PARiHS framework for implementing research into practice

A summary of
Kitson, A., Harvey, G., & McCormack, B. (1998). Enabling the implementation of evidence based practice: a conceptual framework. Quality in Health Care, 7, 149-158. DOI: 10.1136/qshc.7.3.149. Retrieved from: http://qualitysafety.bmj.com/content/7/3/149.abstract

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National Collaborating Centre for Methods and Tools
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Categories:
Method, Implement, Knowledge brokering, KT theories, Organizational capacity and management

Method

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Relevance For Public Health

This method would be relevant for public health practitioners devising a knowledge translation strategy to implement research into practice. For instance, by considering the different kinds of evidence on a public health issue and the context of the organization, practitioners can determine the most appropriate facilitation method to change practice.

Description

The PARiHS (Promoting Action on Research Implementation in Health Services) framework provides a way to implement research into practice. With case studies of teams implementing evidence, it examines the interactions between three key elements for knowledge translation. Three factors determine research use:

- Evidence (E)
- Context (C)
- Facilitation (F)

Significantly, this framework argues that successful implementation (SI) of evidence into practice had as much to do with the context or setting where the new evidence was being introduced and how that new evidence was introduced (facilitated into practice) as it had to do with the quality of the evidence.

The PARiHS framework incorporates themes from the literature on research use, such as:

- Implementing research into practice is an organizational issue rather than an individual issue.
- The research evidence must be strong (such as a systematic review of methodologically sound studies) before implementation is justified.
- Strategies for implementation require careful planning and need to consist of a range of interventions that address the need for education, audit and the management of change.
- Criteria for evaluating the impact of the intervention must be identified and agreed upon before implementing any change.

The main features of the PARiHS framework include:

- Evidence encompasses codified and non-codified sources of knowledge, including research evidence, practitioner experience, community preferences and experiences, and local information.
- Melding and implementing such evidence in practice involves negotiating and developing a shared understanding about the benefits, disadvantages, risks and losses of the new practice over the old.
- Some contexts are more conducive to the successful implementation of evidence into practice than others, such as organizations that have transformational leaders, elements of learning organizations and evaluation mechanisms.
- The framework emphasizes the need for appropriate facilitation to improve the likelihood of success. The needs of the organization determine the type of facilitation and the role and skill of the facilitator. Facilitators work with individuals and teams to enhance the implementation process.

Implementing the Tool

Who is Involved?

Various roles would be involved in planning and implementing this framework, including program directors and managers, supervisors, public health nurses, health promotion officers, community development workers and others.

Steps for Using Tool

The PARiHS (Promoting Action on Research Implementation) framework proposes that successful implementation of research in practice is a function of the relation between the nature of the evidence, the context in which the proposed change is to be implemented and the mechansims by which the change is facilitated. The framework is expressed as:

SI = f (E, C, F)

where SI=successful implementation, E=evidence, C=context, F=facilitation and f=function of.

Each factor, evidence, context and facilitation consists of sub-elements that can be rated on a scale from low to high. High ratings on each factor are more likely to produce successful implementation results (Kitson et al., 1998; Kitson et al., 2008).

1. Evidence: to assess the nature and strength of the evidence and its potential for implementation. There are four evidence bases:

- Research - evidence needs to be translated and adapted so it makes sense in the local context. Research evidence is less certain and less value-free than is often acknowledged.
- Practitioner expertise and experience - the tacit knowledge of practitioners, or 'practical know-how' needs to be made explicit for practitioner expertise to be shared, critiqued and developed.
- Community/intended population - groups and communities need to be included in decision making.
- Local context and environment - data on the local context such as evaluation data, local community stories and knowledge of the organizational culture needs to be considered.

2. Context: the context is the environment or setting in which the proposed change is to be implemented. Context is subdivided into three core elements: an understanding of the prevailing culture, leadership roles and the organization's approach to measurement (evaluation). Other key aspects of context include:

- relevance of the innovation to the organization
- organizational fit of the innovation to organizational structures and procedures such that the innovation is more likely to be adopted
- adequate resources for implementation, where resources are appropriately allocated, targeted and managed
- use of implementation strategies with a multi-disciplinary focus.

3. Facilitation: facilitation describes the type of support needed to help people change their attitudes, habits, skills and ways of thinking and working. Facilitators help people understand what they have to change and how to change it to achieve the desired outcome. The following dimensions are identified within the facilitation role: personal characteristics (openness, credible, authentic,etc.); role characteristics (clarity of role, authority, etc.); and facilitation style (range and flexibility of style, consistent and appropriate presence, etc.). The key features of facilitation within this framework include the following:

- Facilitation is a process that depends upon the person (the facilitator) carrying out the role with the appropriate skills, personal attributes and knowledge.
- The purpose of facilitation varies from providing help and support to achieve a goal to enabling individuals and teams to analyze, reflect and change their own attitudes, behaviours and ways of working.
- A 'facilitation continuum' distinguishes between a 'doing for others' role (more discrete, practical, technical and task driven) on the one side to an 'enabling and empowering' role that is developmental and seeks to mentor and support others in their learning and change processes.
- Facilitation skills are developed through experiential learning and through acquiring key facilitation competencies.
- Facilitation is a discrete intervention (knowledge translation strategy).

Four case studies are presented where the evidence is rated high and context and facilitation range from low to high ratings. Successful implementation of evidence is most likely to occur when the context is receptive to change and when there is appropriate facilitation of change.

