Chapter 2
Hong Kong and Other World Cities

P.H. Chau, Jean Woo, M.K. Gusmano, and V.G. Rodwin

Abstract With population aging and increasing urbanization, it is important to examine the quality of life of older people living in cities, in particular world cities. However, few comparative studies of world cities examine their health, long-term care systems, or the characteristics of their older populations. To assess how well world cities are addressing the challenges associated with aging populations, it is helpful to review comparable data on the economic and health status of older persons, as well as the availability and use of health, social, and long-term care services. By extending the work of the "CADENZA: A Jockey Club Initiative for Seniors" Project and the World Cities Project, this chapter compares three world cities—Hong Kong, New York City, and London. The three world cities are similar in the size and proportion of their older populations, but the characteristics of older people and the health and long-term care systems available to them differ in significant ways. These comparisons reveal how Hong Kong, New York City, and

P.H. Chau (✉)
Faculty of Social Sciences, The University of Hong Kong, Hong Kong
e-mail: phchau@graduate.hku.hk

J. Woo
Department of Medicine and Therapeutics, and The Jockey Club
School of Public Health and Primary Care, Faculty of Medicine,
The Chinese University of Hong Kong, Shatin, Hong Kong

Faculty of Social Sciences, The University of Hong Kong, Hong Kong
e-mail: jeanwoowong@cuhk.edu.hk

M.K. Gusmano
The Hastings Center, New York, USA

New York Medical College, New York, USA
e-mail: gusmanom@thehastingscenter.org

V.G. Rodwin
Robert F. Wagner Graduate School of Public Service, New York University, New York, USA
e-mail: victor.rodwin@nyu.edu

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London are responding to a rapidly aging population. They should be valuable to other cities that face the challenges of population aging.

Introduction

According to the World Health Organization (WHO), populations face different challenges arising from rapid aging. These challenges range from increasing demand on healthcare services and workforces to increasing burden on pension and social security systems, and increasing pervasive agism (WHO 2011a). Comparison of the characteristics of different populations may help explain differences in health and social outcomes, improve our capacity to predict future demand for different services, and identify possible models for addressing the needs of older people living in cities.

The size of population living in urban areas, or specifically cities, is increasing. In 2010, over half the world's population lived in cities and by 2050, nearly 70% of the population will live in urban areas (UN 2009). Because cities often have abundant resources, they may be better equipped to address the challenges of population aging. Among cities, there are some so-called world cities which are the centers of finance, information, media, arts, education, specialized legal services, and advanced business services, and they contribute disproportionate shares of GDP to their national economies (Scott 2001).

While the phenomena of population aging and urbanization are not new, the consequences of these trends on quality of life in cities have not been widely addressed. There are few, if any, comparative studies on the health or long-term care systems focusing on cities, let alone world cities. Models of how to accommodate the demographic changes as well as analyses of best practices are needed. Not until recently have policy makers and researchers start to put their attention to population aging in world cities.

The World Cities Project (WCP) has compared health and social services, health and the quality of life for populations aged 65 years and above in four world cities (New York City, London, Paris, and Tokyo) that share common characteristics and challenges. Such similarity provides a good base for cross-national learning. WCP introduces a spatial perspective to more conventional economic and demographic analyses of population aging. The focus on inter-city as well as intra-city comparisons represents a distinctive approach to social science research in social policy, in particular in the field of aging. In 2006, Rodwin and Gusmano (2006) published a book entitled *Growing Older in World Cities: New York, London, Paris, and Tokyo* to compare the older populations of the four world cities in terms of demography, living arrangements, health and social services, health status, as well as lifestyle. The findings along these dimensions are analyzed in the context of the different health and social care systems with different policies for coping with aging populations.

In 2008, as part of the "CADENZA: A Jockey Club Initiative for Seniors" (CADENZA) Project, Chau and Woo (2008) published a report entitled *How Well Are Seniors in Hong Kong Doing? An International Comparison*, which was the first attempt to compare Hong Kong's older residents with their counterparts in five

economically developed countries, namely, the United States, the United Kingdom, Australia, Japan, and Singapore. In 2010, CADENZA joined WCP and initiated a comparative study of Hong Kong, New York City, and Greater London. Beyond their population size and economic characteristics, these cities share other similarities. First, they are influential within their respective nations, but also to the world. Second, Hong Kong was a British colony until 1997 and therefore town planning and the health and social care systems were largely built within a UK model, introducing similarity with London. Furthermore, Hong Kong and New York are typical "vertical cities" and cities that never sleep. Despite these similarities, the characteristics of older people in these three world cities differ in significant ways.

In this chapter, we explore how these cities address the challenge of population aging by comparing data on older residents within and among these cities. We review their demographic characteristics, their economic and health status, as well as the availability and use of health, social, and long-term care services.

