

## Rural Geriatric Glue: A Nurse Practitioner–Led Model of Care for Enhancing Primary Care for Frail Older Adults within an Ecosystem Approach

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**OBJECTIVES:** This article describes the implementation of the Care for Seniors model of care, an innovative approach to improving care coordination and integration, and provides preliminary evidence of effective use of specialist resources and acute care services.

**DESIGN:** Retrospective.

**SETTING:** Primary care; cross-sector.

**PARTICIPANTS:** Older adults living in a rural area in southwestern Ontario, Canada.

**MEASUREMENTS:** Number of new geriatrician referrals and follow-up visits before and after the launch of the Care for Seniors program, number of Nurse Practitioner visits in a primary care setting, in-home, retirement home and hospital, number of discharges home from hospital and length of hospital stay between.

**RESULTS:** In the 2 years before the launch of the program, the total number of visits to the geriatrician for individuals from this FHT was relatively low, 21 and 15, respectively for 2005–06 and 2006–07, increasing to 73 for the 2011–12 year. Although the absolute number of individuals supported by the NP-Geri has remained relatively the same, the numbers seen in the primary care office or in the senior's clinic has declined over time, and the number of home visits has increased, as have visits in the retirement homes. The percentage of individuals dis-

charged home increased from 19% in 2008–09 to 31% in 2009–10 and 26% in 2011–12 and the average length of stay decreased over time.

**CONCLUSIONS:** This model of care represents a promising collaboration between primary care and specialist care for improving care to frail older adults living in rural communities, potentially improving timely access to health care and crisis intervention. *J Am Geriatr Soc* 62:1772–1780, 2014.

**Key words:** primary care; frail older adults; nurse practitioner; chronic disease management; geriatric care

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In Ontario, family health teams (FHTs) consist of health professionals of varying disciplines (family physicians, nurses, social workers, physical and occupational therapists, pharmacists, and other allied health professions) working together to provide primary care.<sup>1</sup> FHTs were developed in an effort to better enable healthcare providers to manage chronic conditions and in particular to provide better integration with tertiary care,<sup>2</sup> but despite added resources in these primary care settings, care of elderly adults remains a challenge. Many older adults have multiple comorbidities that are best suited to a chronic disease management approach, however this is a challenge to provide within primary care, which is designed to provide acute and episodic care.<sup>3</sup> When care needs exceed the capacity of primary care providers (PCPs), a shortage of geriatricians<sup>4</sup> and the provision of care in “silos,” with little collaboration, coordination, or integration between various care providers or health sectors, challenges access to specialized care.

Although FHTs are suited for the management of frail elderly adults, the level of complexity of this population suggests the need for a specialized approach to the provision of primary care to people with multiple comorbidities.<sup>5</sup> Nurse practitioners (NPs), also referred to as

advanced practice nurses, provide a significant opportunity for improving access to high-quality, cost-effective primary care across the continuum of care.<sup>6</sup> NPs play an important role in providing clinical care and education, supporting prevention, health, and wellness and using evidence-based best practices.<sup>7</sup> Critical to their role is collaboration with physicians and other healthcare providers to optimize care.<sup>7</sup> NPs have competencies in primary care related to assessment, diagnosis, and treatment of a variety of acute, emergency, and chronic conditions.<sup>8</sup> Together with competencies related to patient education, prevention, and health promotion, NPs are ideally suited to geriatric care. There is evidence that NPs can affect health outcomes, functional status, quality of life,<sup>9</sup> adherence to treatment regimens,<sup>10</sup> and health system outcomes, including reducing hospital admissions and readmissions and emergency department wait times.<sup>11–14</sup> Generally, there is much support for the role of NPs as an opportunity for improving care for older adults, supporting chronic disease management, and providing holistic care with attention to medical, functional, social, environmental, and cultural issues;<sup>15–18</sup> providing cost effective health care;<sup>19</sup> and providing care to underserved and rural populations.<sup>20,21</sup>

