Dementia Care Evidence: Contextual Dimensions that Influence Use in Canadian Northern Rural Home Care Centres

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Abstract

Living and working in isolated northern communities pose challenges in using evidence to inform dementia care.

Purpose: To better understand the contextual dimensions of two home care centres in two Canadian northern, rural communities that influence the use of evidence from the perspectives of home care providers (HCPs).

Sample: All clinical leaders, managers, and home care providers (n=48 FTE) in the two home care centres were sent an information letter outlining the study's purpose, expectations, and benefits and invited to participate in focus groups conducted in two home care centres. Fourteen staff participated in the two focus groups.

Method: A qualitative interpretive descriptive approach was used. Semi-structured questions were used to guide the audiotape recorded focus groups. Transcripts were coded using Lubrosky's thematic analysis.

Findings: Findings are described in broad contextual themes (e.g., challenges in using the RAI-HC, availability of resources, relationships in a rural community, leadership, and evaluation) that included both positive and negative contextual dimensions that influenced the use of evidence.

Conclusions: Most importantly, reallocated resources are needed in northern home care settings. Challenges in exchanging evidence related to difficult relationships with physicians, clients, and their family caregivers were identified. Leadership and collaboration dimensions were fundamental to establishing a vibrant workplace in which HCPs provided and exchanged evidence-based dementia care.

Keywords: Evidence-based dementia care, Northern home care, Home care contextual dimensions, Knowledge exchange.

Dementia Care Evidence: Contextual Dimensions that Influence

Use in Canadian Northern Rural Home Care Centres

In 2011, there were 747,000 Canadians living with dementia with predictions that this number will increase to 1.4 million by 2031 when the baby boomers (those born between 1947 and 1966) enter the age of greater risk for dementia (Alzheimer Society of Canada, 2012; Foot & Stoffman, 2004; Forbes & Neufeld, 2008). Dementia is an irreversible syndrome that is characterized by ongoing decline in intellectual functioning sufficient to disrupt physical, social, and/or occupational functioning. For the purpose of this research, dementia is defined as acquired impairment in short- and long-term memory, associated with impairment in abstract

thinking, judgment, and other disturbances of higher cortical function or personality changes (American Psychological Association [APA] 1995; McKhann et al. 1984). Later onset dementia includes four primary types of dementia: Alzheimer's disease, vascular dementia, dementia with Lewy Bodies, and frontotemporal dementia. The most common type is Alzheimer's disease.

In Canada, approximately 30% of Canadians live in rural communities, defined by Statistics Canada as living outside a major urban centre of more than 10,000 (duPlessis, Beshiri, & Bollman, 2001). Rural communities, in comparison with urban settings, have a faster-growing proportion of older adults due to the out-migration of youth and the attractiveness of some rural communities for retirees (Forbes & Hawranik, 2012). In addition, it has been suggested that early life in a rural setting further increases the risk of dementia (Russ, Batty, Hearnshaw, Fenton & Starr, 2012). The greater proportion of older adults in rural areas and the association of age and Alzheimer's disease present challenges for individuals with dementia and their family caregivers. These challenges include lack of health care services and health care providers, and difficulty accessing available services (Forbes & Hawranik, 2012; Jansen et al., 2009). Likewise, in rural areas there are unique challenges for home care practitioners, who are primarily nurses. Recruitment and retention of staff, issues of risk and cost related to travel, staff isolation and safety, and access to reliable information can affect the nature and the quality of the care provided to individuals with dementia and their caregivers (Canadian Home Care Association [CHCA], 2008; Jansen et al, 2009).

The knowledge needed for the provision of care to individuals with dementia and their family caregivers reflects the complex and changing nature of dementia care, for instance managing activities of daily living, behavioural challenges, sleep-wake disturbances, communication and eating difficulties, being depressed, mood swings, aggression, and

wandering (Jansen et al., 2009). The knowledge required to address these needs must include evidence, which is defined as information or facts that are systematically obtained in a manner that is replicable, observable, credible, verifiable, or basically supportable (i.e., research findings; Department of Health [DOH], 2009). Knowledge that will inform dementia care decisions also includes clinical experience, professional craft knowledge (tacit "how to" knowledge), care recipient's preferences and experiences, and local information that enables collaborative care (Roumie, Arbogast, Mitchel, & Griffin, 2005). A rural influence may exist regarding care recipient's preferences and experiences and local information and needs to be better understood.

Research evidence is often translated into best practice guidelines. Dementia care guidelines for healthy eating, keeping physically and mentally active, staying socially engaged, reducing stress, seeking a diagnosis, and help for cognitive and non-cognitive symptoms and behavioural manifestations have been developed (Alzheimer Society of Canada, 2011; Cook & Rockwood, 2012; Hogan et al., 2008; National Institute for Health and Clinical Excellence & Social Care Institute for Excellence, 2011; Rycroft-Malone & Stetler, 2004). However, there is strong evidence in the literature indicating inadequate use of well-known best practice guidelines (Registered Nurses Association of Ontario [RNAO], 2012). Studies have revealed that 30% to 45% of patients do not receive care according to scientific evidence and 20% to 25% of the care provided is not needed or is potentially harmful (Grol, 2001; McGlynn et al., 2003; RNAO, 2012). Although home care nurses are the most frequent contact within the health care system for individuals with dementia and their caregivers (Joint CCAC/Service Provider, 2008), they often lack the current knowledge, skills, and resources necessary to appropriately meet the needs of individuals with dementia and their family caregivers (Forbes et al., 2011).

