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MEDICARE'S MID-LIFE CRISIS 5

An Asian Flavour for Medicare

Learning from Experiments in Japan, Korea, and Taiwan

Ito Peng and James Tiessen

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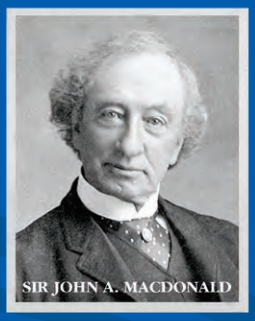
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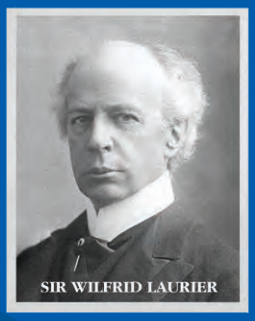
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Executive Summary

With increasing costs, often mediocre outcomes, and the looming challenges of an aging population, Canadian policy-makers would do well to look far and wide for new ideas for health care reform. We are all aware of the shortcomings of the US system. Comparisons with the US are more often used to defend the medicare status quo.

Canadians are increasingly familiar with European models, including those of Britain, Germany, and Sweden. Indeed the Macdonald-Laurier Institute's previous report, "A European Flavour for Medicare," found that the Swiss and Swedish systems revealed a wealth of policy ideas for Canadians.

However, it is unfortunate that Canada is not more familiar with how health care is funded and delivered in Asia, particularly considering that Japan's universal access system predates Canada's by a decade.

While there are obvious cultural and economic differences, the jurisdictions studied in this paper, Japan, Taiwan, and Korea, are experiencing similar pressures to Canada. And when it comes to population aging, Japan has already experienced what the future holds for Canada as the population of seniors and the aged continues to grow.

All three jurisdictions have shown a willingness to learn and innovate that put Canada to shame. For example, to control health care spending, both Japan and Korea implemented, (and Taiwan is seriously considering), Long Term Care Insurance that provides preventative support and reduces acute care stays. They have taken on special interests, for example with Korea's reforms that separated drug prescription and dispensing functions, which were previously both controlled by doctors, creating a serious conflict of interest.

This paper also looks briefly at Singapore's "medical savings accounts", which are appealing because they reduce moral hazard in the demand for and supply of health care services. Singapore's health spending is also much lower than Canada's. In its system, individuals bear their own health care costs. Medical savings accounts are supplemented by public and private insurance.

Overall, the health care services delivered in Japan, Korea, and Taiwan are as sophisticated as those in other developed economies. Hospitals

and clinics are equipped with the latest technologies and broadly accessible by citizens. Japan, Korea, and Taiwan all have lower infant mortality than Canada. All three tend to offer greater access to health care than Canada, but with fewer human resources. And they have better pharmaceutical coverage.

Not everything is perfect in these systems, but we can draw a number of important lessons that could guide health reform at home:

Policy-makers must actively learn from abroad: Japan, Korea, and Taiwan recognized the need for change and wasted little time in searching extensively for solutions, investigating different models and approaches in other jurisdictions.

Identifying new health policy ideas isn't enough: The system changes in Japan, Korea, and Taiwan were and continue to be shaped by deliberate and often difficult but necessary political decisions that recognize the need for fiscal sustainability. And once these countries implemented new health care programmes, they reviewed them every five years or so and made adjustments. This contrasts to Canada, where politicians seem unable, if not unwilling, to effect substantial changes.

User fees can improve equity and improve coverage: The discussion of the use of user fees in Canada has been limited. All three countries studied here employ them with exemptions or subsidies based on income and age. All three also offer more comprehensive health coverage than Canada. User fees can discourage frivolous use and have not been shown to reduce access or harm equity in Japan, Taiwan, and Korea.

Competition among private hospitals can contribute positively to health care: Japan, Korea, and Taiwan rely heavily on private acute care providers, which tend to compete for patients who are free to choose where to go. Competition exists because the hospitals' payment is activity-based, either "fee-for-service" or more recently "case-based". Canadian hospitals' revenues are achieved through administrative rather than market processes, restricting the types of innovation required to survive and thrive. And Canadian hospitals, while nominally private, operate as public institutions.

Hospital specialists on salary: In Japan, Korea, and Taiwan, primary care physicians are primarily compensated on a fee-for-service basis, which encourages more activity and more patients seen. However, more expensive care delivered by specialists is on a salary basis, which helps curb over-delivery of particularly expensive services.

All three systems have well-developed long-term care systems to meet the challenges of aging populations: A system of long-term care insurance could divert Canadians away from "social hospitalization" as our society ages and save money while improving lives. Given that LTCI is not among the services covered as necessary by the *Canada Health Act*, there is room for experimentation with how it is financed. A social insurance system funded by a combination of mandatory payments and government subsidies for low-income earners could protect both Canadians and the health system from the financial pressures of long-term care.

Improved use of information technology: Japan, Korea, and Taiwan are renowned as leaders in the development and use of information and communications technologies but their adoption of electronic medical records has been uneven to this point. Even so, all three have embraced programmes to accelerate the implementation of digital records that can be shared, with patient approval, between providers and funders.

Sommaire

Compte tenu de l'augmentation des coûts, des résultats souvent médiocres et des défis qui s'annoncent avec le vieillissement de la population, les décideurs canadiens feraient bien d'élargir leurs horizons pour découvrir de nouvelles idées de réforme. Nous sommes tous conscients des lacunes du système américain. Les comparaisons avec les États-Unis sont fréquemment utilisées pour défendre le statu quo en matière d'assurance de soins médicaux.

Par ailleurs, les Canadiens sont de plus en plus au fait des modèles européens, notamment ceux de Grande-Bretagne, d'Allemagne et de Suède. En effet, dans un précédent rapport de l'Institut Macdonald-Laurier intitulé « A European Flavour for Medicare », on concluait que les systèmes suisse et suédois étaient riches d'exemples de politiques à suivre pour les Canadiens.

Toutefois, il est regrettable que l'on ne connaisse pas mieux ici la façon dont les soins de santé sont financés et dispensés en Asie, en particulier si l'on tient compte du fait que le système d'accès universel du Japon est né une décennie avant celui du Canada.

Bien qu'il existe des différences culturelles et économiques évidentes, les ordres de compétence étudiés dans le présent article, soit le Japon, Taiwan et la Corée, subissent des pressions semblables à celles du Canada. De plus, en ce qui a trait au vieillissement de la population, le Japon a déjà connu ce que l'avenir réservera au Canada à mesure que sa population d'aînés et de personnes âgées continuera de croître.

Les trois ordres de compétence ont démontré une volonté d'apprendre et d'innover qui inflige un déshonneur au Canada. Par exemple, pour maîtriser les dépenses en soins de santé, le Japon et la Corée ont tous deux mis en œuvre (et Taiwan l'envisage sérieusement) une assurance pour les soins de longue durée qui finance des services préventifs et permet de réduire les séjours en soins intensifs. Ces pays se sont préoccupés des intérêts particuliers, notamment la Corée qui a adopté une réforme séparant en deux fonctions distinctes la prescription et la distribution de médicaments, lesquelles étaient précédemment contrôlées par les médecins, ce qui constituait un grave conflit d'intérêts.

Dans cet article, on donne également un bref aperçu des « comptes d'épargne pour soins médicaux » à Singapour, dont l'attrait tient au fait qu'ils réduisent les risques sur le plan moral posé par l'écart entre l'offre et la demande de services de soins de santé. Les dépenses de santé à Singapour sont également beaucoup plus faibles qu'au Canada. Dans ce système, les particuliers assument leurs propres frais de soins de santé. Les comptes d'épargne pour soins médicaux sont complétés par l'assurance publique et les assurances privées.

Dans l'ensemble, les services de soins de santé au Japon, en Corée et à Taiwan sont aussi avancés que ceux des autres économies développées. Les hôpitaux et les cliniques sont équipés des plus récentes technologies et sont largement accessibles. Le Japon, la Corée et Taïwan connaissent tous une mortalité infantile inférieure à celle du Canada. Tous les trois ont tendance à offrir un meilleur accès aux soins de santé que le Canada, mais en disposant de moins de personnel. Ils disposent également d'une meilleure assurance-médicaments.

Tout n'est pas parfait dans ces systèmes, mais on peut en tirer un certain nombre de leçons importantes qui pourraient guider une réforme de la santé chez nous :

Les décideurs doivent activement apprendre de l'étranger : Le Japon, la Corée et Taiwan ont reconnu le besoin de changement et n'ont pas consacré un temps interminable à chercher des solutions et à étudier divers modèles et approches dans d'autres ordres de compétence.

Développer de nouvelles idées de politiques en santé n'est pas suffisant : Les changements apportés aux systèmes du Japon, de la Corée et de Taiwan ont été et continuent d'être façon-

nés par des décisions politiques intentionnelles et souvent difficiles à prendre, mais nécessaires, qui reconnaissent le besoin de viser la viabilité financière. Et une fois que ces pays ont mis en œuvre de nouveaux programmes de soins de santé, ils les ont passés en revue environ tous les cinq ans pour procéder à des ajustements. Cette situation diffère donc de celle Canada, où les politiciens semblent impuissants face à cette question, sinon opposés à des changements d'envergure.

Les frais d'utilisation peuvent améliorer l'équité et la protection en matière de soins de santé : Les discussions à propos de l'application de frais d'utilisation au Canada ont été limitées. Les trois pays étudiés ici y ont recours tout en accordant des exemptions ou des subventions fondées sur le revenu et l'âge. Tous trois offrent également une protection plus complète en matière de soins de santé que le Canada. Les frais d'utilisation peuvent décourager une utilisation frivole et n'ont pas apparemment réduit l'accès ou l'équité au Japon, à Taïwan et en Corée.

La concurrence entre hôpitaux privés peut avoir une influence positive sur la prestation des soins de santé : Le Japon, la Corée et Taïwan s'appuient dans une large mesure sur les fournisseurs privés de soins intensifs, qui tendent à se faire concurrence pour attirer les patients qui disposent de la liberté de choisir leur fournisseur de soins. La concurrence existe parce que les hôpitaux sont financés sur la base de leurs activités, c'est-à-dire en fonction d'une rémunération « à l'acte » ou plus récemment en fonction d'une rémunération « basée sur les cas ». Les hôpitaux canadiens tirent leurs revenus d'ordres administratifs plutôt que par l'intermédiaire des mécanismes du marché, ce qui limite le nombre d'innovations requises pour survivre et prospérer. En outre, les hôpitaux canadiens, bien que théoriquement privés, fonctionnent comme des institutions publiques.

Les spécialistes dans les hôpitaux sont des salariés : Au Japon, en Corée et à Taiwan, les médecins de soins primaires sont principalement rémunérés à l'acte, ce qui les encourage à voir plus de patients et à accroître leurs activités. Toutefois, les soins plus coûteux dispensés par les spécialistes le sont contre rémunération salariale, ce qui contribue à limiter la sur-prestation de services particulièrement onéreux.

Les trois pays ont bien développé leurs systèmes de soins de longue durée pour répondre aux défis posés par le vieillissement de la population : Un système d'assurance pour les soins de longue durée pourrait détourner les Canadiens de ce que l'on appelle l'« hospitalisation sociale » à mesure que notre société vieillira, ce qui nous permettrait d'économiser de l'argent tout en améliorant la qualité de vie. Étant donné que l'Initiative des soins de longue durée (LTCI) est exclue des services couverts, car reconnus essentiels, par la *Loi canadienne sur la santé*, son mode de financement pourrait être un lieu d'expérimentation. Un système d'assurance sociale financé par une combinaison de versements obligatoires et de subventions gouvernementales pour les salariés à faible revenu pourrait prémunir tant les Canadiens que le système de santé des pressions financières exercées par les soins de longue durée.

L'utilisation améliorée de la technologie de l'information : Le Japon, la Corée et Taiwan sont reconnus comme des chefs de file dans la conception et l'utilisation des technologies de l'information et des communications, mais ces pays ont intégré ces technologies de manière assez inégale jusqu'à maintenant dans le secteur des dossiers de santé électroniques. Mais même là, tous trois ont adopté des programmes visant à accélérer le passage au numérique des dossiers, qui peuvent dès lors être échangés, avec l'approbation du patient, entre les fournisseurs et les bailleurs de fonds.

Introduction

Canada, like all developed countries, faces challenges financing and delivering health care and long-term care to an aging population that expects access to the latest, often costly, treatments. Therefore policy-makers must look abroad for good ideas on how to cope.

As others have noted, the United States typically is the first destination; however its system is expensive, complex, and leaves much of the population (15 percent in 2012) without coverage. Not surprisingly, the US health care system is more often used to defend the existing Canadian health care model rather than to inspire change.

Several analysts have looked beyond the US, especially to Europe, Australia, and New Zealand.[1] This work has led to many insights as these systems tend to be similar or less expensive than Canada's, while providing good, universal care. The Canadian Institute for Health Information (CIHI 2013) report benchmarking Canadian performance scanned 26 international studies and concluded that

> Canada's health system is often compared with those in Australia, France, Germany, the Netherlands, New Zealand, Sweden, the United States and the United Kingdom. These peer OECD Countries, like Canada, have larger and more developed economies and comparable levels of resources to devote to health. (2)

The advantages of comparing Canadian health care with these countries are that they share more or less similar approaches to universal health care, and that they are culturally and linguistically familiar to many Canadians and Canadian researchers, and hence considered more easily comparable. On the other hand, limiting the scope of comparisons to the same familiar countries reduces the chance of finding fresh new ideas. Already Japan certainly does, and Korea and Taiwan arguably soon will, fit the CIHI criteria quoted above.

Limiting the scope of comparisons to the same familiar countries reduces the chance of finding fresh new ideas.