Studies evaluating NP-led transitional care models that support frail older adults transitioning between health sectors with the provision of follow-up care, education, self-management support, and medication review have found better outcomes and lower healthcare costs.<sup>22,23</sup> NP-led models of dementia care have led to better behavior management and caregiver support,<sup>24</sup> and those related to chronic disease management have been associated with better health outcomes<sup>25</sup> and less hospitalization.<sup>26</sup>

To increase capacity to manage and support an aging population, a FHT in southwestern Ontario retained a NP in geriatrics (NP-Geri) to develop a proactive geriatric service to increase access to primary care for frail older adults and to improve the quality of care of older adults. This service evolved as a collaboration between the NP-Geri and family physicians within the FHT with support from an existing geriatrician consultation service and working with community partners to provide enhanced care within this primary care setting. Building on an ecosystem approach, without creation of any new layer of service because NPs were already providing care in this FHT, this model ensures that care is focused on the individual and delivered in the least-intrusive environment for frail older adults, which is most frequently their own home. This article describes the implementation of this innovative model of care and provides preliminary evidence of effective use of specialist resources and acute care services. Because this article describes a model of care using administrative data that does not report individual-level or personally identifiable data, an institutional review board did not review this project.

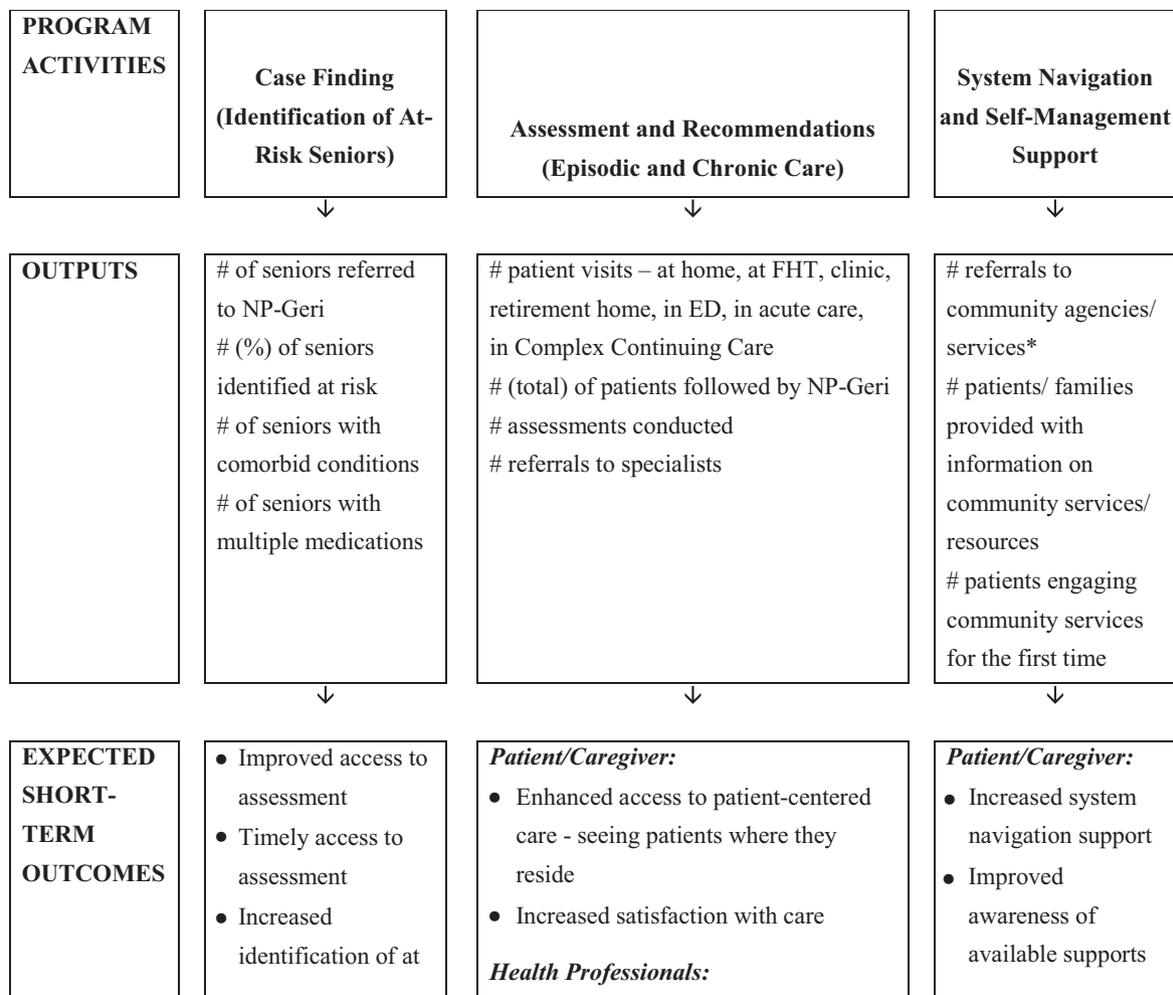
## CARE FOR OLDER ADULTS: PROGRAM DEVELOPMENT

The North Perth FHT is located in the County of Perth, which has a population of 75,112,<sup>27</sup> 12,250 of whom were aged 65 and older in 2011; this is expected to increase to 17,420 by 2023.<sup>28</sup> The FHT is located in a small town in the northern region of the county and serves

a primarily rural population.<sup>27</sup> This FHT consists of 10 medical practices with a combined base of approximately 17,000 patients, 2,496 (14.6%) of whom are aged 65 and older, and 1,188 are aged 75 and older. Within this FHT, family physicians work in various settings, including clinics, local hospital emergency departments, acute care, obstetrics, Complex Continuing Care (CCC) units, retirement homes, and nursing homes. (In Ontario, CCC units provide continuing medically complex care to individuals who have a chronic illness or disabilities that require skilled or technology-based care that cannot be provided at home or in long-term care or nursing homes.) With the aging of the population in this region, building capacity for caring for elderly adults is imperative.

