

Healthy Outcomes: Understanding the Impact of Adequate, Stable and Secure Retirement Income on the Ability of Canadians to Age Well and in the *Right Place*



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The NIA is focused on leading cross-disciplinary, evidence-based, and actionable research to provide a blueprint for better public policy and practices needed to address the multiple challenges and opportunities presented by Canada's ageing population.

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Executive Summary

Canada is in the midst of a rapid demographic shift where more Canadians than ever before are approaching the age of 65 and will also live longer than previous generations (Statistics Canada, 2022a).

Canada's current retirement income system was established almost 60 years ago when the life expectancy at birth of Canadians was around 70 years of age for men and 75 years of age for women (Statistics Canada, 2018a). It was not developed with the idea that Canadians would live as long as they are now and even more so in the future. This is especially true of those who live to the age of 65, as they are expected to live for at least another two decades on average (Statistics Canada, 2015). While increasing numbers of Canadians are choosing to work beyond the traditional age of retirement, especially after Canada abolished mandatory retirement at 65 years of age, a number of factors, such as changes to one's health, can also limit a person's ability to work later in life.

Ensuring Canadians have adequate, stable and secure financial resources throughout retirement remains a priority for both policymakers and Canadians alike. However, there is a growing concern about whether Canadians can afford their own retirements. While the Canadian public pension systems have been credited with alleviating the majority of deep poverty previously faced among older Canadians, these income sources were not designed to provide the vast majority of Canadians with sufficient income adequacy, stability

and security in retirement. Canadians are recommended to supplement the gap left by the public pension systems with additional savings through personal means, such as through Registered Retirement Saving Plans or workplace pensions. However, in 2020, nearly 60 per cent of working Canadians did not have access to a workplace pension plan (Statistics Canada, 2020b), while in 2011, the median value of reported economic resources for Canadians aged 55 to 64 without a workplace pension was just over \$3,000 (Shillington, 2016).

This report provides an in-depth examination of the relationship between available personal economic resources and the health and wellbeing of older adults and their ability to age in the *right* place. Specifically, this report seeks to examine the relationship between income levels, income stability (changes in income over time) and economic security (defined as the perceptions of one's current or future financial circumstances) on health. This report also seeks to showcase new findings from the 2022 *NIA Ageing in Canada Survey* to further examine the relationships between perceived financial security and the health and wellbeing of older Canadians.

This report's in-depth review of the literature could not identify any Canadian studies examining income stability and health among older Canadians and only limited research on this topic has been conducted outside of Canada. Further, there are also key gaps in the literature examining the impact of economic

insecurity and the health and wellbeing of older Canadians, and gender differences as they relate to income and health outcomes. Thus, our understanding of how economic resources are related to the health and wellbeing of older Canadians remains incomplete. Nevertheless, this report has identified a multitude of complex factors that may influence health and wellbeing later in life, including a person's health status and access to economic resources throughout their lives, as well as the impact of a decision to retire.

Acknowledging that a myriad of factors can impact the health and wellbeing of older adults ensuring that Canadians have sufficient economic resources to ageing in the *right* place is a priority area to address. Indeed, Canadians will need varying levels of supports and services to age well in the setting that is right for them. While some older adults will spend the majority of their retirement years in good health, others may enter retirement in poor health or face declining health or personal circumstances that strain their available economic resources. Older adults who want to age at home may find themselves in positions where they have out-of-pocket costs associated with needed home modifications, home care or transportation. Older adults who experience repeated financial emergencies or shocks may be at risk of facing even greater financial insecurity in later life (SOA, 2017b).

The NIA has developed six policy recommendations to further enhance income adequacy, stability and security in retirement:

1. Promote improved financial literacy and planning;
2. Improve access to workplace pension plan arrangements;
3. Enhance income stability and security by facilitating pension plans that provide post-retirement income security, while also introducing and supporting more decumulation offerings for registered savings across the financial sector;
4. Improve options to leverage housing equity as retirement income sources;
5. Protect older Canadians from major out-of-pocket costs – particularly those associated with needing long-term care;
6. Evaluate and consider additional measures to support lower income Canadians.

As policymakers explore better strategies to help Canadians save adequate financial resources in order to assist with financing their retirements, this report has helped to summarize the evidence for the importance of adequate, stable and secure sources of income on the health and wellbeing of people as they age. Increasingly, Canadians need help in finding more public and private options that allow for financial security through later life. As record numbers of Canadians will continue to enter retirement over the coming two decades, strategies and initiatives that seek to address these issues will both continue to remain important and require more attention.

Introduction

Not only are a record number of Canadians ageing but Canadians are living longer than ever before (Statistics Canada, 2022a). Canada's rapidly ageing population is introducing a number of unprecedented public policy challenges, one of which is a growing concern about the ability of Canadians to have access to adequate, secure and stable incomes in later life.

Canada's public pension systems have been credited with alleviating the majority of deep poverty that older Canadians previously faced (Hoepfner, 2010). In the 1970s, older adults in Canada had one of the highest poverty rates among Organisation for Economic Co-operation and Development (OECD) countries (Hoepfner, 2010), with approximately one third of older Canadians living in poverty (Osberg, 2001; Milligan, 2008; Hoepfner, 2010). As of 2020, only 4.7% of all Canadians 65 years of age and older lived in poverty, the lowest reported poverty rate when compared to all other age groups in Canada (Statistics Canada, 2022c). While Canada's reported poverty rate among older adults is very low, they are more likely to live within 10% of the poverty lineⁱ (NACP, 2021). While in 2020 older adults living with family had a poverty rate of 1.3%, older adults not living in an economic family had a poverty rate of 7.4%ⁱⁱ (Statistics Canada, 2022d). Further to this, relative low income, as measured by the Low-Income Measureⁱⁱⁱ, has been increasing, which means older adults' incomes are not increasing as fast as the Canadian average (NACP, 2021).

In 2021, 25% of older adults 65 years of age and above had an individual income of less than \$22,200 and 10% had an income of less than \$15,700 (Statistics Canada, 2022e).

While Canada's public pension systems provide protection for most older adults from living in poverty (Hoepfner, 2010), it was not designed to replace the average Canadian's pre-retirement income. As such, relying only on Canada's public pension systems may be insufficient to provide the necessary levels of income security, stability and adequacy Canadians need as they age. Canadians are recommended to supplement their incomes in retirement either through personal means, such as through a Registered Retirement Saving Plan, or a workplace pension plan. However, many Canadians do not have access to workplace pension plans, and some are not saving enough through personal means. For instance, in 2020, nearly 60 per cent of working Canadians did not have access to a workplace pension plan (Statistics Canada, 2020b), while in 2011, the median value of reported economic resources for Canadians aged 55 to 64 without a workplace pension was just over \$3,000 (Shillington, 2016).

Canada's growing ageing population and with it anticipated longer life expectancies, are also expected to put significant additional pressure on government funded services and systems. The number of people who receive a Canadian public pension in the form of Old Age Security (OAS) is expected to rise 53% from 2020

to 2035, the cost of which will increase from \$46.3 billion in 2020 to \$94.3 billion in 2025 (OCA, 2020). Healthcare spending also tends to rise with increasing age. In 2020, Canada's older population – which represented 18% of its population – accounted for 43.5% of its overall health care spending. For example, in 2019, per capita provincial health spending per year was approximately \$5,000 a year amongst adults 60 to 64 years old but rose to \$11,600 for those aged 75-79 and are almost \$25,000 for adults aged 85 to 89 (Michaud et al, 2022). The need for Long-Term Care (LTC) services also rises with age, the cost of which is anticipated to triple over the next thirty years, from \$22 billion in 2019 to \$71 billion in 2050 (NIA, 2019).

Ageing comes with many changing circumstances that can challenge an older person's financial resources and impact their ability to age in the **right** place. Many older Canadians want to be able to determine how and where they decide to age. This is what the NIA (2022a) calls ageing in the right place. Ageing in the right place is "the process of enabling healthy ageing in the most appropriate setting based on an older person's personal preferences, circumstances and care needs" (p. 8). The NIA has identified four interconnected pillars that are needed to support ageing in the right place: promoting preventative health and better chronic disease management; strengthening home and community-based care and supports for unpaid caregivers; developing more accessible and safer living environments; and improving social connections to reduce loneliness and social isolation.

For many Canadians, aging in the right place means avoiding moving into a long-term care (LTC) home. A recent NIA/ CMA Survey determined that 85% of Canadians of all ages reported that, as they get older, they will do everything they can to avoid moving into a LTC home, while 96% of Canadians who are 65 years and older reported feeling this way (NIA, 2021). With more Canadians aiming to age in their homes for as long as possible, there has been a growing focus on the associated costs, including the costs of housing (Government of Canada, 2022a), home modifications (Carnemolla, & Bridge, 2019), home care (Mondor et al., 2019) and transportation (Allen & Farber, 2019).

Additionally, many older Canadians require help from unpaid caregivers, such as from spouses, family members or friends. Caregivers may experience stress from the time and costs associated with helping their loved one (Statistics Canada, 2020a). Aside from health and social care needs, pursuing hobbies, travel, social activities and other meaningful activities is also key to enjoying a fulfilling retirement; however, these activities often require additional financial resources (Laher et al, 2018).

Specifically, this report examines the relationship between income, income stability (changes in income over time) and economic security (defined as the perceptions of one's current or future financial circumstances) on health.

We also share new findings from NIA's 2022 Ageing in Canada Survey, which showcases Canadian's perceptions of their financial circumstances as they relate to one's physical and mental health and confidence in one's ability to age at home. Lastly, we set the stage for future important discussions about the implications of financial wellbeing by outlining six policy recommendations to support Canadians with having the financial means to age in the right place.

In light of nearly every older Canadian wanting to age in the right place, and needing the financial resources to do so, there still remains much to be examined regarding the health and financial wellbeing of older Canadians. While a number of complex factors impact health and wellbeing in later life, this report finds key gaps in our understanding the relationship between income stability and economic insecurity and the health of older Canadians. Thus, our understanding of how economic resources are related to the health and wellbeing of older Canadians remains incomplete and an important area for future research to address.



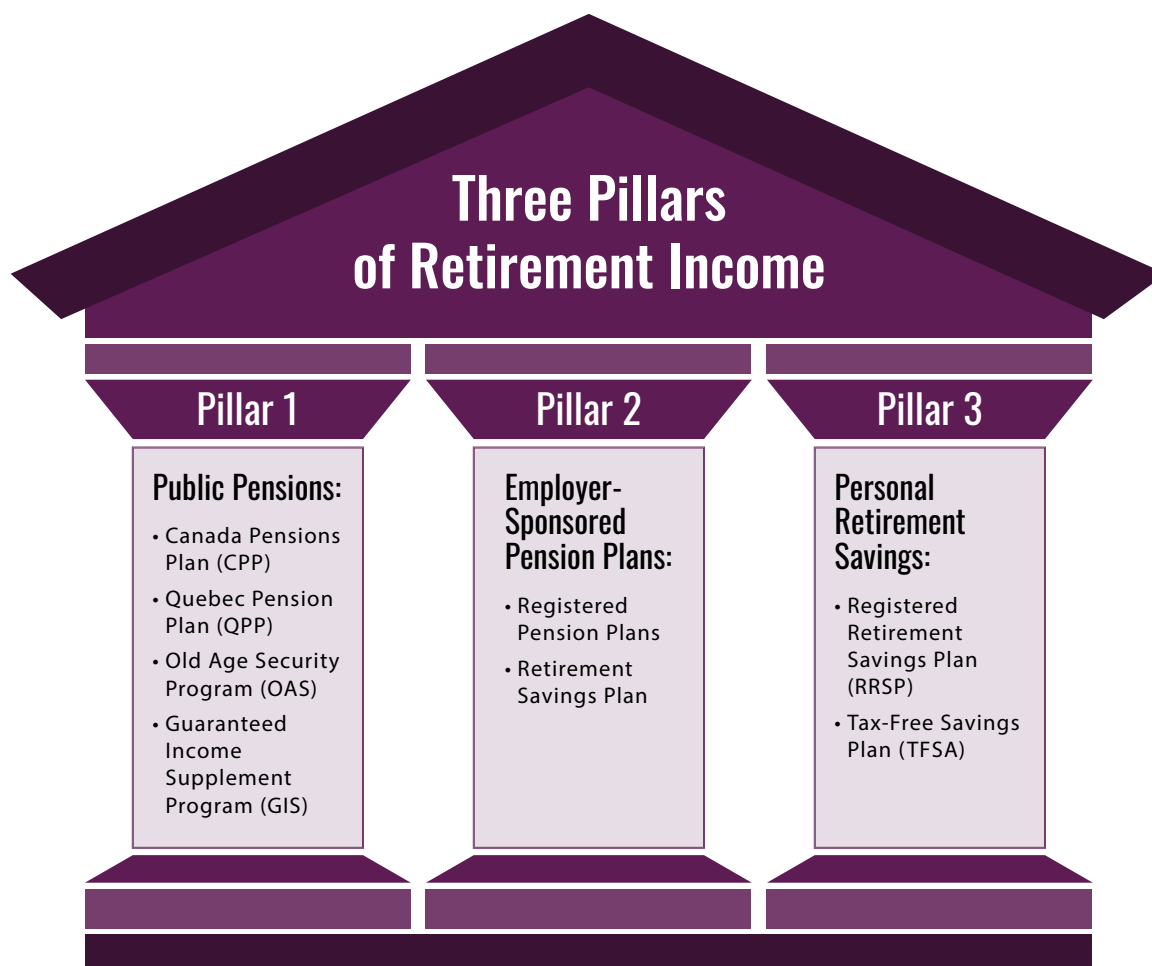
The Challenge: Older Canadians Are at Risk of Not Having Access to Adequate, Stable and Secure Incomes

Understanding the Current Gaps that Exist in Canada's Pension Systems

There are three pillars in the Canadian Retirement Income System (Figure 1; see Appendix A for a complete summary). Canada's Public Pension Systems (Pillar 1) have been credited for alleviating deep poverty amongst older Canadians (Hoeppner, 2010; NACP, 2022); although they were not designed to act as a full replacement source of income for workers and currently only replaces approximately 46% of an average Canadian's pre-retirement earnings (OECD, 2023). Even after the recently announced CPP/QPP expansion, it will only create a replacement rate of 33% of pre-retirement income, up to a maximum pension earning of \$82,700 by 2025 (OECD, 2017). This will bring the future net replacement rates for a full-career average-wage worker to 53%, which is still below the OECD average of 63% (OECD, 2017). Median retirement income and assets of Canadians aged 65 and above can be found in Figure 2.



Figure 1. Understanding the Three Pillars of Canada's Retirement Income System



Canada's retirement income system relies on individuals paying into a workplace pension plan (Pillar 2) and/or accumulating their own personal savings and assets (Pillar 3). However, approximately 60 per cent of working Canadians do not have a workplace pension plan (Statistics Canada, 2020b). Further, the availability of workplace defined benefit pension plans has declined (Statistics Canada, 2022b). These are programs where the employee's pension payments are calculated according to a formula based on length of service and, in many cases, average salary earned

during working years (depending on the details of the plan design). Employers (and possibly employees) fund the cost of the promised pension benefits through annual contributions. Defined benefit workplace pensions are valuable as they offer income stability and security throughout retirement. A recent survey of Ontario defined benefit (DB) pension members found that retirees reported high levels of overall life satisfaction (particularly among retirees with lower household incomes), and high levels of satisfaction with their health and sense of financial security (CANCEA, 2021).

