Mapping the State of the Art: Integrating Care for Vulnerable Older Populations

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Executive Summary

Looking across jurisdictions nationally and internationally, the Canadian Research Network for Care in the Community (www.CRNCC.ca) conducted a scoping review in 2008, which explored 47 models of integrating health and social care for older persons. This report presents the findings of the review and distils key learning points that help enable a better understanding of the institutional and system level characteristics that underpin successful integrating community-based care efforts for vulnerable older persons.

What is clear in the findings presented below, and in on-going evaluations across programs and jurisdictions, is that program approaches and models which appear to work well in one jurisdiction, may not always work well even in proximate jurisdictions due to differences in funding, regulatory frameworks, available resources, service infrastructure, and professional roles. Differences in local norms, family structures, living arrangements as well as the role of individual choice also influence the design and approaches used by programs. In essence, ***context matters***.

One key aspect of context is structure and institutions. Another important lesson drawn from the literature is that well-designed and well-executed integration models perculating from the "ground up" may nonetheless fail to produce sustainable benefits if they lack ***appropriate on-going organizational and structural supports***. For this reason, individual initiatives, under-resourced and one-off pilot projects implemented in the margins have proven to be limited in their ability to achieve system level and/or individual level goals.

Other lessons gleaned from our review include the importance of ***carefully targeting services*** so to best respond to the varying degrees of care complexity, or intensity of care needs, required by older persons. Carefully identifying and targeting care needs enables planners and providers to maximize efficiency and the cost-effectiveness of available resources *and* demonstrate results. ***Clear mechanisms or sites of care management*** are also common across best practice models. Depending on the infrastructure in place locally, care management mechanisms may leverage various combinations of community-based supports including home care, supportive housing, or day programs. ***Multidisciplinary care teams***, including the prominent role of ***primary health care*** physicians, play centre stage in all successful integrating initiatives. Finally, ***time is of the essence:*** *successful initiatives may take years to demonstrate impact at the systems level and therefore need long term commitment to adequately reflect their results.*

This report aims to shed light on the many promising innovations and successful best practice initiatives underway across Canada and internationally. With this, we hope to elicit and encourage new areas of inquiry, research and action to support the evolution of integrated community-based health and social care for vulnerable older persons. Recognizing that there cannot be a "one size fits all solution", this review identifies fundamental design dimensions of

integrating initiatives and key transferable lessons to help inform policy and practice and provide guidance to on-going aging at home efforts across jurisdictions.

Introduction

Population aging constitutes a demographic trend of unprecedented global significance. It is a process widely declared to carry profound socio-economic and political implications affecting countries, communities and households alike (United Nations, 2007). Healthier lifestyles, higher standards of living, and considerable advancements in medical technologies and pharmaceuticals are helping people manage chronic illness and live longer, more fulfilling lives. In fact, in 1999 the then Director General of the World Health Organization, Gro Harlem Brundtland argued that "Population ageing is first and foremost a success story for public health policies as well as social and economic development…" (World Health Organization, 2002).

However, against a backdrop of rising health care costs issues associated with system sustainability, access to timely health care, and advancing individual health and well-being into old age have become critical policy issues for jurisdictions across Canada and internationally. From an economic perspective, society's shifting age structure is forecasted to shake economic growth, savings, investment, consumption patterns, labour markets, pensions, and taxation. Politically, population aging suggests potential changes to voting patterns and political representation. And from the perspective of social structure, experts envisage a metamorphosis of family composition and living arrangements, housing demands, migration trends, epidemiology, and undoubtedly, demand for and access to health and social care (United Nations, 2007). But if increases in longevity suggest of a positive leap forward is it then our systems that are out of step and falling behind?

It is in this connection that policy-makers in OECD countries, including Canada, have implemented a wide range of strategic reforms. For instance, over recent years there has been a resurgence of political endorsement for greater emphasis on the social determinants of health, health promotion and public health. This move has been accompanied by a shift in the locus of care from highly differentiated, well-funded, professionalized, and largely hierarchical acute care models to more team-based, home and community care settings, which tend to be not as well funded and rely to a larger extent on the considerable (and mostly unpaid) contributions of informal caregivers (K Leichsenring, 2008). Often justified in terms of cost-savings, it is generally assumed that care outside of hospitals and institutions is usually less expensive than care provided in them. Yet, this policy directive also provides response to what seems to be a widespread desire on the part of new generations of older persons, to live as independently as possible, for as long as possible, in their own homes and communities.

Similarly, competition, whether under the wing of state regulation or driven by market-forces, has been introduced into the financing and delivery of health care by way of service integration and high performing partnerships to improve health system performance. Integration, a

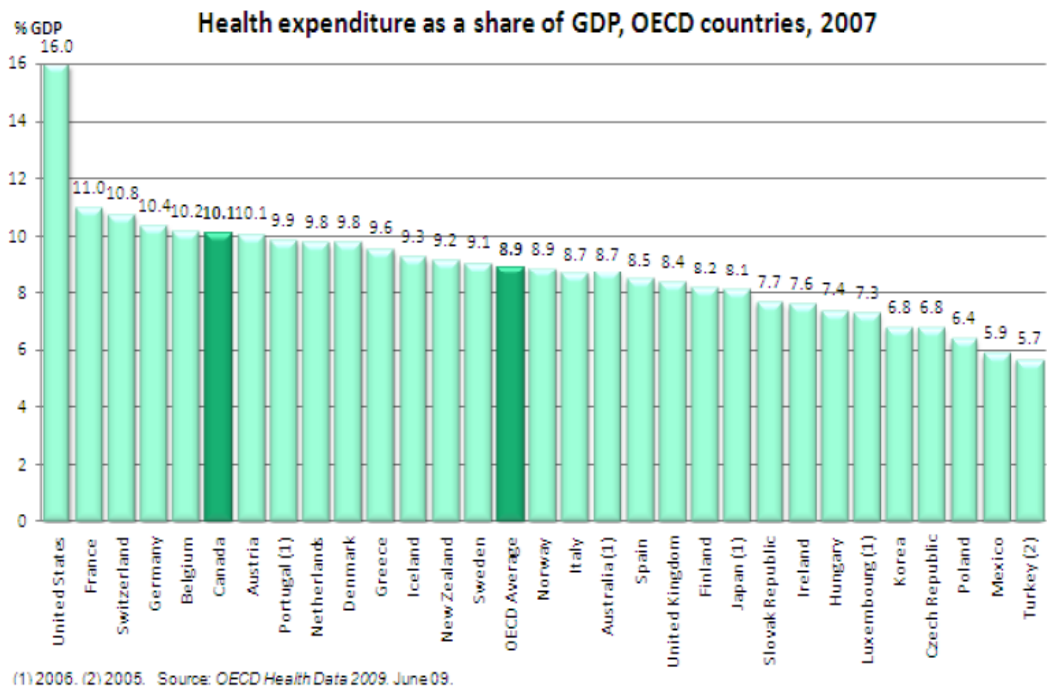
process often perceived as bringing immediate system-wide improvement, has generated growing international attention for its potential to achieve greater cost-efficiencies, better service coordination, user satisfaction, and enhanced client and system outcomes.

Nevertheless, despite on-going efforts to encourage principles of competition and cooperation, health care costs continue to climb in many countries and underlying system problems have endured or gotten worse. System-wide problems necessitate system-wide solutions.

In 2007, Canada invested a little over 10 per cent of its gross domestic product (GDP) in health care. Illustrated in Figure 1, this is more than one percentage point higher than the OECD average of 8.9 per cent (Organization for Economic Cooperation Development, 2009).

Canada also ranks above the OECD average in terms of total health expenditures per capita with spending reaching 3, 895 USD in 2007 (adjusted for purchasing power parity) in comparison to the OECD average of 2, 964 USD (Organization for Economic Cooperation Development, 2009).

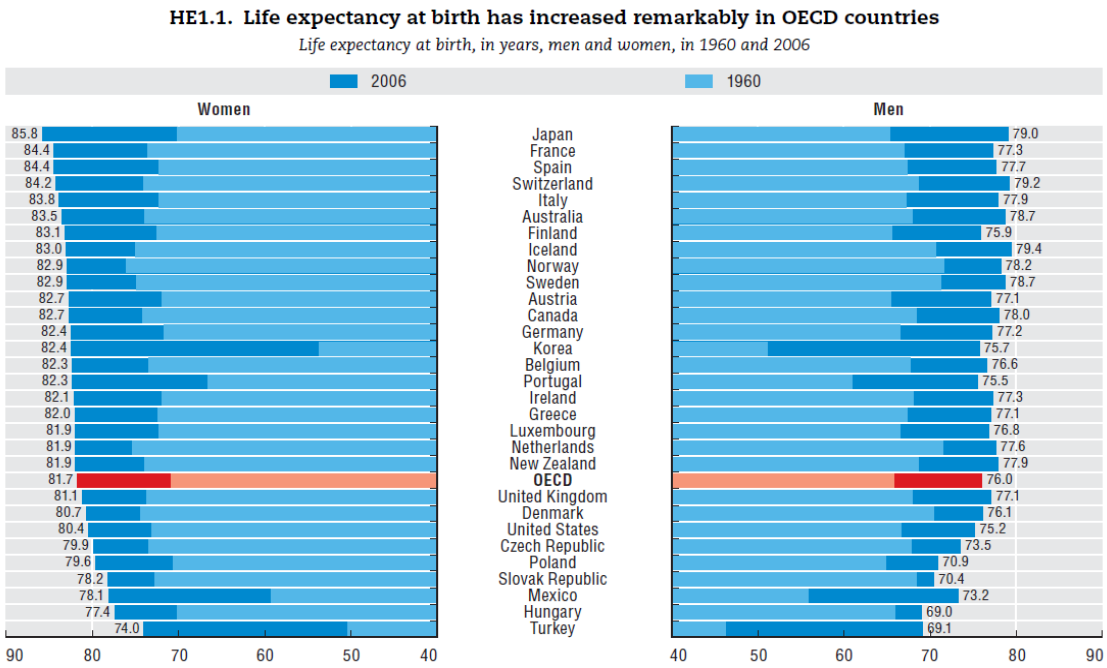
Figure 1: Health expenditures as a share of GDP



But are these investments buying better health? In the recent report, *Value for Money: Making Canadian Health Care Stronger*, experts at the Health Council of Canada continue to deliberate this question. Canada stands relatively well in OECD comparisons on population measures like life expectancy and mortality rates, however other countries spend a lot less on health care for almost the same, if not better results (Health Council of Canada, 2009).

