

Back to the future: home-based primary care for older homebound Canadians

Part 2: where we are going

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Home-based primary care in Canada

Decline of housecalls in Canada. In Canada, the delivery of primary care through home visits has been steadily declining.¹ The 2010 National Physician Survey revealed that only 42.4% (decreased from 48.3% in 2007) of Canada's general practitioners performed housecalls.^{2,3} Unfortunately, these surveys failed to capture the frequency with which responding physicians performed housecalls⁴—therefore, the proportion of those who make housecalls a *regular* component of their practices is likely much lower.

Canadian primary care physicians have identified several barriers to providing housecalls, including time constraints, inadequate remuneration, transportation, and safety concerns.⁵ A 2011 survey of family medicine residents at the University of Toronto in Ontario also revealed that trainees saw a lack of role models for the provision of housecall services as a barrier to practising home-based primary care in the future (Akhtar and Liu, unpublished data, 2011).

The case for home-based primary care in Canada.

The emergence of home-based primary care outside of Canada has gained the recent attention of provincial policy makers grappling with the demographic imperatives created by the aging population in Canada. Older Canadians currently account for 14% (4.8 million) of the national population⁶; however, as the first among the boomer generation turned 65 years in 2011,⁷ this population is expected to double during the next 2 decades, while the number older than 85 years is expected to quadruple.⁸ This will place unprecedented pressure on the Canadian health care system.⁹

Older adults also drive health costs in Canada—accounting for 45% of provincial and territorial governments' health expenditures¹⁰—as they tend to use a disproportionate amount of more expensive acute care services.¹¹ Given that patients with limited access to primary care generate higher health care costs and receive poorer overall quality of care,¹² developing sustainable ways to provide more accessible primary care will be necessary.

While Canadian data supporting home-based primary care are limited, there is growing evidence from some local programs that is strengthening the case for expanding this model of primary care provision in Canada. For example, the House Calls program in Toronto, Ont—described as a “mobile patient-centred medical home”¹³—has reported that patients enrolled after an index hospitalization (average age of 87 years) had a 29% reduction in unscheduled hospital readmissions, and 67% of its patients were able to die at home.¹⁴ This program provides comprehensive, ongoing primary care to frail homebound elderly patients using a family physician-led interprofessional team with geriatrician support. Robust and effective programs also exist in British Columbia,^{4,15} with the Primary Integrated Interdisciplinary Elder Care at Home intervention in Victoria reporting patients having a 39.7% ($P=.004$) reduction in hospital admissions, a 37.6% ($P=.04$) reduction in days in-hospital, and a 20% ($P=.20$) reduction in emergency department visits after entering the practice.¹⁶

Given the strong financial incentives to support increased home-based primary care for frail homebound elderly patients, the Ontario Liberal government recently promised \$60 million annually to support the expansion of physician housecall services.¹⁴ Furthermore, the recent landmark Commission on the Reform of Ontario's Public Services (the Drummond Report) equally encouraged the expansion of “home-based care to the fullest extent possible.”¹⁷ Meanwhile, the British Columbia and Manitoba governments have also expressed interest in developing home-based primary care programs for the elderly.⁴ Indeed, the political environment is ripe, and Canada is well positioned to adopt this needed model of primary care within multiple jurisdictions.

Looking to the future

Designing effective and scalable programs. The first part of our commentary¹⁸ (page 237) revealed that the most compelling evidence for home-based primary care has come out of the US Veterans Affairs System, which operates largely along the principles of the

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Canada Health Act.¹⁹ Their programs have been successful, in part, because they have unified standards for the provision of comprehensive, ongoing home-based primary care.

It needs to be understood that expanding this type of care within and across jurisdictions will be difficult to do with a 1-model approach. We believe that the successful expansion of home-based primary care across Canada can be feasibly accomplished using a mixed-models approach that adheres to common principles of using primary care provider-led interprofessional teams who share after-hours availability for urgent issues. This will allow home-based primary care programs to be successfully developed and scaled up across existing community support agencies, family health teams, and independent family practices.¹⁴

It is important not to view home-based primary care models in isolation but rather as a part of an integrated continuum of primary and specialty care services. Given the fragile health status of the patients that this model serves, leading programs anticipate that their patients' evolving care needs might eventually necessitate more supportive care services and environments such as home-based palliative care support.^{20,21} Conversely, there might be patients whose health status and overall function would eventually improve under this model of care to a point where they could return to office-based primary care.