This report complements these comparative studies by examining health care systems in the three major developed East Asian economies: Japan, the Republic of Korea (Korea), and the Republic of China (Taiwan). These countries are widely recognized for their economic competitiveness; their social policies, particularly their health care systems, are, however, not as familiar internationally. Like many European countries, these three East Asian countries have universal health care systems that grew out of social insurance schemes established in the early to mid 20th century. They are relatively inexpensive, provide reasonable access to services, and contribute to overall good outcomes. These countries are facing similar challenges to Canada in financing and delivering health care and long-term care to populations that are aging at a very rapid rate. Their best practices, as well as their past and future challenges, thus offer important lessons for Canadian policy-makers.

Health care systems are complicated products of historical, social, political, economic, and of course cultural circumstances. Further, the specific elements of these systems, such as payment and financing practices, often have their own internal logic as they are embedded in broader policy environments (Tuohy 1999). Given the obvious cultural and historical differences, it is understandable that Canadians may reflexively dismiss the relevance of the health care service experiences of Japan, Korea, and Taiwan, and question the value of East Asian comparisons. Yet, as Tuohy (1999) points out, comparative studies such as these "*can provide aids to strategic development*. Policy-makers must continually make judgments about what can be feasibly accomplished in their local contexts, and what instruments are best suited to accomplishing their goals" (263).

Providing histories of the emergence of health care systems in three diverse countries normally not included in the conversation about health care supplies context that allows us to consider the feasibility of the policies they have developed. The basic framework and trajectories of these East Asian health care systems are remarkably similar to those of Canada and other Western countries. They first were premised on the general principles of a Bismarckian social insurance system, and then gradually expanded to achieve universal coverage. In short, these countries are contextually different, but at the same time, share very similar health care policy fundamentals with Canada. Their different contexts can offer new perspectives and unexpected insights.

Comparing health care systems

Health care is a fundamental human need, and the scientific evidence and technologies that inform illness prevention and treatment are universal in developed countries. The debate in the US over Obamacare notwithstanding, policy-makers, and citizens served by them, generally are united in their desire for accessible and effective health care services. Further, as the demand for health care grows, it is imperative that these services be delivered efficiently, and in cost-effective ways. This has given rise to initiatives providing benchmark measures of system characteristics and performance, and more detailed examinations of policies behind the numbers.

Although policies are country specific, there is a growing global convergence in social and health policy perspectives and policy-making. For example, international organizations such as the Organisation for Economic Co-operation and Development (OECD), World Health Organization (WHO), International Labor Organization (ILO), and the World Bank play increasingly more active roles in identifying, translating, and advocating policy ideas and best practices. They do this by developing internationally comparative datasets, policy indicators, best practices, and benchmarks governments can use (Mahon and McBride 2013).

The World Health Organization (WHO) in its *World Health Report 2000*, for example, produced a ranking of health care systems, creating an index based on (1) attainment of goals (level and distribution of health and responsiveness), (2) "fairness" of financial contribution by households, and (3) overall performance, which accounts for the amount spent, adjusted by a key health determinant, education level (WHO 2000). Canada ranked 30th amongst 191 countries compared, below Japan, which was 10th, but above Korea, which was 58th. Taiwan was not included in this ranking because it is not formally recognized as an independent country.[2]

There is a growing global convergence in social and health policy perspectives and policy-making.

The 2013 WHO *World Health Report* focuses on "Research for Universal Health Coverage", declaring simply "Everyone should have access to the health services they need without being forced into poverty when paying for them" (WHO 2013). The *Report* describes three dimensions associated with universal coverage: share of population covered, range of services covered, and the share of costs directly covered by households. Japan, Korea, and Taiwan, like Canada and most developed countries (except the US), have achieved universal health care coverage for nearly 100 percent of their citizens. Looking forward, the crux of health policy decisions is wrestling with the tradeoffs associated with expanding service coverage and ensuring equitable access and quality of care in ways that are financially sustainable.

This report begins by providing general context by comparing Japan, Korea, and Taiwan with Canada in terms of their societies and demography. Next we outline how the health care and long-term care systems were introduced and then evolved in their respective countries. We then highlight particular current aspects of the systems to show how and why they operate as

they do, focusing particularly on unique features that seem to work. We end by outlining lessons these countries' experiences offer to Canada in terms of policy-making and implementation, system programmes, and management.

Japan, Korea, and Taiwan – Background

Japan, Korea, and Taiwan, though obviously distinct, share several key features. They all have developed democracies since the Second World War and have pursued rapid economic development, centred largely on manufacturing-based export-led growth strategy, which included government investments in public education and the health care system. Their trajectories vary however. Japan's democracy took hold in the 1950s, while this did not begin to occur in Korea and Taiwan until the late 1980s. Japan was the first within East Asia to achieve high economic growth post-Second World War. Its rapid export-led industrialization resulted in high-speed economic expansion from the mid 1950s to the end of the 1980s. As the Japanese economy grew and upgraded its technologies, it passed on its know-how to Korea and Taiwan. By the beginning of the 1990s, Japan's economic growth had slowed, just as Korea and Taiwan established themselves as international innovators and competitors. The latter two countries' economic growth rates peaked in the 1980s and 90s, until the onset of the 1997/98 Asian financial crisis created a temporary setback, particularly for Korea.

Table 1 shows that Japan, at 128 million people,[3] has a much larger population than Canada, Korea, and Taiwan, which are medium-sized countries.

Japan and Canada are similar in terms of GDP per capita; Korea and Taiwan are about half as wealthy on average. The population share of the elderly (aged 65 or more) in Japan is the world's highest, at nearly 25 percent; Taiwan (11 percent), Korea (11 percent), and Canada (14 percent) are relatively younger, but rapidly aging. In fact, Japan, Korea, and Taiwan, along with Southern European countries such as Italy and Spain, have been aging at a rate faster than other countries in the world, largely because of their very low fertility rates. By 2025 nearly 30 percent of Japanese will be age 65 or higher. Korea and Taiwan will catch up with Canada as their elderly populations will comprise about 20 percent of their populations. By 2040 it is expected that nearly 34 percent of Japanese and over 30 per-

Table 1: Demography of Japan, Korea, Taiwan, and Canada

	Population	GDP/Capita	Share of population (%)[4]					
	(1,000,000)	($US)	Age 65+			Age 80+		
			2010	2025[4]	2040[4]	2010	2025[4]	2040[4]
Japan	128.1[2]	46,131[3]	23.0	29.6	34.5	6.4	10.9	14.2
Korea	49.4[2]	22,388[3]	11.1	19.4	30.5	2.0	4.5	9.4
Taiwan	23.1[2]	20,006[3]	10.7	20.0	30.1	2.6	4.1	9.8
Canada	34.2[2]	50,397[3]	14.2	20.4	24.1	4.0	5.0	8.5

Notes: 1. 2009 2. 2010 3. 2011 4. Forecasts based on medium variant assumptions by the UN and National Development Council (Taiwan).

Sources: United Nations 2012; Ministry of Health and Welfare (Republic of China/Taiwan); National Development Council (Republic of China/Taiwan) 2012; OECD 2013a.

cent of Koreans and Taiwanese will be more than 65. Canada's immigration is expected to keep the proportion closer to 25 percent at that time.

The improving health of people in their late sixties and seventies is manifest in growing shares of the population in their ninth decades or more. Already, more than 6 percent of Japanese are age 80 or more, and this should increase to about 14 percent in 2040. For now, Korea and Taiwan have relatively fewer people in this group than Canada; however in just over 11 years, 4–5 percent will be 80 or more, and by 2040, 8–10 percent of the populations of Korea, Taiwan, and Canada will be of that vintage. A key implication is that health care systems, which traditionally focused on treating episodic illness, are being asked, together with broader social security programmes, to help manage longer-term, chronic conditions.

Health status

The overall health of a nation is determined by several factors, particularly the level and distribution of wealth, education, and diet, and other lifestyle factors, as well as its health care system. As seen in table 2, the life expectancy in Japan, Korea, and Taiwan is comparable to that in Canada, though those of men in Korea and Taiwan are somewhat lower.

It is important to note that these three Asian countries have lower infant mortality rates than Canada. Both the increases in life expectancy and lowering of infant mortality over the past 50 years for Japan and 30 years for Korea and Taiwan are important indicators of their development.

It is important to note that Japan, Korea, and Taiwan have lower infant mortality than Canada.

Certainly economic growth has helped Japan, Korea, and Taiwan catch up with Canada and other developed countries in terms of their population health. The achievements of Korea and Taiwan are notable because, as mentioned above, their wealth per capita is much less than Canada's, or Japan's for that matter. The relatively equitable distribution of income throughout most of the post-war era in these three countries, shown in table 2, may be a factor, as equality tends to be associated with the equitable distribution of good health (Lynch et al. 2000; Wilkinson and Pickett 2006). Another indicator of income inequality, the GINI index, shows the

Table 2: Life expectancy, infant mortality, health determinants, and dementia in Japan, Korea, Taiwan, and Canada

	Life expectancy (years at birth, 2011)		Infant mortality (deaths per 1000 live births)	Ratio income top 20% /bottom 20%	GINI index (disposable income)[2]	Obesity (% population with body mass index >30)	Dementia (% population age 60 or more)
	Female	Male					
Japan	85.6	79.4	2.3	6.1	0.34	4.1	6.1
Korea	84.6	77.9	3.0	5.5	0.31	4.3	4.2
Taiwan	82.5	76.1	4.2[1]	5.9	0.33	17.9[–]	5.22[3]
Canada	83.6	79.3	4.8	5.2	0.32	25.4	5.7

Note: 1. Share of population with BMI > 24. 2. 2009 for Japan, Korea, and Canada; 2008 for Taiwan.3. Percentage of population age 65 or more.

Sources: OECD 2013a, 2014; Ministry of Health and Welfare (R.O.C. Taiwan) 2012, 2014; World Bank 2014; Bureau of Statistics (R.O.C. Taiwan); Taipei Times 2013.

countries are similar to each other, and Canada (OECD 2014).

Korea and Japan both have very low rates of obesity, less than 20 percent of that in Canada, as measured by the body mass index. Taiwan's obesity rate, which has a lower threshold in the measure cited here, is higher than those in Japan and Korea.[4]

Whereas the shares of people who smoke have declined noticeably in all four countries since the 1980s, men in Korea, Japan, and Taiwan are still about twice as likely to smoke as their Canadian counterparts; however a higher share of Canadian women partake in the habit. The rates of dementia in the senior populations vary somewhat between the countries, partly due to differences in identification. In all four countries this is an example of a chronic condition that will become more common as populations grow older.

In sum, summary figures indicate that the general determinants of health, in concert with the health systems of Japan, Korea, and Taiwan, have delivered good health outcomes to their residents.

The evolution of health care and health policies in Japan, Korea, and Taiwan

The paths to the current health care systems in Japan, Korea, and Taiwan are related, though they were taken under different circumstances at different times. These histories highlight how health care policy has been a key element of government policy as these countries rapidly industrialized. They also show that the three nations embraced universal health care at earlier stages of development than Canada, and they continue to recognize the need to adapt to changing circumstances. Amongst the three countries, Japan has the longest history of universal health care, as coverage was extended to all people in 1961. In Canada the parameters of universal health care, including coverage for general physician services, were not established until five years later, or implemented nationwide until the early 1970s. Korea's universal health care system was introduced in 1988, eight years before that in Taiwan.

Japan

The roots of Japan's health care system reach back to 1868, during the Meiji Era (1868–1912), when the country deliberately set out to become a modern, industrialized society. It also embarked on a military expansion into continental Asia, engaging in wars with China (1894–95) and Russia (1904–05) that resulted in their occupying and colonizing Taiwan first, and then Korea.

In the Meiji Era, envoys were dispatched to the West, particularly England, the US, and Germany, to learn how rich countries had developed. Further, the government recruited industrial and scientific experts from abroad to transfer and apply this new knowledge.

A key initiative of the modernization process was to at first complement, and eventually replace, traditional Chinese medicine, which had been imported about 1000 years earlier, with scientific, "Western" medicine. Medical schools, often staffed with professors from abroad (particularly Germany) were developed to train doctors in these new approaches. The drive to introduce scientific medicine to Japan and improve the health of military personnel and vital workforce rather than the broader interest of improving the health of all citizens was the main government goal. Public health activities received less government attention at first, leaving much of this work to be conducted by community groups and large corporate groups (Powell and Anesaki 1990, 87–88).

As in other countries in other times, replacing entrenched stakeholders proved difficult. While the intent was to only license practitioners of Western medicine, the inability to educate sufficient numbers of them led the government in 1882 to "grandfather" existing Chinese medicine (CM) practitioners and their sons (Campbell and Ikegami 1998, 56). In fact, the agency problems created by conventional CM practice – in which practitioners both prescribe and dispense medicine – were sustained by Western doctors and hospitals that did the same. This was the case in Korea and Taiwan as well, as will be discussed.

The financial and organizational structures of the health care system started to emerge in the 1920s, as large companies introduced basic clinical services for their workers, leading to Japan's first Health Insurance Law, implemented in 1927. This act obliged businesses with five or more employees to provide employee insurance for their regular workers earning less than ¥1200 a year (about 40 percent of regular workers) (Anesaki and Powell 1990, 36).[5] While the government was initially to manage this programme, larger firms were allowed to set up their own insurance funds, establishing a practice that continues. Over the next two decades, insurance funds were established for other occupational groups such as farmers and fishermen, and coverage was extended to some dependents.

Japan's pre-WWII government required a healthy population, especially a supply of fit soldiers.

In 1938 the government extended health insurance to the self-employed, including farmers and fishermen and their dependents, under the *National Health Insurance Act*. The government assumed more control in 1942, nationalizing major hospitals in order to establish a network of major and regional hospitals in the largest cities, Tokyo and Osaka, as well as the prefectures. In addition nearly 500 district hospitals were established, along with clinics where necessary. To help meet the demand for physicians, new schools were opened and medical education was shortened (Powell and Anesaki 1990, 48–50; Campbell and Ikegami 1998, 59).[6]

The seven-year US occupation of Japan following the Second World War introduced a new phase of health care. From then Japan's democracy was undergirded by a new Constitution that included an Article that states: "In all spheres of life, the State shall use its endeavors for the promotion and extension of social welfare and security, and of public health." The Occupational administration specifically introduced several health care reforms, including expanding and standardizing medical education and improving service quality and administration. The goal of separating prescription and dispensing activities however remained thwarted by medical association lobbying (Campbell and Ikegami 1998, 60–61).

