

Ensuring the Success of Interprofessional Teams: Key Lessons Learned in Memory Clinics*

Linda Lee,^{1,2} Loretta M. Hillier,³ and W. Wayne Weston⁴

RÉSUMÉ

Cliniques de mémoire en soins de santé primaires suscitent un intérêt croissant, car elles offrent la possibilité d'améliorer le diagnostic et le traitement de la démence. En Ontario, plus de 30 établissements de soins primaires ont participé à un programme de formation visant à aider les participants à établir une clinique de mémoire indépendante dans leur milieu de pratique. Cet article présente les principales leçons acquises dans la mise en oeuvre de ces cliniques sur la base d'une étude qui a utilisé une méthodologie d'entrevue avec les membres des équipes de cliniques de mémoire et a identifié les facteurs favorables, les défis et les recommandations pour la soutenabilité. L'accès à la formation qui facilite le transfert des connaissances et soutient les changements dans la pratique, la collaboration interprofessionnelle, et le soutien de l'infrastructure en cours était d'une importance capitale. Des suggestions pour la mise en place de cliniques et de renforcement des capacités continues ont été identifiés. Les leçons apprises sont applicables à la mise en oeuvre d'autres modèles de prise en charge des maladies chroniques dont le but est la gestion des soins de santé primaires de maladies chroniques complexes.

ABSTRACT

Primary care-based memory clinics are attracting increasing interest because they present an opportunity to improve dementia diagnosis and management. In Ontario, more than 30 primary care setting participated in a training program aimed at assisting participants to establish an independent memory clinic in their practice setting. This article outlines the key lessons learned in implementing these clinics, on the basis of a study that – used an interview methodology with memory clinic team members and – identified facilitating factors, challenges, and suggestions for sustainability. Of key importance was access to training that facilitates knowledge transfer and supports practice change, interprofessional collaboration, and ongoing infrastructure support. Suggestions for clinic implementation and ongoing capacity building were identified. Lessons learned are applicable to the implementation of other chronic-disease care models aimed at improving the primary care management of complex chronic conditions.

¹ The Centre for Family Medicine, Kitchener, Ontario

² Department of Family Medicine, McMaster University

³ St. Joseph's Health Care London and Lawson Health Research Institute

⁴ Schulich School of Medicine & Dentistry, Western University

* Funding for this study was provided by the Canadian Institutes of Health Research (Catalyst Grant Program: Primary and Community-Based Healthcare; Grant No. 212207).

Manuscript received: / manuscrit reçu : 29/01/13

Manuscript accepted: / manuscrit accepté : 06/05/13

Mots clés : vieillissement, démence, équipes interprofessionnelles, leçons acquises (apprises), cliniques de mémoire, les soins primaires

Keywords: aging, dementia, interprofessional teams, lessons learned, memory clinics, primary care

Correspondence and requests for reprints should be sent to / La correspondance et les demandes de tirés-à-part doivent être adressées à:

Linda Lee, M.D.

The Centre for Family Medicine

10B Victoria St. South

Kitchener, ON N2G 1C5

(lee.linda.lw@gmail.com)

Introduction

It is anticipated that the incidence of Alzheimer's disease and related dementias in Canada will increase significantly over the next 30 years with the incidence of new cases doubling from approximately 103,700 in 2008 to 257,800 new cases in 2038 (Smetanin et al., 2009). Although primary care is well positioned to identify and manage dementia because of established and ongoing relationships, there is much evidence that it fails to recognize a significant proportion of cognitive impairment, with estimates as high as one quarter to two thirds of patients having undiagnosed dementias (Bradford, Kunik, Schulz, William, & Singh, 2009; Callahan, Hendrie, & Tierney, 1995; Feldman et al., 2008). Generally, family physicians are limited in early detection of dementia, with the sensitivity of family physicians' dementia diagnoses relative to standardized assessments, using multiple assessment tools, ranging from 0.26 to 0.69 (Bradford et al., 2009). A systematic review of barriers to dementia diagnosis in primary care identified challenges at three levels: patient or societal factors, physician factors, and system factors (Koch & Iliffe, 2010). Patient or societal factors include the stigma attached to a diagnosis of dementia and patient delays in presenting to a physician. Physician factors relate to diagnostic uncertainty, knowledge and experience gaps, difficulties disclosing a diagnosis, and pessimism about the ineffectiveness of treatment. System factors include lack of support for practitioners including infrastructure support (space, time, staffing) as well as limited access to interprofessional care, and time and financial constraints (Koch & Iliffe, 2010).

Efforts aimed at improving the assessment and management of dementia in primary care settings – including strategies to build capacity for dementia care that have focused on the distribution of guidelines, tool kits (including resources such as assessment tools for dementia, delirium, and depression, intervention recommendations, strategies for managing psychological and behavioural symptoms, and supportive resources for caregivers), and practice aids to primary care physicians – have had relatively little impact (Fillit, 2007; Rampatige, Dunt, Doyle, Day, & van Dort, 2009). Calls for dementia care reform have recommended health system redesign more in line with a chronic-disease management model of care (Fillit, 2007; Tsisis, 2009). Within the system of dementia care, emphasis has historically been placed on the development of specialized clinics, programs, and services, which often exist in tertiary care settings, research centres, and psychiatric programs (Jolley, Benbow, & Grizzell, 2006; Morgan et al., 2009; Van der Cammen, Simpson, Fraser, Preker, & Exton-Smith, 1987) with little, if any, integration with primary care. In Canada, specialist-focused models of care may not be sustainable in the long term,

given the shortage of geriatricians, geriatric psychiatrists, and behavioral neurologists (Bardach & Rowles, 2012; Diachun, Charise, & Lingard, 2012; Hogan, 2001), resulting in lengthy wait times to access care. Quality care, characterized by timely access, integration, coordination, and efficient use of specialists, can be enhanced with primary-care-based memory clinics (Greening, Greaves, Greaves, & Jolley, 2009; Lee et al., 2010).

