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Policy

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Progress toward integrating care for seniors in Canada

"We have to skate toward where the puck is going to be, not to where it has been."¹

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Abstract

Introduction: Integrating care is a developing feature of provincial health delivery in Canada for those with chronic conditions. The purposes of this project were to review the conceptual understandings underlying integrated care, examine the features of models of cost-effective care for the elderly, and then ascertain to what extent Canadian provinces were implementing these features.

Method: These goals were accomplished through a review of the integrated care literature followed by a survey of the Canadian provinces. A pretested questionnaire was sent to each of the 10 provincial Ministries of Health in 2008. The questionnaire collected basic background information and then asked a series of open- and close-ended questions about each of the best practice features of integrated care as found in the literature review.

Results: System improvements in integrating care for the elderly are being implemented in Canadian provincial health care systems. There has been substantial improvement in the delivery of case management services but the supply of some community services could be improved. As well, the linkages amongst primary, acute and community care remain weak.

Discussion and conclusion: Providing an adequate supply of services is an ongoing issue in many provinces and could be the result of either inadequate funding and/or poor targeting of scarce resources. While it is promising that so many provinces are starting to break down the silos amongst types of health care service providers, much remains to be accomplished. These issues are at the core of integrating care and are among the challenges being faced by other countries.

Keywords

integration progress, seniors, Canada

Introduction

For some time, international health system policy-makers and some providers have been concerned with two related issues: poor quality of care for those with chronic conditions and rapidly rising health system

costs [1]. These issues are related because those with chronic conditions are the most frequent and costly users of health care services. Those over the age of 65 years (seniors) are much more likely to have chronic conditions and higher costs of care than those younger than 65 years [2].

Improved service coordination and/or integration are frequently cited as mechanisms to reduce fragmented

¹ Attributed to Wayne Gretzky by L. Martin. The Globe and Mail. Toronto, Ontario, November 20, 2008.

care and dissatisfaction for those with chronic condition while improving cost-effectiveness and outcomes [3]. As has been observed in many articles, improving the quality and efficiency care for those with chronic conditions represents a complex shift for health care systems [4]. Thus, change is not expected overnight. The purpose of this paper is to examine progress toward integrating care for elderly people in Canadian provinces.

Background

In Canada, government is structured as a confederation with significant constitutional responsibilities for social and health policy being the responsibility of the 10 provincial governments and three territories. Although the organization and delivery of health services fall within the jurisdictional powers of the provinces, the provinces rely on the federal government to assist with financing health care. The key piece of federal legislation governing requirements for federal financial participation in health is the Canada Health Act which sets forth two categories of service: insured services that include primary medical care and acute care, and extended health services that include residential long-term care, home care, adult residential care, and ambulatory health services. Only the insured services are covered by the five principles of the Act (universality, accessibility, public administration, portability and comprehensiveness). Supportive social services, such as adult day care are funded through another piece of federal legislation, the Canada Health and Social Transfer Act. Because funding for health services, broadly speaking, comes from different sources with differing legislative requirements, and there are varying social, economic and political issues amongst the provinces which affect their ability finance and deliver health care, each province has developed its own terms and conditions under which health and social care services will be provided. In spite of these differences, all provinces, like many countries in the developed world, are struggling to reform their health care systems to achieve better patient outcomes for those with chronic conditions while managing both public expectations and public health care costs.

Project purpose

In an effort to gauge the extent to which Canadian provinces are moving toward integrated care systems for seniors, the activities of this project included a literature review, followed by a survey of provincial ministries of health.

Methods

The following research questions were used to guide a review of the literature:

- What features characterize integrated models of care for seniors that have been evaluated and published in peer-reviewed journals?
- What features of integrated health and social care models are reported in national and international studies of system-level approaches to improving integration of care for seniors?
- What frameworks of care have been published, and what are their shared features and differences?

