Care of the elderly program at the University of Alberta

Meeting the challenges of treating the aging population

Lesley Charles MB ChB CCFP CoE **Bonnie Dobbs** PhD **Jean Triscott** MD CCFP CoE **Rhianne McKay** MA

Abstract

Problem addressed The population is aging rapidly and there are implications for health care delivery in the face of few physicians specializing in care of the elderly (COE).

Objective of program To train physicians wishing to provide COE services.

Program description The COE program at the University of Alberta in Edmonton is an enhanced skills diploma program lasting 6 months to 1 year, with core program requirements including geriatric inpatient care, geriatric psychiatry, ambulatory care, continuing care, and outreach. There is a longitudinal clinic component and a research project requirement. The program is designed to cover the 85 core competencies in the CanMEDS–Family Medicine roles.

Conclusion There is a need for COE physicians to provide clinical care as well as fill educational, administrative, and research roles to meet the health care needs of medically complex seniors. These physicians require alternative funding and a departmental home within a university if they are to provide an academic service.

EDITOR'S KEY POINTS

- Owing to the aging population in Canada, physicians with extra skills in care of the elderly (COE) will increasingly be needed to provide aging Canadians with high-quality health care.
- The goals of the University of Alberta's COE program are 4-fold: to promote excellence in COE through teaching, research, and clinical care instruction at the undergraduate, graduate, and postgraduate levels; to promote academic development of the members of the Division of Care of the Elderly; to provide an academic home and support base for COE physicians and residents; and to provide expertise and support in COE to family physicians in urban and rural Alberta.
- The program is designed to cover the 85 CanMEDS–Family Medicine core competencies. The program has always been tailored to individual residents in terms of start and completion dates, as well as offering part-time options. In the expanded 1-year program, new rotations have been added in palliative care, continuing care, supportive living, and home living. The addition of an exit examination, which includes a formal multiple-choice examination and an objective standardized assessment, allows the resident to demonstrate that he or she has acquired the core competencies.

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Programme de soins pour les personnes âgées à l'Université de l'Alberta

Relever les défis du traitement de la population vieillissante

Lesley Charles MB ChB CCFP CoE **Bonnie Dobbs** PhD **Jean Triscott** MD CCFP CoE **Rhianne McKay** MA

Résumé

Problème à l'étude Le vieillissement rapide de la population a des conséquences pour les soins aux personnes âgées (SPA) étant donné le nombre restreint de médecins spécialisés dans ce domaine.

Objectif du programme Former plus de médecins désireux de fournir des SPA.

Description du programme À l'Université de l'Alberta, le programme de SPA est un programme de 6 à 12 mois conduisant à un diplôme de compétences avancées qui porte, entre autres, sur les soins des patients gériatriques hospitalisés, la psychiatrie gériatrique, les soins ambulatoires, la continuité des soins et les soins à domicile. Il comprend aussi une composante clinique et un projet de recherche obligatoire. Le programme est conçu de façon à couvrir les 85 composantes de base de CanMEDS-Médecine familiale.

Conclusion Il faudra davantage de médecins compétents en SPA pour dispenser les soins complexes que requièrent les personnes âgées et pour occuper des postes liés aux fonctions de formation, d'administration et de recherche associés à ces soins. Les médecins visés devraient recevoir une nouvelle rémunération et appartenir à un département universitaire, s'ils doivent participer à l'enseignement universitaire.

POINTS DE REPÈRE DU RÉDACTEUR

- En raison du vieillissement de la population au Canada, les médecins possédant une compétence particulière dans les soins aux personnes âgées (SPA) seront de plus en plus appelés à fournir des soins de grande qualité à ces patients.

- Le programme de SPA de l'université de l'Alberta poursuit 4 objectifs: promouvoir des SPA de très grande qualité grâce à l'enseignement, la recherche et la formation sur les soins cliniques, et ce, au niveau des premier et deuxième cycles; promouvoir une intégration universitaire pour les membres de la Division of Care of the Elderly; fournir aux médecins et résidents responsables des SPA un site et un soutien universitaires; et procurer aux médecins de famille des régions urbaines et rurales de l'Alberta de l'expertise et de l'aide à propos des SPA.

- Le programme est conçu pour couvrir les 85 compétences de base de CanMeds-Médecine familiale. On a pris soin de l'adapter à chaque résident pour ce qui est des dates de début et de fin du programme, mais aussi en offrant la possibilité de le suivre à temps partiel. Le programme d'un an comprend en outre des stages sur les soins palliatifs, la continuité des soins, les patients requérant de l'aide et ceux qui vivent à domicile. L'ajout d'un examen final comprenant des questions à choix de réponses et une évaluation objective standardisée permet au résident de démontrer qu'il ou elle a bien acquis les compétences de base.

