## La multiplication des soins axés sur la clientèle : une étude pilote mettant de l'avant une approche de traduction des connaissances fondée sur l'interaction sociale

#### Carol L. McWilliam, Anita Kothari, Beverly Leipert, Catherine Ward-Griffin, Dorothy Forbes, Mary Lou King, Marita Kloseck, Karen Ferguson et Abram Oudshoorn

Cette étude a pour but de piloter un processus de traduction des connaissances qui met de l'avant une approche de soins à domicile fondée sur des données probantes et axée sur l'interaction sociale. Un total de 33 professionnels de la santé regroupés en cinq groupes d'intervention hétérogènes et géographiquement définis ont participé à cinq rencontres animées par les responsables de la recherche. Un modèle d'intervention participative a été utilisé dans le cadre de ces rencontres. Les données probantes afférentes à la traduction des connaissances reflètent une approche partenariale autonomisante en contexte de prestations de services. L'étude exploratoire comportait le mesurage quantitatif des résultats, avant et après l'intervention, ainsi que la description qualitative des données, le tout présenté dans cet article. Des réflexions importantes livrées par les groupes révèlent des obstacles au processus de traduction des connaissances et des difficultés éprouvées par les personnes responsables de l'animation, notamment à l'échelle macro, meso et micro. Des recommandations ont aussi été émises pour assurer une traduction des connaissances efficace. Selon des constatations issues des résultats, les interventions en matière de traduction des connaissances doivent tenir compte des trois échelles, pour ce qui est des obstacles et des personnes chargées de l'animation. De plus, le processus doit reposer sur une volonté de transcender les tendances de « poussé-tiré » et sur un leadership transformateur. Les résultats suggèrent une nécessité de mener une étude longitudinale plus prolongée et d'assurer une participation davantage élargie.

Mots clés : traduction des connaissances, processus de traduction des connaissances

# Accelerating Client-Driven Care: Pilot Study for a Social Interaction Approach to Knowledge Translation

### Carol L. McWilliam, Anita Kothari, Beverly Leipert, Catherine Ward-Griffin, Dorothy Forbes, Mary Lou King, Marita Kloseck, Karen Ferguson, and Abram Oudshoorn

This study piloted a knowledge translation (KT) intervention promoting evidence-based home care through social interaction. A total of 33 providers organized into 5 heterogeneous, geographically defined action groups participated in 5 researcher-facilitated meetings based on the participatory action model. The KT evidence reflects an empowering partnership approach to service delivery. Exploratory investigation included quantitative pre-post measurement of outcomes and qualitative description of data, presented herein. The critical reflections of the groups reveal macro-, meso-, and micro-level barriers to and facilitators of KT as well as recommendations for achieving KT. Insights gleaned from the findings have informed the evolution of the KT intervention to engage all 3 levels in addressing barriers and facilitators, with a conscious effort to transcend "push" and "pull" tendencies and enact transformative leadership. The findings suggest the merit of a more prolonged longitudinal investigation with expanded participation.

Keywords: knowledge translation (KT), KT intervention, evidence-based practice, social interaction KT

Knowledge translation invites innovative social interaction interventions. Defined as the exchange, synthesis, and ethically sound application of knowledge within a complex system of relationships among researchers and users (Canadian Institutes of Health Research, 2006), KT is not a series of unilinear, rational actions (Nutley, Walter, & Davies, 2003) but a dynamic process. People from diverse disciplines and with diverse roles and statuses come together to co-create knowledge (Mykhalovskiy, 2001; Mykhalovskiy & Weir, 2004), blending research evidence with their experiential knowledge. They develop mutual understandings, amplify knowledge, solve problems, test ideas, validate strategies, and adapt the knowledge to their own culture, context, and situation (Ellerman, Denning, & Hanna, 2001). Over time, this process can generate "communities of practice," informal groups through which people develop and share the ability to create and use knowledge for the purpose of improving practice (Wenger & Snyder, 2000).

Scott-Findlay and Golden-Biddle (2005) argue that KT strategies need to include organizational-level changes to values and assumptions, emphasizing critical reflection and continuous learning, as well as a practical team-level shift towards managerial recognition of the potential long-term KT outcomes and an individual-level shift towards integrating reflection on research and its application. Recently, theorists have described two social interaction approaches for KT, Promoting Action on Research in Health Services (PARiHS) (Kitson et al., 2008; Rycroft-Malone et al., 2004) and the Knowledge to Action model (Graham et al., 2006).