The government fostered the expansion of health insurance, adding more occupational groups through the 1950s. In 1961 it enacted compulsory universal health care, based on social security principles. While employees paid a nominal co-payment, that for dependents was 50 percent (Ikegami et al. 2011). The system remained financed by a complicated mix of government and private pools. Health insurance, together with other social and industrial policies, was a pillar of Japan's bureaucrat-driven development strategy through the 1960s and 1970s.

Many medical doctors continued to prescribe and dispense CM (or *Kampo* in Japanese) along with Western medications; there was a strong lobby by medical practitioners to include *Kampo* in the health insurance coverage. In 1967, the government extended the health insurance coverage for *Kampo,* which broadened throughout the 1970s and 80s.

In 1973, threatened by rising support for socialist local and regional governments that promised to expand health care, the Liberal Democratic Party (LDP)-led central government acted to reduce patient out-of-pocket costs. People over the age

of 70 were granted free health care.[7] Employees covered by insurance paid a fixed rate for their use, while copayments for their families were reduced to 30 percent of bills. As a result, system use increased, especially by older patients, raising expenditures by 36 percent in one year (Powell and Anesaki 1990, 96).

Over subsequent decades co-payment rates were both increased and applied to employees and the elderly as well as dependents. Now the basic rate is 30 percent for most patients, and there are income-based caps. Lower-income people in the 70–75 age bracket pay 20 percent, but this is reduced to 10 percent when they reach 75. Children less than six have co-payments of 20 percent (Ikegami et al. 2011). Japan also has modest daily hospital co-payments, associated with general living and meal costs.[8]

There are nearly 3500 non-profit or government-run health insurance funds. Individuals do not choose their insurance fund; rather enrolment is determined by their employment situation, residency, and/or age. There are about 1400 employment-based funds for large firm workers, 75 for public sector employees, and a government-subsidized fund for small and medium enterprises (SME), together covering nearly 60 percent of the population. People 75 or older, and those 65 or older with certain disabilities, are covered by the 47 funds for the elderly, the Late Stage Medical Care System (MHLW Japan 2013). The rest of the Japanese population, about 30 percent, are covered by about 1700 municipality-based plans and 164 other health insurance associations that comprise what is referred to as National Health Insurance (NHI).[9]

Insurance funds are financed by a combination of premiums collected from individuals and employers, government subsidies, and co-payments. Premiums average about 10 percent of income, shared equally by employers and workers. General tax revenues cover the "employer" share for the SME fund, and subsidize the NHI and Late Stage Medical Care System funds. Although insurance rates differ between the three different types of health insurance, there is a significant cross-subsidization amongst them. In total, premiums comprise nearly half (49 percent) of the health care budget; general state revenues (38 percent) and co-payments (13 percent) make up the rest (MHLW Japan 2012, 32).

Japan's health care budget is funded by premiums (49 percent), general state revenues (38 percent), and co-payments (13 percent).

Though Japan's myriad insurance funds are distributed throughout the country, health care policy is firmly centralized in the capital, Tokyo, in the Ministry of Health, Labor and Welfare. Notably, the nationwide fee schedule for health care services and products is set biannually in Tokyo by Japan's Central Social Insurance Medical Council, which is comprised of representatives from providers (seven) including the Japan Medical Association; payers (seven), including the insurers; and the broader public (six), including academics.

In 2000, after nearly 20 years of deliberation, Long Term Care Insurance (LTCI) was introduced to address the needs of its aging population. LTCI helps pay for a wide range of home/domiciliary and institutional care determined by need for those aged 65 or more, or from 40–65 with age-related disabilities (such as early onset Alzheimer). Patients undergo assessment and are placed in one of seven need categories, associated with different amounts of care entitlement. Two levels are for people who live on their own, but require support; the remaining five denote higher levels of assistance for daily living.

Premiums, collected from people 40 years old or more, make up 50 percent of the fund; the other half comes from the state (Campbell, Ikegami, and Gibson 2010). The premiums, set at about 2 percent of income, vary by income and location, and average about $50/month per person (Brasor and Tsubuku 2013). The LTCI premiums are simply added onto the existing health care insurance premiums.

As in the case of health care reforms in the past, LTCI was largely a government-led policy initiative. As noted, experts and policy-makers were becoming increasingly concerned about the rising health care cost of the elderly since the 1980s, in particular the phenomenon of "social hospitalization". This refers to patients inappropriately staying in facilities covered under health insurance, such as acute care hospitals, rather than in suitable ones that require patient and/or family outlays, if a place can be secured.[10]

Initially, the Ministry of Health and Welfare[11] had developed a long-term care system (Gold Plan) in 1989 that was very similar to the UK's community care model. The system was funded by the central government and delivered through local governments. It soon became evident that system coordination and efficiency were of concern; in addition, the system was inadequate to meet the existing and future care needs of the aging population. Before its five-year review in 1994, the government decided to seek a new long-term care model.

Japanese policy-makers responded as they had in the past. They had been paying attention to debates on long-term care in Germany since the beginning of the 1990s. In 1995, Germany became the first country in the OECD to introduce LTCI. This prompted Japan to seriously consider introducing its own LTCI programme.

Korea

Like Japan, medical practices in Korea also have a long Chinese medicine tradition, referred to as "traditional Korean medicine". With the opening of the country to external pressures, first from Christian missionaries and then by military threats by Western powers and Japan, Western medicine began to spread in Korea from the late 19th century. This process became more systematic after the annexation of Korea by Japanese (1919–1945). The Japanese colonial government imposed a modernization campaign that included the establishment of railways and other industrial infrastructure and public education. These comprised the social and human (labour) capital investments necessary to benefit colonial expansion in the Korean peninsula. A key element of modernization was replacing traditional Chinese medicine with Western medicine and medical practices.

Following the Second World War, Korea enjoyed a brief period of democratic freedom before it was plunged into another war. The Korean War (1950–1953) not only led to the division of the country into north and south, but also resulted in huge social, economic, and infrastructure destruction, and approximately five million casualties (Kim 2010). As a US protectorate following the Korean War, South Korea received a significant technological transfer and financial and material aid from the US and its allies (Deyo 1988), but its democratic transition was set back. It was not until 1988 that Korea gained its full democracy.

The Park Chung-hee military regime (1961–1979) sought to legitimize itself through economic growth.

As in Japan, an effective, labour-intensive, export-led industrialization strategy required active state investments in human and social capital. To ensure the supply of healthy young industrial workers, the Korean government introduced a number of occupationally-specific health insurance programmes, beginning with industrial workers. The *Health Insurance Act* introduced in 1963 provided voluntary health insurance to workers in workplaces with 300 or more employees. However, because it was voluntary, most employers at the time did not participate in the programme (Peng 2012). To compensate for the lack of more general health insurance for industrial workers, the government implemented compulsory Industrial Accident Insurance in 1964 to cover workplace injuries sustained by workers in firms with 500 or more employees (Cho 1989; Lee and Lee 2000).

In the 1970s and 80s, rapid economic growth, industrialization, and urbanization led to an increased public demand for health and social welfare support. In response to growing social protests, the government undertook periodic revisions of health policy. The *Health Insurance Act* was amended four times between 1976 and 1981, first by making it compulsory for all workers in firms with 500 or more employees, and then sequentially extending coverage to public sector employees, and finally to those belonging to occupational and self-employed health insurance societies.

Despite the gradual enlargement of insurance coverage, more than half the population still remained uncovered in the 1980s. This was because a large proportion of workers in Korea worked in SMEs, rural, agricultural, or informal sectors.

Korean health insurance expanded rapidly after democratization in 1988. In the run up to the first democratic election in 1988, the ruling military government promised the enlargement of health insurance to cover workers in SMEs along with an economic growth plan. The election helped them remain in power (Wong 2004). Shortly after democratization, the health insurance and health assistance programmes were enlarged to cover workers at work places with five or more employees. Finally, in 1989, the programmes were extended to the last group of uninsured people, the urban self-employed, thus making coverage universal. As in Japan, people were assigned to programmes based on their circumstances.

More than half the Korean population remained without health care coverage in the 1980s.

The Asian financial crisis of 1997/98 marked another critical juncture for Korean politics and welfare state policies. The financial crisis had plunged the economy into negative growth territory. This forced it to submit to the IMF bailout, what President Kim Dae-Jung later referred to as "Korea's second shame" (the first being the submission of Korea to Japanese colonization).

The *Health Insurance Act* amendments of the 1970s and 80s simply brought the various health insurance programmes under one umbrella without dealing with the overall structure or coordination. By the end of the 1990s, there were 142 insurers for employees and their dependents and 227 insurers for the self-employed (Chun et al. 2009). The 1999 reform of national health insurance unified these separate health insurance carriers under a single body, the Health Insurance Review Agency (later Health Insurance Corporation or HIC). There were two main reasons for unifying health insurance carriers under a single administrative body. First, the government saw the amalgamation leading to significant cost savings and efficiency. Further there was also a growing concern that variances under the multiple carrier system created inequity amongst different occupational groups and social classes, something that civil society groups lobbied hard to fix.

In 2000, the government pushed reform further by separating medical service and drug dispensing practices. As in Japan, the obvious agency problem due to this structure created a profitable practice for doctors, and not surprisingly, a system that often led to overprescribing of medications. This tendency was supported by high margins, since clinics could procure drugs discounted below official reimbursement prices. Government efforts to control costs by restricting physician service fees were thereby offset by drug sales, which in some cases provided 40 percent of a clinic's revenue (Kwon and Reich 2005).

Consolidating National Health Insurance and separating medical services from drug dispensing were both hugely controversial and highly political, as they brought various stakeholders into direct conflict. The amalgamation of medical insurance carriers was done in the face of staunch opposition by insurance carriers. The government's attempt to separate physician

services from dispensing was met by a wave of nationwide doctors' strikes that lasted nearly a year. However, the government had strong public support.

When Korea separated physician services from drug dispensing, doctors went on strike for a year.

In the early 2000s demographic trends began to show definitive signs of low fertility and aging. This led Korean policy-makers to begin shifting their focus to the issue of long-term care. Despite the fact that the elderly population was less than 7 percent, President Kim Dae-Jung set up the Planning Committee for Elderly Long Term Care in 2000 (PCELTC), and in the following year, announced his commitment to adopt Long Term Care Insurance (LTCI) (Campbell, Ikegami, and Kwon 2009). This commitment was followed by his successor, President Roh Moo-hyun. From 2003 to 2006 President Roh worked with Ministry of Health and Welfare, and the Korean Institute of Health and Social Affairs to hammer out public financing model and the details of the LTCI programme delivery system.[12] In 2007, LTCI became a law with near unanimous legislative support. Learning from Japan's attempt to address its long-term care concerns, Korean policy-makers sought to pre-emptively develop long-term care policies in light of the demographic projection rather than to wait until it became an imperative. Korea was aging at a rate even faster than Japan, and projections put its over-65 population reaching over 30 percent of total population by 2040 (see table 1).

Korean National Health Insurance (NHI) is a compulsory social insurance programme that provides universal coverage. It is funded by a combination of individual payroll and direct premium contributions and general tax, and is operated by the National Health Insurance Corporation. There has been a steady increase in the premium contribution rate over the last few years. Already the premium rate has increased from 5.08 percent of the payroll in 2008 to 5.99 percent in 2013 for employees, shared 50/50 with employer. The contribution rate for the self-employed is currently set at about C$200[13] per month (Korea MOHWFA 2014). The NHI fee is waived for people receiving National Basic Livelihood Social Security, which is similar to social welfare in Canada (Korea NHIS 2014).

The NHI covers medical services, drugs, Chinese medicine and services prescribed or provided by doctors, dental services, eye care, physical therapy, and other professional services. Doctors' fees are regulated by the government. For all services and medications, patients are required to pay a co-payment of approximately 30 percent, although there is a cap on the total amount, and exemptions for low-income individuals.

Korea's Long Term Care Insurance provides domiciliary and institutional-based care determined by need for those 65 or more as well as for people under 65 who suffer from age-related disabilities. In special cases, and for people living in areas of the country where access to care is difficult, cash provisions are made to compensate the family for care.

LTCI is financed through premium contributions collected from people 40 years old and older, and government tax. The contribution rate is based on a percentage of the NHI contribution. Currently it is set at 6.55 percent of the total NHI contributions, up from 4.05 percent in 2008. The average contribution rates for non-employees and self-employed were both about C$6 a month in 2011. Low-income households get government assistance, and are exempted from LTCI premium fees and co-payments.

Overall, funds for LTCI comprise 60–65 percent premium contribution, 20 percent government subsidy, and 15–20 percent co-payment (Kwon 2009). The take up rate and the expenditures of LTCI have increased sharply since its introduction in July 2008. Between July and December 2008, about 3 percent of the elderly population was approved to receive LTCI services; by 2011, the number had increased to about 6 percent (Korea NHIC 2013; Shin 2013).

Taiwan (R.O.C.)

Taiwan, like Korea, was also a Japanese colony.[14] As in Korea, the Japanese colonial government established economic and public educational infrastructure and moved to replace traditional Chinese medicine with Western approaches. After the departure of the Japanese in 1945, Taiwan, like Korea, also briefly enjoyed independence, before the Chinese nationalist Kuomintang (KMT) army invaded it in 1949.

Losing against the Communists in the mainland China, the KMT fled to Taiwan, took over its civilian government, and replaced it with a military regime headed by the Generalissimo Chiang Kai-shek. Over the next 30 years, the KMT ruled Taiwan under strict martial law. Not surprisingly, there was significant resentment and mistrust towards the KMT by the native Taiwanese nationals within Taiwan. It was not until the 1980s that the government was able to gain some measure of public trust and support.

