

**“Caring-About-Caregivers”
Long-Range Scenario Planning (LRSP) to 2033**

**Political Economic Socio-cultural Technological
Environmental Legal Analysis (PESTEL)**

A Primer for Discussion



This discussion paper is funded by the Ontario Ministry of Health and Long-Term Care. The views expressed here do not necessarily reflect those of the ministry.

Prepared by Change-Ability, Inc.

October 2008

Contact Information

Jerry Chek-Hung Koh
Long-Range Scenario Planning Unit, Health System Strategy Division
Ministry of Health and Long-Term Care
80 Grosvenor Street, 8th Floor, Hepburn Block, Toronto, Ontario, M7A 1R3
jerrychekhung.koh@ontario.ca
Tel: 416-327-8544 Fax: 416-314-8275

Index

Introduction	3
1. Political.....	3
Aging at Home 2033?	3
A Decentralized Health System?	4
Policy Ideas: Market, State or Family?	4
Changing Forms of Political Voice?	6
Multiculturalism and Social Cohesion?	7
2. Economic	8
Economic Growth and Globalization.....	8
Economic Volatility	9
Aging and Economic Growth	10
Aging and Workforce Policy	10
Gender and the Workforce	11
3. Socio-cultural.....	12
Immigration	12
Transnationalism.....	12
Geography of Ontario 2033.....	12
Aging and Health.....	13
Social Ties and Social Capital	14
Shared Values or Civility and Tolerance?.....	15
The Widening Income Gap	15
The Wealth Gap and Savings	16
Aging Caregivers	17
Finances and Security of Control.....	17
Faith-Based Communities and Services.....	17
The Generations Gap	18
4. Technological	19
Consumers at the Centre of Care	19
Genetics.....	20
5. Environmental	20
Climate Change	20
Temperature-related morbidity and mortality	21
Health effects of extreme weather events (storms, ice-storms, hurricanes, flooding)	21
Air pollution-related health effects	21
Health effects of water- and food-borne contamination.....	21
Vector-borne and zoonotic diseases.....	21
Socio-economic impacts on community health & well-being.....	21
Impact of climate change action	21
6. Legal.....	22
Tools for Policy Change: Courts, Litigation and Tribunals	22
Deficit and Tax Capacity.....	23
Public Guardianship.....	23

Introduction

One of the first steps in undertaking a Long-Range Scenario Planning (LRSP) project is to identify the key questions, assumptions and driving forces impacting the issue under investigation.

This document uses PESTEL analysis to begin that process in support of the Ontario Ministry of Health and Long-Term Care's LRSP project: 'Caring About Caregivers'. PESTEL is a technique for understanding the various external influences or factors of an issue according to six categories: **P**olitical, **E**conomic, **S**ocial (socio-cultural), **T**echnological, **E**nvironmental, and **L**egal.

This report provides examples of some global forces or trends which may significantly impact the future of a caregiver's role in Ontario. The goal is to help participants in the 'Caring About Caregivers' LRSP sessions start thinking about any provincial trends or forces which will affect the long-term situations of people requiring special care, and the friends and family who are providing it. Participants will be expanding on the trends and drivers identified in this document, as well as identifying new ones, when they conduct their own PESTEL analysis at sessions held in Fall 2008.

1. Political

Aging at Home 2033?

In 2007, the Ontario Ministry of Health and Long-Term Care unveiled a three-year province-wide strategy called Aging at Home.¹ This strategy is designed to build up the community sector, making it possible for aging adults to continue to live independently and healthy in their own homes for as long as possible. It is a vision that is well supported by studies indicating that community-based living is both more cost effective than the institutional alternative² and a solution that's preferred by seniors and their families.

However beneficial this strategy is in the immediate term, several questions arise as a result. First, how well prepared is the system to handle the needs of the aging Boomer population? Second, is a three-year strategy sufficient to cope with the aging of the Boomer population over time and, finally, what happens in five or even 10 years?

The late 1990s saw massive investments in long-term care facilities (LTCFs) and a surge of "bed building". Despite this, there is already pressure for renewed funding and building in some areas. Infrastructure is under pressure at the same time as there is emerging evidence that a proportion of people may be unnecessarily institutionalized.³ Approaches to long-term care have historically been subject to a 'policy pendulum' – swinging in emphasis from community alternatives to institutional care – often with periods of inaction following each 'swing'.

• The open question for Ontario is what happens between 2012 and 2033?

1 Government of Ontario, *Aging at Home Strategy*, Ministry of Health and Long-Term Care, http://www.health.gov.on.ca/english/public/program/ltc/33_ontario_strategy.html

2 Hollander, M. and N. Chappell, *Final Report of the National Evaluation of the Cost Effectiveness of Home Care*, 2002

3 Hirdes, J., *Aging At Home: Using Evidence to Balance Needs and Resources*, Presentation, November 26, 2007, downloaded September 15, 2008 from http://www.ccac-ont.ca/Upload/oaccac/General/253_John_Hirdes.pdf

A Decentralized Health System?

The establishment of the Local Health Integration Networks (LHINs) and the introduction of their legislative authority, marks Ontario's first phase of decentralization.

LHINs across the province are engaging in a multi-year process of establishing service agreements with hospitals, with Community Care Access Centres (CCACs) and with community agencies. LHINs are still maturing, developing their relationships with these agencies, and have varying degrees of discretion and authority in the funding allocation process.

It is not yet clear how the introduction of the LHINs will reshape Ontario's health system infrastructure. Looking to other jurisdictions, we can see how the decentralized model might look. In areas where decentralized health and social care systems are already the norm (e.g. Sweden), the result can be distinct regional differences in how services are delivered. Some areas adopt quasi-market models, while others rely on traditional large public sector organization delivery. How Ontario's decentralized LHIN model develops over time will influence our funding and delivery mechanisms in unpredictable ways, and in ways that may vary from area to area.

- **Will organizations have to adapt to varying approaches to funding and service delivery across decentralized LHIN boundaries?**

Policy Ideas: Market, State or Family?

The axis of market, state and family/individual continues to be the hallmark of policy discussions within Canada and abroad. How these interests and pieces should fit together are the persistent debate underlying and superimposed on most policy decisions. Because it is a debate that is tied to political philosophies and ideologies, it means that discussions on the relative balance of where policy should sit on these topics often becomes locked in terminology such as 'right wing', 'left wing', conservative, or socialist.

The use of these labels obscures the fact policies do not always match expectations. Attaching a political label is not always a predictor for where the policies will fall. For example, Sweden, a socialist state, has experimented with a variety of market mechanisms and competition including private sector delivery.

The trends below have emerged in multiple markets in the recent past, and highlight how notions of performance, competition and choice are becoming increasingly prominent in health and social care organizations. These are examples of the types of trends which may persist over the next 25 years, and affect our health system delivery model. These are trends with the potential to fundamentally alter the environment of health and social care organizations.

Strategic Purchasing: Strategic purchasing is a set of incentives, offered through contracting and provider payment mechanisms, which encourage providers to offer the best available treatment in a cost-effective manner.⁴ Note that strategic purchasing differs from private market models as there is nothing inherent in strategic purchasing that necessitates private sector participation in funding or delivery.