While these approaches are informative, there is limited evidence to support social interaction KT. In particular, greater attention should be paid to collaborative partnering approaches that might address the perception of researchers as self-serving. In this qualitative investigation we present an innovative multilevel social interaction process for KT.

#### Literature Review

The evidence to date leads to the conclusion that KT requires attention at three levels: micro (individual), meso (team), and macro (organizational and environmental) (Estabrooks, Midodzi, Cummings, & Wallin, 2007; Grimshaw, Eccles, & Tetroe, 2004; Grol & Grimshaw, 2003). Gaps between the possession and the application of knowledge are particularly problematic (Reuben, 2002). Professionals have been found to learn through their own grassroots efforts and to reject organized learning opportunities (George, Iacono, & Kling, 1995). Professional managers have been found to rank knowledge sources as (1) experience, (2) association, and (3) involvement (Simmonds, Dawley, Ritchie, & Anthony, 2001), two of which are clearly dependent on social interaction. Also, the intensity of the linkages between scholars and users has been found to consistently predict knowledge uptake (Landry, Lamari, & Amara, 2003). Knowledge translation is promoted through exposure to research evidence (Jones et al., 2004), opinion leaders (Dopson & Fitzgerald, 2005; Grimshaw et al., 2001), active involvement in KT (Grimshaw et al., 2001; Majumdar, McAlister, & Furberg, 2004; Thompson, Estabrooks, Scott-Findlay, Moore, & Wallin, 2007), and attention to the priorities and needs of providers (Rivera & Rogers, 2004).

Investigators have directed less attention to identifying team-level facilitators of KT (Bapuji & Crossan, 2004). Having the opportunity and time for communication is essential (Rivera & Rogers, 2004). Facilitation by people both internal and external to the organization has been found to result in greater change (Kitson, Harvey, & McCormack, 1998). Use of a knowledge broker is not always effective, as KT groups have been

found to have their own motives, achieving individual rather than organizational KT goals and outcomes (Kramer & Cole, 2003).

Established linkages amongst organizational colleagues may serve to facilitate KT (Dopson & Fitzgerald, 2005) or to impede it (Ferlie, Fitzgerald, Wood, & Hawkins, 2005). Professional membership has been found to create social and cognitive boundaries that impede interprofessional KT, suggesting the need for uniprofessional initiatives (Ferlie et al., 2005). Efforts to build upon existing social structures need to consider both hierarchical and peer-group relationships. It has been found that some groups, such as nurses, promote KT more effectively through hierarchical structures while others, such as physicians, use more egalitarian peer relationships affording discussion and influence (West, Barron, Dowsett, & Newton, 1999). However, peer relationships also may contribute to resistance to change, fostering conformity to practice norms (McWilliam & Ward-Griffin, 2006).

Researchers have identified several organizational attributes that merit attention. Opportunities for group membership (Dopson & Fitzgerald, 2005; Greenlaugh, Robert, Macfarlane, Bate, & Kyriakidou, 2004), participation (Amara, Ouimet, & Landry, 2004), and managerial support (Grimshaw et al., 2001) have been found to promote KT. Workplace social structures and approaches promoting participatory decisionmaking, involvement, a sense of belonging, and minimal simultaneous change have been found to facilitate organization-wide learning (London, 2001). Social influence strategies (Goldberg et al., 1998; Thomson-O'Brien et al., 2000) and continuous quality improvement action cycles (Wakefield et al., 2003) can also lead to improved outcomes.

In general, the evidence suggests the importance of regular, ongoing, facilitated (Kitson et al., 1998) face-to-face encounters permitting questioning, clarification, and shared valuing of the knowledge. Overall, however, the barriers, facilitators, outcomes, possible elements, and approaches of social interaction KT are not well understood.

#### Study Context

The participants included six home care programs about to be amalgamated into one organization serving an urban/rural home care jurisdiction in southwestern Ontario, Canada. Each program comprised a government-mandated in-home service brokerage agency providing care and case management as well as multiple agencies contracted to supply a diversity of professional and paraprofessional nursing, therapy, social work, and personal support services, often provided by part-time employees paid only for hours spent in direct service. With extensive role overlapping, service providers primarily worked in isolation despite shared involvement and espousal of a team approach to care.

