional development. Building on this resource, the expert facilitator would work with the executive team to identify a number of experienced facilitators who would then start to work with and mentor the local beginner or novice facilitators.

Someone with a clinical background may decide or be invited to work on a KT or improvement project, which uses best available evidence. Working under the supervision of an experienced facilitator and mentored by an expert facilitator, beginner or novice facilitators would become familiar with the use of evidence in healthcare and how that links to innovations in practice. They would also develop skills around assessing the quality of evidence and involve colleagues in talking about current practice and what can be improved. Building on the principles of effective teamwork (and outlined in Harvey & Kitson, 2015b), the novice facilitator would learn how to engage, motivate, and manage individual and team activity.

Another important dimension is developing the novice facilitator's understanding of and ability to influence the context or setting where the evidence is to be introduced. Context in the i-PARIHS framework refers to features such as resources, culture, leadership styles, and how individuals and teams give and receive feedback on what they do. From this "unit" level perspective, there are also a number of broader influences that affect what happens on the ground. These are referred to as organizational and broader system levels of context.

Common methods employed by facilitators typically involve improvement approaches such as Plan-Do-Study-Act cycles and audit and feedback, underpinned by project management (Harvey & Kitson, 2015b). This helps to address key issues such as establishing clear goals, demonstrating the potential for improvement, providing regular feedback, and trialing changes on a small scale—all important factors in terms of securing and maintaining staff motivation and commitment.

The designated facilitator role complements the formal role of the unit lead. The unit lead can draw on the facilitation and project management skills of the local novice facilitator to ensure that the whole clinical team is mindful of the core elements of evidence-based practice. Working with clinical teams to solve real problems where members can test out new ideas using best available evidence will create a culture of inquiry and innovation. Such activity is captured by the formal reporting

structure created by the KT project structure and timeframes. It is always crucial for the senior executive to set the KT project up within a tight project management timelines and clear deliverables.

In supporting this level of development and training, the senior executive team is building the capability of the workforce. Using locally identified staff to develop their facilitation skills means that the system is being enriched by encouraging individuals and teams to take a more reflective approach to their clinical practice. The senior team also operates as executive sponsors of the local work so that when problems emerge they will be able to influence decisions in other parts of the wider system. Wiechula et al. (2015) described how a facilitation approach supported by the executive nursing leadership of one organization improved the nutritional care of vulnerable patients at risk for malnutrition in the acute care setting.

Facilitation Compared to Other Enabling and KT Roles

The facilitator's role in a KT project is to enable the adoption of new knowledge into practice using action-learning techniques. They work closely with existing clinical teams and unit leads to make this happen. The Cochrane Effective Practice and Organisation of Care review group has also explored different roles, including opinion leaders, academic detailers, knowledge brokers, boundary spanners, knowledge managers, project managers, and change champions (http://www. epoc.cochrane.org/). These roles differ in terms of theoretical underpinning and in how the knowledge is moved between individuals and systems. For example, opinion leaders are individuals who possess authority and have the credibility to shape how their colleagues think and act. Through their leadership, they can influence the uptake of new knowledge. However, the opinion leader is not responsible for changing colleagues' behaviour, so the impact on KT is more passive if this approach is used rather than facilitation approaches.

Academic detailing has emerged from studies in medical sociology looking at how physicians could change their prescribing practices. Trained to impart precise knowledge to key stakeholder groups, the academic detailer targets individual decision makers and tries to influence their behavior by providing precise information. The academic detailer's role is not to consider the wider context or individual behavior within teams. Knowledge broker and boundary spanner roles have often been set up within large organizations (e.g., within public health structures) that have diffuse and wide-ranging

stakeholder groups that need to be kept up to date with new developments. They connect different parts of the system working across departments and organizations. As such, they reflect the stakeholder management role of the facilitator along with paying attention to the local cultures and contexts.

The role of knowledge managers is more formally linked to ways of ensuring that knowledge moves effectively throughout large organizations. The role often embraces both the technological and social networking requirements of knowledge management. The role would not generally be expected to ensure that the recipients use the knowledge resource effectively. Project managers are responsible for accomplishing the stated objectives of a project; while facilitators will have project management skills, they will also be expected to enable others to develop such skills as well as achieving the task. Change champions are individuals who voluntarily take on a role in helping the adoption, implementation, and use of something new into the system. They help to get a new idea accepted at the local level. Similar to the opinion leader role, change champions are a valuable asset in terms of shaping and influencing others' thoughts and behaviors.

Discussion

While there is growing evidence around the impact of facilitation on successful implementation of evidence into practice, there are still a number of unresolved issues. For example, Berta et al. (2015) have argued that the theoretical underpinnings of facilitation have not been sufficiently elucidated, thereby rendering the subsequent development and use of facilitation interventions difficult to measure and evaluate. Other research teams argue that leadership roles are more important in achieving uptake of new evidence (Gifford et al., 2012) and in particular leadership roles that are facilitative in nature (Wong, Cummings, & Ducharme, 2013).