4 Figueras, J., R. Robinson and E. Jakubowski (ed.), *Purchasing to improve health systems performance*, World Health Organization European Office, Open University Press, 2005

Direct Funding – Direct funding is a system in which a client and/or their family caregiver are allocated a budget based on criteria of need, with the freedom to make decisions on what types of care and support are required and enabling the client or caregiver to ‘purchase’ this care directly.^{5 6} The adoption of this policy is most evident in the United Kingdom. Closer to home, the federal Department of Veteran Affairs’ Veterans’ Independence Program is based on some of the same principles.^{7 8} Aspects of a direct funding system are also available in Ontario for the physically disabled.⁹

Social Long Term Care Insurance – In most continental European countries, social health insurance is the primary means of funding health care provision¹⁰. A variety of jurisdictions in Europe are currently exploring the creation of social insurance programs. These are specifically designed for long-term care in order to relieve pressures on health care spending; remove perverse incentives (i.e. funding approaches which favour medical solutions); and provide more even coverage across populations. Japan implemented a social long-term care insurance program in 2000.^{11 12}

Private Markets – Ontario’s long-term care sector has never been the subject of universal coverage and benefits, instead it is an assortment of public sector, government subsidy, and private market solutions. Market-based, private sector long-term care insurance has been available in the U.S. for approximately two decades, but the insurance industry have not yet been able to establish a large credible market for long-term care coverage.^{13 14} Experts have suggested the failure of private long-term care insurance is a mixture of existing public programs, regulatory and tax barriers, as well as a possible failure to persuade consumers that such coverage is a necessary and wise investment decision.^{15 16}

• **How would the introduction of other health and social care finance models and approaches affect the current status quo of funding and service delivery?**

-
- 5 Lunsgaard, J., Consumer Direction and Choice in Long-Term Care for Older Persons, Including Payments for Informal Care: How Can it Help Improve Care Outcomes, Employment and Fiscal Sustainability?, OECD HEALTH WORKING PAPERS NO. 20, 2005
 - 6 Leece, J. and J. Bornat, Developments in Direct Payments, The Policy Press, 2006
 - 7 Williams, P.A., Toronto Central CCAC & LHIN Physicians’ Forum for High Risk Seniors: Evidence and Best Practices, May 30, 2008, downloaded September 10, 2008 from http://www.ccac-ont.ca/Upload/toronto/General/Evidence_BestPractices_PWilliams.pdf
 - 8 Available at: <http://www.vac-acc.gc.ca/clients/sub.cfm?source=services/vip>
 - 9 Available at: <http://www.cilt.ca/funding.aspx>, http://www.ilcwr.org/direct_funding.html
 - 10 Saltman, R. B., R. Busse and J. Figueras (ed), Social health insurance systems in western Europe World Health Organization European Office, Open University Press, 2004
 - 11 Ranci, C. and E. Pavolini, New Trends of Long-Term Care Policy in Western Europe, Paper presented at the annual meeting of the American Political Science Association, Hyatt Regency Chicago and the Sheraton Chicago Hotel and Towers, Chicago, IL, Aug 30, 2007
 - 12 Introduction of Long Term Care Insurance – Japan, downloaded September 10, 2008 from <http://www.ipss.go.jp/s-info/e/Jasos/Long.html>
 - 13 Armstrong, W. and R. Deber, Reading the Fine Print: Focus on Long Term Care Insurance Will it meet the needs of Canadian families and communities?, March 2006, downloaded September 10, 2008 from <http://www.teamgrant.ca/M-THAC%20Greatest%20Hits/M-THAC%20Projects/All%20Info/Reading%20The%20Fine%20Print/Publications/p401089.pdf>
 - 14 Brown, J.R. and A. Finkelstein, Supply Or Demand: Why Is The Market For Long-Term Care Insurance So Small?, NBER Working Paper 10782, September 2004
 - 15 Tell, E. and J.A. Cutler, Private Finance of Long Term Care: Market Penetration and Potential, Academy Health, 22, 2005
 - 16 Johnson, R.W., The Strains and Drains of Long-Term Care, Virtual Mentor, 10, 2008

Changing Forms of Political Voice?

In 2008, it is clear that social and technological change has unpredictable implications for the future of political participation and advocacy. However, the existence of extra-democratic processes, and actions beyond formal parties and the electoral box are not new. They build off of, and are inspired by, the protests and demonstrations that were a hallmark of 20th century politics. Some instances include: the violence of the Winnipeg General Strike of 1919; the U.S. black civil rights movement; and the ‘anti-globalization’ Battle of Seattle in 1999. Lobbying, and the rise and diffusion of ideologically shaped think tanks, reflect a continuity of change. What are the forces of today that could alter the forms of political voice for tomorrow?

- “*Ubiquitous Connectivity and Pervasive Proximity*” is the reflection of the internet and social networking, particularly for Generation Y and Generation Z. Ubiquitous connectivity means that you are always connected, no matter where you are physically located. Your connectivity is no longer dependent on proximity to stationary devices, as those devices become compact and more common. Pervasive proximity means that we are always next to one another via electronic exchange.¹⁷ Already the impact of connectivity is visible in our everyday lives, and is likely to continue to reshape the forms and ties of social capital. Connection and exchange is rapid, and cuts across economic, political and social divides. Not tied to geography, a group of individuals or organizations have the potential to, and do, initiate national, provincial and international collectives as easily as a neighbourhood action.¹⁸
- *Social Identity and Issues* – For much of the previous century, the focus of large political movements was essentially based around issues of “re-distribution” and socio-economic “class”.¹⁹ Following the rise of the civil rights movement in the U.S. in the 1950s, and feminism in the 1970s and onward, the discourse on equity has shifted from socio-economic issues alone, to social exclusion and marginalization related to ‘identity’ (e.g. race, gender, and sexual orientation). It would be inaccurate to suggest that what is now labeled ‘identity politics’ is new, since there were gender-based and race movements in the 19th and 20th centuries. What is different is the prominence and balance of these issues in relation to traditional class movements. The parameters of the discussions have been pushed wider, beyond re-distribution, to include social values of participation, acceptance and recognition. There is also the question of how well political parties mirror multiple needs, the ability of parties to represent a ‘group’, and whether these parties are still the primary mechanism which groups use to put forth and promote their ideas and issues.
- *Emergent Networks and Fragmented Responsiveness* – For many years, ‘policy communities’ or ‘policy networks’ framed the typical expression of political voice and influence.²⁰ These groups were long-term, stable and structured and often reflected the structures and mandates of political institutions. With shifts in technology, and the breadth of social movements, a future question is whether groups that were once stable and structured will increasingly become

17 Federman, Mank, *How Do We Know: The changing culture of knowledge*, SEARCH Canada, Edmonton Alberta, June 15, 2007

18 Geser, H., “On the Functions and Consequences of the Internet for Social Movements and Voluntary Associations”, *Pressure Groups and Political Parties*, 2001, downloaded on September 19, 2007 from http://socio.ch/movpar/t_hgeser3.pdf

19 Fraser, N. A. Honneth, J. Golb, J. Ingram and C. Wilke, *Redistribution Or Recognition?: A Political-philosophical Exchange*, Verso, 2003

20 Meek, J.W., “Policy Networks”, *Encyclopedia of Public Administration and Public Policy Second Edition*, Routledge, 2008

emergent and organic.²¹ Fragmented responsiveness enables different configurations of groups and individuals to rapidly converge on an issue, organize a response and galvanize political pressure. Speed becomes the operative trait over consistency and stability. In response to this, issue management for government and third sector organizations may intensify. This could potentially force an ever-growing emphasis on today rather than tomorrow, on issues rather than strategies, and on specific interests rather than citizens or sectors.

