

**Original Article** 

# Facilitation as a Role and Process in Achieving Evidence-Based Practice in Nursing: A Focused Review of Concept and Meaning

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# **ABSTRACT**

**Background:** Facilitation is proposed as an important strategy to assist practitioners to implement evidence into practice. However, from a front-line nursing perspective, what is actually involved in facilitation, particularly in regards to research utilization, is poorly understood.

**Aim:** To examine the current state of knowledge surrounding the concept of facilitation as a role and process in the implementation of research findings within the nursing context. Building on a previous concept analysis, we examined how facilitation has evolved over the last decade, particularly focusing on the practical elements (e.g., what it entails to operationalize and implement facilitation in nursing).

**Methods:** A systematic search of electronic databases identified theory and research-based nursing papers explicitly focused on facilitation in research utilization. Through a content analysis, we examined how the concept is being used, described, and applied within nursing.

**Results:** Facilitation continues to be described as supporting and enabling practitioners to improve practice through evidence implementation. Certain aspects of the role and the strategies being employed to promote change are more evident. It was possible to formulate these into a taxonomy. Key findings include:

- facilitation is now being viewed as an individual role as well as a process involving individuals and groups;
- project management/leadership are important components;
- no matter which approach is selected, tailoring facilitation to the local context is critical;
- there is a growing emphasis on evaluation, particularly linking outcomes to nursing actions.

**Conclusions:** Further understanding of what facilitators are actually doing to enable changes in nursing practice based on research findings will provide the groundwork for the design and evaluation of practical strategies for evidence-based practice in nursing. Research is needed to clarify how facilitation may be used to implement change in nursing practice along with evaluation of the effectiveness of various approaches.

**KEYWORDS** facilitation, evidence-based practice, research utilization, research use, research implementation, nursing practice

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# **BACKGROUND**

F acilitation is emerging as an important concept in evidence untake in alimination. idence uptake in clinical nursing practice. It is viewed as a means of bridging the gap between theory and practice. Kitson and colleagues (1998) developed a conceptual framework proposing that facilitation, in addition to the nature of the evidence and the quality of the context, is an essential component enabling successful research implementation. Facilitation is presented as a technique whereby facilitators provide support to help individuals and groups realize what they need to change and how to make changes to incorporate evidence into practice.

In further developing the framework, Harvey et al. (2002) conducted a concept analysis of facilitation across a range of health care literature published between 1985 and 1998. Their findings show that facilitation involves helping others change practice with facilitation "ranging from a discrete task-focused activity to a more holistic process of enabling individuals, teams and organizations to change" (Harvey et al. 2002, p. 578). However, facilitation effectiveness is poorly understood. Harvey et al. (2002) found facilitation has some influence on changing clinical practice, but findings are equivocal. At issue are the limited descriptions and lack of rigorous evaluations of facilitation. In summary, the authors concluded that the concept of facilitation is therefore partially developed and further research is needed to describe and illustrate how it relates to evidence implementation.

To explore the concept's maturity, we undertook this enquiry to understand how the nature of facilitation has evolved over the last decade, especially given rapid advancements in the implementation science field. From Harvey et al.'s (2002) analysis, it is apparent that the meaning and application of facilitation varied depending on the applied field. It can be used generally within education and practice development (PD) and specifically for implementation of evidence-based practice (EBP). From a pragmatic point-of-care perspective, there is a need to clarify how facilitation plays out in a bedside nursing situation. Therefore, the scope of this review is purposefully limited to facilitation related to evidence implementation in nursing. We chose specifically to study the concept in terms of operationalizing it at the point-of-care focusing on instrumental knowledge use and the implementation of research evidence to gain a comprehensive view of facilitation in the research utilization (RU) process. While Harvey et al.'s analysis examined a range of health care literature, this review focused specifically on nursing. An important focus of the current review is particular attention to the practical elements and what is entailed to operationalize and implement facilitation.

Building on Harvey et al.'s (2002) analysis, we utilized a similar approach to examine recent literature for descriptions of the meaning of facilitation, strategies involved, characteristics and skills of facilitators, and effectiveness of facilitation interventions on RU. We sought to understand generally how facilitation is being researched, studied, and theorized to gather new insights into application. In examining the current state of knowledge, our objectives were

- Examine the discourse around facilitation in RU in nursing literature as it has evolved since Harvey et al.'s (2002) analysis that focused on literature from 1985-1998,
- Describe the facilitation strategies used and develop a taxonomy of facilitation interventions,
- Explicate the characteristics and skills of facilitators involved in research implementation and develop a facilitator role synopsis, and
- · Determine the effectiveness of facilitation interventions involving nursing practice.

# **METHODS**

Using a multistep approach, we identified literature focused on facilitating RU in nursing in three bibliographic databases (CINAHL, MEDLINE, and EMBASE). Similar strategies were replicated in each database using identical keywords and appropriate mapped subject headings (Figure 1). References of retrieved articles were reviewed for potentially relevant citations, further extending the search. A decision tree was constructed with search and retrieval yields (Figure 2).

First, a broad search was done using the keywords "facilitation" and "facilitator." This failed to generate relevant subject headings. These terms, in addition to "facilitate," comprise both nouns and verbs, thus adding to the complexity of the search. Therefore, the truncated version of each term, "facilita\$," was used to generate literature containing all three. The search was limited to publications from 1996 onward. This corresponds with the guideline development and dissemination movement and advances in EBP within nursing in Canada, which became palpable in the mid-to-late 1990s. There is a 2-year overlap (1996– 1998) with the Harvey et al. (2002) analysis.