The Centre for Family Medicine (CFFM), a multi-site Family Health Team (FHT) with a roster of 26,000 patients, established a memory clinic in 2006 to address existing challenges associated with dementia assessment and care within the community. This interprofessional clinic, described elsewhere (Lee et al., 2010), currently consists of a lead family physician, nurses, social worker, pharmacist, and occupational therapist. An evaluation of the clinic demonstrated that this evidence-based approach to collaborative care could support timely access to high-quality assessment and management of dementia at the primary care level and to highly efficient use of specialist resources (Lee et al., 2010). The success of this clinic is garnering much attention, with an increasing number of FHTs and other primary care settings expressing an interest in establishing their own memory clinics. In Ontario, FHTs consist of multi-disciplinary groups of health care professionals including physicians, nurses, social workers, pharmacists, occupational therapists and other health care providers, working together to provide a patient-centered approach to primary care (Rosser et al., 2010).

In collaboration with the Ontario College of Family Physicians, an accredited training program was developed for interprofessional members of FHTs interested in establishing a memory clinic. This program (described in Lee, Kasperski, & Weston, 2011; Lee, Weston, & Hillier, 2013) consists of a two-day workshop aimed at increasing team knowledge and skill related to the assessment and management of memory problems and cognitive impairment, followed by a one-day observership and two days of mentoring for each team. Moreover, each clinic is linked with a local geriatrician, who provides ongoing consultative support to clinic members as needed. To date, 30 primary care settings (25 FHTs, four non-FHT community-based settings, and one Community Health Centre) have participated in this training program across eight training sessions, with a total of over 150 health professionals completing the program. An evaluation of the training program conducted with 22 FHTs and 124 participants (Lee et al., 2013) found that all but one FHT were able to successfully form a memory clinic and demonstrated several statistically significant outcomes of the training:

increased self-reported knowledge, confidence, and ability to assess and manage cognitive impairment;

- increased comfort level in speaking to patients about memory problems;
- enhanced ability of participants' FHTs to manage cognitive impairment independently; and
- increased engagement in dementia best practices.

Consistent with ideal models of chronic disease management (Scott, 2008) in which high-intensity interventions are recommended for 5–10 per cent of patients, referral rates to specialists from the memory clinics in this program were approximately 9 per cent. This training program represents a significant opportunity to bring about evidence-based practice change to support primary care providers in maintaining the majority of dementia care within primary care practice. The training program has expanded to provide yearly "booster" sessions, consisting of updates on new knowledge, guest speakers, case presentations by different FHTs, and opportunities for networking and sharing successes and problem-solving complex issues.

Interest is growing in the development of new primary care-based memory clinics, as well as in the development of similar models for improved management of other complex chronic geriatric conditions. To enhance the impact of investments made to establish these memory clinics, it is important to have a clear understanding of the factors that contribute to the successful development and implementation of these memory clinics and to proactively manage potential challenges and barriers to success. Consequently, the purpose of the study described in this article was to examine the factors that enable or facilitate the development and implementation of the clinics, challenges, key lessons learned, and suggestions for improvements to the CFFM memory clinic's capacity building efforts to support newly established teams.

Methods

We used an interview methodology in this study. Team members from 13 new FHT-based memory clinics located in Central and Southwestern Ontario were invited to participate in individual or group telephone interviews to provide in-depth information about the development and implementation of their memory clinics. These teams participated in training programs offered between October 2008 and April 2011. The patient base of these FHTs varied, ranging from 4,149 to 118,000, with a mean patient base of 41,695.4 ($SD = 54,180.2$). The memory clinics varied in terms of their composition; at a minimum each clinic had at least one family physician (range across clinics: 1 to 2) and one nurse (range across clinics: 1 to 5 including nurse practitioners, registered nurses, and registered practical nurses). Other team members included social workers (two of the clinics had one social worker; one clinic had two social workers), a

pharmacist (three clinics), an occupational therapist (one clinic), a care navigator (one clinic), two mental health counselors (one clinic), and representation from the local Alzheimer Society (three clinics). All of the clinics operated one day per month, with some offering the clinic over two half days per month and others occasionally operating the clinic an extra half or full day per month to expedite an increase in referrals and reduce the need for wait lists.

A total of 40 clinic members participated in an interview – 31 in individual telephone interviews, and 9 in group interviews (two face-to-face and three via telephone) with a range of two to four participants each. Interviews averaged 30 minutes ($SD = 7.0$; range: 22–40) in duration for groups and 18.2 minutes ($SD = 6.4$; range: 8–40) for individuals. There was an equal distribution of physicians and nurses ($n = 13$ each) participating in the interviews, including nurse practitioners, registered nurses, and registered practical nurses. Other participants included representatives from the Alzheimer Society ($n = 5$), social workers ($n = 4$), mental health counsellors ($n = 2$), and an occupational therapist, a pharmacist, and a care navigator. These interviews were conducted six to eight months following the inception of their clinics.

Questions were asked relating to: (a) what worked well (facilitating factors) with the development and implementation of the memory clinic within their setting; (b) challenges experienced to date in the implementation of the clinic (barriers at patient/caregiver, team, system levels); (c) key lessons learned in the development and implementation of their clinic that could serve as advice to other primary care settings interested in starting their own memory clinic; (d) suggestions for improvements to the memory clinic training program; and (e) identification of resources and supports needed to improve the likelihood that newly established memory clinics will be successful.