Studies and papers were sought through the academic health electronic databases (AgeLine, CINAHL, MEDLINE and Google Scholar), using a wide range of terms such as 'integration,' 'frameworks of care,' 'models of care,' 'coordination' and 'care of the elderly' or 'care of those with chronic conditions' or 'continuing care of the elderly.' In addition to articles from scholarly journals, the grey literature was searched through general electronic databases. The term *grey literature* refers to papers or reports published in non-peer-reviewed journals. Lastly, personal calls were made to experts in the field in search of additional reports.

Inclusion criteria for this review included:

- RCT or comparison group trails of models of integrated health and social care for seniors in peer-reviewed journals, government websites or official evaluation reports;
- Articles about frameworks of health and social integrated care for seniors.

There were three parts to the literature review: a review of RCTs or comparison group trails of integrated care projects for frail seniors, a review of the features of integrated care models in the international literature, and lastly, a review of frameworks for integrated care. Upon the completion of the literature review, a survey of Canadian provinces (Ministries of Health) was undertaken to collect new information about the extent to which the provinces are implementing best practice features of integrated systems of care.²

Results of the literature review

One of the key findings from the literature review was that integrated care is a process through which health policy goals can be accomplished; it is not an end in itself [5]. It follows that there is no one approach to integrating health care; the approach taken depends upon

²More detail can be found in [5, 6].

the policy goal and the local context of service delivery relationships. One of the features of successful projects was that they had, from the outset, a clear goal. Typically, goals include improving access, quality and financial sustainability, often for a high-risk population, such as the frail elderly or medically fragile children [5].

There have been few large RCT trials of integrated care for seniors. We found only seven studies that met our inclusion criteria. Each used a formal evaluation process including randomized assignment of subjects or developed a comparison group. The outcomes of interest in these projects included reductions in hospital and nursing home use, improvement in client satisfaction, and cost-effectiveness or cost savings, respectively.

In these studies, no single element of integrated models of care has been shown to be effective in and of itself. At a minimum, programs of integrated care for seniors that met their goals, use multidisciplinary care/case management for seniors at risk of poor outcomes supported by access to a range of health and social services. Excellent leadership, decision tools, common assessment and care planning instruments and integrated data systems are commonly listed infrastructure supports for integrated care (Table 1). These features can be implemented in a variety of ways depending on the local context. As well some projects, such as the Program for All Inclusive Care of the Elderly (PACE) and Social HMO models, use financial incentives to change provider behaviour. In short, programs that achieved their goals use a variety of features.

The programs with the strongest⁴ results (SIPA in Canada, Integrated Care in Italy, PACE in the United States and the Hospital Admission Risk Program in Australia) actively included either geriatricians or general practitioners (or both) in the projects.

The international literature contains a number of reports indicating that researchers in many countries are developing a consensus about the features of integrated health and social care models. The reports indicate a number of similarities congruent with the findings from evaluated integrated care programs: for example, the importance of cross-sectoral and cross-professional linkages for collaborative care planning; the use of multidisciplinary case/care management supported by shared assessment information, information technology and decision support; and, lastly, the development of appropriate financial and other incentives to encourage the involvement of organizations and professionals in shared program goals [13–17].

Lastly, the literature review examined papers containing conceptual frameworks of integrated care. Frameworks are tools that can be used to guide the implementation of reforms. Local or regional integration models should include framework features but combined in ways that are appropriate to the goal(s) of reform and local contextual features of care. We found four frameworks for integrated care [14, 18–20].