Using life expectancy measures, the Health Council of Canada emphasizes that simply spending more on health care does not necessarily translate into longer lives (Health Council of Canada, 2009). In fact, they point to six countries that spend fewer resources on health care than Canada, but attain the same or better outcomes. Countries such as Spain and New Zealand spend approximately 8 per cent of their GDP on health care and their populations achieve longevity mirroring that of Canadians. Japan invests the same amount (8% of GDP) but has a considerably higher average life expectancy. On the other hand, the United States spends significantly more on health care (approximately 15% of its GDP) and has a much lower average life span (Health Council of Canada, 2009).

Figure 2: Life Expectancy in OECD Countries (OECD, 2009)



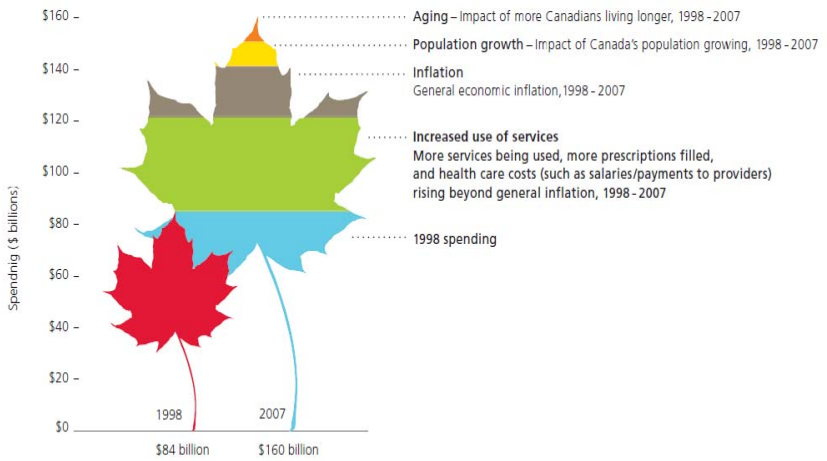
The questions raised by the Health Council of Canada reflect a value-for-money framework that asks us to take a critical look at how well we are using our finite resources to reach the goals of better health and higher quality care while preserving Canada's highly valued, universal, publicly-funded medicare system.

Over the past decade, Canada's total health care spending (public and private) doubled from $79 billion dollars in 1997 to $160 billion in 2007 (Health Council of Canada, 2009). Today, the average dollar amount spent on health care per Canadian is tallied at 46 per cent higher than it was in 1997 (Health Council of Canada, 2009). However, contrary to popular belief, population growth and aging *are not* the largest factors contributing to the country's rising health care spending. Rather, the increase in health service utilization (48%) is found to be the primary cost culprit. As illustrated in Figure 3, inflation (27%), population growth (14%), and population aging

(11%), albeit significant factors, are found to have considerably less impact on the growth in health care expenditures than our use of health services (Health Council of Canada, 2009).

Health care remains at the centre of public debate and at the top of the policy agenda across all industrialized countries. Yet, despite escalating health care investments, the realities of ever-rising fiscal pressures, the continued use of often inappropriate and costly care, and mounting public expectation about the right of individuals to access care on a timely basis continue to stretch already stretched health care systems globally.

Figure 3: What made health care spending double in a decade? (Health Council of Canada, 2009)



Note: This graph starts from 1998, rather than 1997, because 1998 is the first year data were available to describe the impact of our aging population on health care spending.

Source: Calculations based on data in Canadian Institute for Health Information, *National Health Expenditure Trends, 1975-2007*, 2007.

Distressing trends such as these raise questions as to whether the systems themselves preclude solutions. The literature suggests that in many jurisdictions "non-systems" are the root of the problem. Characterized by a persistent chasm between health and social care, "non-systems" tend to accentuate the prevailing patchwork of services and providers[1] who operate more or less independently, even though they serve the same populations. Fragmented or "siloed" systems are distinguished by poor communication, collaboration, and care coordination within and across sectors, services, and providers. The results of which are often manifested in stifled innovation, higher system costs, and reinforced barriers to appropriate care placing people at high risk of falling through the cracks. Such "non-systems" seem particularly ill-equipped to address the complex and chronic care needs of aging and increasingly diverse populations.

The jury is also out on the use of market-based strategies to improve care coordination and system performance. On one side, evidence points to the potential tension and inherent contradiction between the principles of cooperation and competition. The experiences of

[1] Including hospitals, physicians, home and community care, residential long-term care, primary care and public health.

various jurisdictions provide illustration of how this confusion can magnify new and existing challenges for integrating initiatives on the ground (Ham, 2009). Conversely, there are also numerous success stories that demonstrate the positive gains achieved by integrating health and social care. These successes show improvements in care processes, greater patient and provider satisfaction, and reduced hospital and long-term care (LTC) utilization rates without increased costs to the system; in some cases, lower health expenditures have been achieved (Johri, Beland, & Bergman, 2003).

Many of the issues raised by the Health Council of Canada (2009) are echoed and elaborated upon in the findings and discussion presented in this report. Namely, how can integrating health and social care improve value for older persons? For their caregivers? For their providers? Can it enhance value for individuals while improving value at the system level? As the experiences of many jurisdictions reviewed in this report will show, more health care does not always mean better individual health and well-being. Similarly, better access does not necessarily translate into the effective and appropriate use of services. Instead, we must ensure that the services provided are appropriate to the individual's specific, often dynamic and multi-dimensional care needs. In other words, the effective use of health care services means providing the right mix of services for the right mix of the population and at the right time (Health Council of Canada, 2009). For older populations, this refers to finding the best mechanisms to support them in being able to adapt to the changes which are part of the normal aging process and to maintain high levels of independence, well-being, and quality of life.

In Ontario…

In Ontario, as in other jurisdictions, converging factors have pushed investing in integrating care initiatives to the top of the health policy agenda. These include increasing health care expenditures; an aging and increasingly ethno-racially diverse population; more children, adults and older persons living longer with multiple chronic conditions; and, public expectations about accessing appropriate care, in the most appropriate setting, in a timely manner. To respond to these challenges, the province has introduced a number of initiatives to make the system more "patient-focused, results-driven, integrated, and sustainable" (Ontario Ministry of Health and Long-Term Care, 2006).

In 2006, the Ministry of Health and Long-Term Care (MoHLTC) established fourteen geographically-based Local Health Integration Networks (LHINs) as regional entities mandated to plan, fund and monitor hospitals, long-term care facilities, home and community support agencies, and community mental health and additions programs. The aim has been to integrate health services and enable better, more efficient care coordination while placing health dollars where they are most needed according to community-identified priorities. Primary care, pharmaceutical drugs, and public health however continue to remain outside the fold of the LHINs sphere of influence.

In 2007, the province unveiled its three-year Aging at Home Strategy aimed to "transform community health care services so that seniors can live healthy, independent lives in their own homes"(Ontario Ministry of Health and Long-Term Care, 2007). More recently, in 2009, Ontario announced a province-wide ER/ALC strategy aimed at placing greater reliance on community and residential long-term care as a means to reduce unnecessary utilization of hospital emergency rooms (ERs) and "un-block" growing numbers of alternative level of care (ALC) beds: acute care hospital beds occupied by individuals, including many older persons, not requiring acute care. Higher numbers of ALC beds have repeatedly shown to have a ripple-effect throughout the system. For instance, evidence demonstrates that high numbers of ALC beds result in fewer in-patient beds being available for individuals presenting in the ER thus lengthening ER wait times, as well as wait times in the five priority service areas under the provincial Wait Times Strategy (cancer surgery, cardiac procedures, cataract surgery, hip and knee replacements, as well as MRI and CT scans).

Purpose of the Review

Using a broad policy analytic approach, the purpose of this review has been to investigate and identify the key elements and common design fundamentals that set the groundwork and drive successful models of integrating community-based care for older persons. In doing so, we have gone back to the basics and have asked three primary questions: *what is working*; *what is not*, and; *what is required from a policy / systems perspective to facilitate success*.

With this purpose in mind, rather than detailing the characteristics and outcomes of a series of individual integration initiatives, we have chosen a broad policy analytic approach which seeks to identify recurrent themes as well as fundamental design dimensions at the organization and systems level. References and additional details are provided in the accompanying appendix to allow the interested reader to explore specific models in greater depth.

In essence, this report aims to shed greater light on the many promising innovations and successful best practice models and initiatives underway in Ontario, across Canada, and internationally. With this, we hope to elicit and incite new areas of inquiry, research and action supporting the evolution of integrated community-based care for vulnerable persons. We believe such knowledge and reflection is particularly timely as Ontario's Aging at Home Strategy moves well into its second year and as the provincial framework for evaluating Aging at Home is developed.

Integration – What is it and why is it important?

Consistent with the literature, this report distinguishes between ***integrated care*** and ***integrating care***. *Integrated care* suggests a static end point, or a single model. *Integrating care*, on the other hand, suggests a dynamic process of organizing and coordinating care in a

manner that addresses emerging, as well as established, population needs, within the limits of existing or potential resources.

For this paper, integrating care is defined as "a coherent set of services that are planned, managed and delivered to individual service users across a range of organizations and by a range of co-operating service professionals and informal carers.

To date there remains little consensus on the definition of "*integrating care*"(Wan, Ma, & Lin, 2001). Definitions focus on various combinations of:

- the *mechanics of planning, financing, eligibility, and service coverage*;
- how to organize and manage *horizontal linkages among providers and/or related sectors* such as health, housing, enabling neighbourhoods, social care and well-being, income security; (Browne, et al., 2004; Evers, Paulus, & Boonen, 2001)
- *vertical levels of care* (primary, secondary, tertiary) (M. Hollander & Prince, 2008);
- *degrees of integration* [often in terms of the Kaiser triangle, which distinguishes among needs for minimal "linkages" for those with low to moderate care needs, greater "coordination" for those requiring greater care management to ease transitions across acute and other health care sectors while still operating within existing structures, and "full integration" for those with highly complex care needs (Leutz, 1999)];
- *users and their carers* (quality of care, user satisfaction, consistency of care);
- *the services provided*, with a sense that services will be provided when and where needed (Vondeling, 2004).