In 2008, the North Perth FHT retained an NP. Because of her experience in and passion for geriatrics, she was asked to develop and implement a Care for Seniors program. A program logic model for this service is presented in Figure 1. The implementation process is described below. The ultimate objective of this program is to enable older adults with complex medical conditions to live to their fullest quality of life in an environment that is safe and acceptable to them and that best supports their needs through collaboration with their caregivers (family and healthcare providers), providing timely assessments in the most-appropriate location and partnering with appropriate community supports. In this care model, the NP-Geri assumes a pivotal role as she collaborates with PCPs and a geriatrician to provide coordinated, comprehensive care. Moreover, the NP-Geri works in other sectors across the continuum to coordinate care and support people as they transition between sectors, including home, hospital (acute care unit and CCC units), and retirement and long-term care (LTC) homes. The NP-Geri and geriatrician hold a clinic in the FHT once a month. On this clinic day, the geriatrician and NP-Geri also see inpatients in acute care and CCC together, and home visits are conducted as needed. The NP-Geri, in collaboration with the PCPs, refers individuals to this clinic who are complex in terms of multiple comorbidities, complex geriatric syndromes (e.g., delirium, depression, varying stages of dementia, falls, deconditioning, incontinence, declining function, multiple complex medical conditions, multiple medications) and those who require medication reconciliation or are difficult to diagnose. Before the clinic date, the NP-Geri collects a detailed history and conducts preliminary assessments and investigations (e.g., laboratory and diagnostic imaging), making more-efficient use of the geriatrician's clinic time. In addition to her involvement in the FHT, the NP-Geri attends weekly multidisciplinary team meetings in the local hospital's CCC and acute care units to assist with care coordination and discharge planning for frail and complex older adults. The NP-Geri accepts referrals from a variety of sources, namely family physicians and other care providers in the FHT, four retirement homes in the area (117 beds in total), the CCC unit (25 beds), and the acute care unit (25 beds) at the local general hospital. Presenting problems at the time of referral are varied but most often represent a change in functioning or cognition.