All of the interviews were conducted by one author (Hillier) to ensure consistency and were digitally recorded and transcribed. The interviews were conducted to the point of saturation (i.e., little or no new information was obtained in the last interviews conducted). Transcriptions were analysed using a qualitative naturalistic inquiry approach to develop an understanding of the clinics within the natural setting/context (Lincoln & Guba, 1985). Analysis involved examining the responses to each question and categorizing and contrasting these to create a summary of responses (Krueger & Casey, 2000). This inductive analysis, which was used to identify recurring themes in the data without prior assumptions (Patton, 2002), was conducted by one author (Hillier), and the findings were reviewed by the remaining authors (Lee; Weston) to confirm saturation and reliability. This study

was approved by the McMaster University Research Ethics Board.

Findings

Factors Facilitating Memory Clinic Development and Implementation

Clinic members identified several factors that contributed to the successful implementation of their clinics: the memory clinic training program, quality of the model of care, availability of human and physical resources, and ongoing support (see Table 1).

The training program provided a foundation of knowledge about dementia and skills for assessing patients with suspected dementia and included a clinical reasoning model (Lee et al., 2013). Practical resources were provided to apply or adapt to individual clinic settings, such as office processes (scheduling, space, workflow plan), sample information forms for patients, point-of-practice tools and procedures for establishing independent clinics, and a package of information to secure support from other physicians in their FHT. These tools made it easier to operate the clinic without excessive effort or resources, or duplication of effort across clinics. The training program was credited with providing the structure and framework for establishing a clinic (“how to’s”)

and building members’ confidence to establish their own clinic. Moreover, the training program has provided mentorship and consultation support, opportunities for networking with other FHTs, and yearly booster sessions to support ongoing capacity building. Following are comments from some of the study participants, whom we have identified only with codes (e.g., IDO8#1):

I don’t think we would have been able to set up the actual memory clinic within the confines of our Family Health Team had we not had the formal structure of [CFFM memory clinic] and them behind us, quite honestly. I think in retrospect we would not have had a memory clinic had we not had that formalized expertise. [IDO8#1]

Having the tool kit was a big help. We just took and ran with it. It [memory clinic] wasn’t a huge project to establish. It didn’t take a huge amount of resources just to get it going. [IDA11#2]

The CFFM memory clinic acted as a model for other clinics to emulate. Many of the clinics reported that they modeled their clinic after the CFFM clinic, using the strategies provided for allocating physician time efficiently while maximizing use of other disciplines to their full scope of practice. This interprofessional model was viewed as time efficient and comprehensive

Table 1: Summary of factors identified as facilitating and challenging the development and implementation of the newly formed memory clinics

Facilitating Factors	Challenges
<p>Memory Clinic Training Program</p> <ul style="list-style-type: none"> Provision of a clinic structure and framework Enhanced knowledge, skills, and confidence Strategies to secure support of other physicians in the FHTs Strategies for using physician time efficiently Emphasis on team approach Mentorship support Provision of resources (e.g., tool kit) to establish clinic <p>Comprehensive Model of Care</p> <ul style="list-style-type: none"> Need - fills a significant care gap CFFM memory clinic as a model clinic <p>Availability of Human and Physical Resources</p> <ul style="list-style-type: none"> A physician champion FHT team members interested in care of elderly adults Well-functioning and consistent team Partnership with Alzheimer Society Availability of space <p>Access to Ongoing Support</p> <ul style="list-style-type: none"> FHT physician support FHT administration and management support CFFM memory clinic support (consultation support, ongoing education) <p>Good Communication within Clinics</p>	<p>Process and Resource-Related</p> <ul style="list-style-type: none"> Developing clinic efficiencies Meeting increased demands for assessments Limited access to allied health professionals Memory clinic staff turnover Limited physical space <p>Limited Support-Related</p> <ul style="list-style-type: none"> Limited support from some family physicians Limited understanding of how the memory clinics function Lack of understanding of the time-intensive nature of providing dementia care <p>Patient-Related</p> <ul style="list-style-type: none"> Dealing with driving safety Stigma associated with dementia Patient reluctance to attend clinic when asked to complete assessment forms prior to the clinic appointment Patient attendance without family members

CFFM = Centre for Family Medicine

FHT = Family Health Team

and as filling a significant care gap, particularly in rural areas where patients are reluctant to travel long distances to urban settings for specialist assessment and care.

There is a big need for this [memory clinic]. Patients get seen quickly, and there is no problem getting patients referred and seen quickly as there is otherwise. [IDA11#1]

I think, as a practice, when we sent the nurse practitioners out to be trained by [nursing-focused education], the thought was that they would do the assessments and then those assessments would come back to the individual physicians, and they would decide what to do with those assessments. You know, I think it's quite clear that it requires more than that. [IDO08#1]

A physician champion was perceived as important for the successful establishment and sustainability of a memory clinic. This physician secured support from other physicians within the practice and instilled confidence among patients and their families as well as among the interprofessional team members interested in the care of elderly adults. Moreover, FHTs that already had a geriatric team in place were able to easily implement the clinic model as appropriate resources were already in place. For those FHTs with limited resources, partnering with the Alzheimer Society to include a representative as a team member enhanced their resources in terms of expertise as well as facilitated timely access to education and support for their patients within the community. Because a clinic requires several rooms for interviewing patients and their family members, access to adequate space made it easier to implement the clinic model in the most efficient way. Good communication among all professions facilitated the implementation of the clinics' model so that each member was comfortable to provide input into the discussion of the assessment results and treatment recommendations.

