In this paper, the authors provide a policy prescription for Canada’s aging population. They question the appropriateness of predictions about the lack of sustainability of our healthcare system. The authors note that aging per se will only have a modest impact on future healthcare costs, and that other factors such as increased medical interventions, changes in technology and increases in overall service use will be the main cost drivers. They argue that, to increase value for money, government should validate, as a priority, integrated systems of care delivery for older adults and recognize such systems as a major component of Canada’s healthcare system, along with hospitals, primary care and public/population health. They also note a range of mechanisms to enhance such systems going forward. The authors present data and policy commentary on the following topics: ageism, healthy communities, prevention, unpaid caregivers and integrated systems of care delivery.
After more than 35 years of international gerontological research, much is known about appropriate and effective care for an aging society. This paper draws on what we know in order to provide guidelines for public policy. We assert that the aging of Canadian society does not warrant alarmist reactions concerning drastic consequences. We also argue that current prescriptions for how to deal with fiscal challenges regarding our healthcare system (Organisation for Economic Co-operation and Development [OECD] 2010; TD Economics 2010) are unnecessarily pessimistic because they do not recognize the significant enhancements in value for money that could be achieved if integrated systems of care delivery were implemented for older adults and people with disabilities. In addition, the analyses in these and other reports miss the efficiencies that could occur now if lower-cost care (e.g., non-professional community home support services) were to be appropriately substituted for higher-cost care (e.g., hospital care).

In an effort to improve the sustainability of the healthcare system and quality of care, we offer an evidence-based policy prescription to meet the challenges and opportunities presented by an aging society. We provide commentary, related to aging, on family care, formal care from the healthcare system and the broader societal context.

**Setting the Context: Impacts of an Aging Population on Future Healthcare Costs**

Concerns have been expressed over the rising tide of older adults in Canadian society. Apocalyptic demography refers to the oversimplified belief that a demographic trend such as population aging will have dire consequences, and that Canada will not be able to afford the increasing size of its older population (Gee and Gutman 2000). This type of analysis is misleading because it does not include demographic changes related to children and youth that serve as an offset in terms of societal costs. Using more recent dependency ratios that define the youth population as ages 0–19 and the working age population as 20–64, one can calculate dependency ratios for youth and older adults. The old age dependency ratio increased from 15 in 1971 to 21 in 2006 and is projected to increase to 40 by 2056. However, the total dependency ratio decreased from 89 in 1971 to 60 in 2006 and is projected to increase to 84 by 2056 (Statistics Canada 2008). Thus, the overall dependency ratio for young people and the elderly will actually be lower in 2056 than it was in 1971. It should also be noted that if the disappearance of mandatory retirement were to result in an increase to the normal retirement age, this would produce an increase in the size of the working age population and a decrease in the size of the old age population. This would in turn result in a lower dependency ratio for the elderly.

Economists Magnus (2009) and Robson (2009) argue that the cost of care for children is less than the cost of care for older adults, and that the decline in the proportion of young people does not offset the greater cost of caring for older adults. While this may or may not be so, current analysis does not incorporate any economic offsets for the decrease over time in the younger population.

While the escalation of healthcare costs is not in dispute, the extent to which rising costs are attributable to the increasing number and proportion of older adults seems to be seriously overstated. It has been estimated that only about 1% of total healthcare costs per year is due to population aging (Canadian Health Services Research Foundation [CHSRF] 2002; Health Council of Canada 2009; Rachlis 2010, October). Furthermore, economists Denton and Spencer (1999) conclude that Canada can easily afford an aging population, given at least moderate levels of economic growth.
The Health Council of Canada (2009) states that the persistent belief that the increasing size of our older population will overwhelm Canada's health care system is not true; it is a myth. It also goes on to note that spending is not necessarily associated with better outcomes. The Health Council attributes the growth in future costs to an increase in the use of services. The Canadian Health Services Research Foundation (CHSRF 2002) has in turn established that most of the older adults using more services are healthy seniors; that is, healthy not sick older adults are driving most of this increased usage (accounting for 57% in the late 1990s). Rachlis (2010, October) has shown that relatively similar per capita cost increases are occurring across all ages. Finally, Di Matteo (2005) argues that the rising costs of technological interventions is another major factor in medical cost increases and is a much larger factor than the aging of the population. Thus, the rise in healthcare costs is due to increases in use and technology and is not primarily driven by the increase in the older adult population.