Aging in World Cities

Hong Kong stands out as the city with the fastest rate of population aging. While all the three world cities have about one million older people (those aged 65 years and above), the proportion out of the whole population and the rate of change vary (Table 2.1). Hong Kong has the largest proportion of older population (12.8% in 2009), a doubling of the percentage in 1981 (6.6%) (CSD 2011b). In New York City, 12.1% of the population are aged 65 years and above (2009) (USCB 2011). While the size of the older population in New York City increased, such proportion is slightly lower than that in 1980 (13.4%). London has the lowest proportion of older population (11.5% in 2009) (ONS 2011), a decrease over the past 30 years from 15.2% in 1981. It can be seen that the population aged 65 years and above is rapidly increasing in Hong Kong, remained fairly stable in New York, and decreased in London.

Meanwhile, the age composition of the older population is similar in the three world cities. The "oldest-old" population (those aged 85 years and above) is relatively small (1.6% in Hong Kong and London and 1.7% in New York City) among the entire population. Nevertheless, this cohort represents the fastest growing share of the older population in all the three cities (Rodwin and Gusmano 2006).

Given the similar size and proportion of older population in Hong Kong, New York City, and London, it is evident that they face similar challenges of population aging. Nevertheless, there are some interesting differences among these cities, which we explore in later sections.

Table 2.1 Population size of the three world cities, 2009

	Hong Kong	New York City	London
Population size (million)	7.0	8.0	7.7
Older population size (million)	0.9	1.0	0.9
Proportion of older population (%)	12.8	12.1	11.5
Proportion of women in older population (%)	53.7	60.5	56.9

Demographic Challenges

Gender differences in life expectancy result in a higher proportion of women in the older population, a higher proportion of widowhood among older women, and perhaps a higher rate of living alone among older women. This has implications for the provision of informal care within households. Policies that aim to improve the health and quality of life among older people in these cities must also be responsive to cultural expectations. For example, older women in Hong Kong may have greater difficulty living independently because their cultural beliefs about education discourage many older Chinese women from completing their education. This results in lower financial security and poorer health.

Gender Differences in Life Expectancy

In most countries, women have a longer life expectancy than men. This difference affects the demographic characteristics of the older population as well as their marital status, which in turn affects the provision of care, since women tend to provide a disproportionate share of caregiving.

In comparison to New York City and London, men and women in Hong Kong have longer life expectancy at birth. For the older population, life expectancy at 65 years is more relevant than life expectancy at birth in reflecting the health of the older population since the former can also reflect the effectiveness of health promotion as well as healthcare services and their organization. In this respect, older women in Hong Kong have the longest life expectancy at age 65, whereas for men it is similar to their counterparts in New York City and London (CSD 2011a; Bureau 2010; ONS 2010b) (Table 2.2).

Since women have a longer life expectancy, they make up a larger portion of the older population, but the gap is less pronounced in Hong Kong where life expectancy (at birth) among men is higher than that in London and New York City. In Hong Kong, women make up 53.7% of the population aged 65 years and above (in 2009) (CSD 2011b). The proportion of women is 60.5 and 56.9% in New York City and London, respectively (USCB 2011; ONS 2010c) (Table 2.1). While Hong Kong has the smallest proportion of women among the population aged 65 years and

Table 2.2 Life expectancy of the populations in the three world cities, 2008

	Hong Kong	New York City	London
Life expectancy (years) at birth			
Male	79.3	76.3	78.6
Female	85.5	82.0	83.1
Life expectancy (years) at 65 years			
Male	18.1	18.0	18.4
Female	22.9	21.3	21.2

Table 2.3 Marital status of the older populations in the three world cities, 2009 (2001 for London)

	Hong Kong (%)	New York City (%)	London (%)
Proportion of currently married			
Male	80.3	56.1	62.4
Female	43.7	26.3	33.6
Proportion of separated, divorced, or widowed			
Male	16.0	32.0	25.4
Female	54.6	60.6	55.7

above, the proportion of women among the population aged 85 years and above in Hong Kong (68.6%) is about the same as New York City (69.8%), being slightly larger than that in London (66.1%).

The longer life expectancy of women and the larger proportion in the population imply that older women are more vulnerable to the risk of being widowed and losing their spouses. While older men often receive care from their wives, older women usually become widowed as they age (WHO 2006). Hong Kong has the highest marriage rates among older men and women (respectively, 80.3 and 43.7% in 2009), as compared with New York City (56.1 and 26.3% in 2009) and London (62.4 and 33.6% in 2001) (CSD 2010c; USCB 2011; Nomis 2010) (Table 2.3). This suggests that older men in Hong Kong have greater potential for receiving care from spouses. On the other hand, the majority of older women either separated, divorced, or widowed (54.6, 60.6, and 55.7%, respectively, in Hong Kong, New York City, and London). Such proportion increases substantially with age. This helps to explain the remarkable number of women aged 85 years and above who live alone in world cities (Rodwin and Gusmano 2006).