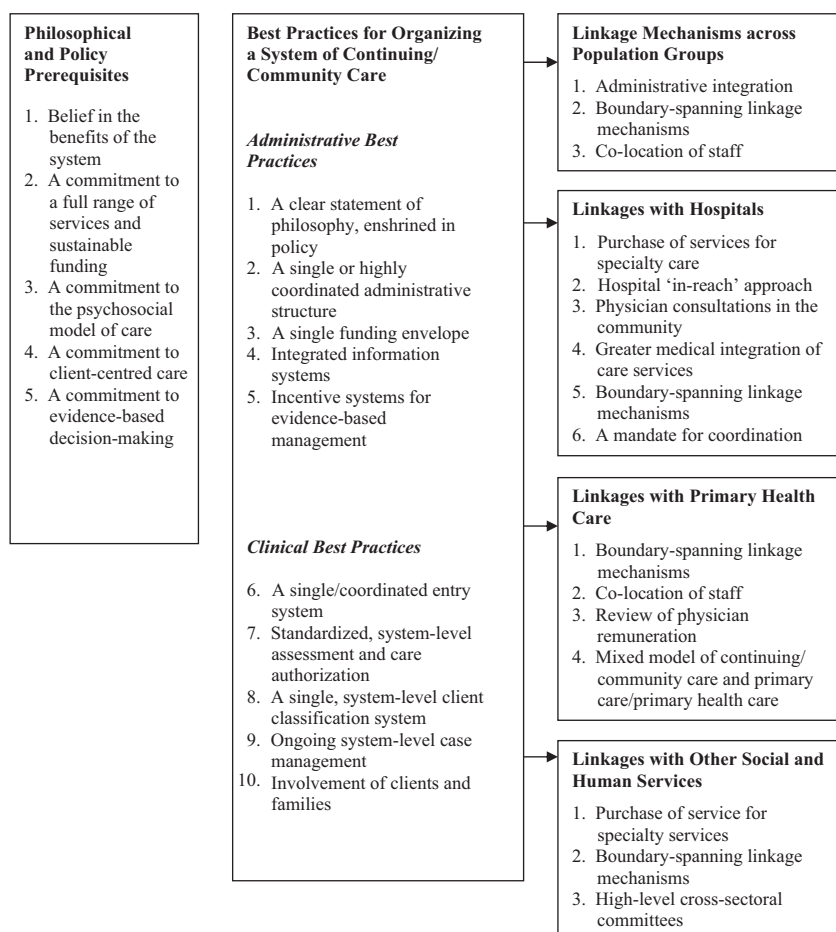
The Hollander and Prince [20] framework is depicted (Figure 1). It has three parts: philosophical and policy prerequisites that underlie ongoing support for integrated systems of care for those with disabilities; a set

Table 1. Summary table of shared project features, outcomes

Outcomes	Features in common	Projects and country	Comments
Reduction in hospital use	<ul style="list-style-type: none"> • Case management • Facilitated access to range of health and social services 	Hospital Admission Risk Program Australia [7] SIPA ³ , Canada [3] PACE United States [8] Integrated Care, Italy [9]	SIPA, PACE and Integrated Care (Italy) all included active physician involvement and multidisciplinary case management team.
Reduced use of nursing homes/long-term care homes	<ul style="list-style-type: none"> • Case management • Multidisciplinary team • Active physician involvement • Access to range of health and social services 	SIPA, Canada [3] PACE, United States [8] SHMO, United States [10, 11] Integrated Care, Italy [9]	PACE and SHMO use capitation payment. SIPA planned to evolve to capitation payment.
Cost-effectiveness or cost savings	<ul style="list-style-type: none"> • Case management • Facilitated access to range of health and social services 	Hospital Admission Risk Program, Australia [7] SIPA, Canada [3] Integrated Care, Italy [9] SIPA, Canada [3]	There were indications of cost-effectiveness in the Coordinated Care Trials, Round 2.
Increased client satisfaction, quality of life	<ul style="list-style-type: none"> • Case management • Facilitated access to range of health and social services 	PACE, United States [8] SHMO, United States [10, 11] SA HealthPlus (Coordinated Care Trials, Round 1), Australia [12]	SIPA involved no additional cost to informal caregivers.

³SIPA=Services Intégrés pour les Personnes Agées Fragiles/Integrated Care for the Frail Elderly.

⁴Strongest results refer to those projects that accomplished their goals as measured in their evaluation.