These home care programs had participated in an 18-year applied research project that developed and tested, through qualitative (Brown, McWilliam, & Ward-Griffin, 2006; McWilliam et al., 1997; McWilliam, Brown, Carmichael, & Lehman, 1994; McWilliam, Ward-Griffin, Sweetland, Sutherland, & O'Halloran, 2001) and quantitative (McWilliam et al., 1999; McWilliam et al., 2004; McWilliam et al., 2007; McWilliam, Stewart, Desai, Wade, & Galajda, 2000) investigation, an empowering partnering approach called "client-driven care." Despite organizational efforts to adopt and promote client-driven care, however, in-home providers generally resisted the change (McWilliam & Ward-Griffin, 2006). As part of their amalgamation, the leaders of these home care programs undertook this KT initiative to create an evidence-based philosophy, strategic plan, and service delivery applying the principles derived from the research on client-driven care.

#### Intervention

A participatory action approach (Stringer & Genat, 2004; Walton & Gaffney, 1991; White, Nary, & Froelich, 2001) was adopted to create a cyclical social interaction KT process uniting researchers and those who might apply the new knowledge (Walton & Gaffney, 1991) in five steps: (1) critically reflect on the research evidence and its implications for practice, (2) use this evidence to identify opportunities for change, (3) use the evidence and personal knowledge of the work and context to formulate strategies for change, (4) implement and evaluate the desired change, and (5) institutionalize and diffuse the changes. The approach incorporated knowledge about social interaction KT (Graham et al., 2006; Kramer & Cole, 2003; Rycroft-Malone et al., 2004), transformative learning (Mezirow, 1991), organizational learning (Senge et al., 1999), and change (Ackerman-Anderson & Anderson, 2001).

Accordingly, practitioners from geographically proximate areas and the research partners were engaged within cross-disciplinary teams as colearners and co-constructors of knowledge through a process of facilitated critical reflection (Harvey et al., 2002; Mezirow, 1991), interaction, and action related to the evidence. Publications, PowerPoint presentations, case studies applying the principles of client-driven care, and researchers served as resources on the evidence. The action groups set their own meeting times and adapted their action meeting agendas to incorporate KT into their everyday work. The groups explored and integrated the principles of client-driven care in designing an action strategy, thereby fostering within-group partnering, interest in the research evidence, and revised perspectives on practice and service delivery. This approach was designed to promote the relevance, applicability, and ease of implementing the knowledge and organization-wide ownership of and autonomy in the processes and outcomes of everyday evidence-based practice, thereby building communities of practice and, ultimately, a learning organization.

#### Methods

The study was approved by the University of Western Ontario Research Ethics Board. Thirty-three providers were organized into five heterogeneous groups of five to seven people, constituting five geographically defined action groups. Each group had a mix of case managers (n = 9; 27%), nurses (n = 8; 24%), therapists (n = 4; 12%), social workers (n = 1; 3%), and personal support workers (n = 11; 34%). The participants were all female and ranged in age from 32 to 60 years (*mean* = 46 years). On average, they had 15 years of experience in health services delivery and 6 to 20 years in home care. Sixty-one percent had a college diploma; the remaining 39% had one or more university degrees.

The groups completed the full action cycle over approximately 5 months. All group meetings were facilitated by a researcher, using a semistructured guide to focus discussion on the participatory action steps, which took five meetings. Over the first three meetings, held once every 2 to 3 weeks, participants reviewed and reflected on the relevance, quality, and applicability of the research evidence, considered barriers and facilitators to implementation, and brainstormed and prioritized strategies for promoting knowledge uptake and application (step 1). At the fourth meeting, participants planned the implementation of their selected strategy (step 2), subsequently implemented over a 3-month period. The groups met a fifth time to evaluate this implementation (step 3) and make recommendations (step 4) for an expanded repeat action cycle to encourage the further evolvement of KT. In addition, all groups participated in a Knowledge-to-Action Workshop, at which they presented their strategies, findings, and recommendations to 192 organizational participants, including policy- and decision-makers and providers from all disciplines.