Papers were included if they contained an explicit focus on facilitation as a role or process in RU in nursing. Exclusions included: descriptions of general barriers and facilitators to RU, unless the facilitation process was distinctly outlined; nurse participation in research as opposed to actual research use; nurses' attitudes and perceptions of research use; and facilitation interventions in which the

# CINAHL

facilita\$	AND
nurs\$	
AND	
evidence-based practice (mp) Nursing Practice, Evidence-based (MeSH)* guideline implementation (mp) Practice Guidelines (MeSH)* "Diffusion of Innovation" (MeSH)* knowledge transfer (mp) knowledge translation (mp) Nursing Practice, Research-Based (MeSH)* research utilization (mp) research implementation (mp) evidence-based practice implementation (mp) knowledge exchange (mp) practice development (mp) Professional Development (MeSH)	OR

\$ = truncated search term mp = keyword MeSH = mapped subject heading \* = explosion of subject heading

# **EMBASE**

facilita\$	AND
nurs\$	
AND	
evidence-based practice (mp) Evidence Based Practice (MeSH) guideline implementation (mp) Practice Guideline (MeSH)* nursing practice (MeSH)* diffusion of innovation (mp) knowledge transfer (mp) knowledge translation (mp) nursing research (MeSH)* research utilization (mp) research implementation (mp) evidence-based practice implementation (mp) knowledge exchange (mp) practice development (mp)	OR

# MEDLINE

facilita\$	AND
nurs\$	
AND	
evidence-based practice (mp) guideline implementation (mp) practice guideline (MeSH)* "diffusion of innovation" (MeSH)* knowledge transfer (mp) knowledge translation (mp) research utilization (mp) research implementation (mp) evidence-based practice implementation (mp) knowledge exchange (mp) practice development (mp) professional development (mp)	OR

Figure 1. Search strategy for CINAHL, EMBASE, and MEDLINE.

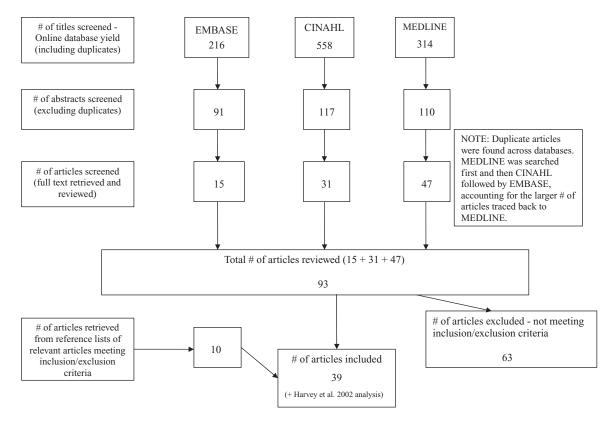


Figure 2. Search strategy decision tree. All databases were limited to date = January 1996–May 2008 and language = English.

changes implemented were not outlined as being based on research evidence.

"Professional development" was used as a keyword and subject heading to identify articles on facilitating evidence implementation as part of continuing education. However, in continuing professional development and education, the focus is on teaching practitioners and enhancing their competence whereas knowledge translation also concerns patients and health systems (Davis et al. 2003). Simply providing education may not result in actual behavior change or research implementation. Therefore, articles focused on facilitating education with no mention of research use were excluded. The same criteria were applied to papers retrieved about "practice development" (PD). As the concept is not well agreed upon and a broad view of PD related to quality is acknowledged, this review focused specifically on articles referring to the implementation of research.

All titles were screened online and if relevant to the aim of the review, corresponding abstracts were examined for eligibility using the inclusion/exclusion criteria. Abstracts of articles appearing to meet criteria were retrieved in full text for review. If an abstract was unavailable online, the full text was retrieved before deciding on inclusion/exclusion. During the screening process, two reviewers assessed papers using the criteria. Once the final set was agreed upon, all papers were examined to synthesize the understanding of facilitation of RU in nursing. Synthesis tables were constructed to display the results relevant to the review aims. Appraisal of study quality was not undertaken as the focus was on the concept and how it is used. A simple content analysis was performed to determine descriptions of the meaning and purpose of facilitation, the characteristics and skills of facilitators, and the effectiveness of facilitation interventions.

# **RESULTS**

A large number of papers were identified (n = 1,088) from the broad keyword search. After screening for duplicates and applying the inclusion/exclusion criteria, a final set of 39 papers resulted (Figure 2). In screening abstracts, a majority (63%) were excluded because there was no mention of facilitation as a role or process or the focus was on general barriers and facilitators to research use (15%). Reasons for exclusion following full article review were tracked (Table 1).

TABLE 1
Reasons for exclusion of full-text articles screened

	ARTICLES EXCLUDED (n = 63)	% (APPROX)
No specific focus on facilitation as a role or process	28	44
No focus on facilitating the implementation of evidence or research use	14	22
Facilitation in learning or education	7	11.1
No major focus on facilitation (only briefly mentioned)	4	6.3
No articulation of the facilitator's role	4	6.3
Facilitation mainly focused on changing physician practice	4	6.3
Forum abstract	1	2
Article could not be obtained	1	2
Total	63	100

The final set included: research studies (17), frameworks (4), reviews (4), project descriptions (6), and discussion or commentary pieces (8) [NOTE: two studies were associated with two papers each and three of the four framework papers discuss further developments of one conceptual framework originally developed by Kitson et al. 1998].

# The Meaning of Facilitation

Definitions of facilitation provided by Kitson et al. (1998) and Harvey et al. (2002) continue to be predominantly cited by others. In the literature published since, one other explicit definition was discovered (Table 2). While Harvey and colleagues (2002) highlight the notion of making implementation easier, the more recent definition given by Stetler et al. (2006) emphasizes the importance of relationships and working together.

**TABLE 2**Definitions of facilitation

In general, implementation research involving facilitation does not provide specific definitions of the term but it is viewed as a method for assisting with quality improvement (Loftus-Hills & Duff 1997). Facilitators support individuals and groups through the change process (Thompson et al. 2006). This change is goal-oriented (Rycroft-Malone et al. 2004; Scott & Snelgrove-Clarke 2008) and intermediaries, such as facilitators, influence nurses to achieve predetermined objectives (Ferguson et al. 2004).

# **Facilitation Strategies**

In line with Harvey et al.'s (2002) findings, facilitation reported in RU in nursing in the intervening years is carried out by individuals assisting others to implement evidence into practice. Facilitators in one study interpreted their role differently with one describing it as maintaining group motivation while another's focus was addressing differences of opinion and helping staff identify problems (Loftus-Hills & Duff 1997). Facilitators have integrated a range of implementation strategies including educational, epidemiological, organizational, behavioral, and social influence strategies (Wallin et al. 2005b) or were seen as likely to use other implementation interventions (e.g., education) while providing support and problem-solving (Stetler et al. 2006). This diversity of approaches in moving evidence into practice reflects the multifaceted nature of facilitation purported by Harvey et al. (2002) who also identified the need for a variety of strategies. In their analysis, they describe facilitation activities as occurring on a continuum ranging from distinctly task-driven actions to more holistic endeavors aimed at releasing "the inherent potential of individuals" (Harvey et al. 2002, p. 581). The primary purpose of facilitation affects its operationalization and in practice, approaches often include various activities spanning the continuum. In keeping with their observations, the recent literature describes facilitation as an intervention that includes coordinating and implementing other multifaceted interventions.

