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Multispecialty Interprofessional Team Memory Clinics: Enhancing Collaborative Practice and Health Care Providers' Experience of Dementia Care

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Résumé

Cette étude a examiné si le travail au sein d'une équipe interprofessionnelle multispecialisée (MINT) en cliniques de la mémoire a un impact sur les perceptions qu'ont les professionnels de la santé des défis, des attitudes et du niveau de collaboration associés à la prestation de soins pour les cas de démence. Les questionnaires ont été remplis par des membres de la clinique MINT avant le lancement de cette clinique et 6 mois après celui-ci. Au total, 228 questionnaires collectés avant et après la formation ont fait l'objet d'analyses paires. Selon les données recueillies six mois après le début du travail en cliniques MINT, une réduction significative a été observée dans le cadre de l'évaluation du niveau de défi pour divers aspects des soins reliés à la démence. Une augmentation significative a été remarquée concernant la fréquence à laquelle les répondants ont fait preuve d'enthousiasme, d'inspiration et de fierté dans leur travail clinique visant les cas de démence. L'évaluation du degré de collaboration lors de la prestation de ces soins s'est aussi améliorée. La présente étude clarifie l'effet des approches collaboratives et interprofessionnelles sur la perception qu'ont les professionnels de la santé des défis et des attitudes associés à la prestation de soins aux personnes atteintes de démence, ainsi que sur le niveau de collaboration d'autres professionnels de la santé.

Abstract

This study explored whether working within Multispecialty Interprofessional Team (MINT) memory clinics has an impact on health care professionals' perceptions of the challenges, attitudes, and level of collaboration associated with providing dementia care. Surveys were completed by MINT memory clinic members pre- and 6-months post-clinic launch. A total of 228 pre-and-post-training surveys were matched for analysis. After working in the MINT memory clinics for 6 months, there were significant reductions in mean ratings of the level of challenge associated with various aspects of dementia care, and significant increases in the frequency with which respondents experienced enthusiasm, inspiration, and pride in their work in dementia care and in ratings of the extent of collaboration for dementia care. This study provides some insights into the effect of collaborative, interprofessional approaches on health care professionals' perceptions of the challenges and attitudes associated with providing dementia care and level of collaboration with other health professionals.

Background

The complex behavioural, psychosocial, functional, and health sequelae associated with dementia make it a uniquely challenging condition to manage. As the condition progresses, neurodegeneration impacts cognition, mood, behaviour, and physical and social functioning, and can result in functional dependence and the need for full-time care (Patterson et al., 2001). Dementia increases the risk of motor vehicle accidents for those still driving, medication errors, financial difficulties, and getting lost, with the associated risk of severe injury and death (Rowe, Greenblum, & D'Aoust, 2012; Sternberg, Wolfson, & Baumgarten, 2000). Persons living with dementia have a higher burden of chronic disease, with significantly higher rates of co-morbid conditions related to frailty, medication use, and health service utilization, than older adults without dementia (Gill, Camacho, & Poss, 2011).

Family physicians typically refer up to 82 per cent of persons living with dementia to geriatric specialists for assessment and management (Pimlott et al., 2006). In Canada, these specialist

referral rates are unsustainable given the critical shortage of geriatricians (Hogan et al., 2012) and the increasing numbers of individuals with dementia (Smetanin et al., 2009). Primary care must therefore assume much greater responsibility for dementia care. However, several studies have concluded that physicians lack confidence in managing dementia and find it more difficult to manage than other chronic diseases and conditions (Harris, Chodosh, Vassar, Vickrey, & Shapiro, 2009; Turner et al., 2004). It is well documented that family physicians lack knowledge about dementia, particularly as related to cognitive screening, differentiating types of dementia, and recognizing early signs and symptoms of cognitive impairment (Chodosh et al., 2004; Dubois, Padovani, Scheltens, Rossi, & Dell'Agnello, 2016; Prins, Hemke, Pols, & Moll van Charante, 2016) with the result that dementia often goes unrecognized (Bradford, Kunik, Schulz, Williams, & Singh, 2009; Feldman et al., 2008). Once dementia is diagnosed, primary care often lacks the resources needed to provide the comprehensive care required for the optimal management of this condition (Callahan, Hendrie, & Tierney, 1995). Challenges experienced in providing dementia care have been associated with health care provider burnout (Duffy, Oyeboode, & Allen, 2009; Kimura, Tamoto, Kan-zaki, & Shinchi, 2011).

Multidisciplinary care approaches and inter-agency partnerships for dementia care provide a significant opportunity to ameliorate the challenges that are associated with dementia care (Crooks & Geldmacher, 2004; Johansson, Eklund, & Gosman-Hedstrom, 2010; Pratt, Clare, & Kirchner, 2006; Venohr et al., 2001). In particular, interprofessional approaches are aptly suited for dementia care, because the complex nature of patient and care partner biopsychosocial needs requires the input and expertise of a range of health care professionals. No one discipline has the expertise to singlehandedly manage the complex medical, cognitive, physical, and psychosocial issues associated with this disease (Grand, Caspar, & Macdonald, 2011). A randomized controlled trial comparing dementia care provided by a multidisciplinary collaborative team (led by a family physician and a geriatric nurse practitioner and consisting of geriatric specialists and psychologists) with non-collaborative care provided by a single provider found that collaborative care was associated with better treatment and better outcomes related to behavioural and psychological symptoms (Callahan et al., 2006). Other studies have demonstrated that collaborative team approaches to dementia care are associated with improved quality of care, adherence to best practice guidelines (Ganz et al., 2010; Vickrey et al., 2006), and patient satisfaction with care (Galvin, Valois, & Zweig, 2014; Lee, Hillier, Heckman, et al., 2014; Lee, Slonim, Hillier, Lu, & Lee, 2018). One such collaborative team approach to dementia care is the Multispecialty Interprofessional Team (MINT) memory clinic care model (previously referred to as Primary Care Collaborative Memory Clinics) for which interprofessional team members are specially trained by having completed a comprehensive memory clinic training program in order to establish a memory clinic in their practice setting. This memory clinic will then serve the patients of all physicians in the practice group.

In Ontario, MINT memory clinics, of which there are currently more than 100, aim to build capacity for quality dementia care at a primary care level, while making efficient use of limited available specialist resources (Lee, Hillier, Molnar, & Borrie, 2017). MINT memory clinics operate at a primary care level. The clinics are led by family physicians, and at a minimum consist of trained family physicians, nurses, and social workers, but most frequently include other professionals such as pharmacists, occupational therapists,

and representatives from local Alzheimer Societies and home care services, as available. Geriatricians, geriatric psychiatrists, and cognitive neurologists provide consultative support to these clinics for the most complex of cases. The patient's own family physician refers persons with memory concerns or identified challenges in dementia care (e.g., managing medications, caregiver burden, or behaviours) to the MINT memory clinic for comprehensive assessment and care planning, and ongoing care in a shared-care approach.

All patients receive a standardized assessment in which they are assessed by various team members during the same appointment time. Prior to the appointment, patients and caregivers are mailed forms that need to be completed and brought with them to the assessment appointment. These forms include the Functional Activities Questionnaire (Teng et al., 2010) and requests for information on medical, psychiatric, educational, and family history. As part of the team assessment, the MINT memory clinic family physician reviews medical information and completes a targeted physical examination as clinically indicated. Laboratory tests and diagnostic imaging (e.g., cranial computed tomography or magnetic resonance imaging) are ordered as relevant. The team nurse reviews patient information forms; obtains detailed medical and social history; assesses gait quality, weight, and orthostatic vital signs; administers cognitive tests; and completes brief language screening when indicated. The social worker assesses for depression, caregiver stress, behaviours, and risks associated with living with dementia using standardized assessments. The social worker also assesses the need for a home safety assessment and community supports. The team pharmacist reviews patient ability to manage medications and adherence, impact of medications on cognition, and potential for medication-related problems. In many clinics, occupational therapists perform some aspects of the nurse and/or social worker role that are within scope of practice. Outside of the clinic assessment appointment, if needed, occupational therapists may conduct home functional abilities assessments and home safety assessments. Representatives from community agencies and services provide a gateway to their respective services where appropriate. Team members have included the Alzheimer Society, home care services (as provided in Ontario by Home and Community Care, a government agency responsible for the administration of home care services and long-term care placement), Behavioural Supports Ontario (a community-based program aimed at supporting persons living with dementia who are experiencing responsive behaviours), and/or existing geriatric outreach services depending on locally available resources.