Qualitative description (Sandelowski, 2000) was used to explore the KT process in depth. All meetings of the five action groups were audiotaped and transcribed verbatim as field data. Additionally, the researchers recorded field observations of the KT process during these meetings and during the workshop. Individual and team analyses followed an "editing analysis" approach (Miller & Crabtree, 1992). Ultimately, themes and subthemes of barriers, facilitators, strategies, and recommendations related to the KT process were identified. An audit trail of analysis activities, member checking with all groups, and peer review by researchers and stakeholders not involved in the analyses helped to ensure intelligibility of the findings (Kuzel & Like, 1991).

#### Findings

Reflecting attention to macro-, meso-, or micro-level change, the five groups ultimately implemented strategies in four areas: piloting clientdriven case conferencing (micro- and meso-level), improving clientcentred team communications (meso-level), refining the in-home client record to allow for a more client-driven approach (macro-level), and meeting with administrators to promote work assignments that optimize provider time for engaging with clients (macro-level; two groups). The groups' critical reflections revealed organizational, team, and individual barriers and facilitators to achieving KT through social interaction on client-driven care.

#### **Organizational Barriers and Facilitators**

Their real-life macro-level context meant that even though action groups were formalized, mobilizing human and fiscal resources for KT activities was a challenge. Groups also identified a lack of direction at times. This impeded KT and made it difficult to sustain. Participants made the following observations:

At times it's not enough people to do the work.... It's really hard for us all to meet.

Nobody has the money to pay for the meetings, conferences, and planning sessions... The only thing that the service providers are paid for is the visit.

It would have been helpful to have more direction...you know, assign the group [work]...give us some direction...assign a chairperson.

Participants described a facilitative context as one enabling geographically proximate teams to participate in KT and be both remunerated for their efforts and recognized for outcomes achieved. Several acknowledged that some agency leaders espoused the client-driven care philosophy and had attempted to create a context for it, despite limited resources.

#### Team Barriers and Facilitators

At the meso level, participants identified a key barrier as not knowing colleagues and therefore being unable to readily work with them. Generally, however, participants saw the opportunity to work together in teams as highly facilitative of KT. They indicated that spending time together to achieve an adequate level of trust facilitated KT. They viewed trust as particularly attainable within smaller groups. Other facilitators included a team orientation, face-to-face meetings, team-building exercises, supportiveness, preparedness for and focus throughout meetings, group ownership of the KT process and content, egalitarian relationships, and strategy evaluation:

As soon as you have...people at the table, you have faces attached to names and then it opens up the communication so that you think, well...I'm going to call [participant] because she would possibly have the answer to that question.

I think that's what we have to really focus in on, everybody coming as an equal partner with their concerns...strengths...weaknesses...and being able to communicate that to each other and to see how we can...go forward.

Overall, the numerous team-level facilitators suggested that team effort was essential for KT. Despite concerns about contextual barriers, these practitioners appeared to be positive about this KT opportunity. Nevertheless, they felt impeded by hierarchical relationships and practices, their geographic dispersion, and a lack of expertise, experience, and direction in group processes:

Sometimes the case managers are seen as the big authority.

"Authorize" — that's a very top-down word.... That's the way it works... here.

## Individual Barriers and Facilitators

Just as the organizational context was seen as impeding KT at the meso level, the action groups at this level identified challenges arising from individuals within them. While consensus supported the KT initiatives of groups, the attitudes of individuals often did not. Some participants saw their work as done when assigned care tasks were completed. As the organization paid employees for these tasks on a piece-work basis, and not all KT activities appeared to be remunerable client care, the time participants spent in KT was not consistently accounted for and remunerated. Thus KT was sometimes impeded by participants' attitudes about taking on unpaid work. Additionally, many participants were accustomed to autonomous, isolated practice and were either unenthusiastic about or inexperienced in social interaction consistent with KT. Sometimes they blamed the organization for this barrier:

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We get this feeling we're nobody, we're nothing, we're underneath, because nobody is communicating to us...why we're doing this... That's not communicated to us, so we aren't communicating because we feel we're not being heard anyway, so why would we do it?

Adding to this reluctance was an assumption by some participants that they had nothing further to learn. Such barriers were offset by two facilitators: a personal valuing of continuing education, and the self-assessed effectiveness of KT in enhancing the quality of their work and/or their work life.