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The proportion of the population 65 years of age and older is increasing rapidly in all developed countries worldwide. In 2011, individuals 65 years of age and older accounted for 14.8% of the Canadian population, up from 13.7% in 2006 and 8.0% in 1971.[1] By 2026, seniors are expected to account for more than one-fifth of the population and could exceed one-quarter by 2056.[1] An examination of growth rates between 2006 and 2011 shows that the 60- to 64-year-old age group was the fastest growing segment of the population, indicating that population aging will continue to accelerate as baby boomers reach and move through their senior years. Centenarians are the second most rapidly growing segment of the Canadian population, with 5825 centenarians in Canada in 2011, an increase of 25.7% since 2006.[1]

The current and projected increases in the number of seniors in Canada have important implications for health care delivery. National data indicate that seniors today are frequent users of health care, costing the health system more than any other segment of the population. Although seniors represent just 14% of the population, they use 40% of hospital services in Canada and account for about 45% of all provincial and territorial government health spending.[2] The amount of health care services used by seniors is driven, in large part, not by age but by the number of chronic conditions. Specifically, compared with seniors with no chronic conditions, seniors with 3 or more chronic conditions reported 3 times more use of health care resources (4.5 million visits per year vs 13.3 million visits per year, respectively).[2] It also is the case that many chronic conditions are associated with age, with 33% of seniors in Canada having 3 or more chronic conditions compared with 12% of younger adults.[3] Thus, the increased prevalence of chronic disease with age, combined with increases in morbidity and health care use, means that chronic disease management will escalate in importance over the next several decades.

In 2005, the Canadian Medical Association identified caring for an aging population as one of the most pressing challenges facing the Canadian health care system.[4] More recently, in a 2011 report from the Canadian Institute for Health Information, the authors identified some of the most glaring problems of the health care system related to seniors, as well as ways for the health system to meet the changing needs.[2] The problems identified included gaps in preventive and collaborative care for seniors, along with the need to reduce comorbidity through prevention and improvement in the care of those with chronic conditions. The authors also emphasized that person-centred care, continuity of care, and comprehensive and integrated responses are aspects of care that are crucial to better outcomes. MacAdam, in her 2008 systematic review of frameworks of integrated care for the elderly, has noted that "integrated care for the elderly has become a major theme in health reform because of well-documented issues surrounding the poor quality of care being delivered to those with chronic conditions."[5] MacAdam also notes that the strongest programs of integrated care include active involvement of physicians.[5]

In Canada, physicians who specialize in caring for seniors include specialists in geriatric medicine, geriatric psychiatrists, and family physicians who have taken additional training in care of the elderly (COE). In 2009, there were 228 geriatricians in Canada with an estimated need for 500 to 600.[2,6] Moreover, 20% of Canadian geriatricians are nearing retirement age, with few physicians joining this specialty.[7] There also is a paucity of geriatric psychiatrists in Canada, with 183 full members of the Canadian Academy of Geriatric Psychiatry and 10 members in training in 2009. Data on the number of COE physicians in Canada are difficult to find. However, the College of Family Physicians of Canada (CFPC) estimated in 2009 that there were approximately 130 physicians who had completed COE training.[8]

Care of the elderly physicians play an important role in the delivery of health services to seniors with complex health needs. In the sections below, we describe the history of COE programs in Canada, then provide an overview of the COE program at the University of Alberta in Edmonton, which has graduated almost half of all COE physicians in Canada. In this overview, we identify strengths of the program, as well as changes or additions to the program that are required to meet the increased health care needs of this segment of the population.

Program description

History of COE programs in Canada. Care of the elderly academic programs were officially established in Canada in 1989, when they were sanctioned by the CFPC. The programs represent elective, supplementary training in COE for 6 to 12 months, taken after the 2-year core residency in family medicine.[9] Currently, COE programs are offered at 15 universities in Canada, with qualified COE physicians making a very sizable contribution to these programs. A list of universities with COE programs is provided in **Table 1**.[10]

History of the COE program at the University of Alberta. The COE program at the University of Alberta was established in 1993 under the leadership of Dr Jean Triscott. In October 2003, a formal Division of Care of the Elderly in the Department of Family Medicine was established at the University of Alberta. The COE program has been fortunate to have strong leadership and support of innovative past and present chairs of the Department of Family Medicine. The mission of the Division of Care of the Elderly is to promote excellence in COE through