- **How might the forms of political voice and advocacy change by 2033, and what might be the impact on policy development, policy content and how organizations provide support and services?**

Multiculturalism and Social Cohesion?

Countries are increasingly turning away from multiculturalism as a national policy to accommodate immigrants of diverse ethnicity, culture, religion and race.^{22 23 24} As a global standard in the multicultural concept of national identity, some national leaders are calling for Canada to consider so-called mono-cultural approaches in which there is a single ‘identity’ and prevailing ‘values’ defined by a dominant group. To date, most of such consideration is contained within the popular press rather than in policy documents.^{25 26}

The assumptions driving mono-cultural arguments include the beliefs that the competing values and interests of diversity inherently undermine social cohesion, and that recent immigrants increasingly reside in ‘ethnic enclaves’ (i.e. areas with a high concentration by ethnicity or race). However, research from Statistics Canada suggests the preference to live with persons similar to oneself is a familiar pattern throughout Canadian history. What’s different today is that immigration is the basis for at least half of Ontario’s population growth, making ethnic enclaves more statistically visible than in the past.²⁷ This implies that popular perception, fueling popular discourse, is an artifact of numbers rather than a new trend. However, this does not negate that ‘ethnic enclaves’ are also formed as a result of economic segregation – with many immigrants forced to live in a particular area due to a lack of economic choice rather than a lifestyle preference.

What remains unclear for now and the future is whether social diversity reduces overall social cohesion. This argument, most persuasively presented in the work of American social capital guru Robert Putnam, is called into question by recent Canadian studies which suggest that diversity does not appear to significantly erode social cohesion (e.g. support for social

21 Pal, LA., Virtual Policy Networks: The Internet as a Model of Contemporary Governance, Carlton University, downloaded September 19, 2008 from http://www.isoc.org/inet97/proceedings/G7/G7_1.HTM

22 Goodhart, D., “Too Diverse?”, Prospect, 95, 2004, downloaded September 10, 2008 from www.prospect-magazine.co.uk

23 Home Office, Strength in Diversity: Towards a Community Cohesion and Race Equality Strategy, London: Home Office. 2004

24 Baldwin, T. and G. Rozenberg, “Britain “Must Scrap Multiculturalism”, The Times 3 April, p. 1., 2004

25 National Post, “The Failure of Multiculturalism”, National Post, August 25, 2006, downloaded September 10, 2008 from <http://www.nationalpost.com/news/story.html?id=d6808448-7d90-446f-9d44-696b54c89f13>

26 Zolf, L, Multiculturalism and the Muslim backlash, CBC News, June 15, 2006, downloaded September 10, 2008 from http://www.cbc.ca/news/viewpoint/vp_zolf/20060615.html

27 Hou, Feng, Spatial Assimilation of Racial Minorities in Canada’s Immigrant Gateway Cities, Urban Studies, 43, 2006

spending).²⁸ The implication of these studies shows that what is bad for the U.S. is not necessarily bad for Canada, and that Canada's multiculturalism policy is a successful paradox —diverse cohesion.

- **Could changes in attitudes and beliefs affect the number of immigrants entering Canada per year, despite projected labour market requirements?**
- **Would a mono-cultural approach alter the requirement for organizations to adapt to ethno-cultural differences in service delivery?**

2. Economic

Economic Growth and Globalization

In 2005, for the first time, the government of Ontario produced economic growth forecasts for the next 30 years.²⁹ Acknowledging the uncertainty of such forecasts, the initiative attempted to account for many of the demographic and other factors considered in this PESTEL paper.

- I For 2015-2020, it is predicted that moderate economic growth and an aging population will combine to cause a growth in spending that will outpace growth in revenue, therefore risking a small deficit if no preventive action is taken.
- I The deficit size is projected to accelerate and grow between 2020 and 2025, again contingent on lack of policy action to address drivers such as aging, health care costs and tax base. The implication is that governments of the future will be considering ways to off-load expenditures from the public sector to the private sector and to individuals and families.

Globalization, in its most basic definition, refers to economic policies in which goods, services and investments are increasingly produced around the world. In its present form, investment and production is facilitated by the presence of few international rules and the reduction and elimination of national rules. Globalization can influence the size of the economy, and the capacity of governments to generate revenue through taxation, both in terms of amount of economic activity or 'competitive' policies, which influence taxation rates.

However, economic growth predictions are based on assumptions around past patterns of investment, and forms of economic activity. Ontario, for instance, is currently undergoing a downturn in its manufacturing sector.³⁰ This is most evident in the automotive sector, the future of which is in question when considered with climate change pressures and solutions.

Some post-industrial shifting from a manufacturing base to a knowledge economy has helped sustain Ontario's economy (e.g. as a financial hub, and site of corporate head offices). But as the

28 Banting, K.C., *Canada As Counter-Narrative: Multiculturalism, Recognition and Redistribution*, Paper Presented to the Panel on Canada's Contribution to Understanding Rights and Diversity, Canadian Political Science Association, University of Western Ontario, June 2, 2005

29 Ontario, *Toward 2025: Assessing Ontario's Long-Term Outlook*, Ministry of Finance, 2005

30 Ontario, *Economic Update*, August 2008, downloaded September 19, 2008 from <http://www.fin.gov.on.ca/english/economy/ecupdates/update.html>

forces of globalization continue to exert pressure, the question is whether Ontario, and Toronto in particular, will keep pace and remain an engine of growth.

International mergers and acquisitions are arguably reducing the number of corporate head offices and the quality paying jobs associated with them. Globalization has also led to shifts in production and increased outsourcing of manufacturing to other countries (e.g. China).^{31 32} Both China and India are rapidly increasing activity in international corporate ownership, technology and knowledge.^{33 34} However, there is no clear relationship between globalization and the size and growth of the economy. That is, the 'economic pie' may be growing in such a way that Canada and Ontario end up receiving a smaller piece of a larger pie.

- **What might be the impact of climate change policies and solutions on international trade and manufacturing – a shift back to more localized production and investment due to policy barriers and rising energy costs?**
- **Critical resources such as oil and agriculture have recently been the subject of volatile swings in price – could reductions in energy and food security and stability affect the capacity of informal caregiving and aging at home?**
- **Will the current downturn and shifts in economic activity have long-term implications for aging at home and caregiving? What will be the impact of forced retirements or shifts to lower earning jobs in relation to future savings and pension protections?**
- **Globalization has arguably been a primary influence on the capacity of governments to tax and generate revenues – how will Ontario adapt in the future?**

Economic Volatility

The Great Depression and subsequent post-war economic and social policies led to increases in the regulation of financial markets and economic activity. First and foremost was governing consensus that state powers and levers should be used to avoid economic crisis and to smooth the volatility of what were seen as normal business cycles of growth and recession.³⁵

Through the 1950s and 1960s, the volatile cycles appeared muted, and North American and European economies entered a prolonged period of expansion with minor dips.³⁶ The relative calm of this period came to an abrupt end in 1973 when the first of the so-called 'oil crises' led to inflation and then stagflation (i.e. high inflation, high unemployment). The ultimate response to these crises was the introduction of new policy paradigms such as monetarism, and gradual de-regulation of capital and other international and national markets over the next 30 years. Today,

31 Storey, Robert H., "Industrial Sunset: The Making of North America's Rust Belt, 1969-1984", *The Canadian Historical Review*, 86, December 2005