#### Participant Recommendations for Refining the KT Process

While some participants suggested the need for traditional education about the research evidence, all favoured continuing the social interaction approach to KT. From their perspective, the KT intervention could best be promoted by mobilizing more systemic support, including consistent remuneration for time spent on KT, better scheduling of activities to implement KT strategies, and more active involvement by decisionmakers. Overall, they recommended that KT "project leaders" create more opportunities for relationship-building, foster group discussion, and improve mechanisms for and channels of communication. While they conceded that communities of practice appeared to be developing, they indicated that further effort is required if KT is to become fully integrated into everyday work.

#### Discussion

The findings of this study are limited to description by a small group of participants from the home care sector. Nevertheless, several new insights may inform the refinement of social interaction approaches to KT.

Most importantly, as has been described by others (Dopson, 2007), this KT initiative was co-constructed by interacting, self-determining individuals *and* the multidimensional, multifaceted forces throughout the meso and macro levels that constituted their work context. That is, the individuals and the forces at the meso and macro levels of this work context were equally and inextricably a part of the co-construction of knowledge translation: neither was foreground; neither was background.

While the barriers and facilitators have been identified to illuminate factors at each level, in reality these environmental/organizational, team, and individual factors constituted an integrated phenomenon. At the macro level, the bureaucratic structure and functioning of large publicly funded health and social service organizations clearly challenged this social interaction KT initiative. System priorities, urban/rural structural and cultural differences, and the organization's focus on cost-efficient service delivery all served to impede KT. Similar challenges are identified in the literature (Bapuji & Crossan, 2004; Dopson & Fitzgerald, 2005). The present findings suggest that if health and social service organizations are to nurture KT, senior administrators and managers will have to participate actively throughout the process. Careful consideration will have to be given to the allocation of resources to KT. The organization's components may have to be restructured so that they better promote communities of KT practice relevant to the KT content. In addition, ongoing evaluation of the effectiveness of KT may serve to promote accountable resource commitment.

Meso-level findings reveal that teamwork in health and social service delivery is still more a theoretical ideal than a practical reality, perhaps especially so in the home care sector. This result is consistent with the findings of previous research (Gantert, 2007; Gantert & McWilliam, 2004; Shaw, De Lusignor, & Rowlands, 2005). There were no apparent unidisciplinary communities of practice that might have facilitated within-discipline or impeded cross-discipline KT (Ferlie et al., 2005). In fact, individuals' pursuit of their own priorities meant inconsistent attendance at KT meetings, disrupting the work flow. Thus if health and social service professionals are to benefit from social interaction approaches to KT, a culture of team functioning may need to be developed and supported.

Micro-level barriers and facilitators further suggest that all KT efforts need to be considered in light of the work orientation and work ethic of the individuals expected to fulfil the KT aims. Organizational learning can be improved only through the individuals who make up the organization. Consistent with previous research findings (Estabrooks, Floyd, Scott-Findlay, O'Leary, & Gushta, 2003), the individual-level barriers and facilitators identified were largely attitudinal. This may reflect individuals' inability or unwillingness to recognize and/or develop their human potential. Alternatively, it may reflect how individuals feel about the knowledge itself (McCombs, 2004) and hence how and whether they apply it in practice (Corte, 2003).

Consistent with recent thinking (Dopson & Fitzgerald, 2005; Grimshaw et al., 2004; Kitson et al., 2008), these findings reveal the inextricability of barriers and facilitators and the people who create or overcome them at all three levels of workplace KT. This finding warrants particular consideration in the development of social interaction approaches to KT. The participation of senior decision-makers and managers along with frontline providers in heterogeneous action groups could lead to shared confrontation of macro-, meso-, and micro-level barriers, shared identification of facilitators, co-creation of knowledge and strategies, and shared problem-solving and actions to ensure the successful implementation of strategies. Such collaboration could enhance both the efficiency and the effectiveness of the KT process and KT outcomes.

Such a level of involvement is challenging, however. Not all participants believed they had the ability to change the macro- and meso-level context. Furthermore, they intimated that the KT process was the responsibility of "project leaders." These findings suggest that the participants felt disempowered, which is incompatible with this KT initiative and an impediment to the KT process (Berta et al., 2005). Also, despite the fact that the KT approach was designed to avoid top-down "push" and to promote grassroots "pull," the participants actually asked for more direction and managerial involvement while simultaneously blaming "the organization" for impeding KT.