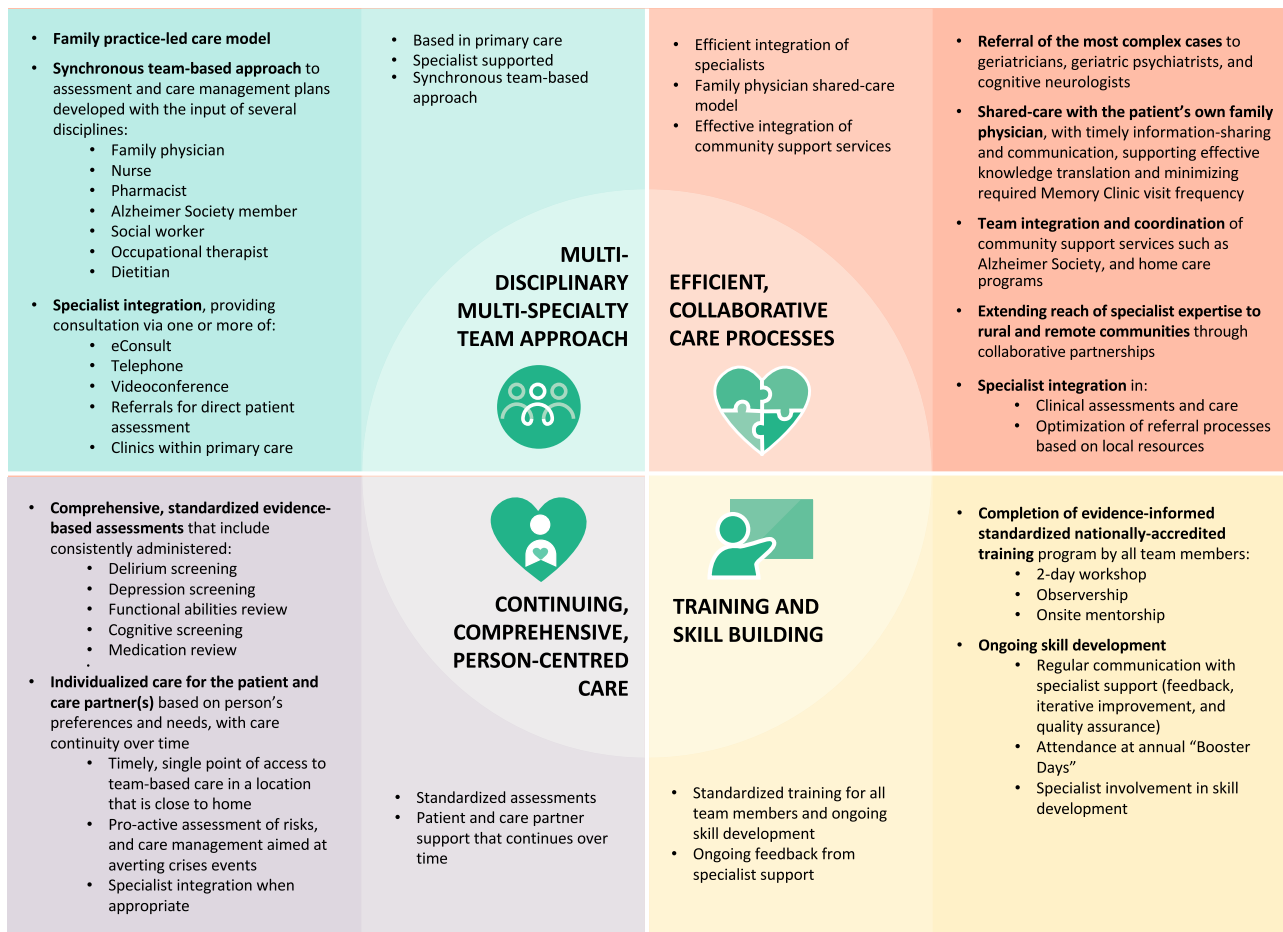
Following completion of the various assessments, all team members congregate to review results together and collaborate on preliminary problem formulation and management plan. A decision is made as to whether the complexity of the case requires consultation with one of the specialists supporting the clinic or a direct referral. While the team is meeting, patients and family members wait in a separate room and are offered refreshments. After the team has met, they meet all together with the patient and family members to clarify history and/or the need for further assessment, review findings and diagnosis, and together determine a plan of investigation and management. Immediately following the assessment, the team physician sends a brief message to the referring family physician summarizing the outcome of the assessment and recommendations. When needed, the MINT memory clinic physician consults with a specialist in geriatric medicine, geriatric psychiatry, or cognitive neurology, either by virtual case discussion or by direct patient referral. Post-assessment,

arrangements are made for investigations, medication modifications, and community support and services, as relevant. Follow-up is arranged with the patient's family physician and the MINT memory clinic at appropriate time intervals, depending on patient and caregiver needs and risks identified. A comprehensive report is prepared by the MINT memory clinic family physician to help referring physicians co-manage dementia care. This report outlines the history, cognitive test findings, assessment results, and detailed management plans. Ongoing management support is provided by the clinic team to the referring physician as well as to the patient and family.

The MINT memory clinic model differs from other specialist-led memory clinic care models operating in tertiary care settings, hospital-based specialized geriatric services or specialized psychiatry services, and geriatric research centres that operate at arm's length from primary care and that focus on providing a consultation service with minimal provision of ongoing patient care (Jolley, Benbow, & Grizzell, 2006; Luce, McKeith, Swann, Daniel, & O'Brien, 2001; Van der Cammen, Simpson, Fraser, Preker, & Exton-Smith, 1987). The MINT memory clinic care model is summarized in Figure 1 and is described in more detail elsewhere (Lee *et al.*, 2010; Lee & Hillier, 2016; Lee, Hillier, Molnar, *et al.*, 2017; Lee, Slonim, Hillier, *et al.*, 2018; Lee, Hillier, & Weston, 2014). MINT memory clinics work with the patient's own family physician within a shared care management approach; proactive care

plans help primary care provide high-quality dementia care. Aimed at providing comprehensive and patient-centred care, assessments within the memory clinic range in length from 1.4 hours for follow-up appointments to 2 hours for new assessments. This time commitment is in great contrast to the limited time that family physicians are able to provide within the context of typical busy family practice (Lee *et al.*, 2010; Lee, Hillier, Heckman, *et al.*, 2014). Within this synchronous team-based care model, all team members work in a coordinated manner to complete the assessment at the same visit and then work collaboratively to formulate a diagnosis and develop an integrated, individualized, and person-centred care plan. This differs from typical multidisciplinary approaches in which the patient is assessed by health care professionals from different disciplines at separate visits and each professional develops a separate care plan that may result in minimal, if any, integration of the services or the different disciplines involved.

Throughout the course of the illness, MINT memory clinic members work with the patient's own family physician to ensure that changing care needs are identified and met, such as optimizing medication use, identifying and managing risks, coordinating necessary community services, and managing specific issues that arise, such as responsive behaviours and escalating care needs. This team-based case management facilitates greater collaboration among care providers as team members work together to



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Figure 1. MINT memory clinics: Core components and implementation details.

determine how best to meet patient needs (Salsbury et al., 2018). Team-based approaches to case management are in contrast to individual case management, which involves coordination of care by an individual case manager. This type of case management is commonly used in dementia care and has been touted as an opportunity to provide persons living with dementia and their caregivers with information, individualized support, advocacy, and care planning and coordination to improve care and reduce health service utilization and costs (Callahan et al., 2006; Iliffe et al., 2019; Van Mierlo, Meiland, Van Hout, & Droes, 2014; Vickrey et al., 2006; Walsh & Holton, 2008). However, it has been suggested that individual case management may be cost prohibitive in some jurisdictions and may be limited in that it operates outside of the patient's primary care circle, potentially fragmenting care as a result of the high turnover rate in dementia care case managers (Fortinsky, Kulldorff, Kleppinger, & Kenyon-Pesce, 2009; Netting & Williams, 1999).

MINT memory clinics are established following completion of a 5-day nationally accredited interprofessional education program. The program is delivered by members of the Centre for Family Medicine Family Health Team MINT Memory Clinic, in Kitchener, Ontario, which founded the first memory clinic in the province. Practice settings interested in developing a memory clinic select interested team members representing the various disciplines to work in the memory clinic, all of whom must complete the specialized training program. Practice settings without integrated interprofessional health care providers can create multidisciplinary teams through the development of partnerships with community agencies and services (Lee, Hillier, & Gregg, 2019). Funding for the training has come from various sources over time including research agencies, non-profit organizations, and government agencies.

The training program consists of a standardized 2-day workshop, 1-day observership, and 2 days of individualized mentorship (Lee, Kasperski, & Weston, 2011; Lee, Weston, & Hillier, 2013). A variety of topics related to dementia care are covered regarding the development and implementation of the MINT memory clinic care model, including how to implement standardized testing; assessment of driving fitness; assessment and management of mood, risk, and caregiver stress; medication optimization; non-pharmacological interventions; and communication with patients and families. Training also focuses on how to schedule and manage clinic flow and work collaboratively to complete the assessment. This evidence-based education program is rooted in current adult learning theory. The program supports active engagement of learners, role-modelling, situated learning experiences (i.e., learning occurs in the environment in which new knowledge is to be applied), and opportunities to apply new learning in practice (Mann, 2002; Yardley, Teunissen, & Dornan, 2012). Following completion of the workshop, new clinic teams spend a day watching the training team conduct assessments. Clinic teams are then mentored over 2 days as they conduct assessments with the training team observing and providing advice and guidance. Annual continuing education sessions ("Booster Days") provide ongoing opportunities for capacity building, support, and networking (Lee, Hillier, & Weston, 2020). Several studies have demonstrated the effectiveness of this training program in establishing MINT memory clinics and changing clinical practice related to dementia assessment and management (Lee et al., 2011, 2013; Lee, Hillier, Heckman, et al., 2014).

There is some evidence that collaborative care approaches, such as the MINT memory clinic care model, result in enhanced health care provider satisfaction with their work (Barrett, Curran, Glynn,

& Godwin, 2007; DiCenso et al., 2010; Gaboury, Lapierre, Boon, & Moher, 2011), increased awareness and understanding of the roles and scope of practice of other disciplines (Farris et al., 2004), and improved working relationships (O'Brien, Martin, Heyworth, & Meyer, 2009). In general, little is known about whether collaborative interprofessional approaches to dementia care reduce the perceived challenges or impact attitudes associated with providing dementia care. Does working within an interprofessional collaborative care model impact the perception of challenges associated with dementia care, enthusiasm for dementia care, or perceptions of having a positive impact on the quality of life of persons living with dementia? Although enthusiasm and passion for dementia care have been identified as requisites for working in this field (Evans et al., 2015), to the best of our knowledge, no research has been conducted in this area. The need to improve health care provider experience of care is evidenced by calls to modify the Institute of Healthcare Improvement's Triple Aim approach to optimizing health system performance to a Quadruple Aim, which would include work life experiences as a system performance indicator (Bodenheimer & Sinsky, 2014; Sikka, Morath, & Leape, 2015). Enhancing our understanding of the role of collaborative care approaches on perceived challenges and attitudes towards dementia care will serve to inform efforts to improve health care provider care experiences and to provide further support for the implementation of these types of care models.