All individuals referred to this program receive a Comprehensive Geriatric Assessment,<sup>29</sup> which includes a review of medical and social history, chronic diseases, current medications, physical examination, functional assessment



**Figure 1.** North Perth family health team (FHT) nurse practitioner (NP)–led geriatric model of care program logic model: anticipated outcomes. The outcomes listed in this Program Logic Model are anticipated and have not been confirmed with empirical evidence. \*For example, Alzheimer’s Society, Community Care Access Centre, Canadian Hearing Society, Arthritis Society, social work or counseling, older adult mental health. ED = emergency department. (Figure 1 continued on nextpage)

(Timed Up and Go), cognitive assessment (Montreal Cognitive Assessment, Mini-Mental Status Examination, Trial-Making Test Part B), and mood assessment (Geriatric Depression Scale, Patient Health Questionnaire—9 (depression-related items)). Health promotion is an important component of this model of care, with attention paid to disease monitoring, screening for cognitive and mood disorders, falls risk assessment, bone health review, medication review, elder abuse awareness, incontinence prevention, immunization, and foot care.

#### UNIQUE FEATURES OF THIS MODEL OF CARE: AN ECOSYSTEM APPROACH

Important elements of this model of care are summarized in Table 1. This model of care is unique in that it uses an ecosystem approach<sup>30</sup> to case finding and management within the existing system, with the NP-Geri acting as the interconnecting “glue” between various sectors (home, caregivers, care partners, community, hospitals) of the healthcare system. The NP-Geri moves smoothly between sectors, including the provision of proactive primary care in the four retirement homes. The NP-Geri visits each

retirement home every 2 weeks to follow up on older adults who were previously seen and to identify, with retirement home staff, other older adults who may be at risk of functional or cognitive decline. Similarly, within the FHT, individuals at greatest risk of decline are proactively targeted for review with the NP-Geri, ensuring early access to assessment and intervention as delivered by the NP-Geri in consultation with PCPs and with the geriatrician as needed. This service is also unique in its cross-sector care integration, particularly as related to the NP-Geri’s role in facilitating a seamless transition from acute care to the community, use of technology to facilitate information sharing, and collaboration with care partners across sectors.

#### Ecosystem Approach to Care

An ecosystem approach involves an opportunity for assuming a systemic perspective on individual needs and health service delivery, taking into account interconnections between individuals and their community (families, caregivers, service partners) and respective information sharing.<sup>31</sup> Oral and electronic communications play a critical



Figure 1. Continued.

role in this ecosystem approach, with the NP-Geri being the “glue” or the interconnecting link. In contrast to health services that operate independently in silos, this model of care with the NP-Geri was developed in direct connection with these existing services. The ecosystem involves ongoing development of each of these services and is somewhat dependent on the other, so that each is interconnected and ever-evolving, being dynamic, rather than static.<sup>30</sup> For instance, the Alzheimer’s Society was able to provide more programming based on enhanced referrals from this service. More-integrated care was feasible with the NP-Geri assisting with transitions between sectors (e.g., hospital to

home). This community engagement is a critical feature of the ecosystem service development and delivery.<sup>32</sup> Adopting this approach to the care of older adults ensures that individual-focused health services evolve within the system of care, integrally involving families and care givers and sharing information (orally and electronically) between services, beyond the traditional boundaries that exist.<sup>31</sup>

**Integrated Care and Transitional Care**

To ensure integrated care and provide smooth transitions between sectors of care, the NP-Geri acts like the “glue,”

**Table 1. Important Features of the Care for Seniors Model of Care**

Nurse practitioner (NP) in geriatrics (NP-Geri) plays a central pivotal role
NP-led model: NP-Geri and primary care providers form the core team in consultation with a geriatrician and collaboration with community partners, including families
Use of an ecosystem approach: although based in Family Health Team, the NP-Geri facilitates a systemic perspective on individual needs and health service delivery, working across sectors (home, hospital, community), being the interconnecting “glue” within existing services that act in silos
Proactive geriatric primary care; especially within the four retirement homes during twice-monthly visits
Case-finding in collaboration with primary care providers, community, and acute care partners
Focus on early identification and intervention and health promotion
Access to Comprehensive Geriatric Assessment to identify systemic, medical, functional, and psychosocial concerns that place elderly adults at risk
NP-Geri supports transition from sector to sector in person when possible and with written, verbal, and electronic communication
Discharge planning and follow-up support for complex older adults being discharged from Complex Continuing Care or acute care unit back to the community
System navigation support to ensure access to available community supports and resources
Access to electronic medical records across sectors to optimize information sharing
Provision of care in the least disruptive environment, most commonly the individual’s home

