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# HOW A GUARANTEED ANNUAL INCOME COULD PUT FOOD BANKS OUT OF BUSINESS

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#### **SUMMARY**

The federal Conservative government recently began phasing in a plan to raise the age of eligibility for Old Age Security from 65 to 67. But a more sensible move for improving the effectiveness of Canada's social safety-net system may be to actually lower the age below 65 and rely strictly on an income test instead, regardless of age. The government could go a lot further toward the reduction of poverty in Canada by building on the success of its income supports for seniors, and making them available to poor Canadians of all ages.

Canada can boast of having one of the lowest rates for poverty among seniors in the world, largely due to its guaranteed income programs for those 65 years and older. When low-income Canadians turn 65 years old and leave behind low-paying, often unstable jobs, their poverty levels drop substantially. What a guaranteed income provides, that their vulnerable job situation did not, is a form of protection against budget shocks — a sudden volatility in income or expenses without the access to savings or credit to smooth things out until stability returns. A guaranteed income provides a kind of "disaster insurance" that can protect someone in a crisis situation from going without necessities such as food or even shelter. Statistics show that the rate of Canadians experiencing "food insecurity" — that is, lack of access to food because of financial constraints — is half that among Canadians aged 65 to 69 years than it is among those aged 60 to 64. Self-reported rates of physical and mental health improve markedly as well after low-income Canadians move from low-wage, insecure employment to a guaranteed income at the age of 65.

That dramatic shift in physical and mental health indicates that expanding guaranteed income programs to younger Canadians is more than a simple cost calculation: there are potential savings to be found as poorer Canadians, given a guaranteed income, become healthier and therefore reduce the burden on the public health-care system. Canadian governments already spend billions of dollars on the downstream effects of poverty, but scant emphasis is put on programs targeting poverty's roots.

There is no evidence, where smaller-scale experiments have been tried, to show that a guaranteed income program creates a serious problem with negative incentives and discourages people from working who otherwise might. But because this is a common worry with working-age guaranteed income eligibility, phasing in the program gradually, by lowering eligibility a few years at a time, will allow ongoing investigation and analysis of the effects, before the program is rolled out on a large scale. The tremendous impact that guaranteed incomes have had on reducing poverty and improving health among seniors is something for which Canadians can be rightly proud. So much so that it is incumbent upon us to investigate whether Canada could use the same policy tools to drastically reduce poverty and improve health among Canadians of all ages.

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#### INTRODUCTION

A remarkable policy achievement of Canadian governments has been the dramatic reduction in poverty rates of Canadians 65 and older through the creation of an income floor, or guaranteed annual income (GAI), delivered through Canada's public pension system.<sup>1</sup> The system consists of the Old Age Security (OAS) program, which is a universal demogrant, the income-tested Guaranteed Income Supplement (GIS), and the contributory Canada Pension Plan (CPP).<sup>2</sup> Mintz and Wilson<sup>3</sup> specifically note that with only 5.9 per cent of older Canadians living below the poverty line, Canada has one of the lowest rates of elder poverty in the world.

Conservative senator Hugh Segal has asked why Canadians have not taken the lesson from the success of the GIS and applied it, as an automatic tax-based top up for income, to reduce poverty rates among Canadians more broadly. For Canadians under the age of 65, we continue to rely on a patchwork of programs and approaches for addressing poverty, including provincial social assistance/welfare and employment supports, and various training programs intended to encourage more Canadians to earn more through the labour market. In cases of emergency, our most impoverished citizens are reliant on temporary relief from community programs and charity, as exemplified by food banks and homeless shelters. As Segal has pointed out, despite governments spending billions of dollars on the downstream effects of poverty — such as working with school dropouts, young people in trouble with the law or those who need safe houses in situations of family violence — not addressing the root causes of poverty or insufficient income has resulted in the inevitable persistence of poverty for Canadians under the age of 65.

In this paper we investigate the potential implications for non-elderly poverty in Canada by estimating the impacts of the guaranteed annual income floor, provided to Canadians 65 and over through federal public pension plans, on household food insecurity prevalence and self-reported health and mental health. To make our case, we do not rely on income-based measures of poverty, such as Statistics Canada's Low Income Cut-Off, but instead use a consumption-based indicator of material deprivation: household food insecurity (lack of access to adequate

<sup>&</sup>lt;sup>1</sup> Ken Battle, "Rethinking Income Support: A Guaranteed Annual Income" (Caledon Institute of Social Policy, Library of Parliament Seminar Series: 2008).

Most recently, the federal government introduced changes to the age of eligibility from 65 to 67 for its public pensions, Old Age Security (OAS) and Guaranteed Income Supplement (GIS), and only recently has the potential adverse impact on poverty rates of seniors been discussed. Herbert J.C. Emery, Valerie C. Fleisch and Lynn McIntyre, "Legislated Changes to Federal Pension Income in Canada Will Adversely Affect Low Income Seniors' Health," *Preventive Medicine* 57, 6, (2013): 963-966; Jack M. Mintz, and Thomas A. Wilson, "Reform Proposals for Replenishing Retirement Savings," *SPP Research Papers* 6, 9 (2013): 7-8. Mintz and Wilson propose de-coupling the age of eligibility for OAS and GIS so that low-income Canadians can continue to receive GIS from age 65.

Mintz and Wilson, "Reform Proposals."

<sup>&</sup>lt;sup>4</sup> Hugh Segal, "Guaranteed Annual Income: Why Milton Friedman and Bob Stanfield Were Right," Policy Options, (April 2008), http://intraspec.ca/segal.pdf; Hugh Segal, "Scrapping Welfare. The Case for Guaranteeing All Canadians an Income above the Poverty Line," *Literary Review of Canada* (December 2012), http://reviewcanada.ca/essays/2012/12/01/scrapping-welfare/.

food because of financial constraints). Using an outcome measure reflecting material deprivation, such as household food insecurity, provides an opportunity to study poverty from a different perspective.<sup>5</sup>

Using data from the 2009–2010 Canadian Community Health Survey, we show that food insecurity prevalence rates for not married persons with less than \$20,000 in annual income fall by half between the ages of 60–64 and 65–69 years. We show that this is largely the result of a shift in income source for these Canadians, from employment and various incomeassistance programs, to federal public pensions. In other words, the introduction of a GAI at age 65 that provides consumption insurance reduces food insecurity risk. We then demonstrate coincident improvements in self-reported health and mental health status that are associated with sizeable reductions in health-care utilization that would imply offsetting reductions in provincial health spending that arise from federal spending on pensions.<sup>6</sup>