The context of a health care work setting is widely considered to be an important influence on the use of best available evidence in practice (Dopson, FitzGerald, Ferlie, Gabbay, & Locock, 2002; Meijers et al., 2006; Rycroft-Malone, Harvey et al., 2004; Wallin, Estabrooks, Midodzi, & Cummings, 2006). Specifically, contextual dimensions such as culture, leadership, evaluation, and resources have been shown to be important dimensions that influence the use of evidence (Estabrooks, Squires, Cummings, Birdsell & Norton, 2009; Kitson, Harvey, & McCormack, 1998). Nurses working in acute care settings with a supportive and collaborative culture, strong leadership, and positive evaluation or performance feedback were significantly more likely to participate in more staff development and report more use of research findings that informed their practice than nurses working in settings where these dimensions of the context were lacking. Lower rates of patient and staff adverse events (negative physical effects due to care provided) were also reported (Cummings, Estabrooks, Midodzi, Wallin, & Hayduk, 2007). In terms of a community home care work setting, the authors are unaware of any research that has examined the context of northern, rural home care centres that influence the use of best available evidence. It is timely to examine these contextual dimensions given the increased prevalence of dementia, the unique characteristics of rural and northern communities (Dandy & Bollman, 2008) and the shift from institutional to home-based care (Alzheimer Society of Canada, 2010).

Aim and Purpose

Our program of research aims to improve the quality of care and quality of life for individuals with dementia and their caregivers through integrated knowledge translation (iKT) strategies. These strategies will facilitate the exchange and use of best available dementia care knowledge by home care practitioners, individuals with dementia, and their caregivers. However, it is essential that the home care context supports iKT (Cummings et al., 2008; McCormack et

al., 2002). The purpose of this study was to better understand the contextual dimensions of the home care centres in two rural communities in Northern Alberta, Canada that influence the use of best available dementia care evidence from the perspectives of home care practitioners.

Setting

The Alberta Health Services, North Zone is 479,509 square kilometres (1,220 kilometres from north to south and 640 kilometres from east to west) and covers 73% of the Canadian province of Alberta (see http://www.albertahealthservices.ca/north-zone.asp for further information). The 2012 population was 412,081 with 35,402 (8.6%) persons over the age of 65 years (Alberta Health Services, 2012). Thirty-eight publically-funded community home care centres servicing a total of 5,659 clients are located in the North Zone. Sixteen per cent of older adults in the North Zone receive home care services (T. Woytkiw, clinical lead, personal communication, September 20, 2011). In 2010-11, 2,824 long term home care clients were assessed using the Resident Assessment Instrument-Home Care ([RAI-HC], Hirdes et al, 2004) and 862 (30.5%) scored >2 on the Cognitive Performance Scale ([CPS], Hartmaier et al, 1995), indicating some degrees of cognitive impairment (W. Harrison, VP rural health, personal communication August 3, 2011).

Two publicly funded home care centres were selected based on an administrator's suggestion and staff's willingness to participate in the study. Due to the large geographical area of the North Zone and long travel distances, these two centres were approached to participate as they were within 30 km of each other and had relatively larger numbers of staff. The community characteristics are outlined in Table 1 with the centres coded as A and B to protect their identity. Both communities meet the Statistics Canada definition of rural with populations under 10,000; both are located within an hour drive of an urban setting.

Table 1

Community Characteristics of Two Rural Communities (A and B)

	Community A	Community B
Population in 2011[a]	Nearly 5,000	~4,500
% 65+ in 2011[a]	25%	26%
Median age in 2011[a]	44.1	45.0
Distance to major centre [b]	>80 kms	>80km
Major industry[c-d]	Agriculture, followed by retail, oil & gas, lumber & coal	Agriculture followed by lumber, oil & gas, manufacturing & retail trades
2006 Community Profile		
% Labour force participation rate[e-f]	57%	60%
% Unemployment rate[e-f]	4%	3%
% Population aged 15+ reporting hours of unpaid care of assistance to seniors[e-f]	19%	22%
Median after-tax income – all census families, 2005[e-f]	~$43,000	~$51,000
% member of visible minority[e-f]	3%	3%
% Aboriginal identity[e-f]	7%	4%
Health Services		
# of GPs[g]	15	9
# of active treatment beds[c-d]	62	35
# of long-term care beds[c-d]	120	100
# of supportive living spaces/rooms[c-d]	20	40

Note: Adapted from: [a] Statistics Canada (2012). [b] Mapquest.com (2013). [c] Alberta Community Profiles [Centre B] (2013). [d] Alberta Community Profiles [Centre A] (2013). [e] Statistics Canada [Centre B] (2007). [f] Statistics Canada. [Centre A] (2007). [g] Alberta Health Services. (2012). Physicians.

In one community the home care centre is located in an acute care hospital and in the other it is in a free standing building. Home care practitioners include regulated professionals such as nurses, licensed practical nurses, and allied health professionals, and unregulated workers such as health care aides. Nurses make up the largest proportion of personnel. Home care services are most commonly delivered in the home but may be delivered in other settings. Client and family caregiver needs are assessed by a Case Manager using the RAI-HC (Hirdes et al, 2004) that focuses on clients' cognition, mood, behaviour, physical functioning, continence, nutritional status, health conditions, informal support, use of health services, and environment. Based on this evidence, care plans are developed and outcomes monitored to determine the type and amount of services needed. Services are provided at no or low cost to the client and family. Case Managers may also assist clients to access medical supplies or assistive equipment and technology. Home care professional services include assessment, treatments and procedures, rehabilitation, medication administration, palliative or end-of-life care, teaching and supervising self-care and care provided by family members and home support service providers. Personal care services include assistance with hygiene, oral care, dressing, toileting and incontinence management, mobilization and transferring, and medications. Other services include caregiver support and respite services (Alberta Health Services, North Zone, 2013).