Like Korea's military regime, the KMT sought to gain political legitimacy through economic growth. It introduced a Labor Insurance programme, which included medical care, in 1953. Like Japan and Korea, the KMT government in Taiwan selectively compensated groups deemed politically and economically advantageous: industrial workers, civil servants, and the military. It expanded only modestly over the next several decades. Indeed, in the 1980s, less than one-fifth of workers were covered (Wong 2004). Even in 1995, the various health insurance plans combined covered only 57 percent of the population (Wu, Majeed, and Kuo 2010).

Like Japan and Korea, before health insurance was made universal, the KMT government in Taiwan selectively compensated groups deemed politically and economically advantageous: industrial workers, civil servants and the military.

By the beginning of the 1980s, the KMT had come to realize that its prospects of political survival would be greatly improved by initiating a gradual process of political democratization in response to growing domestic pressures from citizens' movements. In 1988 the KMT government lifted martial law and set the country's first presidential election for 1996.

The political competition created incentives to introduce social policy changes. In 1994 the government legislated a comprehensive universal national health insurance system and implemented it in the spring of 1995, to coincide with the first presidential election (Peng and Wong 2010; Wong 2004). This and other social policy expansions accorded the KMT a decisive electoral win in 1996, and taught both the KMT and the opposition parties the political value of welfare state expansion.

The Taiwanese economy was not as badly hit by the 1997/98 Asian Financial Crisis as Korea and Japan; nevertheless the crisis reshaped politics and subsequent social policy development. As in Korea, the combination of democratization and financial crisis had galvanized the civil society movement in Taiwan, creating a new demand for political change. In the 2000 presidential election the opposition Democratic Progressive Party (DPP) headed by Chien Shao-bien took power, overturning over 50 years of KMT's political rule in the country. From 2000 to 2008, the DPP maintained the course of welfare state expansion. Specifically it focused on policies related to old-age income security, gender-sensitive labour market and workplace policies, and long-term care.

It was during this period that the government, like that in Korea, also began to pay more serious attention to the issues of low fertility, rapid population aging, and the decline in the proportion of the elderly living with their adult children. Indeed, policy-makers were becoming increasingly concerned about the changes in the Taiwanese household structures and the need for elder care. The proportion of people over the age of 65 living with their children had declined from 70 percent in 1986 to 57 percent in 2005 (Nadash and Shih 2013), while the percentage of elderly people living on their own or only with

their spouses increased from 1 percent in 1976 to 25 percent in 2010 (Wang and Tsai 2011).

The electoral competition for older voters also had an important role to play. In 2007 both major parties proposed long-term care programmes as they campaigned for election in 2008. The KMT prevailed and introduced Long Term Care Service legislation in 2011, in the run up to the next presidential election in 2012. It is interesting that despite its earlier commitment to not socialize care, the Taiwanese government shifted its approach and decided to pursue the LTCI option, after Korea implemented its LTCI.

Like Korea, Taiwan consolidated several health insurance schemes into one universal National Health Insurance programme (NHI). The NHI is a compulsory social insurance administered through a single carrier, the Bureau of National Health Insurance. The NHI is funded by a combination of individual and payroll contributions and general tax. The insured are divided into six categories based on occupation. Although the NHI premium rate is set at 4.91 percent, individual rates vary from zero for military personnel, veterans, and low-income individuals and households to the full amount for employers, the self-employed, and independent professionals (Taiwan-NIA 2014).

The NHI covers all medical and hospital services, including drugs, Chinese medicine prescribed by doctors, Chinese medicine services such as acupuncture and other manipulative therapeutic procedures provided by Chinese medicine clinics and hospitals, dental services, eye care, physiotherapy, and other professional services. Except for those suffering from catastrophic illnesses, people living in remote mountain areas and outlying islands, pregnancy, veterans, low-income households, and those in special hospitals, a basic co-payment of 10 to 30 percent applies to all NHI services. There is however a cap on co-payments for hospital stays. Doctors are paid on a fee-for-service basis.

The proposed LTC service and LTCI legislations, both under review, will serve together as the blueprint for a comprehensive, long-term care system for the elderly and disabled in Taiwan.

There is strong public support for the proposed new social insurance in Taiwan.

Whereas LTC service legislation deals with the structure and processes of a long-term service system, the LTCI legislation addresses the financing of the long-term care services (Nadash and Shih 2013). There is widespread consensus that if the bills are passed the system will be based on a social insurance model.

There is strong public support for the new social insurance (Nadash and Shih 2013). The proposed new social insurance will be made compulsory for all citizens, and will provide both institutional and domiciliary care services based on the level of care needed. It will add 20 to 25 percent onto the National Health Insurance fee. The new social insurance will be funded by contributions from the government (10 percent), employers (60 percent), and employees (30 percent) (Taiwan-NHI 2014). Taiwan's relatively young population and the fairly restrictive criteria required to qualify for access means that the programme should be fiscally feasible (Nadash and Shih 2013).

Health care policy reform

The stories summarized above demonstrate the remarkable capacity of each country, but particularly Korea and Taiwan, to reform their health care policies. This contrasts with Canada where substantive change, particularly in the hospital sector, has been harder to achieve (Simpson 2012). A key reason is that, relative to Canada, governments in these three countries, rather than key stakeholders, tend to hold sway as reforms are debated and implemented. This is mostly due to the situations in which the policies were developed.

In any social or economic system, but especially one as complex and important as health care,

reform is difficult, because steps taken to, for example, improve efficiency or lower costs, can affect the interests of established players. As Tuohy (1999, 245–47) argues, change in Canada is constrained both by the necessity of difficult federal-provincial negotiations under the framework of the *Canada Health Act*, and the key role granted providers, especially physicians and hospitals in determining how resources are distributed. In Canada, as anywhere, the latter groups understandably tend to resist changes that reduce their professional autonomy or incomes.

In Korea and Taiwan however, governments have retained strong central authority in terms of determining how care is organized and paid for. Physicians are organized, and as noted push back as they did in Korea when government acted to take away their stream of medicine dispensing income. Yet, policy-makers were able to prevail. In Japan, physicians retain considerable influence, but since many are employed by hospitals, the latter also can affect change. In the three countries, health care and long-term care policies are directed by centralized governments.

Japan, Korea, and Taiwan's health care systems today

The different, though related, histories of Japan, Korea, and Taiwan have given rise to similar health care systems. All three are overseen by central health bureaucracies that set coverage and financing policies and set most service fees. While Japan and Korea remain based on social security principles, Taiwan is largely tax-financed in structure. This section outlines and compares the systems' key characteristics: health expenditure, primary and acute care delivery, provider payment processes, and equity.

Health care spending and administration

The health systems of Korea, Japan, and Taiwan are inexpensive in both absolute and relative terms (table 3).

Korea and Taiwan's health spending, at 6.5 percent and 6.4 percent of GDP respectively, or about US$2300 per capita and $2500 per capita,

Table 3: Total health care expenditure and allocation (2011, or latest)

	Total health expenditure		Share of current expenditure by function (%)					
	% GDP	Per capita ($US)	Inpatient care	Outpatient care	Long-term care	Medical goods	Collective services[1]	Total
Japan	9.6	3213	32.1	32.6	9.2	21.5	4.6	100.0
Korea	7.5	2315	25.0	33.3	11.7	23.2	6.8	100.0
Taiwan[2]	6.4	2504	27.3	33.2	8.6	28.8	2.1	100.0
Canada	11.2	4665	20.1	34.6	14.9	20.3	10.1	100.0

Notes: 1. Collective services include public health and administration.
2. Estimated from Ministry of Health and Welfare (Taiwan), 2013.

Sources: OECD 2013a; Ministry of Health and Welfare (Taiwan) 2013; Department of Statistics (Republic of China/Taiwan).

are relatively lower than in Japan (10 percent of GDP, about $3200 per capita) and Canada (11 percent, about $4700 per capita). Japan's low spending is notable given its much older population.

In the three countries considered, as well as Canada, outpatient care comprises about one-third of health outlays. However, hospitals consume significantly more resources, more than 25 percent of the total, in the three East Asian countries than in Canada. It should be noted that, since absolute Canadian costs are higher, inpatient care outlays are 90 percent of those in Japan, and much higher than those in Korea and Taiwan. On this account, however, Canada's relatively lower hospital spending would seem to be a good feature of its system.

Medical goods, mostly drugs, also make up a higher share of spending. Canada's long-term care spending is relatively high, suggesting elements such as social care are included in this envelope; in contrast the separate LTCI programmes in Japan and Korea mean their relative spending on long-term care is lower. This is a little surprising, particularly given that Canada does not have a universal long-term care programme for the elderly. Canada's spending on collective services, which comprises both administration costs and public health, is relatively high.[15]

It is worth noting that the Japanese government was able to restrain rising health care spending during the first decade of the 2000s by moving a significant portion of long-term care spending out of the medical care envelope and into Long Term Care Insurance. Indeed, the total health care spending had risen by about 50 percent, from ¥20.6 trillion (5.8 percent of GDP) in 1990 to ¥30.1 trillion (7.6 percent of GDP) in 2000. During this time, the share of health care expenditure on the elderly as a percentage of total health care expenditures increased from 28.8 percent to 37.2 percent, respectively. Between 2000 and 2007, however, the total health care expenditure increased by only about ¥4 trillion, from ¥30.1 trillion (7.6 percent of GDP) to ¥34.1 trillion (8.2 percent of GDP), respectively, while at the same time the share of spending on the elderly declined from 37.3 percent to 33.0 percent (Japan-MOHLW 2014). By implementing Long Term Care Insurance (LTCI) in 2000, the government was able to shift a significant portion of the cost of long-term care from medical insurance to LTCI.

Japan restrained rising health care spending by moving a significant portion of long-term care spending into Long Term Care Insurance.

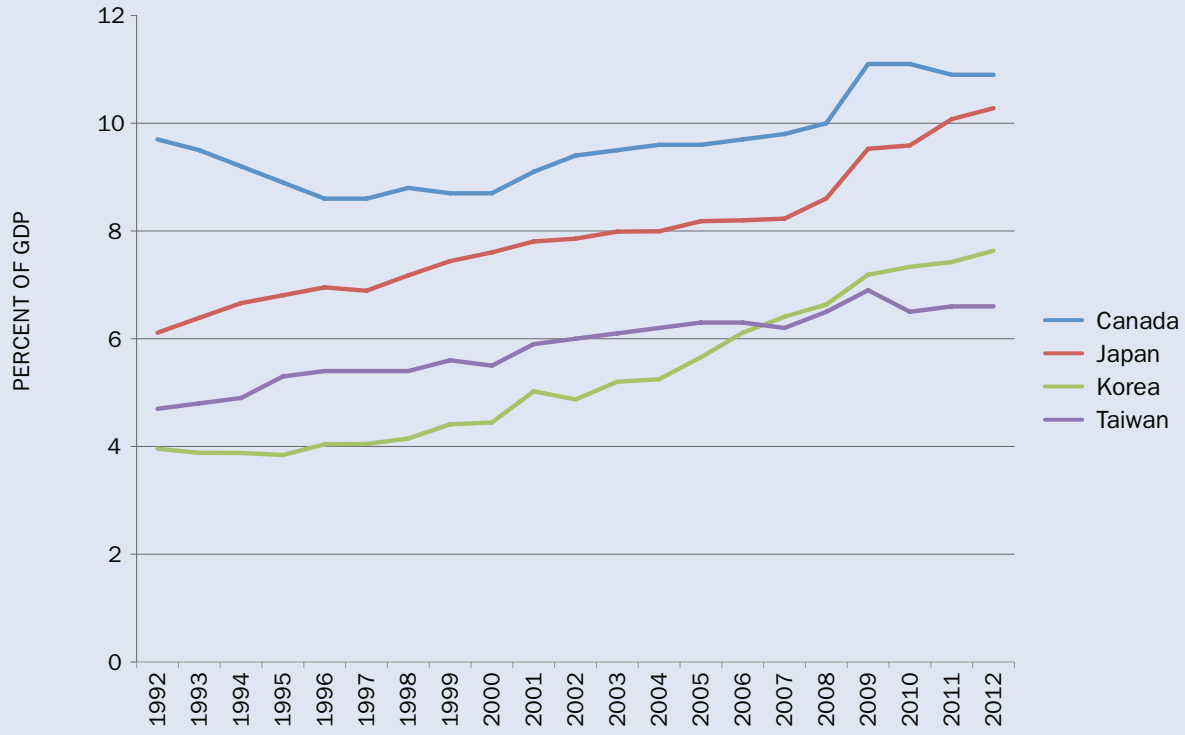
Thus despite a marked increase in the proportion of seniors between 2000 and 2010 (from 17.4 percent to 23 percent), Japan's government was able to limit health care spending increases and maintain the cost of elderly health care at around 34 percent of the total health care spending. The more recent increase in health care expenditure in Japan (after 2008) is largely due to the increase in those aged 80 and more.

Despite their relatively low outlays, Japan, Korea, and Taiwan are not exempt from the international trends of growing health care costs, as seen in chart 1.

The main reasons for the increases are familiar: the growing demand for diagnoses and treatments particularly associated with aging populations, and a growing supply of treatments providers are able and willing to deliver. The sharper increases in shares of GDP spent on health during the 2008/09 financial crisis occurred as spending trends continued, while GDP growth slowed.

In 2010, Korean health care spending per capita was three times the 2000 level in terms of US$ adjusted for purchasing power. Taiwan's spending doubled over the same period on the same basis, while in Japan and Canada increases were

Chart 1: Total health expenditure as share of GDP



Sources: OECD 2013a; Taiwan 2012.