The framework does not consider wider organizational and political factors in the local situation, including the presence of incentives or sanctions for change. The facilitator as the agent of change in the implementation process would need to consider these issues.

Evaluation and Measurement Characteristics

Evaluation

 Has been evaluated.

This framework was evaluated in a case study of nurses in a clinical setting. The evaluation found that evidence, context and facilitation are key elements in implementing evidence in practice (Rycroft-Malone et al., 2004). However, the content, purpose and dynamics of this framework require further consideration to ensure its appropriateness, comprehensiveness and accuracy. This study found that practitioners are challenged in using robust evidence across all four differents types of evidence (research, clinical experience, patient experience and local data/information). Also, implementation of evidence is dependent on organizational factors in addition to individual factors.

Kitson et al. (2008) articulate that the PARiHS framework is a useful tool for research implementation, but it remains largely untested. They also state that the PARiHS framework may be best used as a two-stage process: use it as a preliminary measure of evidence and context, and then use the aggregated data from these measures to determine the most appropriate facilitation method. By using the framework in this manner, decision-makers can tailor any knowledge translation interventions to the local context. Kitson and colleagues also identified three challenges of the framework in implementation science:

1. the need to integrate theoretical perspectives into the framework to explore what works in knowledge translation
2. the need to develop and test diagnostic and evaluative instruments for the three elements and sub-elements of the framework
3. the need to test how the different elements of the framework are interrelated, and how their interrelationships impact on knowledge translation outcomes.

Validity

Not applicable

Reliability

Not applicable

Methodological Rating

 Not applicable

Tool Development

Developers

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Method of Development

The PARiHS (Promoting Action on Research Implementation in Health Services) framework examines factors at play in the implementation of evidence in practice. There are three phases in the development of the PARiHS framework:

- Phase 1: Development and Concept Analysis (1998-2002)
- Phase 2: Empirical Case Studies (2001-2003)
- Phase 3: Development of Diagnostic/Evaluation Tool (2003-Present)

Release Date

1998

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Resources

Title of Primary Resource	Enabling the implementation of evidence based practice: a conceptual framework
File Attachment	None
Web-link	http://qualitysafety.bmj.com/content/7/3/149.abstract
Reference	Kitson, A., Harvey, G., & McCormack, B. (1998). Enabling the implementation of evidence based practice: a conceptual framework. *Quality in Health Care, 7*, 149-158. DOI: 10.1136/qshc.7.3.149. Retrieved from: http://qualitysafety.bmj.com/content/7/3/149.abstract
Type of Material	Journal article
Format	Periodical
Cost to Access	
Language	English
Conditions for Use	

Title of Supplementary Resource	From research to practice: one organizational model for promoting research-based practice
File Attachment	None
Web-link	http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2648.1996.tb00003.x/abstract
Reference	Kitson, A., Ahmed, L.B., Harvey, G., Seers, K., & Thompson, D.R. (1996). From research to practice: one organizational model for promoting research-based practice. *Journal of Advanced Nursing, 23*, 430-440. doi: 10.1111/j.1365-2648.1996.tb00003.x
Type of Material	Journal article
Format	Periodical
Cost to Access	Journal article purchase
Language	English
Conditions for Use	Copyright © 1996 Blackwell Science Ltd

Title of Supplementary Resource	The PARIHS framework - a framework for guiding the implementation of evidence-based practice
File Attachment	None
Web-link	http://journals.lww.com/jncqjournal/Citation/2004/10000/The_PARIHS_Framework_A_Framework_for_Guiding_the.2.aspx
Reference	Rycroft-Malone, J. (2004). The PARIHS framework—a framework for guiding the implementation of evidence-based practice. *Journal of Nursing Care Quality*, *19* (4), 297-304.
Type of Material	Journal article
Format	Periodical
Cost to Access	
Language	English
Conditions for Use	Copyright © 2004 Lippincott Williams & Wilkins Inc.

Title of Supplementary Resource	Evaluating the successful implementation of evidence into practice using the PARIHS framework:theoretical and practical challenges.
File Attachment	None
Web-link	http://www.implementationscience.com/content/3/1/1
Reference	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.
Type of Material	Journal article
Format	Periodical
Cost to Access	None.
Language	English
Conditions for Use	Copyright © Kitson et al; licensee BioMed Central Ltd.

Title of Supplementary Resource	What counts as evidence in evidence-based practice?
File Attachment	None
Web-link	http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2648.2004.03068.x/abstract
Reference	Rycroft-Malone, J., Seers, K., Titchen, A., Harvey, G., Kitson, A., & McCormack, B. (2004). What counts as evidence in evidence-based practice? *Journal of Advanced Nursing, 47* (1), 81-90.
Type of Material	Journal article
Format	Periodical
Cost to Access	
Language	English
Conditions for Use	Copyright © 2004 Blackwell Publishing Ltd

Title of Supplementary Resource	An exploration of the factors that influence the implementation of evidence into practice
File Attachment	None
Web-link	http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2702.2004.01007.x/abstract
Reference	Rycroft-Malone, J., Harvey, G., Seers, K., Kitson, A., McCormack, B., & Titchen, A. (2004). An exploration of the factors that influence the implementation of evidence into practice. *Journal of Clinical Nursing, 13*, 913-924.
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