Method

The Promoting Action on Research Implementation in Health Services (PARIHS) framework (Harvey et al., 2002; Kitson et al., 1998; Kitson et al., 2008; McCormack et al., 2002; Rycroft-Malone et al., 2002; Rycroft-Malone, Seers, et al., 2004) was used to inform this research. The PARIHS framework considers: (i) the evidence and knowledge being used, (ii) the context, and (iii) how use of the information is facilitated. Because of the importance of context

in facilitating the use of research evidence in practice, context is specifically examined in this study. The framework includes the following dimensions as comprising the context of a work setting: culture (Kitson et al., 1998; McCormack et al., 2002; Rycroft-Malone et al., 2002), leadership (McCormack et al, 2002), evaluation (Kitson et al., 1998) and resources (Rycroft-Malone, Harvey, et al., 2004).

A qualitative interpretive descriptive approach (Thorne, Reimer Kirkham, & O'Flynn-Magee, 2004) was used and involved focus groups conducted in the two home care centres. Ethical approval was received from the University of Alberta, Health Research Ethics Board, Study ID Pro00035496. All home care clinical leaders, managers, nurses, allied health workers, and health care aides (n=48 Full Time Equivalent positions) in the two home care centres were sent an information letter outlining the study's purpose, expectations, and benefits. Two focus groups (A=6, B=8, total n=14 individuals) were held during working hours. Participants were females between the ages of 25 to 61 years. Eleven participants had received a diploma in nursing or held a baccalaureate degree in nursing; the group subsequently is described as rural home care nurses while recognizing that three of the 14 participants were not nurses; one was an occupational therapist and two were health care aides. Equal numbers of participants worked full time and part time. The number of years working as a nurse and working in the community varied greatly from two months to 35 years, and two months to 33.5 years respectively. Most of the participants who worked directly with clients 'mildly agreed' that their training adequately prepared them to care for individuals with dementia. This is a concern as participants also reported that 25% to 90% of clients presented with memory problems (Table 2).

Table 2

Focus Group Participants Socio-Demographic Data

Demographic	n

Demographic	n
Gender:	
Female	14
Male	0
Age :[1]	
$\leq$40	3
41-50	5
51-60	2
$\geq$61	3
Education: [1]	
Certificate	1
Diploma	5
Undergrad Degree	7
Current Work:	
Health Care Aide	2
Registered Nurse	2
Case Manager/RN	7
Occupational Therapist	1
Director/RN	2
Employment: [1]	
Full Time	5
Part Time	5
Casual	2
No answer	1

Demographic	n
How long working in your profession? [1]	
≤5 years	3
6-10 years	2
11-20 years	4
21-30 years	2
≥31 years	2
How long have you been working in this community? [1]	
≤5 years	5
6-10 years	3
11-20 years	3
21-30 years	1
≥31 years	1
How many clients currently on your caseload? [1]	
≤20	1
21-40	5
41-60	1
≥61	2
n/a	4
Approximately what % of your clients has memory problems? [1]	
	2
≤30%	
	1
31-50%	
	3
51-70%	
	3
71-90%	

Demographic	n
n/a	4
My current level of knowledge and training has adequately prepared me to care for persons with dementia: [1]	
Strongly disagree	1
Mildly disagree	2
Unsure	2
Mildly agree	7
Strongly agree	1

[1]One participant did not submit the socio-demographic form.

Semi-structured questions that reflected dimensions of home care context were used to guide the audiotape recorded focus groups. Examples of these guiding questions included:

Leadership questions:

- How would you describe your leaders?

- Do your leaders usually tell you what to do, or did they usually ask you what you thought needed to be done?

- Do those in leadership positions facilitate your access to dementia care information?

Culture questions:

- How would you describe your work culture, i.e., "the way you do things"?

- Do you belong to a supportive work group?

- Are your colleagues receptive to learning about new information on dementia care?

- Do you have opportunities to attend professional development activities?

- Would you say that things are continuously improving in your workplace?

Feedback questions:

- Do you or your team routinely use the RAI-HC data or other data to formulate your care plans and to evaluate performances?

- How is performance evaluated in your organization?

Connections questions:

- Would you say that there is a great deal of open communication and sharing of information in your workplace?

- With whom do you have client care related discussions?

- Are your concerns about client conditions taken seriously by those in positions of authority?

Structural and Electronic Resource questions:

- What types of information do you find most useful in supporting individuals with dementia and their caregivers?

- How do you determine the trustworthiness of this information?

- Do you have the people, space, time, and money needed to make use of best available dementia care information and/or to make the needed changes?

Transcripts were coded using Lubrosky's (1994) thematic analysis. Main ideas and topics were identified by individual members of the analysis team (Principal Investigator and her Research Assistants) and coded using key phrases that emerged from the data. To ensure rigor, these preliminary conceptualizations were shared with the analysis team as a whole for development and refinement of the themes and patterns, to ensure that the conceptualizations reflected the data presented by the study participants and to encourage the emergence of multiple perspectives around the interpretation of data. The codes were grouped into themes (a higher

conceptual level) and sub-themes. By comparing and contrasting the coded data, sub-themes, themes, interrelationships, and patterns were revealed.

To promote trustworthiness, the following criteria were adhered to: credibility (peer sharing during team meetings); confirmability (use of an audit trail); and transferability. Transferability refers to the use of "thick description" to enable others to determine whether the concepts are similar enough to make a transfer to other contexts or time (Lincoln & Guba, 1985).

Findings

The findings are described in eight broad contextual themes. These include both positive and negative dimensions that influenced rural home care nurses' use of best available dementia care evidence.