Figure 2. Median Retirement Income and Assets of Canadians aged 65+, in 2022 dollars

Scenario	Median	Description
Net OAS+GIS yearly income	\$ 7,778	OAS is designed to provide monthly income to eligible Canadian seniors. OAS may be partially or entirely clawed back through the tax system if your income exceeds a certain level and low income OAS pensioners may receive additional monthly payment of GIS.
C/QPP yearly income	\$ 8,187	Canadians may begin to receive CPP/QPP benefits as early as age 60, or as late as age 70. The benefit amount is adjusted accordingly - the earlier you start receiving benefits, the less the payment, and vice versa.
Private Retirement Pensions yearly income	\$ 8,026	Income from private sources including employer pension plans, annuities or RRIFs (Registered Retirement Income Funds).
Net Assets	\$ 580,795	House, Employer Pension Plan, TFSA, Savings (money in banks), vehicles and other non-financial assets.

In 2020, 26.6% of Canadians were paying into a DB workplace pension plan, compared to 34.3% of Canadians in 2000 (Statistics Canada, 2022c). Only 9.6% of all private sector workers had access to a DB plan in 2020, compared to almost 82% of all public sector workers. Conversely, defined contribution (DC) workplace pension plans increased from representing 5.8% of all workplace pension plans in 2000 to 7.3% in 2020. DC plans are workplace pension plans in which individual accounts are set up for participants and benefits are based on amounts accumulated over working years (through employee and employer contributions) plus any investment earnings.

DC pension plans may increase an individual's future level of economic insecurity as they put greater responsibility on individuals to manage their incomes throughout retirement in order to ensure they have financial stability and adequacy throughout their retirement.

Older Adults Face More Complex Financial Circumstances as They Age

Ageing comes with many changing circumstances and choices that can strain an older person's financial resources and impact their ability to age in the right place. Many retirees lack a financial plan for retirement (Canadian Institute of Actuaries, 2021) or lack options to ensure that they have income stability throughout retirement (MacDonald et al, 2021). For many older Canadians, retirement decisions are increasingly associated with added uncertainty and risks. Some of these added risks including making decisions on when to retire and when to claim pension benefits.

They also include factors such as inflation, the risk of a recession, changes to health, the loss of a spouse and changes to living situations (Milligan & Schirle, 2013; SOA, 2017a; Michaud et al, 2022). They may also need to prepare for potential LTC needs in the future.

Research on retirees in the United States (US) has found that one in five experienced more than four unexpected financial shocks (such as a sudden medical expense) during their retirements (SOA, 2017b, p. 4). Another US study found that, while for most older adults, financial hardship is transient, 18% to 34% of participants reported financial hardship in two out of the three time periods over a ten-year window (Marshall et al, 2022). Financial shocks can be detrimental if individuals do not have sufficient income or assets, or are unable to change their spending to cope with the change in expenses. Since saving for retirement largely occurs during a person's working years, and economic resources for retirement are usually fixed in size at the time of retirement (Carr et al, 2020), it may be challenging to offset repeated financial shocks while in retirement without sources of stable retirement income, such as those offered in a DB pension. Since the 1990s, there has been an observable increase in the number of older adults who work during traditional retirement years (Milligan & Schirle, 2021, p. 80); however, health issues or caregiving responsibilities may limit a person's ability to continue to work and to drastically improve their sources of income through employment.



Some Older Canadians Lack Confidence in the Ability to Afford to Retire

Older working Canadians may lack confidence in the ability to afford to retire. Results from the 2022 NIA Ageing in Canada Survey highlight how Canadians are struggling to adequately save for retirement. The survey found that, among older Canadians who were still working and intending to retire, only 35% reported that they were in a position to financially afford to when they wanted. On the other hand, 37% reported that they were not in a position to financially afford to retire when they wanted, while 25% reported that it was unclear.

Overall, the 2022 NIA Ageing in Canada Survey found that 63% of Canadians aged 50 years and older reported that they had, or could access, the financial resources they would need in the face of an emergency, with 27% saying they definitely could and 36% saying they probably could. However, 17% answered “probably not” and 13% said “definitely not” when asked whether they had or could access the financial resources they would need in the face of an emergency.



Understanding the Importance of Having Adequate, Stable and Secure Income as it Relates to One's Physical and Mental Health

In the following sections, we examine various mechanisms that describe the relationship between income levels, income stability, and economic security and physical and mental health.

It is important to note that there are a wide range of concepts and measures of economic resources relating to an individual's overall health. The variation between these terms and measures makes it challenging to compare findings between studies measuring different types and magnitudes of economic resources as they relate to an individual's health. In general, this report focuses on three broad areas of research: studies that

examine income levels (where income is measured at one point in time), studies that examine income stability (where fluctuations in income are measured over time) and economic security (perceptions of one's present or future economic circumstances). At times, we broadly refer to these three financial concepts as a whole to describe economic resources or circumstances.

How Might Economic Resources Impact Physical and Mental Health?

Examining the determinants of health is a complex task. In addition to economic resources, health can be impacted by many individual and structural factors (for example, occupation, age, social support, gender, education) that are not examined in this report (Watson & Osberg, 2020; Government of Canada, 2022b). For instance, historically, in many higher income countries, access to healthcare, improved nutrition, new health technologies, vaccines, and public health measures that improved population level mortality, particularly at younger ages and irrespective of one's individual income (Cutler et al, 2006). Education has also been linked to direct improvements on health.



However, it remains the case that even within higher income countries, those who have a low socioeconomic status have worse health and die younger than those who have a higher socioeconomic status (Cutler et al, 2006). There are several proposed mechanisms that aim to explain how and why financial resources may contribute to health outcomes. It is important to note however that our understanding of these mechanisms are often examined in studies of younger and working age individuals, rather than a population of older adults.

Material Explanation

A dominant explanation linking economic resources to health is referred to as the “material explanation” (Aittomaki et al, 2010). Income leads to a greater ability to consume resources that are beneficial for health and wellbeing and may result in a higher standard of living as compared to individuals who are forced to limit their consumption. Importantly, income provides people with more choices and options. As noted by Cutler et al (2006) and Aittomaki et al (2010), some research examining income levels and health has found that the association between health and income levels off at higher income levels, meaning that the association between income and health are more significant at below average income levels (than above average income levels).

The material explanation is dependent on the notion that individuals with income are able to consume things that are beneficial to, or cause less harm to, health and that individuals with lower

incomes consume things that are worse for their health or do not have access to things that are beneficial to their health. This interpretation does not factor in societal norms that can impact health-seeking behaviors regardless of one’s economic status. However, having access to adequate, secure and stable income can allow for greater consumption potential, for example, of higher quality nutritious food, housing, medications or LTC services. Further, higher income allows for greater knowledge of and access to out-of-pocket health technologies and services (Cutler et al, 2006).

Social Status

Another explanation considers that social status is a proxy for income that can contribute to health inequalities (Aittomaki et al, 2010). This may be because economic resources allow for access to commodities in society that are associated with higher status. Thus, individuals who cannot adhere to these dominant social norms may face chronic stress if they are viewed as being of lower status (Wilkinson, 1999). This theory assumes that being of low status leads to stress which then causes health problems (Marmot, 2005; Cutler et al, 2006). However, it is challenging to measure distress caused by social comparison or living conditions at the individual level (Aittomaki et al, 2010).

The Impact of Income versus Wealth

It could be that income on its own may not be a comprehensive measure of economic resources needed to predict health, but rather, that wealth may be a stronger predictor of health because it reflects the long-term accumulation of economic resources including real estate and owning a vehicle. This presents a lifelong economic advantage (Aittomaki et al, 2010). As Aittomaki et al highlight, it could be that wealth is a more stable economic resource than income, and further, can be turned into income sources if needed. However, wealth and income may have different impacts on health (Park et al, 2022). For instance, income is needed for day-to-day expenses and amenities that are important for health. A housing asset, on the other hand, is not spent on a daily basis. Instead, it provides the potential for long-term financial protection and can help maintain living standards.

Income Stability and Economic Security

There has also been increasing attention to measures of economic resources beyond income, such as income stability and economic security, that may impact health. Income stability describes changes to income over time. Time is important in explaining the link between income and health as it reflects the cumulative disadvantage associated with having low income over the course of one's life (Benzeval & Judge, 2001). While having upward changes to income would be beneficial, having repeated negative

changes to income are thought to be harmful to health (Benzeval & Judge, 2001; Prouse et al, 2009; Akanni et al, 2022, Bania & Lette, 2022). Some researchers have suggested that having an income that is rapidly changing for the worse may result in periods of inadequate income, contributing to socio-economic disadvantage and associated unhealthy behaviors (such as smoking or a lack of exercise) which increase the risk of health problems (Elfassy et al, 2019). Having periods of inadequate income may also reduce access to healthcare in some contexts, leading to inadequate chronic disease management (Elfassy et al, 2019). Income volatility may also increase stress, worry or fear over one's current and future financial circumstances (Elfassy et al, 2019; Akanni et al, 2022; Bania & Lette, 2022). Stress is an associated risk factor to several chronic diseases, such as dementia (Johansson et al, 2010) and cardiovascular disease (O'Connor et al, 2021). Thus, income stability may have a dual effect on health by both reducing the availability of income needed for daily living and increasing stress over one's future financial outlook, which, in turn, impacts health.

Lastly, research has found that individual perceptions of economic resources may contribute to mental health. Perceptions of economic resources are often discussed in terms of economic insecurity, which is the fear of a future financial risk or loss (Osberg, 2021). As Osberg writes, "greater piece of mind is a direct benefit of greater economic security" (2021, p. 6). A lack of economic security may impact health and wellbeing due to increased stress or anxiety, which, in turn, worsens physical

and mental health in the short (Bania & Leete, 2022) or long term (Adeline et al, 2019; Grasset et al, 2019). The research on the relationship between debt and mental health supports this mechanism, with the notion that stress caused by debt is associated with mental health symptoms (Drentea & Reynolds, 2012; Marshall et al, 2021).

Factors that Influence the Association Between Economic Resources and Health in Later Life

In summary, among working age adults, it is well established that having a low income is largely thought to impact one's health due to material deprivation, or possibly the stress caused by social comparison (Aittomaki et al, 2010). Income instability may also impact one's health by causing repeated periods of low income (and thus material deprivation) (Benzeval & Judge, 2001) and secondly, may also cause increased stress over one's future financial outlook (Elfassy et al, 2019; Akanni et al, 2022; Bania & Lette, 2022). Economic insecurity on the other hand, is more likely to impact one's mental health, as the fear of facing a future economic downturn, irrespective of one's actual income, can cause stress and anxiety (Osberg, 2021).

Less examined is how economic resources impact the health of older adults. There are a number of factors that may influence the relationship between economic resources and health in later life. First, an individual's socio-economic status throughout their life impacts their health, which can perpetuate health inequalities in old age (OECD, 2017). For example,

a study of older adults in New Zealand examined the impact of material living standards before and after eligibility to obtain a public pension (Allan & Alpass, 2020). The study found that those who reported good material living standards in the ten years before they became pension eligible experienced similar levels of physical health status comparable to the population average, suggesting that "socio-economic inequalities in health among older adults are shaped long before pensionable age" (p. 366).

Poor health across the life course can also lead to a worse overall economic status as it limits opportunities for education and stable, better-paid jobs (OECD, 2017). For some individuals, they may age with worse health and fewer economic resources, which can result in continued health inequalities in later life. For instance, having a low income in later life may pose challenges in covering the cost of LTC or other services beneficial to supporting one's health and wellbeing as one ages.

Other factors, such as life events, may mediate the relationship between economic status and health. For instance, many studies have aimed to examine the impact of retirement on health. Some studies have found that retirement has no impact on health, and others have found that it can lead to declining health or improve self-rated health and mental health (Latif, 2012; Hessel, 2016; Wetzel et al, 2019; Han, 2021; Garrouste & Pedrix, 2022). Differences in health outcomes due to retirement have also been found based on occupational status and gender (Garrouste & Pedrix, 2022).

The conflicting research findings on the effect of retirement on health reflects in part challenges with being able to compare research findings across studies (Han, 2021; Garrouste & Pedrix, 2022). Secondly, the decision to retire reflects access to resources and circumstances at retirement, such as income, access to social support, personal choices and one's health (Garrouste & Pedrix, 2022). For example, poor health can impact one's decision to retire (Han, 2021). A recent study found that if poor health is the cause of retirement, it is associated with worse self-rated health and symptoms of depression after retirement (Han, 2021). Alternatively, health during retirement can improve due to changes to daily routines that allow for more leisure time and social interactions such as volunteering or spending time with friends and family (Garrouste & Pedrix, 2022). Some individuals in retirement may also engage in more healthy behaviors, such as improving their diet, quitting smoking and exercising more (Garrouste & Pedrix, 2022). For older adults who are no longer reliant on full-time employment, a reduction in work-related stressors may also improve health (Latif, 2012).



What are the Consequences of an Adequate, Stable and Secure Income on the Physical and Mental Health of Older Adults?

While it is well known that an income-health gradient exists whereas individuals who have a lower income have worse health and higher mortality (Cutler et al, 2006; Aittomaki et al, 2020), less explored is how economic resources impact one's health in later life. In this section of the report, we examine whether income levels, stability and economic security are related to later life health outcomes.

Evidence examining the relationship between economic resources and health exists across three areas of research: studies that examine income levels (where income is measured at one point in time), studies that examine income stability (where fluctuations in income are measured over time) and studies that examine economic security (perceptions of one's present or future economic circumstances). At times, due to gaps in research examining the health of older adults, research studying the health of working age adults are examined.

Income Levels and Health

A large body of research has shown that income is a key determinant of health. **Income** and **wealth** are measures that describe current levels of economic resources (Osberg, 2021). Income can be measured as net household income, disposable income or gross household

income (Aittomaki et al, 2010). As previously noted, income can come from Canada's public pension systems (via CPP/QPP, OAS, and GIS) and private sources of retirement income such as workplace pension plans, RRSPs or employment income for those still working. **Wealth** encompasses assets such as housing, vehicles or private savings minus debt (Aittomaki et al, 2010). Wealth can serve as a broader view of economic status than income alone, as assets can be turned into economic resources and income to buffer against sudden financial shocks or be used to afford LTC services (Makaroun et al, 2017).

Income and Physical Health Outcomes in Later Life

Research has found that having a lower income and lower wealth is associated with worse physical and mental health outcomes compared to those who report having a higher income. As stated earlier, it is unknown if this relationship is explained by the impact of poor health on one's socio-economic status, or that being of low income subjects one to worse material living conditions, leading to worse health outcomes. While there is extensive research on this topic, the studies examined below showcase recent literature on income and health at older ages.

- Among older Canadians, having a lower income has been found to be a significant predictor of food insecurity (Kansanga et al, 2022) and a lower likelihood of reporting good self-reported health (Bonner et al, 2017). Among adults aged 65 years and older, those who reported a household income of more than \$80,000 per year were 1.94 times more likely to report good self-reported health as compared to individuals reporting household incomes lower than \$20,000 per year (Bonner et al, 2017).
- Among adult Ontarians 18 years of age and older, living with more than two chronic conditions (multi-morbidity) was more prevalent among lower income adults compared to higher income adults (Mondor et al, 2018). While age, marital status and physical activity level also contribute to having multiple chronic conditions, income appears to explain two thirds of the contributing factors leading to multi-morbidity. Certain chronic conditions, such as type 2 diabetes, have also been found to have a greater prevalence among individuals with lower incomes, and is associated with low income independent of other factors that predict diabetes risk, such as physical activity and body weight (Dinca-Pinaeitescu et al, 2011). These findings may suggest that individual behaviors are shaped by socioeconomic conditions over time.
- Among Canadian men born between 1923 to 1955, those who were in the top 5% of the income distribution lived eight years longer compared to men in the bottom 5% of the income distribution (Milligan & Schirle, 2018). Among women, the highest income earners lived only 3 years longer than the lowest income women, as many women born during this period may not have had careers during their lifetime, however may have lived in a household with high earnings.
- A Canadian study found that older adults with the lowest amount of assets and income had the highest mortality rates, with this association being the most significant for adults between 65 to 74 years of age (Park et al, 2022). Having housing assets (or a lack thereof) did not change the association between income and mortality, which means that having a housing asset did not offset the mortality risk associated with having a low income. The association also remained after controlling for gender, age, occupation and education. Research examining older adults in the US and the United Kingdom have also found that low wealth is associated with increased mortality and disability risk (Makaroun et al, 2017).