		REFERENCED BY
Kitson et al. 1998	"A technique by which one person makes things easier for others" (p. 152)	Owen & Milburn 2001; Newton 2003; Wallin et al. 2005a
Harvey et al. 2002	"The process of enabling (making easier) the implementation of evidence into practice" (p. 579)	Ellis et al. 2005; Alkema & Frey 2006; Doran & Sidani 2007; Scott & Snelgrove-Clarke 2008
Stetler et al. 2006	"A deliberate and valued process of <i>interactive</i> problem solving and support that occurs in the context of a recognized need for improvement and a supportive interpersonal relationship" (para. 4)	

Our content analysis revealed many of the specific strategies involved in facilitation of RU in nursing are located toward the task-end of the continuum described by Harvey et al. (2002). We found commonalities across papers with five unique areas emerging:

- 1. Increasing awareness of a need for change
- 2. Leadership and project management
- 3. Relationship-building and communication
- 4. Importance of the local context
- 5. Ongoing monitoring and evaluation

In general, upon increasing practitioners' awareness of a need for change, facilitators employ a variety of change strategies depending on the context where change is to take place. The process is iterative occurring over a period of time with ongoing monitoring and support provided in progressing toward change. Within each of the five areas, the recent literature reveals unique, practical aspects of facilitation.

**Increasing awareness of a need for change.** As originally proposed by Kitson et al. (1998) and reiterated by Harvey et al. (2002), facilitators play an important role in helping people recognize and understand what they need to change. In implementation research and projects to date, this has typically been accomplished through a practice evaluation by formal or informal audit and feedback (Jones et al. 1996; Loftus-Hills & Duff 1997; Ruston 2002; Sipilä et al. 2008). The subject of change may already be identified or facilitators may help staff recognize an area for change by stimulating critical inquiry into their practice (Pepler et al. 2005). In their multisite case study, Loftus-Hills and Duff (1997) found selecting a topic that was relevant to staff and recognized as a priority stimulated interest and motivation. While performance gaps need to be recognized to provide impetus for change, Ferguson et al. (2004) suggest positive emphasis be placed on enhanced patient outcomes rather than evidence of poor practice.

Leadership and project management. Upon recognition of a need for practice improvement, an individual or team assumes leadership and responsibility for managing the change process. This responsibility may rest with a staff member or team at an organization or setting with an outside facilitator providing assistance to help them along (Ruston 2002; Wallin et al. 2005b; Stetler et al. 2006), which is how the role was originally described. Alternatively, a facilitator from the site may assume the leadership role independently (Loftus-Hills & Duff 1997; Owen & Milburn 2001). Facilitators may come from within or outside of the setting, or a combination of both (Rycroft-Malone et al. 2002a, 2002b; Stetler et al. 2006) and may be positioned on or off site (Alkema & Frey 2006). This

is reflective of Harvey et al.'s (2002) findings. However, as Rycroft-Malone et al. (2004) note, regardless of whether internal or external, identifying a leader to drive implementation contributes to success. Emphasis also remains on the facilitator role being clearly defined and articulated (Stetler et al. 2006). This is important for organizations to consider from a practical and operational perspective. Identifying the appropriate person(s) to lead implementation projects and communicating their role may require more attention to increase the likelihood of success.

Building on the project-management end of the Harvey et al. (2002) continuum, facilitators assist groups in setting goals through development of an action plan for change (Owen & Milburn 2001; Stetler et al. 2006). Administrative duties include organizing and facilitating meetings, coordinating audits, problem-solving, and gathering and disseminating information and reports (Owen & Milburn 2001; Rycroft-Malone et al. 2004; Tucker et al. 2006). In particular, knowledge translation and dissemination with end-users in a setting surfaced as a major facilitator role (e.g., developing or distributing and modifying or adapting guidelines in collaboration with practitioners) (Ellis et al. 2005; Wallin et al. 2005b). Facilitators use and offer practical tools or resources but these materials are not well described (Wallin et al. 2005b; Stetler et al. 2006).

**Relationship-building and communication.** Working together and building relationships are inherent in definitions of facilitation and representative of activities closer to the holistic end of the continuum described by Harvey et al. (2002). For greatest effect, Marshall et al. (2001) emphasize engaging the whole team from the beginning. The importance of the relationship between facilitators and practitioners and value of using a teamwork approach is noted across studies (Jones et al. 1996; Loftus-Hills & Duff 1997; Stetler et al. 2006). The role often involves collaborating multiprofessionally, crossing disciplinary boundaries (Jones et al. 1996; Ruston 2002; Sipilä et al. 2008) or linking with outside experts (Stetler et al. 2006). One project highlighted how a facilitator fostered relationship-building through regular communication, promoting shared decision-making and consensusbuilding, recognizing staff efforts, and demonstrating flexibility (Tucker et al. 2006). Enhancing relationships and communication is recognized as an important component (Nagykaldi et al. 2005).

Mentoring staff is also considered a strategy to raise research awareness and facilitate research use (Camiah 1997; Pepler et al. 2006). In an exploratory enquiry by Tolson and colleagues (2005), "confidence-building" (p. 124) was a common thread throughout themes identified as facilitating best nursing practices. Increasing staff awareness of their resistance to research use and change and helping

them overcome it is considered part of facilitation (Wallin et al. 2005b; Pepler et al. 2006).

A number of discussion and review papers described knowledge dissemination, dealing with resistance (Regan 1998), and role-modeling (Eaton et al. 2007) as components of facilitation. Providing advice along with acquiring and translating knowledge to apply in practice were cited as major components of the facilitator's role (Eaton et al. 2007). Owen and Milburn (2001) describe a dynamic process where the role shifted from being primarily directive in the beginning to more enabling as change progressed and staff were encouraged to continue to drive the change process forward themselves. This parallels the findings of Harvey et al. (2002).

*Importance of the local context.* Another critical element seen consistently across articles is the importance of the local context. Context is one of the three elements in Kitson et al.'s (1998) framework proposed as influencing successful implementation of research into practice. A Canadian multiple-case study by Pepler and colleagues (2005, 2006) examined how nursing practice in acute-care is based on research. Variation in research use was found within and across units despite similar strategies facilitating research use being used by clinical nurse educators and clinical nurse specialists. They suggested variation related to differences in unit culture (e.g., beliefs, values, and practice norms). Facilitators in emancipatory PD encourage practitioners to become aware of their practice culture and context and enable them to transform it to achieve sustainable practice change (see Manley & McCormack 2003 for further discussion). As well, helping practitioners "transform the practice environment so that the implementation context is conducive to change" is likely part of the facilitator role (Rycroft-Malone 2004, p. 300).