Similarly, there may be several, sometimes overlapping classifications of integrating care (Billings & Malin, 2005; MacAdam, 2008). These can include:

- *clinical integration* (e.g., direct care and personal support);
- *professional integration* (e.g., coordinating professionals within institutions to work together);
- *organizational integration* (e.g., integrating the delivery of care across sectors within a single organizational framework or linking parts within a single level of care, usually to achieve economies of scale);
- *functional integration* to bring together cure, care and prevention;

- *system integration* pulling together responsibility for planning, financing, and eligibility within a specific geographical area (e.g., LHINs).

For this paper, *integrating care* is defined as "a coherent set of services that are planned, managed and delivered to individual service users across a range of organizations and by a range of cooperating service professionals and informal carers (van Raak, Paulus, & Mur-Veeman, 2005). Nies and Berman define integrating care from the perspective of the service user. They offer a similar understanding and define integrating care as pathways toward "a well-planned and well-organised set of services and care processes, targeted at the multidimensional needs/problems of an individual client, or a category of persons with similar needs/problems"(Angell, 2004). Put simply, integrating care aims to provide seamless access to the right kind of care, at the right time, at the right place – whether that care involves health, social services, housing, and/or community supports, and regardless of where one lives in that particular jurisdiction.

While integrating initiatives may invest new resources "on the ground", the more frequent scenario attempts to reconfigure existing resources to achieve a "bigger bang for the buck". Indeed, discussions around integrating care initiatives have often addressed issues of health system sustainability based on the assumption that more integrated care systems are likely to perform better – or, at least no worse – than less integrated, siloed or fragmented systems.

Why does integration matter?

From a cost perspective, people may rely on, or be referred to, costlier services than are needed. From a quality perspective, these services may be less appropriate to meet the care needs of vulnerable people. While many older persons may prefer to age at home, they (and their caregivers) often lack the time and/or knowledge necessary to aptly navigate a complex health and social care system. Integrating care initiatives are seen to provide a "win-win" solution with better quality, improved appropriateness, and lower cost to the system.

Indeed, one reason so many jurisdictions have attempted to address integration is the growing recognition that the prevailing patchwork of health care providers and services (including hospitals, doctors, home and community care, residential long-term care, and public health) have operated more or less independently, even though they serve the same populations.

In addition to posing barriers to accessing care, there is a growing consensus that such fragmented systems, rather than promoting innovative, cost-effective approaches to delivering a continuum of care, may instead encourage providers to attempt to shift costs elsewhere through referrals, earlier discharges, tighter eligibility requirements and service restrictions. Payers, including governments, may attempt to limit their costs by capping budgets, de-listing certain insured services, and failing to cover new procedures and treatments, even if the overall costs may be higher in the long run. Integration is increasingly recognized as one promising

Tension and conflicts, which almost inevitably arise from issues of the redistribution of resources, can constrain the outcomes of even the most well-designed integration initiatives.

approach to ensuring that demands can be met in an efficient and sustainable fashion while maintaining (or even improving) quality and outcomes.

The Policy Relevance

The health and social care system is complex. On the *demand side*, from the standpoint of clients, there is enormous variability in what type of care is needed, the cultural appropriateness of that care, the willingness and/or ability to pay, and geographic location.

On the *supply side*, the services required can often be provided by a vast array of providers and provider organizations, spanning multiple sub-sectors, each bound by different rules, with differing eligibility criteria, and who receive funding in different ways. Notably, access and availability of services may also differ significantly according to geographic location or catchment area.

Most jurisdictions are characterized by the persistence of health care "non-systems" or "silos" whereby organizations and programs often operate with separate funding, legislation, entry points and rules of resource allocation. That these organizations, programs and services exist and function more or less independently of each other often creates barriers to accessing timely, appropriate, coordinated care. Thus, the combination of demand and supply side (local system capacity) complexities often translate into a patchy, fragmented system that even professionals and non-professionals find difficult to navigate and coordinate. For individuals living with multiple complex and chronic conditions (including dementia) the system is even more cumbersome and intimidating to navigate. In turn, the failure to gain access to the right care at the right time may lead to a deterioration of client (and informal caregiver) health outcomes, increasing the potential for preventable health related complications, recurrences, errors, a proliferation of negative client experiences, and ultimately, greater health system costs downstream.

It is not surprising that integrating initiatives are often inherently political with often crucial and contentious political dimensions. This is because virtually all integration initiatives, and particularly those for older persons, anticipate paying for these services through a redistribution of resources across organizations, providers and sectors. Integration initiatives have typically involved a shift in emphasis from institutional care (i.e., hospitals and residential long-term care facilities) to care in home or homelike environments within the community.

Such shifts are never neutral, they affect budget allocations, entitlements, and health human resources. Health human resource planning is an example of one area impacted by the shift in the location of care. While such regulated health professionals as doctors and nurses constitute

the backbone of care in hospitals, home and community care relies more heavily on health and social care occupations such as, personal support workers, volunteers, informal caregivers and family members. The shift towards home and community care suggests a leveling of professional status and incomes, new professional roles, and the rise of new "gatekeepers". Several examples of implementation difficulties – often accompanied by a lack of physician buy-in – have found that the tensions and conflicts, which almost inevitably arise from issues of redistribution, can constrain the outcomes of even the most well-designed integration initiatives.

Indeed such implementation challenges and policy dilemmas are common to governments, planners, and provider agencies across industrialized countries. For instance, in the United Kingdom, the 2008 *SeeSaw Report* contemplated the tentative pace of change even though a five year history of consistent policy directives had advocated a shift in the locus of care from institutions to homes and communities. Faltering political leadership in some jurisdictions, low public awareness, organized interest groups, and frictions inherent to questions of resource redistribution were identified as key drivers of the country's slow shift towards integrating health and social care (Harvey & McMahon, 2008).

While there may not be a 'one-size-fits-all' approach to integrating care, the experiences of other jurisdictions are valuable in developing a broader understanding of changing patterns and innovations in care delivery, shifting trends in consumer choice and preference, and on-going system integration concerns. This report does not claim to have found the magic recipe to cure system ills but it does present a menu of key principles and design features that when used in combination, may increase the likelihood of success.

Methodology

This report draws on both published and gray literatures. Many initiatives, while demonstrating considerable promise and innovation at the local level, have yet to undergo the rigor of evaluation that would grant them access to peer-reviewed publication. In the effort to provide a comprehensive overview of best available evidence, this review includes a synthesis of potentially promising innovations together with programs and models that through formal evaluation are considered best practice.

A scoping review differs from more formal approaches because it aims to quickly identify key concepts, evidence and available sources that highlight a specific area of research.

The methodology required for a systematic literature review differs according to the research question of interest. Reviews which

answer *what works?* differ considerably from those which address a broader array of questions including, *what combination of interventions works where, for which sub-populations, in which environmental circumstances, in which combinations, administered at what rate of intensity, over what periods of time, and in what order?* (J. Lavis, et al., 2005). Notably, the latter realm of inquiry does not lend itself to randomized control trials (RCTs) and thus, requires a "new form of research synthesis"(Pope, Mays, & Popay, 2006).

Following this line of argument, a systematic scoping review was employed for the purpose of this report (Higgins & Green, 2008; Arksey & O'Malley, 2005). A scoping review differs from more formal approaches because it aims to quickly identify key concepts, evidence and available sources that highlight a specific area of research. A scoping review neither eliminates *a priori* studies that fail to meet evidence quality criteria, nor does it preclude models that have been subject to the rigors of an RCT designed evaluation. Instead, it strives to determine recurring themes and patterns that apply to best practices and innovations. In other words, given that the specific area of interest is to identify key principles of integrating care this review is not restricted to clinical evidence of effectiveness, nor does it focus solely on RCT-tested models. RCTs are frequently conducted among narrowly targeted populations and are often neither feasible nor conducive to the home and community care sector because of the legal/ethical considerations involved[2] (Higgins & Green). Limiting the analysis to include only randomized trials would have eliminated a significant number of initiatives/models thereby biasing our findings (Higgins & Green, 2008).

Scoping Review

Consistent with the recommendations outlined by Arksey and O'Malley (2005), our search strategy involved the following components:

- Extensive database search for publications according to various combinations of specified key words (see Table 1 and 2).
- Hand-searches of key journals including, *International Journal of Integrated Care* and *Health and Social Care in the Community.*
- Review of two systematic reviews on issues of shifting care from hospitals to the community.[3] Singh searched 16 electronic data bases, screened 252,401 citations and

[2] There are several reasons why RCTs may not be feasible in the home and community care sector. The legal/ethical implications are perhaps the leading reason given that in many jurisdictions, residents and citizens are entitled to certain services. Conducting a RCT that requires individuals to be excluded from entitled and/or required services would fall outside of legal and ethical boundaries. RCTs that involve services for which there are no legal entitlements are often considered unstable because the provisions required to transition even successful models into the mainstream system are usually absent.

[3] Our focus looked specifically at shifting care from nursing homes to the community.

summarized the findings of 613 articles (Singh, 2006). Johnston et al identified 4,900 items, and reviewed 601 articles (Johnston, Lardner, & Jepson, 2008).

- Seven key informant interviews to identify on-going integrating care models in Canada. Additional web searches were performed to elaborate on the details of the models referenced.

- Analysis using a policy synthesis methodology (Dixon-Woods, Agarwal, Jones, Young, & Sutton, 2005; J. Lavis, et al., 2005; J. N. Lavis, 2006) with the purpose of identifying key design elements common to the models identified during the search. Table 3 provides the criteria applied in categorizing and analyzing the various models.