Income and Life Satisfaction in Later Life

- A US study examined differences in life satisfaction and perceptions of personal financial control two years before and two years after retirement for three categories of retirees: poor/near poor (income less than 250% of the US poverty threshold and eligible for social security), financially vulnerable (income above the US poverty threshold but not eligible for social security) and financially stable (income 400% above the federal poverty threshold) (Carr et al, 2020). Over a ten-year period, from 2004 to 2014, the researchers found that after controlling for health, demographic characteristics, including gender, and social engagement levels, retirees who had the most financial resources (the financially stable category) reported higher life satisfaction compared to those pre-retirement. There was no difference in life satisfaction scores of those pre-retirement compared to the post-retirement poor/near poor and the financially vulnerable groups. The study also found that satisfaction varied by control for only financially vulnerable retirees and not those who were poor/near poor. Financially vulnerable retirees who had low levels of financial control (i.e. a lack of personal mastery or agency over their finances) had less life satisfaction upon retirement. Financially vulnerable retirees who had high levels of financial control before retirement had an increase in their life satisfaction upon retirement. Thus, for financially

vulnerable individuals, it is likely that both access to economic resources and levels of control/agency over their finances that impacts satisfaction. Conversely, those who have financial security have the freedom of choice and agency in retirement to engage in meaningful activities. For those who are poor/near poor, the availability of social security programs available at retirement may also protect and provide financial security.

Income and Mental Health Outcomes

- Having faced a recent economic downturn and living in a deprived housing situation (i.e. having unmet needs, not owning one's home) has been found to be associated with loneliness among older adults (De Jong Gierveld et al, 2014). Men reported more loneliness than women, which is a finding that differs from other research reporting women are more likely to experience loneliness.
- A study of adult Ontarians 18 years of age and older found that after adjusting for gender and demographic characteristics, participants who reported low levels of life satisfaction had a higher risk of a mental health-related hospital or emergency department visit (Michalski et al, 2022). Of adults reporting they were very dissatisfied with life, 48.8% were in the lowest household income category, compared to only 9.3% of adults in the highest household income category. Compared to participants with the

highest levels of satisfaction and highest household incomes, participants who reported the lowest levels of life satisfaction and low household income had an increased risk of a hospital or emergency department visit.

The Relationship Between Public Pension Systems and Health

Several studies have also examined the relationship between eligibility for a public pension and health. Even among low income individuals, eligibility for a public pension is associated with better health outcomes for some older adults (McIntyre et al, 2016a; Allan & Alpass, 2020) and less probability of experiencing food insecurity (McIntyre et al, 2016b).

- Canadian research examining the impact of its Old Age Security (OAS) program examined differences in self-reported health and mental health and functional health status among two cohorts of older adults eligible for OAS due to age (the first group between 65-69 years of age and the second group between 70-74 years of age) compared to two cohorts of participants who were not eligible for OAS due to their age (group one was between 55-59 years of age and group two between 60-64 years of age) (McIntyre et al, 2016a). The study data was restricted to respondents who had a household or personal income of less than \$20,000 per year and were not married or attached. The researchers found that participants who were eligible for OAS due to their age reported better self-reported health and mental health, and functional health compared to

younger participants who were not yet eligible due to their age. This difference in effect was observed until the OAS participant group reached 74 years of age. OAS-eligible respondents also had lower rates of food insecurity.

- A study of older adults in New Zealand examined the impact on material living standards before and after eligibility to obtain a public pension (Allan & Alpass, 2020). The study found that of those who reported hardship before they were eligible for a pension, a small percentage saw their living standards improve upon pension eligibility, with no additional declines to their health, suggesting that pension systems have a “limited” capacity to alleviate later life health inequalities (p. 366). Not being married or in a relationship was also associated with hardship prior to pension eligibility.

- Based on research by Milligan (2015), it was found that a large proportion of Canadian men and women aged 55 to 64 (73% and 77% respectively), who were not yet eligible for a public pension, were able to avoid living below the poverty line, with income from other family members being the most critical factor in preventing economic hardship. The study also revealed that only a small percentage of men and women (20% and 6% respectively) had sufficient workplace pension income to avoid low-income status. Furthermore, poor health was associated with a greater likelihood of low-income status. Future research is needed to explore how individuals living with a low income before pension eligibility adjust their consumption levels and if their financial situation improves upon receiving a public pension. It is also worth noting that workplace pension coverage has increased for women, which may have a greater impact on future generations.

Income and Health Care Utilization in Later Life

Income has also been found to be related to health care access and utilization:

- A first-of-its-kind Canadian study recently examined economic resources as a determinant of place of death (home or hospital) for individuals receiving end-of-life-care for cancer (Deri Armstrong & Devlin, 2022). Many individuals at the end-of-life would prefer to die in their homes versus a hospital, however, doing so requires considerable personal

resources, including support from unpaid caregivers and out-of-pocket-costs. Based on Canadian Vital Statistics' death records from 2007 to 2019, those who lived in the highest income neighbourhoods had a greater likelihood of dying at home compared to those who lived in the lowest income neighborhoods. When controlling for all factors, there were no differences between men and women on the likelihood of a home death. However, the study did find some differences amongst sub groups of women. Women in the lowest income group had a 0.4 percentage point lower chance of dying at home, whereas women in the highest income group had a 0.4 percentage point higher likelihood of a home death. Married women were also less likely to die at home compared to non-married women. In addition, those who were under 65 years of age were also more likely to die at home, which aligns with the notion that younger individuals may be more likely to have unpaid caregivers to support their needs at the end-of-life. As the authors note, given women are more likely to be caregivers than men, how gender impacts end-of-life care needs further consideration.

- A Canadian study of older adults between 50 to 70 years of age based on data from 2016 in Ontario and Quebec aimed to examine the relationship between income and longevity, and income and the risk of becoming dependent (defined in the study as having a limitation requiring help with activities of daily living (ADL), or entering a LTC home) (Connolly et

al, 2023). The study found that, after controlling for demographic factors including gender, having a higher income was associated with a greater probability of living to the age of 85 years of age, a lower probability of having an ADL limitation, and a lower probability of entering a LTC home. These findings were determined mainly by participants in the highest income tercile. The study also examined whether income was associated with the subjective probability of becoming dependent and found more mixed results. Subjective probabilities were determined by asking participants if they thought they would live to the age of 85, experience an ADL limitation, or the chance they will move into a LTC home. The study found that higher incomes were associated with a lower subjective probability of having an ADL limitation. However, the study found a positive probability between income and the subjective probability of entering a LTC home, which may be explained by factors other than income that impact the decision to move into a LTC home (such as the availability of family caregivers).

- A recent study examined the factors associated with physician specialist visits among older Canadians (Pulok & Hajizadeh, 2022). Aside from “need” factors such as age, number of chronic conditions and disability status, income was the primary non-need factor contributing to physician visits, particularly specialist visits, followed by education. Specifically, the researchers found that higher-income

older adults had a greater probability of using specialist services, even when considering the same level of need among lower income cohorts. While the authors highlight that the exact mechanism underlying this relationship is unknown, it is unlikely that the cost of the health care service is the barrier to accessing specialist services for lower income older adults (due to Medicare). Instead, it may be barriers associated with out-of-pocket costs, such as pharmaceuticals or transportation costs needed to access health care.

- Lower income older Canadians have been found to be more likely to have an overnight hospital stay compared to higher income older adults (Penning & Zheng, 2015; Amegbor et al, 2019). In addition, compared to older adults with an annual income over \$80,000, older adults with a household income of less than \$20,000 per year had a 1.34 times greater chance of experiencing a longer hospital stay (Amegbor et al, 2019). Those with incomes between \$20,000 to \$39,999 per year had a 1.266 greater chance of experiencing a longer hospital stay. Irrespective of income, women were 1.115 times more likely to have no overnight hospital stay.

Income Stability and Health

While there are fewer research studies examining **income stability**, it remains an important measurement of economic resources as it contributes to having an adequate income over the long-term (Elfassy et al, 2019). Further, having a stable income may reduce worry or fear over one's current and future financial circumstances (Akanni et al, 2022; Bania & Lette, 2022). Income stability is often measured by its inverse, income volatility, which refers to changes in income that are often unpredictable or occur quickly over a period of time (Basu, 2017).

The impact of income stability on health has primarily been examined among young and middle-aged adults due to an increase in factors such as precarious employment that may lead to income volatility (Prouse et al, 2009). This research reveals that income volatility is associated with adverse physical and mental health and wellbeing outcomes (Elfassy et al, 2019; Grasset et al, 2019; Akanni et al, 2022; Bania & Lette, 2022).

Income Stability and Health Among Working Age Adults

- A US study found that when compared to income that remained the same or increased, income that dropped more than twice over a 15-year period was associated with a two-fold increased risk of cardiovascular disease and all-cause mortality in the subsequent ten years (Elfassy et al, 2019). The study included US adults between the ages of 23 to 35 and assessed income volatility over five intervals during a 15-year period from 1990 to 2005. Income volatility was measured by the number of income drops (measured as less than 25% from the previous income amount recorded and less than the average income amount for each participant) and by how much the income changed over the 15-year period, ranked from low to high. Participants who experienced high income volatility (income changed between 52% and 242%) and a greater number of drops in income had the highest risk of cardiovascular disease and all-cause mortality within the next ten years. Participants who experienced the highest amounts of income volatility were also more likely to have lower incomes, more drops in income, and larger changes in income. Demographic attributes associated with greater income volatility included being Black and female, having less than high school education, being unemployed, not married, a current smoker, and having depressive symptoms.

- Changes in monthly income may also impact health and wellbeing outcomes, as monthly income changes may be related to the ability to afford regular household expenses (Bania & Lette, 2022). A study of American households under 60 years of age over a 24-month study period examined how changes in monthly income amounts impacted the health of the main income earner in the household in the four months following. When controlling for average household income, the study found that experiencing monthly income volatility increased the probability of negative health outcomes for households that were also liquidity-constrained (i.e. did not have access to liquid assets to maintain income levels in the short-term).

In this study, liquidity-constrained households also had lower incomes and experienced more income instability than other households. These results remained after controlling for previous health status, which could indicate that poor or declining health likely did not result in the income volatility experienced by the household. In addition, when comparing participants who reported stress or anxiety versus those who did not, the former group was associated with higher income volatility (regardless of health status), worse self-reported health at the end of the 24-month study period and a greater decline in self-reported health from month 24 to month 28. These findings may suggest that income volatility may result in greater stress, which then impacts health and wellbeing; however, further research is required to confirm this finding.

- A Canadian study of adult men found that participants who experienced income volatility when they were between the ages of 30 to 55, were associated with a decreased probability of reporting excellent or very good health and satisfaction with life and an increased risk of experiencing a mental health issue by the time participants were between 50 to 75 years of age (Adeline et al, 2019). The study found limited changes to their findings when they examined individuals receiving disability benefits during the study period, which could suggest that poor health did not result in income volatility; however, this remains a possible explanation for the findings.

Income Stability and Health Among Older Adults

There is a notable gap in the research examining income stability among older adults. In the Canadian context, it may be the case that the Canadian pension system cushions income instability in retirement, protecting older adults with both a minimum income floor, as well as mitigating income fluctuations through lower taxes and greater social benefits (such as reduced GIS repayments) when income decreases (MacDonald & Osberg, 2014). However, there is reason to examine this measure of economic resources among older Canadians, particularly those who depend on personal sources of retirement income outside of OAS, GIS and CPP/QPP to maintain their lifestyle. Sudden drops to one's monthly or yearly income could be detrimental if the remaining income is insufficient to cover the entire time spent in retirement or if sudden emergencies or shocks require substantial financial resources.

- A study of older South Koreans aimed to understand how income stability impacted mental health outcomes (Kim & Subramanian, 2019). The study examined the link between income volatility and depressive symptoms in the elderly, considering the effect of co-residing with children, for both men and women. The findings revealed that income volatility alone was not significantly associated with increased/decreased depressive symptoms. Nonetheless, the analysis showed a positive association between income volatility and depressive symptoms

among individuals living without children. Interestingly, among older adults who lived with children, income volatility exhibited a protective association with depression, contrary to what was expected. The interaction term between income volatility and co-residence with children demonstrated statistical significance in the full sample and for both genders. This study has some key contextual considerations given that in 2012, during the final year of this study, only 30% of older South Koreans were receiving a government pension and half of all older South Koreans were living in poverty. It is common for older adults to live with their children as they age, which can reduce the risk of living in poverty. The authors suggest that it could be the case that older adults residing alone may face increased stress from a volatile income because they may have limited options available to them to improve their financial situation (i.e. it may not be possible to seek employment if funds run low). Alternatively, living with others who can share the cost of daily expenses may mitigate the negative impacts of income volatility.

- Another recent study examined whether a one-time severe drop in income increased the risk of mortality (Pool et al, 2018). A severe income drop was defined as a “wealth shock” of 75% or more of total net worth over a two-year period (Pool et al, 2018, p. 1341). The study examined 8714 US adults aged 51 to 61 at study entry and assessed their mortality risk in the twenty years following. The study found that 25% of participants experienced a severe wealth shock. Experiencing a severe wealth shock was associated with an increased risk of mortality. Experiencing a negative wealth shock was more likely among women, those who had a lower household income and net worth, poorer health, and among those of an ethnicity other than non-Hispanic white.

The cause of the wealth shocks were not identified in the study (personal circumstances versus economic factors). As such, it could be the case that for some individuals, a sudden change in health requiring medical expenses could have caused the income shock and subsequent mortality risk. The difference between this study and the above studies is that only one income drop was measured (versus measuring income changes at multiple points in time). However, this study examined a sudden and severe change in wealth that may result in negative repercussions due to the limited ability of older adults not in the labour force to recover financially from a shock.

Economic Security and Financial Hardship and its Impact on Health

The final area of research this report examines are studies that examine economic security and financial hardship. Economic security and financial hardship are two distinct concepts, but both reflect a range of measures that aim to capture an individual's perception of their current or future financial circumstances.



Economic Security

Economic security has been defined in a variety of ways and generally describes the economic conditions that “leave people worse off” (Hacker et al, 2016, p. 53). Some studies define economic insecurity as the potential for future hardship (Osberg, 2021). In this context, economic insecurity is “about possible future [financial] events whose prospect induces worry and anxiety – downside events only” (Osberg, 2021, p. 3). For example, someone might worry about whether they could manage or recover from a future unexpected financial downturn. In this way, economic insecurity is subject to personal perceptions of financial risk and uncertainty and is largely independent of income. Thus, economic insecurity may contribute to negative impacts on individual’s mental health irrespective of income levels. However, individuals who have higher amounts of economic insecurity may be more likely to face poverty or have lower incomes (Osberg, 2021). It is thought that income volatility could also contribute to a lack of economic security if repeated fluctuations in income result in stress about one’s future financial circumstances (Akanni et al, 2022; Bania & Lette, 2022).

Research examining the impact of economic security on health has found that individuals are generally loss averse, meaning economic insecurity has a greater impact on health compared to the same-sized gain caused by improvements in economic security (Watson & Osberg, 2020). Economic insecurity has been found to be more associated with mental health compared to physical health outcomes (Rhode et al, 2017). In addition, a recent Canadian

study found that the negative mental health impact that can occur as the result of the probability of a significant threat to economic insecurity (defined as an income drop of 25% or more) can “linger” for both men and women after the period of economic insecurity resolves (Watson & Osberg, 2020, p. 115). Chronic job-related economic insecurity has been found to be detrimental to men’s mental health, however, individuals can recover from a one-time bout of economic insecurity if they were recently economically secure (Watson & Osberg, 2017) Economic insecurity has also been found to impact one’s mental health even in the event that temporary drops in household income do not actually occur (Rhode et al, 2016; Kopasker et al, 2018). It could be that temporary drops in household income are planned for, whereas the fear of a future loss can be unpredictable. That being said, the concept of economic security highlights the importance of income stability in reducing anxiety and stress around future income flows (Watson & Osberg, 2020).