communicating through the electronic medical record (EMR), written correspondence, and personal visits to the service to which the individual is transitioning, thus pulling sectors together. In attending weekly rounds in the CCC unit, the NP-Geri participates in discharge planning for individuals registered in the FHT. She ensures that a follow-up plan is in place with primary care, makes home visits for those who will benefit but otherwise arranges for them to see their PCPs, and ensures that all the team members including families have the relevant discharge information. Equally important, the NP-Geri ensures that any needed community services and resources are in place so that the transition to community is successful, assisting the individual and caregiver with system navigation support and ensuring that they understand what they need to do to sustain their health and prevent rehospitalization. For individuals transitioning from the community to LTC, the NP-Geri assists with the admission process to ensure a seamless transition, including a personal visit to the home. This transitional care role ensures that individuals have a coordinated and individualized care plan, including medication reconciliation, that will ensure successful and safe recuperation and contributes to their ability to remain home or in LTC and out of the hospital. Because collaborative care with PCPs and geriatricians is critical to the success of this model, the NP-Geri has immediate access to these individuals over the telephone or e-mail (ensuring confidentiality and privacy guidelines are followed) as needed.

### Cross-Sector Information Sharing: EMRs

In contrast to many care providers working in the community, PCPs and the NP-Geri have access to EMRs in the FHT and hospital, and the NP-Geri is able to access these records from the community. (She does not need to be physically present in the hospital to access records, as is often the case.) This access to information across sectors ensures care integration and timely access to information about the individual’s status; avoids duplication of investigations because the NP-Geri has immediate access to what has already been done; ensures timely access to accurate information without needing to rely on individual and caregiver recall, particularly because many frail older

adults and persons with dementia may not be able to provide a reliable history; and prevents individuals and caregivers from having to repeat answers. It also allows the NP-Geri to document any changes for the individual immediately, particularly medication changes or diagnostic information, so that there is no delay in information sharing with other providers.

### Collaboration with Cross-Sector Care Partners: The “Glue”

Because the NP-Geri works across health sectors, she has established collaborative working relationships with various care partners, such as family members, retirement home staff, Community Care Access Centre case managers (in Ontario, the Community Care Access Centre is responsible for the provision of home care services and LTC admissions), hospital discharge planners, various community organizations such as the Alzheimer’s Society, the local Canadian Hearing Society, the Arthritis Society, community-based wellness programs, and older adult mental health programs, to facilitate access to community services. As an example, for persons with dementia, retirement home staff and Alzheimer’s Society staff identify individuals whose disease progression may signal the need for medical follow-up and more-intensive intervention. The NP-Geri is the glue that connects individuals to all relevant care providers and community services and connects all care providers together so that the individual has access to the right care, in the right place, at the right time—consistent with Ontario’s action plan for improved health care.<sup>33</sup> Greater collaboration between local care providers ensures better care coordination and information sharing so that individuals have more timely access to the care they need across health sectors.

### IMPLEMENTATION OF THE CARE FOR SENIORS PROGRAM

The program evolved organically. Implementation occurred in stages as the triage nurses at the FHT and the PCPs, the hospital staff and allied health professionals, and the community partners became familiar with the scope of practice

of the NP-Geri. Presence of an internist–geriatrician in the community, with whom the NP had trained, was helpful in successful implementation. Evolution of the program in response to the community’s needs and building relationships (involving many meetings) with community services and partners were pivotal to its success. Relative flexibility of the NP-Geri in scheduling and ability to drive for distant home visits in this farming community were essential. If needed, the geriatrician then saw these individuals in the monthly clinic (mostly) or at home visits (infrequently).