Table1: Search Strategy – Key Words

Search Strategy – Key Words
[Senior* or old* adult* or elder* or pensioner*]
[Integrat* care or integrat* delivery or integrat* health care or integrat* model*]
[Shelter* or hous* or supportive housing* or congregate*]

Articles/models were excluded if they:

- Were not available in English;
- Were published prior to 1990;
- Were not specific to, or incorporating "at risk" older persons; and/or,
- Were not in reference to an OECD jurisdiction

Table2: Databases Included in the Search

Databases Included in the Search Strategy	
• AgeLine	• MEDLINE
• CINAHL	• Psych Info
• Google Scholar	• PubMED
• Health Sciences: SAGE full-text collection	

Several key articles were also identified and used to perform "related article searches" in the relevant databases (e.g. PubMED). Similarly, "backward" (articles cited by that article) and

"forward" (articles citing that article) searches were conducted in order to minimize the potential of failing to detect related materials during the period of the search.

Table 3: Criteria Used for Policy Analysis and Synthesis

Criteria Used for Policy Analysis and Synthesis
• Jurisdiction: number of models in Canada, the United States, and other OECD countries
• Populations served
• Stated goals
• Care settings: e.g. own home, supportive housing, day program
• Range of services included
• Mechanisms used to link and manage services
• Funding sources and basis for payment: public, private, or mixed sources. Are providers paid through global budgets, fee-for-service, capitation, or combinations thereof? What are the inherent incentives in these various approaches?
• How success is measured. Is there an evaluation of outcomes? Does it examine system, individual, and/or caregiver outcomes?

Reporting the Evidence

The following section provides a detailed account of our findings and sets a framework for the discussion in the subsequent chapter of this report.

Number of Models

Using the selected search strategy, a total of 47 models of integrating care for older persons were identified. Of these,

- 14 models are located in Canada;
- 19 are based in the United States; and
- 14 are found in OECD jurisdictions including the United Kingdom, Australia, Sweden, Denmark, and Finland.

Due to time limitations, this review was not exhaustive but did succeed in identifying many key models.

Populations Served

Within the framework of this review, the models studied employed a range of criteria to help identify populations in need of services being offered by their agency. These criteria included:

Table 4: Criteria Employed by Initiatives to Identify Populations in Need

Criteria Employed by Initiatives to Identify Populations in Need
• Presence of an informal caregiver
• Long-term care placement eligibility

• Health status
  o Dementia
  o Mental health
  o Chronic disabilities
  o Addictions
  o Functional disabilities

• Supports required (i.e., in need of usually two or more health care or social support services)
• Socio-economic status

Notably, although a handful of models required that individuals have an existing caregiver as a precursor for program eligibility, most do not. Models also varied in their expectations with regards to caregiver roles and responsibilities. Similarly, substantial variation was found among the models in the extent to which their programming was mindful of and responsive to the specific needs of caregivers.

Table5: Percentage of Integration Models and Eligibility Criteria Used in Canada, United States, and OECD Countries

	Caregiver	Long-Term Care Eligibility	Health Status	Supports Needed	Socioeconomic Status
Canada	7.1%	14.3%	57.1%	14.3%	28.6%
US	5.3%	26.3%	36.8%	10.5%	57.9%
Other OECD	14.3%	14.3%	78.6%	0.0%	0.0%

Note: Characteristics are not mutually exclusive.

Models located in Canada, Australia and Western Europe were more likely to use health status as a factor to determine eligibility for programming and services (Table 5). In the United States, socio-economic status was the primary determinant followed by health status and the person's eligibility for long-term care placement.

Stated Goals of Program/Service Models

The vast majority of models studied share the common aim, or program purpose, to provide *long-term care substitution* for individuals eligible for long-term care placement and who might otherwise be in long-term care institutions. A second shared goal is the provision of *acute care substitution* for persons discharged from acute care hospitals. Only a handful of models stated that their principle goal was to provide prevention/maintenance services for individuals requiring low levels of assistance and/or to help with activities of daily living (ADLs) as a means to avoid admission into institutional care. It is important to note that some of the models studied operate according to more than one set of goals.

Table 6: Goals of Integrating Care Models

	Diversion from Acute Care	Diversion from Long-Term Care	Prevention/Health Maintenance	Not Identified
Canada (n = 14)	14.3%	57.1%	28.6%	7.1%
US (n = 19)	21.1%	52.6%	15.8%	15.8%
Other OECD (n = 15)	42.9%	57.1%	14.3%	14.3%

Note: Goals are not mutually exclusive.

Care Settings

The models identified throughout this review contribute to a growing body of international evidence which emphasizes the important role of appropriate services and infrastructure in helping older people remain active, maximizing their independence, autonomy, well-being and quality of life as they age (Ham, 2009).

Home-based care, cluster care, supportive housing, and day programs were predominant care settings identified through this review.

Table 7: Care Settings

	Home	Day Program	Supportive Housing	Clustered
Canada (n = 14)	50.0%	28.6%	57.1%	14.3%
US (n = 19)	47.4%	52.6%	26.3%	5.3%
Other OECD (n = 15)	50.0%	50.0%	21.4%	0.0%

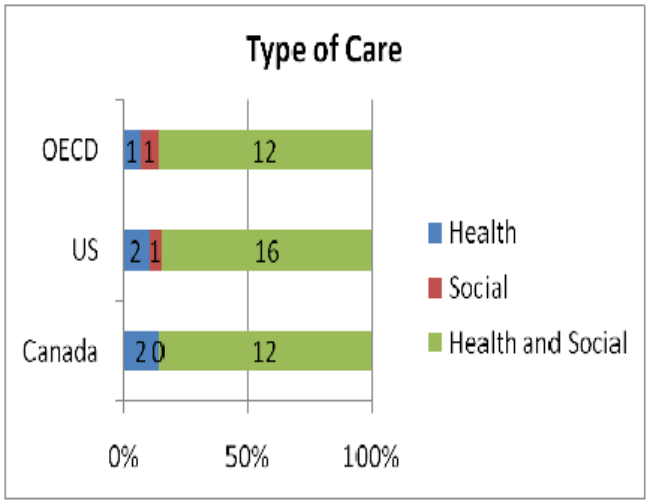
Note: Integrating care models may have multiple care settings.

Under the umbrella of the Vancouver Coastal Health Authority, innovations to their service delivery model have extended the definition of cluster care to include the delivery of services organized by neighbourhood (as opposed to housing sites). Studies show that when services are provided by the same team members in proximate neighbourhoods there are improvements in the flexibility, continuity and cost of care.

The Basket of Services: Scope of Care Delivery

Enabling people to age in the setting of their choice and preference requires that a continuum of services and supports be in place to ensure swift and appropriate response to the changing care needs of the individual (Carstairs & Keon, 2009). According to our findings, the breadth of services included in most integrating care models typically fall under the rubric of health and social care.

Figure 4: Type of Care Provided



Health care includes those services that are deemed medically necessary for the attainment of improved health related outcomes. In general, health care services are largely clinical (including physician, nursing, and rehabilitation support) and are delivered by trained health care professionals and/or less trained personnel while under their supervision.

Social care includes a wide range of services that may take the form of community support such as homemaking, meal

preparation and nutrition, day programs, or home maintenance services. Services may also target caregivers (care for caregivers) and include programs such as support groups and respite. Social care is delivered by professionals, however, it is most often provided by non-professionals and/or by informal caregivers such as family members or volunteers.

Illustrated in Figure 4, the vast majority of models (47%) provide both health and social care; only a few offer exclusively either medical or social care. While the models demonstrating the greatest success are those that integrate health and social care, it is important to emphasize the wide variability found across models in the basket of services offered. For example, programs such as On Lok/PACE (U.S.) or CHOICE (Canada) offer an extensive breadth of services that include in-patient units, nursing and physician care, in-home services, after-hour supports, social programs, recreational therapy, and transportation. In contrast, the Australian-based SA Health Plus focuses its programming specifically on the provision of medical care to support individuals in the community who are at risk of admittance into acute care. The Australian model provides a range of medical services from GP visits and diagnostic tests to vaccinations, physiotherapy and visits from a dietician [when referred by the general practitioner (GP)] (Battersby & Team, 2005; Glasgow, et al., 1999).

Similarly, the range of services provided by the various supportive housing facilities across jurisdictions is also significant. In the United Kingdom, Abbeyfield Care Homes provides services to older persons with high care needs (i.e. dementia or general frailty). Characterized by around the clock care, community nursing care and medication management, Abbeyfield clients have individual care plans that are designed and monitored with a high level of GP involvement.

As a point of contrast, supportive housing programs in Ontario offer a broad range of community supports but must refer to Community Care Access Centres (CCACs) to arrange for professional clinical services such as nursing care. There is currently little involvement from primary health care practitioners. This is to say, that while residents often have their own GP, their physician care is often provided outside of the coordinated basket of services offered in concert with other provider organizations.

Care Management

Care management is a client-centred approach to promoting the coordination of human services (Phillips, 1995) and involves an on-going process of client assessment, service planning, system navigation, care coordination and service/client monitoring. Introduced to the health and social care sphere in the 1970s, care management has since received significant attention in academic and practical literature as a cost-effective response to an increasingly fragmented health and social care system and the need to contain the costs of service delivery (Phillips, 1995; Challis, von Abendorff, Brown, Chesterman, & Hughes, 2002; Hutt, Rosen, & McCauley, 2004). The care management approach aims not only to ensure access to a range of care options appropriate to

clients' changing needs, but to facilitate the meaningful involvement of clients and their caregivers in making decisions about their care.

A case (care) manager is an individual who is member of a multidisciplinary care team and who has taken responsibility for client assessments and care coordination. Alternatively, it may be an arm's length individual (or organization) tasked with purchasing and coordinating services on behalf of the client.

Table 8: How Care is Managed?

