Care for Canada’s frail elderly population: Fragmentation or integration?

Howard Bergman, MD; François Bélanger, PhD; Paule Lebel, MD; André-Pierre Contandriopoulos, PhD; Pierre Toussignant, MD; Yvon Brunelle; Terry Kaufman; Ellen Leibovich, MSc; Rosario Rodriguez, MD; Mark Clarfield, MD

Abstract

Budget constraints, technological advances and a growing elderly population have resulted in major reforms in health care systems across Canada. This has led to fewer and smaller acute care hospitals and increasing pressure on the primary care and continuing care networks. The present system of care for the frail elderly, who are particularly vulnerable, is characterized by fragmentation of services, negative incentives and the absence of accountability. This in turn leads to the inappropriate and costly use of health and social services, particularly in acute care hospitals and long-term care institutions. Canada needs to develop a publicly managed community-based system of primary care to provide integrated care for the frail elderly. The authors describe such a model, which would have clinical and financial responsibility for the full range of health and social services required by this population. This model would represent a major challenge and change for the existing system. Demonstration projects are needed to evaluate its cost-effectiveness and address issues raised by its introduction.

Résumé

Les contraintes budgétaires, les progrès de la technologie et le vieillissement de la population ont entraîné des réformes importantes des systèmes de soins de santé partout au Canada. Ces réformes ont réduit le nombre et la taille des hôpitaux de soins actifs et alourdi les pressions qui s’exercent sur les réseaux de soins primaires et de soins de longue durée. Le système actuel de soin des personnes âgées frêles, qui sont particulièrement vulnérables, est caractérisé par la fragmentation des services, des incitations négatives et l’absence d’imputabilité. Cette situation entraîne à son tour l’utilisation indue et coûteuse des services de santé et des services sociaux, particulièrement dans les hôpitaux de soins actifs et les établissements de soins de longue durée. Le Canada doit mettre au point un système communautaire de soins primaires géré par le secteur public afin de donner des soins intégrés aux personnes âgées frêles. Les auteurs décrivent un tel modèle qui assurerait la responsabilité clinique et financière de l’éventail complet des services de santé et des services sociaux dont cette population a besoin. Le modèle poserait un défi important au système actuel qu’il transformerait. Il faut lancer des projets témoins pour évaluer la rentabilité de ce modèle et répondre aux questions soulevées par sa mise en œuvre.
more than 75 years old, have complex acute and chronic medical problems, as well as functional disabilities. Their social-support network is often overextended or at risk of breaking down. These characteristics lead to increased use of medical and social resources, particularly hospital services.\(^7\,8\)

In 1995 the McGill University/Université de Montréal Research Group on Integrated Services for the Frail Elderly received funding from Quebec's Ministry of Health and Social Services to develop a model for a system of integrated care for the frail elderly (Système de services intégrés pour personnes âgées en perte d'autonomie [SIPA]). The Montreal Regional Health Board, with support of the ministry, is preparing a financial and administrative plan to implement a SIPA demonstration project. Several acute care hospitals and centres locaux de services communautaires (CLSCs) in the Montreal area have formally submitted joint requests to act as SIPA centres.\(^9\) We will describe this model and the issues raised by its introduction.

**Care for the frail elderly**

In Canada, care for the frail elderly is characterized by fragmentation, lack of overall responsibility and accountability, and negative incentives. The results are costly and inappropriate use of acute care hospitals and long-term care institutions.\(^6\)

Medical and hospital care are universally insured in Canada, but the funding and organization of community and institutional continuing care do not provide the same comprehensive coverage and vary between and within provinces.\(^7\)

The responsibility for delivering services to the frail elderly currently lies with many agencies, jurisdictions and professionals: homecare and volunteer agencies, day centres, day hospitals, acute care and rehabilitation hospitals and long-term care institutions, as well as family and specialist physicians.\(^9\) Since each institution is a distinct entity with its own funding mechanism, budget, jurisdiction and criteria for patient selection, services are not coordinated according to patient needs. The system's various components work in parallel and function within their own budgets, with distinct responsibilities that both overlap and leave important needs unmet.\(^7\) No single institution with both clinical and financial responsibility is ultimately responsible and accountable for reducing the number of inappropriate hospital admissions and maintaining dependent elderly in the community or in the most appropriate setting.