**Participant Characteristics**

Record keeping that the NP-Geri and geriatrician completed, with additional information from FHT records, have supported the description of participant characteristics and provided evidence for important outcomes related to access to a geriatrician (April 2005—March 2012; Figure 2) and shorter hospital stays (April 2008—March 2013; Table 3). Eighty-four percent of the individuals that the NP-Geri sees are aged 75 and older (range 36–100; the NP-Geri sees younger individuals with geriatric syndromes). Complexity of the NP-Geri caseload is evident in the fact that 71% of individuals are on 10 or more medications and 60% have five or more chronic conditions, including congestive heart failure, diabetes mellitus, chronic obstructive pulmonary disease, cognitive impairment, osteoporosis, caregiver stress, gait impairment, and mental health concerns.

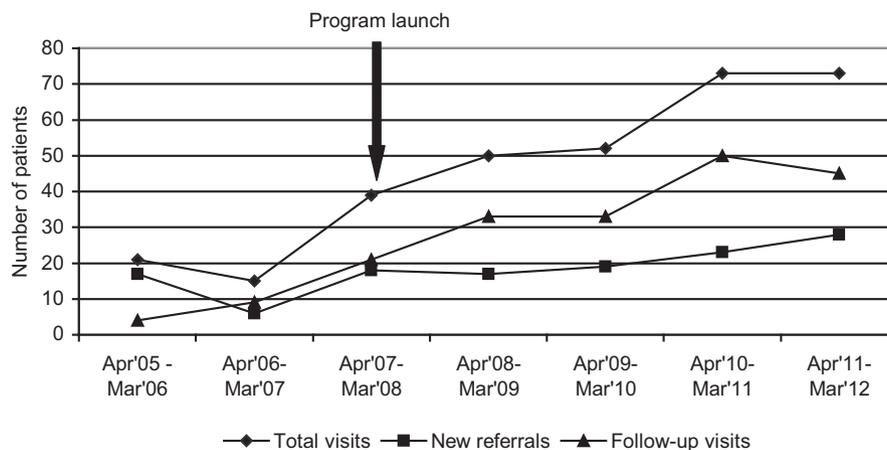
**Cross-Sector Provision of Care**

In the current model of care, the NP-Geri has played a significant role in improving access to care for homebound individuals (own home in the community or retirement homes), who tend to have infrequent access to physicians.<sup>34</sup> As shown in Table 2, although the absolute number of individuals supported by the NP-Geri has remained relatively the same, the numbers seen in the primary care office or in the senior’s clinic has declined over time, and the number of home visits has increased, as have visits in the retirement homes.

The case-finding activities of the NP-Geri have contributed to the increased number of individuals receiving specialized geriatric care, with a trend toward more referrals to the geriatrician for individuals from this FHT and more follow-up visits since the launch of this care model (Figure 2) but stabilizing over time. In the 2 years before the launch of the program, the total number of visits to the geriatrician for individuals from this FHT was relatively low, 21 for 2005 to 06 and 15 for 2006 to 07, increasing to 73 for 2011 to 12. The number of new referrals to the geriatrician (7% in 2010–11 and 9% in 2011–12, based on the total number of individuals that the NP-Geri supported in these years) are as expected for high-risk, complex cases, consistent with a chronic disease management model,<sup>35</sup> reflecting that the majority of individuals are being managed in primary care. Generally, use of geriatrician time has become more efficient as detailed histories, medication reconciliation, screening, and investigations have been completed before the geriatrician consultation. There is also anecdotal evidence from the FHT telephone triage nursing program (those unsure of whether their health concern requires medical attention can call this program) that calls to their program from the retirement homes have decreased markedly with the introduction of the NP-Geri service, suggesting that perhaps this role has contributed to better access to primary care and self-management so that individuals are not needing to access this triage service.

**Effect on Acute Care Use**

Although the number of individuals admitted to CCC, primarily from the acute care unit, increased over time, the average length of stay in CCC decreased over time (Table 3), especially when the NP-Geri initiated weekly rounds. As the NP-Geri developed community partnerships over her first year in the role and became more actively involved in rounds and discharge planning, the percentage of individuals discharged home increased from 19% in 2008 to 09 to 31% in 2009 to 10 and 26% in 2011 to 12. It is possible that optimizing use of CCC beds to increase turnover and decreasing length of stay at this unit allowed for less backlog in the acute care areas of the



**Figure 2.** Total number of yearly\* (April 1 – March 31) geriatrician visits, new referrals and follow-up visits before and after the launch of the Care for Seniors Program.