Well, I think probably the first thing [in establishing the clinic] was having a good physician lead; without that, it's very difficult. [IDA11#1]

For us, it has been very useful to be able to hook up with the Alzheimer's Society; we have two social workers – that has been great. It's also less costly for our family health team for sure. They actually do the evaluations, and they are really incredible support for the families, so that has been an excellent thing for us. [IDM10#4]

Ongoing support from the FHT board of directors and executive director was also perceived as important, particularly in terms of providing financial support for the training and allocation of resources (human and tangible) for the clinic. Similarly, support from physicians within the FHT was paramount in securing referrals to

the clinic. As physicians came to experience the benefits of referring their patients to the clinic, support for the clinic and referrals increased.

The Family Health Team support of that is very important, or we wouldn't have the nurses, because it really is all about, you know, manpower. You wouldn't be able to implement it [the clinic] the same way without that support. [IDM10#5]

Challenges to Memory Clinic Development and Implementation

The clinics have not operated without challenges. All but one of the 13 clinics participating in this study were able to establish their clinics and sustain them over time. The one FHT that was unable to sustain their memory clinic faced several challenges: there was limited management support as this geographical location was deemed well served by geriatricians, so that referrals to specialists were typically seen in a timely manner. Consequently, it was perceived that a clinic of this nature, given the high time and staffing requirements, would be of minimal additional benefit to patients and families. When management failed to support this initiative, the lead physicians did not pursue it, although other health providers on this team expressed an interest in continuing to provide enhanced dementia assessment as part of their mental health program.

The challenges identified by clinic members were primarily related to administrative processes (e.g., accessing adequate resources and supports for their clinic as well as issues around patient-related service delivery). Many perceived these challenges as inherent in the development of any new program and believed these challenges were resolvable. Although the training program provided new clinics with resources to assist them with the implementation of their clinics, because each clinic and FHT operated differently, it was sometimes a challenge to develop processes that met the needs of each FHT and their patients and families. This included (a) logistics of scheduling, (b) conducting assessments involving various health professionals, (c) use of space, (d) training medical residents within the clinics, and (e) adapting information resources from the training program to individual FHTs. To meet increased demands for assessment, one clinic had to increase from one to two clinics per month. The logistics of scheduling and ensuring clinician availability for extra clinic days was a challenge; funding the clinic time and extra workload was also an issue. Some clinics were challenged by limited space for multiple interviews conducted at the same time.

I think one of our challenges was just getting efficient. I think we worked a lot on some of the patient experience because we were moving them around

from room to room, and it was very overwhelming for them, and so we changed some of our structures to help support them. [IDM10#6]

We're getting quite a few referrals. It's a lot of work for one physician to do. I think we'd like more than one physician working in the clinic so that we can stay on top of the referrals and get the assessments done quickly. [IDA11#2]

Clinics involving only physician and nurse team members were challenged to provide a comprehensive service without social workers, occupational therapists, and pharmacists. Although it was noted that these services could be arranged (e.g., through Community Care Access Centres, which in Ontario are responsible for providing home and community-based care), access to these services was limited and took time. In some cases, partnerships with the Alzheimer Society resolved this manpower issue. Moreover, several of the newly established memory clinics struggled with staff turnover in both lead physicians and allied health positions, which reduced continuity of care and threatened sustainability.

Other threats to the clinics included physician resistance to the new service, with some physicians being described as reluctant to accept recommendations or new knowledge related to dementia care. Despite attempts to inform referral sources of the role of the memory clinic, some physicians continued to refer their patients directly to a geriatrician when they could have been assessed more quickly within the memory clinic, or referred with greater documentation and assessment in place, making more-efficient use of specialist resources. Some clinics had to justify the human resources needed to run the memory clinic as many people did not understand the time-consuming nature of dementia assessment and management, including the fact that care provided within the clinic differed from regular primary care practice where acute issues were often less time-consuming to manage.

Some of the old-school family docs are very reluctant to accept new knowledge or accept new ideas, and so it's a lot of re-education and to some degree they feel a little bit threatened sometimes, too. [IDO08#3]

I think one of the challenges is that we're having a hard time at this point justifying our human resources: it seems a lot of people don't seem to understand the intensity of the work and how long it takes to do an assessment. [IDO08#2]

Related to the provision of care, several of the memory clinics noted that dealing with automobile driving safety had been a stressful and challenging aspect of the memory clinic assessment. Patients often failed to recognize or acknowledge that they were no longer fit

to drive, which was particularly difficult for patients who lived in rural areas or whose spouse did not drive. Although most family physicians appreciated having the memory clinic take responsibility for reporting patients who might be unfit to drive, some physicians were concerned about damaging their therapeutic relationships with their patients, even though the reporting of persons suspected of being unfit to drive was mandated in the province of Ontario. One clinic noted concerns that they may have developed a negative reputation in the community because of reporting potentially unfit drivers to the provincial licensing authorities. The high cost of on-road assessments has been an issue for patients unable to afford the fee, while others have been indignant that they are expected to pay for this.

Well, I found the driving assessments more stressful than just about anything in the emerge [Emergency Department]. I can run a code. I can pronounce a person. I can deal with difficult families. But this is a really confrontational subject. ... they oftentimes do not see that this is a disease that can affect their driving safety ... [IDO08#5]

One of the physicians actually said: "I didn't realize that you'd be taking away his license, if I had thought that, I wouldn't have referred." ... You have a patient that says: "Oh no, I'm not doing that [go to the memory clinic] because you're going to take my license." I've heard about the memory clinic and we're starting to get a name in the community. [IDO08#5]

There continues to be stigma associated with dementia; it was noted that some patients became angry and reluctant to accept the diagnosis. Similarly, it was noted that when some of the self-assessment forms were sent to patients to be completed prior to the clinic appointment (as an opportunity to streamline the assessment process within the clinic), a few took offense to the questions, and if they felt the questions did not apply to them, they would not attend the assessment. This was resolved, in part, by carefully selecting the forms that patients were asked to complete prior to the assessment. Moreover, patients who attended the clinic alone, without family members, posed a challenge to the collection of reliable corroborated assessment information and to providing comprehensive intervention and supports.