60–70 percent (Ministry of Health and Welfare, Taiwan 2012). In Korea this large increase in the supply and demand of acute care services, driven at least partly by investor interests, is of concern (WHO 2012). Compared with Korea, Taiwan in particular has moderated increases as the share of GDP spent on health care only rose about 20 percent from 2000 to 2012. They were able to curb health care cost increases by reducing payments to doctors, raising co-payment rates, and introducing a global budgeting system, discussed below.

Financing health care

There are two key structural differences between the health care systems in the three countries and Canada. The first is that budgets are set nationally, not provincially as is the case in Canada. The second, more important difference is that these systems are financed primarily by specific health insurance pools, funded mostly by dedicated premiums levied on employees and employers, and subsidized by general tax revenues (Kwon and Chen 2008). Taken together, the centralized oversight and link to wages and employer costs contribute to the ability to constrain expenditures.

Korea and Taiwan each have one insurer, the National Health Insurance Program and the Bureau of National Health Insurance, respectively; Japan had 3410 in 2012 as mentioned above. The Korean and Taiwanese plans are non-profit agencies, under strict regulation of the government, receiving about 30 percent of their revenues as subsidies.

These systems are not easily classified as either social insurance or tax-financed systems because there are extensive government subsidies that complement social insurance and out-of-pocket contributions.[16] In Korea subsidies coming from general taxes comprise about 15 percent of health care revenues (Kwon 2011), while this number is about 24 percent in Taiwan (MHLW 2014), and 38 percent in Japan (MHLW 2013).

They differ from Canada's mostly tax-financed approach because they create distinct, earmarked pools of funds that purchase or contract care delivery.

Japan, Korea, and Taiwan create distinct, earmarked pools of funds that purchase or contract care delivery.

The health care budget setting process of these countries is done centrally, though they take different approaches. In Japan, the Central Social Insurance Medical Council (*Chuikyo*), mentioned above, reports suggested item-by-item fees for services and drugs every two years to the Minister of Health, Labour and Welfare. The government establishes a spending envelope and the *Chuikyo* tries to make it work, while designing appropriate incentives. When, based on analysing billing trends from previous years, they see an unusual rise in the volume of a certain item or product they may lower the payment to providers, to curb the supply, and therefore consumption. Typically the prices provided for new technologies and drugs are lowered in subsequent fee revisions. For example in 2002, given lower equipment prices and higher volumes, the Council dropped the fee for an MRI by 30 percent (Ikegami and Anderson 2012).

Taiwan has adopted a global budgeting system that requires providers, as a group, to bear some financial risk. Under this scheme the BNHI negotiates "resource-based points" associated with medical services. These points are converted to specific, floating fees that can be paid for these services. Costs to the insurance fund are controlled when BNHI sets a yearly funding envelope for five associations: hospitals, primary clinics, dentists, practitioners of Chinese medicine, and institutional care providers. If the volume of services comprising a funding envelope increases (or decreases) the point-to-fee conversion rate is adjusted downwards (or upwards) to use the funds allocated to that sector (Kwon and Chen 2008). Early analyses of the effects of global hospital budgets showed that costs were constrained. Since the introduction of global budgeting, annual health care expenditure growth has been kept under 5 percent (Taiwan-NIA 2014). However there is some evidence that there may have been a decline in service quality (Chang and Hung 2008).

In contrast with Japan and Taiwan, Korea has had difficulty constraining health care expenditures. The NHIP has set, and subsequently revised, resource-based fee schedules, similar to Taiwan. However unlike Taiwan there is not a global budget that would limit spending.

Sources of funds

Japan, Korea, and Taiwan demonstrate a variety of approaches to paying for health care, and these all vary from Canada's model. There are three broad categories of fund sources: public, private out-of-pocket, and other private. Public spending comprises expenditures financed by taxes and mandated social-security premiums paid by individuals and organizations. Private out-of-pocket are payments not covered by any insurance scheme, or co-payments for those that are covered. Other private spending includes payments by employers or individuals for supplementary insurance for employees and privately funded research or charity outlays. Canadian health care is funded by similar sources; however the shares of funds used differs.

Table 4 shows that the public share of health care spending in Japan, at more than 80 percent, is similar to ratios in the UK and Europe while the Korean and Taiwan figures, 55 percent and 57 percent, respectively, are lower than Canada's (70 percent).

In Korea and Taiwan, more than one third of spending is out-of-pocket, more than double the ratios in Japan and Canada, both of which are about 14 percent. Korea, Taiwan, and Japan all have substantial co-payments, discussed in more

Table 4: Share of total health care spending by source (%).

	Public	Private	
		Out of pocket	Other
Japan[1]	82.1	14.4	3.5
Korea[2]	54.4	36.1	9.5
Taiwan[2]	58.1	36.2	5.7
Canada[2]	70.1	15.0	14.9

Notes: 1.2010 2. 2012
Sources: OECD 2013a; Ministry of Health and Welfare (Taiwan) 2012.

detail below. The approaches differ greatly from another regional developed economy that bears examination, Singapore, which uses medical savings accounts to help pay for both health and long-term care (See page 25).

Equity is a key stated aspiration of health care system design, and is particularly valued by Canadians. Equity in health care delivery has two general aspects: "horizontal equity", in which people with similar health needs receive similar care, and "vertical equity," in which the amount of care delivered to a person is appropriate to their needs (Culyer 2001). High out-of-pocket payments, including co-payments, could be expected to reduce income-based horizontal equity by creating a financial barrier to care access for the poor, who also tend to have high health demands.

Research studying health care equity in Japan, Korea, and Taiwan, however, suggests that these systems' high co-payments have not contributed greatly to income-based inequity. In fact, in Korea and Taiwan the poor, who have more needs, tend to access more care (Lu et al. 2007). Subsidies or waivers of health care premiums and co-payments for the very poor, only about 4 percent of the populations of these countries, enable visits to doctors and hospitals. Similarly, Japan employs co-payments, but offers exemptions or reduced rates. Therefore patient access to care is not strongly linked to income overall; horizontal equity is comparable to that in Korea and the UK (Ikegami et al. 2011).

Research suggests that high co-payments in Japan, Korea, and Taiwan have not led to income-based inequity.

Paying for health care in Singapore

The city-state of Singapore has taken a unique approach to financing health care and long-term care for its 5.4 million residents. Since 1984 Singaporeans must contribute to medical savings accounts called Medisave Accounts (MAs), which they can tap as needed to pay their own and their family's share of health care costs, and purchase insurance covering catastrophic health care costs or those for longer-term care. MAs comprise about 25 percent of the value of the Central Provident Fund, the mandatory savings plan that also helps workers finance home ownership and retirement.

In Singapore acute care is provided by seven public hospitals as well as several private hospitals. Public hospital patients are subsidized: 80 percent for basic services (such as staying in 8–9 person wards), and less for those choosing more amenities, including single rooms and the choice of physicians. Primary care is delivered both by government-supported "Polyclinics" providing a broad range of services, and private general practitioners.

MAs are held individually, though funds can be used to pay for the care of immediate family members, such as grown children covering costs for their parents. When a person dies, funds remaining in their MA are inherited.

Medical savings accounts are appealing because they reduce moral hazard in the demand for and supply of health care services. Because they bear care costs, individuals are incentivized to minimize their use of the system by taking care of their own health and only using services when necessary. Further, since patients pay directly, rather than through third parties, provider prices are more visible, and again in theory, subject to competitive pressures. That MAs can be used to support family means there is a type of family safety net. However, the implementation of the medical saving account idea in Singapore proved complex, and this drove the government to expand the mandate of MAs.

Soon after MAs were introduced it became clear that individuals or families could exhaust their accounts if they had very expensive treatments and/or long spells of severe illness. In response in 1990, the government implemented Medishield, an insurance programme covering short- and long-term catastrophic health care costs. In the early 1990s the government acknowledged that not all people would be able, individually or as families, to accumulate MAs sufficient to cover their health care costs. This gave rise to Medifund, a government-subsidized fund allocated to providers to cover the indigent who need care. In 2002, ElderShield, funded by contributions of people 40 and over, was implemented to help cover long-term care expenses for disabilities. Residents use their MA funds to pay premiums for Medishield and Eldershield, and for complementary private insurance that covers care above basic levels provided.

Singapore's approach to financing health services has been effective in curbing costs: health care expenditure is only about 4.7 percent of the GDP, or about US$2400 a person (WHO). The medical savings account, and the associated principle of individual or family accountability remains a core orientation; but government is still very much involved. The MAs account for only about 10 percent of health care spending (Haseltine 2013). Overall about 62 percent of health care spending is private, and the remainder comes from public sources (WHO). In sum, Singapore's MAs remain a good idea, but they do not remove the need for insurance to pay for unpredictable and expensive health care episodes.

Primary and acute care delivery

Overall, the health care services delivered in Japan, Korea, and Taiwan are as sophisticated as those in other developed economies. Hospitals and clinics are equipped with the latest technologies, and broadly accessible by citizens. Japan is the world's second largest medical device and pharmaceutical market and Korea and Taiwan are also strong consumers. Japanese companies place in the world's top 20 by revenues in medical technologies (Toshiba, Terumo) and drugs (Takeda), but rank in the second tier behind US and European leaders. Both Korea and Taiwan compete internationally in mid-level technologies such as basic health measurement meters (like blood pressure monitors) and rehabilitation equipment; however they are applying their manufacturing and research expertise to move up in this space. Below we examine how these countries, all competitive in information and communication technology (ICT), are working to apply this expertise to health care.

Primary care in Japan, Korea, and Taiwan is delivered fee-for-service by physicians in clinics or by hospitals to outpatients. In general, primary care is not well integrated with acute care, mostly because none of these countries use general practitioners (GPs) as gatekeepers. Patients therefore can access specialists directly without referrals. The result is that people tend to visit GPs for what seem to be nominal complaints; when things seem potentially serious, they tend to choose to visit more sophisticated acute care facilities. In response, health policy bureaucrats in all three countries have acted to introduce general practitioner systems comparable to Canada's. They also have introduced financial incentives to re-direct patients from seeking outpatient care at acute hospitals to community GPs.

Japan only recently began initiatives to formally prepare physicians to be general practitioners; doctors trained as specialists may work in clinics that are, in fact, general practices that address routine matters. Patients have in the past visited acute hospital outpatient clinics where they can access specialists, whose clinic hours may be posted online. The long waits required for very short consultations give rise to a common expression in Japanese: *Sanjikan machi, sanpun shinsatsu* (three hour wait, three minute visit). Recently, to encourage appropriate resource use, advanced acute care facilities are allowed to apply a surcharge of an average of about $20 to the regular patient fee payable by patients who come without a referral letter from another medical facility.

A vestigial characteristic of Japan's system is that, unlike in Korea and Taiwan, doctors may both prescribe and dispense drugs, as mentioned earlier. The government has acted to address this conflict of interest, but the reform is incomplete. In 1989 the margin on drugs dispensed by physicians was about 20 percent, and about 90 percent of drugs were dispensed by doctors. Over years the government set fees that reduced these profits. By 2011, the sales margin level had been lowered to less than 10 percent, and the share of drugs sold by doctors was lowered to 35 percent (OECD 2014).

In Korea less than 10 percent of physicians are GPs (Chun et al. 2009). The lack of a gatekeeping process though means that in practice many specialists perform ambulatory care at their own stand-alone clinics or hospitals, as in Japan. Doctors are known to promote the provision of services not covered by public insurance, such as plastic surgery and some extra tests, because these fees are not regulated and are therefore more profitable. As in Japan, the phenomenon of the very short consultation is prevalent. In Taiwan too, though formally there is a Family Medicine practice, specialists also have their own clinics offering primary care.

Applying ICT to Health Information

Japan, Korea, and Taiwan are renowned as leaders in the development and use of information and communication technologies (ICT). The International Telecommunication Union, for example, ranks Korea first and Japan 12th on its

ICT Development Index; Canada was 20th (ITU 2013). Taiwan was not assessed, but it is likely it would be higher than Canada. While current comparative figures can be difficult to obtain, the numbers that are available suggest that Taiwan and Korea lead Japan and Canada in applying ICT to health care. A 2013 OECD report found that in Korea about 60 percent of primary care clinics and 52–66 percent of hospitals used electronic medical records (EMR), while only about 20 percent of Japanese clinics and hospitals did (OECD 2013c; Yoshida, Imai, and Ohe 2013). In Taiwan, only about 21 percent of hospitals use EMR (Hung et al. 2013). In the three countries larger hospitals are much more likely to use EMR than smaller clinics.

These rates are much lower than those in some other countries, particularly Sweden, Denmark, and the UK (OECD 2013c). One reason Japan was slow was that it was not until 1999 that EMR were legally accepted as medical records; only those recorded on paper were approved, forcing even advanced institutions to use both formats (Yoshida, Imai, and Ohe 2013).

Nonetheless all three countries have stated ambitious national programmes to accelerate the implementation of digital records that can be shared between providers and funders. Taiwan has developed standard EMR forms, the Taiwan Electronic Medical Record Template. This standardization, together with security features, will enable sharing of medical information between institutions and patients themselves, with patient consent (Rau et al. 2010). Japan's government is developing the "My hospital everywhere" concept which will give individuals online and mobile access to their health records, using information supplied by providers. This record would be, again with patient approval, visible to various providers they consult, sparing them the ordering of duplicate tests, for example. It would also enable patients to better manage their own diseases (Kantei 2011).

Korea has been developing the Public Healthcare Information System (PHIS) since 1994, with a push to make it web-based since 2005. The system collects, analyses, and shares data to help inform the regional health care system as well as patient decisions (Ryu et al. 2013). Over 3500 health care organizations are linked to this system.

Sanjikan machi,
sanpun shinsatsu
(Three hour wait, three minutes with the doctor)
–Japanese expression

The most interesting innovation has been Taiwan's use, since 2004, of the NHI IC (integrated circuit) Card, a patient smart card. The chip stores basic patient information, including records of critical medical conditions, prescriptions, and records of the previous six medical visits, accessible with permission to the patient's providers. Virtually all (99.9 percent) institutions paid to deliver care by the government are connected to the card's network. The government is not afraid to use the information to try to rationalize care. In 2011 heavy NHI users, those visiting providers 20 or more times a month, were contacted and offered "counselling", leading them to reduce their visit numbers by 40–50 percent on average (Department of Health 2012, 85).