Based on our analysis, we propose that extending eligibility for an income floor along the terms of federal public pension benefits, particularly the income-tested GIS, to Canadians under the age of 65 would be an effective policy change for addressing poverty. Ostensibly, we are proposing to establish an income floor for Canadians through a guaranteed annual income by defining OAS/GIS-benefit eligibility solely on an income test rather than the current combined age and income test. Critics of this policy direction have highlighted the high potential costs of a guaranteed annual income largely based on concerns of labour-supply disincentive effects. While an earlier literature, investigating the broader social and economic impacts of negative income taxes and guaranteed annual incomes, does not support this concern, concerns over labour-supply disincentives could be addressed by phasing in the eligibility for OAS/GIS for younger ages along the lines recently introduced by the federal Conservative government aimed at raising the age of OAS eligibility from 65 to 67.8 Further, as we explain below, the GAI is addressing market failures, so efficiency gains arising from the program would be expected to reduce the net costs of the scheme through reduced provincial health-care spending, increased investment in schooling, and reduced food bank and homeless shelter use. As Glen Hodgson of the Conference Board of Canada has pointed out, "a GAI might produce sizable net fiscal savings, especially for provinces."9

There has been significant debate about the advantages of using consumption expenditures as opposed to income measures to study poverty. See: Bruce D. Meyer and James X. Sullivan, "Measuring the Well-Being of the Poor Using Income and Consumption," *Journal of Human Resources* 38 (2003): 1180-220; Bruce D. Meyer and James X. Sullivan, "Viewpoint: Further Results on Measuring the Well-Being of the Poor Using Income and Consumption," *Canadian Journal of Economics* 44, 1 (2011): 52-87; Matthew Brzozowski and Thomas F. Crossley, "Viewpoint: Measuring the Well-Being of the Poor with Income or Consumption: A Canadian Perspective," *Canadian Journal of Economics* 44, 1 (2011): 88-106. Current income may not properly measure households consumption, particularly for low-income households, as it includes transitory changes in income that might not necessarily impact the household's living standards due to their buffering capability through access to credit, savings, assets, family support etc.; none of which are reflected in an income measure. While expenditure data give a better indication of the material level of consumption of the household than do income, expenditure levels, like current incomes, they are not readily interpretable in terms of poverty or deprivation/privation other than in the sense that lower is worse than higher. Defining "poverty lines" to evaluate income or expenditure levels does not fully solve this problem.

Lori J. Curtis and William J. MacMinn, "Health Care Utilization in Canada: Twenty-five Years of Evidence," Canadian Public Policy 34, 1 (2008): 65-88; Evelyn Forget, "The Town with No Poverty: The Health Effects of a Canadian Guaranteed Annual Income Field Experiment," Canadian Public Policy 37, 3 (2011): 283-305.

Kevin Milligan, "Should Canada Have a Guaranteed Annual Income?" The Globe and Mail, October 20, 2010.

<sup>8</sup> See pages 23-36 for an extensive discussion of the literature on labour-market disincentives.

Glen Hodgson, "A Big Idea Whose Time Has Yet to Arrive: A Guaranteed Annual Income" (Ottawa: Conference Board of Canada, 2011), http://www.conferenceboard.ca/economics/hot\_eco\_topics/default/11-12-15/a\_big\_idea\_whose\_time\_has\_yet\_to\_arrive\_a\_guaranteed\_annual\_income.aspx.

#### Why a guaranteed annual income addresses poverty

There is a tendency to think of poverty solely in terms of an income level: Is a household's usual income sufficient to purchase what it needs? Chronic poverty or its material manifestations, such as chronic homelessness or chronic household food insecurity, would be a result of households persistently having insufficient money to pay for basic shelter or food. While this may describe some of the poor in Canada, there are many other poor households in Canada where household food insecurity or homelessness are dynamic, transitory situations. Focusing on poverty as a problem of insufficient *income level* leads to beliefs that addressing poverty through the alleviation of its symptoms is justified solely on distributive grounds — i.e., it is the right thing to do to help those in need. <sup>10</sup> What is often not well understood is the efficiency case for addressing the root causes of poverty, and that poverty itself is a symptom of market failure.

Symptoms of poverty, such as homelessness or household food insecurity, in this context, are not solely the product of an inadequate income level, but instead a lack of consumption insurance to address budget shocks — unexpected decreases in income or purchasing power of income. The ability to buffer against budget shocks, to maintain consumption levels when the budget is unexpectedly constrained, is a product of a surplus in the budget or the adjustable discretionary expenditure, and access to credit or assets.

Most households in Canada that are considered poor do not have the capacity to smooth consumption through saving or borrowing or deferring purchases of non-essential goods when household expenses are unexpectedly high or household income is unexpectedly low; indeed, they regularly tend to consume their full current income. On average, lower-income households with less ability to adjust to budget shocks due to a lack of budget surplus or access to assets or credit need smaller shocks to push them over the threshold for food insecurity than do higher-income households; all things being equal, it takes bigger shocks to harm higher income. As small shocks likely occur with greater frequency than large shocks, the prevalence/risk of food insecurity is higher when incomes are lower.

For example, see the discussion in Margot Young and James P. Mulvale, "Possibilities and Prospects: The Debate Over a Guaranteed Income" (Ottawa: Canadian Centre for Policy Alternatives, 2009), http://www.policyalternatives.ca/sites/default/files/uploads/publications/reports/docs/CCPA\_Guaranteed\_Income\_Nov\_2009.pdf.

Leete and Bania find that liquidity-constrained households have an increased probability of food insecurity from negative income shocks but do not have a decreased probability of food insecurity from positive income shocks (Laura Leete and Neil Bania, "The Effect of Income Shocks on Food Insufficiency," *Review of Economics of the Household* 8, 4 (2010): 505-526). Their model of a utility-maximizing household shows that this pattern is consistent with negative transitory income changes that leave households with insufficient income to afford their planned consumption, while positive transitory income shocks have no influence on the households' choices since their consumption plan is based on permanent income. This asymmetry of the effects of positive and negative changes on household food insecurity indicates the potential positive effects of policies that buffer households against transitory income shocks.

If we think about the problems of poverty from this perspective of consumption insurance, Canada's reliance on food banks, homeless shelters and occasional relief through government and charity to address periodic, transitory budget shocks amounts to "disaster insurance" — support for infrequent, large negative events that are not expected to repeat. When the purchasing power of low-income households falls, or income variability in such households increases, the number of negative events requiring intervention rises. In such circumstances, disaster insurance can do nothing to prevent the problem from recurring. Further, as health is adversely affected by homelessness and household food insecurity, <sup>12</sup> falling into those states may increase the likelihood of suffering a further negative event if income or its purchasing power is affected by poorer health.

In contrast, consumption insurance as provided through a GAI provides liquidity-constrained households with the capacity to smooth consumption in the face of relatively small but frequent shocks. This reduces the role for reactive interventions, such as food banks or homeless shelters, to that of dealing with the consequences of large but infrequent shocks. Forget points out, in her examination of the Manitoba Basic Annual Income Experiment — or Mincome, which ran from 1975–1978 — that a guaranteed annual income is really about providing households with consumption insurance that is not available to them through private means and markets. To the extent that being housed and food secure leads to better health outcomes, the GAI may further reduce the likelihood of bad outcomes through the improvements of income and its purchasing power. By correcting the market failure of the missing consumption insurance market for liquidity-constrained households, the GAI is an efficiency-enhancing intervention that can reduce the effective insufficiency of income as a root cause of poverty.