**Table 2. Nurse Practitioner (NP) and Geriatrician Activities: April 2010 to September 2012**

Activities	April 1, 2010– March 31, 2011	April 1, 2011– March 31, 2012	April 1, 2012– September 31, 2012
	n		
<b>NP</b>			
Family Health Team office and clinic visits (individuals supported)	321 (217)	290 (185)	134 (205)
<b>Community care</b>			
Home visits (individuals supported)	89 (32)	109 (42)	123 (46)
Client visits in retirement home (117 beds) <sup>a</sup>	585	717	1080
<b>Hospital</b>			
Complex Continuing Care individual visits (25 beds)	375	NA	224
Acute care unit individual visits	12	14	13
Individuals supported across sectors	349	327	351
<b>Geriatrician</b>			
			April 1, 2012–December 2012
Individual visits	73	73	61
New consultations	23	28	24
Follow-up appointments	50	45	37

NA = not available, although there is general consensus that the NP-Geri provided continuous support of 25 Complex Continuing Care beds in the local hospital.

<sup>a</sup>The NP in geriatrics (NP-Geri) supported 117 retirement home residents across all three time periods.

**Table 3. Number of Admissions, Length of Stay and Discharge Disposition of Complex Continuing Care Individuals Served by the Nurse Practitioner**

Complex Continuing Care	April 1, 2008– March 31, 2009	April 1, 2009– March 31, 2010	April 1, 2010– March 31, 2011	April 1, 2011– March 31, 2012	April 1, 2012– March 31, 2013
Individuals admitted, n <sup>a</sup>	43	94	110	111	143
Length of stay, days, average	277.0	103.8	82.8	81.6	46.6
<b>Discharge disposition, n (%)</b>					
Discharged home	8 (19)	42 (45)	51 (46)	34 (31)	37 (26)
Transferred to long-term care	24 (56)	26 (28)	31 (28)	48 (43)	69 (49)
Transferred to other acute care center	0	1 (1)	4 (4)	5 (5)	9 (6)
Died	11 (26)	24 (26)	24 (22)	24 (22)	25 (18)

<sup>a</sup>Individuals registered with the North Perth Family Health Team.

hospital. Transfers to LTC have been variable over time, highlighting the high level of complexity and frailty of this population.

### Strengths

The strengths of this program include the low cost of implementation (primarily the NP-Geri's salary), use of existing services without creation of additional layers of services, effective communication, and capacity building for older adults' care across sectors. This program facilitates earlier case-finding of geriatric syndromes, resulting in earlier intervention, education, and support to families and individuals, with emphasis on crisis prevention, and transitional support as individuals cross health sectors. With this program, the internist-geriatrician is able to see more individuals over the same time period because the NP-Geri contributes to the assessment process and monitors individuals to ensure adherence to medication changes and recommendations. Moreover, the NP-Geri has been able to identify more older adults needing community services, creating the critical mass needed to provide more programming in the community.

### Enabling Factors: What Works

It is likely that a number of factors have contributed to the success of this model of care. Flexibility of the FHT to allow the NP-Geri to develop a program for older adults' care; the NP-Geri's training in geriatrics (having trained with the internist-geriatrician), leadership skills, and ability to form collaborative partnerships; and the availability of an internist-geriatrician all contributed to the development of this program, which evolved according to the needs of the population served. These success factors are consistent with those identified in the literature as contributing to the success of NP-led care models.<sup>36</sup> Critical to this model is the integration of care between the family physician, the NP-Geri, and the geriatrician, with each contributing his or her level of expertise according to the needs of the individual. The NP-Geri plays an important role in coordinating care between sectors with effective communication between providers and with families, which has been identified as critical to continuity and integrated care,<sup>37</sup> particularly after discharge from hospital, when frail older adults need intensive support to improve health, reconcile medications, and reduce hospitalization.<sup>38</sup> Access to EMRs

at most points in the continuum of care further supports care continuity, integration, and accuracy.<sup>39</sup> This small cohesive team (PCP, NP-Geri, geriatrician, family) allows for easy interaction with care partners across sectors (with NP-Geri acting as the interconnecting “glue”) and is easily adaptable to most primary care settings, particularly in areas where geriatric-specific expertise is limited, as is the case in this predominantly rural area.

