Gender and Population Studies (GAPS) in Health

Rumors of the Canadian Health Care System’s Inevitable Demise Due to Population Aging Have Been Greatly Exaggerated: Probing the Demographic Assumptions Surrounding Canadian “Baby Boomers” Future Health

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Abstract
The following paper examines the commonly propagated idea that the future of the Canadian publicly-funded and universal health care system is threatened by the ageing population, and in particular the “baby boom” cohort born between 1946 and 1965. An analysis of “baby boomers’” health status was carried out utilizing the population health framework and a life course perspective as the theoretical lenses. This analysis provides significant evidence to suggest that this group of aging Canadians is likely to experience better collective health outcomes, when compared to previous generations of Canadian seniors. An analysis of recent health expenditure data is also presented. Based on these analyses, it can be concluded that rumors of the Canadian health care system’s inevitable demise due to population aging have been greatly exaggerated. Potential contributors to rising health expenditure are discussed, and several health and social policy recommendations are made.

The “Baby Boom” cohort (born between 1946 and 1965) has been a source of great demographic fascination, as they have slowly travelled up the Canadian population pyramid like the bulge of a large meal passing through a snake. In Canada, perhaps the direst prediction associated with this demographic cohort has centred on the potential for this large group of aging Canadians to cripple our universal health care system with an overwhelming wave of increased health care demands and costs at a time when the workforce and tax base are also predicted to contract (Certified General Accountants Association of Canada, 2005). “Conventional wisdom”, based on assumptions and stereotypes, would suggest that a growing number of aging individuals will acquire progressive morbidity, culminating in an increased burden on the health care system. However, what if these assumptions are flawed, and population aging does not pose as great a threat to the sustainability of the Canadian health care system as has been suggested? Utilizing Statistics Canada data, that illuminates significant trends among members of the aging population, and the theoretical lenses of population health and life course, the following paper will provide ample evidence to demonstrate that rumors of the Canadian health care system’s inevitable demise in the face of population aging have been greatly exaggerated (McDaniel & Bernard, 2011; Public Health Agency of Canada [PHAC], 2012; Statistics Canada, 2006). In addition, a number of social and health policy recommendations will be made regarding areas of potential intervention to maximize health and manage health care system demands in the coming decades.

A Demographic Snapshot of Canada’s Aging Population

Population aging will accelerate between 2010 and 2031 as all the “baby boomers” pass their 65th birthday, and enter the commonly understood category of senior citizen (Statistics Canada, 2010b). In 2009, seniors represented 14 percent of the Canadian population, but this proportion will grow to between 23 and 25 percent by 2036, and between 24 and 28 percent by 2061 (Statistics Canada, 2010b). These projections represent a significant change from the 5 percent proportion of seniors present in the 1920s and 30s, or the less than 8 percent proportion of seniors present in the 1950s and 60s (Statistics Canada, 2006). By 2036, the numbers of Canadian seniors will more than double the number present in 2009, and this will translate to between 9.9 and 10.9 million seniors (Statistics Canada, 2010b). In addition to the effect of the “baby boom” cohort, additional factors that have contributed to population aging include low fertility rates (1.7 in 2007)
and longer life expectancy among Canadians (Statistics Canada, 2006, 2010b, 2011a). Canadian men currently have a life expectancy of 79 years, while women can expect to live approximately 83 years (Statistics Canada, 2011a). The number of years that a man can expect to live in good health is 68.3 years, while women can expect to live 70.8 years in good health (Statistics Canada, 2010a). Although self-perceived health tends to decrease as people age, 37 percent of seniors reported that they were in very good or excellent health in 2003 (Statistics Canada, 2006). The result of this increased trend towards longevity will be a 2036 population of seniors aged 80 years or older that is approximately 2.6 times the size of the same cohort in 2009 (Statistics Canada, 2010b).

Assuming that all these seniors retire by the age of 65, the working-age population is predicted to decrease progressively to 60 percent by 2036 from the 2009 level of 69 percent (Statistics Canada, 2010b). It should also be noted that the delay of workforce entry among young adults due to prolonged schooling is also contributing to the contraction of the labour force from the other end of the life continuum (Hicks, 2011; Statistics Canada, 2010b).

Immigration is now the primary driver of population growth in Canada due to the declining fertility rate among native-born Canadians, and this trend is expected to increase in the coming decades, with the proportion of foreign-born Canadians reaching at least 25 percent by 2031 (Ng, 2011; Statistics Canada, 2010b). Due to this trend, the demographic composition of senior Canadians will also diversify. In 2001, 28.6 percent of persons aged 65 to 74, and 28 percent of those aged 75 to 84, were immigrants, while 21.3 percent of the 25 to 54 age group were immigrants (Statistics Canada, 2006). In addition, there is a trend of decreased immigration from the United States and Western and Northern Europe, in favor of increased immigration from Asia and other regions of the world (Statistics Canada, 2006). This shift in immigration patterns will contribute to a greater proportion of senior immigrants that are visible minorities, and a general cultural diversification among immigrant seniors in the future (Statistics Canada, 2006).

**Examining “Baby Boomers” Health through a Population Health Lens**

The population health framework acknowledges that the health of any population results from a complex interaction between a number of key determinants of health including: income and social status, social support networks, education and literacy, employment/working conditions, social environments, physical environments, personal health practices and coping skills, healthy child development, biology and genetic endowment, health services, gender, and culture (PHAC, 2012). In the following sections, the potential health status of the aging “baby boom” cohort will be critically examined by utilizing several of the major determinants of health as an organizing framework to demonstrate that this cohort will likely to experience better health outcomes than previous generations of older Canadians.