The purpose of this study was to explore whether working within an interprofessional collaborative model of dementia care has an impact on health care professionals' perceptions of the challenges and attitudes associated with providing dementia care and the level of collaboration among health professionals. This study explored collaborative dementia care within the context of MINT memory clinics (Lee, Hillier, Molnar, et al., 2017).

Methods

Participants

Participants for this study were memory clinic training program participants ($n = 595$) who completed the training program (workshop, observership day, and mentorship components) between September 2014 and January 2018. The program was delivered 21 times during this time period. Participants were either trained to establish 49 new MINT memory clinics located in Family Health Teams and Community Health Centres or completed the training program to join existing memory clinics. Training program participants included physicians, registered nurses, registered practical nurses and nurse practitioners, and allied health professionals, including social workers, pharmacists, occupational therapists, and various other disciplines including dietitians, physician assistants, Alzheimer Society representatives, mental health counsellors, and representatives from home care services and Behavioural Supports Ontario.

Pre-Program and Follow-up Surveys

We used a survey methodology in this study, specifically developing surveys for this study. The pre-program survey gathered information on participants' perceptions of 11 common challenges experienced in various aspects of supporting persons living with dementia (rated on a 5-point scale: 1 = not at all challenging; 5 = extremely challenging). These challenges had been raised in discussions with previous training program participants and are

supported by the literature in this area (Boustani, Schubert, & Sennour, 2007; Harris *et al.*, 2009; Hinton *et al.*, 2007; Kaplan & Berkman, 2011). Respondents were also asked to rate the extent to which their care of patients with dementia in the previous 6 months had been collaborative (defined as involving frequent interactions and knowledge exchanges) with various disciplines involved in dementia care (rated on a 5-point scale: 1 = not at all collaborative; 5 = extremely collaborative). For questions related to dementia care challenges and collaboration with various disciplines, respondents were provided with a “not applicable” response choice. Respondents also rated the extent to which they thought they were able to have a positive impact on the quality of life of their patients living with dementia (5-point scale: 1 = not at all able; 5 = extremely able). This item was presented in a study using a 6-point Likert scale (Harris *et al.*, 2009) and was modified in this study to be a 5-point scale. Five-point Likert scales are used in this study because they are commonly used to measure health-related perceptions and attitudes (Ho, 2017). Five-point scales are simple to construct, easy to administer, and easily understood, and interpreting the results is straightforward (Ho, 2017; Murphy & Davidshofer, 2001).

Health provider attitudes toward dementia care were derived from the Utrecht Work Engagement Scale, a measure of work engagement and fulfillment (Schaufeli, Bakker, & Salanova, 2006). Question wording from this scale was modified from reference to “my job” to “my work with persons living with dementia”. Respondents rated how often (never; almost never = a few times a year or less; rarely = once a month or less; sometimes = a few times a month or less; often = once a week; very often = a few times a week; or always = every day) they felt enthusiastic about their work with persons living with dementia, felt that their work with persons living with dementia inspired them, and felt proud of the work that they do with persons living with dementia.

Emotional energy experienced by health professionals is considered a motivating force for establishing and maintaining therapeutic relationships; lack of emotional energy in this role has been associated with compassion fatigue and care provider burnout (Cocker & Joss, 2016; Figley, 2002; Shimazu & Schaufeli, 2008; van Mol, Kompanje, Benoit, Bakker, & Nijkamp, 2015). Based on this concept, we created a “battery” analogy to measure level of energy for dementia care (energized vs. drained), as dementia care can often be empowering, but at other times can be rather depleting. Respondents were asked to select the “battery level” (completely drained, 20%, 40%, 60%, 80%, completely energized) that most accurately reflected their energy levels associated with working with persons living with dementia during the previous 6 months. In the pre-program survey, respondents were asked to identify their discipline from a list provided; they were also given an “other” response choice in which to specify their discipline. They were also asked to provide the number of years that they have been employed in their current profession.

Questions presented in the pre-program survey were repeated in the follow-up survey. The surveys were pilot tested with four health professionals working in a MINT memory clinic with representation from various health disciplines. Pilot data were not retained for inclusion in this study. Revisions were made to the survey consistent with feedback received; revisions were made primarily to clarify wording. MINT memory clinic training program participants were invited to complete a survey prior to the training workshop. Follow-up surveys were administered 6 months following the launch of the newly established MINT memory clinics. For those participants joining existing memory clinics, the survey was administered 6 months following the completion

of the training program. Both surveys were administered online (www.surveymonkey.com). Participants received an invitation to complete each survey via e-mail, in which a link to the survey was provided. Participants were provided with a 2-week time period in which to complete the surveys and were provided with two reminders via e-mail. Survey completion was anonymous. Participants created their own unique identification code that was used to match pre-program and follow-up surveys for analysis.

This study was approved by the Hamilton Integrated Research Ethics Board, McMaster University (REB #13-266).

Data Analysis

SPSS 25.0 (IBM Corp, 2018) was used to generate descriptive statistics (frequencies, means, standard deviations). We matched pre-program and follow-up surveys so that differences at an individual level could be examined. Survey matching was not possible in some instances in which respondents did not complete one of the surveys or failed to provide their identification code on one of the surveys. We explored differences between the pre-program and follow-up survey ratings of the challenges, attitudes, and level of collaboration associated with providing dementia care using two-tailed paired *t* tests. Differences in these outcome ratings and years in current profession among groups (physicians, nurses, and allied health professions and between those trained to establish new memory clinics and those trained to join existing clinics) were explored using non-parametric analysis of variance (Kruskal-Wallis Test). Where relevant, post-hoc pairwise comparisons using the Dunn-Bonferroni post-hoc method were used to test for differences in means between groups (Dunn, 1961). Between-discipline analyses were conducted between physicians, nurses, and allied health professionals. Given the lower number of individuals representing various disciplines such as social workers, pharmacists, occupational therapists, counsellors, and dietitians, these disciplines were grouped together as allied health professionals. For the purposes of describing the sample, nurses and social workers employed by the Alzheimer Society were differentiated from those employed by the primary care practice setting.

Given a desired statistical power level of 0.95, we required a sample size of 103, assuming a moderate effect size of 0.5. Power analysis was conducted using the G*Power 3.1 program (Faul, Erdfelder, Lang, & Buchner, 2007). Cohen's d_z was calculated to measure the effect size of observed differences between pre-program and follow-up survey outcome scores (Cohen, 1965); $d = 0.2$ was interpreted as a small effect size, 0.5 was interpreted as a medium effect size, and 0.8 was interpreted as a large effective size (Lakens, 2017). In Cohen's d_z the numerator is the mean difference within subjects and the denominator is the standard deviation of the within-subject change scores, making it appropriate to use with a within-subjects design (Cohen, 1988). The Bonferroni adjustment method (Chen, Feng, & Yi, 2017) was used to control for familywise error rate; accordingly, significance for *p* values was set at < 0.002 . Pearson's correlation coefficient was used to measure the association between perceptions of ability to impact positive change in patients' quality of life and perceptions of enthusiasm, inspiration, pride, and energy level for dementia care.

Results

A total of 552 pre-program surveys were completed, representing a 93 per cent response rate; 247 follow-up surveys were completed (44% response rate), of which 228 (92%) could be matched with

pre-program surveys. Survey respondent characteristics are presented in Table 1. For matched pre-program and follow-up surveys, there was a relatively even distribution across the three discipline groups. In the matched survey sample ($n = 228$), the mean number of years in their current profession across all respondents was 12.6 years. In this sample, years in practice did not vary significantly ($p = 0.143$) among the three discipline groups. In the pre-program survey sample ($n = 552$), mean years in the current profession was significantly lower for allied health professionals (mean = 9.1) than for physicians ($n = 12.9$) and nurses ($n = 12.1$), $p = 0.001$.

As there were no significant differences in study outcomes among disciplines, or between those trained to establish new memory clinics and those trained to join existing clinics, results are presented across all respondents.

Challenging Aspects of Dementia Care

Prior to completing the memory clinic training program, mean ratings (on a scale of 1–5) of the level of perceived challenge associated with various aspects of dementia care ranged from 2.3

(developing a therapeutic alliance with caregivers and working collaboratively with other health professionals) to 3.6 (timely access to specialist support), reflecting that these activities were “a little” to “very” challenging (Table 2). At follow-up, mean challenge ratings (on a scale of 1–5) across the dementia care activities ranged from 1.8 (working collaboratively with other health care professionals) to 2.8 (access to specialist support), reflecting that these activities were now “a little” to “somewhat” challenging. Across all activities, there were statistically significant reductions in perceived level of challenge from pre-program to follow-up, with the exception of delivering bad news ($p = 0.054$). Effect sizes were moderate for managing the needs of persons living with dementia and caregivers, and for timely access to specialist support and community services, but were otherwise small.