Household food insecurity and homelessness are linked to a wide range of adverse consequences for physical and psychosocial health and well-being among children, youth, and adults. For studies on the impact of household food insecurity on health, see: Janet Che and Jiajian Chen, "Food Insecurity in Canadian Households," *Health Reports* 12, 4 (2001): 11-22; Sharon I. Kirkpatrick, Lynn McIntyre and Melissa Potestio, "Child Hunger and Long-Term Adverse Consequences for Health," *Archives of Pediatrics and Adolescent Medicine* 164, 8 (2010): 754-762; Lynn McIntyre, Jeanne V.A. Williams, Dina H. Lavorato, and Scott Patten, "Depression and Suicide Ideation in Late Adolescence and Early Adulthood Are an Outcome of Child Hunger," *Journal of Affective Disorders* 150, 1 (2012): 123-129; Nicholas T. Vozoris and Valerie Tarasuk, "Household Food Insufficiency Is Associated with Poorer Health," *The Journal of Nutrition* 133, 1 (2003): 120-126.

For studies on the impact of homelessness on health, see: Jennifer P. Edidin et al., "The Mental and Physical Health of Homeless Youth: A Literature Review," *Child Psychiatry and Human Development* 43, 3 (2012): 354-375; C. James Frankish, Stephen W. Hwang and Darryl Quantz, "The Relationship between Homelessness and Health: An Overview of Research in Canada," in *Finding Home: Policy Options for Addressing Homelessness in Canada*, ed. J. David Hulchanski et al. (Toronto: Homeless Hub, Cities Centre, University of Toronto, 2009); Timothy Stablein and Allison A. Appleton, "A Longitudinal Examination of Adolescent and Young Adult Homeless Experience, Life Course Transitions, and Health," *Emerging Adulthood* (July 15 2013).

Evelyn Forget, "The Town," 290.

<sup>14</sup> ibid.

## Household food insecurity is a useful consumption-based indicator of both poverty and lack of insurance against income shocks

Food insecurity is generally measured at the household level and implies that the overriding reason for food-access problems is financial constraint. Risk factors for experiencing household food insecurity include a variety of socio-demographic and socio-economic household characteristics such as low income, low level of education, higher number of children, being a lone parent-led household, living in rental accommodation, or being aboriginal.<sup>15</sup>

Household food insecurity is a dynamic occurrence, influenced by changes in income levels and household expenses. <sup>16</sup> Such income and/or expenditure changes (e.g., unexpected health expenses) likely impact food expenditures and often result in vulnerable households becoming food insecure. <sup>17</sup> Thus, similar to poverty, household food insecurity can be chronic (long term); for example, when households have insufficient income levels for extended periods of time. Or it can be short term; for example, when households experience budget/income shocks due to ill health, rising housing or energy costs or other sudden unexpected changes. <sup>18</sup>

Food insecurity risk is greatest for households with low incomes, but the risk exists across the income distribution: not all poor households are food insecure and not all non-poor households are food secure. Food insecurity arises from incomplete protection in some households from income shocks that are otherwise insured against in other households. Households that experience food insecurity lack the capacity to buffer consumption against unexpected changes in incomes or costs. Lacking any surplus or reserves in their budget, assets, or access to credit (borrowing), food insecure households are liquidity-constrained and, consequently, they must adjust consumption when income falls or household costs rise. For example, low-income families in Canada devote a substantial portion of their monthly budgets to food, <sup>19</sup> leaving only

Che and Chen, "Food Insecurity"; Valerie Tarasuk, "Household Food Insecurity in Canada," *Topics in Clinical Nutrition* 20, 4 (2005): 299-312; Valerie Tarasuk and Janet Vogt, "Household Food Insecurity in Ontario," *Canadian Journal of Public Health* 100, 3 (2009): 184-188; Valerie Tarasuk, Andy Mitchell and Naomi Dachner, *Household Food Insecurity in Canada*, 2011 (Toronto: Research To Identify Policy Options to Reduce Food Insecurity, 2013), http://nutritionalsciences.lamp.utoronto.ca/wp-content/uploads/2013/07/Household-Food-Insecurity-in-Canada-2011.pdf.

Craig Gundersen and Joseph Gruber, "The Dynamic Determinants of Food Insufficiency," in Second Food Security Measurement and Research Conference, Vol. II, ed. Margaret Andrews and Mark Prell (Washington: USDA, ERS Food Assistance and Nutrition Research Report, 2001), 92-110; Leete and Bania, "The Effect"; Donald Rose, "Economic Determinants and Dietary Consequences of Food Insecurity in the United States," Journal of Nutrition 129, 2 (1999): 517S-520S; Valerie Tarasuk, Lynn McIntyre and Jinguang Li, "Low Income Women's Dietary Intakes Are Sensitive to the Depletion of Household Resources in One Month," The Journal of Nutrition 137, 8 (2007): 1980-1987.

Valerie Tarasuk, "A Critical Examination of Community-Based Responses to Household Food Insecurity in Canada," Health Education and Behavior 28, 4 (2001): 487-499; Nicholas Vozoris, Barbara Davis and Valerie Tarasuk, "The Affordability of a Nutritious Diet for Households on Welfare in Toronto," Canadian Journal of Public Health 93, 1 (2002): 36-40.

Herbert J.C. Emery et al., "Evidence of the Association between Household Food Insecurity and Heating Cost Inflation in Canada, 1998-2001," *Canadian Public Policy* 38, 2 (2012): 181-215; Lynn McIntyre, Sarah K. Connor and James Warren, "Child Hunger in Canada: Results of the 1994 National Longitudinal Survey of Children and Youth, *Canadian Medical Association Journal* 163, 8 (2000): 961-965; Tarasuk, McIntyre and Li., "Low Income"; Tarasuk, "A Critical Examination."

<sup>19</sup> Sharon Kirkpatrick and Valerie Tarasuk, "The Relationship between Low Income and Household Food Expenditure Patterns in Canada," Public Health Nutrition 6, 6 (2003): 589-97.

a restricted budget to face other expenses. With the residual funds, poor families try to balance other expenses, such as heating expenditures. It has been shown that rising energy costs, for example, lead these families to make "heat or eat" decisions, because their ability to absorb shocks is low.<sup>20</sup>

### Differences in incomes available through public sources to Canadians aged 65 and older versus under 65

The basic idea of a guaranteed annual income is to set an income floor (of a defined amount) for every citizen/resident of a country. Although Canada does not have a GAI system per se, it does provide a basic annual income floor to one group of citizens: seniors. The federally funded public pension system (consisting of Old Age Security, Guaranteed Income Supplement for low-income seniors, and GIS Allowance for widowed spouses of low-income seniors) is a system that was gradually put in place in the 1960s and 1970s. The basic federally funded income floor provided through the OAS system in Canada to eligible seniors consists of \$14,708 per year (maximum payment for a single person in 2011).<sup>21</sup>

It has been widely acknowledged that the Canadian pension system is one of Canada's major social policy success stories, as it has caused the poverty rates among seniors to drop substantially after it was implemented.<sup>22</sup> Remarkably, despite decades of strong labour market conditions<sup>23</sup> and rising household incomes, many Canadian households, particularly those of unattached individuals, rely primarily on OAS and GIS benefits for income after age 65.<sup>24</sup> Before turning 65 years old (the current eligibility age), individuals are reliant on either employment income and/or social transfer payments through the provinces. The level of funding available to those on social assistance varies substantially from province to province and is arguably related to political sentiment and provincial economic performance, rather than to the basic cost of living in each province.

