

Building capacity for dementia care

Training program to develop primary care memory clinics

Linda Lee MD MCISc(FM) CCFP FCFP M. Janet Kasperski RN MHSc CHE W. Wayne Weston MD CCFP FCFP

Abstract

Problem being addressed Currently, dementia care provided by family physicians is suboptimal and access to specialist resources is limited. With the aging population, there is a need for system-wide, programmatic interventions to improve the diagnosis and management of patients with memory difficulties. The development of primary care memory clinics addresses this need.

Objective The Memory Clinic Training Program aims to develop highly functioning interprofessional memory clinics that assist family physicians in providing improved care for patients with dementia and other forms of cognitive impairment.

Program description The interprofessional training program consists of a 2-day case-based workshop, 1 day of observership and clinical training at the Centre for Family Medicine Memory Clinic, and 2 days of on-site mentorship at each newly formed memory clinic.

Conclusion The Memory Clinic Training Program is an accredited, comprehensive program designed to assist family practice groups with developing primary care memory clinics. These clinics aim to transform the current limited practice capability of individual family physicians into a systematic, comprehensive, interprofessional health care service that improves capacity and quality of primary care for patients with cognitive impairment and dementia.

Résumé

Problème à l'étude Actuellement, le traitement de la démence par les médecins de famille est sous-optimal et l'accès aux ressources spécialisées est restreint. Avec le vieillissement de la population, il devient nécessaire d'avoir des interventions d'envergure basées sur des programmes pour améliorer le diagnostic et le traitement des patients atteints de troubles de la mémoire. Le développement des cliniques de la mémoire au niveau des soins primaires répond à ces besoins.

Objectif Le *Memory Clinic Training Program* cherche à mettre sur pied des cliniques interprofessionnelles de la mémoire très performantes afin d'aider les médecins de famille à fournir de meilleurs traitements aux patients atteints de démence ou d'autres formes de problèmes cognitifs.

Description du programme Le programme de formation interprofessionnel consiste en un atelier de 2 jours portant sur des cas, une journée d'observation et de formation clinique au *Centre for Family Medicine Memory Clinic*, et 2 journées de tutorat à chacune des cliniques de la mémoire nouvellement établie.

Conclusion Le *Memory Clinic Training Program* est un vaste programme accrédité qui a pour but d'aider les groupes de médecine

EDITOR'S KEY POINTS

- The goal of the Memory Clinic Training Program is to assist family practice groups with developing memory clinics that are able to provide high-quality care for most cognitively impaired patients.
- Family physicians participating in the memory clinic dedicate 1 or 2 days per month to assessing patients referred to the memory clinic. Each patient's own family physician maintains a primary role in implementing treatment plans developed at the memory clinic. Referrals, when necessary, are arranged by the clinic.
- To date, 12 primary care memory clinics have been developed in Ontario. Including the Centre for Family Medicine Memory Clinic, these clinics service the practices of more than 220 family physicians with a combined patient base estimated at more than 300 000 patients; far fewer of these patients require referral for further specialist care than is typical in family practice.

POINTS DE REPÈRE DU RÉDACTEUR

- Le Memory Clinic Training Program a pour but d'aider les équipes de santé familiale et les centres de santé communautaires à mettre sur pied des cliniques interprofessionnelles de la mémoire susceptibles de fournir des soins de grande qualité aux patients les plus atteints sur le plan cognitif au niveau des soins primaires.
- Les médecins qui participent aux cliniques de la mémoire sont habituellement des médecins de famille qui pratiquent à plein temps et qui consacrent 1 ou 2 journées par mois à l'évaluation des patients dirigés à la clinique de la mémoire par des collègues des équipes de santé familiale ou de centres de santé communautaires. C'est le médecin du patient qui conserve le principal rôle dans l'application des plans de traitement mis au point à la clinique de la mémoire. Lorsque jugées nécessaires, les demandes de consultation sont organisées par la clinique.
- Jusqu'à maintenant, le programme a encouragé 23 médecins de famille et 59 intervenants des soins de santé interprofessionnels à créer 12 équipes de cliniques de la mémoire en santé primaire en Ontario. Ces cliniques, dont le Centre for Family Medicine Memory Clinic, fournissent des services aux clients de plus de 220 médecins de famille, soit un nombre combiné de patients estimé à plus de 300 000; ces patients ont beaucoup moins besoin d'être réorientés vers des soins spécialisés que ce qu'on observe typiquement en pratique familiale.