Attitudes Towards Dementia Care

Prior to completing the memory clinic training program, mean ratings (on a scale of 1–7) of the frequency with which respondents experienced enthusiasm, inspiration, and pride in their work in

Table 1. Survey respondent characteristics

Characteristics	Pre-Program Survey ($n = 552$)	Follow-up Survey ($n = 247$)	Matched Pre-Program and Follow-up Surveys ($n = 228$)
Discipline, n (%)			
Family physicians	142 (25.7)	76 (30.8)	70 (30.7)
Nurses ^a	200 (36.2)	70 (28.3)	69 (30.3)
Nurses – Alzheimer Society Representatives ^b	14 (6.5)	14 (20.0)	6 (8.6)
Registered nurses	109 (54.5)	42 (60.0)	37 (53.6)
Registered practical nurses	20 (10.0)	2 (2.9)	7 (10.1)
Nurse practitioners	57 (28.5)	20 (28.6)	19 (27.5)
Allied health professionals ^c	208 (37.7)	101 (40.9)	89 (39.0)
Social workers	56 (26.9)	23 (22.7)	22 (24.7)
Social workers – Alzheimer Society	34 (16.3)	18 (17.8)	15 (16.8)
Pharmacists	44 (21.1)	21 (20.7)	20 (22.4)
Occupational therapists	29 (13.9)	12 (11.8)	11 (12.3)
Occupational therapists – Alzheimer Society	2 (0.9)	1 (0.9)	1 (1.1)
Counsellors	8 (3.8)	3 (2.9)	3 (3.3)
Dietitians	7 (3.3)	5 (4.9)	5 (5.6)
Alzheimer Society representatives – discipline unspecified	23 (11.0)	15 (14.8)	10 (11.2)
Other ^d	5 (2.4)	3 (2.9)	2 (2.2)
Unspecified discipline	2 (0.3)	0	0
Mean years in current profession (SD)			
Physicians	12.9 (10.7) ($n = 141$)	NA	14.2 (11.2) ($n = 69$)
Nurses ^a	12.1 (11.1) ($n = 196$)	NA	13.2 (11.8) ($n = 68$)
Allied health professionals	9.1(9.2) ($n = 207$)	NA	10.8 (10.1) ($n = 89$)
All disciplines	11.1 (10.4) ($n = 544$)	NA	12.6 (11.0) ($n = 226$)

Note. Percentages may not sum to 100% because of missing values.

^aRegistered nurse/ registered practical nurse/ nurse practitioner; percentages specified for nurses who were Alzheimer Society representatives are based on the total number of nurses for each of the surveys.

^bPercentages are based on the total number of nurses for each of the surveys.

^cPercentages are based on the total number of allied health professionals for each of the surveys.

^dOther disciplines included: Exercise physiologists, physical therapists, physician assistants, and speech-language pathologists.

SD, standard deviation.

Table 2. Pre-program and follow-up survey mean (SD) ratings of the level of challenge (5-point rating scale: 1 = not at all challenging; 5 = extremely challenging) associated with various aspects of dementia care

Challenging Aspects of Dementia Care	Pre-Program Mean (SD)	Follow-up Mean (SD)	<i>p</i>	Cohen's <i>d_z</i>	Pre-Survey NA Responses ^a <i>n</i> (%)	Follow-up NA Responses ^a <i>n</i> (%)
Developing a therapeutic alliance with persons with dementia (<i>n</i> = 204) ^b	2.8 (0.95)	2.4 (0.86)	0.001	0.314	12 (5.3)	13 (5.7)
Developing a therapeutic alliance with caregivers of persons with dementia. (<i>n</i> = 208)	2.3 (0.87)	2.0 (0.84)	0.001	0.292	10 (4.4)	13 (5.7)
Working collaboratively with other health care professionals involved in dementia care. (<i>n</i> = 212)	2.3 (1.0)	1.8 (0.96)	0.001	0.384	12 (5.3)	5 (2.2)
Working collaboratively with community agencies involved in dementia care. (<i>n</i> = 196)	2.6 (0.98)	2.1 (0.98)	0.001	0.409	24 (10.5)	11 (4.8)
Delivering "bad news" (e.g., diagnosis of dementia, driving concerns). (<i>n</i> = 130)	3.3 (1.0)	3.0 (.98)	0.054	NA ^c	68 (29.8)	50 (21.9)
Managing the needs of persons with dementia within your current practice setting. (<i>n</i> = 193)	3.1 (0.96)	2.6 (0.85)	0.001	0.458	18 (7.9)	15 (6.6)
Managing the needs of caregivers within your current practice setting. (<i>n</i> = 200)	3.1 (0.94)	2.5 (0.86)	0.001	0.526	15 (6.6)	16 (7.0)
When needed, timely access to community agency support for persons with dementia and their caregivers. (<i>n</i> = 189)	3.5 (1.1)	2.8 (0.99)	0.001	0.564	29 (12.7)	14 (6.1)
When needed, timely access to specialist support for persons with dementia. (<i>n</i> = 170)	3.6 (1.1)	2.8 (1.1)	0.001	0.529	39 (17.1)	32 (14.0)
Establishing and maintaining a positive relationship with persons with dementia. (<i>n</i> = 210)	2.5 (0.99)	2.1 (0.83)	0.001	0.325	11 (4.8)	10 (4.4)
Supporting patients who may not adopt a "sick role"; e.g., persons with dementia who have difficulty understanding/ accepting their illness. (<i>n</i> = 202)	3.2 (1.0)	2.7 (0.91)	0.001	0.344	14 (6.1)	15 (6.6)

Note. ^aPercentages are based on *n* = 228 (matched pre- and follow-up surveys).

^b*ns* within parentheses represent the number of respondents completing each item.

^cNA Cohen's *d* was not calculated because difference is not statistically significant.

SD = standard deviation; NA = not applicable, if the activity was considered beyond the scope practice.

Table 3. Pre-program and follow-up survey mean ratings (SD) of various attitudes towards dementia care, *n* = 228

	Pre-Program Mean (SD)	Follow-up Mean (SD)	<i>p</i>	Cohen's <i>d_z</i>
I am enthusiastic about my work with persons with dementia and their caregivers. ^a (<i>n</i> = 220) ^b	5.2 (1.3)	5.8 (1.0)	0.001	0.472
My work with persons with dementia and caregivers inspires me. ^a (<i>n</i> = 220)	5.0 (1.3)	5.7 (1.1)	0.001	0.504
I am proud of the work that I do with persons with dementia and their caregivers. ^a (<i>n</i> = 219)	5.2 (1.3)	5.9 (1.0)	0.001	0.508
In your current practice setting, to what extent do you think you are able to have a positive impact on the quality of life of your patients with dementia and their caregivers? ^c (<i>n</i> = 180)	3.4 (.82)	3.8 (.64)	0.001	0.475

Note. ^a7-point rating scale: 1 = never; 2 = almost never (a few times a year or less); 3 = rarely (once a month or less); 4 = sometimes (a few times a month or less); 5 = often (once a week); 6 = very often (a few times a week); 7 = always (every day).

^bNumbers in parentheses represent the number of respondents completing each item.

^c5-point scale: 1 = not at all able; 5 = extremely able.

SD = standard deviation.

dementia care ranged from 5.0 to 5.2, reflecting that these were experienced "often" (at least once a week) (Table 3). At follow-up, mean ratings ranged from 5.7 to 5.9, reflecting that these were now experienced "very often" (several times a week). From pre-program to follow-up, there were statistically significant increases in the frequency with which participants experienced enthusiasm, inspiration, and pride in their work in dementia care; the effect sizes were moderate. Similarly, from pre-program to follow-up there was a significant increase in the extent to which respondents perceived themselves as being able to have a positive impact on the quality of life of their patients and caregivers; the effect size was moderate (Table 3). Related to the level of energy that respondents

experienced for dementia care, prior to completing the memory clinic training program, mean ratings (ranging from 0%, completely drained to 100%, completely energized) of "battery level" (39.6%) reflected that respondents felt relatively drained by their work in dementia care (Figure 2). At follow-up, mean energy ratings (69.1%) were significantly increased (*p* = 0.001), indicating that participants were more energized to provide dementia care and a large effect size was observed (*d* = 0.980). All of these variables are positively correlated, so that as perceptions of ability to have a positive impact on the quality of life of patients increased, so did perceptions of enthusiasm, inspiration, pride, and energy levels (Table 4).

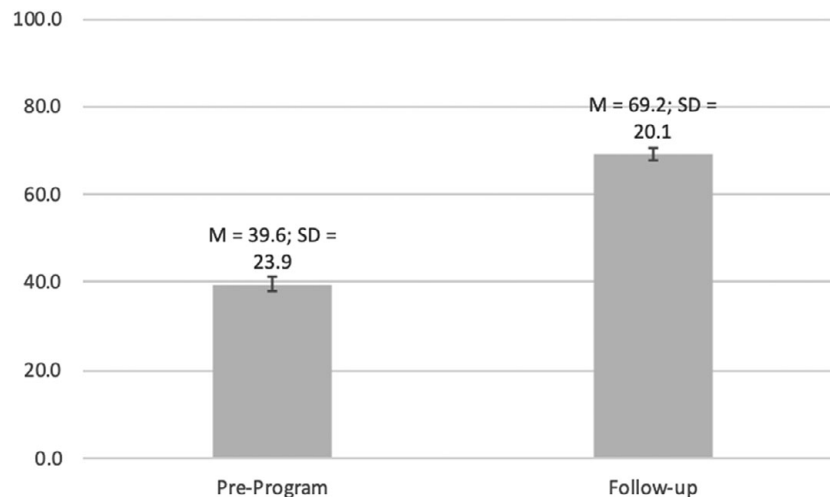


Figure 2. Mean ratings of level of energy for dementia care ($n = 221$). 0 = completely drained; 100% = completely energized.

Table 4. Correlations between perceptions of ability to have a positive impact on the quality of life of patients and perceptions of enthusiasm, inspiration, pride, and energy level for dementia care, $n = 228$

Variables	1	2	3	4	5
1. Ability to have a positive impact of quality of life	1.0				
2. Enthusiasm for dementia care	0.507 ^a	1.0			
3. Feeling inspired by dementia care	0.532 ^a	0.849 ^a	1.0		
4. Feeling proud of work dementia	0.581 ^a	0.806 ^a	0.833 ^a	1.0	
5. Energy level	0.324 ^a	0.190 ^a	0.164 ^b	0.180 ^b	1.0

Note. ^a $p < 0.01$

^b $p < 0.05$

Level of Collaboration in Dementia Care

Prior to completing the memory clinic training program, mean ratings (on a scale of 1–5) of level of collaboration (defined as involving frequent interactions and knowledge exchanges) with various disciplines involved in dementia care ranged from somewhat collaborative for work with Behavioural Supports Ontario representatives (2.6) to very collaborative for work with nurses (3.9; see Table 5). At follow-up, mean ratings of level of collaboration with various disciplines involved in dementia care ranged from somewhat collaborative for work with Behavioural Supports Ontario representatives (2.8) and home care case managers (2.9) to extremely collaborative with nurses (4.5), social workers (4.5), and Alzheimer Society representatives (4.5). At follow-up, mean ratings of level of collaboration across all the disciplines, with the exception of home care case managers and Behavioral Supports Ontario representatives, were significantly increased, reflecting that respondents perceived more frequent interactions and knowledge exchanges with these disciplines for dementia care. Effect size was largest for collaboration with Alzheimer Society representatives, moderate for social workers and occupational therapists, and otherwise small for other disciplines.