Ethnic and Cultural Differences

Understanding ethnic and cultural differences helps to serve the older population better. It is important to provide a wide range of options to address the diverse needs and expectations of people with different backgrounds. Even for a homogeneous population, provision of different options is also important so the interests of the minority will not be neglected.

The Hong Kong older population is more homogeneous in terms of ethnicity than many other world cities, including Tokyo (Rodwin and Gusmano 2006). Over 99% of the Hong Kong population aged 65 years and above are Chinese (CSD 2007c). To another extreme, New York City has the most heterogeneous older population. About 58.9% are Whites, 21.5% are Black or African American, and 8.7% are Asian (USCB 2011). In-between is London, where 72.7% of the older population (men aged 65 years and above and women aged 60 years and above) are British Whites and 11.2% are Irish or other Whites (ONS 2011).

Cultural differences could affect quality of life of the populations. For example, the traditional Chinese belief that women need not be educated results in great

Table 2.4 Education attainments of the older populations in the three world cities, 2006 (2001 for London)

	Hong Kong (%)	New York City (%)	London (%)
Proportion with low education[a]			
Male	70.3	21.7	57.1
Female	86.6	23.4	64.8

[a] Hong Kong: below lower secondary school; New York City: below ninth grade of education; London (65–74 years): no academic, vocational, or professional qualifications, including open examination grades, or higher school certificates

gender differences in education attainment, which further influences the ability to seek formal employment and maintain high health literacy. In the past, Chinese women were usually deprived of education. In Hong Kong, compulsory education policy was imposed in the 1970s, thus the current cohort of older women are largely deprived of education opportunity. Striking gender differences in education attainment among the older populations in Hong Kong are observed. While a vast majority of the older Hong Kong population did not complete lower secondary school (the third year of secondary education) (CSD 2007d), such proportion is far greater in older women (86.6%) than older men (70.3%). Unlike Hong Kong, gender disparity in terms of education attainment is far lower in New York City and London. Only 21.7% of men and 23.4% of women aged 65 years and above in New York City did not complete their ninth grade of education, whereas 57.1% of men and 64.8% of women aged 65–74 years in London had no academic, vocational, or professional qualifications, including open examination grades, or higher school certificates (USCB 2011; Nomis 2010) (Table 2.4).

Difference in living arrangements of the older population in the three cities may also be partly explained by the Chinese cultural preference for traditional households that are large extended nuclear families that facilitate mutual support among its members. While Hong Kong is becoming Westernized, there are still more people living together in the same household in Hong Kong (3.0 members) than in New York City (2.7) and London (2.3) (CSD 2007a; USCB 2011; UK 2009). Nevertheless, the difference is getting narrower as the average household size in Hong Kong is declining.

The cultural difference whereby older Chinese tend to have close-knit families may also be reflected in the rate of living alone. The older population in Hong Kong has the lowest rate of living alone when compared to New York City and London. The rate of living alone among the community-dwelling population aged 65 years and above is 12.9% in Hong Kong (2006), which is less than half of that in New York City (32.7% in 2006) and London (39.8% in 2001) (CSD 2008; USCB 2011; Nomis 2010). The proportion of those living alone is substantially lower in Hong Kong for both men and women across all age cohorts. Besides cultural difference, the rate of living alone, especially among older women, can also be explained by the gender difference in life expectancy. As men in Hong Kong have longer life expectancy than those in New York City and London, the gender difference in rate of living alone in Hong Kong is generally smaller. For example, the rate of living alone

among community-dwelling older Hong Kong population aged 85 years and above is 15.0 and 19.4% for men and women, respectively. The corresponding rates in London are 44.2 and 69.9%, respectively. Nevertheless, there are other factors related to living alone. While older people who live alone in the community are at risk for social isolation and poverty, it may reflect a greater degree of independence facilitated by affordable housing and better community support services, as in the case of New York City and London (to be discussed later in this chapter). There is a need to further study the cause, meaning, and impact of living alone in these world cities.

Financial Security

Hong Kong, London, and New York are three of the most expensive cities in the world, and thus pose a challenge to older people. Employment status, household income, ownership of accommodation, as well as insurance coverage all affect financial security. Population with low education level may be disadvantaged in terms of employment and financial assets, predisposing to lower financial security. In general, the Hong Kong older population has less financial security than in New York City or London as reflected by various indicators including the lower education attainment of the older Hong Kong population.