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familiale à créer des cliniques de la mémoire au niveau des soins primaires. Ces cliniques visent à transformer les capacités restreintes actuelles des médecins de famille individuels en un service systématique et complet de soins interprofessionnels capables d'améliorer la capacité et la qualité des soins primaires des patients.

Despite the profound effects of dementia in terms of personal suffering and economic loss,¹⁻³ it has been estimated that 64% of those living in the community with dementia are undiagnosed and untreated,⁴ a substantial proportion that has been confirmed by many.^{5,6} The underdiagnosis of dementia has been attributed to a lack of family physician knowledge about dementia,^{7,8} unfamiliarity with cognitive screening,^{5,9} and a lack of symptom recognition.^{10,11} Dementia has been described as more difficult to manage than other chronic diseases¹²; diagnostic uncertainty, complexity of care, time pressures, and limited availability of specialist support remain challenges for family physicians.^{13,14}

Yet there is mounting evidence that early detection of dementia is critical to ensuring that patients and caregivers have access to treatment, education, counseling, and other services that can delay decline, prevent crises, ease the burden of care, and delay institutionalization.¹⁵⁻¹⁷ Unrecognized dementia increases the risk of delirium, motor vehicle accidents, medication errors, financial difficulties, caregiver burnout, and poor management of comorbid conditions.^{4,18} Additionally, recent studies suggest that early diagnosis can lead to considerable cost savings for government.¹⁹⁻²¹

Canada faces a critical shortage of geriatricians,²² and the wait to access specialist care can be lengthy—commonly 6 to 12 months.²³ As family physicians refer most patients with dementia to other specialists (82% in one study),²⁴ wait times are not compatible with early diagnosis and intervention. One viable solution to the problem is to increase the capacity for management at the family physician level. Evidence indicates that collaborative, interdisciplinary approaches can provide improved dementia care at the primary care level.^{16,25} Recent development of the family health team model of care in Ontario²⁶ represents an important step toward building the necessary infrastructure for an interprofessional approach to care for these patients.

In collaboration with the Ontario College of Family Physicians, the Centre for Family Medicine (CFFM) Family Health Team has recently developed an accredited, 5-day Memory Clinic Training Program. The goal of this program is to help family health teams and community health centres develop self-sustaining interprofessional memory clinics that are able to provide high-quality care for most cognitively impaired patients in primary care. The clinics follow the model of care

provided at the CFFM Memory Clinic, in which a dedicated family physician and team of interprofessional health care providers conduct assessments and develop accurate diagnoses and comprehensive individualized treatment plans to be implemented by patients' own family physicians. Physicians participating in the memory clinic are usually full-time practising family physicians who dedicate 1 or 2 days a month to assessing patients referred to the memory clinic by colleagues within their family health teams or community health centres. Using guideline-based cognitive testing, assessments target cognitive function, behavioural and psychological symptoms, fitness to drive, medication review, psychosocial issues, caregiver stress, and need for community support. A geriatrician provides support to the memory clinic physician for questions that might arise. A shared-care approach to management is used, with each patient's own family physician maintaining a primary role in care management and the memory clinic maintaining a supportive role. If required for more complex cases, a referral to an appropriate specialist (geriatrician, geriatric psychiatrist, or neurologist) is arranged by the memory clinic physician, with focused questions and all supporting documentation of cognitive testing being sent to the specialist. Referrals for driving assessments and mandatory reporting to the Ministry of Transportation are also handled by the memory clinic physician. As necessary, the interprofessional team coordinates referrals to community services and supports.

A comprehensive, independent evaluation²⁷ of CFFM Memory Clinic outcomes over 3 years demonstrated highly efficient use of specialist resources, with referral to specialists required in just 8% of cases. More important, results of the chart audit conducted independently by 2 geriatricians as part of this evaluation indicated agreement with diagnosis and interventions provided and confirmed that all decisions to refer or not to refer to specialists were appropriate. Results also demonstrated a high level of satisfaction from patients, caregivers, referring physicians, and team members. These findings are consistent with outcomes of ideal chronic disease management models of care.²⁸

Program description

Typical continuing medical education programs often produce minimal or no change in behaviour,²⁹ largely because of the "transfer problem"—difficulty in applying what is learned in the classroom to the practice setting.³⁰ This program was designed to enhance transfer to the actual setting in which the new memory clinics would be developed by making the learning experiences match the real-world competencies needed to run a memory clinic.³¹ The training uses many design features known to enhance learning and behaviour change:

case-based discussions, problem-solving exercises, pocket cue cards, coaching, and booster sessions.³²

The Memory Clinic Training Program consists of a 2-day interactive case-based workshop, a day of observing and training at the CFFM Memory Clinic in Kitchener, Ont, and 2 days of on-site mentorship at each newly formed memory clinic. Typically, participant teams include 2 family physicians, 2 nurses or nurse practitioners, a social worker, and a pharmacist, depending on the availability of these resources. Participants are provided with detailed training manuals as well as laminated pocket cards and reference literature. Competencies promoted are listed in **Box 1**. Needs-based “booster sessions” are scheduled for previously trained teams to provide an opportunity for obtaining updated information, case discussion, and sharing of best practices.