There is still a lot of stigma around dementia. Sometimes patients become pretty angry when we tell them. They just don't want to believe it. It makes it hard for the family and for us to move forward to help them. You really need to put a positive spin on a bad diagnosis. When you get a diagnosis that requires your gallbladder to come out, people send you flowers. When you get a diagnosis of dementia, no one sends you flowers. [IDA11#2]

Key Lessons Learned

Clinic members identified a number of key lessons that they learned in the development and implementation of their clinics that they believed were important for FHTs considering this model of care [see Table 2].

Consistent with factors identified as enabling the clinics' establishment, participation in the CFFM memory clinic training program allowed all team members to develop the required expertise and a consistent vision for the clinic. In addition, adapting the model of care to specific resources available in the FHT was viewed as important to supporting quality care. In adapting the care model, FHT members had to ensure "depth on the bench" with a full clinical complement of both medical and psychosocial expertise, by maximizing the unique skill set of each profession and selecting team members based on their interest ("passion") in older-adult care and their ability to be "team players". Where human resources were limited, partnerships with local community resources, such as the Alzheimer Society, were identified as an opportunity to fill staffing gaps associated with nursing and social work roles. Important for the clinic's efficiency was a designated lead ("point") person, who could assume responsibility for coordinating the clinic, including monitoring follow-up appointments and liaising with community services. Recruitment of at least two lead physicians ensured adequate coverage, workload sharing, and mutual consultation support for difficult or complex cases.

FHT administration and management "buy in" was perceived as critical to the success of the clinic, particularly as related to the provision of adequate infrastructure

supports, such as physical space and clerical support. Other important factors were as follows: (a) linkages with local geriatricians to provide access to consultation and mentorship support; (b) promotional and communication strategies to ensure that referral sources were aware of the role of the clinic, including screening for fitness to drive; (c) referral sources' responsibility in following up on treatment recommendations; and (d) timely sharing of assessment results. In terms of implementing the clinic, team members stressed that with experience, the logistics of running the clinic became smoother and more efficient. To facilitate efficiency, it was suggested that clinics start on a small scale and gradually increase the number of patients scheduled, and that clinic processes should be revised based on evaluation of initial experiences. Adequate time should be allotted for follow-up appointments as many patients value an opportunity to ask questions and discuss their concerns once they have had time to reflect on the diagnosis. Scheduled clinic time should also include time for debriefing amongst clinic team members after an assessment as an opportunity for learning from each other's experiences and for team building.

Suggestions for Improvements: Resources/Supports Needed for Ongoing Implementation

The training program was described as comprehensive, well organized, and designed for optimal learning and application; there were few suggestions for improvements. Clinic members most frequently expressed an interest in ongoing opportunities for capacity building and problem-solving, such as "booster"

Table 2: Key lessons learned in the development and implementation of new memory clinics

Clinic Composition

- Ensure interprofessional membership
- Select clinic members carefully (team players with a passion for care of the elderly)
- Recruit more than one physician
- Designate a lead person for administrative issues
- Use a flexible collaborative model of leadership for clinical activities
- Develop partnerships with community resources

Infrastructure Support

- Have all clinic members attend the training program
- Secure "buy in" from the practice setting – administration and other family physicians who refer patients to the memory clinic
- Ensure needed resources (personnel, space, point-of-practices tools) are in place
- Establish a mentorship/consultation relationship with a geriatrician
- Develop a communication and marketing strategy (referral sources, patients)

Clinic Implementation

- Acknowledge that scheduling and implementation take time to master
- Start on a small scale, then gradually build on experience
- Ensure adequate time for follow-up visits
- Include debriefing time at the end of each clinic
- Build capacity and skill among referring family physicians for case-finding (identifying new cases of dementia)

sessions, teleconferences and webinars, a web-based vehicle for sharing information related to dementia, and ongoing mentorship opportunities beyond that offered in the initial training program. Team members also identified a desire for ongoing opportunities for networking and consultative support, including a web-based forum for discussing/brainstorming difficult cases and profession-specific opportunities for discussion.

Discussion

The primary care-based memory clinic model represents a significant opportunity to improve dementia care using an interprofessional collaborative care approach. The factors identified in this study that facilitated the development and implementation of the memory clinics address many of the factors that have typically challenged the management of dementia and other chronic diseases of older adults in primary care practice. These include (a) limited physician knowledge and skills, (b) lack of a comprehensive model of care that focuses on psychosocial issues as well as medical issues, (c) limited use of evidence-based best-practice guidelines and standardized assessment tools, (d) limited resources to support practice, (e) lack of human resources and champions, and (f) poor access to expert assessment and management (Barrett, Haley, Harrell, & Powers, 1997; Bradford et al., 2009; Hollander & Prince, 2008; Nazerali, 2006). These challenges exist regardless of the size of the practice setting, so memory clinics have a place in all FHTs regardless of the size of the patient base. Given the aging of the population, most FHTs have a significant proportion of seniors who, with increasing age, are at risk for dementia, so that even the smallest of FHTs can justify a memory clinic operating a half day per month. FHTs with larger patient bases would likely need to operate their clinics more frequently (one to two days per month) to meet service demands without generating a lengthy wait list.