Writers such as Fries (1989) have argued that in the future there will be a “compression of morbidity”; that is, people may not live longer per se but will remain healthier for longer periods of time. Thus, they will need more intensive health services for a shorter period of time prior to death. While recent reports of declining rates of severe disability in some countries have led to optimism for the future, the trend does not characterize all nations and does not characterize Canada, where the trend is currently stable (Manton 2008; OECD Indicators 2009). A reflection of this stability is reported by Wister (2005), who states that while rates of cardiovascular disease, arthritis/rheumatism, hypertension and bronchitis/emphysema declined in Canada from the 1970s to the late 1990s, the rates for diabetes, asthma, migraine headaches, respiratory diseases and the total number of chronic conditions increased during the same time period. Thus, while healthcare costs will increase, the aging of the population per se will only account for an increase of some 1% per year. Furthermore, some of these increases should be mitigated by offsets from savings related to the decline in the proportion of young people in the population and, possibly, reductions in cost pressures related to the compression of morbidity.

The first step would be for federal and provincial governments to recognize and re-validate continuing care as a major component of Canada’s healthcare system.

Key Mechanisms for Policy Change

While we may not be able to fully negate demographics and other trends, there are steps that we can take to mitigate their effects through intelligent and well-thought-out public policy. In what follows, we state our views about how to better respond to the challenges of an aging population in Canada. We note what should be done. However, things do not happen in a vacuum; thus, our first comments relate to the broad issue of how change could be achieved.

From the mid-1970s to the mid-1990s, Canada was actively developing province-wide integrated systems of care delivery, generally referred to as systems of continuing care (Hollander 2001b). During that period, continuing care services were clearly considered to be an important component of our Canadian healthcare system and, in terms of public expenditures, were the third largest component after hospital and physician serv-
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ices (British Columbia Ministry of Finance and Corporate Relations 1992). Without such integrated systems, it is our view that the elderly and persons with disabilities receive suboptimal care, and that our current system results in greater costs. (We are not aware of any literature that indicates that splintered and stovepiped systems provide optimal or cost-effective care.) Thus, the first step, from which all other actions would flow, would be for federal and provincial governments to recognize and re-validate continuing care as a major component of Canada’s healthcare system, along with other components such as hospital care, primary care and public/population health. In conjunction with this re-validation, both levels of government and regional health authorities should designate a senior person (e.g., the assistant deputy minister and vice-president, respectively) to be responsible for community and continuing care services. National and provincial data collection and reporting should be adjusted to allow for a clear accounting of public expenditures for continuing care services. Recent data indicate that if a continuing care system existed, it would still constitute the third largest component of our healthcare system in terms of public expenditures (Hollander et al. 2009).

In addition to formal recognition of continuing care, some mechanisms would need to be established to maintain an ongoing focus on continuing care, and to improve and adapt this model over time. There are several possible mechanisms for this. It does not seem feasible to re-open the Canada Health Act. Thus, a new continuing care act could be developed in consultation with the provinces. Other options would be to develop protocols, guidelines and standards for continuing care through the Social Union Framework Agreement or to have the upcoming federal/provincial health accord mandate, and focus on, continuing care. Due to the complexity of continuing care and the variability across jurisdictions, a federal/provincial/territorial advisory committee could also be established that would report to the conference of deputy ministers of health. Another approach could be to set up a separate national organization for continuing care akin to the current Public Health Agency of Canada or the Mental Health Commission of Canada. The new agency or commission would work to foster and promote care for the elderly and other persons with ongoing care needs across Canada.

The above proposals reflect structural changes that would be vehicles for developing enhanced public policies for older adults and persons with disabilities. The following sections note what topics, in our view, deserve policy attention. Each topic, in its own way, is related to health status, on a continuum from the social context in which people live to the provision of healthcare services.

**Ageism**

Ageist attitudes remain throughout society. Such attitudes have been documented, for example, in media portrayals of seniors and among school-age children, healthcare professionals and employers facing older job applicants (Achenbaum 1995; Van Dalen et al. 2009; Wood et al. 2008). The low level of interest of individuals in working in occupations related to older age (Gonçalves 2009) is of such concern that several national organizations in Canada, including the Association of Geriatric Physicians and the Canadian Association on Gerontology, formed a group known as the Geriatric Education and Recruitment Initiative, whose task it is to change the negative image of older adults within society (Hogan 2007). The pervasiveness of ageism has led Stones and Stones (1998) to refer to it as a “quiet epidemic” that contributes to indifference.