Because of the universal and comprehensive characteristics of their mandate and funding, acute care hospitals are expected to resolve all medical and social problems.\(^11\)

Between 1961 and 1992, as per capita use of acute care hospitals decreased for all other age groups, there was a 23% increase in use by those older than 75.\(^2-4\)

Many jurisdictions have responded by developing a single entry point, with case management provided for continuing care in the community and for admissions to long-term care institutions.\(^17\) Although this coordination represents an important step toward reduced fragmentation and improved use of resources, there are still significant limitations, including the cleavage between medical and social care, acute and continuing care, and community and institutional care. Each agency continues to function autonomously in its own jurisdiction with its own budget.

In the US, evaluations of homecare projects have shown that it is not sufficient simply to "add on" case management and home care without fundamentally changing the delivery of care and the relationship between acute and long-term care.\(^16,18\) Several integrated care programs for the frail elderly have already been evaluated; their emphasis is on case management with clinical and financial responsibility. Some projects with different levels of integration, particularly the Program of All-Inclusive Care for the Elderly (PACE)\(^19,20\) and the Social Health Maintenance Organization (S/HMO) in the US,\(^21\) the Darlington Project in the United Kingdom\(^22,23\) and the Adel reform in Sweden\(^24,25\) have demonstrated, to varying degrees, increased patient and family satisfaction, increased use of primary care and community resources (including alternative housing), decreased admission rates to hospitals and institutions, and improved cost-effectiveness.

In Canada the current situation highlights the need for the development of a system of integrated care for the frail elderly. It should have the following characteristics:

- be a community system based on primary care, which is responsible for the full range of health and social services;
- be responsible for care of a defined population;
- provide case management, with clinical responsibility for the entire range of services provided;
- be funded on a prepayment basis, based on capitation with financial responsibility for the full range of services; and
- be publicly managed, thus respecting the fundamental tenets of Canadian health care.

**SIPA: a system of integrated care for the frail elderly**

SIPA is a community-based primary care system based on a patient-focused model designed to meet the needs of the frail elderly and to assure comprehensive care, integration of all available services and continuity of care by
all professionals and institutions involved. It is responsible for primary and secondary medical and social services, prevention, rehabilitation, medication, technical aids and long-term care, but not for ultraspecialized services such as transplantation.

One SIPA centre would be responsible for the entire population of frail elderly in a given region. In Quebec this would correspond to the region currently covered by the CLSCs, each of which has an elderly population of about 11 000 people, 20% to 25% of whom would be eligible for SIPA. In other provinces the SIPA region could be defined according to existing communities or catchment areas.

SIPA would serve as a single entry point for all frail elderly, who are deemed eligible if they have severe disability in 1 of the following areas, or mild to moderate disability in 2: activities of daily living, instrumental activities of daily living (such as financial management or meal preparation), mobility, mental status or continence. The accompanying sidebar provides eligibility criteria that correspond to the profile of frail community-dwelling elderly. All eligible elderly people would be registered in SIPA following evaluation. Although self-referral or referral by a health care professional would be allowed, there would be incentives for a SIPA centre to seek out eligible patients.

Clinical model

Within SIPA, care would be provided by an interdisciplinary team comprising health and social service professionals, including the person's family physician. The team would be responsible for evaluating patients' needs and planning and delivering services and its goal would be to use services and resources in the most appropriate and efficient way by employing evidence-based geriatric interventions. SIPA uses a consolidated model of case management by organizing and providing most community services. For contracted services, including those obtained in an acute care hospital or long-term care institution, SIPA maintains its financial responsibility for costs incurred and shares the clinical responsibility.