- Employment-related Economic Security and Health
 - Some studies measure economic insecurity as related to employment, with job security providing economic security, while joblessness (or jobs with perceived low security) leading to economic insecurity (Watson & Osberg, 2017; Watson et al, 2020). Several studies have found that job-related economic security has more of an impact on men than women (Watson & Osberg, 2017; Kopasker et al, 2018; Watson et al, 2020).

- For instance, a study found that chronic job-related economic insecurity was associated with psychological distress for men aged 25 to 64 (compared to those who did not experience job related economic insecurity), but not for women (Watson & Osberg, 2017). It has been suggested that women may be more resilient to economic security if being a “breadwinner” is less important for women’s identity (Watson & Osberg, 2017). However, future research is needed to further understand these mechanisms.
- A recent Canadian study found that job-related economic insecurity among adults between 45 to 64 years of age during the 2008 recession was associated with increased Body Mass Index (BMI) for men (3 point increase) and women (2 point increase) (Watson et al, 2020).

Financial Hardship

Several studies have examined the impact of **financial hardship** (at times referred to also as financial strain) on the health of older adults. Financial hardship captures a broad range of financial stressors, including perceptions of financial strain, difficulty the paying bills, needing to skip medications due to cost, experiencing food insecurity (Marshall et al, 2021, 2022), and the stress caused by incurring debt (Drentea & Reynolds, 2012; Hamilton et al, 2019; Marshall et al, 2020). Financial hardship reflects the current state of available economic resources needed to pay for monthly expenses, and, as such, someone can experience financial strain regardless of their income level (Kahn & Pearlin, 2006). Financial hardship also captures an individual’s perceptions of economic resources, as individuals can have a view of their personal financial situation that is different from an objective measure of available resources (Marshall et al, 2022). For instance, it is possible that an individual with an objectively high income can experience financial hardship (by some definitions) if their spending is greater than their income allows.

The research on financial hardship shows that personal experiences and perceptions of financial strain are associated with mental health symptoms, independent of income (Hamilton et al, 2019; Wilkinson, 2016). As seen in one study, a decrease in financial resources did not predict mental health symptoms, but the perception of financial strain (as experienced during the 2008 recession) did (Wilkinson, 2016).

This research speaks to the importance of examining an individual's perceptions of their financial circumstances as it relates to health.

- Financial Hardship and the Mental Health of Older Adults
 - A study of US adults drawing on the 2010 cycle of the Health and Retirement Study aimed to examine whether financial strain was associated with symptoms of depression or anxiety (Marshall et al, 2021). Financial strain was measured through three subjective questions that included whether individuals could afford their monthly bills, whether they ate less food because they were concerned that they could not afford it, or were taking less medication due to the cost. The study also examined two indicators of debt (debt from credit cards or medical debt). Researchers found that all measures of economic hardship and medical debt (but not credit card debt) were associated with symptoms of depression and anxiety even after controlling for age, ethnicity, gender, marital status, employment status, education and income. Being unable to pay bills and taking less medications due to the cost were found to have the strongest associations with poor mental health.
 - Another US study found evidence that the perceptions of financial strain have a greater impact on mental health than income alone (Wilkinson, 2016). The study aimed to determine whether

objective measures of economic wellbeing compared to perceptions of financial strain during the 2008 recession were associated with the mental health of adults who were 51 years of age and older (Wilkinson, 2016). Objective financial measures included employment, household income, net assets and home equity. Financial strain was measured by two scales which asked whether participants had difficulty meeting their monthly payments and whether they were satisfied with their current financial situation. The study found that a worsening of one's objective financial situation (i.e. becoming unemployed, a decrease in income or assets) was associated with increased financial strain but did not predict mental health outcomes. Instead, only the perception of financial strain predicted symptoms of depression and anxiety. Gender was not examined as part of the analysis.

- Debt and Mental Health
 - Several studies have examined debt-related stress as an aspect of financial hardship (Drentea & Reynolds, 2012; Hamilton et al, 2019; Marshall et al, 2020). A study of mainly older Americans found that debt-related stress was associated with depression, anxiety and anger, regardless of age, gender, and ethnicity (Drentea & Reynolds, 2012).
 - While not specific to older adults, an Ontario study of adults who were 18 years of age and older found that higher debt-related stress was associated with a 1.64 increased odds of reporting moderate to serious psychological distress and increased odds of reporting poor to fair general health and mental health (Hamilton et al, 2019). While adults who were 50 years and older were less likely to report debt stress, the association between higher debt stress and mental health did not vary by age, gender, employment status, income or education.

Research Summary

In this report, income adequacy, stability and security are presented as potentially significant factors needed to understand the health and wellbeing of older adults. We examined the evidence on the relationship between economic resources and health across three areas of research: studies that examine income levels (where income is measured at one point in time), income stability (where fluctuations in

income are measured over time) and economic security and financial hardship (perceptions of one's present or future economic circumstances).

What we found is that there are a multitude of complex factors that may influence health and wellbeing in later life, including a person's health status and access to economic resources throughout their lives and the impact of the decision to retire. Research examining income and health in later life finds an association between worse adverse physical or mental health and having a low income. However, it is unknown if this relationship is explained by the impact of poor health on one's socio-economic status or if low incomes subject individuals to worse material living conditions, thereby leading to worse health outcomes. It does not consider the impact of income on health (or vice versa) earlier in one's life, which may have an influence on health in later life. Nevertheless, these studies show that the differences in health outcomes related to income level do not just impact younger individuals, but persist into later life. Several studies of older Americans showcase that economic insecurity and financial hardship are associated with adverse mental health in later life (Wilkinson, 2016; Marshall et al, 2021). These studies show that facing financial hardship, such as being unable to pay one's bills or afford medication, is associated with worse mental health. Similar to younger individuals, these findings further reinforce the notion that individual perceptions of financial circumstances are likely related to poor mental health.

This report's in-depth review of the literature could not identify any Canadian studies that have examined income stability and health among older Canadians. Only limited research examining income stability and the health of older adults has been conducted outside of Canada. There are also key gaps in the literature that examines the impact of economic insecurity and the health and wellbeing of older Canadians. Thus, our understanding of how economic resources are related to the health and wellbeing of older Canadians remains incomplete.

There are several areas of future research that would help improve our understanding of how economic resources impact the health of older Canadians. It would be valuable for future research to examine not only the prevalence of income stability among Canadian older adults and identification of Canadians who are at risk of income volatility, but to also examine the magnitude and duration of income volatility which may be consequential to the health and wellbeing of older Canadians. For instance, negative income changes late in life could be particularly detrimental if they impact one's ability to afford needed essential services such as housing repairs or LTC services. Thus, it could be that income volatility during periods of precarious health for older adults may be particularly concerning compared to older adults who are able to adjust their lifestyle or expenses to accommodate changes in income. Researchers may also want to investigate the impact of economic insecurity on the health outcomes of older adults, as a lack of confidence in one's retirement income may also contribute to greater stress in later life.

Future research on the connection between economic resources and health also need to consider differences in health outcomes by gender. In many of the studies examined in this report, gender is often only viewed as a variable to control for, rather than examining gender differences between men and women related to income. Only in the economic insecurity literature was a gendered analysis conducted in several studies, which found that among working age men and women, men were more impacted by economic insecurity than women (Watson & Osberg, 2017; Kopasker et al, 2018; Watson et al, 2020). A gendered analysis is important as many factors related to both income and health are gendered. For instance, women's retirement incomes are determined by their employment histories (Finnie & Spencer, 2012; Milligan & Schirle, 2013). While women in the Baby Boomer generation are anticipated to have improved later life economic circumstances (Denton & Boos, 2007; Milligan & Schirle, 2012), previous generations of women had different career trajectories, with more time spent caregiving and out of the workforce (Denton & Boos, 2007; SOA, 2018) and less access to workplace pension plans (Statistics Canada, 2018b). Also, as highlighted by Deri-Armstrong & Devlin (2022) availability of a caregiver is also linked to gender, which can impact health outcomes such as place of death at the end-of-life.

What also remains unexplored in this report is the how income mediates health outcomes for individuals with intersecting social identities that have historically been marginalized by society — such as members of Black, Indigenous and racialized communities, people living with disabilities and, those who identify as being 2SLGBTQI+. For instance, research has found that across all age categories, First Nations people have higher mortality rates than the general Canadian population (Akee & Feir, 2018). During the COVID-19 pandemic, racialized Canadians had higher mortality rates from COVID-19 compared to non-racialized Canadians (Statistics Canada, 2022f).

Having a low income increased the mortality risk from COVID-19 for all racialized populations except for the Chinese Canadian population, with Black Canadians who also had a low income facing a 3.5 times greater risk of mortality compared to non-racialized individuals with a low income. These health inequities may be related to a multitude of factors ranging from having inadequate housing (PHAC, 2020), experiencing racism when using healthcare services (Ben et al, 2017) or receiving low quality preventative healthcare earlier in life, increasing the overall risk of chronic disease (Beck et al, 2020 in Statistics Canada, 2022f). While some of the American research studies included in this report included race or ethnicity as demographic factors (e.g. Elfassy et al, 2019; Pool et al, 2018), many Canadian studies presented in this report did not report on these demographics. This is a critical gap that future research should address.

Lastly, research should continue to consider how income mediates access to services that enable ageing in the *right place*, such as LTC services and supports. For example, a study by Deri Armstrong & Devlin (2022) found that those who lived in the highest income neighbourhoods had a greater likelihood of dying at home compared to those who lived in the lowest income neighborhoods, providing insight into circumstances where income may mediate the ability to age and die in the *right place*.



Findings from the NIA Ageing in Canada Survey

To further highlight the importance of understanding how the financial circumstances of Canadian older adults are associated with health, this report highlights novel findings from the 2022 NIA Ageing in Canada Survey.

The 2022 NIA Ageing in Canada Survey was the first inaugural survey that will be repeated annually to track how Canadians feel about their experience of growing old in Canada over the next decade. The 2022 NIA Ageing in Canada Survey was conducted online with 5,885 Canadians aged 50 years and older between July 5th to August 7th, 2022. The survey captured older Canadians' perspectives across three dimensions of ageing: social wellbeing, financial security and health and independence.

The 2022 NIA Ageing in Canada Survey provides a profile of older Canadians' perceptions of economic resources and their overall health and wellbeing. Of the various measures included in the NIA's survey that were meant to track perceptions of financial security among Canadians, two are especially relevant when thinking about economic status and health:

- 1) perceived income adequacy;
- 2) confidence to age in the right place.

Because the NIA's survey focused on capturing older Canadians' perspectives on these aspects of their financial security, these two measures may demonstrate how subjective measures of economic status relate to health and wellbeing.

Findings from the 2022 NIA Ageing in Canada Survey help to highlight the relationship between economic resources and health and wellbeing in later life. While its findings do not establish the direction of the relationship — whether a lack of economic resources leads to worse health or whether worse health leads to fewer economic resources—they do reveal that older Canadians with varying levels of economic resources also report different physical and mental health outcomes.

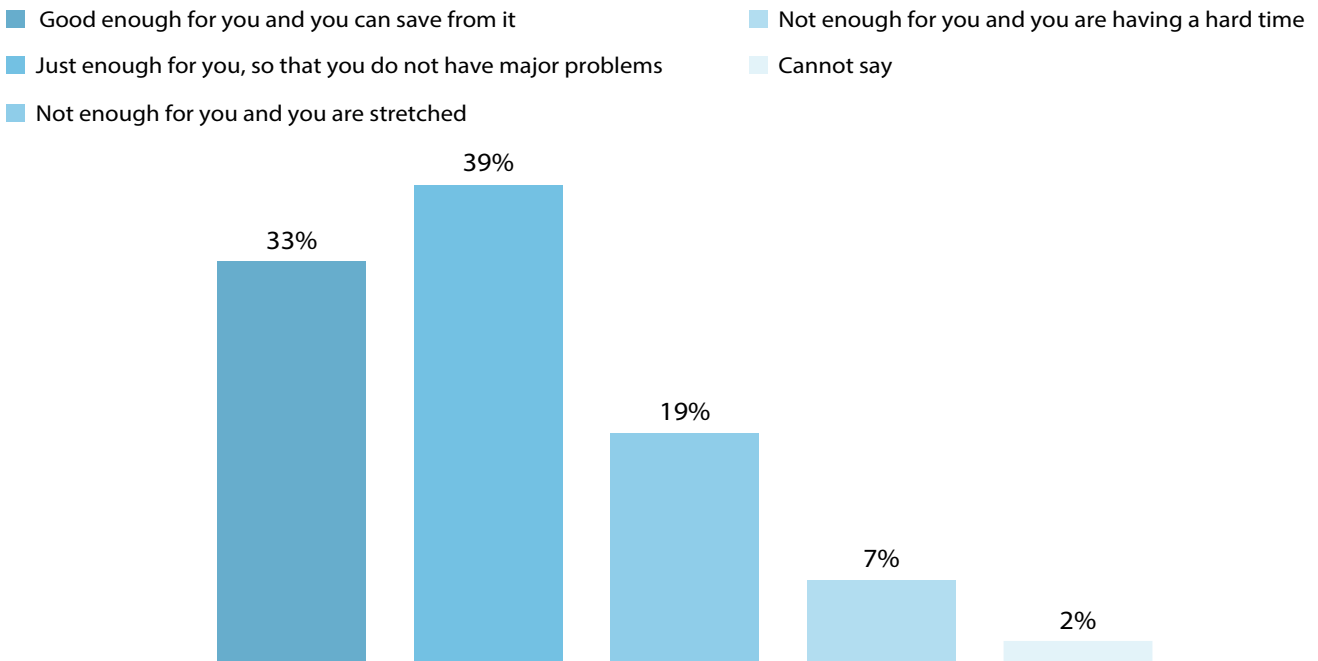
Perceived Income Adequacy

Measuring perceived income adequacy can provide insight into whether Canadians have confidence in their financial resources and their ability to sustain themselves to live and age comfortably while also saving for the future. Perceived income adequacy is based on a question asking respondents how they would best describe their total household income at the present time, with the possible responses being: 'good enough for you and you can save from it', 'just enough for you, so that you do not have major problems', 'not enough for you and you are stretched', 'not enough for you and you are having a hard time', and 'cannot say'.

The 2022 NIA Ageing in Canada Survey found that most ageing Canadians perceive their total household income as adequate:

- Overall, **72%** of Canadians aged 50 years and older said that their income was enough for them (33% said that it was good enough that they could save from it and 39% said that it was just enough so that they did not have major problems), while **26%** said that their income was not enough for them (19% said that it was not enough for them because they were financially stretched and 7% said that it was not enough because they were having a hard time) (Figure 3).

Figure 3. Perceived Income Adequacy (%)



Q.45 – Which of the following best describes your total household income at present time?