	Case Managers	Multidisciplinary Teams	Self-Management
Canada (n =14)	12 (86%)	2 (14%)	0 (0%)
US (n = 19)	13 (68%)	5 (26%)	1 (5%)
Other OECD (n = 15)	3 (20%)	11 (73%)	1 (7%)

Results of this literature review indicated that while all models employ some sort of a care management strategy, significant variation exists across jurisdictions. Illustrated in Table 8, the primary model employed in the United States (68%) and Canada (86%) is grounded in the use of individual case managers. Among other OECD countries studied, multidisciplinary teams (73%) are the primary vehicle for care management. Notably, while self-managed care strategies[4] were identified through the literature review, few programs were identified through the search strategy. This suggests that while self-managed care may be increasingly common within the home and community care sector, there is continued need for greater documentation of self-management models.

Source of Funding Revenue

Health and social care services can be purchased from a variety of sources. There can be public or private sources of financing, or a combination of both. Internationally, sources of public (or quasi-public) funding involve various levels of government and refer to coverage that is either universal or is means tested (e.g., social assistance) (Deber, Hollander, & Jacobs, 2008).

[4] The fundamental difference between self-managed care and traditional home-based care is that the individual client or family member, rather than an agency or health care professional, is responsible for determining when and how services are to be delivered, system navigation, brokering and purchasing appropriate services. Under this model, clients/consumers receive direct government funding to purchase care (based on assessed need). This is in contrast to the traditional model, which sees service brokering and purchasing occur through publicly funded service agencies. Self managed care is also referred to as direct funding, individualized funding, consumer directed care, and family managed care. http://www.hc-sc.gc.ca/hcs-sss/pubs/home-domicile/2006-self-auto/definition-eng.php

Figure 5: Sources of Funding Revenue

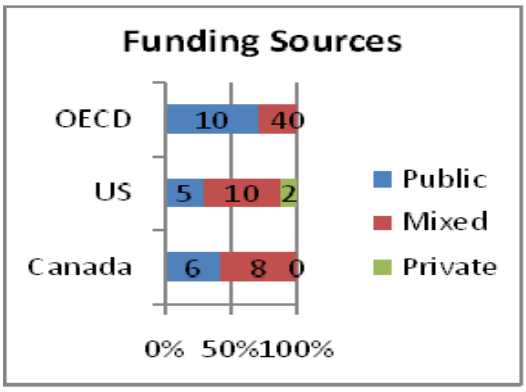


Figure 5 provides an overview of funding sources for integrating care initiatives according to jurisdiction. There appears to be an almost even split between models which receive a mixture of public/private funding and those which receive full public financing (45%). A very small margin of the study sample (4%), primarily from the United States, reported receiving funds entirely from private sources of revenue.

Evaluation Frameworks

Efforts to integrate care for older persons tend to have both *top line* and *bottom line* goals. *Top line* goals refer to the client and their goals to maintain or improve their wellbeing, independence, autonomy, and quality of life. In this respect, top line goals address concerns around improving access, quality and consistency of care (Woods, 2001; Salisbury, 2003). This goal is primarily driven by moral and ethical considerations about the need to care for the most vulnerable individuals and groups in our societies; it underpins most health care systems, including Canada's.

Bottom line goals look at the cost and sustainability of these systems. They seek to respond to top line demands while using available resources in the most cost-effective manner, recognizing potential threats to the political and economic viability of health care systems in the face of rising utilization and costs (Kodner & Kyriacou, 2000).

Across industrialized countries, integrating care initiatives contribute to top line *and* bottom line goals. At the individual level (top line goals) measurements of success include indicators such as:

- ✓ Increased life satisfaction
- ✓ Improved quality of life
- ✓ Satisfaction with services provided
- ✓ Informal caregiver satisfaction
- ✓ Improvement or stability of functional autonomy
- ✓ Reduced informal caregiver burden
- ✓ Living safely in an environment of choice, and/or
- ✓ Reduced personal costs

At the system level (bottom line) success can be determined using indicators including:

- ✓ Cost reductions or cost stability
- ✓ Reduction in service use (i.e., ambulance, hospital, long term care, phyisican visits, pharmaceuticals, length of stay), and/or
- ✓ Improved health outcomes for service users

The majority of evaluations are oriented towards assessing individual and/or system-level outcomes. Additional outcomes of interest assess caregiver and/or provider outcomes.

Table 9: Positive Outcome Measures

	System	Individual	Caregiver	Staff
Canada	64.3%	64.3%	14.3%	0.0%
US	57.9%	52.6%	10.5%	0.0%
Other OECD	85.7%	71.4%	0.0%	7.1%

Note: Models may have multiple positive outcome measures.

For purposes of this study, success has been defined within the narrow parameters of showing at least one positive outcome at both the individual and system-level in the absence of negative outcomes. Indicators used to measure success include:

- ✓ Satisfaction (individual, caregiver, provider)
- ✓ Access
- ✓ Health outcomes
- ✓ Cost (total cost, distribution of costs)
- ✓ Service use (including diversion rates)
- ✓ Impact on other sub-sectors (including physician care, nursing homes, 911 emergency call centre, and hospitals).

Importantly, not all formal evaluations measured these indicators. Similarly, this review includes promising innovations which may not have been subject to formal evaluation at the time of this sutdy.

The following 18 models met the study's criteria of success:

Table 10: Successful Models Identified by the Review

Canada	United States	OECD
BC Continuing Care Service Delivery System (British Columbia) (Ameringer, 2008)	Arizona Long-term Care System (ALTCS) (W. G. Weissert, Lesnick, Musliner, & Foley, 1997; (rabowski, 2006; McGeehan & Applebaum, 2007)	Abbeyfield Sheltered Housing (United Kingdom) (Hallman & Joseph, 1997)
Comprehensive Home Option for Integrated Care of the Elderly (CHOICE; Alberta) (Beaulne, 1998)	Program for All Inclusive Care for the Elderly (PACE) (Mukamel, et al., 2007 10211)	U.K. Case Management: Lewisham(United Kingdom) (Challis, Reilly, Abendstern, & Venables, 2002)
East-Central Regional Health Authority (Alberta) (M. J. Hollander & Prince, 2007)	Social Health Maintenance Organizations (SHMO) (Johri, et al., 2003; Fischer, et al., 2003; Kodner & Kyriacou, 2000; Manton, Newcomer, Lowrimore, Vertees, & Harrington, 1993; Newcomer, Harrington, & Friedlob, 1990)	U.K. Case Management: Darlington (United Kingdom) (Johri, et al., 2003)
Program of Research to Integrate Services for the Maintenance of Autonomy (PRISMA; Quebec) (M. J. Hollander, Cherry, MacAdam, Pallan, & Ritter, 2007a; M. J. Hollander, Cherry, MacAdam, Pallan, & Ritter, 2007b ; Réjean Hébert, Pierre J Durand, Nicole Dubuc, & André Tourigny, 2003; Kodner, 2006; Somme, Hébert, Bravo, Blanchard, & Saint-Jean, 2007; Réjean Hébert, Pierre J Durand, Nicole Dubuc, & Andr Tourigny, 2003; Hébert, Dubois, Raoche, & Dubuc, 2008)	Social Health Maintenance Organizations II (SHMO II) (Grabowski, 2006)	Integrated Care and Discharge Practice (PALKO) (Hammar, Per l, & Rissanen, 2007)
Resource Integration for Seniors in the Community (RISC; Ontario)(Dalziel, Amos, Martell, Brown, & Association, 2005)	Wisconsin Family Care Program (Grabowski, 2006)	Health and Social Care (Denmark); (Grabowski, 2006; Colmorten, Clausen, & Bengtsson, 2003)
Systeme de soins Integres pour Personnes Agees (SIPA; Quebec), (Integrated Service System for Frail Older Persons) (Beland, et al., 2004; Beland, et al., 2005; Beland, et al., 2006; Bergman, 2001; Johri, et al., 2003)		Continuing Care in Denmark (Denmark) (Stuart & Weinrich, 2001b; Stuart & Weinrich, 2001a; Vondeling, 2004)
Veterans Independence Program (VIP) (David Pedlar & Walker, 2004)		

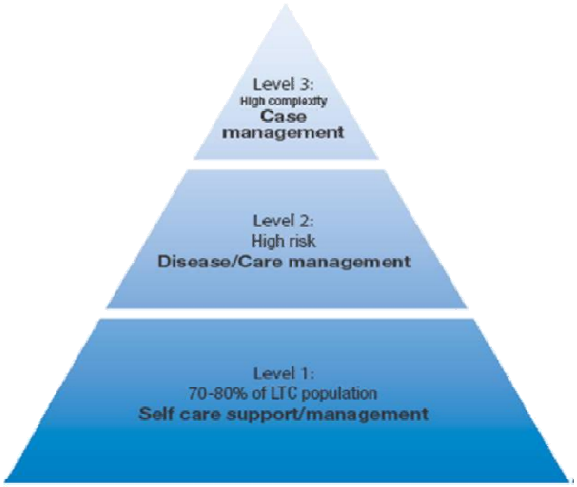
The models reviewed demonstrate strikingly similar best practice features that arguably contribute to their success at the individual and system level. Continued discussion of re-current themes, fundamental design features and their policy implications is presented in the subsequent section of this report.

Discussion: Pulling it all together

This section discusses the findings from the scoping review and elaborates on six common and key design features identified, namely: i) targeting services to appropriate needs groups; ii) flexible care management; iii) flexible services; iv) diversity of care settings; v) integrating funding, and; vi) integrating structures and institutions. This discussion aims to pull together the many experiences gathered from across jurisdictions and distill key learning points to help inform the development and scale-up of integrating initiatives for vulnerable older persons in Ontario and beyond.

Different levels of integrated care for different needs groups

Figure 6: Kaiser Permanente Triangle
Source: U.K. Department of Health (2005)



The results of this scoping review underscore the critical importance of matching the level of care need with the appropriate level of integrating care initiative. A dominant theme in the literature derives from Leutz's emphasis on the importance of recognizing that different populations require different levels (or intensity) of integrating care. With reference to Leutz's well-cited aphorism, "you can integrate all of the services for some of the people, some of the services for all of the people, but not all of the services for all of the people," it is clear that not everyone has complex care needs nor does everyone require fully integrated services (Leutz, 1999; Johnston, et al., 2008; Leung, et al., 2004; Montgomery & Fallis, 2003; Hutt, et al., 2004; Johri, et al., 2003; W. Weissert, Chernew, & Hirth, 2003).