<sup>&</sup>lt;sup>20</sup> Emery et al., "Evidence of the Association."

Service Canada, "Old Age Security Payment Amounts," http://www.servicecanada.gc.ca/eng/services/pensions/oas/payments/index.shtml.

Conference Board of Canada, "How Canada performs" (2013), http://www.conferenceboard.ca/hcp/details/society.asp; John Myles, "The Maturation of Canada's Retirement Income System: Income Levels, Income Inequality and Low Income among Older Persons," Canadian Journal on Aging 19, 3 (2000): 287-316; Lars Osberg, "Poverty among Senior Citizens: a Canadian Success Story," in The State of Economics in Canada: Festschrift in Honour of David Slater, ed. Patrick Grady and Andrew Sharpe (Centre for the Study of Living Standards, 2001), 151-181; Tammy Schirle, "Senior poverty in Canada: A decomposition analysis," Canadian Public Policy 39, 4 (2013): forthcoming.

Ronald Kneebone and Margarita Gres, "Trends, Peaks, and Troughs: National and Regional Employment Cycles in Canada," The SPP Research Papers 6, 21 (2013).

Ross Finnie, David Gray and Yan Zhang, "Guaranteed Income Supplement (GIS) Status Amongst the Retired Population: An Analysis of the Incidence," *Canadian Public Policy* 39 (Supplement), (2013): S65-S80; National Advisory Council on Ageing (NACA), "Seniors on the Margin: Ageing in Poverty in Canada" (Ottawa: Government of Canada, 2005), http://publications.gc.ca/collections/Collection/H88-5-3-2005E.pdf.

Figure 1 depicts the highest total welfare income for a single person considered employable in the Canadian provinces (excluding Prince Edward Island, Nunavut, the Northwest Territories and the Yukon), compared to the basic income floor of \$14,708 provided through OAS and GIS for 2011.<sup>25</sup> Besides significant variations regarding assistance levels (the lowest being \$6,696 in New Brunswick and the highest being \$9,821 for Newfoundland and Labrador), none of the provincial payments even come close to the basic income floor paid out through seniors' benefits.<sup>26</sup>

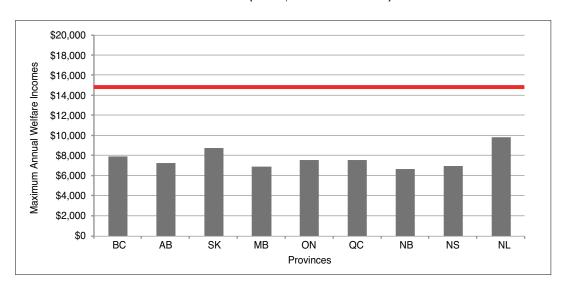


FIGURE 1: MAXIMUM ANNUAL WELFARE INCOMES (SINGLE, EMPLOYABLE PERSON) BY PROVINCE

The red horizontal line represents the federally funded income floor provided through the OAS/GIS system in Canada to eligible seniors. Welfare in this graph is defined as: basic social assistance + federal child benefits + provincial/territorial child benefit + provincial tax credits + GST credit + additional social assistance program benefits.

Sources: National Council of Welfare, "Welfare Incomes 2011" (Ottawa: Ministry of Public Works and Government Services, 2011); Human Resources and Skills Development Canada, CPP & OAS Stats Book 2010: Statistics Related to Canada Pension Plan and Old Age Security Programs (Ottawa: 2010).

Where public discourse views Canada's first pillar of the pension system as a floor on which seniors land after enjoying higher incomes while employed, for many poor near-senior Canadians, the first pillar is a substantial "step up" in income level and income stability compared with the precarious employment and social assistance that they relied on prior to age 65.<sup>27</sup>

National Council on Welfare, "Welfare Incomes 2011"; Human Resources and Skills Development Canada, CPP & OAS Stats Book 2010: Statistics Related to Canada Pension Plan and Old Age Security Programs (Ottawa: 2010).

Some provincial governments offer income supplements to seniors living in their jurisdictions. The basic income floor deemed appropriate for a poor senior in those provinces is higher than \$14,708. For information on Ontario's provincial supplement, see: Ontario Ministry of Finance website, "Ontario Guaranteed Annual Income System," <a href="http://www.fin.gov.on.ca/en/credit/gains/">http://www.fin.gov.on.ca/en/credit/gains/</a>.

<sup>&</sup>lt;sup>27</sup> National Advisory Council on Ageing, "Seniors on the Margin."

Unlike the case for Canadians age 65 and over, who are provided with a stated minimum level of income, provincial total welfare benefits (basic social assistance plus additional benefits such as the GST credit and provincial tax credits) for those under age 65 have no set entitlement for benefits other than a potential maximum entitlement. The transfers represent the maximum amount of support for an eligible recipient with little certainty and, as Figure 1 shows, the ceiling is much lower than the income floor for seniors.

Households receiving pensions as their main income source have a lower prevalence of food insecurity than other population groups.<sup>28</sup> In 2007–2008, households reporting income from seniors' benefits or salaries/wages showed the lowest rates of food insecurity (6.1 per cent and 4.8 per cent, respectively) in Canada. Considering these numbers, it is of interest to investigate whether providing an income floor to all Canadians — or expanding the GAI system to all Canadians — would be an effective and efficient anti-poverty strategy.

#### **METHODS**

#### **Data source**

For this study, our data are from the public-use files of the Canadian Community Health Survey (CCHS) Cycle 5.1 for 2009–2010.<sup>29</sup> The CCHS is a cross-sectional survey that collects health and socio-demographic data from a large representative sample of the Canadian population. Analyses were restricted to respondents in four age groups, covering two groups of different proximities to age-eligibility for GIS/OAS (55–59 years, 60–64 years), and two groups of differing post-eligibility ages for GIS/OAS (65–69 years, and 70–74 years). We also restricted our analysis to respondents with an annual personal income<sup>30</sup> of \$20,000 or less to control for respondents' income levels and only analyzed data from unattached respondents (this included single, divorced, separated, and widowed).