Other teams have focused on the importance of context and how it influences the movement of knowledge across organization (Damschroder et al., 2009). There continues to be significant investment in the generation of new evidence in the shape of guidelines and other relevant products, although the evidence of their effective uptake and use has been disappointing. Schuster, McGlynn, and Brook's (1998) landmark study, which found that less that two thirds of patients received care based on evidence-based guidelines, was replicated in Australia. This team found that only 58% of the Australian public received evidence-based care when they visited their family physician or primary care area (Runciman et al., 2012).

This suggests that we do have to change the way we think about engaging the generators and users of new knowledge in more interactive and inclusive ways. Traditional methods do not work, and it would be fair to argue that approaches that are based on enabling local teams to change the way they interpret and use new knowledge would have merit. This is why the i-PARIHS framework has refined its way of conceptualizing the core elements thought to be influential in successful implementation. We have extended the concept of evidence to embrace the wider understanding of how innovations move across systems. We argue that evidence-based innovations are what we should be promoting in health systems. The i-PARIHS framework also acknowledges the central importance of the individual and team in all of this potential change. Perhaps not the most active word to describe the role, but the recipients are those who need to engage with and react to the new ideas. This is best done in conversations where interpretation and sense making are encouraged. That deep appreciation of the need to make sense of one's immediate environment helps shape the local and wider context: individuals and teams begin to feel more in control and able to experiment and to trial doing things differently (Masso et al., 2014). Our argument is that skilled facilitation enables this sort of approach to flourish. However, as we have indicated, there is still a lot more exploration to be undertaken before we can be confident we have all the elements clearly articulated.

Kitson & Harvey

Conclusions

The i-PARIHS framework has been used to explain how KT is implemented in practice and how individuals and leaders think about evidence and shaping the culture and context within which they work. This framework draws on the skills and capacity of facilitators who can work with individuals and teams to help them use the best available evidence in their practice.

Clinical Resource

 Implementing evidence-based practice in healthcare: A facilitation guide: https://www.routledge. com/products/9780415821926

References

Argyris, C., & Schon, D. A. (1996). *Organizational learning II: Theory, method and practice*. Reading, MA: Addison-Wesley.

Baskerville, N. B., Liddy, C., & Hogg, W. (2012). Systematic review and meta-analysis of practice facilitation within

- primary care settings. *Annals of Family Medicine*, 10(1), 63–74.
- Berta, W., Cranley, L., Dearing, J. W., Dogherty, E., Squires, J. E., & Estabrooks, C. A. (2015). Why (we think) facilitation works: Insights from organizational learning theory. *Implementation Science*. doi:10.1186/s13012-015-0323-0
- Damschroder, L., Aron, D., Keith, R., Kirsh, S., Alexander, J., & Lowery, J. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4, 50. doi:10.1186/1748-5908-4-50
- Eriksson, L., & Wallin, L. (2015). Using facilitation to improve neonatal health and survival in Vietnam. In G. Harvey & A. Kitson (Eds.), *Implementing evidence-based practice in healthcare: A facilitation guide* (pp. 169–184). Abingdon, UK: Routledge.
- Gibb, H. (2013). An environmental scan of an aged care workplace using the PARiHS model: Assessing preparedness for change. *Journal of Nursing Management*, 21(2), 293–303.
- Gifford, W., Davies, B., Graham, I., Tourangeau, A., Woodend, K., & Lefebre, N. (2012). Developing leadership capacity for guideline use: A pilot cluster randomized control trial. *Worldviews on Evidence-Based Nursing, 10,* 51–65. doi:10.1111/j.1741-6787.2012.00254.x
- Haines, A., & Jones, R. (1994). Implementing findings of research. *British Medical Journal*, 308, 1488–1492.
- Harvey, G., Hegarty, J., Humphries, J., Rothwell, K., Kislov, R., Entwistle, V., & Boaden, R. (2015). Facilitation methods within a project to improve the management of chronic kidney disease in primary care. In G. Harvey & A. Kitson (Eds.), *Implementing evidence-based practice in healthcare: A facilitation guide* (pp. 169–184). Abingdon, UK: Routledge.
- Harvey, G., & Kitson, A. (2015a). Translating evidence into healthcare policy and practice: Single versus multi-faceted implementation strategies—Is there a simple answer to a complex question? *International Journal of Health Policy and Management*, 4(3), 123–126.
- Harvey, G., & Kitson, A. (2015b). *Implementing evidence-based practice in healthcare: A facilitation guide*. Abingdon, UK: Routledge.
- Helfrich, C., Damschroder, L., Hagedorn, H., Daggett, G., Sahay, A., Ritchie, M.,... Stetler, C. B. (2010). A critical synthesis of literature on the promoting action on research implementation in health services (PARIHS) framework. *Implementation Science*, 5, 82. doi:10.1186/1748-5908-5-82
- Heron, J. (1989). *The facilitator's handbook*. London: Kogan Page.
- Hogg, W., Lemelin, J., Moroz, I., Sots, E., & Russell, G. (2008). Improving prevention in primary care: Evaluating the sustainability of outreach facilitation. *Canadian Family Physician*, *54*, 712–720.
- Kitson, A., Harvey, G., & McCormack, B. (1998). Enabling the implementation of evidence-based practice: A conceptual framework. *Quality in Health Care*, 7, 149–158.