Discussion

This study demonstrated that working in an interprofessional collaborative model of dementia care can positively impact health professionals' perceptions of the challenges and attitudes

associated with providing dementia care and can improve collaboration among health providers in providing dementia care. Through their work in the MINT memory clinic model, participants perceived improved collaboration with community care supports (Alzheimer Society) and other health care professionals involved in dementia care. They also found it less challenging to provide most aspects of dementia care, perhaps because of increased and meaningful collaboration among interprofessional team members and the team-based case management approach used in this care model. Lastly, working within the MINT memory clinic model was associated with improved attitudes towards dementia care. Participants experienced increased enthusiasm, inspiration, pride, and energy for dementia care, and felt that they were better able to have a greater impact on quality of life of persons living with dementia and their caregivers. These findings are consistent with those of a phenomenological study exploring MINT memory clinic team member experiences with the provision of dementia care (Sheiban, Stolee, McAiney, & Boscart, 2018). In this study, team members described how working with others in this care model has led to personal and professional fulfillment, as it enabled them to have an important impact on the lives of persons living with dementia and found this work meaningful and motivating.

It is possible that some challenges associated with dementia care can be addressed by practice infrastructure supports and collaborative practice, as offered by the MINT memory clinic model. Working in a collaborative care model eases the challenges associated with working with other health professionals, community

Table 5. Mean (SD) ratings^a of the level of collaboration^b with various disciplines for dementia care, *n* = 228

Discipline/Role	Pre-Program Mean (SD)	Follow-up Mean (SD)	<i>p</i>	Cohen's <i>d_z</i>
Geriatric specialists (<i>n</i> = 127) ^c	2.9 (1.2)	3.5 (1.1)	0.001	0.428
Family physicians (<i>n</i> = 178)	3.7 (1.2)	4.1 (0.96)	0.001	0.285
Pharmacists (<i>n</i> = 153)	3.5 (1.3)	4.2 (1.1)	0.001	0.479
Nurses (<i>n</i> = 186)	3.9 (1.1)	4.5 (0.81)	0.001	0.391
Social workers (<i>n</i> = 177)	3.7 (1.1)	4.5 (0.74)	0.001	0.651
Occupational therapists (<i>n</i> = 114)	3.1 (1.4)	4.0 (1.3)	0.001	0.642
Alzheimer Society members (<i>n</i> = 145)	3.2 (1.5)	4.5 (0.81)	0.001	0.769
Home Care Case Managers (<i>n</i> = 148)	2.9 (1.1)	3.0 (1.2)	0.348	0.077
Behavioural Supports Ontario (<i>n</i> = 70)	2.6 (1.5)	2.8 (1.5)	0.463	0.088

Note. ^a5-point rating scale: 1 = not at all collaborative; 5 = extremely collaborative.

^bDefined as involving frequent interactions and knowledge exchanges with different care providers.

^cThe *n*s represent the number of matched pre-post ratings of level of collaboration for each discipline. SD = standard deviation.

agencies, and specialists more than it eases those associated with working directly with persons living with dementia and caregivers. This is evidenced by the smaller effect size of follow-up survey differences in challenge ratings associated with aspects of direct care with persons living with dementia and caregivers. Limited change in challenges related to delivering bad news and forming therapeutic alliances with persons living with dementia may reflect challenges in communication and social interactions with persons living with dementia and caregivers, such as their reaction to difficult news, particularly if it affects their autonomy, such as suspension of driving license privileges (Adams & Gardiner, 2005). No matter how well skilled health professionals become at delivering upsetting news, there are understandable negative reactions to bad news, no matter how well it is communicated. An important role for clinicians is to help patients ameliorate the suffering associated with bad news and its consequences (Rabow & McPhee, 1999).

Prior to completing the memory clinic training program and working within MINT memory clinics, participants perceived their interactions with their primary care colleagues (family physicians, pharmacists, nurses, social workers) as being moderately collaborative and their interactions with geriatric specialists and community-based services (Alzheimer Society, home care, Behavioural Supports Ontario) as being less collaborative. After working in the MINT memory clinics for 6 months, participants perceived their work in dementia care to be more collaborative, particularly with representatives from the Alzheimer Society, but also with their own primary care colleagues (social workers, pharmacists, occupational therapists). This is evidenced by the moderate to large effect sizes in differences in collaboration ratings at follow-up. The lower effect sizes in differences in level of collaboration with geriatric specialists, family physicians, and nurses suggests that more work needs to be done to support collaborations with these disciplines. The lack of change in collaboration with representatives from home care services and Behavioural Support Ontario may reflect the relative lack of integration of these roles within the primary care practice setting. Opportunities to better integrate these services into the MINT memory clinic care model, ensuring meaningful contributions to the assessment process and care planning, may facilitate more collaborative interactions with these services. Previous research has demonstrated higher levels of

involvement with community services when representatives from these services are fully integrated in the memory clinic as team members (Lee, Hillier, & Harvey, 2014; Lee, Lu, Hillier, Gregg, & Kaufman Carlin, 2019).

A number of factors likely contributed to increased collaboration in the MINT memory clinics and reduced perceptions of dementia care as challenging. These factors may include the inter-professional nature of the memory clinic training program, the efficient standardized processes within the MINT memory clinic care model, and the team-based case management approach. It is likely that the interaction of the training and clinical practice within this care model contributed to changes in collaboration for dementia care. Interprofessional education has been identified as a prerequisite for collaborative dementia care (Cartwright, Franklin, Forman, & Freegard, 2015; Dreier-Wolfgramm et al., 2017). A review of effective collaborative dementia care models highlighted the important role of interprofessional education in team-based approaches to facilitate collaborative care (Dreier-Wolfgramm et al., 2017). Learning together, health professionals develop shared goals for care and recognize each other's knowledge, skills, and roles and their unique contributions to dementia care, which facilitates an increase in mutual trust and better preparation to work collaboratively in clinical practice (Cartwright et al., 2015; Lee et al., 2013). Interprofessional education has been identified as a significant opportunity to build capacity for optimal, evidence-based dementia care; to foster early diagnosis; and to coordinate referrals to community services (Downs et al., 2006; Galvin et al., 2014; Iliffe et al., 2010). Evaluations of the MINT memory clinic training program and model of care have highlighted the importance of this interprofessional education training program to the establishment and implementation of the memory clinics (Lee et al., 2013; Lee, Hillier, Heckman, et al., 2014). The memory training program includes education on effective teamwork and supports team building by requiring team members to work together on case study presentations and encouraging members of each discipline to contribute to their full scope of practice. Observership opportunities with the interprofessional training team serve to model and reinforce collaborative processes and care. Promotion of collaborative values in education programs can facilitate interprofessional collaboration (San Martin-Rodriguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005). Moreover, at an

individual level, willingness to collaborate in a team, a shared interest in care of the elderly, and respect for the unique and complementary contributions of each discipline to dementia care have been identified as key to the successful implementation of the memory clinics (Lee, Hillier, Heckman, et al., 2014).

Collaboration within MINT memory clinics is facilitated by the structure of the clinics and clinic processes. Although the clinics are family physician led, there is a relatively flat hierarchy in which the physician is not necessarily the dominant decision maker. All team members work together to identify key issues and develop effective care plans to address identified issues. Limited power differentials, values that support collaborative practice over individualism, and interdependence among professionals are key to successful inter-professional collaboration in health care (San Martin-Rodriguez et al., 2005). Within the MINT memory clinic care model, all team members contribute to the success of the outcome and work at their maximum scope of practice. This serves to foster a synergistic method of working together. As a result, the burden of care may be less overwhelming and challenging for care providers than it is when they provide care independently, and they experience better satisfaction with the care that they provide.

The team-based case management approach used in the MINT memory clinic care model may also have contributed to improved collaboration and attitudes towards dementia care. There is generally a dearth of evidence on the effectiveness of team-based case management. Some evidence exists that suggests that this approach to case management results in high levels of patient satisfaction (Day et al., 2012), improved patient outcomes and reduced health service utilization (Aberg-Wistedt, Cressell, Lidberg, Liljenberg, & Osby, 1995), and increased job satisfaction, staff morale, and retention (Block, Wheeland, & Rosenberg, 2014). In contrast to individual case management approaches that tend to operate external to the patient's primary care circle (Van Mierlo et al., 2014; Walsh & Holton, 2008), a primary care team-based management approach leverages existing primary care infrastructure and uses the expertise and strengths of each discipline to support the varied medical, functional, and psychosocial needs of persons living with dementia and their caregivers. These oftentimes complex and interrelated needs may be best addressed by health care teams working collaboratively in a coordinated and integrated way to develop effective care plans that are holistic and not solely medical in focus (Day et al., 2012). In doing so, no one health care professional, is left feeling helpless in responding to complex issues and may indeed feel able to have a greater impact on improving patient care and quality of life. As demonstrated in this study, various aspects of dementia care were perceived as less challenging and team members had a more positive attitude towards dementia care after working in a collaborative team. An interprofessional team approach also serves to overcome challenges experienced by persons living with dementia and caregivers related to accessing information about dementia, knowledgeable care providers, and community services (Prorok, Hussain, Horgan, & Seitz, 2017). This is true of the MINT memory clinic model, as team members provide person-centred care for patient and caregiver dyads with care coordination and system navigation support offered throughout the disease process as needed (Lee, Hillier, et al., 2018).