32 Lin, Z and W. Pyper. Job Turnover and Labor Market Adjustment in Ontario from 1978 to 1993, November 1997, Statistics Canada Working Paper No. 106

33 Holtz, C.A., China's Economic Growth 1978-2025: What We Know Today about China's Economic Growth Tomorrow, Social Science Division, Hong Kong University of Science & Technology [downloaded September 8, 2008 <http://ihome.ust.hk/~socholz/Growth/Holz-China-Growth-2Nov05-web.pdf>

34 Wilson, W.T., *The India Century*, 2008, [downloaded September 8, 2008 at <http://www.dancewithshadows.com/business/india-third-largest-economy.asp>

35 Tchana, F., Regulation and Banking Stability: A Survey of Empirical Studies, MPRA, May 2008, downloaded September 19, 2008 from http://mpra.ub.uni-muenchen.de/9298/1/MPRA_paper_9298.pdf

36 Vietor, R.H., "Contrived competition: economic regulation and deregulation, 1920s-1980s", *Business History*, 1994

the international economic world is on the cusp of perhaps its most significant economic crisis since the Great Depression.³⁷

- **Will the intensity of business cycles (although not necessarily frequency) grow over time and how will this affect revenue and social policy in the future?**

Aging and Economic Growth

There is much debate and fear around the relationship between an aging population and economic growth. For countries in the Organisation for Economic Co-operation and Development (OECD), the declines projected to occur in both labour force participation and labour force-to-population ratios suggest modest declines in the pace of economic growth. But even these declines may be moderated by behavioural responses to an aging population: higher savings for retirement; greater labour force participation; and increased immigration from labour-surplus to labor-deficit countries.³⁸ Another unknown in the relationship between aging and economics is whether the belief that aging adults spend less will prove to be true of the future Boomer population.

- **Does a decline in economic growth present a threat to the revenue generation of government, or the necessity to revisit current taxation distribution between older retired adults and a younger working population?**

Aging and Workforce Policy

How does Ontario support a growing number of persons in need of care if we are facing a shrinking labour market? The obvious implication is that family and friends might have to take on an increasing burden, or if that is not possible, that there will be an increase in institutionalization. Ontario and Canada are already beginning to feel the effects of an aging workforce, and appear to be on the cusp of a major shift in market size leading to severe labour shortages.³⁹ The general consensus is that immigration must remain high, though it is agreed even increased immigration will not be sufficient to offset the decline of other population drivers (e.g. fertility rate) and labour market size.

There are a number of factors influencing retirement age, though generally speaking these factors all push in the direction of a delayed retirement. Overall, data suggests that Canadians in their late 40s and early 50s are planning to put off their retirement plans. However, since 1976 the median age of retirement has shifted downward from 64.9 to 61 years of age. This type of conflicting data means that in the short-term there is uncertainty about the future direction of change – whether the median age of retirement will shift up or down.

37 Elliot, L, "A Financial Crisis Unmatched Since the Great Depression, Analysts Say, The Guardian, March 18, 2008 downloaded from <http://www.guardian.co.uk/business/2008/mar/18/creditrunch.marketturmoil1>

38 Bloom, D, D. Canning and G. Fink, Population Aging and Economic Growth, Program on the Global Demography of Aging Working Paper Series #3108, Harvard University, 2008

39 McMullin, J.A. and M. Cooke, Labour Force Ageing and Skill Shortages in Canada and Ontario, Canadian Policy Research Networks, 2004

Many jurisdictions are exploring how workforce policy can be strengthened and expanded to improve flexibility for caregivers so that they can remain in the labour market. Others are attempting to bolster labour force participation and/or reduce potential economic losses by providing economic protections such as using tax policy to establish credits and incentives.

- **What is the role and balance between government and private sector organizations in creating more flexible workplace policies to support people in their dual roles as labour market participants and as caregivers?**
- **Can and will tax policy be an additional instrument used to provide protection to individuals in their caregiving role and decisions?**
- **What will be the impact of new technology, and technology-enabled “productivity”, in caregiving – how will it change what is currently a labour intensive activity?**

Gender and the Workforce

Women have long been the primary caregivers for family members and friends. Against this traditional gendered role is a dramatic increase in female participation in the labour market, including roles of increasing authority, prestige and compensation. However, this is an ‘as well as’ not an ‘instead’ situation. Despite these labour market changes, women continue to be the primary caregivers overall.

Surveys suggest that women who balance both paid employment and unpaid caregiving are more satisfied with life than those who are caregivers alone.⁴⁰ Some caution is advised when drawing this conclusion, since caregivers who are completely out of the labour market are often caring for individuals with high care needs. Nevertheless, the logical inference is that workforce participation can provide an opportunity to socialize, gain recognition, and earn income. The critical factors in being able to manage both roles appears to be choice, flexibility, and supports.

Those caregivers who ‘drop out’ of the marketplace – mostly women - often do not return to the workforce at all, and in the event they do, they suffer losses in pension and savings.⁴¹ People in high income groups often increase their labour contribution rather than provide informal care, using their increased earnings to purchase caregiver services.

- **What are the policies that increase the health and capacity of caregivers and allow them to maintain the choice of participation in the labour market?**
- **How might the contribution of men to the caregiving role change over time?**

40 Canada, General Social Survey, Ottawa: Statistics Canada, 2002

41 Lily, M., A. Laporte, P. Armstrong and P.C. Coyte, “Labor MarketWork and Home Care’s Unpaid Caregivers: A Systematic Review of Labor Force Participation Rates, Predictors of Labor,” *The Milbank Quarterly*, 85, 2007
MarketWithdrawal, and Hours ofWork

3. Socio-cultural

Immigration

Immigration continues to be the main engine of population growth in Canada, currently accounting for about 50% of Ontario's own population growth. Statistics Canada forecasts that by 2030, population growth for the country will be entirely driven by immigration. But no increase in the number of immigrants will stop Canada's population from aging.

Currently, it appears that immigration will continue at present or even higher numbers in order to maintain economic and labour market growth. Yet, there is some evidence that immigrants are increasingly migrating to the western provinces due to more buoyant economic markets, incentives and employment opportunities.⁴²

Immigration and settlement policy are explicitly political, and while economic and labour market imperatives will continue to be important factors, other considerations (e.g. policies supporting multiculturalism) might override demographic assumptions.

- **Increases in temporary work permits and potential weakening of in-country migration on humanitarian and compassionate grounds (e.g. family reunification) – will this be the face of immigration for the future?**
- **What will be the source countries for immigration – will the economic rise of China and India reduce the numbers emigrating from these countries over time?**

Transnationalism

Transnationalism is a growing international phenomenon in which people hold citizenships with multiple countries where they live and do business.⁴³ While the revolution in communications and transportation technologies has enabled migrants to maintain strong connections, it is currently believed that it is a small share of emigrants and co-ethnics or co-nationals who are active in transnationalism.⁴⁴ With Canada's large and diverse immigrant population, as well as rules permitting dual citizenship, the current transnational population may continue to grow in the future.