### Challenges

Initial challenges were logistical, such as developing an optimal and coordinated schedule for seeing individuals in various locations and establishing effective communication mechanisms, which were often resolved after trial and error using different strategies. Because there is an increasing push to keep older adults at home as long as possible and out of the hospital and LTC, and as the population ages, increases to the NP-Geri’s current case load may pose a threat to the sustainability of this model of care. Opportunities for sustaining this model using existing resources or with additional resources, especially with an increase in case load, will need to be explored. Because few NPs with specialized geriatrics training are available, the creation of an education program for NPs in geriatrics will be instrumental in sustaining this model of care; work is under way to develop this program.

### Limitations

The data presented were gathered retrospectively to demonstrate the success of this model. Inadequate information is available on the effect of this model of care on emergency department visits and admissions to hospital. Although it is generally suggested that these have decreased with the implementation of this model, definitive data are not available. There is also no comparison group with which to quantify effect and conduct cost-effectiveness analyses.

### CONCLUSIONS

Combined with the expertise of PCPs and geriatricians in managing chronic geriatric syndromes, NPs have the potential to optimize care for medically complex older adults at the primary care level, within existing services and without adding extra layers of services. Several systematic reviews of the literature have found that models of care in which geriatricians have direct patient contact are more likely to result in better health outcomes than models of care in which geriatricians primarily provide consultation support to other providers<sup>40</sup> and can have a positive effect on improving functional status and reducing hospital admissions and institutionalization.<sup>41</sup> There is evidence that collaborative care provided by a geriatrician and NP-Geri can result in better quality of care for dementia, depression, falls, heart failure, and urinary incontinence and greater adherence to recommendations.<sup>42</sup> A study of a primary care–based shared care model involving a NP-Geri, family physician, and registered practical nurse, supported by a pharmacist, dietitian, social worker, and visiting geriatrician, demonstrated that this care model provided timely access to specialized assessment and preventive and multidisciplinary care and was perceived to improve care coordination, facilitated by shared access to

medical records and access to a geriatrician for capacity building.<sup>43</sup>

The model of care presented here addresses many of the challenges to the provision of care to older adults, including lack of geriatric expertise, particularly in rural areas; limited access to hospital medical records; and limited care coordination.<sup>38</sup> This model of care is consistent with a chronic disease management approach in that it emphasizes self-management, with the NP-Geri supporting older adults, families, and caregivers to manage their health proactively and effectively in the least intrusive environment—the home environment for most older adults. Moreover, the majority of individuals can be managed in primary care with better links between primary care and specialist care, reserving more-complex cases for specialist consultation and thus making more efficient use of limited geriatric resources in Canada. Although there is limited empirical evidence to demonstrate the effects associated with this model of care, limiting the inferences that can be made, the model is nonetheless a potential opportunity to improve care of vulnerable older adults in a way that may contribute to efficient use of existing resources. This service is a promising model of collaboration between family physicians and NPs with geriatric expertise, supported by a geriatrician, to improve care for frail elderly adults living in rural areas and has the potential to be easily replicated in other communities.

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**Conflict of Interest:** The authors have no conflicts of interest to declare.

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**Author Contributions:** Prasad: concept and design, interpretation, data collection and analysis, critical manuscript review, final manuscript approval. Dunn: concept and design, data collection and analysis, interpretation, critical manuscript review, final manuscript approval. Hillier: data analysis, manuscript drafting, critical manuscript review, final manuscript approval. McAiney: interpretation, critical manuscript review, final manuscript approval. Warren: concept and design, interpretation, critical manuscript review, final manuscript approval. Rutherford: critical manuscript review, final manuscript approval.

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