In general, the facilitation approach depends on the characteristics and needs of the local setting where change is to occur. Harvey et al. (2002) noted that facilitators utilize various skills according to the context's needs. However, in addition to using different skills, a repeating theme in recent literature is the notion of working with practitioners to tailor and adapt actual facilitation interventions and practice guidelines (the evidence tool) to a local setting (Jones et al. 1996; Ellis et al. 2005). Adapting evidence to the setting creates a sense of local ownership among staff, which is important (Loftus-Hills & Duff 1997; Ruston 2002). It is undoubtedly a necessary activity to "fit" recommendations to the context and capability of a practice setting.

Henderson and Winch (2008) suggest that in implementation, evidence is integrated into the local context under the guidance of a facilitator. A "problem-solving approach" to research use applies information regard-

ing the social and cultural context to select appropriate change strategies to overcome barriers (Winch et al. 2005). Clearly, more attention is being given to facilitating research implementation in practice by tailoring approaches to a local context, a predominant factor to be taken into account. Certain approaches may or may not be effective within a single setting, let alone across settings.

**Ongoing monitoring and evaluation.** Following development and initiation of a tailored action plan, the facilitation process continues for a period of time. Facilitators organize meetings to assess progress and effectiveness of selected approaches and to provide ongoing feedback and support in addressing issues (Jones et al. 1996; Marshall et al. 2001; Wallin et al. 2005b; Stetler et al. 2006). Changes to the plan may be necessary and in some cases, further education or training required (Marshall et al. 2001; Stetler et al. 2006). The meetings are important for motivation and continued action, providing deadlines that stimulate practitioners to complete previously agreed-upon tasks (Marshall et al. 2001). Further, Loftus-Hills and Duff (1997) found regular meetings generated enthusiasm and feedback that helped practitioners recognize their accomplishments. Similar to Harvey et al.'s (2002) findings, there is variation within and across studies in amount and length of follow-up based on groups' needs.

Recent work offers a new focus on incorporating evaluations from various perspectives. Post-intervention audit has been utilized to evaluate practice change (Jones et al. 1996; Ruston 2002; Sipilä et al. 2008). In evaluating outcomes, the ability of nurses to make the connection between evidence and patient care is important for success in getting research into practice (Pepler et al. 2006; Doran & Sidani 2007). Doran and Sidani (2007) went further and developed a knowledge translation framework concentrated on patient outcomes. Facilitation is one of four main components described. Advanced-practice nurses facilitate staff, through provision of education and support, in assessing patient outcomes and using research in their decision-making processes. In contrast, Ring et al. (2006) found nurses perceived improvements in the process of patient care, as opposed to patient outcomes, as the benefit of best practice statements. Acknowledging success of the group's effort and also benefits to users may sustain motivation for continued change (Owen & Milburn 2001). Both process and patient outcomes are likely important and nurses' satisfaction with the process of care may serve as a proxy for improved outcomes.

**Summary.** Over the past decade, the understanding of facilitation in research implementation has evolved and the literature offers insight into what facilitators or individuals engaging in facilitation are doing to enable changes in nursing practice. Facilitators are taking on leadership

**TABLE 3** Skills and attributes of facilitators identified in research studies

Loftus-Hills & Duff 1997 Innovative and resourceful, ability to maintain momentum and direction and to allocate roles and delegate

responsibilities, and to give support and encouragement

Ellis et al. 2005 Understanding of the practice context

Wallin et al. 2005b

Stetler et al. 2006 Credible, flexible in adopting different styles depending on the context, experienced, knowledgeable, committed,

responsive, and good communication and problem-solving skills with an understanding of the local context

Additional skills and attributes of facilitators identified in other literature

Tact and sensitivity; provision of technical, practical, organizational, and emotional assistance; interpersonal and communication skills; consistent presence and availability; knowledge of practice development, experience, and a comprehensive understanding of EBP; project and group management skills; flexibility, commitment, persistence, and negotiation skills

(Kitson et al. 1998; Harvey et al. 2002; Rycroft-Malone et al. 2002a; Ferguson et al. 2004; Richens et al. 2004; Henderson et al. 2005; Thompson et al. 2006; Eaton et al. 2007; Tranter et al. 2007)

General skills identified in other papers:

Political and conflict management skills; marketing skills; having vision; keen and able to generate interest; positive and confident; ability to act as a catalyst for change; active listener; strategic thinker

Critical thinking and appraisal skills; knowledge of research methods and process and data analysis; motivating, enabling, and energetic; adaptive (knowing when to take over and complete tasks and when to assist and enable clinicians to complete the tasks themselves); leadership skills; ability to secure and obtain adequate resources; reliable; authority/status and ability to influence change in practice; understanding of the larger organizational context (unit and organizational culture/infrastructure/vision/values); team building skills; computer/IT skills; organized; teaching skills

Empathetic; patience; networking skills and appropriate contacts

roles and are involved in a large part of project management. Efforts have increasingly been directed toward tailoring facilitation to the local context. The importance of relationship-building and mentoring has been identified as well as the value of evaluating the process and outcomes to measure that change has occurred.

# **Characteristics and Skills of Facilitators**

There is a range of requisite knowledge and skills for those engaging in facilitation of RU, adding to the findings of Harvey et al. (2002). The role does not impose ways of working on individuals (Jones et al. 1996), being neither prescriptive nor directive, but strives to help people recognize and attain their greatest potential (Thompson et al. 2006). Facilitation for EBP in nursing must also involve change management at multiple levels (Regan 1998). Working with different disciplines and possessing respect and credibility within the setting are viewed as characteristics (Owen & Milburn 2001) along with knowledge and skills in research methods and process (Winch et al. 2005). We found that qualities of effective facilitators are described although not formally evaluated. Many of the skills and characteristics were found in the conceptual and theoretical literature, project descriptions, and reviews (Table 3).