- Kitson, A., Wiechula, R., Conroy, T., Whitaker, N., Holly, C., & Salmond, S. (2015). Case study of the Signature Project—An Australian-US knowledge translation project. In G. Harvey & A. Kitson (Eds.), *Implementing evidence-based practice in healthcare: A facilitation guide* (pp. 169–184). Abingdon, UK: Routledge.
- Kitson, A. L., Rycroft-Malone, J., Harvey, G., McCormack, B., Seers, K., & Titchen, A. (2008). Evaluating the successful implementation of evidence into practice using the PARIHS framework: Theoretical and practical challenges. *Implementation Science*, *3*, 1. doi:10.1186/1748-5908-3-1
- Knox, L., Taylor, E., Geonnotti, K., Machta, R., Kim, J., Nysenbaum, J., & Parchman, M. (2011). *Developing and running a primary care practice facilitation program: A how-to guide*. Rockville, MD: Agency for Healthcare Research and Quality.
- Landry, R., Amara, N., & Lamari, M. (2001). Utilization of social science research knowledge in Canada. *Research Policy*, 30(2), 333–349.
- Liddy, C., Laferriere, D., Baskerville, B., Dahrouge, S., Knox, L., & Hogg, W. (2013). An overview of practice facilitation programs in Canada: Current perspectives and future directions. *Health Policy*, 8, 58–67.
- Masso, M., McCarthy, G., & Kitson, A. (2014). Mechanisms which help explain implementation of evidence-based practice in residential aged care facilities: A grounded theory study. *International Journal of Nursing Studies*, *51*, 1014–1026.
- May, C., & Finch, T. (2009). Implementation, embedding and integration: An outline of Normalization Process Theory. *Sociology*, *43*, 535–554.
- McCormack, B., Kitson, A., Harvey, G., Rycroft-Malone, J., Titchen, A., & Seers, K. (2002). Getting evidence into practice: The meaning of "context." *Journal of Advanced Nursing*, *38*(1), 94–104.
- McKibbon, K. A., Lokker, C., Wilczynski, N. L., Ciliska, D., Dobbins, M., Davis, D. E.,. . . Straus, S. (2010). A cross-sectional study of the number and frequency of terms used to refer to knowledge translation in a body of health literature in 2006: A Tower of Babel? *Implementation Science*, *5*, 16. doi:10.1186/1748-5908-5-16
- Reason, P. (1988). *Human inquiry in action*. London, England: Sage.
- Rogers, C. R. (1969). Freedom to learn—A view of what education might become. Columbus, OH: Charles Merrill.
- Runciman, W. B., Coiera, E. W., Day, R. O., Hannaford, N. A., Hibbert, P. D., Hunt, T. D., . . . Braithwaite, J. (2012). Towards the delivery of appropriate health care in Australia. *Medical Journal of Australia*, 197(2), 78–81.
- Rycroft-Malone, J., Kitson, A. L., Harvey, G., McCormack, B., Seers, K., Titchen, A., & Estabrooks, C. (2002). Ingredients for change: Revisiting a conceptual framework. *Quality and Safety in Health Care*, 11(2), 174–180.

Effective Knowledge Translation Kitson & Harvey

Rycroft-Malone, J., Seers, K., Titchen, A., Harvey, G., Kitson, A. L., & McCormack, B. (2004). What counts as evidence in evidence-based practice. *Journal of Advanced Nursing*, 47(1), 81–90.

- Schuster, M., McGlynn, E., & Brook, R. (1998). How good is the quality of health care in the United States? *Milbank Quarterly*, 76, 517–563.
- Schwarz, R. (2002). *The skilled facilitator*. San Francisco, CA: Jossey-Bass.
- Stetler CB, Legro MW, Rycroft-Malone J, Bowman C, Curran G, Guihan M, . . . Wallace CM. (2006). Role of "external facilitation" in implementation of research findings: a qualitative evaluation of facilitation experiences in the

- Veterans Health Administration. *Implementation Science*, 1, 23. doi:10.1186/1748-5908-1-23
- Wiechula, R., Shanks, A., Schultz, T., Whitaker, N., & Kitson, A. (2015). Case study of the PROWL project—A whole-system implementation project involving nursing and dietetic lead facilitators. In G. Harvey & A. Kitson (Eds.), *Implementing evidence-based practice in healthcare: A facilitation guide* (pp. 169–184). Abingdon, UK: Routledge.
- Wong, C. A., Cummings, G. G., & Ducharme, L. (2013). The relationship between nursing leadership and patient outcomes: A systematic review update. *Journal of Nursing Management*, 21, 709–724.