Location of Home Care Centre

In the home care centre located in the local acute care hospital, the proximity to other health care practitioners involved with their clients was identified as promoting the sharing of evidence. "*We* have *a much better rapport with the doctors...we communicate with outpatients...Now we can walk physically down there and say... we're sending them to you...It's a much better open line of communication*" (B, p.17). There was no mention of positive or negative aspects of office location by participants from the home care centre in the free-standing building.

Challenges in Using the RAI-HC

The staff used the RAI-HC (Hirdes et al, 2004) to assess clients, develop care plans, and monitor outcomes. The RAI-HC also assisted in determining case load assignment among staff working in different geographic areas. However, challenges were reported as participants had difficulty completing the RAI-HC in a timely manner. One participant explained that she

developed her care plan and put in the services prior to completing the RAI-HC. "*Well I think it's backwards...I have to admit them* [clients]*, make the care plan but I'm not obligated to do the RAI for two weeks*. [By then], *my care plan's done, like I've already decided what my service provision issues were*" (A, p.27). Nurse case managers found that completing the RAI-HC took up most of their time. "*It just got to the point where I was so upset about the amount of time spent on the computer versus actual patient care that I decided I needed a different job. So now I work casual and it's wonderful...I get to do all the patient care*" (A, p.30). Also, the registered nurses were concerned they were being replaced by licensed practical nurses to provide front-line nursing care that involved the exchange of best available dementia care evidence. "*They're keeping our hands away from the patients*" (A, p.31). The RNs were spending most of their time at their computer completing the required RAI-HC.

According to participants, in the near future, the RAI-HC will be used across the province to *determine staffing ratios based on the number and type of clients assessed. One manager explained, "They're going to start funding us in a year depending on our RAI scores and caseloads. It's the completed up-to-date RAI that they look at. So the fact that we're 100* [assessments] *behind, those 100 don't exist... So we get zero funding for them*" (A, p.28). Receiving decreased funding will only intensify the perception of unavailable resources.

Availability of Resources

The lack of available human resources played a significant role in participants' ability to access, *assess*, adapt, and apply best evidence. "*We just don't have enough hands*" (B, p.16). "*There's not a lot of time for proactive thinking...It's reactive*" (B, p.15). Most home care nurses are generalists, meaning "*you can have everybody coming across your radar*" making it difficult to stay up-to-date on the latest evidence related to a wide range of conditions. There was a lack

of access to specialized dementia care knowledge and/or expertise; "We have a specialist team in palliative care but we don't have a team for deme*ntia*" (B, p.4). "*Our geriatric, psychiatric nurse does some dementia-related things.* [However], *we have one, for a large area*" (B, p.2-3). In addition, "*some people* [clients], *myself included, are not that great at looking things up on the internet, or they don't have a computer available. We don't have handouts to give them, or that nice booklet to give them anymore and sometimes I photocopy some of my old information which might not be current*" (B, p.37). There was a sense of helplessness among the participants, "*We have nowhere to go, you can't get help from other facilities, there are so many criteria to get people assessed or to get help; once you've accepted somebody, it's your problem; very few resources*" (B, p.1).

Participants also described available educational resources. These included "Supportive Pathways" (A, p.53) and Alberta Health Services Insite (internal website), "although [Insite] is better than it used to be, it's still really hard to find, unless you know exactly the right search words" (A, p.53). In-house, tele-health sessions, and webinars were more accessible to the staff as in-services external to the organization were too costly (A, p.17; B, p.19). Face-to-face orientations and *practice* sessions on how to support individuals with dementia and their caregivers were considered most valuable (A, p. 25; B, p.37, p. 41). Participants also tended to seek dementia care advice from more experienced home care nurses (A, p.52). One participant summed up her experience with "We're resourceful with limited resources" (B, p.11).

Dementia care community resources, such as support groups and day programs, were also lacking. "What's also useful is for the caregivers to have some kind of a venue or support group where they can receive support for themselves. There's nothing here" (A, p.49). "Another big resource that's missing in this town is transportation. If we had a day program, wonderful; how

do we get people there?" (B, p.43). The lack of formal day programs that provide respite for family caregivers and support for the individuals with dementia, and the lack of public transportation may also limit adherence to practices that reflect best available dementia evidence.

Relationships in a Rural Community

Living and working in a rural community may mean that the home care nurses and other health professionals personally know, or are related to, their clients. Close relationships within a small community may enhance the exchange of evidence while at the same time make it difficult for home care nurses to separate their personal lives from their work. "*We try to provide equal services...whether it's your friend's grandma...it can be tough*" (B, p.22). "*We're talking of a rural area where these doctors know these families, know every part of their family and have real relationships...we try to be equal to everybody, but from their end, it doesn't always work*" (B, p.21). In addition, "*these relationships are not terminated when the client is discharged from home care. If you're in the bigger centre, you know you can wash your hands of that person once they're placed and you'll never see them whereas here you go to the grocery store, they come to outpatients, and they're back at you again*" (B, p.22).

"We keep people in their homes as long as possible" (B, p.1) [by trying] "to let people do what they can [*rather* than do for clients] and it's just taking time for the physicians and public to come along" (B, p.24). Care is provided based on the evidence rather than solely on clients', caregivers', and providers' wishes. "So we do the best we possibly can and try to be equal to all" (B, p.24). However, the participants' professional decisions regarding client care were not always to the satisfaction of family members. "People don't like some of the best practices that we do. We promote independence. If you're living in a lodge [supportive living] and you're going out to do your hair or whatever, then if you need wound care, you should come" [to the home care

office] (B, p.22). "It's difficult, we do our *job... we try to be equal to all... we try to standardize... and it's hard, I mean we get shouted at and they make us cry"* (B, p.22).