The interdisciplinary team would attempt to identify and minimize a person's risk of functional decline and to minimize inappropriate use of acute and long-term care institutions. Consequently, SIPA would emphasize flexibility and rapidity in meeting patients' needs using community-based interventions such as alternative and assisted housing instead of hospital and institutional care.

Empowerment and choice

In the organization of services and in decisions regarding resource allocation, SIPA must respect the dignity and preferences of elderly people and their caregivers. This is particularly true concerning institutional care. Without placing the entire burden of home care on the family and other informal caregivers, SIPA must encourage family participation in care and in decisions affecting care.

Empowerment and choice

Elderly people will be encouraged to remain patients of their family doctors or to choose the SIPA physician. In either case, a well-defined working agreement must be established between the primary care physician and the interdisciplinary team. SIPA would have to assure that the elderly person has a choice of care providers. When choosing consultants, hospitals and nursing homes, SIPA would have to consider the characteristics of its population and preferences of patients and their caregivers.

Elderly people would enroll in the SIPA centre within their territory. However, after a predetermined period they could request a transfer to a neighbouring SIPA centre.

Financing

Under SIPA, all public financing for health and social services would be integrated, and the new organization would be responsible for all costs incurred in providing services to the population it serves. Financial resources include funds currently distributed for the care of the target population to homecare organizations, acute care and rehabilitation hospitals, long-term care institutions and physicians, as well as funds for drugs. Based on existing provincial policies, SIPA would be able to ask patients to reimburse a portion of the cost of certain services.

A single SIPA budget would be based on the number of people enrolled, the socioeconomic and demographic

<table>
<thead>
<tr>
<th>Who is eligible for admission to SIPA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with a score of −5 in 1 of the following domains, or −2 in 2 domains, are eligible for entry:</td>
</tr>
<tr>
<td>- Activities of daily living (ADL)</td>
</tr>
<tr>
<td>- Instrumental activities of daily living</td>
</tr>
<tr>
<td>- Incontinence</td>
</tr>
<tr>
<td>- Mental status</td>
</tr>
<tr>
<td>- Mobility</td>
</tr>
<tr>
<td>Each domain has 2 to 8 categories. For example, there are 5 categories in the ADL domain: eating, washing, dressing, grooming and use of the toilet. Within each category, the following scores are applied: 0 = completely independent, −0.5 = independent with difficulty, −1 = needs cuing or supervision and −2 = needs help.</td>
</tr>
</tbody>
</table>
characteristics of the elderly population within its territory, and the budget available from the regional health board or ministry.

SIPA would be responsible for the cost of all services it organizes as well as for services contracted to other professionals and institutions, such as primary care physicians, consultants and acute care hospitals. It would not be allowed to overrun its budget. All deficits would have to be reimbursed and any surplus would be reinvested in a reserve fund or in the development of services.

**Governance**

Because this model is a community-based integrated system, it would be logical that the ministry or regional health board give a community-based organization, such as a CLSC, organizational responsibility. Depending on the jurisdiction, this responsibility might be given to a consortium of public institutions, including hospitals. In any case, because of its clinical responsibilities and the nature of its financing, SIPA would have to seek the collaboration of its partners, in particular acute care hospitals and long-term care institutions, physicians and other professionals, and community organizations. As well, the program would have to be evaluated independently and regularly based on 3 criteria: (1) its impact on the elderly population within its territory, including its clientele; (2) the quality of care and services that it provides or contracts to provide; and (3) its administrative operations.

**SIPA in the Canadian system of care**

The SIPA model proposes important changes in the way health and social services are organized, delivered and financed. The introduction of this model within Canada's health care system raises important issues regarding quality, performance. Therefore, they would not be a factor when determining a patient's care plan.