Source: Hollander and Prince [20].

Figure 1. Hollander and Prince framework.

of best practices for organizing service delivery; and a set of mechanisms for coordination and linkage across the range of organizations and professionals involved in delivering continuing care services (see below). It uses a comprehensive community-based long-term care system as its frame of reference.

A comparison of the frameworks is presented in Table 2. The Hollander and Prince framework seemed to be the most developed, because it includes more features and depicts the linkage relationships among health and social care sectors. Therefore, it was used as the reference framework.

It can be seen that there are areas of agreement across the frameworks, especially with the Kodner and Spreeuwenberg framework and with Leutz in regard to clinical features. No model proposed as many features as Hollander and Prince. In general, most frameworks included similar administrative and clinical features and a number of the linkage features.

The Hollander and Prince framework, because it is more detailed and because it was developed in Canada using Canadian information, was selected to form the basis of a survey of provincial Ministries of Health.

Results of a survey of Canadian provinces

The survey of provincial Ministries of Health was administered in the summer/fall of 2008. The survey was not sent to the northern territories which have very different social, political and economic characteristics than the provinces. The survey questions were pre-tested by the staff of the Ministry of Health in Alberta. Surveys were returned from nine of the 10 Canadian provinces. The province of Quebec did not respond to the survey; to obtain data from Quebec, the questionnaire was sent to the Regional Health Authority (RHA) in the Eastern Townships (L'Estrie RHA). In the case of Manitoba, the provincial response was incomplete

Table 2. Comparison of integration frameworks

Hollander and Prince	Leutz	Kodner and Spreeuwenberg	Banks
<i>Philosophical and policy prerequisites</i>	No mention	No mention	Yes
1. Belief in the benefits of the system			
2. A commitment to a full range of services and sustainable funding			
3. A commitment to the psychosocial model of care			
4. A commitment to client-centred care			
5. A commitment to evidence-based decision-making			
<i>Administrative best practices</i>			
6. A clear statement of philosophy, enshrined in policy	6. No mention	6. No mention	6. Not mentioned as such but implied
7. A single or highly coordinated administrative structure	7. No mention	7. Yes	7. No mention
8. A single funding envelope	8. No mention	8. Yes	8. Coherent funding systems
9. Integrated information systems	9. Yes	9. Yes	9. Yes
10. Incentive systems for evidence-based management	10. No mention	10. Common decision support tools	10. Yes, incentives and sanctions
<i>Clinical best practices</i>			
11. A single/coordinated entry system	11. Yes	11. Yes	11. No mention
12. Standardized system-level assessment and care authorization	12. Yes	12. Yes	12. No mention
13. A single, system-level client classification system	13. No mention	13. No mention	13. No mention
14. Ongoing system-level case management	14. Yes	14. Yes	14. No mention
15. Communication with clients and families	15. No mention	15. Yes	15. Support for caregivers
<i>Linkage mechanisms</i>			
16. Administrative integration	16. No mention	16. Consolidation/decentralization of responsibilities	16. No mention
17. Boundary-spanning linkage mechanisms	17. Yes	17. Yes	17. No mention but implied
18. Co-location of staff	18. No mention	18. Yes	18. No mention
<i>Linkages with Hospitals</i>			
19. Purchase of services for specialty care	19. No mention	19. Yes	19. No mention
20. Hospital 'in-reach'	20. No mention	20. No mention	20. No mention
21. Physician consultations in the community	21. No mention	21. Jointly managed care services	21. No mention
22. Greater medical integration of care services	22. No mention	22. Jointly managed care services	22. Awarding responsibilities to integrate services
23. Boundary-spanning linkage mechanisms	23. Yes	23. Yes	23. No mention
24. A mandate for coordination	24. No mention	24. Strategic alliances or care networks	24. Awarding responsibilities to integrate
<i>Linkages with Primary Care/Primary Health Care</i>			
25. Boundary-spanning linkage mechanisms	25. No mention	25. Yes	25. No mention but implied
26. Co-location of staff	26. No mention	26. Yes	26. No mention
27. Review of physician remuneration	27. No mention	27. No mention	27. Resourcing integration
28. Mixed model of continuing/community care and primary care/primary health care	28. No mention	28. Strategic alliances or care networks	28. No mention
<i>Linkages with Other Social and Human Services</i>			
29. Purchase of service for specialty services	29. No mention	29. Joint purchasing Commissioning	29. Resourcing integration
30. Boundary-spanning linkage mechanisms	30. No mention	30. Yes	30. No mention but implied
31. High-level cross-sectoral committees	31. Yes	31. Inter-sectoral planning	31. No mention