Occasionally, participants perceived little recognition for their contributions to supporting rural families over extended periods of time, perhaps because they were considered a member of the family. "*We just kind of fit in so then we're forgotten about because it's a natural course...Look at what we've done, we've let this person and his family manage for so long that we're just kind of a background thing. But on the other hand, that little card of thanks would have been nice*" (B, p.14). This excerpt reveals the need for increased attention to the complexity of these relationships and the influence on the use of evidence.

An additional challenge for the homecare nurses was feeling that their contributions to the care of individuals with dementia and their families were not respected by physicians. "*Do they, respect what we do? I would say not, I would say a resounding no, that's another work in progress*" (B, p.34). "*Due to the lack of respect to our profession...sadly, we are still hand maidens*" (B, p.35). One participant explained that the values and goals of physicians and nurses differ. "*The doctors don't work for the organization that we work for, and they may have different ideas as to what best practice is…We're concerned about sustainability and I don't think the physicians are, they're not concerned about cost"* (B, p.20).

Advocating to physicians on behalf of clients also came with some risks:

I have a lady that's been sitting in an acute care bed for almost two months...because the physician will not sign a capacity [cognitive ability] *assessment...We have empty beds in the long-term care centre that she could go to immediately...That's time consuming, trying to hunt down physicians...they don't want to hear your explanations...I was*

warned to drop it because if not it would affect future interactions. Yes, we're often

threatened if we advocate (A, p. 6-7).

Leadership

Positive descriptions of the leadership (i.e., directors) that promoted use of evidence within the two home care centres were reported as being:

present and approachable, knowledgeable about the topic or willing to find the required information; honest and not micromanaging [staff]; *using a positive, supportive approach that encouraged critical thinking; providing a prompt response that may include constructive criticism; providing opportunities for professional growth; and being recognized for a job well done*. (A, p.10-12, 17; B, p.6-8, 14, 28)

In addition, having a consistent person in charge was also identified as essential as frequent turn-overs in the leadership were disruptive to the staff. Having *"a manager that is the same discipline is important"* (A, p.10, 12, 17; B, p.29) in facilitating sharing of best available evidence.

Team Work within the Home Care Centre

Participants described their team, which was composed of home care nurses, as **"***being on the same page, we're not working against each other"* (B, p.24), sharing the workload, freely supporting each other, reassuring, confirming, and *"consulting with each other tremendously, and bouncing ideas off of each other"* (A, p.14, 16, 18; B, p.11). An additional strength of the team was their perseverance in implementing best practices even when faced with differing practices of other professionals. *"We definitely work together to make sure the safety of that client is foremost…we tend to break rules even if we have to sometimes…to keep them safe"* (B, p.35).

One manager credited her team's functioning to a culture of collaboration that embraced change. "*We've embraced electronic charting, it's probably because* [name] *is so positive as a team lead, embraced a lot of things that many home care teams have been struggling with, and I think we're kind of a shining star in that way*" (B, p.12).

Interdisciplinary Collaborations

The participants identified many health care professionals from other disciplines in their community with whom they regularly collaborated (A, p.38-41). In addition, they regularly organized and/or attended family conferences, staff meetings, and meetings with the assistive living staff and other partners.

With new or challenging clients, home care nurses would attempt to arrange a family conference to ensure that consistency and best available evidence were incorporated into the care plans. Otherwise, "*we're the go-between…you're talking with the client about physiotherapy and then you've got to talk to the physiotherapist and then you've got to get back to the occupational therapist and then back to the family…so I find we're doing a lot of being in the middle to try and coordinate all of this*" (B, p.31).

Evaluations

The absence of regular employee performance appraisals was a concern to several participants. "*I have to say, I have never had a performance appraisal… I've been here for eight [years] and then we've had the rotation of managers which has been part of it*" (B, p.28). A healthy work environment cannot be promoted when an employee does not receive a regular performance appraisal and the opportunity to explore strategies to improve in applying evidenced-based care (Gaitskell, 2004).

One manager was interested in expanding the use of the RAI-HC to evaluate the use of evidence to improve client outcomes. "*How we're doing or what our caseload is like or how we can prioritize…For all the input that you put in, to be able to pull something out that you can use as a grader, a bigger program planning tool...in terms of accreditation and evaluation*" (B, p.26-27).

Practice Implications

The lack of resources in these two rural home care settings had a significant impact on home care nurses' ability to access, assess, adapt, and apply best available evidence. Funding is a critical issue. The CHCA (2013) reports that although there was a 55% increase in the number of people who accessed home care from 2008 to 2011, no province has followed through on its commitment to increase home care funding. The CHCA calls for a reallocation of funds to home care from acute care. Reallocated home care funding targeted to dementia care may ensure greater numbers of staff with specialized training in dementia care and knowledge translation skills. Home care nurses would be able to provide more preventive and maintenance services to better support family caregivers through the exchange of best available dementia care knowledge and not always be responding to crisis situations that require acute care services. Adequately supporting families in keeping the individual with dementia at home for as long as possible is a cost-effective strategy for the health care system.

The potential for complex relational issues that emerge when working and living in small northern rural communities needs to be addressed to enhance the exchange of evidence. Possible approaches include: (a) exploring the issues through dialogue with rural healthcare professionals (including physicians and discharge staff in acute care) and community members; (b) collaborating to draft guidelines for dealing with common, recurring conflicts; (c) exploring,

assessing, and proposing models for resolving conflicts in these communities; and (d) developing and implementing knowledge exchange training curricula and other dementia care educational resources for and with rural practitioners, administrators, and policy makers (Nelson, Pomerantz, Howard, & Bushy, 2007).