Box 1. Content of the Memory Clinic Training Program

The training program aims to develop competency in the following areas:

- a clinical reasoning approach to patients with memory difficulties
- delirium
- depression
- differentiating “normal aging” from mild cognitive impairment and dementia
- clinically differentiating important types of dementia (Alzheimer disease, vascular dementia, mixed dementia, Lewy body spectrum disorders, and frontotemporal dementias)
- differentiating cases that can safely be managed in primary care from those requiring specialist assessment
- pharmacologic and nonpharmacologic management of dementia
- assessments of capacity

To date, the program has trained 23 family physicians and 59 interprofessional health care providers to develop 12 primary care memory clinic teams in Ontario. Including the CFFM Memory Clinic, these clinics serve the practices of more than 220 family physicians with a combined patient base estimated at more than 300 000 patients.

Participants’ evaluations of all aspects of training have been very positive. A comprehensive evaluation of outcomes of all memory clinics started by those trained through the program is currently under way.

Discussion

With Canada’s aging population and limited specialist resources, system-wide, programmatic interventions to change health service delivery for patients suffering from dementia and cognitive impairment are needed.^{23,33} This primary care memory clinic

model answers the call. The Memory Clinic Training Program addresses the need for effective training to develop highly functioning primary care memory clinics. The program is rooted in constructivist learning theory, which supports active engagement of participants, role modeling, situated learning experiences, and opportunities to apply new learning in practice.³⁴ Recent evidence demonstrates that educational initiatives involving practice-based workshops effectively improve detection of dementia in primary care,³⁵ in contrast to the relative ineffectiveness of traditional conferences, rounds, and workshops³⁶ or distribution of guidelines.³²

This model serves to build health system capacity in 3 distinct ways. First, evaluation of the CFFM Memory Clinic revealed that most referring family physicians reported increased confidence, knowledge, and skill in managing patients with dementia. This model might act as a practice-based mentorship to increase capacity for care among referring family physicians.²⁷ Second, primary care memory clinics act as intermediaries between patients’ family physicians and other specialists by assessing more complex cases that family physicians might not be comfortable with, providing direction to the family physicians for ongoing care, and referring cases to other specialists only when necessary. Third, a reduction in referrals builds capacity by decreasing burden on specialist care and reducing wait times for urgent specialists’ appointments. Further, among those cases that are referred for further specialist care, primary care memory clinics increase specialists’ efficiency by providing them with a detailed history and results of cognitive testing.

This model of care is distinct from other published approaches to increasing the primary care management of dementia³⁷ in that most diagnosis and management recommendations are made by trained family physicians recruited from within the family practice group, rather than by specialists drawn on externally. By recruiting leads from a large base of primary care physicians rather than from limited specialist resources, the model sustainably increases capacity within the health care system. Additionally, with relationships already established between practice colleagues, the family physician memory clinic lead can become a more effective peer mentor and an easily accessible resource to the referring physicians within that group.

At present, a limitation of the Memory Clinic Training Program is that it is designed for family physician groups with access to interprofessional health care providers who can participate in these memory clinics. Other memory clinic models, which incorporate community-funded health care professionals for practice groups without these resources, are currently being explored.

Conclusion

The Ontario College of Family Physicians–CFFM Memory Clinic Training Program is an accredited, comprehensive program to assist family practice groups with developing primary care memory clinics. These clinics aim to transform the current limited practice capabilities of individual family physicians into a systematic, comprehensive, interprofessional health care service that improves capacity and quality of primary care for patients with cognitive impairment. Physicians participating in the memory clinics are usually full-time practising family physicians who dedicate 1 or 2 days a month to assessing patients referred to the memory clinic by colleagues within their family health teams or community health centres. To date, the program has trained 23 family physicians and 59 interprofessional health care providers to develop 12 primary care memory clinic teams in Ontario. Including the CFFM Memory Clinic, these clinics serve the practices of more than 220 family physicians with a combined patient base estimated at more than 300 000 patients. 🌿