**Income and Social Status**

Socioeconomic status is potentially the most significant determinant of health, because it influences so many other determinants of health, and increases the degree of control that an individual or family will have over their life (PHAC, 2012). Income levels will influence a person’s access to: safe housing and living environments, a healthy balanced diet, and opportunities for recreation and vacations (PHAC, 2012). In addition, higher socioeconomic status is also strongly related to higher education and better working conditions (PHAC, 2012).

There is a significant amount of evidence to suggest that the “baby boom” cohort will likely experience an excellent level of socioeconomic well-being when compared to previous generations (Brown, 2011; Milligan, 2008; Statistics Canada, 2006; Veall, 2008). The financial situation of Canadian seniors has improved significantly over the past 25 years and poverty rates among Canadian seniors are low when compared to other Organization for Economic Cooperation and Development [OECD] countries (Brown, 2011; Statistics Canada, 2006). Between 1980 and 2003, the average total after-tax income among seniors increased by 18 percent, and median after-tax income increased by 31 percent (Statistics Canada, 2006). In the same period, median after-tax income of unattached senior men increased by 43 percent, while the same measure increased by 42 percent for unattached senior women (Statistics Canada, 2006). In addition, the below – Low Income Measure (LIM) among Canadian seniors has decreased significantly in the last 35 years, and the senior poverty rate has fallen from 37 percent in the 1970s to approximately 6 percent in recent years (Veall, 2008).

Numerous factors have contributed to the improved financial status of older Canadians including strong workforce participation rates, an improved public pension system, and an increased proportion of seniors holding private pensions (Milligan, 2008; Statistics Canada, 2006; Veall, 2008). An older couple in the 1970s may have received a modest public pension consisting of Old Age Security (OAS) and possibly a small Guaranteed Income Supplement (GIS) cheque (Milligan, 2008). In some cases, this couple may have also benefitted from a private employer-provided pension, which was likely tied to the husbands employment (Milligan, 2008). In today’s context, the same older couple will still have access to OAS and an expanded GIS, but they will also benefit from the addition of the Canada Pension Plan (CPP) or the Quebec Pension Plan (QPP) (Milligan, 2008; Statistics Canada, 2006). In addition, this couple may also have income from a Registered Retirement Savings Plan (RRSP), and private employer-based retirement benefits from both the husband and the wife, due to the increased workforce participation by women (Milligan, 2008; Statistics Canada, 2006). Between 1980 and 2003, the proportion of senior men receiving income from CPP/QPP increased from 68.6 percent to 95.8 percent, while the proportion of senior women receiving income from CPP/QPP increased from 34.8 percent to 85.8 percent (Statistics Canada, 2006). During the same time period, the proportion of senior men receiving retirement income from pensions and other private sources increased from 39.8 percent to 69.8 percent, while the proportion of senior women receiving private retirement income increased from 19.7 percent to 53 percent (Statistics Canada, 2006). When all other income sources are taken into account, 95 percent of seniors...
receive some income from OAS, the GIS, or Spouses Allowance (SPA); however, the proportion of income derived from these sources is declining as income from public and private pensions has increased (Statistics Canada, 2006).

While the socioeconomic status of Canadian seniors has generally increased, it is important to note that not all groups of seniors are faring as well. Canadian income tax data shows that recent immigrants, women, the unmarried, and those that are supporting dependent children (e.g. grandchildren) are overrepresented among below-LIM seniors (Veall, 2008). Immigrants are often not eligible for full OAS/GIS because eligibility for these programs requires at least ten years of residence in Canada, and CPP/QPP payments will be smaller if work history in Canada is limited (Veall, 2008). Using the Longitudinal Administrative Database, Veall (2008) calculated that “71 percent of immigrants aged 66 and over who landed from 1994 to 2003 had below-LIM status in 2004” (p.52). Since immigration is currently the primary driver of population growth in Canada, this finding has significant policy implications for the health and well-being of immigrant seniors. Single or widowed seniors also have increased rates of below-LIM levels of income (Bernard & Li, 2006; Veall, 2008). There are several factors that contribute to this pattern including the loss of private pensions or employment earnings among widows or widowers, and the fact that the death of a spouse results in an automatic reduction on OAS and GIS payments (Veall, 2008). Unmarried senior women are particularly vulnerable to poverty (Veall, 2008). Seniors caring for dependent children are also vulnerable because pension benefits do not generally factor in the additional cost of supporting children during retirement.

In general, patterns in retirement income would suggest that members of the “baby boom” cohort are likely to experience better socioeconomic status than previous generations of older Canadians, which will likely contribute to a collectively better health status among this cohort. While this pattern promises to hold true for the majority of this cohort, it will still be necessary to pursue social policy that seeks to mitigate less favorable socioeconomic outcomes among immigrants, single persons, women, and those caring for dependent children during their retirement.

Education and Literacy

Education and literacy have a significant impact on the health of a population because they are closely tied to socioeconomic status, contribute to job security and satisfaction, and provide the capacity for individuals to adapt to change and learn new information and skills, including health related knowledge (PHAC, 2012). In general, the higher the level of education someone has, the more likely they are to report excellent or very good health (Buckley, Denton, Robb, & Spencer, 2004, 2005; Statistics Canada, 2006). For example, university degree holders aged 65 to 74 were more likely to report excellent or very good health (58 percent) than 25 to 54 year-olds, who had not completed high school (48 percent) (Statistics Canada, 2006). Buckley et. al. (2005) also found that a senior’s chances of remaining in good health in the next two years are enhanced by 10 percent for men and 14 percent for women if they are better educated. Overall, education and socioeconomic status are among the most significant influences on seniors health (Buckley, et al., 2004, 2005).