Opportunities for dialogue among the home care nurses, administrators, and policy makers are needed to address the issues that the home care nurses raised related to the RAI-HC. Strategies to help staff and leadership build their capacity to effectively complete the RAI-HC in a timely manner and to interpret and use all the client and caseload information it generates are needed.

The leaders' positive, supportive approaches, active listening, and willingness to mentor contributed to a vibrant workplace and promoted the use of dementia care evidence. These relational attributes could be described as reflecting 'emotional intelligence', which Akerjordet and Severinsson (2007) defined as "an ability that encompasses personal and social competence, in which the core values of one's professional identity are reflected by self-awareness, emotional management, responsibility, authenticity, and empathetic understanding" (p. 1411). In addition, promoting a common vision such as "*supporting clients to remain at home for as long as possible*" is a central element of good leadership (Cummings et al., 2008) and closely resembles 'transformational leadership' (McCormack et al., 2002). This form of leadership is reported to be among the most effective because leaders are able to transpose their ideas and beliefs into collective beliefs. These eventually become assumptions and part of a centre's culture (McCormack et al., 2002) and can positively influence the transfer of best available dementia care knowledge.

Teamwork is critical to ensure the use of best practice evidence and reflects components of social capital: bonding, bridging, and linking. Bonding refers to sharing information within a work group, bridging implies sharing information between groups, and linking refers to sharing client care issues with leaders. Building social capital has been demonstrated to be negatively associated with emotional exhaustion which is a common occurrence in home care (CHCA, 2008). Hofmeyer and Marck (2008) encourage leaders to use ecological thinking to build social capital within their organizations by committing the necessary human and material resources to "(1) forge relations to foster bonding, bridging, and linking social capital; (2) build solidarity and trust; (3) foster collective action and cooperation; (4) strengthen communication and knowledge exchange; and (5) create capacity for social cohesion and inclusion" (p.144).

Evaluation of home care nurses' evidence-based practice is also a critical domain of the home care context as it is necessary to meet Accreditation and Continuing Care Health Service Standards. It is an expectation that client data be collected annually or sooner if there is a change in client condition, and performance appraisals and team evaluations are expected to be completed on an annual basis. Limited resources and isolation in the North Zone lead to challenges in providing feedback to staff on an annual basis, and evaluating the processes and outcomes of client care. These important challenges merit further attention.

Study Limitations

Transferability of the study's findings may be limited as the data reflect the responses of a convenience sample located in two northern home care centres in Alberta, Canada. Readers must assess the extent to which these findings are transferable to other settings and how applicable they are in other contexts. Further research is needed using other approaches and in other settings.

Conclusions

Despite its limitations, this study illustrates how contextual dimensions influence the use of best dementia care evidence in rural home care nursing practice. Most importantly, allocation of resources needs to reflect the unique demographic characteristics and pragmatic realities of northern rural home care settings. Reallocated resources are needed in these settings. A shift in current resources from acute care to home care is long overdue since without adequate funding it is very difficult for home care nurses to use best available dementia care evidence. Providing increased resources could promote further dialogue regarding the value and purposes of the RAI-HC and assist in its timely completion and multiple uses. Challenges were evident in exchanging evidence related to occasional difficult relationships with physicians, clients, and their family caregivers. Where ubiquitous relationship challenges among stakeholders are exacerbated by environmental and contextual circumstances, there is a need for culturally-sensitive interventions and solutions. Solutions may be found through meaningful dialogue and through the development and application of best practice guidelines.

Leadership and collaboration dimensions are fundamental to establishing a vibrant workplace where home care nurses actively develop and use their skills, knowledge, and abilities to provide and exchange evidence-based dementia care. These findings contribute to our understanding of the availability and less available contextual dimensions within northern rural home care centres that contribute to home care nurses' ability to use dementia care evidence in these rural settings.

References

Akerjordet, K. & Severinsson, E. (2007). Emotional intelligence: A review of the literature with specific focus on empirical and epistemological perspectives. *Journal of Clinical Nursing, 16*(8), 1405-1416. http://dx.doi.org/10.1111/j.1365-2702.2006.01749.x

Alberta Health Services North Zone (2013). *Alberta North Zone Home Care: Keeping you well and independent.* Retrieved from http://www.albertahealthservices.ca/Seniors/if-sen-home-care-brochure-north.pdf

Alberta Health Services (2012). Alberta North Zone. Retrieved from http://www.albertahealthservices.ca/northzone.asp

Alberta Health Services North Zone (2012). *Demographics 101.* Retrieved from http://www.albertahealthservices.ca

Alberta Health Services. (2012). *Physicians.* Retrieved from http://www9.albertahealthservices.ca/Default.aspx?cid=29&lang=1

Alberta Community Profiles. (2013). *Community profile – [Centre B.]* Retrieved from http://www.health.alberta.ca/documents/PHC-Profile-CalgaryCentre.pdf

Alberta Community Profiles. (2013). *Community profile – [Centre A].* Retrieved from http://www.health.alberta.ca/documents/PHC-Profile-CalgaryCentre.pdf

Alzheimer Society of Canada. (2010). *The rising tide: The impact of dementia on Canadian*

society: Executive Summary. Author: Toronto, ON.

Alzheimer Society of Canada (2011). Heads up for healthier living: For people with Alzheimer's disease and their families. Retrieved from http://www.alzheimer.ca/~/media/Files/national/ Heads-up/Heads_Up_Healthier_Living_e.pdf

Alzheimer Society of Canada (2012). A new way of looking at the impact of Dementia in Canada. Retrieved from

http://www.alzheimer.ca/en/News-and-Events/Media-centre/Fact-sheets

American Psychological Association (APA). 1995. *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed. (DSM-IV). Washington, DC: APA.