This study has demonstrated how interprofessional team-based approaches to dementia care in which assessment and care are provided in a synchronous, coordinated and integrative manner can improve how health professionals work together to provide dementia care and how they feel about providing dementia care. Job dissatisfaction in dementia care has been associated with feeling

that one is unable to adequately manage dementia or have an impact on a person living with dementia and feeling unsatisfied with the quality of care provided (Vernooij-Dassen et al., 2009). In contrast, increased job satisfaction in dementia care has been associated with opportunities for skill development and training, personal growth, delivery of person-centred care and quality care, and confidence in one's ability to provide quality care (Drebing, McCarty, & Lombardo, 2002; Teri, Huda, Gibbons, Young, & van, 2005; Vernooij-Dassen et al., 2009). Similarly, it has been shown that perceptions of the meaningfulness of one's job impacts engagement in that job (May, Gilson, & Harter, 2004). Perceptions of the meaningfulness of one's job is associated with rewarding interactions with coworkers and, conversely, when jobs are perceived as meaningless, people are more likely to experience burnout and detach themselves from their work (May et al., 2004). Working to one's full potential and in service to others have also been associated with job meaningfulness (Lips-Wiersma & Wright, 2012). Moreover, working within a patient centered approach that emphasizes the psychosocial aspects of dementia care can reduce the care burden experienced by physicians, as less emphasis is placed on their role in curing disease and greater emphasis is placed on helping persons living with dementia to live well with their disease (Apesoa-Varano, Barker, & Hinton, 2011). All of these characteristics are consistent with the MINT memory clinic care model, which emphasizes person-centred care, working to full scope of practice, and collaboration (Lee, Hillier, Molnar, et al., 2017). It has been demonstrated that the MINT memory clinic training program provides a significant opportunity for building knowledge, skill, and confidence in dementia care (Lee et al., 2013) and for improving the quality of dementia care provided (Lee, Hillier, Heckman, et al., 2014). The results of this study suggest that the MINT memory clinic care model provides primary care with a more effective and enjoyable way of addressing a condition that is traditionally difficult to manage, and in doing so, provides personal satisfaction that may reach to the root of why clinicians chose a career in health care. Indeed, it was dissatisfaction with the limitations imposed in traditional models of primary care dementia care that inspired the development of the MINT memory clinic care model.

This study provides further evidence of the positive impacts associated with the MINT memory clinic model. This care model has demonstrated efficient use of limited specialist resources by freeing specialists and their teams to focus on the management of the most complex cases while MINT memory clinics manage the majority of cases of dementia that may be less complex (Lee et al., 2010; Lee, Hillier, Molnar, et al., 2017; Lee, Hillier, et al., 2018). There is also evidence of high levels of satisfaction among referring physicians (Lee & Hillier, 2016) and positive patient and care partner experience with care (Lee, Slonim, et al., 2018). Positive health system impacts have been demonstrated related to delayed time to first emergency department visit and hospitalization, reduced alternate level of care days, and delayed long-term care placement and associated cost savings (Health Innovations Group, 2019). Quality improvement in health care in Ontario is guided by the Quadruple Aim framework, which emphasizes the importance of improved patient experiences, better health outcomes, lower health care costs, and improved health care provider experience (Bodenheimer & Sinsky, 2014). The findings from this study demonstrate that the MINT memory clinic care model improved health professionals' experience of dementia care. Along with previously demonstrated improvements to patient experience of care (Lee, Slonim, et al., 2018) and outcomes (Lee, Hillier,

Heckman, et al., 2014; Lee, Hillier, Molnar, et al., 2017), and reduced health system costs (Health Innovations Group, 2019), this would suggest that the MINT memory clinic model is achieving the Quadruple Aim approach to optimizing health system performance (Bodenheimer & Sinsky, 2014).

Limitations

The outcome measures in this study were self-reported; therefore, the extent to which care is indeed collaborative, as defined by frequent interactions and information sharing between health professionals, is not known. Alternative methodologies, such as chart audits and observational studies to assess frequency and type of interactions between team members and coordination of care are needed to increase our understanding of the nature and extent of collaboration within interprofessional teams in comparison with usual care or alternative models of dementia care. The pre-post study design may have introduced a response bias resulting from a perceived need to report differences in the expected direction. This bias is likely minimal, as there were no incentives for bias, because survey questions were non-leading and responses were anonymous. More rigorous methodologies, such as randomized control trials or study designs that provide control or comparison groups would allow for more meaningful conclusions to be drawn about the impact of collaborative care models on attitudes towards dementia care, particularly in light of the low response rate for the follow-up survey (44%). Given this low response rate, the follow-up survey results may not be representative of all participants. Response rates for follow-up surveys in our previous studies have varied from 36 per cent (Lee, Hillier, Heckman, et al., 2014) to 67 per cent (Lee et al., 2013) with a median of 54% (Lee, Hillier, & Gregg, 2019). It is not entirely clear why follow-up survey response rates are low, but we suspect that this may reflect time constraints in busy family practice settings and low motivation to complete a survey for a program completed 6 months earlier. Low response rates for follow-up surveys are not unusual. A review of response rates for online follow-up surveys completed by health professionals found response rates ranging from 5 per cent to 62 per cent; response rates of 30–50 per cent were deemed “good”, and anything over 50 per cent, was deemed “excellent” (Silverman et al., 2018).

This study explored how attitudes towards dementia care are influenced by work within an interprofessional collaborative care model. Pre-survey attitudes towards dementia care were fairly positive, perhaps reflecting a selection bias in that participants of the MINT memory clinic training program were self-selected based on their interest in care of the elderly. Selection bias may also have influenced follow-up survey results if less engaged and less satisfied participants did not respond to the second survey. However, this was not the case, as there were no statistically significant differences in ratings of enthusiasm, inspiration, pride, or energy level in the pre-survey between those who responded to the follow-up and those who did not. Energy for dementia care was measured to gather a sense of health professionals’ experience with care. Energy level as a psychological construct has not, to the best of our knowledge, been studied as related to attitudes towards provision of health care. However, intuitively, it makes sense that when health professionals feel depleted, they will have a less positive experience with care, similar to the concept of burnout, which is characterized by pessimism, loss of enthusiasm for clinical work, and low feelings of accomplishment (Shanafelt et al., 2012).

Future Directions

As it could be argued that health professionals’ positive experience with care within the MINT memory clinic model could be attributed to greater time allotted for dementia care, more research is needed to understand the nuances of positive experience with care and how these are manifested in dementia care, both in interprofessional care models, such as the MINT memory clinic care model, and in non-team-based care models. More research is also needed on the collaboration between memory clinic physicians and the specialists assigned to support the clinics. Early research has revealed that clinic physicians and specialists value their collaboration for dementia care and desire more opportunities for collaboration (Lee, Hillier, Locklin, Lumley-Leger, & Molnar, 2019). Studies are currently underway to better understand the collaborative relationship between clinic physicians and specialists and how collaboration can be best fostered, supported, and sustained over time. More research is also needed on how team members work to the maximum scope of practice and synergistically together and how best to enhance and sustain positive attitudes towards dementia care over time. Generally, there is limited research on the role of interprofessional education on facilitating collaborative knowledge, skills, and practice (Jackson et al., 2016). More research is needed on how interprofessional education can facilitate interprofessional collaborative practice for dementia care.

Conclusion

There is an urgent need for models of dementia care that build system capacity and efficiency and that improve health care provider experience with care, leveraging the large infrastructure of primary care in Canada and other countries to better meet the needs of our aging population. The MINT memory clinic care model provides one such dementia care model. This study provides some insights into the effect of the MINT memory clinic interprofessional approach to dementia care on health care professionals’ perceptions of the challenges and attitudes associated with providing dementia care and level of collaboration with other health professionals. Interprofessional team-based approaches, such as the MINT memory clinic model, can foster and support optimal dementia care through synergistic and collaborative working relationships, and can foster positive attitudes toward dementia care. This in turn will promote positive patient and care partner experience with care, as their care team will be engaged to provide patient-centred and well-coordinated care.

References

- Aberg-Wistedt, A., Cressell, T., Lidberg, Y., Liljenberg, B., & Osby, U. (1995). Two-year outcome of team-based intensive case management for patients with schizophrenia. *Psychiatric Services*, *46*(12), 1263–1266.
- Adams, T., & Gardiner, P. (2005). Communication and interaction within dementia care triads. *Dementia*, *4*(2), 185–205.
- Apesoa-Varano, E. C., Barker, J. C., & Hinton, L. (2011). Curing and caring: The work of primary care physicians with dementia patients. *Qualitative Health Research*, *21*(11), 1469–1483.
- Barrett, J., Curran, V., Glynn, L., & Godwin, M. (2007). *Interprofessional collaboration and quality primary healthcare*. Ottawa: Canadian Health Services Research Foundation.
- Block, S. R., Wheeland, L., & Rosenberg, S. (2014). Improving human service effectiveness through the deconstruction of case management: A case study