The “baby boom” cohort enjoys a higher level of educational attainment than previous generations, which bodes well for their health outcomes during their senior years (Statistics Canada, 2006). Between 1990 and 2005, the proportion of 55 to 64 year olds holding a post-secondary degree or certificate increased from 7 percent to 19 percent, and the proportion of near seniors with less than a high school education declined from 54 percent to 25 percent (Statistics Canada, 2006). During this same period, the proportion of 55 to 64 year-old women holding a post-secondary certificate or diploma increased from 16.2 percent to 28.9 percent, and the proportion with a university degree increased almost three-fold from 5.1 percent to 14.9 percent (Statistics Canada, 2006).

Literacy is also a significant indicator of an individual’s ability to function effectively in society; therefore, literacy ultimately influences overall health status. Between 1994 and 2003, Canadian adults were surveyed to evaluate their literacy skills on a scale of one to five in several domains including prose literacy and numeracy (level one denoting the lowest proficiency level and level five the highest) (Statistics Canada, 2006). Prose literacy refers to “the knowledge and skills needed to understand and use information from texts including editorials, news stories, brochures, and instruction manuals” (Statistics Canada, 2006, p. 109). Numeracy refers to “the knowledge and skills required to effectively manage the mathematical demands of diverse situations” (Statistics Canada, 2006, p. 109). In 2003, over 80 percent of seniors had prose literacy skills between level one and two, which placed them below the desired threshold for coping well in a complex knowledge society (Statistics Canada, 2006). The other 17.9 percent had literacy skills at level three or better (Statistics Canada, 2006). When numeracy was examined a similar pattern emerged with 62 percent designated level 1 and another 25.7 percent at numeracy level two (Statistics Canada, 2006). During the same period, individuals aged 55 to 65 were doing much better than the older cohort, with only 26.9 percent of those surveyed designated at prose level one (Statistics Canada, 2006). These data also suggested that there is a generational effect on literacy, since literacy scores tended to increase in the younger generations, and this may also be a result of the higher educational attainment noted among successive generations (Statistics Canada, 2006). Given this pattern, it is relatively safe to speculate that the “baby boom” cohort will demonstrate higher levels of literacy than previous generations of older Canadians, and this may also contribute to more favorable health outcomes in their senior years.

Employment and Working Conditions

It is often assumed that individuals that are older than 65 years will be retired and no longer participating in the labour force, and for many years this was increasingly the case with declining labour force participation in the age groups of 55 to 64 and 65 to 69 (Statistics Canada, 2006).
However, between 1996 and 2004 labour force participation rates among men began to increase again with an 8 percent increase noted in men aged 55 to 64, and an increase of approximately 5 percent in the 65 to 69 age group (Statistics Canada, 2006). Labour force participation rates among older women have been increasing steadily since the mid-1970s, with particularly large increases noted since the late-1990s (Statistics Canada, 2006). The labour force participation rate of women between 55 and 64 had increased to 49 percent by 2004, and among women aged 65 to 69 the participation rate had increased to 11 percent during the same time period (Statistics Canada, 2006). In addition, the labour participation rate of men and women older than 70 years has remained between 6 and 8 percent and 2 percent respectively since the late 1970s (Statistics Canada, 2006).

The proportion of men between 55 and 64 working part-time has been fairly stable at around 36.3 percent since the mid-1990s, while the proportion of women in the same cohort, who work part-time, has remained fairly stable since the early 1980s with a range between 29 and 33 percent (Statistics Canada, 2006). Similarly, the incidence of part-time employment among women 65 years or older has remained fairly stable within a range of 55 to 60 percent; however, this rate increased to 63.3 percent in 2004 (Statistics Canada, 2006). Among those older Canadians working part-time, part-time work was preferred by 65 percent of those aged between 55 and 64, and by 85 percent of those 65 or older (Statistics Canada, 2006). The proportion of older workers in temporary positions has also gradually increased over time, and self-employed individuals are much more likely to delay retirement (Statistics Canada, 2006).

Earl (1999) examined the labour force success of “baby boom” women and suggested that a much higher proportion of this cohort worked full-time when compared to the previous cohort of women (85 percent versus 74 percent). She concludes that women in the “baby boom” cohort have done well in the labour market and started their careers out-earning women 20 years older, while 20 years later they out-earned the generation 20 years younger than them (Earl, 1999). In addition, although these women’s full-time employment rate has decreased as they aged, women belonging to the “baby boom” have increased their participation in the labour force and experienced a reduction in their age-specific unemployment rate (Earl, 1999).

A notable trend that has relevance for the “baby boom” cohort is the increased likelihood of labour force participation among seniors holding a university degree (Statistics Canada, 2006). In 2004, university degree holders were 4.6 times more likely to participate in the labour force than those who had between zero to eight years of formal schooling (Statistics Canada, 2006). Since the “baby boom” cohort has generally higher levels of education and a greater proportion of university graduates, this may translate into greater labour force participation by this cohort of older Canadians.