Canadian Home Care Association (2008). *A scan of options for delivering home care in rural, remote and northern regions of Canada.* Retrieved from http://www.cdnhomecare.ca

Canadian Home Care Association (2013). *Portraits of Home Care in Canada – 2013*. Retrieved from http://www.cdnhomecare.ca/media.php?mid=3394

Cook, C., & Rockwood, K. (2012). Knowledge translation: An overview in relation to the Fourth Canadian Consensus Conference on the Diagnosis and Treatment of Dementia. Canadian Dementia Knowledge Translation Network. Retrieved from http://alzres.com/ content/5/S1/S6

Cummings, G., Estabrooks, C., Midodzi, W.K., Wallin, L., & Hayduk, L. (2007). Influence of organizational characteristics and context on research utilization. *Nursing Research, 56*(4S), S24-S39. http://dx.doi.org/10.1097/01.NNR.0000280629.63654.95

Cummings, G., Lee, H., McGregor, T., Davey, M., Wong, C., Paul, L., & Stafford, E. (2008). Factors contributing to nursing leadership: A systematic review. *Journal of Health*

Services Research and Policy, 13(4), 240-268. |
http://dx.doi.org/10.1258/jhsrp.2008.007154

Dandy, K., & Bollman, R. (2008). Older adults in rural Canada. *Rural and Small Town Analysis Bulletin, 7*(8). Catalogue no. 21-006-X.

Department of Health (2009). Living well with dementia: A national strategy: Accessible summary. Leeds, UK: National Dementia Strategy Working Group.

Dopson, S., FitzGerald, L., Ferlie, E., Gabbay, J., & Locock, L. (2002). No magic targets! Changing clinical practice to become more evidence-based. *Health Care Management Review*, 27(3), 35-47. http://dx.doi.org/10.1097/00004010-200207000-00005

du Plessis, V., Beshiri, R., & Bollman, R.D. (2001). Rural and small town Canada analysis bulletin catalogue no. 21-006-XIE Vol. 3, No.3 (November 2001) Statistics Canada Catalogue no. 21-006-XIE.

Estabrooks, C. A., Squires, J.E., Cummings, G., Birdsell, J., & Norton, P.G. (2009). Development and assessment of the Alberta Context Tool. *BMC Health Services Research, 9*(234). http://dx.doi.org/10.1186/1472-6963-9-234

Foot D.K., & Stoffman, D. (2004). *Boom, bust, and echo: Profiting from the demographic shift in the 21st century*. Toronto, ON: Footwork Consulting.

Forbes, D. & Hawranik, P. (2012). Looming dementia care crisis: Are Canadian rural and remote settings ready? In J. Kulig & A. Williams (Eds.), *Health in rural Canada* (pp.447-461). Vancouver, BC: UBC Press.

Forbes, D.A., & Neufeld, A. (2008). Invited article: Discourse: Looming dementia care crisis: Canada needs an integrated theory of continuing care now! *Canadian Journal of Nursing Research*, 40(1), 9-16.

Forbes, D.A., Ward-Griffin, C., Kloseck, M., Mendelsohn, M., St-Amant, O., DeForge, R., &
Clark, K. (2011). "My world gets smaller and smaller with nothing to look forward to":
Dimension of social inclusion and exclusion among rural dementia care networks.
Online Journal of Rural Nursing and Health Care, 11(2).

Gaitskell, V. (2004). The value of performance appraisals. Retrieved from
http://graphicartsmag.com/articles/2004/12/the-value-of-performance-appraisals/

Grol, R. (2001). Successes and failures in the implementation of evidence-based guidelines for
clinical practice. *Medical Care*, 39, 1146-1154. http://dx.doi.org/10.1097/00005650-
200108002-00003

Hartmaier, S.L., Sloane, P.D., Guess, H.A., Koch, G.G., Mitchell, C.M., & Phillips, C.D. (1995).
Validation of the Minimum Data Set Cognitive Performance Scale: Agreement with the
Mini-Mental State Examination. *The Journals of Gerontology, Series A: Medical Sciences,*
50, M128-M133.

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.
http://dx.doi.org/10.1046/j.1365-2648.2002.02126.x

Hirdes, J.P., Fries, B.E., Morris, J.N., Ikegami, N., Zimmerman, D., Dalby, D.M., ... Jones, R.
(2004). Home care quality indicators (HCQIs) based on the MDS-HC. *The Gerontologist,*
44(5), 665–679. http://dx.doi.org/10.1093/geront/44.5.665

Hofmeyer, A., & Marck, P.B. (2008). Building social capital in healthcare organizations:
Thinking   ecologically   for   safer   care. *Nursing   Outlook,   56,*   145-151.
http://dx.doi.org/10.1016/j.outlook.2008.01.001

Hogan, D.B., Bailey, P., Black, S., Carswell, A., Chertkow, H., Clarke, B., … Thorpe. L. (2008). Diagnosis and treatment of dementia: Non-pharmacologic and pharmacologic therapy for mild to moderate dementia: Recommendations from the Third Canadian Consensus Conference on Diagnosis and Treatment of Dementia. *Canadian Medical Association Journal*, 179(10), 1019-1026. http://dx.doi.org/10.1503/cmaj.081103

Jansen, L., Forbes, D., Markle-Reid, M., Hawranik, P., Kingston, D., Peacock, S.,..Leipert, B. (2009). Formal service providers' perceptions of in-home care: Informing dementia service quality. *Home Health Care Services Quarterly, 28*(1), 1-23. http://dx.doi.org/10.1080/01621420802700952

Joint CCAC/Service Provider (2008). *Addressing the health human resource challenge from a home and community perspective: A blueprint for action.* Toronto, ON: Author, Association Committee, Submission to Health Force Ontario.