- **How might transnationalism affect pension contributions and savings?**
- **Where will transnational population decide to “age”: in Canada, or in their country of origin?**

Geography of Ontario 2033

Ontario has a strongly divided geography. For many years, the North and many rural communities in southern Ontario have witnessed the exodus of their young people to urban centres, leading in some cases to high dependency ratios at both ends of the age continuum: 1) a

42 Jedwab, J. *Immigrant Family Income in Canada 2006: Saskatchewan and Alberta are areas of highest remuneration*, Association of Canadian Studies, September 2008

43 Robinson, R., *Transnational Migrant Communities: Their Potential Contribution To Canada's Leadership Role And Influence In A Globalized World*, Ottawa: The North-South Institute, 2005

44 Goldring, L., Henders, S. J., and P. Vandergeestl, *The Politics of Transnational Ties: Implications for Policy, Research, and Communities*, YCAR-CERLAC Workshop Report March 7 and 8, York University, Toronto, 2003, downloaded on September 11, 2008 from http://www.yorku.ca/ycar/workshop/workshop_final_report.pdf

large seniors population; and 2) a significant child population.⁴⁵ Northern and rural areas also typically have higher rates of low income, low education, high health risk behaviour (e.g. smoking), and an elevated presence of chronic disease (e.g. diabetes). Moreover, rural areas are by definition low population density, often having few specialized health resources.

The other geographic trend is within urban centres, particularly in relation to the large metropolis of Toronto and the GTA. Within Toronto itself, the inner city is increasingly affluent as the process of gentrification pushes deprivation out.⁴⁶ A resettlement process has begun as low income families move to what are called the ‘inner suburbs’ (e.g. Etobicoke, Scarborough) and the ‘outer suburbs’ (e.g. areas of Mississauga).

- **Will climate change solutions (e.g. carbon tax) accelerate urban/suburban shifts as what is often a ‘lifestyle preference’ for the inner city becomes an economic decision as well?**
- **Will Ontario increasingly become a geo-economically divided province, filled with ‘sub-Ontarios’ defined by health status, economic resources and service availability?**
- **What values will define and shape Ontario's future as a caring province?**

Aging and Health

Over the last 30 years, people have begun to live longer and in apparently better health. Yet, even assuming healthier living, the effect on health systems is unclear. Health care costs increased dramatically over the same time period that, statistically-speaking, Ontarians were becoming healthier. Adding uncertainty to uncertainty, what are the implications of living longer and healthier on caregiving, caregivers and our social health systems? While people living longer might imply greater caregiving demand, it has been speculated that the observed closing of the gender gap in life expectancy might reduce some care needs, as men live longer and couples support each other (i.e. the death of a spouse being a strong predictor of increased care needs and long-term care admission).^{47 48}

- **What will the life and health expectancies be by 2033 (e.g. longer or shorter; healthier or unhealthier)?**
- **Will observed trends with increases in obesity, decreases in physical activity and other health behaviour trends continue, and what will be the impact on care needs?**
- **Can we assume a healthier population means lower health care costs, off-setting anticipated increases in social care expenditures?**

45 Canadian Population Health Initiative, *How Healthy are Rural Canadians: An Assessment of Their Health Status and Health Determinants*, Canadian Institute for Health Information/Public Health Agency of Canada/Centre for Rural and Northern Health Research, 2006

46 Hulchanski, D.J, *The Three Cities within Toronto: Income Polarization among Toronto's Neighbourhoods, 1970-2000*, Toronto: Centre for Urban and Community Studies, University of Toronto, 2007

47 Gaymu, J. P. Ekamper and G Beets, “Future Trends in Health and Marital Status – Effects on the Structure of Living Arrangements of Older Europeans in 2030, *European Journal of Ageing*, 5, 2008

48 Trovato, F. and L. Nirannilathu, “From divergence to convergence: the sex differential in life expectancy in Canada, 1971-2000”, *The Canadian Review of Sociology and Anthropology*, 2007

Social Ties and Social Capital

There is a large body of research indicating that social networks and support positively influence health and mental health status; the availability of caregiving; and the awareness of professional care services and options.⁴⁹ However, there is a socio-economic component in that more affluent and, in particular, better educated persons report having wider social networks.^{50 51 52} Living arrangements, social ties and social capital all have an impact on caregiving needs and requirements. However, it is important not to mix up a support network with a care network as these are not necessarily the same.⁵³

The key source of social support and informal care for most individuals are their family or close friends. These relationships have undergone tremendous transformation over the last 30 years. Some evidence suggests family break-up (e.g. divorce) can reduce the amount of support from children, and divorce rates in Ontario remain high.⁵⁴ Living with another person, frequently a spouse, influences factors such as isolation and having someone to help with daily activities.⁵⁵ It has yet to be determined whether divorce rates affect the likelihood of living alone when older.

It is also possible that the patterns of social capital and support are changing. There is some speculation that public sector programs ‘crowd out’ and reduce the willingness of people to help each other. However, Scandinavian studies suggest it is the opposite, indicating that public programs providing formal care seem to increase social capital and the willingness to help others on an informal basis.

The most recent survey of volunteering among Canadians found that rates have increased slightly.⁵⁶ While 45% of Canadians report spending some time volunteering, 11% of Canadian volunteers account for 77% of volunteer hours. Although youth volunteer more frequently, persons 55 years and older provide the most volunteer hours, at just over 30% of total volunteer hours.

It is not surprising that older adults are the largest providers of volunteer time, as many of this population are retired or semi-retired with no dependent children. Yet, the likelihood of providing caregiving help directly declines with age. Canadians aged 15 to 24 were most likely to help others directly (89%), followed closely by those between 25 and 54 years of age (85-88%). The rate of helping then declines noticeably among those aged 55 to 64 (81%), and drops off again for those over the age of 65 (66%). Many of those over the age of 65 do, however, provide various

49 Berkman, L, F. Glass, I Brissette and T.E. Seeman, “From Social Integration to Health: Durkheim in the New Millenium”, *Social Science and Medicine*, 51, 2000

50 Broese Van Groenou, M.I and T. Van Tilburg, “Network Size and Support in Old Age: Differentials by Socio-Economic Status in Childhood and Adulthood”, *Ageing and Society*, 23, 2003

51 Antonucci, T.C., “Social Relations: An Examination of Social Networks, Social Support and Sense of Control,” in Birren, J, and K.W. Schaie (eds) *Handbook of Psychology of Ageing*, New York: Academic, 2001

52 Krause, N. and E. Borawski-Clark, “Social Class Differences in Social Support Among Older Adults”, *Gerontology*, 35, 1995

53 Keating, N., P. Otfinowski, C. Wenger, J. Fast and L. Derkson, “Understanding the Caring Capacity of Informal Networks of Frail Seniors: A Case for Care Networks”, *Ageing and Society*, 23, 2003

54 Steinberg Schone, B., and L.E. Pezzin, *Divorce Reduces Informal Caregiving and Economic Ties Between Elderly Parents and Their Adult Children*, Agency for Health Care Policy and Research, 1999, downloaded September 12, 2008 from www.ahrq.gov/news/press/pr1999/divorcpr.htm

55 Lafrenière, S.A, Y. Carrière, L. Martel and A. Bélanger, *Dependent Seniors At Home–Formal And Informal Help*, Ottawa: Statistics Canada, 2003

56 Hall, M., D. Lasby, G. Gumulka, C. Tryon, *Caring Canadians, Involved Canadians: Highlights from the 2004 Canada Survey of Giving, Volunteering and Participating*, Statistics Canada/Imagine Canada, 2006

types of informal care and support to those within their social network or family, and these activities are not captured in formal volunteering statistics.

Some studies have indicated that immigrants are less likely to volunteer than people born in Canada, although the gap appears small.⁵⁷ Given the challenges of adapting to a new country and work environment, the difference seems practical in character with no evidence that it indicates a preference among immigrants to volunteer less.