Observations from respondents with missing household food insecurity responses, and data from the Yukon, Northwest Territories, Nunavut and Prince Edward Island, were excluded (the territories have large aboriginal populations with confounding factors influencing food insecurity, and all excluded jurisdictions have small population sizes). The population-weighted total sample sizes after all exclusions were 140,000 for 55–59 year olds, 120,000 for 60–64 year olds, 130,000 for 65–69 year olds and 110,000 for 70–74 year olds. The fact that these sample sizes are similar speaks to the fact that the populations are likely similar, rather than there being a large proportion of near seniors moving into the lowest-income quintile after retirement.

Che and Chen, "Food Insecurity"; Health Canada, "Canadian Community Health Survey, Cycle 2.2, Nutrition (2004): Income-Related Household Food Security in Canada" (Ottawa: 2007), ISBN 978-0-662-45455-7, http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/income\_food\_sec-sec\_alim-eng.php; Health Canada, "Household Food Insecurity in Canada in 2007-2008: Key Statistics and Graphics" (Ottawa: 2011), http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/insecurit/key-stats-cles-2007-2008-eng.php#fn-np7; Tarasuk and Vogt, "Household Food."

We also conducted the same analysis using data from CCHS 4.1, 2007–2008. As data from both cycles produced the same results, we chose to present the results from the more recent cycle.

We also conducted the analysis based on samples of unattached individuals with *household* incomes less than \$20,000 per year. This sample produced substantively similar results.

#### **Measures**

Food insecurity, as measured through the Household Food Security Survey Module,<sup>31</sup> was used as the main outcome measure. The variable "FSCDHFS," a dichotomous summary measure of food insecurity status over the preceding 12 months by severity, is derived by Statistics Canada from its 18-question food insecurity module. As secondary outcome measures, we used self-reported health and self-reported mental health to determine if the income floor through federal pension benefits improved health in eligible age groups. To demonstrate that income source mattered to the outcomes, main income source was broken down into the categories "employment income," "employment insurance (EI)/workers' compensation/social assistance" (no finer classification is available in the public-use files), "seniors' benefits" (which would include OAS and GIS for the 65–74 year olds), and "other income." We otherwise did not control for covariates because the only variable of interest was age group above or below the OAS and GIS age-65 eligibility threshold.

#### Statistical analyses

Using simple descriptive statistics, we compared the prevalence of food insecurity between the two age groups of interest. As food insecurity is a household-level outcome, we weighted the analyses using household weights to accommodate the survey-design effect of CCHS. Data were analyzed using STATA 11.0.<sup>32</sup>

#### **RESULTS**

In presenting the results of our analysis, we first demonstrate the sizeable shift in income source for these low-income (as defined by a personal income less than \$20,000 per year in this study) individuals in Canada, from employment and various income-assistance programs, to federal public pensions as they move from 55 years of age through to 74 years of age. We then document reductions in food insecurity, and changes in self-reported health and mental health in the age groups.

Gary Bickel et al., Guide to Measuring Household Food Security, Revised 2000 (Washington: USDA, Food and Nutrition Service, 2000), http://www.fns.usda.gov/fsec/files/fsguide.pdf; Health Canada, "Canadian Community Health Survey, Cycle 2.2, Nutrition (2004): Income-Related Household Food Security in Canada."

<sup>32</sup> Stata Corp. (College Station, Texas).

#### Turning 65 changes the main personal income source for low-income Canadians

As Figure 2 shows, there is a pronounced change in sources of income for low-income Canadians under age 65 and those aged 65 and over. Employment income and EI/workers' compensation/social assistance each constituted the major income source for about one-third of low-income Canadians aged 55–64; in contrast, over 80 per cent of low-income Canadians aged 65–74 report "seniors' benefits" as their major source of income. Only 12 per cent of individuals aged 65 years or older reported employment income as their main income source.

100% 90% Employment El/Workers' 80% Comp/SA Percentage (95% CI) 70% Seniors' 60% Benefits 50% Other 40% 30% 20% 10% 0% 55 to 59 60 to 64 65 to 69 70 to 74 Age Group (Years)

FIGURE 2: MAIN PERSONAL INCOME SOURCE FOR LOW-INCOME UNATTACHED RESPONDENTS BY AGE GROUP (WEIGHTED), CCHS 5.1 (2009/2010)

 ${\it EI = employment insurance; Workers' Comp = workers' compensation; SA = social assistance.}$ 

Employment income includes wages and salaries, and income from self-employment.

Social assistance includes provincial or municipal social assistance, or welfare.

Seniors' benefits include benefits from Canada Pension Plan or Quebec Pension Plan, Old Age Security, and Guaranteed Income Supplement.

Other income includes dividends and interest, job-related retirement pensions, superannuation and annuities, RRSP/RRIF (Registered Retirement Savings Plan/Registered Retirement Income Fund), Child Tax Benefit, child support, alimony, and other (e.g., rental income, scholarships).

# Changing the income source at age 65 from employment, El/workers' compensation/social assistance, to seniors' benefits results in a marked drop in food insecurity prevalence

Regardless of income source, food insecurity rates were substantially higher in the younger groups than in older age groups; specifically, 34 per cent of respondents in the 55–59-year age group and 27 per cent of respondents in the 60–64-year age group were food insecure. Food insecurity among seniors was reduced by more than half (14 per cent in those aged 65–69 years and 12 per cent in the 70–74-year age group). Figure 3 shows how food insecurity varies by income source, as well as how a decrease in household food insecurity correlated with older age (and thus, reliance on seniors' benefits). When the main source of income was reported to be through employment, about 20 per cent of respondents were food insecure, regardless of age. In contrast, reliance on EI/workers' compensation/social assistance resulted in a very high rate of food insecurity of between 40 per cent and 50 per cent for individuals aged 55–69 years of age. Respondents reporting their main income from seniors' benefits had prevalence rates of

food insecurity of 29 per cent (for the 55–59-years group), 22 per cent (60–64 years), 15 per cent (65–69 years), and 11 per cent (70–74 years). For the ages 55–64, seniors' benefits would not include OAS or GIS but would include Canada Pension Plan or Quebec Pension Plan benefits. These rates are very similar to what we found for income from employment. These results suggest that seniors' benefits provide similar protection from food insecurity as does employment, whereas reliance on EI/workers' compensation/social assistance leads to pronounced rates of food insecurity. Because all respondents had an income below \$20,000, we cannot differentiate between the effect of income source on food insecurity or whether the actual income level within the income group rose to reduce food insecurity prevalence.

100% 90% Employment 80% El/Workers' Comp/SA Percentage (95% CI) 70% Seniors' 60% Benefits 50% Other 40% 30% 20% 10% 0% 55 to 59 60 to 64 65 to 69 70 to 74 Age Group (Years)

FIGURE 3: FOOD INSECURITY PREVALENCE OF LOW-INCOME UNATTACHED RESPONDENTS BY AGE GROUP AND PERSONAL INCOME SOURCE (WEIGHTED), CCHS 5.1 (2009/2010)

El = employment insurance; Workers' Comp = workers' compensation; SA = social assistance. See Figure 2 for details on income source.