Academic or government health care organizations typically hire and train facilitators for specific projects (Nagykaldi et al. 2005) and individuals are appointed to the role (Loftus-Hills & Duff 1997; Owen & Milburn 2001; Tucker et al. 2006). In implementation studies, facilitators may be given specific training (Loftus-Hills & Duff 1997; Sipilä et al. 2008). In one study, facilitators were provided with an extensive education program including: treatment using the guideline, audit and feedback, interaction and motivation skills, and how to understand and lead change (Sipilä et al. 2008). However as Harvey et al. (2002) also found, aside from the description, there was little evidence as to how these skills are developed. In other cases, it seemed that individuals taking on facilitation had previous training, skills, or relevant experience (Stetler et al. 2006). The characteristics and skills required depend on the strategies used to promote change and certain knowledge is needed to engage in facilitation (Wallin et al. 2005a).

It is becoming obvious that a diverse skill set is essential for effective facilitation of RU. Skills are learnt and change over time through experience (Newton 2003). Being flexible is an important asset (Owen & Milburn 2001; Wallin et al. 2005b). As proposed in Harvey and colleagues' (2002) analysis, selecting skills applicable to specific situations is what may be needed for effective facilitation.

# **Facilitation and Other Roles**

Facilitation may be associated with or a part of other roles. Advanced-practice nurses, including clinical nurse specialists and nurse practitioners, as well as clinical nurse educators may have the skills and qualities required of facilitators and are well positioned to assume the intermediary role (Ferguson et al. 2004). Data collected by Pepler et al. (2006) from a sample of nurses indicate specialists and educators are expected to focus on research use, while nurses' primary focus is expected to be direct patient care. Even where managers perceived their role in research implementation as facilitating and providing support, the ultimate responsibility for research use was still seen to rest on individual practitioners (Caine & Kenrick 1997). This is important to consider from a practical perspective when organizing an implementation endeavor.

Successful facilitation by clinical nurse educators is associated with positive attitudes regarding research use and increased use is noted by those with higher education (Milner et al. 2006). Opportunity to consult with clinical nurse specialists, expert nurse clinicians, or educators, is a significant predictor of RU (Estabrooks et al. 2007). Clinical nurse educators perform literature searches and offer articles on selected topics as needed to facilitate RU (Milner et al. 2006). Wallin and colleagues (2005a) point out that clinical nurse specialists and educators may have the appropriate knowledge and skills for facilitation but they also have numerous other responsibilities possibly taking priority. Nurses also identified library science support in conducting literature searches, accessing, appraising, and summarizing evidence as facilitating EBP (Tod et al. 2007). These more recent observations are important in terms of the different roles and functions and who actually assumes responsibility for the facilitation of RU.

Facilitation has been recognized by Harvey et al. (2002) and others as a distinct role in itself. It is now emerging as potentially a part of other roles such as nurse educators, leaders, and advanced-practice nurses, including clinical nurse specialists and nurse practitioners, creating some confusion. In addition, individuals influencing practice change, or change agents, and facilitators are referred to by different designations (e.g., facilitators, link nurses, opinion leaders, etc.) (Richens et al. 2004; Nagykaldi et al. 2005). In their analysis, Harvey et al. (2002) sought to distinguish facilitation from other change agents and proposed facilitators may be differentiated by their association to the change setting and the strategies used to effect change. For instance, facilitators may be internal or external to the organization and use strategies that enhance organizational systems and culture, but the division between change agent roles is unclear. In a recent review, Thompson et al. (2006) examined different change agent concepts in health, education, and management literature. They noted all roles operate under the premise that increasing access to knowledge leads to change, and differences were observed in how individuals in each role influence

change and in the amount of time they are involved with the group or organization. Similar to Harvey et al.'s (2002) findings, facilitators utilize group dynamics to influence change and the role is boundary-spanning for a specified time period. A conclusion in Thompson et al.'s (2006) review was that confusion and overlap among the concepts still exists. The current review focused exclusively on facilitation related to RU in nursing and it is noteworthy that the skills and attributes are consistent with the broader literature (see Harvey et al. 2002; Thompson et al. 2006 for more detailed discussion of the differences among roles).

# **Effectiveness of Facilitation Interventions Involving Nursing Practice**

A number of studies evaluating facilitation in health care were included in Harvey et al.'s (2002) analysis but none appeared to focus on nursing. In the years following, we were not able to locate any randomized-controlled trials assessing the effectiveness of facilitation on changing nursing practice based on research findings. Rather, we found several trials investigating the effectiveness of trained nurse facilitators in influencing changes in primary care general practitioners' offices (Hulscher et al. 1997; Lemelin et al. 2001; Hogg et al. 2008). These studies involved a number of staff, with nurses in some, but not all practices, and as the focus was primarily on medical practice thus not included in this review. As well, no other studies were found. which assessed the effectiveness of facilitation on RU as the primary research objective.

# **Role Summary**

To synthesize the review findings, a taxonomy was constructed, which outlines the activities involved in facilitation of RU in nursing (Table 4). The information was organized in specific stages related to the process of carrying out an evidence implementation: planning for change, leading and managing change, monitoring progress and ongoing implementation, and evaluating change.

# DISCUSSION AND RECOMMENDATIONS

We undertook this enquiry to describe how facilitation of RU in nursing has evolved over the past decade. Many aspects of the groundbreaking work of the United Kingdom group (Kitson, Harvey, McCormack, Rycroft-Malone and colleagues) remain relevant today. Facilitation continues to be applied in implementation studies without specific explanation of meaning making it difficult to replicate either in research or practice. Definitions provided by Kitson et al. (1998) and Harvey et al. (2002) are frequently referenced, indicating they are relevant and resonate with those in the field and their experiences. Facilitation is still

#### **TABLE 4**

Taxonomy of facilitation interventions/strategies and facilitator role synopsis

1) Planning for change

Increasing awareness

- 1.1 Highlighting a need for practice change
- 1.2 Selecting an area for change relevant to staff/recognized as a priority
- 1.3 Stimulating critical inquiry and assisting groups to develop/refine specific clinical practice questions
- 1.4 Assisting with/performing a formal/informal practice audit
- 1.5 Interpreting baseline data and providing feedback/insight into performance gaps
- 1.6 Emphasizing enhanced patient outcomes as opposed to poor practice as reason for change

Developing a plan

- 1.7 Assisting with development of an action plan
- 1.8 Helping identify and determine solutions to address potential barriers to EBP
- 1.9 Goal-setting and consensus-building (shared-decision making)
- 2) Leading and managing change

Knowledge and data management

- 2.1 Knowledge translation/dissemination (assisting with conducting literature searches, appraising and summarizing the evidence)
- 2.2 Helping to interpret the research and apply it in practice
- 2.3 Providing resources/tools for change