The primary role of the provinces in Canadian health care precludes many of the approaches seen in the three countries. Canada Health Infoway acts to foster health ICT projects that can be integrated, but national standards have not yet been developed fully (OECD 2013c). Canada in this respect resembles Japan more than Korea and Taiwan. The main lesson that can be observed is that technological capability is not necessarily linked to the tendency to deploy ICT expertise in health care; political and bureaucratic will matter more. Patient smart cards could be issued in Canada; they are used in similar ways in Germany and France. Canada could also accelerate movement towards the creation of accessible personal health records. Canada Health Infoway is establishing standards for a "Consumer Health Platform" and there are personal record initiatives in British Columbia and at Toronto Sunnybrook Hospital. But this has yet to emerge as a national project.

Another area of technological innovation is in robotics, particularly in relation to elder care. This is most actively pursued and experimented with in Japan where the need and pressure for innovation are highest. In 2012 the Japanese Ministry of Economy, Industry and Technology, and Ministry of Health and Welfare released a joint policy statement prioritizing four areas where robots can be incorporated in the elder care. To facilitate this the Ministries also allocated funds to support public-private partnerships with industries to develop and commercialize robotic technology (METI 2012). In 2013 and 2014, the government allocated a total of ¥ 1.82 billion to 51 industry groups and NGOs to develop robotic care devices for elder care (METI 2014). The robots that are being developed for elder care range from "soft" machines such as a humanoid robot that will read and recognize human emotion and act as a conversational partner to elderly people suffering from dementia (Ohiro 2014) to "hard" equipment such as a bed that transforms into a wheel chair (Nikkei 2014). Although seemingly science fiction-like, Japanese policy-makers and industry leaders believe that these technological innovations may be a solution to the care worker shortage faced by the country now and in future.

Hospitals

Japanese, Korean, and Taiwanese hospitals are non-profit enterprises, and mostly privately owned. In Japan about 80 percent of hospitals are private, including third sector not-for-profits, but since public hospitals tend to be larger, they account for 70 percent of beds (MHLW Japan 2012). In Korea about 90 percent of hospitals and 85 percent of beds are privately owned (Chun et al. 2009), while the numbers in Taiwan are about 83 percent and 66 percent respectively (MHW 2013). This is of course most unlike Canada where all but a few legacy hospitals are *de facto* public institutions.[17]

The doctors working at these hospitals, mostly specialists, are salaried employees. In Taiwan, for example, just under half, about 47 percent, of doctors are employed by hospitals; the rest are in clinics (MHW Taiwan, 2012). Again, this differs from Canada where most doctors working at hospitals are independently paid by government for their services.

Hospital revenues in Japan, Korea, and Taiwan are primarily based on the volume of services they perform. Historically they have been compensated on a fee-for-service basis, invoicing insurance funds for procedures performed and ancillary costs, included hospital stays. While this encourages hospitals to be active, there are concerns that "supplier-induced demand" may unnecessarily increase the services delivered. Fee-for-service funding tends to make funders vulnerable to higher costs, unless curbing measures are introduced.

The use of robotics in elder care is actively pursued and experimented with in Japan.

To help address such problems these countries are introducing elements of activity-based funding borrowed from the US diagnostic-related group (DRG) or case-based approach. Under these schemes hospitals are paid a fixed fee for treating a patient who presents with a certain condition, such as a broken leg. Providers then choose appropriate treatments, generating surpluses on "easy cases" that are used to subsidize more challenging ones. The funders therefore assume the risk associated with the incidence of an illness while the hospitals have discretion on how to treat cases.

Japan began rolling out its case-mix system, called Diagnosis Procedure Combination (DPC), in 2003, starting with large, top-flight hospitals. It is not yet complete, because many interventions, including surgery, rehabilitation, and drugs delivered on the day of a procedure, fall outside the case fee, and are still paid fee-for-service. Some diagnostic categories, especially less common ailments, are also treated this way. The DPC scheme includes fees for hospital stays,

which are per diem, though the daily rate declines when a stay exceeds the average length for the diagnosis specified. While the implementation of this payment system has seen some success, the gaps noted above should be addressed if the programme is to have its desired effects (Anderson and Ikegami 2011).

Korean hospitals are primarily fee-for-service, which has led to a relatively high volume of service delivery, particularly in higher margin specialities (Kwon 2009). In response, in 1997 the government piloted a DRG-type payment for some diagnoses in hospitals that chose to participate. As expected it had the desired effects, including shorter lengths of stay and fewer tests. However pushback from providers has limited the expansion of this type of payment.

Nonetheless in 2002 the Korean government introduced this approach to pay for eight diagnoses, together comprising about 25 percent of inpatient cases. Seven years later about two-thirds of hospitals participate in this voluntary scheme for seven illnesses. This is problematic because only hospitals that profit from this arrangement tend to choose this type of payment (Jones 2010).

Taiwan too paid its hospitals fee-for-service when universal health care was introduced in 1995. However, the government soon became concerned when, not surprisingly, costs for medical services climbed. Informed by the US experience with case-mix payments, the Bureau of National Health Insurance started a five year implementation of the Taiwan Diagnostic Related Groups (Tw-DRGs), starting with categories comprising about 17 percent of health spending (Cheng and Liu 2013).

Health care resources and access

Japan, Korea, and Taiwan tend to offer greater access to health care than Canada, but with fewer human resources, as shown in table 5. On average, people in these countries visited a doctor more than once a month, about twice the rate in Canada. Given their relatively smaller numbers and the larger number of visits, the physicians in these countries are much busier on average than their Canadian counterparts. Japan, like Canada, has a relatively large number of nurses, almost twice the relative numbers in Korea and Taiwan.

Table 5: Health system features (2011, or latest)

	Japan	Korea	Taiwan	Canada
Doctors (per 1000)	2.2	2.1	1.8	2.4
Nurses (per 1000)	10.0	4.7	5.1	9.3
Beds (acute care, per 1000)	8.0	5.9	3.5	1.7
Magnetic resonance imaging (MRI) devices (number per 1,000,000)	46.9	21.3	3.31	8.5
Positron emission tomography (PET) devices (number per million)	3.7	3.3	1.61	1.3
Average length of hospital stay (days)	18.2	15.8	9.9	7.7
Doctor consultations (average per year)	13.1	13.2	15.7	7.4

Note: 1. Calculated from 2009 figures.

Sources: OECD 2013b; Ministry of Health and Welfare (Taiwan) 2013; Medical Travel Taiwan.

Hospital average length of stay (ALOS) is considerably longer in the East Asian countries. For example, recent research comparing hospital length of stay (LOS) in Japanese and Canadian hospitals confirmed the former had significantly longer LOS for the diagnoses examined, even when controlling for patient demographic characteristics (Tiessen et al. 2013). In Taiwan, patients on average stay more than two days longer in the hospital than those in Canada, nearly a 30 percent difference. In Japan and Korea ALOS is nearly double that in Canada. Japan particularly has been acting to lower this number.

In Korea and Taiwan the co-payments for visits to top teaching hospitals or medical centres is higher than those for general hospitals or physician visits.

The longer LOS in Japan, Korea, and Taiwan is reflected in the greater number of beds that accommodate more patients for longer periods. Overall this means that Canada uses its hospitals more intensively, keeping patients for shorter periods. This means hospitals are staffed with the higher nurse per patient ratios that are required to address heavy care needs; typically care needs become lighter as stays lengthen.

A significant difference between the countries is seen in the deployment of the latest diagnostic imaging technologies. Both Japan and Korea have very high numbers of MRI (magnetic resonance imaging) and the more modern PET (positron emission tomography) devices, particularly compared with Canada. Japan's MRI numbers are the highest in the OECD, and Korea ranks fourth, behind the United States and Italy (OECD 2014). In contrast, though the figures are older, it is apparent that Taiwan has not embraced these technologies to the same degree, which is not necessarily a bad thing.

Health insurance coverage and user fees

The key differences between the public health insurance programmes of Japan, Korea, and Taiwan and that in Canada are that the former plans are more comprehensive, and they all employ co-payments. Table 6 summarizes what is covered and associated co-payments.

In the three East Asian countries, inpatient (hospital) and outpatient care are included in their insurance plans, like Canada. However, unlike Canada, under these three plans, public subsidy of the cost of prescribed medicines taken both in hospitals or at home is universal. In Canada, only inpatients as well as residents of Quebec[18]

Table 6: Public health care insurance general coverage and associated co-payments by country

	Inpatients Standard (range) Cost/day (standard)	Outpatients Standard (range)		
		Basic care	Drugs	Dental care
Japan	30% (10–30%) $18/day meals & living expense	30% (10–30%)	30% (10–30%)	30% (10–30%)
Korea	20% (5–60%)	30–40%	30–35%	30%
Taiwan	5–30%	$2–16	10–20%	$2
Canada	No co-payment	No co-payment	Not covered[1]	Not covered

Note 1. Pharmaceutical coverage for outpatient seniors and all inpatients is offered in all provinces.

Sources: MHLW; NHI (Korea); Ministry of Health and Welfare (Taiwan) National Health Insurance Administration.

and groups such as seniors, those on welfare, First Nations, and Inuit enjoy this benefit (Gagnon 2010). As well, again differing from Canada these plans also extend coverage to dental care that is not delivered in hospitals. In Canada, dental care, beyond treatments performed in hospitals, such as emergencies, is not part of health care packages. It is interesting to note that in Japan, Korea, and Taiwan, vision care services are part of the health insurance package; similar to Canada though, eyeglasses and contact lenses are not covered.

In Korea and Taiwan more than half of the population has private health insurance to cover out-of-pocket outlays, including co-payments. In Korea regulations state that private health insurance can cover only 90 percent of out-of-pocket charges (Kwon 2013). In Japan, voluntary health insurance is available for co-payment and some non-covered services. While about 70 percent of Japanese carry such insurance, it pays for only about 3 percent of total health spending (Tatara and Okamoto 2009; Matsuda 2013). In Canada, about two-thirds of the people have supplemental coverage, usually offered through their work (Canadian Life and Health Insurance Association 2013).

Though Japan, Korea, and Taiwan have considerable co-payments, all systems have relatively low income-contingent caps on the amounts people have to pay. In Korea, the government pays 50 percent of co-payments above $1200 in a month for all people, and the full amount of co-payments above $2000 to $4000 a year, depending on income.[19] In Taiwan there is a cap of about $1100[20] for hospital stays of less than 30 days, and $1800 in a year. Japan has individual limits on the amounts people are expected to pay. For people under 70, it ranges from about $350 to $1500 (plus 1 percent of payments over $500) per month, depending on income. For people more than 70, it is about half those amounts (Japan MHLW 2013).

The most commonly cited reason for using co-payments is to reduce what economists call *moral hazard* that could result when people who do not have to pay for care use it when they don't have to, and/or they do not act to stay as healthy as possible. Whether co-payments reduce overuse or, less favourably, lower use by those who cannot afford them, is discussed elsewhere. However, they are also used to direct patients to appropriate providers, as mentioned above. This is necessary in systems that do not have formal gatekeepers and hospitals that offer outpatient services.

In Korea and Taiwan the co-payments for visits to top teaching hospitals or medical centres is higher than those for general hospitals or physician visits. This is to deter patients from seeking care first at institutions that specialize in complicated or complex cases when, typically, they should start with a more general assessment. Taiwan's co-payments also are higher when people visit hospitals without referrals or when they go to emergency care.

Research conducted in Canada has found that, despite the lack of co-payments, its health care system is not more equitable than those in Japan, Korea, and Taiwan. In Canada, the rich tend to access specialists and doctors more, while the poor are more likely to see GPs and spend more time in hospitals (Allin, Grignon, and Le Grand 2010). It goes without saying that access to dental care in Canada has been found to be strongly linked to income level (Grignon et al. 2010). This is not as significant in Japan and Korea, though there is a "pro-rich" bias towards dental use in Taiwan (Lu et al. 2007; Murakami et al. 2014).

That said, in Japan, Korea, and Taiwan, despite the relative success of equitably providing care, there is recognition of the inequities that are apparent, and that will become more challenging to address in light of governments' fiscal limits and growing income inequality.

Long-Term Care

As noted above, since 2000 both Japan and Korea have adopted Long Term Care Insurance (LTCI) in an effort to address the issue of rapid population aging. Although initially refusing to follow this path, the Taiwanese government too has re-

cently begun to take steps to develop LTCI. The development of LTCI reveals important health care policy lessons for Canada and other OECD countries. First, they demonstrate that population aging has garnered serious public policy attention and concerns in these countries since the 1990s. Amongst the three countries, Japan is the only one that is confronting such a crisis. By 1995 Japan's over-65 population had reached nearly 15 percent and by the time LTCI was implemented in 2000 the proportion of the elderly was already at 17 percent. Currently over a quarter of Japanese population is over the age of 65 (Japan Statistical Agency 2014).

In 10 years (2025), the elderly will make up 20 percent of the populations of Canada, Korea, and Taiwan; Japan was in this situation in 2005.

Even though Korea and Taiwan still have relatively young populations – the proportion aged 65 or more in both countries is only about 12 percent – Korea already has established LTCI and Taiwan is developing its own plan. In other words, both countries have begun to develop national long-term care strategies to deal with the future contingencies associated with an aging population well ahead of time. In both cases, LTCI appears to be the policy choice. True, the pace of population aging in Korea and Taiwan is much more rapid than Canada. But, in 10 years (2025), the elderly will make up 20 percent of the populations of Canada, Korea, and Taiwan; Japan was in this situation in 2005. Korea and Taiwan's pre-emptive efforts to address long-term care needs highlight the importance of a long-term perspective and pro-active health care policy-making.