because some aspects of the survey were felt to be the responsibility of the provincial RHAs. A survey was sent to the Winnipeg RHA, which provided regional information.⁵

⁵With the devolution of authority to RHAs, health systems appear to be becoming more diverse within provinces. For example, provincial respondents indicated that features of integrated care vary across RHAs within their province. At the time of the survey, all provinces except Prince Edward Island had RHAs [Ontario's Local Area Health Networks (LHINs) are a version of RHAs]. After the survey was administered Alberta collapsed its RHAs into a province-wide health service board.

The survey contained both open and closed-ended questions. The questions were about the progress of the province in implementing the features listed in the Hollander and Prince framework. The survey was comprised of open and close-ended questions with many opportunities for clarification of responses. A copy of the questionnaire is available [6]. While the responses to the survey were typically prepared by staff, the senior staff member responsible for continuing care reviewed the completed surveys before they were submitted to the researcher.

Contextual information on the utilization of nursing home and home care services was collected in the initial survey questions, supplemented with census information from Statistics Canada. Access to a broad range of institutional and community services is an underlying requirement for integrated care programs for the frail elderly [16, 21] among many others.

Nursing Home⁶ Bed Supply and Utilization

There are about 151,979 nursing home beds in the nine provinces responding to the survey. Manitoba appears to have a larger supply of nursing home beds per senior (aged 65 years and over) than other provinces. All provinces and the RHA in Quebec, except Ontario, reported that they are increasing their nursing home bed supply (Table 3).

Access to and range of home care services

Some provinces (British Columbia, Nova Scotia and Prince Edward Island) serve less than 10% of their 65 plus population in their home care programs while Ontario and New Brunswick serve about 18.4% of those aged 65 years and above (Table 4).

Among a list of home care services that the literature indicates should be part of the basket of services,¹¹ all provinces offer nursing, personal support, respite care and palliative care. Most also offer rehabilitation services, equipment and supplies, day programs, home-making/housekeeping, meals, and self directed care. Few offer transportation or supportive housing as part of the home care program. Every province indicated that there were waiting lists for one or more home care services. Wait lists were most common for rehabilitation, personal support, day programs, homemaking and meals [6].

It appears that the provinces are having difficulty in maintaining an adequate supply of both home care and nursing home services because there are waiting lists for both of them. The home care services with wait lists varied by province but five provinces (50%) indicated wait lists for rehabilitation, personal care, and respite care. Home care service shortages may be a contributing factor to applications for nursing home placement.

In summary, one of the challenges facing policy makers is to ascertain the most effective balance between in-home and residential care. Providing too many nursing home beds leads to over utilization of an expensive service while providing too few beds leads to problems in managing hospital emergency rooms, inpatient flow and home and community care budgets. As well, long

Table 3. Nursing home (NH) bed supply⁷

	BC	AB	SK	MB	ON	QC/RHA	NB	NS	PE	NL
No. of seniors ⁸ (000's)	617.8	361.9	148.3	160.8	1685.7	47.9	108.6	138.4	20.1	70.6
No. of NH* beds (000s)	29.6	14.0	8.6	9.8	75.9	1.5	4.4	5.9	1.0	2.7
Beds per 1000 65+ pop.	47.9	38.7	58.0	60.9	45.0	31.3	40.5	42.6	50.0	38.2
Planning to build more NH beds	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Table 4. Home care utilization