Given the investment in time and resources to participate in the training program, readiness to attend the program and establish a new memory clinic is informally assessed by ensuring that participating FHTs have (1) support from the FHT management (executive director, executive board) to allow staff to participate in the training program, with the knowledge that the end goal is the establishment of a memory clinic; (2) commitment from team members to participate in the training and to work within the newly established memory clinic; (3) availability of a specialist to support the memory clinic, and (4) availability of community partners to fill human resource gaps in the clinic team for those clinics that are relatively under-resourced. For example, the team may include representatives from the local Alzheimer Society, who are nurses and social workers, to assist in the completion of cognitive

and caregiver assessments and to provide ongoing support and outreach. It is strongly encouraged that these components be in place prior to FHTs' participating in the training program.

Although the one FHT that did not sustain its clinic initially had all of these conditions in place, once they began to implement their clinic, interest in sustaining the clinic waned because new specialist resources arrived in their area that significantly reduced both the wait times for geriatric assessment and the perception of the memory clinic's added value to the FHT. Interestingly, an organization's readiness seems to have little to do with the duration of an FHT's existence. Some of the most motivated teams to train have been the newly formed FHTs, perhaps because they are in the early stages of developing programs; therefore, their allied health professionals are not being drawn away from existing programs. Some well-established FHTs have had more difficulty securing buy-in for the allocation of resources for the memory clinic because the use of allied health professionals' time appears disproportionately high in comparison to existing clinics for conditions such as hypertension, in which patient assessments can be completed relatively quickly.

Collaborative interprofessional teams are considered efficient and effective in providing high-quality health care (Borrill, West, Shapiro, & Rees, 2000; Pullon, McKinlay, Stubbe, Todd, & Badenhorst, 2011) and are aptly suited for dementia care. Several reviews of the factors contributing to successful interprofessional teams found determinants at individual, organizational, and systems levels (San Martín-Rodríguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005; Xyrichis & Lowton, 2008). At an individual level, interprofessional determinants include the interactional relationships between team members based on effective communication and a commitment to work together collaboratively with mutual respect and trust. In this study, successful implementation of the memory clinics was attributed to (a) clinic staff's willingness to collaborate within the team, (b) a shared interest in the care of elderly adults, and (c) respect for the unique and complementary contributions that each discipline brings to the diagnostic and care planning process.

Beyond providing information on effective teamwork, the memory clinic training program supported the development of interprofessional collaborations by providing opportunities for team building, such as requiring teams to work together on case study presentations encouraging each team member to contribute their full scope of practice. Moreover, participants reported that informal opportunities for socializing – for example, when traveling together to the workshop, dining together, or staying at the same hotel – served to enhance their

relationships; these opportunities likely contributed to positive attitudes about collaborative practice.

Organizational support is critical for effective interprofessional collaborations (San Martín-Rodríguez et al., 2005; Xyrichis & Lowton, 2008). Effective team interactions are supported by organizational structures that are horizontal, rather than hierarchical, which value and foster collaboration, facilitate coordination and communication, and support teamwork with good leadership and adequate resources. In such horizontal structures, leadership responsibilities are shared among team members and adjust to the particular needs of each patient. Physicians provide leadership related to diagnosis and medical management, which requires this level of accountability, while other team members may provide leadership related to psychosocial management and the processes involved in running the clinic. Consistent with interprofessional education programs, the memory clinic training program helps teams to explore how power and decision-making are shared among team members in efforts to develop a clinic culture in which all members accept and share responsibilities (Lingard et al., 2012; Whitehead, 2007).

Despite the central responsibility of physicians for diagnosis and medical management, the clinics are structured in the memory clinic training program such that all professions contribute in an important way to patient care, with no one profession consistently dominating the decision-making process. Supporting this structure is the use of a bio-psychosocial model of care, rather than a purely medical model that would place greater value on medical aspects of care and the role of medical team members over others. Over time, as team members learn from their experiences of patient care and from one another, an effective interprofessional team becomes more than the sum of its parts. The concept of “shared mind” (Epstein, 2013) or “distributed cognition” (Lingard, 2012) may help to explain how the members of an effective clinic share their thoughts, feelings, and hunches to arrive at an understanding that no single team member could discover alone. Such teams share an understanding of one another’s roles and the overarching goals of the team and, through their interactions and struggles to find a way to help each patient, new and deeper understandings of their mission emerge.

Although each memory clinic team must find its own way to work together, based on the specific practice context, available resources and unique skill set of the professionals involved, having a model provided – to show how dementia care could best be offered – was invaluable in helping each team get started. This model was demonstrated throughout the training program when all members of the CFFM memory clinic team

assisted in the training and during the observership day when participants had an opportunity to see the team in action. Finally, a set of “standard operating procedures” provided detailed guidance on the potential roles of each team member and techniques for conducting the cognitive tests.

At a system level, successful interprofessional collaboration is facilitated by several factors: (a) limited power differentials, (b) cultural values that support collaborative practice over individualism, (c) interdependence among professionals, and (d) promotion of collaborative values in education programs (San Martín-Rodríguez et al., 2005). It is well documented that often very little of what is learned in typical training programs is applied to practice (Broad, 2005; Davis, Thomson O’Brien, Oxman, & Haynes, 1992; Davis et al., 1999); other factors essential to facilitate practice improvements are, for instance, recruitment of clinical leaders and resources within the practice environment that enable implementation of new skills (Bradley et al., 2003; Green & Kreuter, 1991) and management support for knowledge transfer and practice change (Bradley et al., 2003; Broad, 2005). Consistent with what is known to effect practice change, the results of this study emphasize that while education opportunities are capacity building at an individual level, at a practice or system level, organizational culture valuing change and continuous quality improvements are important for improving the operation of the new clinics. Without these enabling factors, the FHTs would have been challenged to effectively and efficiently implement memory clinics. Best teaching practices within this training program, such as case-based learning and mentorship opportunities, contributed to maximizing knowledge transfer and practice changes.