Table 1. List of COE program coordinators or directors and locations in Canada

COE PROGRAM COORDINATOR OR DIRECTOR	LOCATION
Dr Conrad Rusnak	University of British Columbia
Dr Lesley Charles	University of Alberta
Dr Vivian Ewa	University of Calgary
Dr Nene Rush	University of Manitoba
Dr Scott McKay	University of Western Ontario
Dr Andrea Moser	Northern Ontario School of Medicine
Dr Anna Emili	McMaster University
Dr Sidney Feldman	University of Toronto
Dr Michelle Gibson	Queen's University
Dr Véronique French Merkley	University of Ottawa
Dr Miriam Abdelnour	McGill University
Dr Marie-Josée Hotte	University of Sherbrooke
Dr Nathalie Champoux	University of Montreal
Dr Pascale Bernard	Laval University
Dr Barry Clarke	Dalhousie University

COE—care of the elderly.
Data from the College of Family Physicians of Canada.[10]

Table 2. Core areas and activities of the COE division members at the University of Alberta in Edmonton

CORE AREAS	ACTIVITIES
Teaching	• Providing education in geriatrics at the undergraduate and graduate levels, and in the residency and COE diploma programs
Clinical care	• Coordinating and delivering geriatric services in acute care, community-based care, and continuing care facilities in health regions • Provide telehealth consultation to rural and remote sites in Alberta • Developing new initiatives for health care services to seniors and their care providers in the community
Research	• Conducting research on issues specific to COE • Facilitating interdisciplinary research • Engaging in research dissemination and knowledge translation

COE—care of the elderly.

teaching at the undergraduate, graduate, and postgraduate levels, and through research, innovation, and the promotion of best-practice clinical care.

The goals of the COE program are 4-fold: to promote excellence in COE through teaching, research, and clinical care instruction at the undergraduate, graduate, and postgraduate levels; to promote academic development of the members of the Division of Care of the Elderly; to provide an academic home and support base for COE physicians and residents; and to provide expertise and support in COE to family physicians in urban and rural Alberta (**Table 2**). To accomplish these goals we have established a mandatory undergraduate 3-week rotation in geriatrics; a mandatory 4-week second-year resident rotation in geriatrics or an integrated horizontal first-year resident rotation in geriatrics, both for family medicine residents; and an enhanced-skills diploma program lasting 6 months to 1 year for family physicians.

Program components. The COE diploma program ranges from 6 months to 1 year. Core program requirements include geriatric inpatient care, geriatric psychiatry, ambulatory care, continuing care, and outreach, and regular time in a longitudinal clinic. There also is a research project requirement. Overviews of typical 6-month and 1-year residencies are provided in **Box 1**. The academic half-day is organized with the collaboration of the Geriatric Medicine Residency Training Program and the Division of Care of the Elderly. Care of the elderly residents are active participants in the academic half-day, participating in journal clubs, senior core curriculum sessions, "geriatric giants" sessions, presentations of case studies, and presentations of their research at geriatric grand rounds. The program is designed to cover the 85 CanMEDS–Family Medicine core competencies. As of 2012, the program was expanded to 1 year of training for most residents, with an exit examination upon completion. The exit examination comprises multiple-choice questions and an observed geriatric assessment. With the support of the Office of Postgraduate Medical Education and the Department of Family Medicine at the University of Alberta we have been able to increase our openings to the equivalent of 4 positions in the 1-year program (3 positions in the 1-year program and 2 positions in the 6-month program) from 4 positions in the 6-month program.

Discussion

At the time of publication, 51 residents had completed the COE program, which represented 43% of all COE graduates in Canada. Our COE graduates are leaders in geriatric care in both academic and clinical settings. Some of our COE graduates work mainly in primary care family medicine clinics, with some other graduates combining a family practice and a COE clinic (eg, seniors' clinics, Comprehensive Home Option of Integrated Care for the Elderly programs). Some graduates also work as members of a geriatric care team in the acute care setting, while others work solely as COE physicians in acute care, seniors' clinics, or in community care (eg, assisted living, long-term care). Most of our COE physicians are funded via alternative relationship plans (ARPs).

Box 1. Components of the 6-mo and 1-y COE diploma programs

6-mo core program
- 1-2 mo geriatric inpatient care (acute COE, geriatric assessment unit, tertiary rehabilitation unit)
- 1 mo geriatric psychiatry
- 1 mo research
- 6-8 wk ambulatory care, continuing care, and outreach
- 1 d per wk longitudinal clinic care (except during geriatric psychiatry)
- 2 wk vacation

1-y program (in addition to the 6 mo of core components)
- 1 mo geriatric inpatient care (acute COE, geriatric assessment unit)
- 1 mo geriatric psychiatry and tertiary rehabilitation unit
- 1 mo research
- 1 mo continuing care
- 1 mo palliative care
- 2 wk home living program
- 4 wk vacation

COE—care of the elderly.