	BC	AB	SK	MB	ON	QC/RHA	NB	NS	PE	NL
No. of seniors (000's)	617.8	361.9	148.3	160.8	1685.7	47.9	108.6	138.4	20.1	70.6
No. of seniors served by home care services ⁹	54,600	56,000	25,745 (60+)	27,227	310,486 ¹⁰	6204	20,000	11,759	1200	NA
Percent of seniors 65+ served by home care program	8.8%	15.5%	17.4%	16.8%	18.4%	12.9%	18.4%	8.4%	5.9%	NA

⁶ The provinces use a variety of terms to describe their residential long-term care services. In this survey, the term 'nursing home' is used to refer to licensed regulated facilities that provide medical, nursing and personal care services in addition to meals, housekeeping, laundry, social, spiritual and other services. Some provinces (British Columbia and Alberta, for example) provide public support for a residential option that includes supportive services for seniors who do not need the more intensive care provided by nursing homes (assisted living); others such as Ontario also have a more intensive level of care called a chronic disease hospital. This survey does not capture the availability of other residential care options, such as assisted living or chronic disease hospitals.

⁷ BC=British Columbia, AB=Alberta, SK=Saskatchewan, MB=Manitoba, ON=Ontario, QC=Quebec, RHA=Regional Health Authority, NB=New Brunswick, NS=Nova Scotia, PE=Prince Edward Island, NL=Newfoundland and Labrador.

⁸ Statistics Canada [22].

⁹ [23].

¹⁰ Ontario survey information was adjusted to subtract the clients served by the placement coordination units in order to make the Ontario figures comparable with those from other provinces.

¹¹ The service list included nursing, rehabilitation, equipment and supplies, personal support, day programs, homemaking/housekeeping, transportation, meals, palliative care, respite care, supportive housing, self-directed care, and other.

waits lists for nursing home places can develop with the result of increasing the reliance on family members.

Wait lists of home care and nursing home services may also be a function of a shortage of human and/or financial resources. And it is quite likely that wait lists could be a function of poor targeting of services because there is little information available to case managers about which services are most effective for which clients.

The second section of the survey assessed the extent to which provinces are implementing the features of the Hollander and Prince framework. It also asked questions about how important each of the framework features are to provincial decision-makers.

Acceptance of philosophical and policy prerequisites

The results indicate that provincial governments are supportive of the philosophical and policy requisites of the selected integrated care framework. The survey contained questions about each of the areas listed below.

Administrative best practices

Almost every province agreed that most of the administrative best practices are very important, but no province has implemented all of the administrative features. For example, one of the key features of integrated care systems is the availability of integrated information systems. Although all provinces reported that this feature is either very or somewhat important, none reported having a fully integrated information system. Additionally, most provinces do not have a single funding envelope for care for seniors, but those with RHAs have a single funding envelope for health services for their populations. None has an incentive system for evidence-based decision-making (but only four provinces think that this feature is very important). Only five provinces reported that they have a single administrative structure for continuing care services [6].

These results seem to indicate that most provinces have yet to align their administrative structures, enablers and incentives to support a more effective integrated care system.

Clinical best practices

Provinces have been more successful in implementing clinical best practice features. Seven provinces indicated that they have a single or coordinated entry system to care; almost all (nine) have province-wide

assessment and care authorization instruments; seven have system-level client classification systems; six have ongoing system-level case management; and they all have mechanisms for communicating with families [6].

Linkage mechanisms

The provinces are far less developed with regard to the boundary-spanning or linkage mechanisms of integrated care health systems, as shown in the following examples.