# Turning 65 leads to better self-reported health and self-reported mental health over and above the reduction seen in food insecurity for those receiving seniors' benefits

In general, receiving seniors' benefits improved health and mental health, over and above the effect that benefits had on food insecurity status, which were also notable (Table 1). For selfreported health among the food insecure, the percentage of respondents reporting fair/poor health in the two age groups below age 65 was approximately 55 per cent. This decreases to 34 per cent for the 65–69 year olds, and then rises again (as one would expect as part of the aging process) to 49 per cent for the 70–74 year olds (but is still lower than those 10 to 15 years younger). As was observed with self-reported health, receiving seniors' benefits improved selfreported mental health even amongst the food insecure after they turned age 65. Specifically, the proportion of food insecure respondents with poor/fair mental health dropped by more than half in the older age groups (receiving seniors' benefits) compared to the younger age groups - from 36.5 per cent in the 55-59-year group and 29 per cent in the 60-64-year group, to 17 per cent and 13 per cent in the 65–69-year age group and 70–74-year age group, respectively, indicating that mental health benefits persisted despite aging. Among the food insecure in these age groups, higher rates of fair/poor self-reported health and mental health were observed than were observed among their food secure counterparts, but still, overall rates of both food insecurity and poor health and mental health were lowered in those older than 65 years.

TABLE 1: PROPORTIONS OF LOW-INCOME UNATTACHED RESPONDENTS WITH FAIR/POOR SELF-REPORTED HEALTH
AND SELF-REPORTED MENTAL HEALTH BY AGE GROUP AND FOOD SECURITY STATUS (WEIGHTED), CCHS 5.1
(2009/2010)

	ALL				FOOD INSECURE			
	Self-reported health = fair/poor		Self-reported mental health = fair/poor		Self-reported health = fair/poor		Self-reported mental health = fair/poor	
	Proportion (%)	95% CI	Proportion (%)	95% CI	Proportion (%)	95% CI	Proportion (%)	95% CI
55 to 59	40.0	(33.4, 46.5)	21.6	(16.9, 26.4)	56.5	(43.6, 69.4)	36.5	(26.0, 46.9)
60 to 64	39.8	(34.8, 44.9)	17.3	(13.5, 21.0)	55.1	(45.0, 65.2)	29.1	(20.3, 37.9)
65 to 69	31.5	(26.9, 36.0)	10.5	(7.7, 13.3)	33.7	(22.3, 45.1)	17.1	(7.6, 26.7)
70 to 74	35.7	(31.0, 40.4)	7.7	(5.4, 9.9)	49.4	(34.4, 64.4)	12.6	(3.5, 21.8)

#### DISCUSSION

Our analysis shows that food insecurity prevalence decreases significantly (by almost 50 per cent) for low-income Canadians eligible for federal public pension benefits. This is due to a shift in income source from employment and various transfer payment to seniors' benefits (largely OAS and GIS) once they turn 65 years old. Moreover, self-reported health and self-reported mental health status were consistently better in the food secure and, among the food insecure, decreased markedly in the two older age groups (65 years and older). These findings suggest that the receipt of public pension benefits has a pronounced effect on reducing household food insecurity and on improving the health and mental health of low-income Canadians.

This analysis provides support for a GAI for our most impoverished Canadians younger than age 65, with novel insights into potential yields related to health and mental health. This scheme would extend eligibility for an income floor through a guaranteed annual income by defining benefit eligibility for the existing GIS/OAS federal pension benefits based solely on an income test rather than the current combined age and income test. Implementation could be phased in through the lowering of the age of eligibility for the income-tested pension benefits. Our proposition is in contrast to recent legislated changes to the Canadian federal pension system, which will gradually raise the age eligibility for OAS/GIS by two years (from 65 to 67 years old). We suggest that reductions in health-care utilization could result from a non-age-tested benefit, leading to reductions in provincial health spending, and offsetting much of the increase in federal public pension costs associated with extending an income floor based on the existing Guaranteed Income Supplement program to younger age-groups of Canadians.

Our proposal for addressing poverty is not particularly new. Considerable efforts to design GAI schemes were undertaken in the 1970s, but the idea of a GAI has been in and out of Canadian policy discussions ever since.<sup>33</sup> Senator David Croll, who chaired the Canadian Senate's committee on poverty in the 1970s, recommended a federal GAI in the form of negative

James P. Mulvale, "Desperately Seeking a New Model of Economic Security for Canada: the Basic Income Approach," *Canadian Social Work* 10, 1 (2008); Richard Pereira, "Economic Security in the Twenty-First Century — Guaranteed Annual Income (GAI), An Ecological, Democratic, Justice and Food Security Imperative" (Master of Arts Thesis, Athabasca University, October 2009); David H. Croll, "Poverty in Canada," in *The Empire Club of Canada Speeches* 1971-1972, (Toronto: The Empire Club Foundation, 1972), 191-204.

income tax (based on need, and incorporating work incentives) in 1972. It was planned as an addition to the Canada Pension Plan, unemployment insurance and agreements with First Nations and Inuit Canadians. One out of the five major experiments with negative income tax (NIT), conducted around the same time (Mincome), was based in Canada, specifically in the province of Manitoba (see below). In 1985, the Macdonald Commission recommended its so-called Universal Income Security Program; however, suggested benefit levels were so low that it was felt that this type of GAI would be ineffective for decreasing poverty and thus the idea received strong opposition and was ultimately dropped. After this proposal, the idea of a GAI seemed to have disappeared from the Canadian consciousness for almost two decades. It experienced a resurgence in the early years of the new millennium, when a variety of different groups (e.g., the Canadian Council of Social Development, various feminist groups and senator Hugh Segal) in Canada started advocating for a GAI as a poverty-alleviation measure once more; there is, in fact, a resurgence underway at this time: "The Basic Income Guarantee (BIG) Push" is being championed through the Basic Income Canada Network.

When GAI models have been proposed in the past, the most significant concerns brought up by opponents have been twofold: 1) how a GAI could be financed/funded; and 2) the negative effects of providing every citizen with a basic income floor (mainly the labour/work-effort disincentives). Both Forget and Segal<sup>37</sup> argue that a GAI scheme would not be prohibitively costly (figures from a variety of authors range from \$30 billion to \$50 billion per year); there would be little in the way of costs-of-work disincentives, and the social returns through improved education outcomes, reduced health-care costs and improved labour productivity could result in net savings to government from a GAI.<sup>38</sup>

The ultimate cost of a universal GAI scheme based on the federal OAS/GIS could be much less than the estimated \$30 billion to \$50 billion. Expenditures for introducing a GAI for all Canadians will at least partially be compensated for by savings on administrative costs for various income-support programs and health-care utilization. Current provincial assistance programs are not unified. If we could use the existing federally controlled GAI through OAS/GIS to replace provincially run programs, significant savings could accrue.

<sup>34</sup> Forget, "The Town."

Men Battle and Sherri Torjman, "Yes, Virginia, There is a Guaranteed Annual Income" (Caledon Institute of Social Policy, 2000), http://www.caledoninst.org/Publications/PDF/gaicomm.pdf; Battle, "Rethinking Income"; Canadian Council on Social Development, "The Progress of Canada's Children and Youth 2006" (Ottawa: 2006); Segal, "Guaranteed Annual"; Segal, "Scrapping Welfare."