- on the emergence of a team-based model of service coordination. *Human Services Organizations Management, Leadership and Governance*, **38**(1), 16–28.
- Bodenheimer, T., & Sinsky, C. (2014). From triple to quadruple aim: Care of the patient requires care of the provider. *Annals of Family Medicine*, **12**(6), 573–576.
- Boustani, M., Schubert, C., & Sennour, Y. (2007). The challenge of supporting care for dementia in primary care. *Clinical Interventions in Aging*, **2**(4), 631–636.
- Bradford, A., Kunik, M. E., Schulz, P., Williams, S. P., & Singh, H. (2009). Missed and delayed diagnosis of dementia in primary care. *Prevalence and contributing factors. Alzheimer Disease and Associated Disorders*, **23**(4), 306–314.
- Callahan, C. M., Boustani, M. A., Unverzagt, F. W., Austrom, M. G., Damush, T. M., Perkins, A. J., et al. (2006). Effectiveness of collaborative care for older adults with Alzheimer disease in primary care. A randomized controlled trial. *Journal of the American Medical Association*, **295**(18), 2148–2157.
- 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**(6), 422–429.
- Cartwright, J., Franklin, D., Forman, D., & Freegard, H. (2015). Promoting collaborative dementia care via online interprofessional education. *Australasia Journal on Ageing*, **34**(2), 88–94.
- Chen, S. Y., Feng, Z., & Yi, X. (2017). A general introduction to adjustment for multiple comparisons. *Journal of Thoracic Disease*, **9**(6), 1725–1729.
- Chodosh, J., Pettiti, D. B., Elliott, M., Hays, R. D., Crooks, V. C., Reuben, D. B., et al. (2004). Physician recognition of cognitive impairment: Evaluating the need for improvement. *Journal of the American Geriatrics Society*, **52**(7), 1051–1059.
- Cocker, F., & Joss, N. (2016). Compassion fatigue among healthcare, emergency and community service workers: A systematic review. *International Journal of Environmental Research and Public Health*, **13**(6), 618.
- Cohen, J. (1965). Some statistical issues in psychological research. In B. B. Wolman (Ed.), *Handbook of clinical psychology* (pp. 95–121). New York: McGraw-Hill.
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Crooks, E. A., & Geldmacher, D. S. (2004). Interdisciplinary approaches to Alzheimer's disease management. *Clinics in Geriatric Medicine*, **20**(1), 121–139.
- Day, C. A., Demirkol, A., Tynan, M., Curry, K., Hines, S., Lintzeris, N., et al. (2012). Individual versus team-based case-management for clients of opioid treatment services: An initial evaluation of what clients prefer. *Drug and Alcohol Review*, **31**(4), 499–506.
- DiCenso, A., Bourgeault, I., Abelson, J., Martin-Misener, R., Kaasalainen, S., Carter, N., et al. (2010). Utilization of nurse practitioners to increase patient access to primary healthcare in Canada—Thinking outside the box. *Nursing Leadership*, **23**(Spec No 2010), 239–259.
- Downs, M., Turner, S., Bryans, M., Wilcox, J., Keady, J., Levin, E., et al. (2006). Effectiveness of educational interventions in improving detection and management of dementia in primary care: Cluster randomized controlled study. *British Medical Journal*, **332**(7543), 692–696.
- Drebing, C., McCarty, E. F., & Lombardo, N. B. (2002). Professional caregivers for patients with dementia: Predictors of job and career commitment. *American Journal of Alzheimer's Disease and Other Dementias*, **17**(6), 357–366.
- Dreier-Wolfgramm, A., Michalowsky, B., Austrom, M. G., van der Marck, M. A., Iliffe, S., Alder, C., et al. (2017). Dementia care management in primary care: Current collaborative care models and the case for interprofessional education. *Zeitschrift für Gerontologie und Geriatrie*, **50**(2 Suppl), 68–77.
- Dubois, B., Padovani, A., Scheltens, P., Rossi, A., & Dell'Agnello, G. (2016). Timely diagnosis for Alzheimer's disease: A literature review on benefits and challenges. *Journal of Alzheimer's Disease*, **49**(3), 617–631.
- Duffy, B., Oyeboode, J. R., & Allen, J. (2009). Burnout among care staff for older adults with dementia. *Dementia*, **8**(4), 515–545.
- Dunn, O. J. (1961). Multiple comparison among means. *Journal of the American Statistical Association*, **56**(293), 52–64.
- Evans, S., Brooker, D., Thompson, R., Bray, J., Milosevic, S., Bruce, M., et al. (2015). Introduction to the transforming dementia care in hospitals series. *Nursing Older People*, **27**(6), 18–24.
- Farris, K. B., Cote, I., Feeny, D., Johnson, J. A., Tsuyuki, R. T., Brilliant, S., et al. (2004). Enhancing primary care for complex patients. Demonstration project using multidisciplinary teams. *Canadian Family Physician*, **50**, 998–1003.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, **39**(2), 175–191.
- Feldman, H. H., Jacova, C., Robillard, A., Garcia, A., Chow, T., Borrie, M., et al. (2008). Diagnosis and treatment of dementia: 2. Diagnosis. *Canadian Medical Association Journal*, **178**(7), 825–836.
- Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self-care. *Journal of Clinical Psychology*, **58**(11), 1433–1441.
- Fortinsky, R. H., Kulldorff, M., Kleppinger, A., & Kenyon-Pesce, L. (2009). Dementia care consultation for family caregivers: Collaborative model linking an Alzheimer's association chapter with primary care physicians. *Ageing and Mental Health*, **13**(2), 162–170.
- Gaboury, L., Lapierre, L. M., Boon, H., & Moher, D. (2011). Interprofessional collaboration within integrative healthcare clinics through the lens of the relationship-centered care model. *Journal of Interprofessional Care*, **25**(2), 124–130.
- Galvin, J. E., Valois, L., & Zweig, Y. (2014). Collaborative transdisciplinary team approach for dementia care. *Neurodegenerative Disease Management*, **4**(6), 455–469.
- Ganz, D. A., Koretz, B. K., Bail, J. K., McCreath, H. E., Wenger, N. S., Roth, C. P., et al. (2010). Nurse practitioner comanagement for patients in an academic geriatric practice. *American Journal of Managed Care*, **16**(12), e343–e355.
- Gill, S. S., Camacho, X., & Poss, J. W. (2011). Community-dwelling older adults with dementia. In S. E. Bronskill, X. Camacho, A. Gruneir, & M. M. Ho (Eds.), *Health system use by frail Ontario seniors: An in-depth examination of four vulnerable cohorts* (pp. 47–69). Toronto: Institute for Clinical Evaluative Sciences.
- Grand, J. H., Caspar, S., & Macdonald, S. W. (2011). Clinical features and multidisciplinary approaches to dementia care. *Journal of Multidisciplinary Healthcare*, **20**(1), 125–147.
- Harris, D. P., Chodosh, J., Vassar, S. D., Vickrey, B. G., & Shapiro, M. F. (2009). Primary care providers' views and challenges and rewards of dementia care relative to other conditions. *Journal of the American Geriatrics Society*, **57**(12), 2209–2216.
- Health Innovations Group. (2019). *Provincial evaluation of primary care collaborative memory clinics*. Toronto, ON: Author.
- Hinton, L., Franz, C. E., Reddy, G., Flores, Y., Kravitz, R. L., & Barker, J. C. (2007). Practice constraints, behavioral problems and dementia care: Primary care physicians' perspectives. *Journal of General Internal Medicine*, **22**(11), 1487–1492.
- Ho, G. W. (2017). Examining perceptions and attitudes. *Western Journal of Nursing Research*, **39**(5), 674–689.
- Hogan, D. B., Borrie, M., Basran, J. F. S., Chung, A. M., Jarrett, P. G., Morais, J. A., et al. (2012). Specialist physicians in geriatrics—Report of the Canadian geriatrics society physician resource work group. *Canadian Geriatrics Journal*, **15**(3), 68–79.
- IBM Corp. (2018). *IBM SPSS Statistics for Windows, Version 25.0*. Armonk, NY: IBM Corp. <https://www.ibm.com/products/spss-statistics>.
- Iliffe, S., Wilcock, J., Griffin, M., Jain, P., Thune-Boyle, I., Koch, T., et al. (2010). Evidence-based interventions in dementia: A pragmatic cluster-randomised trial of an educational intervention to promote earlier recognition and response to dementia in primary care (EVIDEM-ED). *Trials*, **11**, 13.
- Iliffe, S., Wilcock, J., Synek, M., Carboch, R., Hradcová, D., Koch, T., et al. (2019). Case management for people with dementia and its translations: A discussion paper. *Dementia*, **18**(3), 951–969.
- Jackson, M., Pelone, F., Reeves, S., Hassenkamp, A. M., Emery, C., Titmarsh, K., et al. (2016). Interprofessional education in the care of people diagnosed with dementia and their carers: A systematic review. *BMJ Open*, **6**(8), e010948.
- Johansson, G., Eklund, K., & Gosman-Hedstrom, G. (2010). Multidisciplinary team, working with elderly persons living in the community: A systematic literature review. *Scandinavian Journal of Occupational Therapy*, **17**(2), 101–116.