LTCI in Japan, Korea, and Taiwan seems to address fiscal and equity concerns. Indeed, two important reasons for the Japanese government to introduce LTCI were first, to reduce the cost of social hospitalization amongst the elderly, and second, to create a new dedicated revenue stream to fund long-term care. Furthermore, they would achieve universal coverage for long-term care for the elderly. It would not be easy for the government to achieve these objectives within the existing health insurance schemes and the community care system. The Japanese and Korean experience show that LTCI can reduce health care costs previously associated with social hospitalization, and at the same time, increase the supply of home care and other domiciliary care for the elderly population.

LTCI received strong public support in Japan at the time of the introduction, and continues to receive strong support, because it is perceived to be a much more equitable way to deliver care to the elderly. Similarly in Korea, there was and continues to be strong support for LTCI.

Japanese policy-makers and health care experts spent much of the 1990s analysing Germany's LTCI and the UK's community care models and debates, and finally adopting Germany's LTCI to fit the Japanese context. Korean and Taiwanese policy-makers benefitted from Japan's experience in implementing LTCI system, in addition to the experiences of Germany and the UK. For example, learning that Japan's then six level disability categories often made the process of classification cumbersome and complicated, Koreans simplified their disability classification to three levels, thus making case evaluation more efficient. Both Korea and Taiwan also adopted Japan's LTCI principle of providing services rather than cash benefits, a route that Japan rejected after examining Germany's LTCI, which offered options of services or cash provisions to the LTCI recipients. In short, through cross-national policy learning each country was able to use the experiences of their antecedent countries to avoid mistakes and to adapt to their specific national and cultural contexts.

Finally, although public support for LTCI was high in all three East Asian countries, in all cases much of the policy initiatives and leadership in the development of LTCI rested in the hands of government and health care policy-makers (Campbell and Ikegami 2000; Peng 2002; Camp-

bell, Ikegami, and Kwon 2009; Nadash and Shih 2013; Hung, Liu, and Pai 2010). In all these East Asian countries, the key institutional actors pushing for LTCI were the Ministries of Health and Welfare or equivalents. They were often supported by women's groups and other civil society organizations.

The governments in all three countries recognized that a large share of elder care fell on the family, in particular, women. They also realized that this undermined women's human capital mobilization. The situation is not as bad in Canada, partly because of a slightly more gender-equal employment system, and partly because of weaker social and cultural expectations of women's familial care role compared to Asia. Nevertheless, Canadian and US surveys show family care givers (most of them women) incur significant personal costs in terms of wage and employment losses associated with the care of their elderly family members.

In the absence of adequate social care, families often resorted to hospitalizing their frail elderly family members, a costly but understandable solution in lieu of long-term care services. In Korea and Taiwan too, policy-makers have been keenly aware of the health care cost implications of rapid population aging. Through LTCI, therefore, they saw an opportunity to reduce social hospitalization, shift the fiscal burden of long-term care from the national health insurance to long-term care insurance, and at the same time, create a new revenue line dedicated to long-term care through the creation of a separate social insurance.

Family care givers (usually women) incur significant wage and employment losses associated with the care of their elderly family members.

The timing was opportune because of the growing public awareness of the aging population. With the combination of strong public support for social care, and the fiscal opportunities, the governments in all three East Asian countries were able to implement LTCI without much public opposition. Table 7 summarizes the LTCI in the three countries.

Table 7: Summary of LTCI in Japan, Korea, and Taiwan

	Japan	Korea	Taiwan (proposed)
Implementation year	2000	2008	Projected for 2017
Coverage	All population 65+; all population 40+ if age-related disability	All population 65+; all population if age-related disability	All population suffering from functional and cognitive disability
Type of provisions	Home care Community care Institutional care services Preventative services Cash benefit if living in remote areas	Home care Community care Institutional care services Cash benefit if living in remote islands and areas	Home care Community care Institutional care services Cash benefit (people hiring foreign care workers not qualified for cash benefit)
Co-payment	10% waived for low income families	10–20%, waived for low income families	5–10%, waived for low income families
Financing scheme	45% – government subsidy 45% – employer and insured contributions 10% – co-payment	20% – government subsidy 60–65% – employers and insured contributions 15–20% co-payment	90% – government subsidy + employer and insured contributions 10% – co-payment

It must be noted that the implementation of LTCI has not lacked broader challenges. In Japan the budget of LTCI more than doubled from 2000 to 2011, and it is forecast to continue expanding (Shimizutani 2013). It has not yet succeeded in lowering overall levels of social hospitalization. This is partly because the programmes do not yet adequately address the increase in single person households and the number of seniors with dementia (Shimizutani 2013). The government will need to modify programmes in order to contain costs while addressing these needs.

In Korea, the 50 percent increase in the number of people approved to receive LTCI services from 2008 to 2011 prompted the government to raise the contribution rate, from approximately C$3 in 2009 to C$5 in 2011 (Shin 2013).[21] On the other hand, preliminary analyses suggest that LTCI has achieved overall positive effects in terms of improving physical functions of service users, reducing families' care burden, contributing up to KRW6903.3 billion in value added to the economy in job creations in 2011, and furthermore, has led to an estimated KRW 423.4 to 449.7 million in medical cost reduction (Sunwoo 2012). Like Japan, Korea will need to continue monitoring the progress of its LTCI and if necessary modify programmes in order to manage rising costs.

Lessons for Canada

This survey of the health care and long-term care systems of Japan, Korea, and Taiwan provides both broad lessons related to policy-making and implementation, and more specific ideas associated with system structure and management. The experiences of these systems also can contribute to public debates about programme initiatives and more specific structural factors that have received limited consideration in the Canadian context.

Policy-making and implementation

1. Policy-makers must actively learn from abroad

Once the governments of Japan, Korea, and Taiwan recognized the need for change, they wasted little time in searching extensively for solutions, investigating different models and approaches abroad. They looked to Europe, the US, and Canada, as well as to each other for policy models and innovations. Though Canadian health care policy-makers do consider Europe, Australia, New Zealand, or the US for ideas, they tend to overlook Asia, for some reason. By not looking beyond our immediate cognate health care systems, we risk missing opportunities to think outside the box, and to learn new innovations in health care.

The development of LTCI in Japan, Korea, and Taiwan illustrates the importance of active cross-national policy learning. It is no accident that all three East Asian countries have decided to adopt LTCI as all three countries – despite the obvious historical and diplomatic tensions – have a long history of policy learning from each other, and from other Western countries. Japan initially looked to the UK for policy ideas on community care, and then focused on Germany for policy innovation in LTCI. This was partly because Germany's social insurance model aligned more closely to Japan's existing social insurance framework.

As there is still significant mutual learning between Japan, Korea, and Taiwan in almost all other aspects of social policy development (Peng 2011 and 2012; Peng and Wong 2008 and 2010; Campbell, Ikegami, and Kwon 2009), Korea – anticipating a similar demographic fate as Japan – was quick to follow. A similar case may be made about Taiwan, which benefitted from the models and experiences of the Japanese and Korean LTCI.

2. Identifying new health policy ideas is not enough; they need to be implemented and regularly adjusted

The significant system changes in Japan, Korea, and Taiwan were, and continue to be, shaped by deliberate and often difficult but necessary political decisions that recognize the need for fiscal sustainability. The Korean government's 2000 health care reforms to bring the national health insurance under a single payer system and to end doctors' drug prescribing and dispensing is a case in point. The introductions of LTCI in Japan and Korea are other good illustrations of continuous deliberate systems changes.

The development of LTCI in Japan, Korea, and Taiwan illustrates the importance of active cross-national policy learning.

However, system change should not and does not end upon implementation. Once these countries implemented new health care programmes, they reviewed them every five years or so, made adjustments, and revised goals and targets. This contrasts with Canada where politicians often seem unable, if not unwilling, to affect substantial changes to a good system that could be better, and needs reforms to be sustainable (Simpson 2012).

Recent Japanese, Korean, and Taiwanese health care reforms have proved to be more far-reaching than those of Canada. While the changes or even new programmes introduced were bold and potentially expensive, knowing that they can be altered makes it easier to take first steps. Again, these reforms and subsequent adjustments were no easy feat. Timing, opportunities, and the state capacity to seize opportunities and act on them are crucial. The Korean health care reforms of 1999 (the consolidation of health insurance carriers and the separation of drug prescribing and dispensing) were fiercely opposed by two of the largest institutional actors – health insurance companies and doctors. But the Kim Dae-Jung government was able to leverage its strong electoral mandate for policy change and the IMF directives for economic restructuring to force the reforms.

System programmes and management

User fees can improve equity and improve coverage

The discussion of health care service user fees has been limited in Canada, despite their use in other countries that demonstrate health equity comparable to Canada. All three countries examined here employ them, forcing most patients, with exemptions and/or discounts based on income and age, to directly pay for services. Japan even requires inpatients pay a nominal amount for the cost of their hospital accommodation.

At the same time, these countries offer more comprehensive health care coverage than Canada. As noted, their basic packages include dental care, outpatient prescription drugs for those under 65, and, recently in Japan and Korea, long-term care. Coverage of medical prescriptions and dental care is not a trivial matter in Canada. In 2013 it is estimated that outlays on prescribed drugs comprised about 14 percent of all health spending, and those on dental services about 6 percent (CIHI 2013). Put another way, yearly spending per capita averages about $830 for drugs and $360 for dental care. These costs are, of course paid for publicly or privately, either out-of-pocket or through complementary insurance such as that provided by employers.

In total, about 58 percent of prescribed drug spending in Canada is paid for privately; for dental care the ratio is over 90 percent. For both drugs and dental services, complementary insurance picks up about 60 percent of these charges with household out-of-pocket spending accounting for the rest (CIHI 2013, 29–36). A recent Statistics Canada study showed that average out-of-pocket spending on dental care was

linked to income level: those in the lowest 20 percent spent only an average of about $170 a year; those in the top 20 percent averaged about $650 (Sanmartin et al. 2014). This suggests people were foregoing treatment if they could not afford it. For prescription drugs, which tend to be less discretionary, the link to income was different. The highest income wage earners had the lowest out-of-pocket spending, about $270 per household, while those in the second lowest 20 percent of wages spent the most, about $390.

The earlier recommendation of introducing public LTCI in Canada is an example of a programme that could invoke user fees. These fees would provide some revenue to the programmes and curb demand for more than basic services. These charges would, as in Japan, Korea, and Taiwan, be waived for those with low incomes. Individuals with the financial means should be able to pay extra for services and accommodations they may require, as these will vary more than necessary acute care services. This would not change how clients pay for LTC services in Canada, which may or may not require user fees, which are typically linked to income.

Competition among private hospitals can contribute positively to health care

The experiences of the three systems suggest that Canadians should not reject out of hand the notion of privately owned hospitals, especially if they are non-profit. Canada's health care systems have created a reliable and safe supply of appropriate levels of hospital care throughout most of the country. Hospitals, which mostly are *de facto* public institutions, differ primarily in terms of being teaching and research institutions, or being oriented towards larger or smaller communities. While there has been some movement toward activity-based funding, it has been limited to date (Sutherland 2011). This structure creates some variety and competition, but it is not clearly defined. Revenues are achieved through administrative rather than market processes, bounding the types of innovation required to survive and thrive.

In contrast, Japan, Korea, and Taiwan rely heavily on private acute care providers, which tend to compete for patients who are free to choose where to go. Competition also exists because the hospitals' payment is activity-based, either fee-for-service, or more recently, case-based. It has been claimed that this approach has contributed to creating a "medical arms race", as hospitals may over-equip themselves with the latest technologies and beds. However it does create dynamism in the sector due to the existence of different provider types: university-affiliated, state or municipally operated, and corporate or third-sector not-for-profit. While public hospitals, particularly those linked to top medical schools, tend to be perceived as delivering the most advanced care, private competitors may supply more responsive care. In Japan, private providers are better able to provide integrated care, as the same corporate owner can accommodate and transition patients through care pathways in primary, acute, rehabilitation, and even long-term care facilities.

In Canada in the immediate term, the long-term care sector offers the best environment for continued innovation as it already comprises a mix of public, not-for-profit, and private providers. Since the sector operates outside the *Canada Health Act*, and providers and other stakeholders are not as well organized as in health care, governments have faced less political resistance as they implement policies to address needs (Baranek, Deber, and Williams 2004, 289–292).

Hospital specialists on salary

In Canada physicians are paid primarily fee-for-service, whether they work as general practitioners or specialists. While alternative payments, such as hourly or per patient capitation rates, are increasing, fee-for-service comprises about 70 percent of physician compensation (CIHI 2013). In Japan, Korea, and Taiwan, primary care physicians are primarily compensated on a fee-for-service basis, similar to Canada. The main strength of this approach is that this encourages doctors to be active, addressing real or perceived care needs on the front lines in a timely fashion (Robinson 2001). Another advantage is that primary care consultations are relatively inexpensive for the system.

However, specialists, who are more highly paid for their expertise, may tend to over deliver care, or deliver care more expensively than necessary, if they are paid fee-for-service (Robinson 2001). In the three East Asian countries, specialists tend to be paid salaries by the hospitals they work at, and this helps curb outlays on their services. This is even more important in these countries that, unlike Canada, do not use GPs as gatekeepers, as mentioned below.

All three systems have well-developed long-term care systems to meet the challenges of aging populations

The Ministries of Health and Welfare in Japan, Korea, and Taiwan were motivated to develop elder care systems through LTCI in order to address the current and anticipated future demand for care. Equally important though, they were also motivated to introduce LTCI in order to reduce health care costs and to create a new revenue source dedicated to the long-term care of the elderly.

There are real concerns associated with introducing a tax-supported entitlement programme such as LTCI (Blomqvist and Busby 2014). It reduces private incentives to secure both financial resources, directly or through private insurance, and human resources, including informal support, needed as one ages. Therefore it can potentially increase government spending and the tax burden, unless properly designed and managed. It can also contribute to inter-generational inequity as younger workers become required to support not only the poor elderly, but also those who may not need subsidies. However, as noted above, LTCI does not fall under the *Canada Health Act*, leaving significant room to experiment with a social insurance-type system that would be affordable even with growing concerns about rising provincial health budgets.