<sup>36</sup> Basic Income Canada Network: http://biencanada.ca.

<sup>&</sup>lt;sup>37</sup> Forget, "The Town"; Segal, "Guaranteed Annual"; Segal, "Scrapping Welfare."

Margaret Clarke et al., "A Basic Annual Income for the Neuro-Developmentally Disabled in Canada," *Policy Options* (May 2012); Segal, "Guaranteed Annual"; Segal, "Scrapping Welfare." Here the figure of \$30 billion is used. Hum and Simpson estimate that the cost of a GAI through a negative-income-tax model with benefit levels comparable to those of the current OAS/GIS benefits would be closer to \$50 billion in 2012 purchasing power (Derek Hum and Wayne Simpson, "The Cost of Eliminating Poverty in Canada: Basic Income with an Income Test Twist," in *The Ethics and Economics of the Basic Income Guarantee*, ed. K. Widerquist, M. Lewis and S. Pressman, Aldershot, U.K.: Ashgate, 2005, 282-292).

Forget<sup>39</sup> analyzed health-administration data from the time of the Mincome GAI experiment in the 1970s and found the overall hospitalization rate (and specifically hospitalizations for injuries and accidents, and mental health) fell significantly (by 8.5 per cent, relative to the comparison group) during the duration of the experiment.<sup>40</sup> From our results, which are novel in GAI argumentation, we would also expect to see significant cost savings in the publicly funded health-care system. Our results showing the OAS leading away from food insecurity and away from poor/fair self-reported health and mental health are clearly aligned with a large literature that shows that poverty is related to poor health.<sup>41</sup> The link between income adequacy and health includes a negative association between perceived health, mental health, and psychological stress.<sup>42</sup> Physical and mental health have important impacts on the labour market, affecting the capacity to work, labour-force participation, wages, and job security and choice.<sup>43</sup>

The biggest impediments to the universal application of a GAI are the concerns over labour-market disincentive effects and the overall cost to the public purse of the scheme. <sup>44</sup> Proponents of a GAI point to evidence from the 1970s Negative Income Tax experiments where they interpret that the disincentive effects for labour supply and the social costs of a GAI were not found to be large. These large experiments were conducted at a time of economic prosperity when funding for large welfare reforms was available, and elimination of state poverty was a proclaimed goal of the U.S. presidential administration. They were among the first large-scale social experiments, and not primarily designed to test the policy (GAI), but rather the side-effects of the policy (e.g., labour disincentives). <sup>45</sup>

<sup>&</sup>lt;sup>39</sup> Forget, "The Town."

<sup>40</sup> ibid

Committee on the Social Determinants of Heath (CSDH), "Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health." (Geneva: Final Report of the Commission on Social Determinants of Health, 2008); Michael B. Marmot, Jessica Allen and Peter Goldblatt, "A Social Movement, Based on Evidence, to Reduce Inequalities in Health," *Social Science and Medicine* 71, 7 (2010): 1254-58; Kate E. Pickett and Richard G. Wilkinson, "Greater Equality and Better Health," *British Medical Journal* 339 (2009): b4320; Dennis Raphael, "Poverty, Income Inequality, and Health in Canada" (CSJ Foundation for Research and Education, 2002), http://dspace.cigilibrary.org/jspui/bitstream/123456789/15466/1/Poverty%20Income%20Inequality%20and%20Health %20in%20Canada.pdf?1; Charlemaigne C. Victorino and Anne H. Gauthier, "The Social Determinants of Child Health: Variations across Health Outcomes — A Population-Based Cross-Sectional Analysis," *BMC Pediatrics* 9, 1 (2009): 53.

<sup>&</sup>lt;sup>42</sup> For a review, see: Nathalie Auger and Carolyne Alix, "Income, Income Distribution, and Health in Canada," in *Social Determinants of Health*, ed. Dennis Raphael (Toronto: Canadian Scholars' Press, 2008), 61-74.

For a review, see: Janet Currie and Brigitte C. Madrian, "Health, Health Insurance and the Labor Market," in Handbook of Labor Economics, ed. O. Ashenfelter and D. Card (Amsterdam: 1999), 3309-3415.

<sup>&</sup>lt;sup>44</sup> Chandra Pasma, "Working Through the Work Disincentive," *Basic Income Studies* 5, 2 (December 2010).

Data from the experiments showed mostly positive effects on health, homeownership, reduction of low birth-weight, school performance, and other indicators of well-being. Robert A. Levine et al., "Looking Back at the Negative Income Tax Experiments from 30 Years on," in *The Ethics and Economics of the Basic Income Guarantee*, ed. Michael Anthony Lewis, Steven Pressman and Karl Widerquist (New York: Ashgate, 2004), 95-109; Karl Widerquist, "A Failure To Communicate: What (If Anything) Can We Learn From the Negative Income Tax Experiments?" *The Journal of Socio-Economics* 34, 1 (2005): 49-81.

Results derived from the four basic income experiments in the United States have been analyzed numerous times with respect to their effect on labour disincentives. Hum and Simpson<sup>46</sup> assessed that the data from Manitoba's Mincome experiment showed that annual hours of work for men declined by only one per cent.<sup>47</sup>

While labour-supply responses were larger in the U.S. experiments, <sup>48</sup> overall Hum and Simpson <sup>49</sup> conclude that "the preponderance of evidence from the experiments testifies for those who would argue that a guaranteed income plan, or indeed other changes in social policy which alter the tax rate and transfer income received by households, will not have large work disincentives."

Critics of a GAI scheme do not find the evidence from the earlier NIT experiments as sufficiently compelling for informing us about labour-supply disincentive effects of a guaranteed income. There is a view that the results are "dated," in the sense that they are now nearly 40 years in the past and observed during economic conditions specific to that time period. Further, there are legitimate concerns as to the limitations of the experiments, such as the fact that individuals who received a GAI knew that they would be only getting the GAI for a certain amount of time. Such knowledge could result in a different labour response than the knowledge that one will receive a "true" basic income during their lifetime.

Empirical studies of labour supply of low-income Canadians since the late 1980s have been interpreted as showing larger labour-market disincentive effects of income transfers to low-income persons, but an alternative interpretation is that, with one exception, they do not overturn the conclusion of Hum and Simpson. Lemieux and Milligan's study<sup>50</sup> of less-educated men aged 25 to 35 without dependent children in Quebec finds that a 175 per cent increase in social assistance benefits at age 30 reduced the employment rate for this group of men by three to five percentage points, and reduced the employment rate of all men in the age group without dependent children by one percentage point. Lemieux and Milligan<sup>51</sup> assess that these changes in employment rates in the context of such a large increase in benefits represent "relatively modest behavioural effects."<sup>52</sup> A more recent study evaluating minimum income schemes proposed for Quebec by a 2009 advisory committee studying ways to fight poverty and social exclusion (the Comité consultative de lutte contre la pauvreté et l'exclusion sociale, or CCLP),

Derek Hum and Wayne Simpson, "Whatever Happened to Canada's Guaranteed Income Project?" *Canadian Public Administration* 36, 3 (1993a): 442-450; Derek Hum and Wayne Simpson, "A Guaranteed Annual Income? From Mincome to the Millenium," *Policy Options* (2001): 78-82.