Although study participants were successful in establishing and implementing their memory clinics, challenges were identified related to the process of running the clinics. These included difficulties with scheduling and developing administrative efficiencies, and accessing resources such as staffing and physical space. Issues related to staffing, resources, and time constraints have been well-documented challenges associated with dementia care and care of elderly adults in primary care settings (Baeza, Bailie, & Lewis, 2009; Coleman, Grothaus, Sandhu, & Wagner, 1999; Fillit, 2007; Hollander & Prince, 2008; Shahady, 2006). Resolution of these challenges may require creative and innovative solutions such as enhanced partnerships with community services, such as the Alzheimer Society, to share human resources. Identified challenges such as limited support from some physicians and a lack of understanding of the time- and labour-intensive nature of the clinic highlight the barriers associated with the

management of complex chronic conditions. Effective management of these conditions requires a shift in focus away from management of acute conditions that are typical in primary care practice (Coleman et al., 1999) and a pro-active rather than reactive approach to health care (Orchard, Green, Sullivan, Greenberg, & Mai, 2008). Despite these challenges, there continues to be significant interest in maintaining the clinics as a viable and effective strategy for identifying and managing persons with cognitive impairment.

Several strategies for supporting new memory clinics were identified in this study, many of which are consistent with a plan-do-study-act (PDSA) approach to quality improvement (Quality Improvement Innovation Partnership, 2009), such as starting the clinics on a small scale, testing processes and revising them according to feedback. Interest was expressed in web-based forums for case presentations and knowledge exchange, many of which already exist at provincial and national levels and offer opportunities for ongoing capacity building. Clinic members valued ongoing training and networking opportunities with an expressed desire for more detailed knowledge and skills beyond that provided in the training program to further support clinic members' development of specialized expertise.

The results of this study apply to the development of effective and successful interprofessional teams. Moreover, key lessons learned in this study apply to the development and implementation of care models for the assessment and management of other complex chronic conditions of elderly adults.

Study Limitations

This study has several limitations. Because interview participants were clinic members, the perspectives of FHT management and other physicians associated with the clinics are not known. Interviews were conducted roughly six to eight months following the inception of the new clinics. It is not known whether the clinics were subsequently able to resolve their challenges and what strategies proved effective in doing so. More longer-term formative evaluation of the clinics may highlight additional key lessons to support the sustainability of new clinics.

References

Baeza, J., Bailie, R., & Lewis, J. M. (2009). Care for chronic conditions for indigenous Australians: Key informants' perspectives on policy. *Health Policy, 92*, 211–217.

Bardach, S. H., & Rowles, G. D. (2012). Geriatric education in the health professions: Are we making progress? *The Gerontologist, 52*, 607–618.

Barrett, J. J., Haley, W. E., Harrell, L. E., & Powers, R. E. (1997). Knowledge about Alzheimer disease among primary

care physicians, psychologists, nurses, and social workers. *Alzheimer Disease and Associated Disorders, 11*, 99–106.

- Borrill, C., West, M., Shapiro, D., & Rees, A. (2000). Team working and effectiveness in health care. *Health Care Management, 6*, 364–371.
- Bradford, M. A., Kunik, M. E., Schulz, P., William, S. P., & Singh, H. (2009). Missed and delayed diagnosis of dementia in primary care. Prevalence and contributing factors. *Alzheimer Disease and Associated Disorders, 23*, 306–314.
- Bradley, E. H., Holmboe, E. S., Matterna, J. A., Roumanis, S. A., Radford, M. J., & Krumholz, H. M. (2003). The roles of senior management in quality improvement efforts: What are the key components? *Journal of Healthcare Management, 48*, 15–29.
- Broad, M. L. (2005). *Beyond transfer of training: Engaging systems to improve performance*. San Francisco, CA: Pfeiffer.
- Callahan, C. M., Hendrie, H. C., & Tierney, W. M. (1995). Documentation and evaluation of cognitive impairment in elderly primary care patients. *Annals of Internal Medicine, 122*, 422–429.
- Coleman, E. A., Grothaus, L. C., Sandhu, N., & Wagner, E. H. (1999). Chronic care clinics: A randomized controlled trial of a new model of primary care for frail older adults. *Journal of the American Geriatrics Society, 47*, 775–783.
- Davis, D. A., O'Brien, M. A., Freemantle, N., Wolfe, F. M., Mazmanian, P. E., & Taylor-Vaisey, A. (1999). Impact of formal continuing medical education: Do conferences, workshops, rounds, and other traditional continuing education activities change physician behavior or health care outcomes? *Journal of the American Medical Association, 282*, 867–874.
- Davis, D. A., O'Brien, Thomson, M. A., Oxman, A. D., & Haynes, R. B. (1992). Evidence of the effectiveness of CME. *Journal of the American Medical Association, 268*, 1111–1117.
- Diachun, L. L., Charise, A., & Lingard, L. (2012). Old news: Why the 90-year crisis in medical elder care? *Journal of the American Geriatrics Society, 60*, 1357–1360.
- Epstein, R. M. (2013). Whole mind and shared mind in clinical decision-making. *Patient Education and Counseling, 90*, 200–206.
- Feldman, H. H., Jacova, C., Robillard, A., Garcia, A., Chow, T., Borrie, B., et al. (2008). Diagnosis and treatment of dementia: 2. *Diagnosis*. *Canadian Medical Association Journal, 178*, 825–836.
- Fillit, H. (2007). Commentary on "The Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2006." Clinical guidelines are not enough: System-wide, population-based programs are needed to improve the care of patients with Alzheimer's disease and related dementias. *Alzheimer's & Dementia, 3*, 441–443.