These findings also inform the theory and practice of social interaction approaches to KT. Specifically, the social interaction process needs to transcend organizational-level "science push" (Landry, Amara, & Lamari, 1998) and individual-level "demand pull." This too suggests the merit of creating action groups that include representatives of all levels of the organizational hierarchy as well as the cross-section of disciplines.

In an effort to transcend "push" and "pull" through social interaction, and in keeping with the recommendations of the participants, in the second action cycle (currently in progress) the KT action groups feature a heterogeneous mix of frontline and managerial staff who together confront and work through "push" and "pull" forces. Social interaction includes a conscious effort to illustrate and role model transformative leadership principles. Ongoing investigation during this second action cycle might expose additional elements of interrelationships and interactions across different layers of the organization, thus indicating how best to address these challenges.

This KT intervention placed heavy demands on the time, energy, and abilities of everyone involved, including the research partners. The KT process had to take into account a diversity of expectations as well as the enactment of hierarchical relationships, team functioning, and interdisciplinary ways of knowing. It also had to accommodate boundary spanning and role blurring. Contributions, time availability, and outcome achievement varied greatly. All involved, including the research partners, confronted many competing expectations. In particular, the study's researchers faced the challenge of seeing their contributions to KT devalued and less recognized.

The viability of social interaction models of KT requires conscious attention to the fostering of mutual understanding and respect. "Seeing below the waterline" (Golden-Biddle et al., 2003, p. 22) is critical to the success of KT. Sustained group efforts to confront the challenges and engage in relationship-building were essential to the success achieved in this first KT cycle. These observations indicate the potential of programmatic collaborative research with sustained partnerships over multiple studies to optimize KT through social interaction.

Above all, however, the findings invite the development of social interaction models of KT beyond current frameworks, which conceptualize separate roles for knowledge brokers, facilitators, and research consultants. The identification of mutually exclusive roles may simply reify hierarchical structures that impede KT. Social interaction models, in contrast, could serve to engage all parties in sharing responsibility and accountability for the processes and outcomes that they construct together, and to foster acceptance of the consequences — for the results may not necessarily be those anticipated by any one individual or group, including the researchers.

#### Conclusion

The findings of this study highlight the importance of simultaneously integrating participants and their actions at the macro, meso, and micro levels throughout the KT process. They also illuminate the importance of using social interaction to create and sustain transcendence of the "push" and "pull" tendencies and traditions embedded in KT. In addition, the findings suggest a need to promote transformative leadership that encourages all parties to share responsibility and accountability for both the process and the outcomes of KT. Overall, however, the findings indicate that this social interaction KT intervention warrants more prolonged longitudinal investigation with expanded participation. An issue not yet addressed is how to include those who are ultimately served by any KT intervention aimed at promoting evidence-based practice in the health and social services sector — namely, clients and their caregivers.

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#### Authors' Note

The authors acknowledge the participation and contributions of their collaborative research partners as well as the decision-makers and providers at Ontario's South West Community Care Access Centre and its affiliated provider agencies, which implemented the intervention.

This research was funded by the Canadian Institutes of Health Research. The findings and conclusions are those of the authors. No official endorsement by the funding body is intended, nor should it be inferred. Comments or queries may be directed to Carol L. McWilliam, School of Nursing, Health Sciences Addition, University of Western Ontario, London, Ontario N6A 5C1 Canada. Telephone: 519-661-2111, ext. 82221. E-mail: cmcwill@uwo.ca.

Carol L. McWilliam, MScN, EdD, is Professor, School of Nursing, University of Western Ontario, London, Canada. Anita Kothari, PhD, is Assistant Professor, Faculty of Health Sciences, University of Western Ontario. Beverly Leipert, RN, PhD, is Associate Professor and Chair, Rural Women's Health, School of Nursing, University of Western Ontario. Catherine Ward-Griffin, RN, PhD, is Associate Professor, School of Nursing, University of Western Ontario. Dorothy Forbes, RN, PhD, is Associate Professor, School of Nursing, University of Western Ontario. Mary Lou King, RN, PhD, is Assistant Professor, School of Nursing, University of Western Ontario. Marita Kloseck, PhD, is Assistant Professor, Faculty of Health Sciences, University of Western Ontario. Karen Ferguson, RN, MHSc(N), is Lecturer and Undergraduate Chair, School of Nursing, University of Western Ontario. Abram Oudshoorn, RN, is a doctoral student in the School of Nursing, University of Western Ontario.