A key lesson gleaned from the experiences of other jurisdictions highlights the significance of ***carefully identifying and targeting those is need of services and understanding the appropriate level of care required***. This is key to achieving individual goals such as facilitating health, well-

Carefully targeting services to best meet the identified care needs of the person facilitates better individual health, well-being and independence, and is central to achieving system-level goals of high quality, cost-effective and appropriate care.

being and independence, and is central to broader system-goals of ensuring high quality, cost-effective and appropriate care.

Using a variation of the Kaiser Permanente Model, the U.K. Department of Health targets 3-5 per cent of the population of seniors which they describe as having complex needs and using the greatest proportion of health and social care resources. Evidence suggests that this group would benefit the most from active care management and integrated services (Department of Health, 2005). It is argued that targeting this 3-5 per cent to ensure these clients received an appropriate mix of services would result in improved quality of care and cost-effectiveness for the system, with consequent reductions of hospital admission and emergency room services (Hutt, et al., 2004).

What about those with more moderate care needs? Do they require integrated care as well? To some extent, yes. Some may benefit from coordination/ integration to help ease transitions across acute and other health care sectors. Still others may require only "linkages" to help them maintain their functional capacity (Leutz, 1999). The literature suggests that although they do not need extensive case management, lower levels of integration would nonetheless be both cost-effective and beneficial to individual well-being.

Denmark, for example, has decided that it makes good sense for individuals and is cost-effective for the health and social care system to prioritize a preventive approach to care. By giving early interventions such as knowledge about available health services, advice and guidance on activities, and funding to encourage self-care and activation, the Skaevinge Project found better health status and fewer hospital admissions in the long term. The provision of preventative care through the use of a coordination function enables people to maintain their independence for as long as possible and delays or prevents admission to hospitals or residential care (Wagner, 2001).

Flexible care management

Building on the issues discussed above, a central aspect of successful models is the concept of flexible case/care management. Flexible care management recognizes that older individuals have different levels or complexity of care needs. At one extreme, "intensive case management" targets those assessed with highly complex care needs. It features smaller case loads, more frequent visits and contact with the most 'at-risk' persons (Challis, Chessum, Chesterman, Luckett, & Traske, 1990; Dalziel, et al., 2005).

One striking early example is found in the work of the Thanet Community Care Project in the United Kingdom. Here, intensive care management is matched to frail older persons at-risk of long-term care placement (Challis, et al., 1990). Design features include selecting experienced case managers (who are largely social workers) and giving them smaller case loads with flexible budgets to provide client-centred care. The evaluation of this project found success on all dimensions. The case managers were satisfied with the greater flexibility, older persons and their caregivers reported increased satisfaction and well-being, and the system found a lower need for LTC placement with no greater cost to the system. Interestingly, the evaluation found that the experimental group was more likely to be at home, less likely to be depressed, and more likely to be engaged in social activities.

Flexible care management means empowering the provider in finding the "best fit" between client needs and services delivered.

Those with lower level care needs may do well with less frequent and intense monitoring. Studies of supportive housing residents in Toronto (who for the most part live independently and required help mainly with instrumental activities of daily living) found a strong and positive impact in the reduction of calls made by residents requesting emergency assistance (Bindman, Forrest, Britt, Crampton, & Majeed, 2007; Lum, Ruff, & Williams, 2005). Rather than "intensive" case management, frequent monitoring by, and contact with, care managers and personal support workers sent a strong and reassuring message to residents. Further, it was found that clients who were confident that they would receive care when needed tended not to "hoard" services. This too, ultimately contributes to cost-savings at the organization and system level.

At the other end of spectrum are self-managed care models. In some jurisdictions such as the Netherlands, self-management models are justified as being more compatible with choice and "consumer-directed" services. Under self-managed care, clients act as managers of their own care plans, with full responsibility for coordinating services. Based according to need, they receive a set amount of funds which they use to purchase the services they feel are necessary for the betterment of their health. According to the PROCARE survey of the European Union, this is one strategy that can be used to overcome the "bottlenecks occurring at the interface between health care and social care realms" (Kai Leichsenring, 2004). Such models are more commonly used among populations living with disabilities and are less common to populations where cognitive capacity is an issue. Nevertheless, what is important to note is that even self-managed models can make effective use of care managers as a connecting resource. In fact, in his review of the Saskatchewan Home Care program, Hollander recommends ***enhancing case management from home care per se to having case managers work at the broader systems level to ensure the best fit between client needs and services delivered on an ongoing basis*** (Hollander Analytical Services Ltd., 2006).

Flexible services

When services are integrated across a continuum, it is more likely that people can be treated at the most appropriate level of care.

Today's dual challenge of caring for an aging population while sustaining universal, publicly funded health care systems asks policy and decision-makers, planners and providers to look critically at whether we are using services well to produce better health. It also requires a look at home care services and whether they provide adequate response to client needs. Are they cost-effective substitutes for more expensive services or cost add-ons? It also requires thought to a range of complex questions regarding the financing and delivery of care. For instance, in what circumstances do social care and supportive services such as pet care, wigs, vacuuming and snow removal act as substitutes for more expensive clinical care? If they do, when should society pay for such services?

Policy goals which aim to provide services in the most cost-effective manner usually lead to disheartening debates over what should, or should not, be offered in the basket of services. Thinking beyond the traditional medical model of care forces policy and decision makers to confront the complex and contentious issue of entitlements and which costs should be subsidized by society (Deber & Gamble, 2007).

Findings from this review suggest that ***a broader and more flexible view of services can reduce upward substitution of more complex and costly services such as long-term care admissions.*** When services are integrated across a continuum, it is more likely that people can be treated at the most appropriate level of care. The Canadian Veterans Independence Program (VIP) employs a model whereby case managers are empowered to include transportation costs for shopping, banking, etc. into client care packages when transportation is otherwise unavailable. Home adaptations to modify bathrooms, kitchens and doorways to enable safer and more accessible home environments, housekeeping, grounds maintenance/snow removal and nutritional services are also included in care packages when such services help delay or avert unnecessary hospital admission or LTC institutionalization. Evaluations of the VIP model have found that providing a flexible range of low cost services

Studies conducted by **The Balance of Care Research Group** *suggest that unduly restricting the range of services that support older persons in living safely and independently in their homes may lead to unnecessary upward substitutions of more expensive services – even for older persons at relatively low levels of need.*

allows vulnerable seniors to remain safely in their homes, reduces the need for more costly residential long-term care, and results in improved individual outcomes (David Pedlar & Walker, 2004; D Pedlar & Hollander, 2008).

Studies conducted by The Balance of Care Research Group, (Williams, et al., 2009) suggest that unduly restricting the range of services that support older persons to live safely and independently in their homes may lead to unnecessary upward substitutions of more expensive services. Faced with heavy caseloads, increasingly complex coordination tasks involving multiple providers, and a lack of flexibility in the basket of services available to clients, case managers may default to residential LTC options – even for older persons at relatively low levels of need (Bigby, 2003; Brotman, 2003; Lassiter, 1995; Yeo, Ashbridge, Jedrziewski, Choplick, & Johnson, 2004).

A flexible basket of services works to ensure appropriate care that is responsive to culturally-diverse needs and the needs of people of diverse sexual orientation. Individuals from different ethnic, cultural, and socio-economic backgrounds may have different levels of awareness about and/or access to community-based supports as well as different perceptions and expectations of services, providers, and family caregivers.

Diversity of care settings

Results of this review have found that ***there is no single care setting which is deemed to be the best fit for integrating services***. In fact, some of the more successful models demonstrate the advantages brought by mixed care settings. The North Renfrew Long-Term Care Centre (Deep River, Ontario), for example, operates using a "campus of care model with 21 long term care beds (including 1 respite unit) and 10 supportive care apartments (including 1 respite unit). Within this model, residential care is not necessarily the "last stop"; residents have the potential flexibility to move from a supportive care apartment to a long term care unit when their needs warrant, and back to supportive housing if their needs change. Under the same administrative structure, NRLTCS also offers flexible and person-centered community services such as Adult Day Program, meals on wheels, congregate dining, transportation, and respite/short stay to residents in the broader community as well as to residents of the LTC facility and supportive care apartments (Aikens, 2007, 2009).

Context matters… Integration models which may work effectively in densely populated urban areas with relatively well developed service infrastructure may not be readily transferrable to sparsely populated rural and remote areas.

Furthermore, when considering care settings, sensitivity and consideration for geographic and ethno-cultural diversity is critical. ***Integration models which may work effectively in densely***

populated urban areas with relatively well developed service infrastructure may not be readily transferrable to sparsely populated rural and remote areas. Context matters. As such, alternative integration models and creative solutions may be required in meeting the needs of regions characterized by relatively underdeveloped service infrastructures, long distances and high travel costs.

The United Kingdom, Australia, Norway and Sweden provide examples of creative solutions for complex situations. Direct payment budgets are provided to carers and self-directed individualized funding is allocated to individuals who belong to new immigrant communities with particular dietary, cultural and/or religious requirements. In the Northern town of Deep River, Ontario the North Renfrew campus care model uses international experience to shape creative interventions that meet local needs. Based on the Danish example, the North Renfrew Centre is looking to modify the model of emergency medical services (EMS) so that it provides emergency overnight care to older persons. Together, EMS staff and personal support workers (PSWs) work to respond to night-time emergency calls with swift response to client needs while diverting inappropriate hospital utilization. These models suggest that a mix of strategies and care settings may work well even in rural and remote areas with relatively underdeveloped service infrastructures.