Dr Lee is a family physician practising in Kitchener-Waterloo, Ont; Director of the Centre for Family Medicine Memory Clinic, and Assistant Professor in the departments of family medicine at McMaster University in Hamilton, Ont, The University of Western Ontario in London, Ont, and Queen's University in Kingston, Ont. **Dr Weston** is Professor Emeritus of Family Medicine at the Schulich School of Medicine and Dentistry at the University of Western Ontario in London and Chair of the Canadian Operating Committee at the Institute for Healthcare Communication. **Ms Kasperski** is Chief Executive Officer of the Ontario College of Family Physicians, Associate Professor of Clinical Education at the Northern Ontario School of Medicine, and a Board Member of the Toronto East General Hospital.

Competing interests

None declared

Contributors

All authors participated in the design of the training program and contributed to the preparation of the article for submission.

Correspondence

Dr Linda Lee, The Centre for Family Medicine, 10 B Victoria St S, Kitchener, ON N2G 1C5; e-mail joelinda5@rogers.com

References

- Chapman DP, Marshall Williams SM, Strine TW, Anda RF, Moore MJ. Dementia and its implications for public health. *Prev Chronic Dis* 2006;3(2):A34. Epub 2006 Mar 15.
- Bynum JP, Rabins PV, Weller W, Niefeld M, Anderson GF, Wu AW. The relationship between a dementia diagnosis, chronic illness, Medicare expenditures, and hospital use. *J Am Geriatr Soc* 2004;52(2):187-94.
- Alzheimer's Society of Canada. *Rising tide: the impact of dementia on Canadian society*. Toronto, ON: Alzheimer's Society of Canada; 2010. Available from: www.alzheimer.ca. Accessed 2010 July 21.
- Sternberg SA, Wolfson C, Baumgarten M. Undetected dementia in community dwelling older people: the Canadian Study of Health and Aging. *J Am Geriatr Soc* 2000;48(11):1430-4.
- Feldman HH, Jacova C, Robillard A, Garcia A, Chow T, Borrie M, et al. Diagnosis and treatment of dementia: 2. Diagnosis. *CMAJ* 2008;178(7):825-36.
- Valcour VG, Masaki KH, Curb JD, Blanchette PL. The detection of dementia in the primary care setting. *Arch Intern Med* 2000;160(19):2964-8.
- Barrett JJ, Haley WE, Harrell LE, Powers RE. Knowledge about Alzheimer disease among primary care physicians, psychologists, nurses, and social workers. *Alzheimer Dis Assoc Disord* 1997;11(2):99-106.
- Pimlott NJ, Persaud M, Drummond N, Cohen CA, Silvius JL, Seigel K, et al. Family physicians and dementia in Canada. Part 1. Clinical practice guidelines: awareness, attitudes, and opinions. *Can Fam Physician* 2009;55:506-7. e1-5. Available from: www.cfp.ca/content/55/5/506.full.pdf+html. Accessed 2011 May 25.
- Chodosh J, Petitti DB, Elliott M, Hays RD, Crooks VC, Reuben DB, et al. Physician recognition of cognitive impairment: evaluating the need for improvement. *J Am Geriatr Soc* 2004;52(7):1051-9.
- Boise L, Camicioli R, Morgan DL, Rose JH, Congleton L. Diagnosing dementia: perspectives of primary care physicians. *Gerontologist* 1999;39(4):457-64.
- Woods RT, Moniz-Cook E, Iliffe S, Campion P, Vernooij-Dassen M, Zanetti O, et al. Dementia: issues in early recognition and intervention in primary care. *J R Soc Med* 2003;96(7):320-4.
- Harris DP, Chodosh J, Vassar SD, Vickrey BG, Shapiro MF. Primary care providers' views of challenges and rewards of dementia care relative to other conditions. *J Am Geriatr Soc* 2009;57(12):2209-16. Epub 2009 Nov 23.
- Pimlott NJ, Persaud M, Drummond N, Cohen CA, Silvius JL, Seigel K, et al. Family physicians and dementia in Canada. Part 2. Understanding the challenges of dementia care. *Can Fam Physician* 2009;55:508-9.e1-7. Available from: www.cfp.ca/content/55/5/508.full.pdf+html. Accessed 2011 May 25.
- Foster NL. Barriers to treatment: the unique challenges for physicians providing dementia care. *J Geriatr Psychiatry Neurol* 2001;14(4):188-98.
- Brodsky H, Green A, Koschera A. Meta-analysis of psychosocial interventions for caregivers of people with dementia. *J Am Geriatr Soc* 2003;51(5):657-64.