Project management

- 2.4 Identifying a leader
- 2.5 Establishing and allocating roles/delegating responsibilities
- 2.6 Advocating for resources and change

Recognizing the importance of context

- 2.7 Creating an open, supportive, and trusting environment conducive to change
- 2.8 Helping to build in the structures/processes to support staff and help them overcome obstacles
- 2.9 Creating local ownership of change
- 2.10 Assisting with adapting evidence to the local context
- 2.11 Boundary-spanning (addressing organizational systems/culture), managing the different requirements of each discipline/role
- 2.12 Tailoring/adapting facilitation services to the local setting Fostering team-building/group dynamics
- 2.13 Relationship-building
- 2.14 Encouraging effective teamwork
- 2.15 Enabling individual and group development
- 2.16 Encouraging/ensuring adequate participation
- 2.17 Increasing awareness of and helping overcome resistance to
- 2.18 Consensus-building (shared decision-making)
- 2.19 Empowering group members

Administrative and project-specific support

- 2.20 Organizing/scheduling meetings
- 2.21 Leading/participating in meetings
- 2.22 Gathering information and assembling reports

# **TABLE 4**

(Continued)

- 2.23 General planning
- 2.24 Providing skills training
- 2.25 Practical assistance
- 3) Monitoring progress and ongoing implementation Problem-solvina
- 3.1 Problem-solving and addressing specific issues
- 3.2 Making changes to the developed plan as necessary
- 3.3 Networking

Providing support

- 3.4 Mentoring and role-modeling EBP
- 3.5 Maintaining momentum and enthusiasm
- 3.6 Acknowledging ideas and efforts
- 3.7 Providing ongoing support/reassurance and constructive feedback
- 3.8 Providing advice

Effective communication

- 3.9 Providing regular communication (e-mails, phone calls)
- 3.10 Keeping group members informed
- 4) Evaluating change

Assessment

- 4.1 Performing/assisting with evaluation
- 4.2 Linking evidence implementation to patient outcomes and improved care processes
- 4.3 Acknowledging success, recognizing and celebrating achievements

described as involving two major elements of "supporting" and "enabling" practitioners to improve practice through evidence implementation. Regarding facilitation, articles (n = 31/39) frequently referenced the conceptual framework originally developed by Kitson and colleagues (1998) and/or the concept analysis by Harvey et al. (2002). This may account for some of the consistency of the results in relation to the findings and ideas put forward in these germinal articles.

Since publication of Harvey et al.'s analysis in 2002, there is growing emphasis on relationship-building and communication (Stetler et al. 2006; Thompson et al. 2006). More evident are the strategies being employed to promote change, many of which would be located on the task end of the Harvey et al. facilitation continuum. These activities range from providing task-oriented, practical assistance to enabling individuals and groups to change their ways of working. The literature provides little new information on the skills and education of those undertaking facilitation of RU. Training topics are outlined but not described in sufficient detail in this literature.

Over the past decade, new components or themes emerged in the literature of how the concept of facilitation is being used specifically for RU generating further discourse, namely:

- facilitation is now viewed as both an individual role as well as a process involving individuals and groups (e.g., it is not always a "facilitator" filling the role, groups may engage in the process of facilitation);
- project management and leadership are important aspects of facilitation in RU (e.g., someone must be accountable and responsible for initiating and seeing the change through) with facilitators assuming the project leadership role;
- no matter which approach is selected, tailoring facilitation to the local context is increasingly considered
- there is growing emphasis on the importance of evaluation and linking outcomes to action (e.g., nurses observing positive outcomes as a result of implementing change).

Previously, facilitation was largely viewed as being achieved by a person carrying out a specific role. What is evident in recent literature is that facilitation is both a specific role (e.g., facilitator) as well as a process (e.g., group engaging in facilitation). From a practical perspective and at a program level, this invites consideration of the use of structures already in place that might serve as venues for the facilitation process such as nursing practice councils, staff meetings, quality circles, and unit councils. These could be used for facilitating RU rather than starting a new group and thus reduce duplication of effort. Practically and strategically, these bodies often have evidence implementation included within their mandate and are responsible for approving practice guidelines and changes in practice. In these entities, relationships among members are often established with consensus and decision-making processes already in place. Importantly, they have the influence and authority to effect changes in practice, which are identified as valuable (Kitson et al. 1998).

Facilitation is a distinct role or potentially embedded as part of other roles such as nurse educators, leaders, practice developers, and advanced-practice nurses. These nurses often actively engage in facilitation as a major component of their role. However, it is not referred to specifically as "facilitation" and therefore not recognized as such. At a policy level, organizations are obliged to create environments where nurses can meet the standards designated by their regulatory bodies, which includes RU. Practice change in most settings is not entirely within an individual nurse's decision-making realm and authority, thus organizations need to consider their different nursing roles and identify who is going to facilitate these requirements. Lack of time and authority to change practice has long been

recognized by practitioners as a barrier to evidence implementation (Funk et al. 1995; Kajermo et al. 1998; Parahoo & McCaughan 2001). Facilitation function may already exist in roles and in making this recognized, the change process would be clearly led and managed. Acknowledging facilitation responsibilities within existing roles in settings and teams is a promising avenue to support RU without adding new resources. Key to success may be deputizing and authorizing this function. Beyond acknowledgment, organizations must position individuals so they may be more successful in these roles and create conditions for them to perform these responsibilities.

Organizations seeking to advance EBP need to identify how facilitation is going to happen, commit resources, and nominate someone responsible to manage the process to promote and maintain change. An individual or a team may assume responsibility for carrying out the day-to-day tasks (e.g., organizing paperwork and scheduling meetings) and addressing larger issues (e.g., advanced skills training in literature searching and appraisal) with organizational support of dedicated time and resourcing.

# **CONCLUSIONS**

Facilitation continues to evolve as an important element in advancing evidence-based nursing practice. Literature in the last decade has translated the concept into a more practical and applied process in RU. However, no randomizedcontrolled trials were identified investigating facilitation in effecting changes in nursing practice through research implementation. There is a need for further research on the effectiveness of facilitation interventions on RU in nursing as well as their cost-effectiveness. Further to Harvey et al.'s (2002) findings, questions of the sustainability of facilitation interventions remain unanswered. Nurses have identified that practice change would not be sustained without ongoing support (Ruston 2002). As one group reported, there is "no natural substitute for the facilitator" (Wallin et al. 2005b, p. 69). While we are beginning to understand "what" facilitators or those engaging in facilitation do, there is a need for a greater understanding of "how" they perform these activities specifically related to research utilization. To further advance this area of EBP, we recommend several focused areas for future attention and research:

• Effectiveness of facilitation on the implementation of research findings to change nursing practice with researchers providing explicit descriptions of the facilitation approach/intervention indicating how facilitation is quantified (we encourage researchers to publish both positive and negative results to enhance

- the understanding of what does and does not work in different circumstances or contexts).
- · Sustainability of facilitation approaches and what structures and processes need to be in place to maintain change.
- Relative importance of the different combination of skills required for effective facilitation.
- Relationship between contextual characteristics and components of facilitation interventions used to better tailor facilitation to specific local settings.