In addition to the important health service delivery contributions of our COE graduates, COE physicians also make important contributions from an academic perspective. Four COE physicians are employed by the academic Department of Family Medicine, acting as the academic arm of the Division of Care of the Elderly. As well, there is a Research Director and a Research Coordinator for the division. We believe this organizational structure is key to the success of our program. The 4 positions include a Divisional Director and a Program Director, with the remaining positions devoted to administrative support, teaching, research, and clinical services. The ability of the Division of Care of the Elderly to fulfil its academic mandate has been enhanced by the presence of a full-time Research Director and a full-time Research Coordinator. Our intent is to add 2 more academic appointments in the next year.

The program's success in attracting applicants and graduating residents is owed to the academic home and tremendous support offered to us by the Department of Family Medicine. We have been fortunate to have ARP-funded positions for a substantial number of our residents to graduate into. The Division of Geriatric Medicine and Division of Care of the Elderly are jointly developing a clinical ARP to employ physicians to meet the aging population's increasing need for services. We also have had the good fortune of having a visionary Divisional Director (J.T.) who, along with her colleagues, has grown the program over the years.

The program has always been tailored to individual residents in terms of start and completion dates, as well as offering part-time options. With our expanding program, we have been able to add new rotations in palliative care, continuing care, supportive living, and home living that are essential for teaching our graduates how to treat the senior population. The addition of an exit examination, which includes an objective standardized assessment, allows the resident to demonstrate that he or she has acquired the core competencies. It also serves as a means of assessing the quality of the program. We hope in the future to involve an external examiner, which will strengthen the overall assessment of our program. Currently, we are conducting a research survey to see where our graduates are practising and the kind of services they are offering to seniors. We also will seek their feedback on the program's strengths and gaps so that we can tailor it accordingly.

In the future, we also envision the creation of national core competencies for COE programs. At present, we use our own core competencies, which have had considerable input from a national level. However, a national set of core competencies would be ideal. One of the authors of this paper (L.C.) sits on the CFPC Working Group on Assessment of Competence in Health Care of the Elderly and is using the experience of developing the University of Alberta's core competencies to develop the national core competencies. We also envision the creation of a nationalized standard for evaluation of residents, ideally using an exit examination similar to the one that we have developed. As of July 2012, we have doubled our number of residents. However, given the aging population, it is important that we continue to expand our training program to match the demand for trained COE physicians. In Alberta, new home living and supportive living teams have been developed, and specialized geriatric ambulatory clinics associated with the primary care networks and family care clinics have been created to accommodate "aging in place." There also is a need to increase the number of academic faculty and clinical teaching preceptors. We are in the process of advocating for and expanding our funding through academic and clinical ARPs.

Conclusion

Owing to the aging population in Canada, physicians with extra skills in COE will increasingly be needed to provide aging Canadians with high-quality health care. Historically, there has been a shortage of geriatricians in Canada and that shortage continues.[11] Thus, a number of specialized geriatric programs now have COE physicians providing clinical care as well as academic, administrative, and research leadership in collaboration with geriatric medicine specialists.[8] However, there is a need for greater collaboration among primary care physicians, COE family physicians, and internal medicine geriatricians for there to be advancements in

clinical care, education, and research for this segment of the population. Moreover, increasing collaboration could result in a "bigger voice" to government, universities, and funding agencies, which is needed if we are to advance the cause of geriatrics.[12]

There also is a need for an increased number of COE physicians in acute care and in community and continuing care settings. Of interest, research indicates that general practitioners and family physicians appear to focus increasingly on less time-consuming (younger) patients, referring more complex (older) patients to specialists.[13] Thus, the need for specialist care for seniors is of relevance today, with an anticipated escalation of that need over the next 30 years.

There is clearly a demand for more COE physicians in Canada if we are to meet the health care needs of medically complex seniors. It is hoped that our Division of Care of the Elderly can continue to provide a home for family physicians primarily interested in COE and to support teaching, research, and clinical excellence for complex elderly patients and their families in our communities.

For anyone interested in developing a COE division or program, please feel free to contact us. We would be happy to offer any assistance.

Dr Charles is Program Director in the Division of Care of the Elderly and Assistant Professor in the Department of Family Medicine at the University of Alberta in Edmonton. **Dr Dobbs** is Research Director in the Division of Care of the Elderly in the Department of Family Medicine at the University of Alberta. **Dr Triscott** is Divisional Director in the Division of Care of the Elderly and Professor in the Department of Family Medicine at the University of Alberta. **Ms McKay** was Research Coordinator in the Division of Care of the Elderly in the Department of Family Medicine at the University of Alberta at the time of the study.

Contributors
All authors contributed to the concept and design of the study; data gathering, analysis, and interpretation; and preparing the manuscript for submission.

Competing interests
None declared

Correspondence
Dr Lesley Charles, Specialized Geriatrics, Glenrose Rehabilitation Hospital, 10230-111 Ave NW, Edmonton, AB T5G 0B7; telephone 780 735-8840; fax 780 735-8846; e-mail **Lcharles@ualberta.ca**

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