- *Administrative Linkage Mechanisms across Population Groups:* Half of the provinces do not think that this feature of the framework is important. Only two reported that they have this feature, although four reported that they have staff whose job description includes acting as access points to people from other populations [6].
- *Linkages with Hospitals:* Eight provinces have implemented co-location of home care case managers in hospitals. Half reported that they have physicians who make home visits to frail elders to avoid hospitalizations. Only the RHA in Quebec reported that the home care system is responsible for paying for hospital alternative level of care (ALC) days. This is becoming a common feature of some European systems, which view ALC days as a failure of the residential and community care system [6].
- *Linkages with Primary Health Care:* Five provinces report that physician remuneration is appropriate for care of the frail elderly and four provinces indicate that physicians are adequately remunerated for home visits. Only Ontario reported that home care case managers are located in primary care offices, in some parts of the province. The Quebec RHA and PEI reported that there are physicians associated with the home care program to coordinate with client primary care physicians [6].
- *Linkages with Other Social and Human Services:* Half of the provinces have an organized approach to eligibility for various levels of housing with supportive services. Only six report having a system for high-level planning of service supply for seniors needing coordinated care [6].

Given the importance of effective linkages across hospitals, primary care and other human services, it would appear that this is an area for greater attention by the provinces.

Table 5 indicates our assessment of the areas of strengths and weaknesses in provincial implementation of the best practice features of the integrated continuing care framework.

Table 5. Provincial implementation summary assessment

Framework	Provincial progress	Comments
Philosophical and policy prerequisites	Strong	Provinces generally support the prerequisites
Administrative features	Mixed	Some best practice features have been implemented
Clinical features	Quite strong	A number of best practice features have been implemented
Linkage Mechanisms across Population Groups	Weak	Few best practice features have been implemented
Linkages with Primary Health Care	Weak	Few best practice features have been implemented
Linkages with Hospitals	Weak	Few best practice features have been implemented
Linkages with Other Social and Human Services	Mixed	Few best practice features have been implemented

In summary, many provinces have waiting lists for at least some residential and community-based services; thus case managers may not be able to implement optimal care plans for frail elders. With regard to implementing the best practice features of integrated care models, there has been slower and uneven progress. The areas of weakest implementation include organizing administrative features which support integration, such as interoperable information systems, and in the development of linkage mechanisms across service sectors. Given the importance of both effective administrative practices and effective linkages across hospitals, primary care and other human services, it would appear that these are areas for greater attention by provinces.

Discussion

All Canadian provincial governments are investing in home and community care services as one part of their health reform agendas. In doing so, they are responding to a number of factors: the aging of the population, the need to provide support for family caregivers, the importance of reducing preventable utilization of both acute and residential long-term care resources, and the need to make the most effective use of technological advances that have made it possible to care for people in the community who once would have had no option but to be in hospital or residential long-term care. The results of this survey indicate that increased investment in best practice features might ensure quality of care for seniors while reducing fragmentation and waste. Our finding that there are waiting lists for both home and residential nursing home care is a significant issue. Available resources are not keeping up with population growth and/or are not being targeted to those most in need.

A key question emanating from these results concerns the barriers that might be preventing provinces from moving more quickly to implement such key features as shared information systems. These barriers include, but may not be limited to, competing

pressures for funding from other health care sectors, human resource issues, difficulties in implementing linkages with the primary care and hospital sectors in particular, and/or lack of flexibility over budget allocations across sectors. Another barrier may also be the paucity of conclusive findings about cost-effectiveness of integrated care models [13] which could cause hesitation on the part of policy makers.

This study did not closely examine a number of areas; for example, progress amongst primary care practitioners and hospitals in implementing effective chronic disease care plans, and the impact of community service supply shortages on effective use of hospital services. As well, administering the same survey to health providers might have produced very different results. Lastly, although the framework calls for involvement of family caregivers, this study did not collect data about the ways in which the provinces are engaging family caregivers.

Over all, these findings indicate that Canadian provinces are actively working toward improving healthy system integration for seniors; over time these steps will improve the quality of care for today's seniors while preparing the country for the challenges that the 'baby boom' cohort will bring to the Canadian health care system.

Reviewers

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