Sample base: 5,885

Perceived Income Adequacy and Health Outcomes

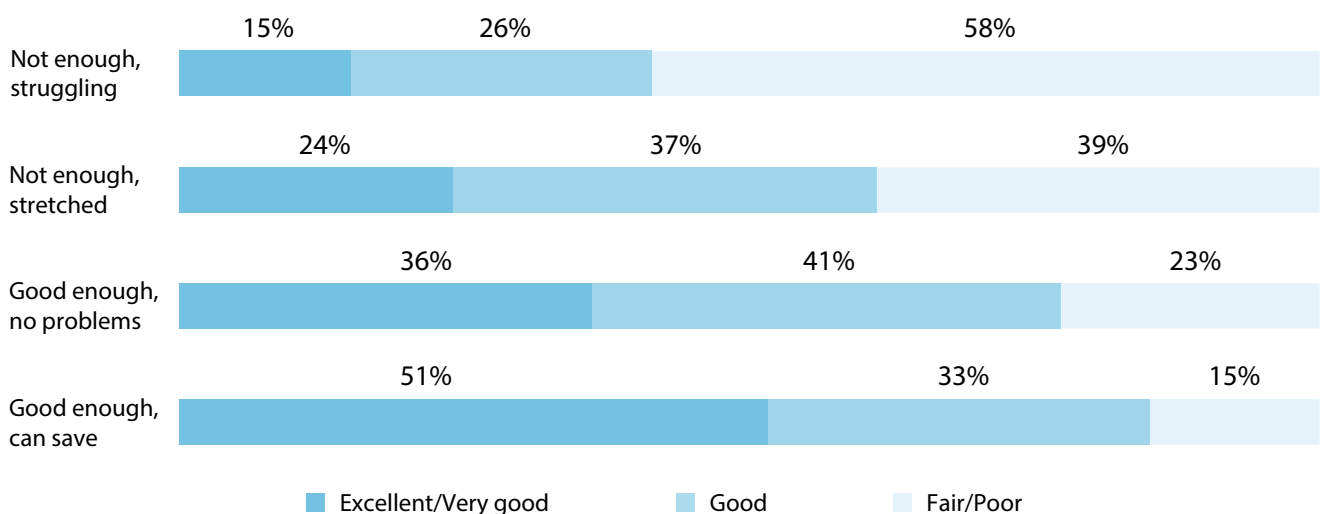
The 2022 NIA Ageing in Canada Survey found that Canadians aged 50 years and older who perceive their income as adequate also report better health than those who report that their income is not enough for them (**Figure 4**).

The 2022 NIA Ageing in Canada Survey found that:

- Among Canadians aged 50 years and older who reported the highest levels of perceived income adequacy their income as good enough and they could save from it, **51%** reported their health as excellent or very good, **33%** said it was good, while only **15%** reported their health as fair or poor.

- On the other hand, among Canadians who said that their income is not enough for them because they were stretched, only **24%** reported being in excellent or very good health and **37%** reported being in good health, while **39%** said their health was fair or poor.
- Those who reported that they were struggling financially reported even worse self-reported health. Among Canadians aged 50 years and older who reported their income as inadequate because they were having a hard time, only **15%** said that their health was excellent or very good, and **26%** said that their health was good, whereas **58%** said that their health was fair or poor.

Figure 4. Health Status by Income Adequacy



Perceived Income Adequacy and Health Across Age Groups

The 2022 NIA Ageing in Canada Survey also found that the proportion of older Canadians reporting better health is higher for those who report the highest levels of perceived income adequacy regardless of age (**Figure 5**).

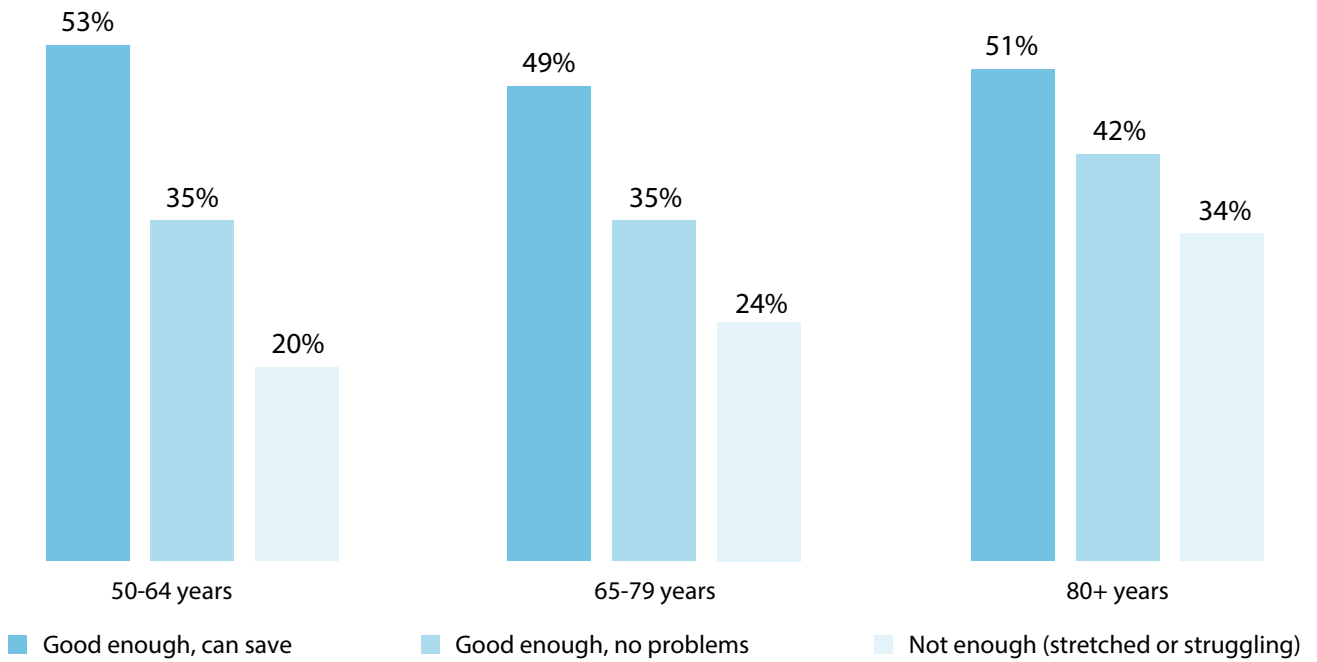
Note that for the purposes of examining how the relationship between perceived income adequacy and health varied across age groups, we combined both responses reflecting lower income adequacy into one category (those who reported that their income was not enough because they were stretched and those who reported that their income was not enough because they were having a hard time). More Canadians who said that their health was excellent or very good described their income as good enough compared to those who said their income was not enough for them, and this was true regardless of whether they were aged 50-64 years, 65-79 years, or 80 years and older.

The 2022 NIA Ageing in Canada Survey found that:

- Across all age groups, Canadians who reported the highest levels of perceived income adequacy (those who described their income as good enough such that they could save from it) consistently had the highest share of respondents who said that their health was excellent or very good relative to those who said their income was just enough so that they do not have major problems and those who said their income was not enough for them.
- Among Canadians who said that their income was good enough such that they could save from it, **53%** of those aged 50-64 years reported their health was excellent or very good compared to **49%** among those aged 65-79 years and **51%** those aged 80 years and older.
- Canadians who reported lower levels of perceived income adequacy were less likely to report excellent or very good health compared to Canadians who reported higher levels of perceived income adequacy. For Canadians who reported their income was not enough, only **20%** of adults between ages of 50 to 64, **24%** of adults aged 65-79 years and **34%** of adults aged 80 and above reported excellent or very good health.



Figure 5. Canadians Reporting Excellent or Very Good Health by Age and Perceived Income Adequacy (%)



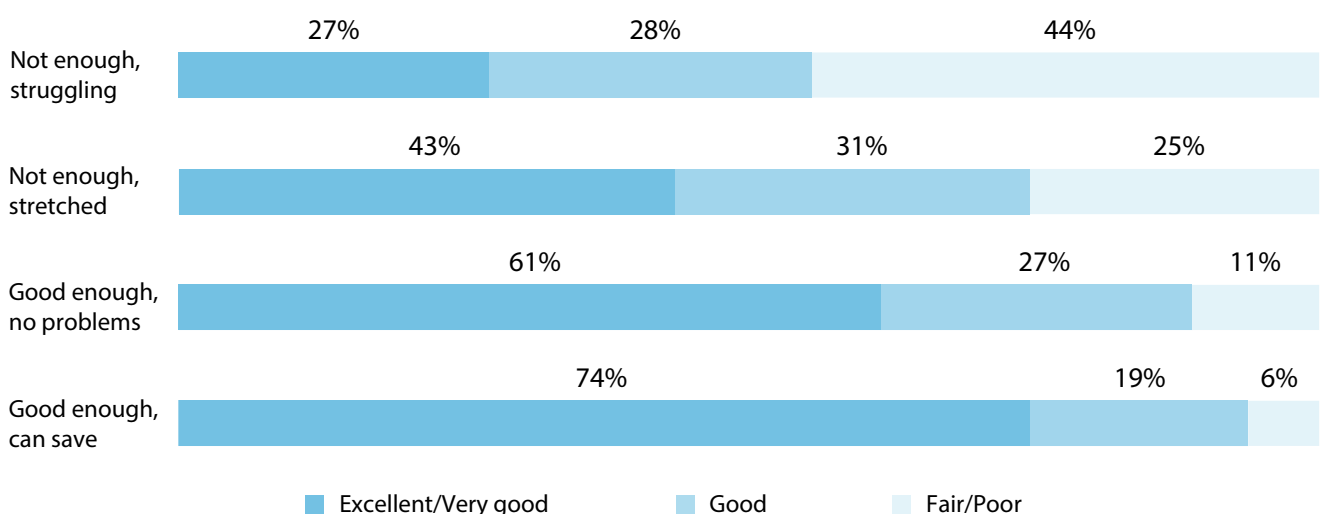
Perceived Income Adequacy and Mental Health

In addition to differences in physical health, the 2022 NIA Ageing in Canada Survey also found that ageing Canadians with varying levels of perceived income adequacy also report different levels of mental health. Specifically, Canadians aged 50 years and older who report their perceived income level to be adequate are more likely to report better mental health outcomes than their counterparts who report their income is not enough for them (**Figure 6**).

The 2022 NIA Ageing in Canada Survey found that:

- The majority (**74%**) of Canadians aged 50 years and older who described their income as good enough such that they could save from it said that their mental health was excellent or very good and **19%** said that it was good. On the other hand, only **6%** reported their mental health as fair or poor.
- By comparison, Canadians aged 50 years and older who reported that they were struggling financially were more likely to report that their mental health was fair or poor. Among those who said that their income was not enough for them and that they were having a hard time, **44%** said that their mental health was fair or poor, while **28%** said that their health was good and **27%** said that it was excellent or very good.

Figure 6. Mental Health Status by Income Adequacy



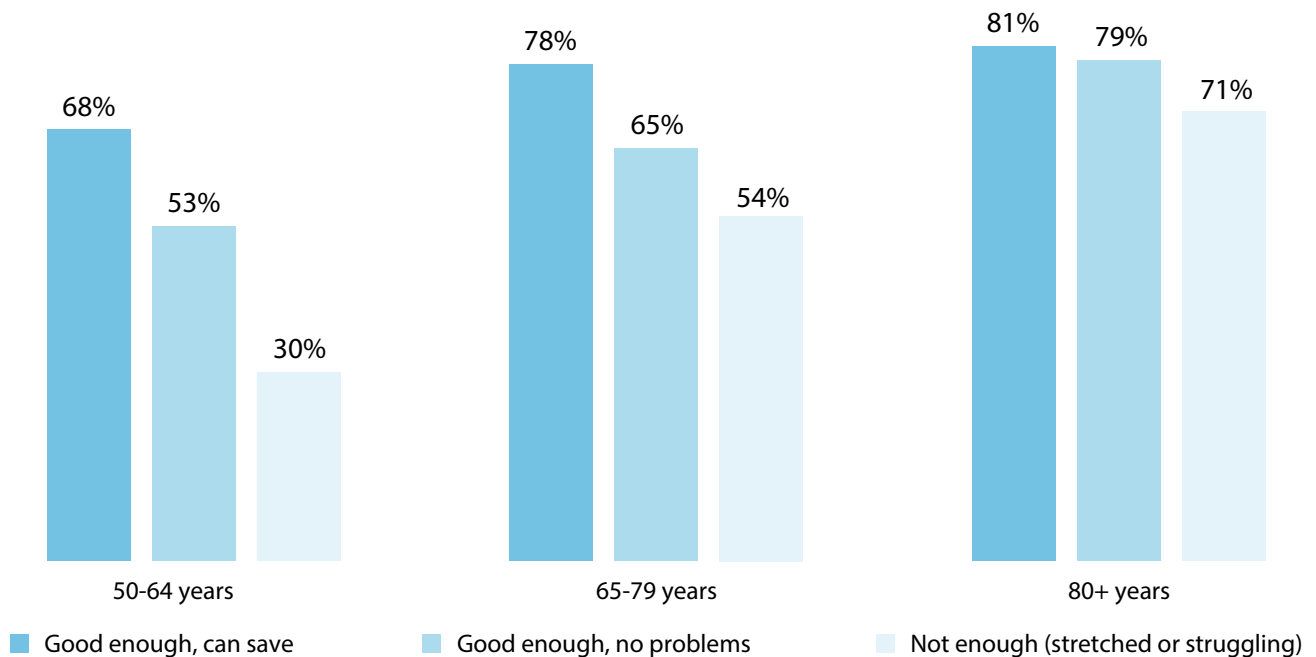
The 2022 NIA Ageing in Canada Survey also examined whether the relationship between perceived income adequacy and mental health among ageing Canadians was consistent across age groups. Findings reveal that regardless of age, the proportion of Canadians reporting better mental health is highest among those who also report the highest levels of perceived income adequacy (**Figure 7**).

Just as was the case with physical health, for the purposes of examining how the relationship between perceived income adequacy and mental health varied across age groups, we combined both responses reflecting lower income adequacy into one category (those who reported that their income was not enough because they were stretched and those who reported that their income was not enough because they were having a hard time).

The 2022 NIA Ageing in Canada Survey found that:

- Canadians who described their income as good enough such that they could save from it consistently had the highest share who also said that their mental health was excellent or very good when compared to those who said their income was just enough so that they do not have major problems and those who said their income was not enough for them regardless of age.
- Overall, a higher share of Canadians aged 80 years and older reported that their mental health was excellent or very good across all levels of perceived income adequacy than among Canadians aged 50-64 years and 65-79 years.
- However, the difference in the share of respondents who reported excellent or very good mental health across perceived levels of income adequacy was also smallest among Canadians aged 80 years and older.

Figure 7. Canadians Reporting Excellent or Very Good Mental Health by Age and Perceived Income Adequacy (%)



The Relationship Between Health Status and Income Adequacy and Confidence in Being Able to Remain at Home

The 2022 NIA Ageing in Canada Survey found that levels of confidence around ageing in place among older Canadians varied by health status and income adequacy.

Canadians aged 50 years and older who reported excellent or very good health were more likely to express confidence in their ability to remain in their own home for as long as they wanted when compared to those who reported good, fair or poor health. The survey found that almost half (49%) of those who reported being in

excellent or very good health were very confident that they would be able to remain in their own home, compared to just 25% of those who reported being in good health and 15% of those who reported being in fair or poor health.

Confidence levels were also higher among older Canadians who reported that their income was enough for them (either that it was good enough and they could save money from it, or that it was just enough to avoid having major problems) than those who said their income was not enough for them (either that they are stretched or that they are having a hard time). For example, while 42% of Canadians aged 50 years and older who reported that their income was good enough that they could save from it said they felt very confident they would be

able to remain in their own home as long as they hope to, the share was only **20%** among those who said their income was not enough for them and that they were struggling.

Summary of Findings from the 2022 NIA Ageing in Canada Survey

Overall, findings from the 2022 NIA Ageing in Canada Survey further highlight the important link between perceived economic resources and health and wellbeing in later life. Canadians who reported higher adequate income levels, also reported better levels of health and wellbeing, and this was true for both physical health and mental health. Those who reported having excellent or very good health and higher income adequacy were also more confident in their ability to age in the right place.