- **What will be the generational and cultural patterns of volunteering by 2033?**

Shared Values or Civility and Tolerance?

One of the perceived socio-cultural threats for the future is a breakdown in 'shared values'. While perceived value gaps are most evident when discussing ethnic and cultural differences, they are also present when comparing generations (e.g. Baby Boomer vs. Generation X), as well as the splintering of interests by identity.

Yet some have convincingly argued that the notion of Canada as a nation of shared values is a myth.⁵⁸ While survey findings suggest differences between collective, aggregated Canadian and American public opinions, there is a logical leap in concluding that these Canadian opinions constitute shared values and consensus. Past political context and public protest remind us that there are large divides and disparities in beliefs and attitudes among Canadians. Recent research also indicates that there are greater differences in values amongst various groupings of Canadian-born residents, than between Canadian-born and ethnic or religious groups of immigrants.⁵⁹

The question of shared values and assumptions may need to be repositioned when thinking about the future. It may be that it is not shared values that establishes social cohesion in Canada, but instead that social cohesion is achieved through institutions and social practices of civility and tolerance. Does this mean that it will be more meaningful to discuss changes in 'Canadian values' as changes in traditional civility and tolerance? More importantly, is a decrease in civility and tolerance the direction that Canada is headed?

- **How might reductions in civility and tolerance affect the present policy environment, and the direction of policies in the future?**

The Widening Income Gap

There is now a consensus that the general income inequality gap has been growing, particularly since the 1990s. The gains associated with the economic expansion of the '90s went mainly to higher income families while the earnings of poorer families stagnated, and social transfers declined.⁶⁰ The mid-1990s also saw an unexpected increase in the low-income rate in Canada. It deviated from its expected trend based on the unemployment rate, because though the unemployment rate fell, the low-income rate continued to rise. As with the widening income gap, this development caused earnings problems amongst poorer families, which were magnified by

57 Canadian Council on Social Development, *Making Connections: Social and Civic Engagement among Canadian Immigrants*, 2006

58 Heath, J., *The Myth Of Shared Values In Canada*, The 2003 John L. Manion Lecture, Ottawa, May 15, 2003

59 Soroka, S. N., R. Johnston and K. Banting, *Ties That Bind? Social Cohesion and Diversity in Canada*, IRPP, 2006, downloaded September 19, 2008 from [http://degreesofdemocracy.mcgill.ca/other/2007%20SorokaJohnstonBanting\(IRPP\).pdf](http://degreesofdemocracy.mcgill.ca/other/2007%20SorokaJohnstonBanting(IRPP).pdf)

60 Picot, G. and J. Myles, *Income Inequality and Low Income in Canada: An International Perspective*, Analytical Studies Branch Research Paper Series, Ottawa: Statistics Canada, 2005

declining social transfers. The burden of this income gap has fallen particularly hard on recent immigrants.⁶¹

- **What implications will the income inequality gap have on health status (since the gradient of health tends to closely mirror the gradient of income)?**
- **What are the implications of lower incomes and earnings on personal savings and the accumulation of wealth, and by extension on the ability to age at home?**
- **How might the capacity of persons to balance caregiving with income requirements and labour force participation change over the long run (including the capacity to save for their own aging and retirement)?**

The Wealth Gap and Savings

One of the social policy success stories over the last 30 years has been the reduction in rates of poverty for seniors. The dramatic decline in low-income levels among Canadian seniors since the 1970s - a result of the maturation of legislative changes introduced in the 1960s - is evident and well-documented. However, the fundamental question is whether this success story in post-war social policy will be maintained over the next 30 years.

Statistics Canada data indicates unambiguously that wealth inequality has increased in Canada. The wealth of the poorest 40% of the distribution of Canadian families stagnated or fell over this 21-year observed period, while the wealth of the top deciles in the same period rose substantially - and the further up one goes, the larger the rate of gain.⁶²

A new study has found that, over the past 20 years, the gap in pension contributions in preparation for retirement has widened substantially between families at the top of the earnings scale and those at the bottom. The study showed that families with the top earnings in 2003 contributed more towards their pensions and were likely to be better prepared for retirement than their counterparts were in 1986. As a result of these increased savings by the wealthy, the gap in family contributions to RRSPs and RSPs between rich families and their lower-income counterparts has grown even wider over the last two decades.⁶³

While women are increasingly participating in the labour market and thereby contributing to CPP, there continues to be a significant gender gap in both wages and savings.⁶⁴

- **Are there policies that can provide protection from the savings gap, particularly as it relates to persons in a caregiving role?**

61 Picot, G. and J. Myles, *Income Inequality and Low Income in Canada: An International Perspective*, Analytical Studies Branch Research Paper Series, Ottawa: Statistics Canada, 2005

62 René Morissette, R. and X. Zhang, *Revisiting Wealth Inequality, Perspectives on Labour and Income*, Ottawa: Statistics Canada — 2006.

63 Morissette, R. and Y. Ostrovsky, *Pension coverage and retirement savings of Canadian families, 1986 to 2003*, Business and Labour Market Analysis Division, Ottawa: Statistics Canada, 2006

64 Lily, M., A. Laporte, P. Armstrong and P.C. Coyte, "Labor MarketWork and Home Care's Unpaid Caregivers: A Systematic Review of Labor Force Participation Rates, Predictors of Labor," *The Milbank Quarterly*, 85, 2007
MarketWithdrawal, and Hours ofWork

Aging Caregivers

In previous generations, persons with serious mental illness, significant physical disability and/or developmental challenges were likely to live in an institution and die young. Neither of these conditions are true to the same degree in Ontario in 2008. Significant progress means the vast majority of these population groups live independently or at home with family. Even when these persons are in an independent living arrangement with professional support, family often continues to contribute substantially to their social and financial well-being. However, as caregiving parents who belong to the 'Baby Boomer' generation begin to age and require care themselves, the challenges of today are likely to turn into bigger challenges in the future.

One question is whether the dependent or semi-dependent child of today accurately represents the needs and status of a dependent or semi-dependent child in the future. As noted, these populations have moved beyond the institution, and advances in both technology and social conditions may be changing both their needs and the dependency relationship. Fewer and fewer persons with serious mental illness experience a long-stay in a psychiatric institution, and new medications and community support programs are creating increasing opportunities for 'normalized' living conditions, employment and recovery. Assistive devices and support further advance the capacity of the physically disabled to live independently, and while more progress is required, opportunities for employment are also increasing. Changes such as these can significantly influence the nature and extent of dependency.

The Public Guardian of Ontario is frequently faced with difficult situations regarding the financial and social well-being of vulnerable adults. Bill C-10 demonstrates how the public sphere attempts to assist in these situations through the reintroduction of the 'lifetime benefit trust', a mechanism that enables parents to provide estate planning for their dependent adult children.

- **Will the role of families providing support change as a result of changes in the social role and independence of vulnerable individuals?**
- **How can individuals and families plan for the multiple impacts of aging?**

Finances and Security of Control

Families often fail to plan ahead with the adoption of living wills and power of attorney. Preparations are not in place so that property and care decisions can be assumed by the caregivers when the mental competency of an aging parent is in question. Such failures increase pressures on the Public Guardian to intervene and adjudicate complex situations. Even in cases where families have planned ahead, there is growing recognition of financial and physical abuse correlating to these decisions.