An inability to work, isolation due to
Ageist attitudes and other such factors contribute to ill health and their attendant costs. Thus, steps should be taken within government to ensure that existing and future public policies do not discriminate against the elderly. At a societal level, public awareness campaigns could be launched and the topic of older adults could be included in public messaging against discrimination.

Healthy Communities
The desire of Canadians, embraced by the federal government, is healthy aging to the extent possible. Health Canada defines healthy aging as “a lifelong process of optimizing opportunities for improving and preserving health and physical, social and mental wellness, independence, quality of life and enhancing successful lifecourse transitions” (2002: 5). United Nations’ principles for older persons include independence, participation, care, self-fulfillment and dignity, all of which require action in the health arena. Canada is a signatory to the United Nations Madrid International Plan of Action on Aging (the Madrid Accord), which lays out a number of steps that can be taken to reduce ageism and to promote age-friendly environments (United Nations 2002).

In 2002, the World Health Organization (WHO) launched the Active Aging Policy Framework, defining active aging as “the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age” (Kalache 2009). For WHO, active aging requires a variety of supports including personal, environmental, economic, behavioural and health and social services supports. WHO’s Global Age-Friendly Cities: A Guide was launched in 2006, targeting eight domains for action: outdoor spaces and buildings, transportation, housing, social participation, respect and social inclusion, civic participation and deployment, communication and information and community support and health services (A. Kalache, personal communication, 2009). The Special Senate Committee on Aging (2009) recommended that the federal government promote Global Age-Friendly Cities: A Guide (and Public Health Agency of Canada’s Age-Friendly Rural and Remote Communities: A Guide [2009a]). Given that Canada supports healthy aging, is a signatory to the Madrid Accord and supports age-friendly cities, all of which promote better health and support for the elderly, it would be timely for governments to act on these commitments.

Prevention
Health promotion, or the process of enabling people to increase control over and improve their health, has been embraced by several national reports, including those of the National Forum on Health (1997) and the Romanow Commission (Romanow 2002). There is now evidence demonstrating that many chronic conditions can be prevented and that it is cost-effective in human, social and financial terms to invest in such policies (Kannus et al. 2005; Katz and Shah 2010; WHO 2002, 2003). Smoking, a lack of physical exercise and an inadequate diet are established risk factors for virtually all chronic illnesses. For example, it is estimated that every $1.00 spent on enhancing physical exercise results in a savings of $3.20 in medical costs (WHO 2002); $1.00 invested in health promotion has been estimated to yield a return on investment of $6.00–$8.00 in health cost savings (PHAC 2009b). A 20% decrease in falls experienced by older adults would result in 7,500 fewer hospitalizations, 1,800 fewer permanently disabled older adults and a healthcare cost savings of $138 million per year (PHAC 2009b).

Research targeted specifically to the needs of older adults supports the cost-effectiveness
of preventive home care. Hollander (2001a) studied the preventive function of home care in two health units that implemented cuts to home-making services in the mid-1990s, and two that did not do so. Individuals cut from the services cost the government considerably more in terms of hospital and nursing home costs in the third year after the cuts compared with people who continued to receive a modest amount of supportive services. It now appears that well-conceived and clearly targeted interventions can actually have positive impacts. Thus, it may be beneficial to support targeted evaluation studies on prevention activities that have demonstrated a high probability of success.

Unpaid Caregivers

The networks of family and friends within which most older Canadians are embedded step up to help when a loved one’s health declines. Caregiving, or simply caring, refers to providing unpaid support to individuals when their health has deteriorated and they can no longer function independently (Chappell et al. 2008; Chappell and Funk in press).