Interestingly, however, the role of perceived income adequacy on reported physical and mental health was less meaningful among the oldest Canadians aged 80 years and older in that differences between those with lower and higher income adequacy were much smaller than among Canadians aged 50-79 years. While we are unable to tease out why adults aged 80 years and older reported better physical or mental health than their younger counterparts, regardless of income level, this finding is consistent with others from the 2022 NIA Ageing in Canada survey showing that these oldest Canadians consistently reported better outcomes across the key indicators of social well-

being, financial security, and health and independence compared to their younger counterparts aged 50-79 years. In this case, it could be that the oldest Canadians could be reporting better health regardless of income because perceptions of health change with age. Alternatively, it may be that the sample of older adults 80 years and older who participated in the survey could have had better economic resources across their life, resulting in better health or longevity at later ages. The NIA's future annual Ageing in Canada surveys will continue to explore this phenomenon.

Implications: Where Next in Discussions about the Impact of Later-Life Income on the Health and Wellbeing of Older Canadians?

The Costs Associated with Ageing in the Right Place

The findings of this report suggest that there is a need to situate our understanding of economic resources and health in discussions about how to support Canadians to age in the right place.

For Canadians to age in the right place, adequate, stable and secure financial resources are needed to meet changing levels of personal needs and circumstances. Many older adults face periods of change as they age based on their personal circumstances and overall health status (SOA, 2021). For instance, research on American retirees found that among older adults who retire, a period of time is spent in retirement with a similar level of health status as before retirement (and many hope to travel, engage in hobbies or continue working in this time), followed by a period where health may start to decline and limit activities, and a third phase where older adults may need a lot of help and support due to declining health. The time spent in each phase is unique to each individual and it can be challenging to identify how one will progress through these phases. Thus, it is important to acknowledge that older adults will not age similarly as one homogenous group and there will be substantial variation in the type and amount of resources needed throughout later life.

Older adults who have fewer financial resources and greater financial insecurity and instability may have trouble paying for their needs beyond daily essentials, such as participation in social activities, hobbies and other activities known to improve mental health and social wellbeing – this is particularly true at later ages when savings may be exhausted. The COVID-19 pandemic has also further brought to light the impact of income on health and its disparities across Canada. Older adults reported between 6 to 17% higher rates of social isolation and loneliness during the pandemic (compared with pre-pandemic rates) (Kadowaki & Wister, 2021) and those with lower incomes also faced restricted access to digital technologies or the internet due to their associated costs or other access barriers (Conroy et al, 2020 in Kadowaki & Wister, 2021). This is concerning due to the known negative physical and mental health effects associated with being socially isolated (see NIA, 2022c).

Further, emergencies or unexpected expenses can strain one's financial resources. Many older adults do not face any sudden financial shocks or crises as they age, or face limited consequences from financial shocks by changing their spending or having buffers, such as an emergency fund (SOA, 2017b).

In fact, research has shown that many older adults can be resilient in the face of financial shocks (SOA, 2017b, 2018). However, older adults who are unprepared for financial shocks, or those who face multiple or severe shocks, are at an increased risk of being unable to have the financial resources needed to sustain their retirement years (SOA, 2017b). Severe shocks include divorce, needing to pay for LTC services, or financially helping children (SOA, 2021).

Out-of-pocket healthcare costs may come as a shock for some older adults, even though many older adults will experience a decline in their health as they age (SOA, 2021). Older adults can face challenges with the costs associated with chronic illness management (Moody et al, 2022). Older adults who have higher levels of functional impairment, lower levels of self-reported health and more comorbid medical conditions, pay the most for out-of-pocket healthcare costs (Demers et al, 2008; Law et al, 2018; Moody et al, 2022). For example, in Canada, while 52% of Canadian households had home care costs that were only paid for by government, 27% of households paid for home care services using their own money (Gilmour, 2018). Further, for households receiving support services only (i.e. help with tasks such as bathing, meals, housekeeping or transportation), 44% of households pay out-of-pocket for services, compared to 39% who receive government funded services. For 12% of households, the costs of personal or home support can amount to \$400 or more per month. Out-of-pocket home care costs can be larger depending on the province. For example, in British

Columbia (BC), only older adults receiving GIS have their publicly-funded income-based home care fees waived (Office of the Seniors Advocate, 2022). All other older adults have their home care costs calculated based on their income. For example, “the home support daily rate calculation requires seniors with an annual income of \$28,000 to pay \$8,800 a year if they were to receive a 45-minute daily visit of home support” (p. 2). Although provincial and territorial governments can fund home care services, current programs fail to provide adequate levels of support for many Canadians.

Similarly, older adults living with multiple chronic conditions and greater functional impairment reported more out-of-pocket costs for public transportation, ambulance costs and paying friends or family members to provide transportation (Demers et al, 2008; Law et al, 2018). Beyond medication and transportation costs related to healthcare access, many older adults develop conditions that require medical equipment (e.g. incontinence supplies) and assistive devices (e.g. mobility aids) that result in unexpected out-of-pocket expenses (Demers et al, 2008; Law et al, 2018). Hearing aids, dental care and mobility aids can also be costly in some provinces (Office of the Seniors Advocate, 2022). The out-of-pocket spending related to their health conditions, including aging-related conditions, impacts older adults’ ability to afford basic living expenses such as food, medication and shelter (Moody et al, 2022). Consequently, the out-of-pocket expenses associated with older age combined with limited income can contribute to medication non-adherence, poor self-care

habits and unsafe living environments (Demers et al, 2008; Law et al, 2018).

Housing costs may also strain the financial resources of older adults. Based on the 2016 census, almost 20% of older adults reported a housing affordability issue (housing costs are more than 30% of before tax income), while almost 40% of older adults living alone reported affordability issues (Government of Canada, 2019a). Some older adults also choose to live in specific communities, such as a retirement home. The cost to live in retirement home can range substantially based on the amount of care provided and unit type (semi-private to two-bedroom) (Roblin et al, 2019). 2016 data from the Canada Mortgage and Housing Corporation estimated that the average cost of a standard care space in a retirement home in Ontario ranges from \$1,973 for a semi-private room to \$5,253 for a two-bedroom suite. Retirement homes in the Greater Toronto Area can cost up to \$650 more than the provincial average. These living costs do not factor in the cost of needing additional care services. In comparison, in 2016, the average cost of LTC home accommodation ranged from \$1,794.28 for a basic, shared room to \$2,563.22 for a private room (lower income older adults have reduced rates).

Ageing in the right place also requires substantial support from unpaid caregivers. Based on data from 2019, the NIA estimates that about 75 per cent of total home care hours that support older Canadians (receiving publicly funded home care in Ontario) was being provided for free by their family members (MacDonald et al,

2019). The NIA estimates that, based on an assumed cost of \$30 per hour (\$18 for salary and \$12 for overhead costs), unpaid caregivers provided just under \$9 billion in additional free care to Canada's publicly funded health care systems (MacDonald et al, 2019). Further, the number of older Canadians who will require the support of unpaid caregivers is projected to more than double by 2050, yet the NIA has also projected that due to declining birth rates, women's greater participation in the labour force, and families living geographically far apart, that there will likely be 30 per cent fewer close family members (e.g. spouses, adult children) and friends available to provide unpaid care by 2050. Older adults who find themselves without the support of unpaid caregivers and whom also cannot afford out-of-pocket LTC costs may find themselves with unmet care needs.

There are some sources of financial support available to unpaid caregivers. For instance, the federal government introduced the Canada Caregiver Credit in 2017 — meant to be a more accessible tax credit — which provides eligible unpaid family caregivers approximately \$7,000 in tax relief. However, to be eligible for this non-refundable credit, care recipients must be low-income dependents and family member caregivers who must be employed or earning a sufficient taxable income through other sources (NIA, 2020), which creates a barrier for low-income unpaid caregivers to access financial support. Some provinces have implemented targeted initiatives that address these gaps, such as Nova Scotia's caregiver benefit for low-income unpaid caregivers, Quebec's refundable caregiver tax credit and Manitoba's Primary

Caregiver Tax Credit, while other provinces and territories also provide non-financial support for unpaid caregivers. However, there is currently no process for unpaid caregivers to have their needs recognized and formally assessed separately from the care recipient, and no national minimum standard of services and care that unpaid caregivers and their care recipients can expect to receive.

It is important to acknowledge that there is currently work underway to address some of the financial challenge's older adults face in ageing at home. There are a range of federal and provincial tax credits, grants and benefits related to housing to support ageing in the right place. For example, federally, you can claim some expenses through the Home Accessibility Tax Credit (HATC) which provides support for home modifications for adults 65 years of age or for those who are eligible for the Disability Tax Credit (Government of Canada, 2023a). The HATC allows an individual to claim up to \$20,000 in eligible expenses and receive

a maximum tax credit of \$3,000. The federal government also recently introduced the Multigenerational Home Renovation Tax Credit, which provides up to \$7,500 for renovations that construct a secondary suite for a family member who is living with a disability or is over 65 years of age (Government of Canada, 2022c). There are also a variety of tax credits and grants at the provincial level that can be used to support home renovations, although significant variation exists between provinces with respect to coverage.



As stated earlier, while OAS/GIS prevents many older Canadians from living in extreme poverty, living on such a low income may limit one's options when making decisions about where and how one wants to live in later life. Future discussions around how to support lower income Canadians should evaluate the impact of existing programs, such as the effectiveness of OAS/GIS, tax credits and other income-tested social services, such as health or housing benefits.

Some Canadians Face Cumulative Sources of Disadvantage that Impact their Later Life Financial Resources

While many Canadians will have the financial resources they need to age in the right place, some Canadians face cumulative sources of disadvantage throughout their lives that impact their ability to have secure and stable retirement incomes. Recent immigrants, persons with disabilities, sole-caregivers, and Black, Indigenous and other marginalized groups, can face barriers to equal opportunities within the Canadian economy as exacerbated by intersecting factors such as income levels, gender, and language background and subsequently have higher poverty rates when compared to the Canadian average (NACP, 2020). For example, based on the 2016 census, "20.6% or approximately 1.58 million racialized individuals were living in poverty in 2015, while the poverty rate of non-racialized individuals was 10.6%" (NACP, 2020, p. 24). Unattached individuals living with a disability (excluding older

adults) had a poverty rate of 49.5%, and 30% of individuals living with a disability were living in deep poverty. As Lightman and Gingrich (2018) found in their study of economic disadvantage in Canada, individuals who identified as Black, South Asian and Arab, in addition to recent immigrants and women, were over represented when it came to facing economic exclusion in the labour market.

Individuals who have recently immigrated to Canada and are particularly close to retirement age, have unique considerations as they approach retirement age. Unlike their Canadian-born counterparts, those who have recently immigrated have had less time to contribute to the Canadian pension system due to residency requirements (Curtis & Lightman, 2017) as one must live in Canada for 40 years to receive full OAS benefits (partial OAS pensions are available to those who have lived in Canada for ten years or more) (Government of Canada, 2023b). Language barriers can also prevent older immigrants from accessing financial services and better understanding the pension system (Huang et al. 2015; Natoli 2015).

Generational and Gender Differences in Understanding Health, Ageing and Economic Resources

The first members of the Baby Boom generation, born between 1946 and 1965, began to turn 65 years of age in 2011 (Statistics Canada, 2022g), meaning that the North American data on retirement and health before 2011 will reflect mainly

the experiences of members of the Interwar (born before 1928) and Greatest generations, who were born between 1928 to 1945. These retirees, who are now well into their eighties, experienced a different life history than subsequent generations (SOA, 2019). For instance, research on older American retirees found that many are the recipients of defined benefit pensions (SOA, 2019). Similarly, in Canada during the late 1970's, more than 50% of all male employees were enrolled in a registered employer pension plan (Statistics Canada, 2018b) compared to only 34.4% in 2020 (Statistics Canada, 2022d). On the other hand, only 27% of employed women had workplace pension coverage in the 1960s and 36% had coverage by the late 1970s (Statistics Canada, 2018b). Since the late 1980's and early 1990s, approximately 40% of women have a workplace pension plan (Statistics Canada, 2022c). Several studies have found that many of this generation's retired households drew down resources slowly throughout retirement and had considerable wealth at the end-of-life, particularly from their housing assets (Banks & Crawford, 2022). They were also more likely to have children and live close to their children (SOA, 2019). Research on US retirees over the age of 85 has found that this group by and large has managed their financial situations well through flexibility and resiliency, matching their spending to their incomes and tending to spend less overall (SOA, 2019). There are, however, also documented differences between the experiences of men versus women in this generation; while women were more likely to live longer, they were also more likely to be a caregiver, or become widowed

(SOA, 2018). Furthermore, the fact that women historically spent less time in the labour force than men, created significant implications for how widowhood or divorce negatively impacted the long-term financial security of women compared to men who become widowed (Denton & Boos, 2007; SOA, 2018).

On the contrary, the Baby Boomer generation is not only entering retirement at more diverse ages and socioeconomic circumstances but are living longer (SOA, 2019). In Canada, while women have historically lived longer than men (and still do), the life expectancy gap between men and women is narrowing, with men's life expectancy increasing 7.7 years from 1965 to 2013, while women's life expectancy increased only 6.4 years over the same period (Milligan & Schirle, 2018). The Baby Boomer generation also had smaller families, and placed greater value on their personal autonomy (Golant, 2017).

Compared to previous generations, Canadian women members of the Baby Boomer generation are anticipated to have improved financial circumstances in retirement (Denton & Boos, 2007; Milligan & Schirle, 2012). Women's retirement incomes are influenced by their time spent working (Milligan & Schirle, 2013) and thus it has been found that single older women with less lifetime earnings were more likely to receive GIS (Finnie, Gray & Zhang, 2012). For women with more substantial working histories, they may have better retirement income situations in retirement (Finnie & Spencer, 2012). Since the 1970s, women have increased their education, workplace pension plan coverage, and contributions to CPP/QPP, which has helped to significantly improve women's retirement incomes and the average older family household income (Schirle, 2012).

The economic picture for younger generations reveals that Generation X (born between 1966 and 1980) and Millennials (born between 1981 and 1996) (Statistics Canada, 2022g) and younger generations will continue to face a greater number of challenging economic circumstances throughout their lives (SOA, 2021b). For instance, during the COVID-19 pandemic in the US, 40% of US Millennials and 33% of Gen Xers lost their job or experienced a decrease in pay (SOA, 2021b). 24% of Millennials and 20% of Gen Xers reported high debt-related stress compared to only 15% of Late Boomers, and 8% of those in the Silent generation. Millennials have also been found to be more likely to only plan for short-term expenses and carry more debt.

Within Canada, in the private sector, workplace defined benefit pension plan coverage has fallen from 21.3% in 1999 to 8.8% in 2020 (Statistics Canada, 2022b). Rising economic insecurity continues to be an issue impacting younger generations (Watson & Osberg, 2019; Osberg, 2021; SOA, 2021a, 2021b), which raises the question of whether individuals who are experiencing more financial constraints during their working years will be able to save an adequate amount for their retirements.



Policy Recommendations

Given the important impact of economic resources on health, the NIA has developed six evidence-informed policy recommendations to enhance income adequacy, stability and security for Canadians as they age:

1. Promote improved financial literacy and planning.

Promoting financial literacy, and encouraging working Canadians to start planning and saving for their retirement earlier, will be key to ensuring older Canadians have greater financial security, stability and adequacy. There also continues to be a growing concern about the lack of financial literacy and financial access amongst many adults, with some arguing for these measures of financial capability to also be viewed as a determinant of health (Sun & Chen, 2022). The unfortunate reality is that the Canadian retirement income and tax systems are incredibly complicated to navigate for all Canadians alike.