Retirement age has recently received additional attention in Canada, because the 2012 Federal Budget outlined plans to gradually increase the age of eligibility for OAS and GIS to 67 years, starting in April 1, 2023 (Government of Canada, 2012). With the increase in life expectancy, there have been several calls for a change in retirement ages to address the issue of a potentially contracting workforce and tax base, and to mitigate the massive loss of workforce knowledge that could occur with the retirement of the “baby boom” cohort (Denton & Spencer, 2011; Hicks, 2011). Hicks (2011) suggested that given recent trends in increased work force participation by older Canadians, it is likely that many individuals will stay in the work force for at least five years longer and perhaps considerably more. Given the potential benefits to society of supporting later retirement among the “baby boom” cohort, it is suggested that the Canadian government create flexible retirement options for those Canadians, who wish to remain in the labour force (Hicks, 2011).

The relative stability of labour force participation by the “baby boom” cohort, combined with the potential for increased socioeconomic well-being, suggests that this age cohort may experience more favorable health outcomes than previous generations. In particular, the enhanced labour force participation and socioeconomic status of women in the “baby boom” cohort will contribute to the future health and well-being of this group when compared to older generations.

Social Support Networks and Environments

Social support from families and friends, and social connections within the wider community, are associated with better physical and mental health (PHAC, 2012). Mutual caring, respect, and support provide individuals with increased resources to solve problems, deal with adversity, and maintain a sense of mastery over their life and health (PHAC, 2012).

In the 2003 General Social Survey, approximately 95 percent of individuals in the 25 to 54 age group indicated that they had a close friend, or friends, although there are some data to suggest that this percentage may drop as people age, because 14 percent of seniors and 28 percent of older seniors (75 and older) reported having no friends (Statistics Canada, 2006). Some seniors reported receiving social support from relatives rather than friends, and in general 98 percent of seniors reported that they had at least one person that they were close to (Statistics Canada, 2006). The 2005 General Social Survey identified that 29 percent of seniors aged between 65 and 74, and 30 percent of seniors aged 75 and over, reported that they had six or more family members that they felt close to; however, this was only the case for 22 percent of 25 to 54 year-olds (Statistics Canada, 2006). Similarly, seniors were more likely to see their relatives or talk to them on the phone than those in the 25 to 54 age group, and the frequency of contact tended to increase if they were living alone, widowed or living in a rural area (Statistics Canada, 2006). Neighbours represented a larger share of senior’s social networks (14 percent among those 75 or older) than younger persons (9 percent in 25 to 54 year-olds), and seniors were more likely to know their neighbours because they tended to have lived in their neighbourhood longer (Statistics Canada, 2006). In general, social networks play a major role in the support of seniors and seniors were often...
both the provider and recipient of help (Statistics Canada, 2006).

Seniors aged 65 to 74 were just as likely to be members or participants in at least one community organization as those in the 25 to 54 age group (54 percent for both groups), and 43 percent participated at least once a week (Statistics Canada, 2006). Seniors are also more likely to be participants in religious affiliated groups, and are more likely to participate in service clubs or fraternal organizations (especially men) (Statistics Canada, 2006). Participation in volunteering and organizations also tended to increase with the education level of seniors (Statistics Canada, 2006).

The “baby boom” cohort have already established fairly strong social networks and ties to their social environment as they enter their older years, and given their generally higher education level, past trends would suggest that their participation in community voluntary organizations may actually exceed that of the previous generation. In addition, the “baby boom” cohort have considerably greater exposure to, and comfort with, technology than previous generations (Statistics Canada, 2006), so social networks may be expanded to include online communities or communication utilizing electronic means (e-mail, websites, texting, videoconferencing, etc.) among this group of seniors.

**Personal Health Practices & Coping Skills**

Personal health practices and coping skills relate to the capacity of individuals to prevent illness, practice self-care, and cope with life’s challenges (PHAC, 2012). In general, seniors are less likely to get injured, have declining psychological stress until the age of 75, are more likely to report a sense of well-being than younger cohorts, and tend to rate their stress as lower (Statistics Canada, 2006). Seniors are also more likely to consume fruits and vegetables, and although their physical activity level is generally lower than that seen in younger cohorts, the differences are not as great as might be expected (Statistics Canada, 2006). This is especially the case when comparing older men to younger cohorts, because older men tend to be more physically active (Statistics Canada, 2006). Obesity levels are rising in all age groups, which translates to a detrimental effect on health outcomes (Statistics Canada, 2006). Smoking levels in the “baby boom” cohort were high, although there are a growing group of former smokers in this cohort, who are also likely benefitting from anti-smoking laws that have decreased the amount of environmental tobacco smoke exposure (Statistics Canada, 2006).

Since health-related behaviours are closely tied to education level and literacy, the “baby boom” cohort’s higher education and literacy levels may enhance their potential to engage in personal health practices to a greater degree than previous generations of seniors. In general, “the higher the level of education, the lower the likelihood of smoking, being physically inactive, not eating enough fruit and vegetables and being a heavy drinker” (Statistics Canada, 2006, p. 56). For example, 63 percent of 65 to 74 year-old university educated seniors were active or moderately active, as compared to 40 percent among those who had not completed high school (Statistics Canada, 2006). In addition, 55 percent of university educated seniors, aged 65-74, ate five or more servings of fruits and vegetables per day, as opposed to 42 percent of those who had not completed high school (Statistics Canada, 2006).