Integrating funding

Fragmented funding mechanisms tend to go hand-in-hand with fragmented systems. In a siloed system, there are perverse incentives for one sector to off-load costs to another sector so as not to permit savings to be captured and potentially reinvested to achieve system efficiencies. By the same token, hospitals may wish to protect their income by maximizing the use of hospital services – clearly a disconnect for any health care system which seeks to keep people healthy and out of hospital (Feachem & Sekhri, 2005). ***The literature shows that when systems are integrated, savings can be reinvested where they are needed the most.***

The impact of fragmented funding intensifies in situations where different sectors operate under varying funding principles. To illustrate, the current line-by-line funding approach typical to the community care sector in Ontario has inherent challenges and rigidities which hospitals (who operate under global budgets) are exempt from. In studies conducted by The Balance of Care Research Group, case managers observed that problems in coordination increase, and costs often rise, when multiple providers (often from different agencies) have to be

In studies conducted by The Balance of Care Research Group, case managers observed that problems in coordination increase, and costs often rise, when multiple providers (often from different agencies) have to be scheduled, managed and transported to the client's place of residence.

scheduled, managed and transported to the client's place of residence. Coordination is further complicated by the need for services to be delivered and accounted for using standard service units, such as an hour of care. Case managers noted that such systems reduce the provider's ability to deliver client-centred care and thwart the power to flexibly increase or decrease the length of a visit as needed (Williams, et al., 2009).

Recognizing that integration often costs before it pays (Leutz, 1999), long-term political and financial commitments are required to shape integrating care pathways before harvesting results and economies of scale (Ham, 2009; Leutz, 1999). This review identified numerous funding models which contribute to better system and individual level outcomes. Five examples are provided below:

- As part of a larger integration initiative designed to reduce the number of ALC beds, **Vancouver Coastal Regional Health Authority's *At-Home Redesign Strategy*** saw impressive reductions in ALC clients (from 12 per cent to 6 per cent). The cost savings generated from the initiative were channelled directly into the home and community care sector. Given that no further beds have since been closed, the incentive for the community sector to receive new funding (and divert investments to acute care) has been the demonstration of effective community-based strategies that result in: i) reductions to inappropriate use of acute care; ii) reductions to ALC, and that iii) show means to increase acute care capacity for appropriate patients (e.g., by reducing ER visits by diverting to more appropriate care). The community sector is responsible for developing targets that it will be measured against and held accountable for (Rigg, 2006 www.crncc.ca).

- ***Saskatchewan Home Care Program* of the Regional Health Authority**. Saskatchewan Health provides a global budget to Regional Health Authorities with explicit expectations that appropriate funds are allocated to home care services (Hollander Analytical Services Ltd., 2006).

- **The Canadian federal *Veterans Independence Program (VIP)*** employs a model whereby budgets are negotiated to purchase the most appropriate community-based services to allow individuals, deemed eligible for LTC placement, to live safely within their home and community (D Pedlar & Hollander, 2008). This funding framework has shown to provide sufficient flexibility to allow for care to be delivered in the most appropriate and cost-effective manner.

- **Kaiser Permanente's Social HMO *Medicare Plus II* program** is financed using a combination of methods including: Medicare, Medicaid, individual monthly payments and service co-payments. Although funding is derived from a variety of sources and is subject to capitation, Kaiser Permanente authorizes and allocates resources for comprehensive service packages across the care continuum. In addition to medical

services, care packages may also include: prescription drugs, assistive devices, emergency response, foot care, transportation, home and commuity care, and nursing home short stays (Davis, 2001). Non-institutional long-term care benefits include personal assistance services, homemaking, rehabilitation therapies, meals, respite, and adult day health care. These additional service are funded, in part, through gains in efficiency from existing Medicare benefits (e.g., reductions in hospital admissions).

- Similar to Medicare Plus II, **the *On Lok/Program for All-inclusive Care for the Elderly (PACE)*** also receives monthly capitation payments from Medicare, Medicaid, and monthly payments from a small number of individuals who are ineligible for Medicaid. The various sources of financing are pooled and are used largely without restriction under shared clinical and administrative governance. Thus, in both the PACE and the Social HMO models, the capacity to pool funding streams facilitates clinical flexibility and the latitute to provide the most appropriate level of care in a swift and cost-effective manner.

Studies show financial integration as leveraging the clinical flexibility and the latitute necessary to provide the most appropriate level of care in a swift and cost-effective manner.

The literature maintains that financial incentives should be designed to organize and maximize the use of limited resources and replace where possible more costly care with less costly care (Murphy, 2004). Studies in the U.K. have found that "community matrons" (case managers with a nursing background) tend to be more reliant on medical care services as opposed to social care services. This often results in missed opportunities to maximize the cost-efficiencies found in downward substitutions for high cost services such as acute hospital care or LTC residency (National Health Service UK & Department of Health, 2004). Similarly, capitation models require built-in safeguards that deter instances of "cherry-picking" or "cream-skimming".

Financial integration holds all parties across the system – from primary health care to hospital services – accountable to a pooled budget and a single bottom line figure. This model ensures maximum efficiency in the use of available financial and health human resources in attaining optimal health outcomes for the individual and the system. Based on the system integration experiences of nine European countries[5], experts including Leichsenring (Kai Leichsenring & Alaszewski, 2004; K Leichsenring, 2008; King, Fulop, Edwards, & Street, 2001) caution against

[5] A multi-country FP5 project under the European Commission entitled "Providing integrated health and social care for older persons", commonly referred to as the PROCARE project.

the shifting of financial resources from long-term to acute care sectors. They warn that shifting investments may not pay-off in the short term and may pose even greater challenges to integration given longstanding power imbalances between acute and community sectors. Further, time is of the essence - positive outcomes may only become apparent after a few years (Health Services Utilization Research Commission, 2002), particularly since vulnerable populations may be able to "muddle through" for a short (but unsustainable) time period (M. J. Hollander, 2003).

Integrating structures and institutions

Thus far, the report has discussed care management, service delivery, care settings and funding as conceptually distinct topics even though in practice they are interrelated and bound by their respective structures and institutions. In this regard, ***structures and institutions can lay the foundation for integration initiatives or alternatively, they can undermine the best intentions.*** Indeed, a growing body of literature points to integration obstacles brought on by organizations separated by competition for scarce funding and resources, differing client information and decision support systems, differing standards of care, and differing management structures and organizational cultures. Kodner (2006) promotes the importance of umbrella structures at the organizational level as a means to guide the integration of strategy, management and service delivery. He argues the framework promotes effective collaboration and ensures efficient operations through integrated governance structures responsible for overall accountability in service delivery, performance outcomes, and quality and financial management.

Studies conducted by the Nuffield Trust, a Centre for Research and Policy Studies in Health Services at the University of Birmingham, provide evidence corroborating the importance of overarching structures in their provision of high-level strategic management (Ham, 2009). Effective umbrella structures display strong leadership capacity aligning providers and agencies towards a shared vision and cultivate a culture of integration through joint communication strategies and governance frameworks. Nonetheless, their research also strongly reinforces the importance of ensuring that initiatives are locally-driven from the front-lines of care; efforts must first evolve organically from the ground-up before the focus turns to structural solutions (Ham, 2009). In the U.K., for example, a critical first step was aligning the work of community health and social care teams with primary health care physicians serving the same catchment areas (Ham, 2009).

Hollander and Prince (2002) provide an extensive framework specifying administrative and clinical best practices for organizing a continuum of care with linkages across population groups, sectors (primary, secondary, tertiary), and social and human services (M. Hollander & Prince, 2002).

Our findings suggest that while there appears to be shared features across models, different institutional means have been employed to promote their integrating initiatives. Some of the structural commonalities and discrepancies amongst the models studied are described below.

On Lok/PACE model represents a self-enclosed system placing professional providers under one roof. This organizational structure can arguably facilitate multidisciplinary teams and inter-professional collaboration, joint assessment and long-range care planning with high physician involvement (Commission, 2004). The trade-off however is that such a model may not work for clients who cannot, or do not wish to be transported to care. Furthermore, this model assumes significant investment in a locale which is able to house all providers, services and mechanisms for inter-professional collaboration.

Global challenges, Local Solutions *– Our findings suggest that while there appears to be shared features across models, different institutional means have been employed to promote integrating initiatives. Be mindful of the local context!*

In contrast to On Lok/PACE, the institutional structure of the **Social HMO model** puts acute and home care services under one administrative and financial umbrella. Rather than focusing on delivering services from a single locale, this model relies on case managers to create effective linkages across sectors. Under this framework for integrating care, all providers are responsible for working towards a single bottom line.

Supportive housing provides excellent example of integrating care from the perspective of community support services. With a shared philosophy (mission) to "do whatever it takes" to keep people at home, supportive housing providers demonstrate a ground-up approach to building integration and one that keeps the central focus on service users. However, the ability for supportive housing providers to fulfill their mission is often hampered by the rigid requirements of line-by-line budget restrictions.

The Danish model provides an international gold standard on integrating health and social care sectors. Since the 1940s, Denmark has sought to reduce the length of stay in hospitals by rendering care more efficient. This has been achieved primarily through the redesign of care processes, an increase in outpatient services, the boosting of system capacity to provide greater home nursing, and building society's trust in home and community care.

To encourage integration across primary, secondary and tertiary care sectors, the government rolled-out a series of institutional and administrative changes. In 1987 legislation entitled the *Lov om Ældreboliger* (Law on Elderly Housing) was introduced to revamp available housing options for older persons. This act represented an important step in de-institutionalizing elder

care: regulations were standardized for the construction of special housing for frail elders; the building of traditional nursing homes was de-prioritized, and; services were separated from housing. In essence, nursing homes were replaced by elderly housing options with access to community services that support individuals to live independently in the community (Lewinter, 2004).

The second shift introduced initiatives to integrate health and community care across regions and municipalities using financial incentives and measures of fiscal accountability to reinforce the new patterns of care delivery. As of 1994, the legal framework obliged cooperation among municipalities and regions in the coordination of care and required integrated 4-year health plans to guide implementation on the ground.

The third change further reinforced integrating care initiatives by interlocking financial structures to create cost-effective care. In Denmark, health care is financed by a combination of national earmarked "health taxes". This taxation is redistributed in block grants to regions (which have no taxation authority) and municipalities (which have taxation authority) with municipalities contributing 20 per cent of funding from local budgets.[6] The underlying rationale for municipal co-financing is the incentive to increase preventative services and decrease the inappropriate use of hospital services (Strandberg-Larsen, Nielsen, Vallgarda, Krasnik, & Vrangbaek, 2007). For example, regions have billed municipalities for patient care costs associated with delayed discharge as a result of gaps in necessary outpatient services at the municipal level. In other words, co-financing has created the incentive to boost capacity in the home and community care sector (Strandberg-Larsen, et al., 2007).