- Callahan CM, Boustani MA, Unverzagt FW, Austrom MG, Damush TM, Perkins AJ, et al. Effectiveness of collaborative care for older adults with Alzheimer disease in primary care: a randomized controlled trial. *JAMA* 2006;295(18):2148-57.
- Mittelman MS, Ferris SH, Shulman E, Steinberg G, Levin B. A family intervention to delay nursing home placement. A randomized controlled trial. *JAMA* 1996;276(21):1725-31.
- Steele C, Rovner B, Chase GA, Folstein M. Psychiatric symptoms and nursing home placement of patients with Alzheimer's disease. *Am J Psychiatry* 1990;147(8):1049-51.
- Weimer DL, Sagar MA. Early identification and treatment of Alzheimer's disease: social and fiscal outcomes. *Alzheimers Dement* 2009;5(3):215-26. Epub 2009 Apr 11.
- Caspi E, Silverstein NM, Porell F, Kwan N. Physician outpatient contacts and hospitalizations among cognitively impaired elderly. *Alzheimers Dement* 2009;5(1):30-42.
- McCarten JR, Anderson P, Kuskowski MA, Jonk Y, Dysken MW. *Changes in outpatient costs following screening and diagnosis of cognitive impairment*. Chicago, IL: Alzheimer's Association; 2010. Available from: www.alz.org/icad/documents/abstracts/2010_early_detection.pdf. Accessed 2010 Aug 1.
- Hogan B. Human resources training and geriatrics. *Geriatr Today J Can Geriatr Soc* 2001;4:7-10.
- Massoud F, Lysy P, Bergman H. Care of dementia in Canada: a collaborative care approach with a central role for the primary care physician. *J Nutr Health Aging* 2010;14(2):105-6.
- Pimlott NJ, Siegel K, Persaud M, Slaughter S, Cohen C, Hollingworth G, et al. Management of dementia by family physicians in academic settings. *Can Fam Physician* 2006;52:1108-9.e1-6. Available from: www.cfp.ca/content/52/9/1108.long. Accessed 2011 May 25.
- Guerrero Austrom M, Damush TM, Hartwell CW, Perkins T, Unverzagt F, Boustani M, et al. Development and implementation of nonpharmacologic protocols for the management of patients with Alzheimer's disease and their families in multiracial primary care setting. *Gerontologist* 2004;44(4):548-53.
- Rosser WW, Colwill JM, Kasperski J, Wilson L. Patient-centered medical homes in Ontario. *N Engl J Med* 2010;362(3):e7. Epub 2010 Jan 6.
- Lee L, Hillier LM, Stolee P, Heckman G, Gagnon M, McAiney CA, et al. Enhancing dementia care: a primary care based memory clinic. *J Am Geriatr Soc* 2010;58(11):2197-204. Epub 2010 Oct 26.
- Scott IA. Chronic disease management: a primer for physicians. *Intern Med J* 2008;38(6):427-37.
- Mazmanian PE, David DA. Continuing medical education and the physician as a learner: guide to the evidence. *JAMA* 2002;288(9):1057-60.
- Price DW, Miller EK, Rahm AK, Brace NE, Larson RS. Assessment of barriers to changing practice as CME outcomes. *J Contin Educ Health Prof* 2010;30(4):237-45.
- Bransford JD, Brown AL, Cocking RR, editors. *How people learn: brain, mind, experience, and school*. Washington, DC: National Academies Press; 1999.
- Mann KV. Continuing medical education. In: Norman GR, van der Vleuten CPM, Newble DI, editors. *International handbook of research on medical education*. Boston, MA: Kluwer Academic Publishers; 2002. p. 415-57.
- Filit H. 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. *Alzheimers Dement* 2007;3(4):441-3.
- Mann KV. Thinking about learning: implications for principle-based professional education. *J Contin Educ Health Prof* 2002;22(2):69-76.
- Downs M, Turner S, Bryans M, Wilcock J, Keady J, Levin E, et al. Effectiveness of education interventions in improving detection and management of dementia in primary care: cluster randomised controlled study. *BMJ* 2006;332(7543):692-6.
- Oxman AD, Thomson MA, Davis DA, Haynes RB. No magic bullets: a systematic review of 102 trials of interventions to improve professional practice. *CMAJ* 1995;153(10):1423-31.
- Greaves I, Jolley D. National Dementia Strategy: well intentioned—but how well founded and how well directed? *Br J Gen Pract* 2010;60(572):193-8.