It should be acknowledged that this review focused specifically on facilitation in relation to research use. It is recognized that research evidence is not the only type of evidence practitioners utilize in practice. To this end, we recommend that further literature review be undertaken to add insight and perspective to the findings of this review and to examine how facilitation has evolved in relation to the learning and broader PD literature, beyond simply RU. Further work in the area has been done, especially in PD, which could be included in a review of a broader scope (see Garbett & McCormack 2002; Titchen 2003). For example, findings from a series of papers including the literature analysis of a realist synthesis of the evidence relating to PD published by McCormack and colleagues (2007) further elucidates the role of internal and external facilitators and effectiveness in the PD context. This literature offers further insight into the role, function, and nature of facilitation from a broader standpoint (particularly in regard to project management and leadership, relationship-building, effectiveness, and skills/attributes).

This enquiry has uncovered evolving aspects of facilitation as both a role and process in RU in nursing. Facilitation itself should be considered a distinct intervention on one level and on another it involves organizing and implementing other change strategies. We offer insight into what facilitation entails in relation to nursing and a starting point for future avenues of research in the area. More research is needed to examine how facilitation is specifically being used to make changes focused on nursing practice through research implementation. Advancing nursing knowledge in the area could provide information for developing facilitation approaches which could be incorporated into tailored training programs and continuing professional development for individuals whose role involves facilitation. A greater understanding of the experience of facilitation from the perspectives of both facilitators and nurses at the point-of-nursing care would provide further insight into the dimensions of the role and process as it relates to nursing. Facilitation may be an important and critical strategy in and of itself to bridge the gap between research and practice. To help individuals and organiza-

tions begin to operationalize facilitation, this review provides a clear and more comprehensive understanding of what specifically facilitators are doing to enable changes in nursing practice particularly in terms of relationship building, mentoring, providing effective communication, and systematic program planning and management. This will lay the groundwork for the design of practical strategies for EBP in nursing where facilitation is a key element and allow for rigorous evaluations of its effectiveness on enhancing research utilization.

# References

- Alkema G.E. & Frey D. (2006). Implications of translating research into practice: A medication management intervention. Home Health Care Services Quarterly, 25(1/2), 33-54.
- Caine C. & Kenrick M. (1997). The role of clinical directorate managers in facilitating evidence-based practice: A report of an exploratory study. Journal of Nursing Management, 5, 157-165.
- Camiah S. (1997). Utilization of nursing research in practice and application strategies to raise research awareness amongst nurse practitioners: A model for success. Journal of Advanced Nursing, 26, 1193–1202.
- Davis D., Evans M., Jadad A., Perrier L., Rath D., Ryan D., Sibbald G., Straus S., Rappolt S., Wowk M. & Zwarenstein M. (2003). The case for knowledge translation: Shortening the journey from evidence to effect. British Medical Journal, 327(7405), 33-35.
- Doran D.M. & Sidani S. (2007). Outcomes-focused knowledge translation: A framework for knowledge translation and patient outcomes improvement. Worldviews on Evidence-Based Nursing, 4(1), 3-13.
- Eaton E., Henderson A. & Winch S. (2007). Enhancing nurses' capacity to facilitate learning in nursing students: Effective dissemination and uptake of best practice guidelines. International Journal of Nursing Practice, 13, 316-320.
- Ellis I., Howard P., Larson A. & Robertson J. (2005). From workshop to work practice: An exploration of context and facilitation in the development of evidence-based practice. Worldviews on Evidence-Based Nursing, 2(2), 84-93.
- Estabrooks C.A., Midodzi W.K., Cummings G.G. & Wallin L. (2007). Predicting research use in nursing organizations: A multilevel analysis. Nursing Research, 56(4 Suppl.), S7-S23.
- Ferguson L., Milner M. & Snelgrove-Clarke E. (2004). The role of intermediaries: Getting evidence into practice. Journal of Wound, Ostomy and Continence Nursing, 31(6), 325-327.

- Funk S.G., Tornquist E.M. & Champagne M.T. (1995). Barriers and facilitators of research utilization: An integrative review. *Nursing Clinics of North America*, 30(3), 395–407.
- Garbett R. & McCormack B. (2002). The qualities and skills of practice developers. *Nursing Standard*, 16(50), 33–36.
- Harvey G., Loftus-Hills A., Rycroft-Malone J., Titchen A., Kitson A., McCormack B. & Seers K. (2002). Getting evidence into practice: The role and function of facilitation. *Journal of Advanced Nursing*, 37(6), 577–588.
- Henderson A. & Winch S. (2008). Managing the clinical setting for best nursing practice: A brief overview of contemporary initiatives. *Journal of Nursing Management*, 16, 92–95.
- Henderson A., Winch S., Henney R., McCoy R. & Grugan C. (2005). 'Working from the inside': An infrastructure for the continuing development of nurses' professional clinical practice. *Journal of Nursing Management*, 13, 106–110.
- Hogg W., Lemelin J., Graham I.D., Grimshaw J., Martin C., Moore L., Soto E. & O'Rourke K. (2008). Improving prevention in primary care: Evaluating the effectiveness of outreach facilitation. *Family Practice*, 25, 40–48.
- Hulscher M.E., van Drenth B.B., Van Der Wouden J.C., Mokkink H.G., van Weel C. & Grol R.P. (1997). Changing preventive practice: A controlled trial on the effects of outreach visits to organise prevention of cardiovascular disease. *Quality in Health Care*, 6, 19–24.
- Jones K., Wilson A., Russell I., Roberts A., O'Keeffe C., McAvoy B., Hutchinson A., Dowell A. & Benech I. (1996). Evidence-based practice in primary care. British Journal of Community Health Nursing, 1(5), 276– 280.
- Kajermo K.N., Nordström G., Krusebrant A. & Björvell H. (1998). Barriers to and facilitators of research utilization, as perceived by a group of registered nurses in Sweden. *Journal of Advanced Nursing*, 27, 798–807.
- Kitson A., Harvey G. & McCormack B. (1998). Enabling the implementation of evidence-based practice: A conceptual framework. *Quality in Health Care*, 7, 149–158.
- Lemelin J., Hogg W. & Baskerville N. (2001). Evidence to action: A tailored multifaceted approach to changing family physician practice patterns and improving preventive care. *Canadian Medical Association Journal*, 164(6), 757–763.
- Loftus-Hills A. & Duff L. (1997). Implementation of nutrition standards for older adults. *Nursing Standard*, 11(44), 33–37.
- Manley K. & McCormack B. (2003). Practice development: Purpose, methodology, facilitation and evaluation. *Nursing in Critical Care*, 8(1), 22–29.