- **With an aging population, the dependency relationships that evolve will likely increase in frequency, but there remains the unpredictable question of how such relationships can be better governed and protected in ways that coordinate and cut across social service systems, police and the judicial system?**

Faith-Based Communities and Services

In the U.S., there has been an increase in direct government funding of faith-based community services. Centers for Faith-Based and Community Initiatives were established at five federal

agencies, and assistance and guidebooks were provided to religious groups to help them to apply for federal funds of over \$5 billion.⁶⁵

In Ontario, there is a long-standing historical association between faith and human service delivery (e.g. Catholic Children's Aid, Catholic Family Services). More recently, new social service organizations have emerged to address the needs of immigrants, though these have been more closely related to ethnicity rather than faith.

- **Would an increase in faith-based services, reflecting the deep diversity of the current and future Ontario population, negatively or positively enhance the capacity of caregivers?**

The Generations Gap

With the move into the new century, we are increasingly faced with a proliferation of labels and names for various generations of children, youth and adults (e.g. Generation X, Generation Y, Generation Z).⁶⁶ The most famous are the Baby Boomers: the generation who will start entering their older adult years in 2011. At the other end of the age spectrum there is Generation Y, who are the future caregivers. The people of this generation, the so-called Echo Boom and iGeneration (born between 1987-1994 and 1995-2007 respectively), will constitute much of the labour market and caregiver population over the next 25 years, and their understanding of technology and its usage will impact the way caregiving is done in the future.

Technology is a major driver and there is an emerging consensus that it has meaningful implications for how younger generations think, process information, communicate and interact.⁶⁷ No less important are major forces such as globalization, economic ideas, and changes in shared political context/referents (e.g. no memory of the Cold War or the Berlin Wall). That future generations will (and do) use technology frequently and differently seems inevitable. What they value and how this will translate in markets and in their families is less clear. It has been suggested that Generation Y is a population that is optimistic, idealistic, empowered, ambitious, confident and passionate. It has also been suggested that they have a greater interest in a work-life balance, and that they demand the flexible working conditions to accommodate it.

- **How will Generation Y respond to a possible future of supporting ever larger numbers of aging Baby Boomers, if that manifests as taxation on their labour market efforts?**
- **Will Generation Y's current demand for life-balance to pursue personal interests and friendships be converted to demands for flexible work policies that allow them to provide support and care to their friends and family?**
- **With the perception of less commitment to 'ideology', will Generation Y be more interested in exploring other policy options including increased use of private markets and/or market forces such as strategic purchasing?**

65 White, D., Federal Funding of Faith-Based Services, downloaded September 12, 2008 from http://usliberals.about.com/od/faithinpubliclife/a/Funds_Faith2.htm

66 See http://en.wikipedia.org/wiki/List_of_generations

67 Federman, M., Why Johnny and Janey Can't Read, and Why Mr. And Mrs. Smith Can't Teach: The Challenge of Multiple Media Literacies in a Tumultuous Time, Creative Commons, 2007, downloaded September 11, 2008 from <http://individual.utoronto.ca/markfederman/WhyJohnnyandJaneyCantRead.pdf>

68 Bhindi, N. and M. Hough, Working More Effectively with Generations X and Y Within a School Environment, ACEL National Conference, October 2006

- **Will Generation Y increasingly become more transnational – extending the range of labour mobility and movement beyond Ontario or even Canada?**

4. Technological

Consumers at the Centre of Care

Standardization, digitalization, nanotization, de-tethered mobile networks, peripheral intelligence, biogenomics, non-invasive modalities and robotics are just a few of the extraordinary technologies that seem to offer the potential to shift from a closed, provider-based medical delivery system to a consumer-driven, patient-centered one.

The market for home monitors is now valued at about \$500 million, but could grow to as much as \$5 billion in 10 years according to Omar Ishrak, President and Chief Executive of GE Healthcare's clinical systems business.⁶⁹ Remote monitoring technologies include devices such as electronic perimeter management and wander management systems: tools that assist in the care of people with cognitive impairment and which facilitate communication between providers and patients while in different locations.⁷⁰

Aging Services Technology are devices designed to assist individuals' ability to perform activities of daily living and to maintain their independence. The category includes a wide range of devices from those that remind individuals to eat and to take medication, to video phones.

Together, technologies like these have the potential to transform aging at home and the role of the caregiver. The significant current challenge in adopting these technologies is cost, as most services and systems are private sector-based and only some public sector programs have explored uptake and usage.

- **Web of Care** consumers will have 'always-on' access to public internet and subscription-based medical/health knowledge databases.
- **Personal Health Records** will be electronically connected to the internet, evolving with emerging technology and electronically connected with the latest health-coach mindware that anticipates health needs and enables the storage, management and intelligent use of a patient's personal medical record to improve their health and medical care.
- **Smart eHomes** of the future will be embedded with all types of internet-connected monitors, including biomonitors tailored to the individual needs of the residents.
- **HealthBots** will assist elderly and special needs patients at home by reminding them to visit the bathroom, take medicine, or schedule an appointment with their doctor.
- **Anywhere@Decision Support** can provide health informatics and will deliver tools, resources, and support for patients and healthy people who need to better manage prevention and treatment decisions.
- **Wearable Biosensors** are detection devices that, when worn on certain body parts, search for and identify status indicators of a biological function such as heart rate and glucose levels.

69 Downloaded from <http://www.businessweek.com/ap/financialnews/D93D25D00.htm>

70 Konig, M., A. Tumlinson, S. Koss and J. Blum, Technologies Promise in Enabling Long-Term Care Reform, Avalere Health, July 2008

- **Implantable eCare** are the insertion and management of artificial devices within the human body, a technology which may become increasingly common for maintaining and improving health.
 - **NanoCare** is the next generation of implantable eCare referring to the creation of tiny components that will be constructed, inserted and applied within and to the human body.⁷¹
- **How prevalent will remote monitoring technologies and aging services technology become in the future?**
 - **Do such technologies have the potential to fundamentally alter the labour intensive nature of caregiving, as well as alleviate future projected health human resource needs and shortages?**
 - **Without changes in funding models and criteria, does new technology have the potential to create an economic divide with only high income populations gaining access and benefits?**

Genetics

The concept of the health consumer at the centre of care is further supported by genetic technologies. This could include new ill-health prediction and prevention technologies and more effective therapies using existing as well as new gene-based drugs.⁷²

Genetics also has the potential to alter the prevalence of conditions that affect the physical and cognitive health of children. Currently, approximately 40% of birth defects are from unknown causes. For known causes, the technology does not yet exist or the critical mass in prevalence is so small that mass screening and intervention appears prohibitively expensive.⁷³ Nevertheless, with rapid advances in understanding of the human genome, the possibility of breakthrough knowledge, screening and technology has unknown potential.

- **What might be the impact of genetic research and interventions on health and social care costs?**
- **What are the ethical implications of genetic screening for birth defects and how might such factors influence uptake and changes in prevalence of children with disabilities?**

5. Environmental

Climate Change

Climate change will impact public health both directly and indirectly. Direct effects include extreme events caused by climate change. For example, when Hurricane Katrina struck the southern US coast in 2005, it caused more than 1,300 deaths, and many people went missing. In Europe, the two week heat wave of 2003 caused between 30,000 and 45,000 premature deaths.