A common administrative structure also maximizes the effective use of health human resources by optimizing opportunities for multidisciplinary collaboration and enhanced joint decision-making in relation to treatment. Demark is commonly cited as a gold standard model of integrating care as it goes furthest among all the models examined in developing integrating home-care systems. Recognizing the import and value in holistic, system-wide solutions, the Danish model has succeeded in providing the national infrastructure necessary to support the administration and delivery of safe, cost-effective care in the home and in the community.

[6] A total of 80 per cent of regional health care activities is financed by the State through such block grants; the remaining twenty per cent of public financing is derived from municipal contributions. What may also be helpful to our understanding of the Danish experience is that municipalities are responsible for administering and funding (although some funds flow from the State) all aspects of home and community care with few private non-profit, or for-profit providers in the same playing field. Home and community care providers are for the most part municipal employees. In this sense, municipalities are arguably in a position to balance economies of scale with delivering care close to those who need it the most.

Conclusion

We began this report with the caution against a generic recipe for integrating community-based health and social care. Indeed, there is no ideal "one-size-fits-all" model. However, as this review illustrates, there are common design elements that help to facilitate success. Two common and symbiotic denominators are reflected in the literature. The first of which includes clients and their caregivers as meaningful partners in designing and driving care plans. The second emphasizes the importance of local context. Put simply, successful integrating initiatives need to be mindful of local needs, local settings, local resources and local infrastructure. The most successful programs are those that provide local solutions to the global challenges common to aging populations and health systems across jurisdictions.

We have also learned that while well-executed integration models can occur using a "top down" approach; the evidence reinforces the primacy of locally-driven initiatives that evolve organically from the front-lines of care. The literature points to the central role of on-going organizational and structural supports - not in their ability to lead integrating efforts - but rather in their ability to provide the supports necessary to ensure the long-term success of local innovations. In other words, when individual initiatives, under-resourced and one-off pilot projects are implemented at the margins, their success has proven to be as short-term as their project funding and equally bounded in their ability to attain longer term system and individual level goals.

The careful identification and targeting of services is another key lesson drawn from the literature. The practice of targeting enables planners and providers to maximize efficiencies along complex care pathways, improve the cost-effectiveness of available resources (minimizing unnecessary duplication), and allows for the clear demonstration of results. Key to this is the integration of shared assessment tools across providers. Such instruments identify not only appropriate responses for older persons with complex care needs but also provide timely entry into programs targeted to prevent and/or delay the progression of chronic illness.

Identifying the appropriate mechanism (be it an individual, a team, or an organization) and making it accountable for coordinating an individual's continuum of care needs has shown to be an integral component of best practice models. Depending on the infrastructure in place locally, care management mechanisms may leverage various combinations of community-based supports including home care, supportive housing, or day programs. Multidisciplinary care teams, including the prominent role of primary health care physicians, play centre stage in all successful integrating initiatives.

Finally, time is of the essence – integrating care is a dynamic process. Long-term political and financial commitment is required as successful initiatives often take years to demonstrate impact and harvest returns at the systems level.

This report has sought to shed light on the many promising innovations and successful initiatives underway across Canada and the international community. With this, we have hoped to elicit

and encourage new areas of inquiry, research and action to support the continued evolution of integrating community-based health and social care for vulnerable older persons. While there may not be 'one-size-fits-all' approach to integrating care, the experiences of other jurisdictions are valuable in developing a broader understanding of changing patterns and innovations in care delivery, shifting trends in consumer choice and preference, and on-going system integration concerns. This report does not claim to have found the magic recipe to cure system ills but it does present a menu of key principles and design features that when used in combination, may increase the likelihood of success.

Appendix A: The Models in Review

Table 1: Programs Reviewed (*=Deemed Successful)

Program Name	Where	Type of Model	Who	What	How	Funding Type	Outcome
BC Continuing Care Service Delivery System*	Canada (British Columbia)	Home	Individual, Age, Health status	Heath	Case management	Mixed	Individual, System
CHOICE*	Canada (Alberta)	Day program, Home	Individual, LTC Eligible	Health and Social care	Team	Mixed	Individual, Caregiver, System
Continuing Care in Nova Scotia	Canada (Nova Scotia)	Home, Supportive housing	Age, Health status	Health and Social care	Case management	Mixed	N/A
East-Central RHA*	Canada (Alberta)	Day program, Supportive housing and Home	Health status	Health and Social care	Case management (team approach)	Mixed	Individual, System
Halton Region's Municipal Service Coordination Strategy	Canada (Ontario)	Supportive Housing	Individual	Health	Team	Public	N/A
Independent Living BC	Canada (British Columbia)	Supportive Housing	Age, Low income, Individual, Health status	Health and Social Care	Case management	Mixed	System
North Renfrew LTC Centre	Canada (Ontario)	Supportive Housing	Individual, Low income	Health and Social Care	Case management	Public	Individual, System

Peel Senior Link	Canada (Ontario)	Supportive Housing/ Clustered care	Low income, Age, Health status	Health and Social care	Case management	Public	Individual
PRISMA*	Canada (Quebec)	Home	Individual, Age, Health status, Support needed	Health and Social care	Case management	Mixed	Individual, Caregiver, System
RISC*	Canada (Ottawa)	Home	Individual, Caregiver, Age, Support needed	Health and Social care	Case management, Team	Public	Individual, System
Senior's Supportive Housing BC	Canada (British Columbia)	Supportive housing	Individual, Support needed, Health status	Health and Social care	Case management	Mixed	System
SIPA*	Canada (Quebec)	Day program	Individual, LTC Eligible	Health and Social care	Case management	Public	Individual, System
Vancouver Coastal RHA	Canada (Vancouver)	Clustered supportive housing	Age, Health status	Health and Social care	Case management	Mixed	System
Veterans Independence Program (VIP)*	Canada (National)	Home, Day program	Individual, Low income	Health and Social care	Case management (self or health care professional)	Public	Individual, System
Arizona Long term Care System*	US	Home, Supportive housing	LTC Eligible	Health and Social care	Case management	Private	Individual, System

Care Network for Seniors	US	Home	Low income, LTC eligible	Health and Social care	Case management (team approach)	Mixed	Individual
Community Based Elder Care (C-BEC)	US	Home, Day program	LTC eligible, Health status	Health and Social care	Case management (team approach)	Public	Individual
The Coming Home Program	US	Supportive housing	LTC eligible, Low income, Health status	Health and Social care	Case management	Mixed	N/A
Customized Services in NH	US	Home	Caregiver, Health status	Social care	Self-managed	Public	N/A
EVERCARE	US	Supportive housing	Age, Health status	Health	Case management	Private	System
HAP Service Coordinators and Public Housing	US	Supportive housing	Health, Income	Health and Social care	Case management	Mixed	N/A
Just for Us	US	Clustered	Health	Health	Case management	Mixed	System
MSHO	US	Home	Age, Income	Health and Social care	Case management	Public	Individual, System
Medicaid High-Cost Users Initiative	US	Home, Day program	Income, Health	Health and Social care	Case management	Public	N/A
OnLok	US	Home, Day program	Individual, Low income	Health and Social care	Team	Mixed	Individual, Caregiver, System

PACE*	US	Home, Day program	Individual, LTC Eligible	Health and Social care	Team	Mixed	Individual, System
SHMO*	US	Day program	Age, LTC Eligible, Low income	Health and Social care	Case management	Mixed	Individual, System
SHMO II*	US	Day program	Age, Low income	Health and Social care	Team	Mixed	Individual, System
Star Plus	US	Home, Day program	Low income	Health and Social care	Case management	Mixed	Individual, System
Texas ICM Program	US	Day program	Low income	Health and Social care	Case management	Public	N/A
VNS CHOICE	US	Home, Supportive housing	Individual, Disease, Low income	Health and Social care	Team	Public	System
Wisconsin Family Care Program*	US	Day program	Health	Health and Social care	Team	Public	Individual, System
Wisconsin Partnership Program	US	Day program	Individual, LTC Eligible	Health and Social care	Case management	Mixed	Individual, Caregiver
Abbeyfield Care Homes	Other OECD (UK)	Supportive housing	Individual, Health Status	Health and Social care	Team	Mixed	N/A
Abbeyfield Sheltered Housing*	Other OECD (UK)	Supportive housing	Individual, Age	Social care	Team	Mixed	Staff, System
Continuing Care*	Other OECD (Denmark)	Home, Supportive Housing	Individual with disability	Health and Social care	Case, Team-based & Self-management	Public	Individual, System

Rapid Response Team (RRT)	Other OECD (UK)	Home, Day program	Individual, Health status	Health and Social care	Team	Mixed	System
SA Health Plus	Other OECD (Australia)	Day	Individual, Health Status	Health care	Case management	Public	Individual, System
SAD	Other OECD (Portugal)	Day program	Individual, Health Status	Health and Social care	Team	Mixed	Individual
UK Case Management Darlington*	Other OECD (UK)	Day program	Individual, Caregiver, LTC Eligible	Health and Social care	Team, Led by case manager	Public	Individual, System
UK Case management Lewisham*	Other OECD (UK)	Day program	Individual, Caregiver, Health status	Health and Social care	Team, Led by case manager	Public	Individual, System
UK Case management Thanet*	Other OECD (UK)	Home	Individual, Health Status	Health and Social care	Team, Led by case manager	Public	Individual, System
UK Case management Gateshead*	Other OECD (UK)	Home	Individual, Health Status	Health and Social care	Team, Led by case manager	Public	Individual, System
East Kent Case Management Project*	Other OECD (UK)	Home	LTC Eligible	Health and Social care	Case management	Public	Individual, System
Health and Social Care*	Other OECD (Denmark)	Home, Day program	Health	Health and Social care	Team	Public	Individual, System
Vittorio Veneto	Other OECD (Italy)	Day program	Individual, Health Status	Health and Social care	Team	Public	System
PALKO*	Other OECD (Finland)	Home	Individual, Health Status	Health and Social care	Team	Public	Individual, System

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