Informal care, unpaid assistance primarily from family, is the major form of care for older adults, far exceeding that provided by the formal healthcare system (Chappell et al. 2008). Some studies have estimated caregiver contributions either at minimum wage or in terms of replacement value (Harrow et al. 2004; Langa et al. 2002a, 2002b). A recent Canadian study (Hollander et al. 2009) documented involvement in meal preparation and cleanup, house cleaning, laundry and sewing, maintenance and outdoor work, shopping for groceries and other necessities, providing transportation, doing banking and bill paying and personal care (assistance with bathing, toileting, care of toenails and fingernails, brushing teeth, shampooing hair and dressing). A conservative estimate from that study is that unpaid care by persons aged 45 plus to older adults (i.e., those 65 plus) in Canada represents an economic contribution of some $25 billion annually, costed at hourly rates for paid care providers.

Who provides care for older adults is a question of the boundaries between the state and family, that is, who “should” be providing what care and how much? Policy options that support the needs of caregivers are important for several reasons: the formal care system could never replace all of the support provided informally; caregivers express a desire to continue in their role; and many caregivers make great sacrifices in order to provide the care that they do. Without assistance, caregiver health can deteriorate and result in greater demands on the formal healthcare system.

The Special Senate Committee on Aging (2009) identified four policy options to assist unpaid caregivers: direct services to caregivers including, for example, home support services, education, information, resources and counselling; direct payment to caregivers for reimbursement of expenses and compensation; labour policy including workplace policies, labour standards and employment insurance; and indirect compensation such as tax credits and pension credits and adjustments. A lead role for the federal government was suggested. A caregiving framework proposed by the Canadian Caregiver Coalition (2008) and supported by the Special Senate Committee on Aging (2009) argues that the value of family caregiving should be acknowledged in legislation, policy and practice.

Integrated Systems of Care Delivery

As noted previously, in Canada we have had integrated systems of care delivery for older persons and people with disabilities in the past. They were complex and combined health and supportive care. As they were not insured services under the Canada Health Act, they
evolved in different ways across Canada. However, the types of needs addressed and services provided were reasonably similar in spite of perceived differences due to terminology and policy. These integrated systems allowed for trade-offs between lower-cost services (such as home care) and higher-cost services (such as residential care and hospital care) (Hollander 2001b).

Recent national policy has focused on home care per se rather than on the broader concept of continuing care. This is fine as far as it goes, but a focus on home care alone (while helpful for clients) will generally only lead to added costs. For example, current policy appears to lead to an increasing cost spiral. Hospitals lobby for, and receive, additional funding. Governments reduce funding for long-term home support services in the community (because they are not perceived to be “real health services”). People living in the community find it difficult to maintain their independence due to cuts to supportive services and are thus admitted to residential care or hospital. This, in turn, leads to greater cost pressures on hospitals, and the same cycle of using more costly services (i.e., hospital beds) to substitute for less costly services (home support) is repeated, over and over again, resulting in an ongoing spiral of increasing costs. What most people do not appear to grasp is the conundrum that while older adults and people with disabilities have legitimate medical needs (i.e., they have medical diagnoses), the most appropriate response, in large part, is to provide supportive services that allow these people to function as independently as possible for as long as possible.

The weight of the evidence now clearly indicates that home care, including a major home support component, can be a cost-effective substitute for residential and acute care across time, geographic areas and types of care recipients (Chappell et al. 2004; Hollander 2001a, 2001b; Hollander and Chappell 2002; Hollander et al. 2007; Hollander et al. 2009). However, the fact that home care costs less than institutional care is a necessary but not sufficient condition for cost-effectiveness. Value for money in the broader healthcare system can only be achieved if home care is part of a larger integrated system of care delivery that allows for cost-effective trade-offs.

It turns out that we already have a well-recognized, world-class, made-in-Canada template for how to organize integrated systems of continuing care (Hollander and Prince 2008; MacAdam 2008, 2009). Thus, all of the conditions are in place to successfully reintroduce, and re-validate, continuing care as a major component of our healthcare system (i.e., evidence of the potential cost-effectiveness of continuing care, and a best practices framework for organizing optimal systems of care delivery). What is now required is the political and administrative will to do so.