As described in a recent NIA report, *Canadian Perspectives on the Financial Realities of Ageing in the Right Place* (see Iciaszczyk et al, 2020), research from Canada and around the world, shows that retirement planning is strongly associated with financial literacy. In Canada, estimates have found that those with higher levels of financial literacy are 10% more likely to have retirement savings (Boisclair et al, 2017). Overall, Canadians increasingly recognize the importance of saving for retirement.

Results from Statistics Canada's Canadians Financial Capability Survey (CFCS) in 2019 found that 69% of Canadians who are not yet retired are financially preparing for their retirement (either on their own or through a workplace pension plan), which is up from 66% in 2014 (Government of Canada, 2019b). In addition, 47% of Canadians report they know how much they must save to maintain their standard of living in retirement, a 10-point increase since 2014 (37%) (Government of Canada, 2019c). However, financial literacy is highly stratified by gender, income and education, with women, lower income workers and less-educated Canadians having lower levels of financial knowledge and being less aware of the need to save for retirement.

Overall, it is becoming increasingly important to educate and encourage many Canadians to save for their retirement, a responsibility shared by individuals and the government. Financial literacy can be acquired in many ways: by reading books and online resources, through financial education provided by employers, at school or in a community program and with the assistance of professional financial advisors. For example, the federal government has developed a program called Your Financial Toolkit, which includes sections on retirement planning. A major component of financial literacy is also to encourage all Canadians to start saving for retirement earlier during their working years.

Improved financial literacy and planning can include, for example, improving awareness about the benefits of delaying collecting CPP/QPP (MacDonald, 2020) and OAS (MacDonald & Chandler, 2022) benefits for some Canadians. As described in a recent NIA report on the topic, *Get the Most from the Canada & Quebec Pension Plans by Delaying Benefits* (see MacDonald, 2020), Canadians are not required to begin receiving their CPP/QPP benefits as soon as they retire. Benefits can be taken as early as age 60 or as late as age 70, and the benefit amounts are adjusted according to the age of the individual when they start receiving their payments.

Indeed, delaying CPP/QPP benefits comes with a sizeable financial advantage:

- If CPP/QPP benefits start before age 65, then payments decrease by 0.6% each month (or 7.2% per year), up to a maximum reduction of 36% at age 60.
- If benefits start after age 65, then payments increase by 0.7% each month (or 8.4% per year), up to a maximum increase of 42% at age 70. (There is no additional advantage to starting benefits after age 70.)

As MacDonald (2020, p, 6) writes: “in addition to the conventionally reported statutory figures, average national wage growth affects the CPP/QPP benefit calculation in such a way that often increases the delay incentive and also heightens the penalty for taking benefits early. This key piece of information on the financial delay incentive structure is not featured in the official public-facing descriptions of the CPP/ QPP claiming mechanics. When delaying benefits, however, it often results in even greater financial advantages.”

Similarly, there can also be a benefit to delaying OAS benefits. In 2022, OAS benefit payments increased by 10% for older adults 75 years of age and above. OAS payments can be maximized by delaying the start of OAS benefits by up to five years after eligibility at 65 years of age (MacDonald & Chandler, 2022). Doing so the monthly payment increases 0.6 per cent for each month the pension is deferred-up to a maximum of 36 per cent more, if OAS is claimed at age 70. Delaying OAS benefits until 70 years of age may be beneficial for Canadians who have not lived in Canada long enough to receive partial or full OAS benefits (MacDonald & Chandler, 2022).



2. Improve access to workplace pension plan arrangements.

As discussed earlier, many Canadians do not have access to any type of workplace pension plan. Further, defined benefit plans that offer secure and stable income throughout one's retirement are less common in the private sector. There is, therefore, a need to improve access to workplace pension plans, particularly those that offer post-retirement income security.

As described in an NIA report, *Canadian Perspectives on the Financial Realities of Ageing in the Right Place* (2019), increasing workplace pension coverage would provide more Canadians with better opportunities to achieve income security in retirement by offering an additional and diversified source of retirement income (MacDonald, 2019a). It could also have the effect of limiting reliance on publicly-funded programs for older Canadians, relieving some of the inevitable burdens that provincial and territorial health and LTC systems will face as the proportion of older and mostly retired Canadians to working Canadians more than doubles between 2010 and 2060.

Conceptually, workplace pensions allow workers to defer income, as well as taxes on that income, to a later age or time when they are not working, such as retirement (MacDonald, 2019a). Although workplace pension plan benefits often come at the price of reduced take-home wages, they provide a more realistic and effective way to save for retirement than saving individually. Because they provide

automatic, locked-in savings, workplace pension programs allow Canadians to avoid the tendency to spend all of what they earn. Behavioural economic biases show that people become accustomed to a certain level of take-home pay and adjust their lifestyle accordingly (Beshears et al, 2020). But when an employer automatically deducts savings for a workplace pension plan, this helps establish a person's "normative benchmark" lifestyle and can lead them to adjust their spending habits accordingly. Having an employer consistently save on a worker's behalf is an effective option to help Canadians build financial savings for retirement while living within their means.

There are also compelling reasons for employers to support workers in saving for a more financially secure retirement. Supporting retirement readiness is valuable for an employer's reputation and can help attract and retain workers. Several surveys have demonstrated that Canadians are more willing to take a job with lower pay if there's a workplace pension plan being offered (Statistics Canada, 2020). Younger Canadians 18 to 24 years of age also appear to be willing to give up part of their annual income to contribute towards pension savings (Dobson, 2017).

3. Enhance income stability and security by facilitating pension plans that provide post-retirement income security, while also introducing and supporting more decumulation offerings for registered savings across the financial sector.

Defined benefit pension plans that provide long-term, stable sources of monthly income are a very strong vehicle for achieving secure finances throughout retirement. As outlined earlier in this report, it could be that income stability contributes to feeling economic secure, and therefore having less stress or anxiety about one's future financial circumstances and greater peace of mind (Watson, 2021; Akanni et al, 2022; Bania & Lette, 2022). Further to this, as described by MacDonald et al, (2021), "a rationed income (in the form of a monthly cheque) reduces the opportunity for unintentional conflicts of interest and helps ward off potential financial exploitation of [older] Canadians with accessible savings" (p. 17). Research also shows that collective, workplace pension plans provide a higher return on investment than individualized approaches or private savings opportunities to saving for retirement (HOOPP, NIA & Common Wealth, 2018). Retirees receiving a defined benefit pension have also been found to report high levels of overall life satisfaction and having access to a defined benefit pension may also play a role in employee retention amongst working members (CANCEA, 2021).

In the recent NIA report *Affordable Lifetime Pension Income for a Better Tomorrow: How we can address the \$1.5 trillion decumulation disconnect in the Canadian retirement income system with Dynamic Pension pools* (2021), MacDonald et al. explained that there is a gap in appropriate and available options that turn retirement savings into affordable monthly lifetime income, creating a problematic disconnect in the Canadians retirement income system. Further, there was widespread concern that this would lead to a growing number of older Canadians having inadequate, insecure income in later life. Due to this concern, in 2018, the NIA leveraged its earlier research (MacDonald, 2018) to bring together a coalition of retirement financial security stakeholder organizations across Canada. The coalition asked the Federal government to change tax and pension legislation to allow a third retirement savings decumulation option that would enhance retirement income security for Canada's growing ageing population^{iv}. The coalition's efforts were a success: in Budget 2019, the government announced its approval for the creation of Advanced Life Deferred Annuities (ALDAs) starting at age 85 and Variable Life Payment Annuities (VLPAs) – which were later renamed Dynamic Pension Pools (or DP pools).

Following this, consultations with the Department of Finance took place, and in 2021, related amendments to the Income Tax Act were passed with Budget 2021. Following this successful legislative change, the NIA continued its work, leading a team of researchers and collaborators to investigate the adoption

of the proposed legislated changes. In 2021, the NIA released a report with the Global Risk Institute: *Affordable Lifetime Pension Income for a Better Tomorrow: How We Can Address the \$1.5-trillion Decumulation Disconnect in the Canadian Retirement Income System with Dynamic Pension Pools*. In this report, MacDonald et al (2021) outlined the key features needed for the successful implementation of this novel financial retirement vehicle. DP pools have the potential to change the Canadian retirement income system and bring millions of older Canadians improved income security.

As described by MacDonald et al (2021, p. 5): “a DP pool is an efficient financial decumulation vehicle with a simple but profound goal: to help people optimize their expected lifetime retirement income while ensuring they never run out of money. DP pools operate on a risk-sharing principle. While protecting a single individual from outliving their savings is often prohibitively expensive, the same protection becomes affordable when spread across a large group. In a DP pool, any funds left over when a member dies remain in the pool, so those who die earlier than average subsidize those who die later. This gives retirees the freedom of not holding on to savings to cover the possibility of living beyond their life expectancy, providing a substantial boost to their lifetime retirement payments and ability to more freely spend what they receive in income each year.”

4. Improve options to leverage home equity as retirement income sources.

The NIA report *Canadian Perspectives on the Financial Realities of Ageing in the Right Place* outlines the need for improving options that allow Canadians to turn their assets into stable and secure sources of income (Iciaszczyk et al, 2021). For some Canadians, their primary residence is their most important asset and it forms a substantial basis of personal net worth. Retiring Canadian homeowners can use home equity to generate income savings and enjoy a comfortable retirement. This could be achieved by utilizing any of the following options, which are available to Canadians, however may continue to be underutilized by Canadians:

- A Home-Equity Line of Credit (HELOC): Secured against the value of one’s home equity, taking out a HELOC can provide flexibility and tax-free retirement income, where funds can be borrowed and repaid without penalties, up to a maximum credit limit (Government of Canada, 2021a). The credit limit for HELOCs in Canada can go up to 65% of a home’s purchase price or market value (Government of Canada, 2021b). The drawbacks of HELOCs, however, is that borrowers in or approaching retirement have a hard time qualifying for them, primarily because qualifying requires proof of steady income and banks are unlikely to lend money to those who are no longer working or retiring soon.

- A Reverse Mortgage: A reverse mortgage allows Canadian homeowners aged 55 and older to take out a loan against the equity in their home. Homeowners can borrow up to 55% of the current value of their home and do not have to repay the loan during their lifetime as long as they live in the home and have not sold it (FCAC, 2021). A reverse mortgage can help older Canadians fund their retirement by increasing the amount of money they have directly available, without having to make regular payments on the loan.

With repayments only required when the homeowner sells, moves or dies, reverse mortgages can provide retiring Canadians with a reliable way to sustain their living standards and cover expenses associated with declining health. This option therefore provides access to home equity without having to sell the home.

- Viagers: The NIA is currently exploring the potential for promoting the popular French concept of viagers to help more Canadians age in the right place. Viagers or “selling a home via viager” refers to a popular form of a real estate transaction in France in which a buyer purchases a home from an ageing resident but does not take up occupancy in the home that they purchased until the seller dies. Before home occupancy, the buyer provides the seller with a lump sum payment, which is similar to a down payment and followed by a series of cash payments, the amount and frequency of which are decided based on actuarial calculations and serve as a life annuity (Investing Answers, 2023). Viagers present the opportunity for older Canadians to age in place with an additional source of lifetime income while simultaneously providing another point of entry for buyers into the housing market.



5. Protect older Canadians from major out-of-pocket costs – particularly those associated with needing long-term care services.

A long-term care insurance (LTCI) program at the national level could be a potential means of financing one of the largest out-of-pocket costs older Canadians currently face (Fell et al, 2023). The implementation of a public LTCI program, in which Canadians could contribute to a pooled fund dedicated to covering potential future LTC costs, could alleviate the financial burdens of ageing facing many older adults and increasingly strained public LTC systems. As described in the NIA report, *Canadian Perspectives on the Financial Realities of Ageing in the Right Place* (2019, p. 18-19), successful examples of public LTCI programs have been implemented in the Netherlands (1968), Germany (1996), Japan (2000), South Korea (2008) and Taiwan (2015). In 2019, Washington State approved a LTCI program, which will begin providing benefits to eligible recipients in 2025. All six examples finance their public LTCI programs through a mix of payroll contributions, taxation and co-payments determined by an individual's care needs and ability to pay. LTCI programs in the Netherlands, Germany, Japan, and South Korea have been particularly successful in providing financial protection against LTC costs, while also providing older adults with the autonomy to choose the type of care they prefer.

The Canadian context, however, poses some challenges to implementing a universal LTCI program in its purest form that would require thoughtful consideration and co-operation between federal, provincial and territorial governments, as well as the broader private and public sectors. As a federated nation, Canada lacks the ability to impose such a program centrally. Another challenge to overcome is the issue of intergenerational equity. Any universal long-term care insurance system would need to account for the current needs of an ageing population, without unduly burdening younger generations. Just as was seen by the recent enhancements to CPP/QPP, a new program like this would need to be funded – that is, without legacy expenses. As such, a long-term care insurance program does require long lead times and, if it were to begin now, would do very little to help the Baby Boomer generation. These, and other considerations, would pose a challenge to the implementation of universal LTCI program in Canada. Nevertheless, given the realities of our growing ageing population, and increasingly strained publicly-funded systems, it's an option that requires further consideration for future generations.

6. Evaluate and consider additional measures to support lower income Canadians.

Introduce Workplace Tax-Free Pension Plans

Currently, a majority of lower-income Canadians neither have access to workplace pensions plans nor do they save sufficiently on their own for retirement (Shillington, 2016). As recommended in NIA's 2019 report *Filling the Cracks in Pension Coverage: Introducing Workplace Tax-Free Pension Plans* (MacDonald, 2019a, p. 45): "the Government of Canada should explore options to enable a new class of workplace pension plans that are a mirror image of current workplace pension plans with one critical difference – that they target lower-income Canadian workers in particular. Rather than operating in a "registered savings" environment, this new class of pension plan would operate in a "tax-free" savings environment (after-tax contributions and pensions that do not count as income). The availability of this type of option would be especially beneficial in helping to ensure that lower income Canadians currently without pension options have better means of saving for their own retirement."

MacDonald goes on to say: "Outside of public pension programs, workplace pension plans are considered the most effective vehicle to save for retirement due to features like automatic savings, employer contributions, substantial fee reductions via economies of scale, potentially higher risk-adjusted investment returns, and possible pooling of longevity and other risks. However, the dynamics

of income taxes and government social benefits for older Canadians can lead to financial incentives that are both unclear and inconsistent for all Canadians. Conceptually, workplace plans allow workers to defer income – and taxes on that income – to a time when they are not working (i.e., retirement). But these tax deferrals are generally much more valuable to higher earners. Canadians with lower annual income also pay an effective tax rate of 50% or more on each dollar of pension income they receive, due to the income testing underlying the eligibility calculation for public pension benefits for older Canadians like the Guaranteed Income Supplement (GIS). When these factors are combined, modest-income Canadians can face financial penalties, rather than incentives, within the current registered pension plan system. TFPPs are an option to offer workplace pension plans that remove the current disincentives for lower and middle-income working Canadians. Workplace TFPPs would operate in a "tax-free" environment like TFSAs. Contributions to TFPPs would be made using after-tax dollars and, therefore, would not receive a tax deduction. Once the money is in the plan, however, it would grow free of investment income tax, and withdrawals would not be taxed or added to taxable income. Since it wouldn't count as income, pension income from TFPPs would not be considered when determining eligibility for federal or provincial income-tested benefits, credits and subsidies" (2019, p. 5-6). See MacDonald (2019) for further details on the advantages of being in the proposed TFPP over the existing options of saving in TFSAs - either individually or as part of a group.

Consider additional measures to support financially vulnerable Canadians

While we have outlined several promising areas for many Canadians to improve their financial circumstances as they age, there remains a need to further explore policies that support lower income Canadians, particularly those who face cumulative sources of financial disadvantage over their life courses. For instance, Canadians who are not in the workforce due to poor health or other circumstances, such as being an unpaid caregiver, may be unable to contribute to the CPP/QPP, a workplace pension plan, their TFSA or RRSP. During their working years, lower income Canadians may also be more limited in their ability to save money in a TFSA, an RRSP, or own a home or have other assets that can be used to ensure income security and adequacy as they age.