- Jolley, D., Benbow, S. M., & Grizzell, M. (2006). Memory clinics. *Postgraduate Medical Journal*, *82*(965), 199–206.
- Kaplan, D. B., & Berkman, B. (2011). Dementia care: A global concern and social work challenge. *International Social Work*, *54*(3), 361–373.
- Kimura, H., Tamoto, T., Kanzaki, N., & Shinchi, K. (2011). Burnout and characteristics of mental health of caregivers of elderly dementia patients. *Journal of Rural Medicine*, *6*(2), 47–53.
- Lakens, D. (2017). Equivalence tests: A practical primer for t tests, correlations, and meta-analyses. *Social Psychological and Personality Science*, *8*(4), 355–362.
- Lee, L., & Hillier, L. M. (2016). Family physicians' perspectives on memory clinics in primary care. *Neurodegenerative Disease Management*, *6*(6), 467–478.
- Lee, L., Hillier, L. M., & Gregg, S. (2019). Partnerships for improving dementia care in primary care: Extending access to primary care-based memory clinics in Ontario, Canada. *Health and Social Care in the Community*, *27*(6), 1574–1585.
- Lee, L., Hillier, L. M., & Harvey, D. (2014). Integrating community services into primary care: Improving the quality of dementia care. *Neurodegenerative Disease Management*, *4*(11), 11–21.
- Lee, L., Hillier, L. M., Heckman, G. A., Gagnon, M., Borrie, M. J., Stolee, P., et al. (2014). Primary care based memory clinics: Expanding capacity for dementia care. *Canadian Journal on Aging*, *33*(3), 307–319.
- Lee, L., Hillier, L. M., Locklin, J., Lumley-Leger, K., & Molnar, F. (2019). Specialist and family physician collaboration: Insights from primary care-based memory clinics. *Health and Social Care in the Community*, *27*(4), e522–e533.
- Lee, L., Hillier, L. M., McKinnon, W. J., Gregg, S., Fathi, K., Sturdy Smith, C., et al. (2018). Effect of primary care-based memory clinics on referrals to and wait-time for specialized geriatric services. *Journal of the American Geriatrics Society*, *66*(3), 631–632.
- Lee, L., Hillier, L. M., Molnar, F., & Borrie, M. J. (2017). Primary care collaborative memory clinics: Building capacity for optimized dementia care. *Healthcare Quarterly*, *19*(4), 55–62.
- 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*(11), 2197–2204.
- Lee, L., Hillier, L. M., & Weston, W. (2014). Ensuring the success of inter-professional teams: Key lessons learned in memory clinics. *Canadian Journal on Aging*, *33*(1), 49–59.
- Lee, L., Hillier, L. M., & Weston, W. W. (2020). "Booster Days": An educational initiative to develop a community of practice of primary care collaborative memory clinics. *Gerontology and Geriatric Education*, *41*(1), 4–19.
- 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*(7), e249–e252.
- Lee, L., Lu, S., Hillier, L. M., Gregg, S., & Kaufman Carlin, G. (2019). Improving access to community supports and services for persons living with dementia: Integration of home care services into primary care-based memory clinics. *Geriatrics and Gerontology International*, *19*(1), 81–82.
- Lee, L., Slonim, K., Hillier, L. M., Lu, S. K., & Lee, J. (2018). Persons with dementia and care partners' perspectives on memory clinics in primary care. *Neurodegenerative Disease Management*, *8*(6), 385–397.
- 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*(1), 24–32.
- Lips-Wiersma, M., & Wright, S. (2012). Measuring the meaning of meaningful work: Development and validation of the comprehensive meaningful work scale (CMWS). *Group and Organizational Management*, *37*(5), 655–685.
- Luce, A., McKeith, I., Swann, A., Daniel, S., & O'Brien, J. (2001). How do memory clinics compare with traditional old age psychiatry services? *International Journal of Geriatric Psychiatry*, *16*(9), 837–845.
- Mann, K. V. (2002). Thinking about learning: Implications for principle-based professional education. *Journal of Continuing Education in the Health Professions*, *22*(2), 69–72.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety, and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, *77*(1), 11–37.
- Murphy, K. R., & Davidshofer, C. O. (2001). *Psychological testing*. Upper Saddle River, NJ: Prentice Hall.
- Netting, F., & Williams, F. (1999). Implementing a case management program designed to enhance primary care physician practice with older persons. *Journal of Applied Gerontology*, *18*(1), 25–45.
- O'Brien, J. L., Martin, D. R., Heyworth, J. A., & Meyer, N. R. (2009). A phenomenological perspective on advanced practice nurse-physician collaboration within an interdisciplinary healthcare team. *Journal of the American Academy of Nurse Practitioners*, *21*(8), 444–453.
- Patterson, C., Gauthier, S., Bergman, H., Cohen, C., Feightner, J. W., Feldman, H., et al. (2001). The recognition, assessment and management of dementing disorders: Conclusions from the Canadian Consensus Conference on dementia. *Canadian Journal of Neurological Sciences*, *28*(1 Suppl), S3–S16.
- Pimlott, N. J. G., Siegel, K., Persaud, M., Slaughter, S., Cohen, C., Hollingworth, G., et al. (2006). Management of dementia by family physicians in academic settings. *Canadian Family Physician*, *52*(9), 1108–1109.
- Pratt, R., Clare, L., & Kirchner, V. (2006). It's like a revolving door syndrome': Professional perspectives on models of access to services for people with early-stage dementia. *Aging and Mental Health*, *10*(1), 55–62.
- Prins, A., Hemke, F., Pols, J., & Moll van Charante, E. P. (2016). Diagnosing dementia in Dutch general practice: A qualitative study of GPs' practices and views. *British Journal of General Practice*, *66*(647), e416–e422.
- Prorok, J. C., Hussain, M., Horgan, S., & Seitz, D. P. (2017). I shouldn't have had to push and fight': Health care experiences of persons with dementia and their caregivers in primary care. *Aging and Mental Health*, *21*(2), 797–804.
- Rabow, M. W., & McPhee, S. J. (1999). Beyond breaking bad news: How to help patients who suffer. *Western Journal of Medicine*, *171*(4), 260–263.
- Rowe, M., Greenblum, C. A., & D'Aoust, R. F. (2012). Missing incidents in community-dwelling people with dementia. *American Journal of Nursing*, *112*(12), 30–35.
- Salsbury, S. A., Goertz, C. M., Vining, R. D., Hondras, M. A., Andresen, A. A., Long, C. R., et al. (2018). Interdisciplinary practice models for older adults with back pain: A qualitative evaluation. *Gerontologist*, *58*(2), 376–387.
- San Martin-Rodriguez, L., Beaulieu, M. D., D'Amour, D., & Ferrada-Videla, M. (2005). The determinants of successful collaboration: A review of theoretical and empirical studies. *Journal of Interprofessional Care*, *19*(1 Suppl), 132–147.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire. *Education and Psychological Measurement*, *66*(4), 701–716.
- Shanafelt, T. D., Boone, S., Tan, L., Dyrbye, L. N., Sotile, W., Satele, D., et al. (2012). Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Archives of Internal Medicine*, *172*(18), 1377–1385.
- Sheiban, L., Stolee, P., McAiney, C., & Boscart, V. (2018). Health care provider experiences in primary care memory clinics: A phenomenological study. *BMC Family Practice*, *19*(1), 68.
- Shimazu, A., & Schaufeli, W. B. (2008). Work engagement: An emerging concept in occupational health psychology. *Bioscience Trends*, *2*(1), 2.
- Sikka, R., Morath, J. M., & Leape, L. (2015). The quadruple aim: Care, health, cost and meaning in work. *BMJ Quality and Safety*, *24*(10), 608–610.
- Silverman, T. B., Schrimshaw, E. W., Franks, J., Hirsch-Moverman, Y., Ortega, H., El-Sadr, W., et al. (2018). Response rates of medical providers to internet surveys regarding their adoption of preexposure prophylaxis for HIV: Methodological implications. *Journal of the International Association of Providers of AIDS Care*, *17*, 2325958218798373.
- 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: Risk Analytica.
- Sternberg, S. A., Wolfson, C., & Baumgarten, M. (2000). Undetected dementia in community dwelling older people: The Canadian study of health and aging. *Journal of the American Geriatrics Society*, *48*(11), 1430–1434.
- Teng, E., Becker, B. W., Woo, E., Knopman, D. S., Cummings, J. L., & Lu, P. H. (2010). Utility of the functional activities questionnaire for distinguishing mild cognitive impairment from very mild Alzheimer disease. *Alzheimer Disease and Associated Disorders*, *24*(4), 348–353.

- Teri, L., Huda, P., Gibbons, L., Young, H., & Van, L. J. (2005). STAR: A dementia-specific training program for staff in assisted living residences. *Gerontologist, 45*(5), 686–693.
- Turner, S., Iliffe, S., Downs, M., Wilcox, J., Bryans, M., Levin, E., *et al.* (2004). General practitioners' knowledge, confidence and attitudes in the diagnosis and management of dementia. *Age and Ageing, 33*(5), 461–467.
- Van der Cammen, T. J., Simpson, J. M., Fraser, R. M., Preker, A. S., & Exton-Smith, A. N. (1987). The memory clinic: A new approach to the detection of dementia. *British Journal of Psychiatry, 150*(3), 359–364.
- Van Mierlo, L. D., Meiland, F. J., Van Hout, H. P., & Drees, R. M. (2014). Towards personalized integrated dementia care: A qualitative study into the implementation of different models of case management. *BMC Geriatrics, 14*, 84.
- van Mol, M. M. C., Kompanje, E. J. O., Benoit, D. D., Bakker, J., & Nijkamp, M. D. (2015). The prevalence of compassion fatigue and burnout among healthcare professionals in intensive care units: A systematic review. *PLoS One, 10*(8), e0136955.
- Venohr, I., Fine, R., Saunders, V., Tenney, E., Vahan, V., & Williams, M. (2001). Improving dementia care through community linkages: A multi-site demonstration project. *Home Health Care Services Quarterly, 19*(4), 51–63.
- Vernooij-Dasssen, M. J., Faber, M. J., Olde Rikkert, M. G., Koopmans, R. T., Van, A. T., Braat, D. D., *et al.* (2009). Dementia care and labour market: The role of job satisfaction. *Aging and Mental Health, 13*(3), 383–390.
- Vickrey, B. G., Mittman, B. S., Connor, K. I., Pearson, M. L., Della Penna, R. D., Ganiats, T. G., *et al.* (2006). The effect of a disease management intervention on quality and outcomes of dementia care: A randomized controlled trial. *Annals of Internal Medicine, 145*, 713–726.
- Walsh, J., & Holton, V. (2008). Case management. In W. Rowe & L. A. Papp-Paglicci (Eds.), *Comprehensive handbook of social work and social welfare, social work practice* (Vol. 3) (pp. 139–160). Hoboken, NJ: Wiley.
- Yardley, S., Teunissen, P. W., & Dornan, T. (2012). Experiential learning: Transforming theory into practice. *Medical Teacher, 34*(2), 161–164.