71 Goldstein, D. P. J. Groen, S. Ponshe, M. Wine, *Medical Informatics 20/20*, Jones & Bartlett Publishing Co., 2007

72 United Kingdom, *Our Inheritance, Our Future Realising the potential of genetics in the NHS*, Whitepaper presented to Parliament by the Secretary of State for Health, June 2003

73 Baird, P., *Reducing Birth Defects in the Population*, Centre for Health Services and Policy Research, 99:4D, 1999

Beyond direct extreme events, climate change also impacts forests and crops, water resources, transportation, energy and the built environments in which we live. Exposure to air pollution is associated with increases in both morbidity and mortality. People who die from causes related to air pollution are better tracked than the much larger numbers of vulnerable groups who get sick from it such as infants, the elderly, people who are not physically fit, people with existing chronic diseases and mental illness, patients on particular medications, ‘housing poor’, the socially isolated and homeless. Resource dependent communities, including many aboriginal communities, are especially vulnerable to climate change.⁷⁴

The following list provides a few specific examples of the health impacts of climate change:⁷⁵

Temperature-related morbidity and mortality

- I cold and heat-related illnesses; respiratory and cardiovascular illnesses; increased occupational health risks

Health effects of extreme weather events (storms, ice-storms, hurricanes, flooding)

- I damaged public health infrastructure, including contamination of food and water; injuries and illnesses; occupational health hazards; population displacement

Air pollution-related health effects

- I changed exposure to outdoor and indoor air pollutants and allergens; asthma and other respiratory diseases; heart attacks, strokes and other cardiovascular diseases

Health effects of water- and food-borne contamination

- I diarrheas and intoxication caused by chemical and biological contaminants

Vector-borne and zoonotic diseases

- I changed patterns of diseases caused by bacteria, viruses and other pathogens carried by mosquitoes, ticks and other vectors

Socio-economic impacts on community health & well-being

- I loss of income and productivity; social disruption; diminished quality of life; socio-economic impacts on community, health and well-being; increased costs to health care

Impact of climate change action

The world’s scientific consensus is that we have very little time - a few years - to reverse the rise in greenhouse gas emissions. According to the World Watch Institute, new technologies, new behaviours and new approaches to global governance will be driven by the need to effectively manage and survive climate change. In addition to the physical reality of climate change, actions taken to mitigate climate change might impact health infrastructures.

Climate change action may result in positive health outcomes. The World Health Organization (WHO) reports that actions taken to mitigate the effects of climate change can have direct and

74 Ontario College of Family Physicians, *Addressing the Health Effects of Climate Change*, April 2008

75 Health Canada, *Canada’s Health Concerns from Climate Change and Variability*, Environmental & Workplace Health, Ottawa, 2007

immediate health benefits. For example, reduced use of coal-fired power generation reduces air pollution and associated respiratory and cardiopulmonary disease and death. Increased use of active modes of transport such as walking and cycling can reduce obesity, air pollution and traffic-related injuries and deaths. Dietary changes such as eating foods that are locally lower in the food chain, such as fruits, vegetables and grains (as opposed to red meats which are high emitters of greenhouse gases), lowers risks of obesity, stroke, coronary artery disease, hypertension and diabetes.

Climate change adaptation measures related to health can include improving access to cooler or air-conditioned environments, providing protective shelter and clothing, and improved weather condition monitoring such as early weather warnings and advisories. Adaptation can also include infrastructure re-design from buildings and sewer systems to urban planning and transportation.⁷⁶

- **How will societies need to adapt and become resilient to climate change impacts that are already unavoidable?**
- **Will climate change impacts lead to violent competition for scarce resources or greater global cooperation?**⁷⁷

6. Legal

Tools for Policy Change: Courts, Litigation and Tribunals

Protection from poverty, and rights to food and shelter, have been enshrined as basic human entitlements since the 1948 Universal Declaration of Human Rights. Despite the long history of the Declaration, freedom from poverty and freedom to material goods are not reflected in constitutional law or legislation, though all provinces, including Ontario, have social programs covering the provision of some access to these goods.

In 2002, the province of Quebec introduced and passed Bill 112, *An Act to Combat Poverty and Social Exclusion*: the first explicit legislative act designed to the eliminate poverty and increase social inclusion.⁷⁸ Manitoba followed suit with Bill 226, *The Social Inclusion and Anti-Poverty Act*, which received first reading in May 2008.⁷⁹ The August 2008 *Report of the Poverty Reduction Working Group* out of Nova Scotia continued this trend, in its recommendation that anti-poverty strategies be recognized in provincial legislation.⁸⁰

The impact of Canada's Charter of Rights and Freedoms and the role of the Supreme Court have grown in the 25 years since the Charter was first introduced into the political landscape. Most controversial is the perception by some that the Supreme Court is increasingly moving beyond interpretation and into policy making (a practice tagged 'judicial activism'). Whether these assumptions are indeed well-founded (empirical research suggests not), it is clear the Supreme

76 *Natural Resources Canada*: <http://adaptation.nrcan.gc.ca>.

77 World Health Organization, *Climate Change and Health*, January 2008, downloaded on September 15, 2008 from <http://www.worldwatch.org/node/5659>

78 Collin, C., *Poverty Reduction Strategies in Quebec and in Newfoundland and Labrador*, Library of Parliament, 2007

79 Manitoba, *The Social Inclusion and Anti-Poverty Act*, 2008 [accessed October 7, 2008 at <http://web2.gov.mb.ca/bills/sess/b226e.php>]

80 Nova Scotia, *Poverty Reduction Working Group Report*, 2008 [accessed October 7, 2008 at http://www.gov.ns.ca/coms/specials/poverty/documents/Poverty_Reduction_Working_Group_Report.pdf]

Court is becoming an institution that can influence social policy decisions. This was recently demonstrated in the Chaoulli decision, which proved Quebec's ban on private insurance for insured health services violates the Quebec Charter of Human Rights and Freedoms.

Though frequent litigation and judicial settlements were once considered a strictly U.S. phenomenon, there is evidence that litigation continues to increase in Canada, and perceptions of the need to risk manage are rising.⁸¹ At minimum, a trend towards increased litigation has significant cost implications for insurance coverage, and less known implications for service design and quality measures.

In addition to direct litigation, there are indications of increases in the use of quasi-judicial tribunals such as human rights commissions to challenge policy, eligibility criteria and service coverage.

- **Will legislation and legislative challenges through legal avenues and tribunals become an increasingly prominent tool for policy development and policy change?**

Deficit and Tax Capacity

Prior to the 1990s, balanced budget legislation was unheard of in Canada.⁸² Once associated with neo-conservative policies only, such legislation has been introduced in many provinces regardless of the ideological persuasion of the governing party (e.g. Saskatchewan's NDP government). The intent and purpose of balanced budget legislation is to influence not only expenditure, but also the revenue generating discretion of the governing party.

- **Will legislation continue to place constraints on the revenue generation and public spending role of governments?**

Public Guardianship

Public guardianship is a long-standing system of protection for vulnerable adults in issues of both care and financial decisions. Tools such as living wills and power of attorney can be put into place to avoid the need for public guardianship protections and arrangements, but uptake and implementation is variable.

- **With increases in the size of the aging population, is it likely that there will be heightened demand on Public Guardianship, or will other approaches be adopted or existing mechanisms more consistently used by individuals and families?**

81 GONZALEZ, G., "Rising litigation trends increase demand for E&O coverage in Canada; Legal changes ease filing of class actions in several jurisdictions", *Business Insurance*, 2006

82 Phillips, L.C., *The Rise Of Balanced Budget Laws In Canada: Legislating Fiscal (Ir)Responsibility*, *Osgoode Hall Law Journal*, 34, 1996