How to best support financially vulnerable Canadians throughout their life remains a pressing issue, and thus, it is important to acknowledge that there is currently work underway to address some of the challenges older Canadians are currently facing in ageing at home. On October 6, 2022, the Canada's Ministers of Seniors and Health announced the establishment of an expert panel to provide recommendations for establishing a new Ageing at Home Benefit that includes the NIA's Director of Health Policy Research, Dr. Samir Sinha (Employment and Social Development Canada, 2022).

Conclusion

This report provides an in-depth overview of the relationship between having an adequate, stable and secure income and physical and mental health and wellbeing. Its in-depth review of the literature could not identify any Canadian studies that have examined income stability and health among older Canadians, while only limited research on this topic has been conducted outside of Canada. Further, there are also key gaps in the literature that examines the impact of economic insecurity and the health and wellbeing of older Canadians and research that examines differences in health outcomes by gender. Thus, our understanding of how economic resources are related to the health and wellbeing of older Canadians remains incomplete. Nevertheless, this report still identified that there are a multitude of complex factors that may influence health and wellbeing in later life, including a person's health status and access to economic resources throughout their lives and the impact of the decision to retire. Furthermore, the findings from the 2022 *NIA Ageing in Canada Survey* further support the premise that those who have higher levels of perceived income adequacy also report better physical and mental health and more confidence in their ability to age in the *right place*.

Acknowledging that a myriad of factors can impact the health and wellbeing of older adults, it is likely the case that sufficient economic resources are needed to enable ageing in the *right place*. Indeed, Canadians will need varying levels of

supports and services to age well in the setting that is right for them. Viewed through the NIA's lens of ageing in the *right place*, it may be challenging for some Canadians with income insecurity or instability to prepare and respond to unexpected costs as they age, such as needing to make home modifications or repairs to remain in their home or suddenly requiring medical or LTC expenses that are not covered or only partially covered.

As Canada's public pension systems were not designed to act as a full replacement source of income for workers, Canadians are expected to make up their remaining income needs through personal savings or workplace pensions. Not only are some Canadians not saving enough for their retirement, many working-age individuals do not have access to workplace pension plans that offer stable and reliable forms of retirement income. Thus, to support Canadians in having adequate, stable and secure incomes as they age, this report includes six policy recommendations that could help Canada better address this issue. These strategies promote improved financial literacy and planning amongst Canadians, advocate for creating retirement income systems that provide stable and secure incomes in retirement and stress the importance of continuing to evaluate the impact of retirement income streams that impact Canadians with lower incomes. Doing so will help ensure that Canadians are able to have financial independence and choice to ultimately enable ageing in the *right place*.

Appendix A. Overview of the Structure of Canada's Retirement Income System (RIS)

(Adapted from Ambachtsheer and Nicin (2019) in MacDonald, B.J., (2020). Get the Most from the Canada & Quebec Pension Plans by Delaying Benefits: The Substantial (and Unrecognized) Value of Waiting to Claim CPP/QPP Benefits. National Institute on Ageing, Ryerson University)

Canada's RIS structure roughly fits the World Bank's 3-pillar model of government programs, employment-based retirement and pension plans and personal retirement savings.

Pillar 1: Public Programs and Plans Administered by the Government:

Old Age Security: The universal OAS program began in 1952 (Canadian Museum of History, n.d.) to provide an inflation-indexed base pension. In 2023, the monthly benefit commencing at age 65 for an individual who resided in Canada for 40 years after age 18 and before benefits commenced is approximately \$691.00 per month for individuals aged 65 to 74 and \$760.10 for individuals 75 and above (Government of Canada, 2023c). At the high end of the income spectrum, the OAS pension is gradually clawed back starting at about C\$79,000 income level and reaching 100% claw back at about \$129,000 (or more when the benefit is increased for postponed commencement and less when the benefit is reduced due to shorter residency). The OAS program is funded out of general tax revenue, meaning that Canadians do not pay into it directly.

Guaranteed Income Supplement: GIS came into effect in 1967 (Canadian Museum of History, n.d.). The GIS provides supplementary monthly income to OAS recipients who reside in Canada and have low income (SDC, 2020a). In 2023, the GIS provides a single senior a maximum monthly benefit of \$1,032.10 if your yearly income is less than \$20,952 (Government of Canada, 2023d). Amounts vary based on income levels and marital status. Canadians with a spouse/common-law partner who receives a full OAS pension can receive a maximum of \$621.25.

Canada/Quebec Pension Plans: The Canada Pension Plan came into effect on January 1, 1966 (Canadian Museum of History, n.d.). The CPP/ QPP provide nearly all working Canadians a partial earnings replacement upon retirements as early as age 60. They are workplace-based pension arrangements requiring compulsory participation via contributions paid by employers and working Canadians. The original target income replacement rate was 25% of average earnings up to a maximum earnings level (about \$59,000 today). Originally a pay-go system, it was moved to a partially pre-funded target benefit basis in the 1990s, permitting a stabilized contribution rate of 9.9% of pay, split 50-50 between employers and employees (FCAC, 2020).

In 2016, recognizing that the majority of private sector workers were not members of employer-sponsored pension plans, Canada's federal and provincial governments agreed to increase the target CPP/QPP benefit to 33.33% of average earnings, and to increase the ceiling on maximum earnings covered by 14%. By 2023, total employer/employee contributions will increase to 11.9%, split 50-50 between employers and employees. These enhancements are to be fully prefunded with the additional contributions required phased in over a number of years, starting in 2019. The full increase in CPP/QPP will be achieved by 2065 (SDC, 2019). Overall, the enhancements will on average increase CPP/QPP benefits by 44 per cent across Canadian seniors (MacDonald, 2019b).

Pillar 2: Collective Workplace-based Program including Registered Pension Plans (RPPs), Group Registered Retirement Savings Plans (GRRSPs), and Deferred Profit-Sharing Plans (DPSPs).

RPPs: Registered pension plans are established by employers or unions registered under federal or provincial regulators in accordance with their Pension Benefits Acts (FSCO, 2017). The two main types of employer-established plans are defined benefit (DB) and defined contribution (DC). In a DB plan, ultimate retirement benefits are defined by a formula that typically includes years of service, earnings, etc. Benefits within a DC plan, by contrast, are defined by the amount of contributions that are made and the investment returns that are generated over time.

Group RRSPs/DPSPs: Employers also play a role in creating retirement savings arrangement for their workers. Two main types are Group RRSPs and Deferred Profit-Sharing Plans (DPSPs). Group RRSPs are similar to individual RRSPs but administered by an employer for a group of employees (FSCO, 2017). Employers select a financial services provider to manage the group RRSP, and may also match employee contributions into their RRSPs up to some maximum amount. DPSPs are arrangements that allow employees to share in employer profits. Approximately 1.6 million workers are members of these group arrangements (OSFI, 2017).



The contributions can be used to reduce income tax and the annual limit as of 2022 was \$29,210 (Government of Canada, 2023e).

Pillar 3: Personal Retirement Savings Vehicles, including RRSPs and Tax-Free Savings Accounts (TFSAs).

Individual RRSPs/TFSAs: Canadians can also save for retirement on their own through RRSPs or TFSAs. RRSPs are personal retirement savings accounts offered by financial institutions and facilitated by the Income Tax Act (FSCO, 2017). Contributions to RRSPs are tax deferrable until withdrawal. They must be converted into Registered Retirement Income Funds (RRIFs) by age 71. RRIF holders must withdraw at least a mandated minimum annual amount from their account as taxable pension income (ibid). TFSAs are also personal savings accounts, but rather than allow tax on contributions to be deferred until withdrawal, contributions and investment returns are permitted to accumulate tax-free. Both accounts have annual and lifetime contribution limits. About 14 million Canadians had TFSAs as of the 2017 contribution year (CRA, 2017), 8.1 million contributed to their TFSA in that year, and 1.4 million maxed out their \$5,500 contribution limit for 2017 (ibid). For the same year, 5.9 million Canadians contributed to their RRSP accounts. Median RRSP contributions for that same year were \$3,000 (Statistics Canada, 2020b).

Appendix B. The 2022 NIA Ageing in Canada Survey

About the Survey

The annual NIA Ageing in Canada Survey was designed to track how older Canadians feel about key ageing-related issues, and how that changes each year over a 10-year period. This will make it possible to pinpoint trends and patterns — for example, at which ages a given issue becomes more significant for older Canadians. Moreover, the survey will provide a consistent measurement of annual progress on key metrics to track Canada’s performance on healthy ageing. It will also help to advance ageing-related research by providing high-quality evidence that Canadians, researchers, governments, media and other stakeholders can use to identify growing strengths and evolving gaps on ageing-related issues.

To develop the survey, the NIA, in partnership with the Environics Institute, canvassed more than 30 existing surveys and hundreds of survey questions focused on ageing from a variety of educational institutes, organizations, research centres and market research firms spanning the Canadian, American and international contexts to identify key ageing-related indicators and corresponding survey questions. Many of the questions in the NIA’s survey were intentionally aligned with or reproductions of existing survey questions used in the Canadian context to support comparability of findings. However, the NIA and Environics Institute also adjusted the language or developed

novel questions in cases where it was determined that a different question would be better suited to measure the corresponding indicator.

The focus population for the survey was older Canadians living in the community, rather than in institutional long-term care settings. This population was chosen to gain insights into how we can best support older adults to age in their homes and communities for as long as possible. The survey, comprised of 62 questions and lasting 20 to 25 minutes, was administered online with a representative sample of community-dwelling Canadians aged 50 and older living in Canada’s 10 provinces, using standard survey industry recruitment and confidentiality protocols. The survey sample was designed to provide meaningful categories, with robust representation by five-year increments for age cohorts across this population. This was done to ensure it would yield a sample that would generate meaningful results and findings. The sample was weighted by gender, region and education to ensure it was representative of Canada’s community-dwelling population aged 50 years and older. Further details on the survey methodology, including a profile of the sample, can be found in the Appendix of this report.

The NIA’s survey was not able to capture community-dwelling older Canadians living in Canada’s three northern territories because it could not reach

a sufficient number of them through Canadian online survey platforms. The survey is also not representative of Canadians living in institutional settings such as long-term care homes, a key segment of Canada's older population. However, given our large sample of community-dwelling older adults and our focus on improving conditions for these older Canadians to keep ageing in their own homes and communities, this survey provides highly reliable and useful insights into how we can better support Canada's ageing population.

Survey Methodology

The 2022 NIA Ageing in Canada Study is based on a survey conducted online with a representative sample of 5,885 Canadians ages 50 and older between July 5 and August 7, 2022, across the 10 provinces. The survey fieldwork was conducted by Environics Research (under subcontract), which utilized several commercially available online panels to draw the sample.^{vi} Respondents were able to complete the survey in either English or French.

Questionnaire

The questionnaire for this survey was developed by the National Institute on Ageing and the Environics Institute. It comprised a total of 62 questions and included both existing measures drawn from the literature and new questions. A copy of the questionnaire is available from the NIA upon request.

Final Sample

The survey sample was stratified to include a significant subsample of respondents in each five-year age cohort for purpose of analysis. Quotas were also established to ensure sufficient representation by region, community size, educational attainment and gender. The final data were weighted so the national results would be proportionate to the country's population (based on the 2021 Census). A profile of the sample composition is provided in the table below, including both the unweighted and weighted distribution across core demographics and how they compare with the national population.



Table: Survey sample profile*

Group	# Respondents #	Unweighted %	Weighted %	2021 Census*** %
Age				
50 – 54	900	15	16	16
55 – 59	900	15	18	18
60 – 64	900	15	18	18
65 – 69	900	15	15	15
70 – 74	903	15	13	13
75 – 79	900	15	9	9
80+	482	8	12	12
Gender**				
Female	3,000	51	52	52
Male	2,867	49	48	48
Region				
B.C	771	13	14	14
Alberta	616	10	10	10
Sask/Man	503	9	6	6
Ontario	2,143	36	38	38
Quebec	1,381	23	24	24
Atlantic	471	8	8	8
Education				
HS or less	2,020	34	50	50
Trades/Colleges	2,276	39	30	30
University	1,579	27	30	30
Total	5,885	100	100	100

* Categories may not add up to 100% because of rounding

** A small number of respondents identified another gender

*** Based on the 2021 Census

Key Measures from the 2022 NIA Ageing in Canada Survey

Self-Reported Physical Health:

Q.36 – In general, would you say your health is excellent, very good, good, fair or poor?

- Excellent
- Very good
- Good
- Fair
- Poor
- Cannot say

Self-Reported Physical Health:

Q.39 – In general, would you say your mental health is:

- Excellent
- Very good
- Good
- Fair
- Poor
- Cannot say

Perceived Income Adequacy:

Q.45 – Which of the following best describes your total household income at the present time:

- Good enough for you and you can save from it
- Just enough for you, so that you do not have major problems
- Not enough for you and you are stretched
- Not enough for you and you are having a hard time
- Cannot say

Access to Financial Resources in an Emergency:

Q.46 – Do you have, or have access to, the financial resources you might need if faced with an unexpected event or loss, such as widowhood, a major disability, or the loss of your home through fire or natural disaster?

- Definitely yes
- Probably yes
- Probably no
- Definitely no
- Cannot say

Glossary

Home and Community Care: care that is provided in home-based settings rather than in a hospital or nursing home and which allows individuals to remain independent in the community (Government of Canada, 2016a). This type of care can be provided by regulated health care providers (i.e. nurses, therapists), but also by non-regulated care providers such as personal support workers (PSWs) also known as health, continuing or simply 'care aides' (H-/C-/CAs) or nursing aides, volunteers and unpaid caregivers (i.e. friends, family, and neighbours) (Government of Canada, 2016a).

Long-Term Care Homes (Nursing Homes): designated building-based place for individuals to live and receive 24/7 supervised care but also a range of professional health and personal care services and supports with activities such as the provision of meals, laundry, and housekeeping. As this type of care is not insured under the CHA, each province and territory develops their own legislation and accompanying policies and regulations to govern the provision of nursing home care in their jurisdiction (Government of Canada, 2004).

Long-Term Care: The NIA defines long-term care as: A range of preventive and responsive care and supports, primarily for older adults, that may include assistance with Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) provided by either not-for-profit and for-profit providers, or unpaid caregivers in settings that are not location-specific and thus include designated buildings or in-home and community-based settings.

Unpaid Caregiver: "the people – family, friends, neighbours – who provide critical and ongoing personal, social, psychological and physical support, assistance and care, without pay, for loved ones in need of support due to frailty, illness, degenerative disease, physical/cognitive/mental disability or end-of-life circumstances" (The Change Foundation, 2016).

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Endnotes

ⁱ Canada's official poverty line is measured by the Market Basket Measure, which considers a family "to be in poverty, if given its size and region of residence, it does not have enough income to buy a set of goods and services considered to represent a modest, basic standard of living" (Statistics Canada, 2022c).

ⁱⁱ An economic family "refers to a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law union, adoption or a foster relationship" (Statistics Canada, 2022c).

ⁱⁱⁱ There are other measures that examine poverty in Canada, such as the low income measure, which measures low income relative to a Canada-wide median (Statistics Canada, 2022d).

^{iv} <https://www.cia-ica.ca/docs/default-source/2018/218120e.pdf?sfvrsn=0>

^v The territories were not included in the target population for this survey because their populations are too small to support coverage in the panel samples commercially available for this type of online research. The three territories combined represent 0.3 percent of the Canadian population.

^{vi} The primary sample was provided by Asking Canadians, supplemented with contributions from Canadian Viewpoint, MARU and Leger. Multiple sources were used to ensure that all quotas in the sample for age, region, gender and education could be filled.

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