Kitson, A., Harvey, G., & McCormack, B. (1998). Enabling the implementation of evidence-based practice: A conceptual framework. *Quality and Safety in Health Care, 7*(3), 149-158. http://dx.doi.org/10.1136/qshc.7.3.149

Kitson, A., Rycroft-Malone, J., Harvey, G., McCormack, B., Seers, K., & Titchen, A. (2008). Evaluating the successful implementation of evidence into practice using the PARIHS framework: Theoretical and practical challenges. *Implementation Science*, 3(1), 1-12. http://dx.doi.org/10.1186/1748-5908-3-1

Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Luborsky, M. (1994). The identification and analysis of themes and patterns. In J. Gubium, & A. Sanker (Eds). *Qualitative methods in aging research,* 189-210. Thousand Oaks: Sage.

Mapquest.com. (2013). Retrieved from http://www.mapquest.ca/

McCormack, B., Kitson, A., Harvey, G., Rycroft-Malone, J., Titchen, A., & Seers, K. (2002). Getting evidence into practice: The meaning of 'context'. *Journal of Advanced Nursing, 38*(1), 94-104. http://dx.doi.org/10.1046/j.1365-2648.2002.02150.x

McKhann, G., Drachman, D., Folstein, M., Katzman, M.,Price, D., & Stadlan, E.M. (1984). Clinical diagnosis of Alzheimer's Disease: Report of the NINCDS-ADRDA Work Group under the auspices of Department of Health and Human Services Task Force on Alzheimer's Disease. *Neurology* 34: 939-944. http://dx.doi.org/10.1212/WNL.34.7.939

McGlynn, E., Asch, S.M., Adams, J., Keesey, J., Hicks, J., DeCristofaro, A., & Kerr, E.A. (2003). The quality of health care delivered to adults in the United States. *New England Journal of Medicine*, 348, 2635-2645. http://dx.doi.org/10.1056/NEJMsa022615

Meijers, J.M., Janssen, M.A.P., Cummings, G.G., Wallin, L., Estabrooks, C.A., & Halfens, R.Y.G. (2006). Assessing the relationships between contextual factors and research utilization in nursing: Systematic literature review. *Journal of Advanced Nursing, 55*(5), 622-635. http://dx.doi.org/10.1111/j.1365-2648.2006.03954.x

National Institute for Health and Clinical Excellence & Social Care Institute for Excellence (2011). Dementia: Supporting people with dementia and their careers in health and social care. Retrieved from http://www.nice.org.uk/CG042fullguideline

Nelson, W., Pomerantz, A., Howard, K., & Bushy, A. (2007). A proposed rural healthcare ethics agenda. *Journal of Medical Ethics, 33*(3), 136-139. http://dx.doi.org/10.1136/jme.2006.015966

Registered Nurses Association of Ontario (RNAO). (2012). Toolkit: Implementation of best practice guidelines (2nd ed.). Retrieved from http://rnao.ca/sites/rnao-ca/files/ RNAO_ToolKit_2012_2ed.pdf

Roumie, T., Arbogast, P., Mitchel, E.F., & Griffin, M. (2005). Prescriptions for chronic high-dose cyclooxygenaise-2 inhibitors are often inappropriate and potentially dangerous. *Journal of General Internal Medicine,* 20, 879-883. http://dx.doi.org/10.1111/j.1525-1497.2005.0173.x

Russ, T.C., Batty, G.D., Hearnshaw, G., Fenton, C. & Starr, J.M. (2012). Geographical variation in dementia: Systematic review with meta-analysis. *International Journal of Epidemiology*, 1-21. http://dx.doi.org/10.1093/ije/dys103.

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), 913-924. http://dx.doi.org/10.1111/j.1365-2702.2004.01007.x

Rycroft-Malone, J., Kitson, A., Harvey, G., McCormack, B., Seers, K., Titchen, A.,... Estabrooks, C. (2002). Ingredients for change: Revisiting a conceptual framework. *Quality and Safety in Health Care*, 11(2), 174-180. http://dx.doi.org/10.1136/qhc.11.2.174

Rycroft-Malone, J., Seers, K., Titchen, A., Harvey, G., Kitson, A., & McCormack, B. (2004). What counts as evidence in evidence-based practice? *Journal of Advanced Nursing*, 47(1), 81-90. http://dx.doi.org/10.1111/j.1365-2648.2004.03068.x

Rycroft-Malone, J., & Stetler, C.B. (2004). Commentary on evidence, research, knowledge: A call for conceptual clarity. *Worldviews on Evidence-Based Nursing*, 1(2), 98-101. http://dx.doi.org/10.1111/j.1741-6787.2004.04031.x

Statistics Canada, (2012). *Census Profile: 2011 Census. (Statistics Canada Catalogue no. 98-316-XWE).* Retrieved from http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/index.cfm?Lang=E

Statistics Canada. (2007). [Centre A]*, Alberta (Code 4813031)* (table).*2006 Community Profiles. 2006 Census.* (Statistics Canada Catalogue no. 92-591-XWE). Retrieved from http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E

Statistics Canada, (2007). [Centre B]*, Alberta (Code 4813019)* (table). *2006 Community Profiles*: *2006 Census.* (Statistics Canada Catalogue no. 92-591-XWE). Retrieved from http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E

Thorne S, Reimer Kirkham S, & O'Flynn-Magee K. (2004). The analytic challenge in interpretive description. *International Journal of Qualitative Methods, 3*(1), 1-21.

Wallin, L., Estabrooks, C.A., Midodzi, W., & Cummings, G.G. (2006). Development and validation of a derived measure of research utilization by nurses. *Nursing Research* 55(3), 149-160. http://dx.doi.org/10.1097/00006199-200605000-00001