While our proposal to develop integrated systems of care delivery, rather than focusing on its component parts such as home care, would necessitate a significant change, implementing an integrated system of continuing care would not be unprecedented. We have had such systems in Canada in the past, and several countries offer either national home care/long-term care programs incorporating both health and support services or the inclusion of many of these services within integrated systems of care. Australia, for example, has had a national home care system since 1985 that focuses on community-living individuals who require maintenance and support services to remain in their home of choice (Canadian Healthcare Association 2009; Woodward 2004). The state of Arizona implemented a cost-effective, integrated system of care, with capitation funding, in 1989 (Weissert et al. 1997). Denmark’s integrated system of care...
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for older adults and those with disabilities focuses on home care (which includes home support) and is cost-effective. In the 12-year period from 1985 to 1997, when the United States experienced a 67% increase in per capita expenditures for continuing care, Denmark experienced an 8% increase. During this time, Denmark decreased nursing home beds by 30%, while the United States increased theirs by 12% (Hollander et al. 2007; Stuart and Weinrich 2001). In 2000, Japan, which has a much higher proportion of elderly citizens than Canada has, introduced a universal long-term care program that included both institutional and home care services. The system is funded by a separate stand-alone program, Kaigo Hoken. The program was revised in 2006. It provides comprehensive long-term care (Campbell and Ikegami 2000) for those who are age 65 and over or who are 40–65 and disabled due to Alzheimer’s disease, stroke or other age-related ailments. The program recognizes that long-term care consists of a separate set of services combining healthcare and welfare, that is, services that previously fell under the mandates of healthcare and social services. The Japanese program includes prevention benefits to encourage healthy independent seniors to stay in the community, providing counselling at community support centres on topics such as oral function and physical fitness (Tsutsui and Muramatsu 2007).

Canada, like other countries, can provide care services to meet the needs of a growing older population if the will exists. The fact that not everyone in older age requires care or requires heavy care suggests that energy should not be wasted worrying about excessive demands in the future. Rather, the focus should be placed on ways in which appropriate care can be provided to those in need. Three decades of gerontological research suggest that the most appropriate care system for an aging society is one that supports both caregivers and older adults in a comprehensive continuing care system, and that this can be cost-effective if established so that it has the capacity to substitute less costly care for more expensive forms of care, while maintaining at least an equivalent quality of care.

**Discussion**

Even if a national, integrated continuing care system were established, it would not necessarily end cost escalation, because other cost drivers would still be factors. It is therefore imperative that issues beyond the scope of this paper – such as increased technological and pharmaceutical interventions and increased service provision – also be tackled. Some medical care will be required for some individuals in old age, but if this care is not restricted to that which is effective, cost escalation will prevail. At present, we lack evidence that many of the interventions in current use actually increase quality of life or prevent a decline in health status.

Thus, our policy prescription for an aging population is as follows:

**Ageism**

- Adopt policy screens at all levels of government to ensure that public policies do not

All of the conditions are in place to successfully reintroduce, and re-validate, continuing care as a major component of our healthcare system. What is now required is the political and administrative will to do so.
discriminate against older adults.
• Develop a separate anti-ageism media campaign or include older adults in public messaging against discrimination.

Healthy Communities
• Take action, consistent with Canadian culture and values, to implement recommendations related to age-friendly cities and the Madrid Accord.

Prevention
• Establish targeted funding mechanisms, such as the original Health Transition Fund, to (1) evaluate promising preventive initiatives, particularly for tertiary prevention, and (2) support promising new demonstration and evaluation projects with a high potential for a relatively rapid pay off.

Unpaid Caregivers
• Provide support for respite care.
• Assess the needs of caregivers.
• Provide information, resources and counseling for caregivers.
• Conduct demonstration and evaluation projects to develop informed policy regarding direct payment to caregivers.
• Adjust labour and tax policies to support caregivers.

Integrated Systems of Care
• Recognize and re-validate integrated continuing care systems at all levels of government.
• Adjust provincial and national data collection and reporting to allow for accurate estimates of expenditures for continuing care.
• Ensure that future health accords or other agreements focus on integrated care, not just home care.
• Develop appropriate federal/provincial/territorial or inter-provincial mechanisms and/or a national agency/commission to foster, improve and adapt integrated systems of continuing care.

While reviewing current policies on ageism, healthy communities, prevention and unpaid caregivers and re-validating continuing care and establishing appropriate service delivery mechanisms to increase value for money in our healthcare system, it must be recognized that the efficiencies achieved can be negated if other cost drivers are not also addressed at the same time.

Acknowledgement
This paper is based, in part, on a larger paper titled “Policy Challenges and Issues in Caring for Older Canadians,” written for the Institute for Research on Public Policy and prepared by Dr. Neena Chappell.

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