The creation of new programmes to fill the gap between, or perhaps more correctly, to address the overlap of, health care and long-term care is the most sensible specific innovation Canada should adopt. As noted, all three countries, under fiscally conservative governments, have acted to address issues surrounding the unfolding of problems that are emerging, and will only become more formidable as predictable demographic trends continue. These countries add to the growing consensus in continental Europe where LTCI has been introduced in Germany and France. In all of these countries, the public accepted the idea of paying into a new social insurance dedicated to long-term care.

The overarching reasons for public LTCI are similar to those associated with the case for health insurance (Barr 2010). Individuals typically do not know what their long-term care needs will be or for how long, so can incur a broad range of costs, in some cases catastrophic. Yet in 2010 only about 385,000 Canadians held such LTCI, less than 1 percent of the population of Canadians over 65 (CLHIA 2012). The US Department of Health and Human Services estimates that about 70 percent of people who reach the age of 65 will require LTC at some time. Other US-based analyses claim that people have a 30–50 percent chance of ever entering a nursing home (Brown and Finkelstein 2009). Yet, as in Canada, US LTCI enrolments are very low.

LTCI does not fall under the Canada Health Act, *leaving significant room to experiment with a social insurance-type system.*

Several reasons are proposed for this (for one example see Brown and Finkelstein 2009).[22] On the supply side, insurance market failures hinder the ability of private insurers to properly price and provide appropriate plans. From the purchaser perspective, individuals cannot properly assess their own potential needs, and also may assume these costs will be covered by public health care in Canada, or Medicare and/or Medicaid in the US. There is some truth to the latter conjecture, because if individuals have neither their own sufficient funds nor adequate LTCI,

the state may be compelled to provide last resort coverage. Often these patients will be placed in acute care hospitals, rather than more appropriately and inexpensively in long-term care facilities or at home.

Japan, Korea, and Taiwan share no remembrance or policy affinity with Scandinavia: these are tax-averse familialistic societies. The fact that three governments were able to not only convince tax payers to socialize care and pay into yet another social insurance scheme, let alone gain political support for it, is a testament to the fact that the timing for such a social insurance is right in Canada. Notably, after studying Germany and Japan's LTCI models, the province of Quebec, under the Parti Québécois (PQ), introduced LTCI legislation in late 2013. This initiative was, however, halted when the Liberal party defeated the PQ in April 2014. Despite this, recent discussions at the provincial health ministers' meetings suggest that there is a growing interest amongst these ministers to learn and share information about LTC models and options.

Aside from the health economics rationale mentioned above, another important reason for provincial governments' interest in LTCI is the growing understanding about high personal and economic costs associated with care giving in lieu of an adequate longer-term care policy in Canada. In 2012 over 8 million Canadians (28 percent of the population aged 15 and over) provided long-term care to their family or friends, 48 percent were caring for their parents, and another 13 percent for their grandparents. An analysis of Statistics Canada's family care data reveals that family care givers suffered from high levels of psychological and physical health problems and incurred significant out-of-pocket expenses associated with family caring (Turcott 2013). Other studies show family care giving is often associated with loss of wages and employment (Keefe 2011).[23] In sum, the personal and economic costs of family care giving are significant. For policy-makers concerned about effective mobilization of human capital, this is not an effective solution.

The costs of long-term care vary widely, depending on the degree of disability and whether it is delivered at home or in institutions. In Canada, since 1988, all provinces have provided elements of home care support. In 2004, the Federal government-orchestrated Ten Year Plan to Strengthen Health Care included provincial commitments to support short-term care for acute, end-of-life, and mental health patients (Health Canada 2004). However the types of services supported vary considerably (Canadian Home Care Association 2011).

Fewer than 1 percent of Canadians over 65 have LTCI.

LTCI programmes should be designed to help mitigate the concerns mentioned above (Blomqvist and Busby 2014). The use of caps, and as importantly, co-payments of up to 50 percent could significantly lower the required tax bump. Means testing that links premium subsidy levels to the amount of accessible personal resources can address equity issues, particularly that between generations. Should Canada implement and revise a LTCI programme, it can learn from the experiences of Japan, Korea, and Taiwan, as well as other countries that face similar issues.

Japan, Korea, and Taiwan all feature earmarked pools of funds explicitly allocated for long-term care. In Japan and Korea, it is because their systems are mostly social insurance-financed, though as mentioned above, they receive significant subsidies. Though tax-financed, Taiwan's system designates a fund. This contrasts with the situation in Canadian provinces where public long-term care spending is a line item within comprehensive public budgets.

While it may be argued that with active immigration policy, Canada can afford to defer the need to consider long-term care, this would be

a highly unsustainable strategy in the long term. Despite a steady annual intake of approximately 250,000 immigrants per year, Canada has been aging at a steady rate over the last few decades, as noted above. To halt or reduce population aging, Canada will have to take in significantly more immigrants than our current level. Canada's demographic aging, despite large intake of immigrants, is largely due to its below replacement total fertility rate, at approximately 1.5, about the OECD average. Studies also show that cumulative fertility patterns of Canadian-born *and* immigrant women are remarkably similar after adjusting for socio-economic variables (Woldemicael and Beaujot 2010).

Broadly implement electronic health records

The potential clinical and economic benefits associated with the adoption of electronic health records are obvious; that they are not universally adopted by providers and patients is surprising, especially when health care is compared to other aspects of our lives in Canada. Canadians have Social Insurance Numbers and more than 80 percent file income taxes online. Yet international surveys consistently show Canada is lagging in the application of ICT to health care.

The steps Japan, Korea, and Taiwan have taken to foster the broad use of EMR have had mixed results to date, with the possible exception of Taiwan. That said, these three countries remain strongly committed to ensuring providers and patients have the ability to share common information. They are committed because they firmly believe that a fully integrated EMR will lead to positive return.

Looking abroad can confirm what is done well at home

The final lesson for Canada that can be drawn from Japan, Korea, and Taiwan is that Canadian health care has elements that should be valued in comparison with other practices. The most apparent is the better, broader, though yet imperfect, integration of primary care with acute care. In the three East Asian systems, patients can directly access specialists. While a popular policy that allows quick access, it can result in inappropriate allocation of the time of experts.

Conclusions

The most obvious lesson one learns when looking abroad for ideas on how to pay for and deliver health care services is that Canada's situation is not unique. Canadians are living longer, and benefiting from innovations in diagnostic and therapeutic technologies that our well-trained clinicians are ready to deliver. At the same time, governments, many in slower growth environments, are fiscally challenged with meeting the goal of trying to ensure their populations get equitable access to the care they need.

The countries studied in this report, Japan, Korea, and Taiwan, are in similar straits, but have responded differently, partly due to their related histories, and their political and bureaucratic cultures. Canadian policy-makers and the public they work for should try to be open to lessons from these East Asian countries to augment what they have learned from the usual comparator nations. One would be hard-pressed to say that the ideas identified are culture-bound; they are worth considering.

The experiences of the three countries demonstrate that political and bureaucratic fortitude are required to not only recognize and anticipate needs, but as importantly to implement appropriate programmes. Policies cannot be perfect because the health care sector is particularly complex, and the stakes, in some cases life itself, are considerable. It is not always clear how populations respond, so policy-makers should be ready to make changes; otherwise stakeholders become lodged and changes become more difficult.

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Endnotes

1 For example the report Flood, Stabile, and Tuohy (2001) prepared for the Standing Senate Committee on Social Affairs, Science and Technology that produced the "Kirby Report" studied Australia, the Netherlands, New Zealand, the UK and the US. See also Lundback (2013). Esmail (2013) is a notable exception.

2 This is the study cited in Michael Moore's 2007 documentary on US health care, *Sicko*, showing that the US ranked 37th, two spots ahead of Cuba. France was ranked first in terms of overall performance.

3 Japan's population peaked at 128.1 million in 2008, and has since begun to decline. A mid-range projection estimates that Japanese population will drop by about 30 percent, to 97 million, by 2050 (Japan Statistical Agency 2014).

4 The Taiwanese government defines obesity as body mass index (BMI) > 24, whereas the WHO definition of obesity is BMI > 30.

5 Most workers at this time were non-regular, or temporal, employees.

6 Medical education was rationalized and standardized during the post-war occupation.

7 This includes all health care services covered by National Health Insurance, dental, and public health care services.

8 For those under 65, the charge is $3 a meal, and about $18/day for elderly in long-term care beds. The reasoning is that people would incur some costs whether or not they are in hospital.

9 These are farmers, students, and other self-employed or retired people still in employee plans. Retired employees can have a few options. They may join the NHI, stay with their employee plan for two years while paying the full premium, join another plan as a dependent, or in the case of employees of some large firms, enter into their firm's retiree plan.

10 This is similar to what is referred to in Canada as the Alternative Level of Care (ALC) issue.

11 The Ministry of Health and Welfare was reorganized into the Ministry of Health, Labor and Welfare (MHLW) in 2001.

12 Korea has a 5-year, one-term presidency system. The highly popular President Kim Dae-Jung was replaced by another populist left-of-centre president Roh Moo-hyun in 2003.

13 One Korean won (KRW) is about C$0.0011.

14 Taiwan was under Japanese colonization from 1895 to 1945.

15 This is due more to Canada's substantial public health outlays than higher administration costs. In Canada, administration accounts for about 3 percent of total health care spending, compared to 2 percent in Japan and 4 percent in Korea (OECD 2013b). The US figure is 7 percent.

16 Since social security premiums are compulsory they are, in effect, taxes.

17 As noted, formally most Canadian hospitals are private and not for profit, but are treated as public institutions. In Ontario they operate under the *Public Hospitals Act*, for example.

18 Quebec introduced a mandatory drug plan, delivered by private plans and a public one, for those under 65 in 1997.

19 KRW1,200,000.

20 TWD32,000.

21 KRW3238 per month for an employed insured person and KRW2980 for self-employed households in 2009 to KRW5383 for employed and KRW4712 for self-employed in 2011.

22 There is a considerable literature on these issues. For example Pauly (1990) notes that a person may rationally decide not to buy LTCI for two reasons. First, families and friends may, and often are, relied upon to deliver care informally, so a person who does not want be institutionalized may not want to purchase LTCI. As well, a person's wishes for a bequest can influence this choice. A person who does not care about this may rather risk depleting their assets to pay for LTC, while a person who wants to ensure survivors are provided for may purchase LTCI.

23 A pilot study conducted by Metlife Mature Market Institute (1999) calculates potential life-time income loss of $659,139 for a care giver engaged in intense care giving (level 3 to 5 care). Based on the US data on family care givers engaged in intense care giving, Metlife Mature Market Institute (2006) also estimates the replacement cost of employees who leave employment due to family care obligations for the employers to be approximately US$2.82 billion. Moreover the Institute also estimates the annual costs of absenteeism and partial absenteeism due to care to be approximately US$3.43 billion and US$825 million.

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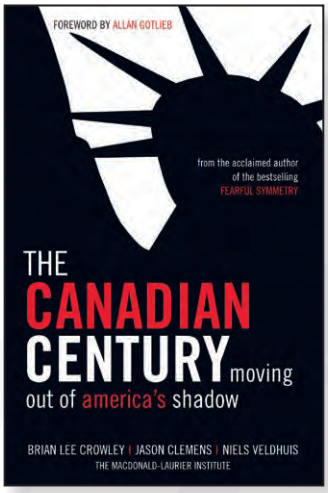

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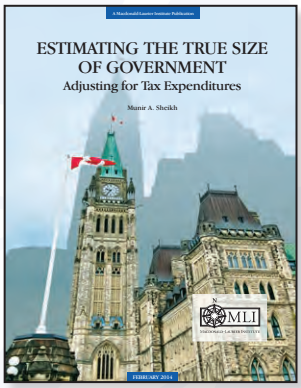

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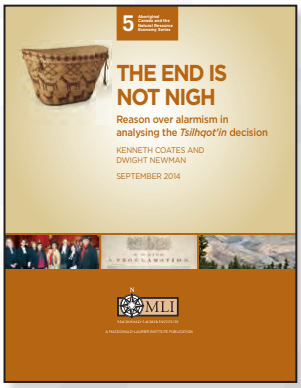

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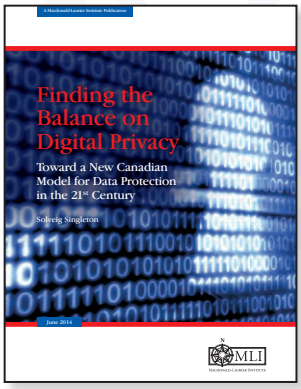

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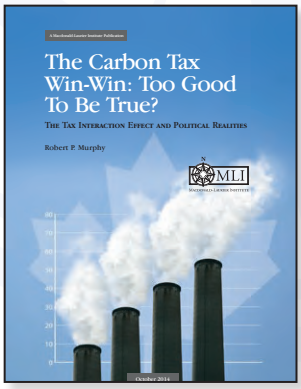

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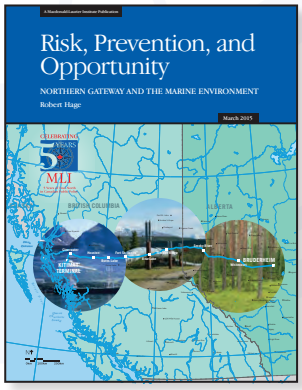

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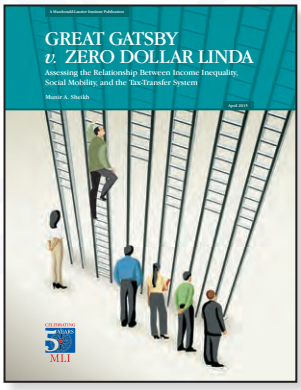

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