**Health Services**

Availability of high quality health services that are targeted towards promoting health, preventing illness, and restoring health across the continuum is another important determinant of health and well-being (PHAC, 2012). In general, seniors tend to access health services more often than younger cohorts, because their advancing age contributes to the greater incidence of chronic illness; therefore, it is not surprising that seniors are more likely to have a regular doctor than individuals in the 25-54 age group (Statistics Canada, 2006). In addition, seniors tend to consult a doctor more frequently, with 67 percent of men and 68 percent of women consulting a physician three or more times a year in 2003 (Statistics Canada, 2006). One testament to Canada’s universal health care system is the fact that having difficulties with the health care system was not related to income status among seniors (Statistics Canada, 2006). In general, about 80 percent of seniors were covered by insurance for prescription medications in 2003, which was comparable to coverage in the 25 to 54 year-old cohort; however, they are less likely to be covered for dental or vision problems, or for hospitalization (Statistics Canada, 2006).

Since Canada has a universal health care system, there are few financial barriers for the “baby boom” cohort related to the access of physician or hospital care. In addition, given their generally higher education levels, “baby boomers” have the potential for higher level of health system literacy to effectively navigate the system. Perhaps the higher labour force participation by women in the “baby boom” cohort, combined with the potential for better quality employment and benefits due to higher education levels, will also contribute to an improvement in insurance coverage for this group during their senior years (McDonald & Donahue, 2011).

**Gender**

Although there is still much room for improvement, Canada has made significant strides towards gender equity during the lifetime of the “baby boomers”, and this will likely contribute to positive health outcomes among this cohort as they become seniors (Statistics Canada, 2011b). Women have achieved a great deal of success in the area of education, with more girls completing their high school diploma within the expected timeframe than boys, lower dropout rates, and higher enrollments in college and university programs than men (Statistics Canada, 2011b). In addition, more women complete their post-secondary degree or diploma than men (Statistics Canada, 2011b). Unfortunately, although the education and income of women has improved significantly, men’s average earnings still exceed those of women (Statistics Canada, 2011b). The factors that contribute to positive health outcomes are essentially the same for men and
women, although women’s greater life expectancy may make them slightly more susceptible to some chronic conditions (Statistics Canada, 2011b).

As the influence of patriarchal structures in society wanes, hopefully the remaining disparities, such as the failure to recognise the contribution of care giving work to society (Jelin, 2011), will continue to decrease to a point where gender is no longer a significant determinant of health. Although Canada has certainly not reached this point yet, it can be stated with some certainty that the effect of gender inequality on the health of the “baby boom” cohort will almost certainly be less than that experienced by previous generations.

Culture

The “baby boom” cohort are a very heterogeneous group, and because of the increased influence of immigration on Canada’s population growth, they are certainly a more culturally diverse group than previous generations (Statistics Canada, 2006, 2010b). The effect of this cultural diversity on the health of the “baby boom” cohort during their senior years remains to be seen; however, there is a growing body of evidence to suggest that although immigrants are generally healthier than Canadians when they arrive in the country, this “healthy immigrant effect” tends to decline in as little as three years after arrival (Beiser, 2005; De Maio, 2010; De Maio & Kemp, 2010; Newbold, 2009; Ng, 2011). In addition, since the proportion of immigrants, who are visible minorities, is increasing, there may also be some detrimental effects on the health of these individuals due to the influence of racism, discrimination, and social exclusion. In a recent study by the Canadian Centre for Policy Alternatives utilizing 2006 census data, a troubling trend of lower incomes and increased labour market barriers was noted among racialized (visible minority) Canadians (Block & Galabuzi, 2011). Racialized Canadians tended to earn about 81.4 cents for every dollar earned by non-racialized Canadians, due to disparities in the distribution of good well-paying jobs (Block & Galabuzi, 2011). Labour participation among racialized Canadians was slightly higher than the participation rate of non-racialized Canadians, but they continue to experience higher levels of unemployment, and the work they are able to attain is more likely to be insecure, temporary, and low paying (Block & Galabuzi, 2011). Racialized men are 24 percent more likely to be unemployed than non-racialized men (Block & Galabuzi, 2011). Racialized women are 48 percent more likely to be unemployed than non-racialized men and earn 55.6 percent of the income of non-racialized men (Block & Galabuzi, 2011). Clearly, these findings articulate a potentially significant disparity in labour force participation and socioeconomic status for visible minorities that may influence some members of the “baby boom” cohort, and subsequently contribute to less favorable health outcomes, or potentiate the negative impacts of immigration on health outcomes.

Since aging Canadians in the future are more likely to be from a diverse cultural background or be a visible minority, care must be taken to guard against disparities in health and well-being based on cultural differences or racialization of individuals. Therefore, this may prove to be a potential area for future policy intervention.

Physical Environments

The physical environment is an important determinant of health, and may include the availability of safe living and work environments, and the degree of exposure to environmental contaminants in the air, water, or food supply (PHAC, 2012). It is challenging to comment on the physical environments that the “baby boom” cohort have been exposed to because Canada is a large and geographically diverse country, and many environmental exposures will depend on numerous factors including income, workplace, home environment, and local legislation. Since the “baby boom” cohort have a documented better socioeconomic status than previous generations, it is likely that they were able to afford safer living conditions than some members of previous cohorts. In addition, the “baby boom” has lived through a period of significant change that has witnessed improved working conditions and standards (e.g. increased use of personal protective equipment), increased monitoring of environmental standards (e.g. air and water), enhanced government infrastructure and services, and the advent of legislation such as tobacco use restrictions in public places, among others. Although it could be argued that pollution levels may be higher in many areas, the Canadian “baby boom” cohort have generally experienced largely positive physical environments, which suggests that their achievement of health is likely impacted less by this determinant than previous generations.