The uneven distribution of primary care physicians—especially in rural and remote areas—will pose a particular challenge to the adoption of home-based primary care in Canada. This issue has been mitigated in the US Veterans Affairs System by having nurse practitioners and physician assistants assume the primary care practitioner role.²² Furthermore, technological advancements such as telehealth have also allowed for the provision of home-based primary care to homebound older adults in rural areas.²³

The proliferation of this model will also require the development of remuneration incentives. One such development is Ontario's recent ratification of the Care of the Elderly Alternate Funding Plan model, which will provide full-time equivalent salaries for family physicians specifically providing ongoing home-based primary care.²⁴ This will make housecall medicine a more financially viable career choice for family physicians in a way that previous fee-for-service payment models and their limitations did not.

Finally, the design of home-based primary care programs in Canada will require careful consideration of their target populations. The way Medicare defines the homebound primarily using simple physical criteria is useful from a cost-containment perspective. However, policy experts note that this definition might be too restrictive, and could fail to fully capture the complexity

and heterogeneity of the population that could benefit from home-based primary care.²⁵ Canadian program developers and provincial policy makers will therefore need to carefully consider broader inclusion criteria to ensure that these programs are available to the full range of homebound elderly patients whose needs are not well served by routine office-based primary care. For these older adults, home-based primary care should be considered a necessity rather than merely a convenience.

Education and training. Experts have recognized that the sustainability of existing and future home-based primary care programs will rely on effective education in housecall medicine.^{26,27} To that effect, Hayashi et al developed a novel housecalls curriculum for internal medicine residents, and a related educational outcomes study reported substantial increases in residents' knowledge, skills, and attitudes relevant to home-care medicine.²⁶ Canadian medical educators could consider these educational initiatives to better educate medical students, residents, and fellows, as well as current practising primary and specialty care physicians, in home-based primary care. In Canada, concerted efforts to increase recruitment in geriatric medicine and family medicine care of the elderly training programs, as well as augmenting core family residency training in geriatrics, are also needed in order to address the critical deficiency in health care providers with expertise in caring for frail older adults.²⁸

Research and evaluation. There is a need for further research investigating the functional aspects of home-based primary care programs and their associated outcomes. In order to make the definition of *homebound older adults* useful for targeting patients who would benefit from home-based primary care, standardized selection criteria using validated screening tools will need to be developed. Finally, further quality improvement of this model of care will rely on high-quality prospective randomized trials that measure important patient, caregiver, and system outcomes such as satisfaction and quality of life, as well as emergency department visits, hospitalizations, long-term care admissions, and overall cost-benefit analyses.²⁰ This research could also help optimize home assessments by identifying evidence-based practices.

Conclusion

There is an urgent need to develop more effective primary care models to better serve Canada's frail homebound older adults, especially as their numbers are only expected to grow over the coming decades.⁹

Many of the home-based care programs studied in the literature are home visit outreach programs that

simply supplement office-based care. Unfortunately, this has hindered effective comparisons of more comprehensive home-based primary care programs in existing systematic reviews and meta-analyses, and has ultimately delayed the broader development, acceptance, and dissemination of a common robust model.²⁷

Specifically designed home-based primary care programs that have emerged from the United States can substantially affect patient, caregiver, and systems outcomes. High-quality evidence from the Veterans Affairs System and beyond shows that these programs can substantially reduce emergency department visits, hospitalizations, and long-term care admissions. In Canada, these outcomes are critical to maintaining quality of life and function in older adults, as well as to the overall sustainability of the health care system.

Although Canadian family physicians have moved away from housecalls, we argue that Canada is well positioned to adopt the emerging modern model of home-based primary care. Recent political interest and successful local demonstration models have arisen,^{13,14} and we urge provincial governments to continue investing in the development and expansion of these programs.

Finally, we call for leaders in academic medicine to champion medical education and quality improvement research focused on the provision of home-based primary care for homebound older adults. This will ensure the sustainability of the Canadian health care system and provide better care for one of our most vulnerable and marginalized populations.

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Competing interests

Dr Nowaczynski is Clinical Director of House Calls—a physician-led, home-based interprofessional primary and specialty care program serving frail, marginalized, and housebound older adults in Toronto, Ont. **Drs Nowaczynski** and **Sinha** are 2 of the 4 Co-principle Investigators of a \$395 000 BRIDGES grant entitled "Bridging Care for Frail Older Adults: A Study of Innovative Models Providing Integrated Home-based Primary Care in Toronto."

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