The evaluation of quality would be an essential component of this system. The SIPA model proposes ongoing evaluation of clinical care and administrative and financial activities based on an information system that is monitored not only internally but also by independent external groups.51 Quality is also ensured by patient empowerment. The proposed model introduces the notion of contestability: the elderly person can choose, within a certain framework, to be served by the SIPA centre in a neighbouring area. The fact that patients can change centres and “carry with them” the capitated budget means that all SIPA centres would have to be responsive to their needs and provide quality care that is at least comparable with that in the neighbouring centre. It is this potential for portability that would influence the response of providers.52

The primary care physician would play a key role in the SIPA model and the elderly would be encouraged to remain with their primary care physician. Physicians in general, and primary care physicians in particular, find it difficult to assure continuity of care for the frail elderly. With the ability to mobilize community resources quickly and flexibly, including comanagement with the SIPA physician when necessary, SIPA would facilitate the work of the family physician. SIPA would also be responsible for physician payment; in keeping with blended-payment proposals from family medicine organizations,53 the most feasible system would be to maintain fee-for-service payments and add sessional fees to account for the increased time needed to provide care for the frail elderly and their families, for home visits and for communication with the multidisciplinary team.

**Conclusion**

SIPA represents a major challenge and change to the management of care for frail elderly Canadians.
existing system of care. Before a major reform to the present system can be proposed, the issues raised in this paper need to be addressed. The next step, therefore, is to organize demonstration projects to develop the experience of integrated care in the Canadian context and to evaluate SIPA as an effective and cost-efficient model.

We thank Drs. David Challis and Robert Kane for their invaluable advice, and Dr. Susan Gold for her critical review of the manuscript. We thank Catherine Rousseau, MSc, Michèle Fréret and Josée Vézina for helping prepare the manuscript.

This work was supported by grants from the Quebec Ministry of Health and Social Services, the Jewish General Hospital Foundation (Sheila Zitriner Award), the World Health Organization, the Federation Council and the Foundation for Vital Aging (CLSC René Cassin).

References


46. Capital Health Authority. Program description for the comprehensive home option of integrated care for the elderly [working document]. Edmonton: Capital Health Authority; 1995.

Reprint requests to: Dr. Howard Bergman, Director, Division of Geriatric Medicine, McGill University, 3755 Côte Ste-Catherine Montreal QC H3T 1E2; fax 514 340-7547; mdhb@musica.mcgill.ca

About the authors: Dr. Bergman is Director of the Division of Geriatric Medicine, McGill University, and with the Département d’administration de la santé, Université de Montréal, and the Division of Geriatric Medicine, Sir Mortimer B. Davis–Jewish General Hospital, Montreal; Dr. Béland is with the Département d’administration de la santé, Université de Montréal, and the Division of Geriatric Medicine, McGill University, Montreal; Dr. Lebel is with the Direction de la santé publique, Régie régionale de Montréal, and the Centre hospitalier Côte des Neiges, Montreal; Dr. Contandriopoulos is Director of the Département d’administration de la santé, Université de Montréal; Dr. Tousignant is with the Direction de la santé publique, Régie régionale de Montréal, and the Département d’administration de la santé, Université de Montréal; Dr. Kaufman is with the CLSC Notre-Dame de Grace/Montreal West, Montreal; Ms. Leibovich is with the Division of Geriatric Medicine, McGill University, and the Département d’administration de la santé, Université de Montréal; Mr. Brunelle is with the Ministère de la Santé et des Services sociaux du Québec, Quebec; Mr. Kaufman is with the CLSC Notre-Dame de Grace/Montreal West, Montreal; Ms. Leibovich is with the Division of Geriatric Medicine, McGill University, and the Département d’administration de la santé, Université de Montréal; Dr. Rodríguez is with the Département d’administration de la santé, Université de Montréal; Dr. Clarfield is Director of Geriatrics in the Ministry of Health, Jerusalem, and with the Division of Geriatric Medicine, McGill University, and the Division of Geriatric Medicine, Sir Mortimer B. Davis–Jewish General Hospital.