The Life Course of Canadian “Baby Boomers” and Health

The life course perspective recognizes that our experiences shape our life trajectory, that life course patterns develop in the context of multiple and interconnected systems, that social connections and support networks exert interdependent effects on the life courses of the social players, and that numerous local and national contexts influence life courses, and are influenced by them (McDaniel & Bernard, 2011). Within this perspective, the timing of major life transitions and experiences influence the future life course of individuals, which is often referred to as path dependency (McDaniel & Bernard, 2011). One’s life course can be further affected by inequalities or barriers that “can act like the force of gravity in pulling down individuals’ efforts to make life transitions that could be beneficial” (McDaniel & Bernard, 2011, p. 44). In addition, even if a person benefits from relative advantages in life, shocks can occur that can derail them from achieving positive life course directions (McDaniel & Bernard, 2011).

Members of the “baby boom” cohort were born following the Second World War, and grew up during a time of peace, economic growth, and relative prosperity in Canada. Benefitting from this environment during their childhood, the “baby boomers” began their lives on a relatively secure note with access to a reasonably high
quality primary and secondary education, which launched a large proportion of this cohort on a positive life course path. This cohort has also benefited from the comprehensive and universal social safety net of Canada’s welfare state throughout most of their lives, which has contributed a degree of protection from the shocks associated with significant life events such as major illness, unemployment, disability, and retirement (Hicks, 2008). The timing of their birth was fortuitous because the “baby boom” arrived on the scene in time to benefit from the establishment of the National Medicare Program and the establishment of provincial social assistance programs under the Canada Assistance Plan in 1966 (Hicks, 2008). During the 1960s and 1970s, federal financing supported a huge expansion of postsecondary education, including the doubling of university capacity and the creation of a new system of colleges (Hicks, 2008). This created greater opportunities for access to postsecondary education than ever before. Unemployment insurance, and later employment insurance, was available during times of job loss, and many families benefited from unemployment insurance benefits during maternity leaves. In addition, this cohort will benefit from Old Age Security (OAS), the Guaranteed Income Supplement (GIS), and the Canada Pension Plan (CPP) or Quebec Pension Plan (QPP) during their retirement.

Despite better access to retirement benefits, the “baby boom” cohort will almost certainly alter the common life scripts associated with retirement ages (Hicks, 2011; McDonald & Donahue, 2011). Many “boomers” may work long past the traditional retirement age of 65, and this will change society’s understanding of what it means to be an older adult in Canada, and will also contribute to enhanced socioeconomic status among these individuals and increased tax revenue for the Canadian government (Hicks, 2011).

Although there were many positive contextual factors influencing the life path of many “baby boomers”, there were several significant cases of inequality that probably influenced the life course of some members of this cohort. Gender equity improved significantly during the life course of “baby boom” women; however, gender inequality and discrimination undoubtedly exerted a significant gravitational pull on the life path of many women, especially during their younger years. Despite these barriers, women in this cohort have achieved significant progress and success with respect to education, labour force participation, income, and employment equity, when compared with previous generations of women (Brozowski, 2002; Statistics Canada, 2011b). As women’s labour force participation increased, fertility rates decreased, and Canada increasingly depended on immigration to maintain its population and workforce (Statistics Canada, 2010b). Visible minority immigrants to Canada, who belong to the “baby boom” cohort, have likely experienced discrimination and barriers to success, which will have undoubtedly exerted negative effects on their life course (Block & Galabuzi, 2011). In addition, the inequality experienced by Aboriginal peoples in this cohort is well documented, and has had a profound negative impact on the life course of these individuals to the current day (Indian and Northern Affairs Canada, 1996; Loppie-Reading & Wien, 2009). Living in the shadow of the Indian Act, Aboriginal peoples have been profoundly affected by the legacy of residential schools, poverty, severe unemployment, social exclusion, housing crises, and poor physical and mental health (Indian and Northern Affairs Canada, 1996; Loppie-Reading & Wien, 2009).

Despite some notable exceptions, the vast majority of Canadian “baby boomers” have experienced many favorable political, economic, and social environment advantages during their life course, when compared to previous generations, and this may contribute to better health outcomes and healthy life expectancy among members of this cohort. Although there may be some similarities to their parents’ generation, it is highly possible that the “boomers” will “break the mold” of the current understanding of a senior citizen and will experience enhanced health, employment, and activity their senior years.

Will the Aging Population Contribute to Health System Crisis?

The analysis of the health status of Canadian “baby boomers” utilizing the population health framework and the life course perspective as theoretical lenses has outlined convincing evidence that this cohort has largely benefitted from the social, political, and economic contexts present during their life course. As a result, it is highly likely that Canadian “baby boomers” will experience better financial security and health during their senior years than previous generations. In addition, basing future health system cost projections and utilization patterns on assumptions rooted in trends of age-specific morbidity and mortality from previous generations of older-Canadians is highly problematic (Evans, McGrail, Morgan, Barer, & Hertzman, 2001).