<sup>47</sup> ibid

Hum and Simpson report that evidence suggests that the decline in annual hours of work for men was larger at six per cent in four negative-income-tax experiments in the United States before 1980. Females also showed larger reductions in annual hours of work of 15 per cent to 19 per cent. Derek Hum and Wayne Simpson, "Economic Response to a Guaranteed Annual Income — Experience from Canada and the United States," *Journal of Labor Economics* 11, 1 (1993): S263-96; Widerquist, "A Failure"; Levine et al., "Looking Back."

<sup>49</sup> Hum and Simpson "Whatever Happened," 449

Thomas Lemieux and Kevin Milligan, "Incentive Effects of Social Assistance: A Regression Discontinuity Approach," *Journal of Econometrics* 142 (2008) 807-828.

<sup>&</sup>lt;sup>31</sup> ibid., 826

<sup>&</sup>lt;sup>52</sup> Lemieux and Milligan, "Incentive Effects."

used SLID data for non-disabled single males and single females aged 18 to 65, simulating large increases in labour force non-participation under several models of a minimum income scheme comparable to what would exist under a GAI based on federal OAS/GIS benefits. For single men and single women without children, there would be around a 20 per cent reduction in the labour-force participation rate. 53

Clavet, Duclos and Lacroix<sup>54</sup> estimate that the expected reductions in work effort among single men and single women in Quebec in response to a minimum income scheme would quadruple its ultimate cost over what the existing cost estimates suggest. Considering what this would mean for a GAI Canada-wide, the annual cost put forward by proponents of \$30 billion to \$50 billion for a universal GAI would potentially be as much as \$120 billion to \$200 billion annually.

The uncertainty over labour-market disincentive effects of a GAI should not be used to reject a GAI scheme for Canada, but instead used to guide a phased-in introduction of a GAI with the intent of determining the extent of the ultimate coverage of the scheme. For example, if the GAI were extended by reducing the age of eligibility for OAS/GIS benefits incrementally over time, as the federal government is currently doing in raising the age of entitlement, then it would be possible to monitor the size of the labour-supply response and the cost of the scheme's extension. Similarly, a GAI has also recently been suggested for Canadians with disabilities.<sup>55</sup> The House of Commons Standing Committee on Human Resources, Social Development, and the Status of Persons with Disabilities (HUMA) suggested an income-tested basic income for individuals with disabilities in their Federal Poverty Reduction Plan. HUMA further suggested that a GAI for the disabled would be a first step towards a more universal application of a GAI across the population. Clarke et al. recommended a GAI for Canadians with neuro-developmental disabilities, based on the results that the income disparity between disabled and non-disabled are dramatically reduced once they turn 65 years of age and are thus eligible for OAS payments.<sup>56</sup>

Nicholas-James Clavet, Jean-Yves Duclos and Guy Lacroix, "Fighting Poverty: Assessing the Effect of Guaranteed Minimum Income Proposals in Québec," *Canadian Public Policy* 39, 4 (2013).

<sup>54</sup> ibid

Clarke et al., "A Basic Annual"; House of Commons Canada, Standing Committee on Human Resources, Skills and Social Development, and the Status of Persons with Disabilities (HUMA), "Federal Poverty Reduction Plan: Working in Partnership Towards Reducing Poverty in Canada," 2010, <a href="http://www.parl.gc.ca/content/hoc/Committee/403/HUMA/Reports/RP4770921/humarp07/humarp07-e.pdf">http://www.parl.gc.ca/content/hoc/Committee/403/HUMA/Reports/RP4770921/humarp07/humarp07-e.pdf</a>; Ronald D. Kneebone and Oksana Grynishak, "Income Support for Persons with Disabilities," *The SPP Research Papers* 4, 11 (2011); Michael Mendelson et al., "A Basic Income Plan for Canadians with Severe Disabilities" (Caledon Institute of Social Policy, 2010), <a href="https://www.caledoninst.org/Publications/PDF/906ENG.pdf">https://www.caledoninst.org/Publications/PDF/906ENG.pdf</a>.

Clarke et al., "A Basic Annual"; Clarke et al. ("A Basic Annual") performed a costing analysis providing neurodevelopmentally disabled Canadians with a guaranteed annual income of \$14,708 per year, equivalent to the maximum seniors' benefits (OAS plus GIS) payment. The authors concluded that the expenditure required for providing a basic income for their target group with employment earnings of less than \$15,000 would amount to one per cent of current federal government expenditures (taking into account that a large part of the cost is already being covered by current programs).

One final issue that is often raised is that the costs of a GAI, as we propose it, would be borne by the federal government, while the benefits in terms of reduced social assistance and reduced health-care spending would be captured by the provinces. While it has been identified that the challenges of working out the federal-provincial issues could be a barrier to a GAI, we do not see this as a serious problem. Historically, the OAS and GIS were introduced under the same conditions. Transfers of cash and tax points can feasibly be adjusted between the federal government and the provinces and have been adjusted in the past. For example, the introduction of the federal National Child Benefit program in 1998 was integrated with provincial social assistance.<sup>57</sup>

#### CONCLUSION

Although the reduction of seniors' poverty through the implementation of the federal pension system in the 1970s, which can essentially be considered a GAI for anyone age 65 or older, is well-known to Canadian policy-makers as one of the big Canadian policy "success stories," no action has yet been taken to extend a GAI to all Canadians in an attempt to reduce or eliminate poverty. A GAI provides households with consumption insurance that is not available to them through private means and markets. We found household food insecurity to be a useful consumption-based indicator of poverty that changed with age and food security status in a sample of low-income, unattached persons aged 55–74 years whose main personal income source shifted after age 65 to the OAS program. Although we suggest that more detailed costing and benefit analyses are warranted, considering our findings and the effect size of the GAI on low-income adults over 65 years of age, it is tempting to suggest that providing an income floor to all Canadians — that is, expanding the GAI system to all Canadians — could prove to be a highly efficient anti-poverty strategy.

Our analysis was mainly limited by the dataset available to us — CCHS public-use data files — which only provides crude age and income measures. A finer analysis of CCHS microdata should be undertaken for costing purposes and to model the health gains and food insecurity reduction into other household configurations, other age groups, and for specific jurisdictions.

Kevin Milligan and Mark Stabile, "The Integration of Child Tax Credits and Welfare: Evidence from the Canadian National Child Benefit program," *Journal of Public Economics* 91, 1-2 (2007): 305-326.

<sup>&</sup>lt;sup>58</sup> Myles, "The Maturation"; Osberg, "Poverty among."

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