- Green, L. W. & Kreuter, M. W. (1991). *Health promotion and planning. An educational and environmental approach*. (2nd ed.) Toronto, ON: Mayfield Publishing.
- Greening, L., Greaves, I., Greaves, N., & Jolley, D. (2009). Positive thinking on dementia in primary care: Gnosall Memory Clinic. *Community Practitioner*, 52, 20–23.
- Hogan, B. (2001). Human resources training and geriatrics. *Geriatrics Today: Journal of the Canadian Geriatric Society*, 4, 7–10.
- Hollander, M. J., & Prince, M. J. (2008). Organizing health care delivery systems for persons with ongoing care needs and their families: A best practices framework. *Healthcare Quarterly*, 11, 44–54.
- Jolley, D., Benbow, S. M., & Grizzell, M. (2006). Memory clinics. *Postgraduate Medical Journal*, 82, 199–206.
- Koch, T., & Iliffe, S. (2010). Rapid appraisal of barriers to the diagnosis and management of patients with dementia in primary care: A systematic review. *BMC Family Practice*, 11, 20.
- Krueger, R., & Casey, M. A. (2000). *Focus groups*. (3rd ed.) Thousand Oaks, CA: Sage.
- Lee, L., Hillier, L. M., Stolee, P., Heckman, G., Gagnon, M., McAiney, C., et al. (2010). Enhancing dementia care: A primary care-based memory clinic. *Journal of the American Geriatrics Society*, 58, 2197–2204.
- Lee, L., Kasperski, M. J., & Weston, W. W. (2011). Building capacity for dementia: Training program to develop primary care memory clinics. *Canadian Family Physician*, 57, e249–e252.
- Lee, L., Weston, W. W., & Hillier, L. M. (2013). Developing memory clinics in primary care: An evidence-based interprofessional program of continuing professional development. *Journal of Continuing Education in the Health Professions*, 33, 24–32.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Lingard, L. (2012). Rethinking competence in the context of teamwork. In B. D. Hodges & L. Lingard (eds.), *The question of competence*. Ithaca, NY: Cornell University Press.
- Lingard, L., Vanstone, M., Durrant, M., Fleming-Carroll, B., Lowe, M., Rashotte, J., et al. (2012). Conflicting messages: Examining the dynamics of leadership on interprofessional teams. *Academic Medicine*, 87, 1762–1767.
- Morgan, D. G., Crossley, M., Kirk, A., D'Arcy, C., Stewart, N., Biem, J., et al. (2009). Improving access to dementia care: Development and evaluation of a rural and remote memory clinic. *Aging and Mental Health*, 13, 17–30.
- Nazerali, N. (2006). Maximizing available time. Family doctor's challenges with dementia. *Canadian Family Physician*, 52, 157–160.
- Orchard, M., Green, E., Sullivan, T., Greenberg, A., & Mai, V. (2008). Chronic disease prevention and management: Implications for health human resources in 2020. *Healthcare Quarterly*, 11, 38–43.
- Patton, M. Q. (2002). *Qualitative evaluation and research*. Thousand Oaks, CA: Sage.
- Pullon, S., McKinlay, E., Stubbe, M., Todd, L., & Badenhorst, C. (2011). Patients' and health professionals' perceptions of teamwork in primary care. *Journal of Primary Health Care*, 3, 128–135.
- Quality Improvement Innovation Partnership. (2009). *Learning collaborative one. An improvement journey for primary health-care teams*. Retrieved 15 January 2013 from www.Qiip.ca.
- Rampatige, R., Dunt, D., Doyle, C., Day, S., & van Dort, P. (2009). The effect of continuing professional education on health care outcomes: Lessons for dementia care. *International Psychogeriatrics*, 21, S34–S43.
- Rosser, W. W., Colwill, J. M., Kasper, J., & Wilson, L. (2010). Patient-centered medical homes in Ontario. *N Eng J Med* 362(2), e7.
- San Martín-Rodríguez, L., Beaulieu, M. D., D'Amour, D., & Ferrada-Videla, M. (2005). The determinants of successful collaboration: A review of the theoretical and empirical studies. *Journal of Interprofessional Care*, 19 (1 Suppl), 132–147.
- Scott, I. (2008). Chronic disease management: A primer for physicians. *Internal Medicine Journal*, 38, 427–437.
- Shahady, E. J. (2006). Barriers to care in chronic diseases: How to bridge the treatment gap. *Consultant*, 46, 1149–1152.
- Smetanin, P., Kobak, P., Briante, C., Stiff, D., Sherman, G., & Ahmad, S. (2009). *Rising tide: The impact of dementia in Canada in 2008 to 2038*. Toronto, ON: Risk Analytica.
- Tsasis, P. (2009). Chronic disease management and the home-care alternative in Ontario, Canada. *Health Services Management Research*, 22, 136–139.
- Van der Cammen, T. J., Simpson, J. M., Fraser, R. M., Preker, A. S., & Extton-Smith, A. N. (1987). The memory clinic: A new approach to the detection of dementia. *British Journal of Psychiatry*, 150, 359–364.
- Whitehead, C. (2007). The doctor dilemma in interprofessional education and care: How and why will physicians collaborate. *Medication Education*, 41, 1010–1016.
- Xyrichis, A., & Lowton, K. (2008). What fosters or prevents interprofessional team work in primary and community care? A literature review. *International Journal of Nursing Studies*, 45, 140–153.