The Canadian Institute for Health Information (2011) reports that the total public-sector spending on health care increased at an annual rate of 7.4 percent over the ten year period examined in their study, and that the rate of health spending growth has exceeded economic growth in Canada. Public-sector health spending also reached a peak of 8.5 percent during 2009 (Canadian Institute for Health Information [CIHI], 2011). However, contrary to common opinion, population aging has only contributed to 0.8 percent of the average annual growth, and “demographic factors at a combined 1.8 % have been a relatively modest contributor to the 7.4% per year growth in health spending” (CIHI, 2011, p.vi). Physician spending has been a significant influence on health spending, “increasing at an annual rate of 6.8 % per year between 1998 and 2008” (CIHI, 2011, p. iv). “More than one-half of this growth, 3.6% per year, is attributable to increases in physician fee schedules (CIHI, 2011, p. iv). Price inflation has also been a major factor in the growth of hospital costs, and health care worker compensation contributes to approximately 60 percent of most hospital budgets (CIHI, 2011). Nurses represent the largest group of hospital workers, and increases in health sector compensation have grown faster than compensation in non-health care sectors since 1998, partially due to competition for a limited number of health care providers (CIHI, 2011). Another
significant contributor to public-sector health spending between 1998 and 2007 were prescription drug expenditures, which grew at an average annual rate of 10.1 percent (CIHI, 2011). The contributors to prescription drug expenditures are complex, with 6.2 percent attributed to an increase in the volume of drugs used, and another 2 percent attributed to a change in the mix of drugs used (CIHI, 2011). In addition, Canada is currently paying the highest generic drug prices in the world, and along with Germany, Canada also pays the second-highest patented drug prices in the OECD (Canadian Institute for Health Information [CIHI], 2011; Noseworthy, 2011). Health care utilization effects contributed an average of 1.5 percent per year to the growth in physician spending, and although there has been a decrease in the overall number of beds, lengths of stay have modestly increased (CIHI, 2011). Although technological change has likely also contributed to the increase in health spending, this was difficult to quantify in the study (CIHI, 2011).

The effect of aging on the development of a potential health care crisis was discussed by Dalziel (1996), who suggested that although the aging population will certainly contribute to an increase in health care cost, this effect will be gradual and sustainable. The real issue from Dalziel’s perspective lies with increased health care utilization patterns and inappropriately long acute care hospitalizations because of a lack of long-term care beds (Dalziel, 1996). A similar conclusion was reached by Evans et al. (1991), who suggested that the “apocalyptic” demographic predictions related to the affect of population aging on the health care system are largely unfounded, since numerous studies have demonstrated that the effects of aging on skyrocketing health care costs are relatively small. Similarly, a recent research project examining economic security in the aging Canadian population concluded that aging of the population is not the cause of the increased cost of health care and social security today, and that even when the entire “baby boom” are older than 65 years-old in 2031, the impact of population aging on system costs will be manageable (Brown, 2011).

There is certainly a significant problem of increasing health care expenditures in Canada, and failure to address this issue could eventually contribute to a crisis; however, the evidence does not suggest that the aging “baby boom” population are the primary cause of this pattern of ballooning costs. It is certainly true that a more than doubling of Canadians in the 80 plus age group by 2036 will likely contribute to increased demands on the system, since this age group tends to demonstrate higher levels of morbidity and system utilization. However, the evidence suggests that these increased demands will be manageable, especially given the likelihood that older Canadians will be relatively healthier than previous generations. What contributes to the propagation of this myth? Evans et al. (2001) suggest that the beneficiaries of this idea are the providers of care, who are dependent on health care expenditures for their income, and benefit from an infusion of resources into the system. In addition, if cost escalation is attributed to external factors, such as population aging, then individuals in the health care sector cannot be held accountable for this pattern of increased cost (Evans, et al., 2001).

It is also important to note that the frequent cries of “crisis” related to population aging may also be dangerously distracting from the real contributors to health care expenditure increases. It is important that the health care system develops effective strategies and policies to maximize system efficiency according to evidence-informed practices, if Canadians hope to enjoy the privilege of a universal publicly-funded health care system in the future.

**Health and Social Policy Recommendations**

The effect of population aging on publicly-funded health expenditure is clearly not the threat to the sustainability of the Canadian health care system that many would suggest; however, this finding does not constitute justification for inaction on the part of policy makers and health care leaders. Health expenditure is still rising at a potentially unsustainable annual level. In addition, it is essential that health care planners do not become distracted by the disproportionate amount of attention that population aging has received at the expense of other important issues that need to be addressed in the health care system. With this in mind, I submit several health and social policy recommendations for consideration.

**Controlling Future Health Care Costs**

1. Health care decision makers must explore better evidence-informed practices for the effective clinical management of older adults, since the proportion of older adults being served by the Canadian health care system will increase (CIHI, 2011; Dalziel, 1996).
2. The system must explore adjusting the mix of hospital care, transitional care, supported living, long-term care, and community care to meet the needs of the aging population, so that older adults receive the appropriate level of care on an ongoing basis, and acute care beds and emergency rooms are not tied up by individuals with no other place to go (CIHI, 2011; Dalziel, 1996).
3. The factors contributing to price inflation must be explored, including direct and frank negotiations with health care professionals (nurses, physicians, etc.) to align future increases in remuneration with inflation and societal trends (Canadian Institute for Health Information [CIHI], 2011; Noseworthy, 2012).
4. Exploring more effective ways to utilize health system resources presents perhaps the most hope for reigning in health care costs. This may involve providing physicians and primary providers with tools to make more effective and cost effective clinical decisions on a day to day basis. Strategies may include the use of information technologies and priority-setting tools to guide client care decisions, which inform these health providers of their options and the cost implications of each option (Noseworthy, 2011, 2012).
5. The dramatic increase in pharmaceutical costs is a significant driver of rising health care costs (CIHI, 2011). Educating prescribers about evidence-informed practice options related to pharmaceutical use, and increasing their awareness of pharmaceutical costs could be one strategy to improve expenditures at the front-line of health care delivery (Noseworthy, 2011, 2012).