- Marshall J.L., Mead P., Jones K., Kaba E. & Roberts A.P. (2001). The implementation of venous leg ulcer guidelines: Process analysis of the intervention used in a multi-centre, pragmatic, randomized, controlled trial. *Journal of Clinical Nursing*, 10, 758–766.
- McCormack B., Wright J., Dewar B., Harvey G. & Ballantine K. (2007). A realist synthesis of evidence relating to practice development: Findings from the literature analysis. *Practice Development in Health Care*, 6(1), 25–55
- Milner M., Estabrooks C.A. & Myrick F. (2006). Research utilization and clinical nurse educators: A systematic review. *Journal of Evaluation in Clinical Practice*, 12(6), 639–655.
- Nagykaldi Z., Mold J.W. & Aspy C.B. (2005). Practice facilitators: A review of the literature. *Family Medicine*, 37(8), 581–588.
- Newton J.M. (2003). Developing facilitation skills—a narrative. *Collegian*, 10(3), 27–30.
- Owen S. & Milburn C. (2001). Implementing research findings into practice: Improving and developing services for women with serious and enduring mental health problems. *Journal of Psychiatric and Mental Health Nursing*, 8, 221–231.
- Parahoo K. & McCaughan E.M. (2001). Research utilization among medical and surgical nurses: A comparison of their self reports and perceptions of barriers and facilitators. *Journal of Nursing Management*, 9(1), 21–30.
- Pepler C.J., Edgar L., Frisch S., Rennick J., Swidzinski M., White C., Brown T.G. & Gross J. (2005). Unit culture and research-based nursing practice in acute care. *Canadian Journal of Nursing Research*, 37(3), 66–85.
- Pepler C.J., Edgar L., Frisch S., Rennick J., Swidzinski M., White C., Brown T. & Gross J. (2006). Strategies to increase research-based practice: Interplay with unit culture. *Clinical Nurse Specialist*, 20(1), 23–31.
- Regan J. (1998). Will current clinical effectiveness initiatives encourage and facilitate practitioners to use evidence-based practice for the benefit of their clients? *Journal of Clinical Nursing*, 7, 244–250.
- Richens Y., Rycroft-Malone J. & Morrell C. (2004). Getting guidelines into practice: A literature review. *Nursing Standard*, 18(50), 33–40.
- Ring N., Coull A., Howie C., Murphy-Black T. & Watterson A. (2006). Analysis of the impact of a national initiative to promote evidence-based nursing practice. *International Journal of Nursing Practice*, 12, 232–240.
- Ruston A. (2002). Factors influencing community nurses' treatment of leg ulcers. *British Journal of Nursing*, 11(1), 12–14.
- 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.
- Rycroft-Malone J., Harvey G., Kitson A., McCormack B., Seers K. & Titchen A. (2002a). Getting evidence into practice: Ingredients for change. Nursing Standard, 16(37), 38-43.
- Rycroft-Malone J., Kitson A., Harvey G., McCormack B., Seers K., Titchen A. & Estabrooks C. (2002b). Ingredients for change: Revisiting a conceptual framework. Quality and Safety in Health Care, 11(2), 174-180.
- 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(8), 913-
- Scott S.D. & Snelgrove-Clarke E. (2008). Facilitation: The final frontier? Nursing for Women's Health, 12(1), 26-
- Sipilä R., Ketola E., Tala T. & Kumpusalo E. (2008). Facilitating as a guidelines implementation tool to target resources for high risk patients—the Helsinki Prevention Programme (HPP). Journal of Interprofessional Care, 22(1), 31–44.
- Stetler C.B., Legro M.W., Rycroft-Malone J., Bowman C., Curran G., Guihan M., Hagedorn H., Pineros S. & Wallace C.M. (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). Retrieved April 18, 2009, from http://www. implementationscience.com/content/1/1/23.
- Thompson G.N., Estabrooks C.A. & Degner L.F. (2006). Clarifying the concepts in knowledge transfer: A liter-

- ature review. Journal of Advanced Nursing, 53(6), 691-
- Titchen A. (2003). Critical companionship: Part 1. Nursing Standard, 18(9), 33-40.
- Tod A.M., Bond B., Leonard N., Gilsenan I.J. & Palfreyman S. (2007). Exploring the contribution of the clinical librarian to facilitating evidence-based nursing. Journal of Clinical Nursing, 16(4), 621-629.
- Tolson D., McAloon M., Hotchkiss R. & Schofield I. (2005). Progressing evidence-based practice: An effective nursing model? Journal of Advanced Nursing, 50(2), 124-133.
- Tranter S., Burns T., Dobson S., Graf E., Ng W. & Martinez Y. (2007). Practice development in the hospital haemodialysis unit: Improving calcium and phosphate management. Renal Society of Australasia Journal, 3(2), 61-64.
- Tucker S., Klotzbach L., Olsen G., Voss J., Huus B., Olsen R., Orth K. & Hartkopf P. (2006). Lessons learned in translating research evidence on early intervention programs into clinical care. MCN: The American Journal of Maternal/Child Nursing, 31(5), 325-331.
- Wallin L., Profetto-McGrath J. & Levers M.J. (2005a). Implementing nursing practice guidelines: A complex undertaking. Journal of Wound, Ostomy and Continence Nursing, 32(5), 294–300.
- Wallin L., Rudberg A. & Gunningberg L. (2005b). Staff experiences in implementing guidelines for kangaroo mother care—a qualitative study. International Journal of Nursing Studies, 42, 61-73.
- Winch S., Henderson A. & Creedy D. (2005). Read, think, do!: A method for fitting research evidence into practice. *Journal of Advanced Nursing*, 50(1), 20–26.