6. The federal and provincial governments should engage in collaborative negotiation with the pharmaceutical companies to explore reduced pricing based on volume purchase. Nationally, the Patented Medicine Prices Review Board (PMPRB) has achieved better pricing for patented pharmaceuticals in Canada; however, there is no oversight of generic pharmaceutical pricing, despite the fact Canada pays the highest prices for these drugs in the world (Noseworthy, 2012). Perhaps, the mandate of the PMPRB should be extended to include the regulation of generic pharmaceutical prices as well (Noseworthy, 2011, 2012).

7. National guidelines for the appropriate and cost-effective use of diagnostic and therapeutic technologies may also reduce inappropriate utilization of these resources that contributes to increased system costs and increased wait times for many diagnostic and therapeutic procedures (Noseworthy, 2011).

8. The Canadian federal government should explore the possibility of pulling their portion of health care funding out of the current Canadian Health and Social Transfer (CHST) block payment to the provinces, so that they may once again have the leverage to encourage collaboration and national strategy related to health care delivery. Recent trends in federal politics would suggest the political will to pursue this strategy is unlikely; however, it could present the best hope for getting the provinces to collaborate effectively on health strategy (Noseworthy, 2011, 2012).

Supporting Aging Canadians to Promote Health

1. Although the “baby boom” generation of seniors will likely be collectively healthier than previous generations of older Canadians, investment in primary and secondary health promotion programming may prevent additional deterioration of health or even improvement of health outcomes in this cohort.

2. Since socioeconomic status is a significant contributor to health status, maintenance of existing retirement income plans (OAS, GIC, CPP/QPP) and supporting Canadians to participate in private pension plans and Registered Retirement Savings Plans (RRSPs) is essential to good health outcomes among older Canadians.

3. Marital status is a significant contributor to economic well-being among older Canadians, especially for women (Veall, 2008). One suggestion to reduce this measure of senior poverty would be to implement tax or transfer instruments that affect unmarried as opposed to currently married individuals (Veall, 2008).

4. Recent immigrant seniors may not be eligible for OAS/GIS or CPP/QPP because of their short residency in Canada, which may contribute to impaired health outcomes among these individuals (Veall, 2008). Since immigrants will make up a larger proportion of senior Canadians in the future, the Canadian government would be wise to relax pension eligibility criteria for recent immigrants to reduce the potential for costs associated with poorer health outcomes in this group.

5. Although the number of seniors supporting children is likely not a huge issue, those who find themselves in this situation are often economically disadvantaged; therefore, the pension systems should establish a modified funding formula for these seniors for the benefit of their health and the future health of the children they are raising (Veall, 2008).

6. Senior Canadians, who wish to work past the retirement age, should be supported in their decision to do this. This practice will not only contribute to the economic well-being of these seniors and the tax base, but also to the effectiveness of the workforce, which will be losing a great deal of institutional knowledge when a large number of “baby boomers” retire. Therefore, flexible options related to paying out pensions should be explored so that these individuals are not disadvantaged by the choice to work longer (Hicks, 2011).

Promoting the Health of Future Generations

1. With all the attention being directed towards the health of the aging population, it is essential that younger generations of Canadians are not forgotten in future health and social policy initiatives. While the health of the “baby boom” cohort is likely better than previous generations, it would be problematic to assume that this trend will continue in future generations, because each generation is exposed to different influences on their life course. The popular media and members of the health professional community are expressing concern for the future health of young Canadians. Technology use, and an increasingly sedentary lifestyle, may contribute to decreased physical fitness, rising obesity rates, and the potential for increased incidence of conditions such as diabetes and cardiovascular disease. As Canadians wrestle with ways to manage the costs of the health care system demands associated with aging Canadians, it is also essential that there is concurrent investment in primary prevention activities, education, and social policy that aims to decrease future
morbidity and the associated increased expense among subsequent generations.

**Conclusion**

In this paper, the PHAC population health framework and a life course approach was utilized to analyze the health status of the Canadian “baby boom” cohort as they gradually celebrate their 65th birthdays and officially enter their senior years. This analysis concluded that there is a significant amount of evidence to suggest that the “baby boom” cohort is likely to collectively experience better health outcomes than previous generations of older Canadians. However, as a very heterogeneous group, some members of this cohort have experienced the gravitational effects of inequality on their life paths including: women, Aboriginal peoples, visible minorities, and immigrants. In addition, a review of recent health expenditure data suggests that population aging has only made very modest contributions to the escalating costs noted in the Canadian health care system. Therefore, it can be concluded that the effects of population aging are not likely to threaten the sustainability of the Canadian health care system on their own. While population aging and the “baby boom” cohort can likely be ruled out as the lead suspect in the potential demise of publicly-funded and universal health care in Canada, there are other “persons of interest” that may threaten the system including: significant price inflation, rising health care salaries, ballooning pharmaceutical costs, and inefficient resource utilization patterns. With this in mind, several recommendations for future health and social policy in Canada were presented for consideration.

**References**


Noseworthy, T. (2012). [Is our health system really sustainable?].