Formal Job Attachment

While there is no mandatory retirement age in any of the three world cities, many older people no longer stay in the work force and have relatively limited incomes. In Hong Kong, it is common for people to retire at the age of 55–60 years, while the eligible age for retrieving accrued benefits of Mandatory Provident Fund is 65 under normal circumstances. In London, the traditional age of retirement (and qualification for public pensions) is 60 for women and 65 for men. In New York City, the traditional age of retirement is 65, but the average age of retirement is actually 62. Under the Social Security program in the United States, people born in 1960 or later cannot collect full pension benefits until the age of 67, but the age of eligibility for Medicare health insurance benefits is still 65. Labor force participation rate among the older population aged 65 years and above in Hong Kong is 5.4%, which is much lower than that in New York City (14.8%) and London (10.0%) (CSD 2010a; USCB 2011; ONS 2010a) (Table 2.5). Various factors could account for the differences in these rates. Pension and social security policies can play an important role. The high rate in New York City may reflect migration of economically inactive older people who move out of the city, but there is no evidence to support this hypothesis. Older Hong Kongers have a lower level of education which may become an obstacle in employment. Some seniors may choose to retire because of personal preference, such as to enjoy family life or other commitments, but in contrast, some may be excluded from

Table 2.5 Financial security indicators of the older populations in the three world cities

	Hong Kong	New York City	London
Proportion with formal job attachment (2009) (%)	5.4	14.8	10.0
Gini Coefficient (all ages, 2006)	0.533	0.532	–
Poverty[a] rate (2006–2009) (%)	40.1	18.6	15.0

[a] Hong Kong (2006): a monthly income less than or equal to 50% of the median income of all other households of equal size; New York City (2008): a person's household income in the last 12 months being below the poverty threshold appropriate for that person's household size and composition; London (2006–2009): an income below 50% of the median income after housing costs

the labor force even if they wish to stay. Views on the consequence of extending work life diverge, such as reducing opportunity for young people, increasing health risks, enhancing social life and community involvement, and reducing the probability of social isolation. Nevertheless, in terms of financial security, remaining in labor force provides older people with greater income security.

Income Disparities

Since older people living with family members can benefit from the sharing of resources with each other, financial security of older people, particularly those retired, can be affected by household incomes rather than individual incomes. In Hong Kong (2006), the median monthly household income is HK$17,250, while that among households with household head aged 65 years and above is much lower at HK$8,525 (CSD 2007b). This is roughly equal to an annual income of HK$207,000 (or US$37,691 after adjusting for purchasing power parity (PPP)) and HK$102,300 (or US$18,627), respectively. In New York City (2006), the median annual household income is US$46,480, while that among those with household head aged 65 years and above is US$24,941 (USCB 2011). In London, comparable data are unavailable. It is common for both Hong Kong and New York City that the median income for households with head aged 65 years and above is only about half of that for all households. This could be due to the lower income level of older household members as well as to the smaller size of households with older heads.

Apart from income dispartiy across age, income inequality is also common in Hong Kong and New York City. In Hong Kong, about 60% of the households with older people have an annual household income of less than US$32,775 (adjusted by PPP) (2006) (CSD 2008). In New York City, about 41% of community-dwelling older people have an annual household income of less than US$35,000, while 13.6% have an annual household income of more than US$125,000 (2006) (USCB 2011). The distribution of household income among older households suggests there is significant income inequality in both Hong Kong and New York City. This is further supported by the Gini coefficient (a measure for income inequality, the greater the coefficient, the greater the extent of income inequality). The Gini coefficient for all households in Hong Kong is 0.533 (2006), which is similar to that of New York City

(0.532) (CSD 2007b; USCB 2011) (Table 2.5). Income inequality among households headed by older people is greater than that among all households in Hong Kong as shown by a higher Gini coefficient of 0.582. However, we have been unable to obtain equivalent data for New York City. Studying income inequality is a complicated issue. For example, the Gini coefficient based on household income does not take into account household size, nor does it reflect differences in taxes and social benefits, which has introduced some uncertainty toward the issue.

Poverty

One of the definitions for poverty is to compare one's household income with certain threshold. The US Census Bureau defines poverty by a person's household income in the last 12 months being below the poverty threshold appropriate for that person's household size and composition. Using this method, 18.6% of people aged 65 years and above in New York City are living in poverty (2008) (USCB 2011). The London government defines poverty by an income below 60% of the median income after housing costs. Using this method, 23% of the pensioners (men aged 65 years and above and women aged 60 years and above) in London are considered as living in poverty (2006–2009) (UK 2008). Using alternative definition of poverty (income below 50% of the median income after housing costs), the poverty rate among the pensioners in London is 15%. In Hong Kong, there is no official definition for poverty based on a single poverty line or income indicator. One non-governmental organization (NGO) defines poverty as living under a monthly income less than or equal to 50% of the median income of all other households of equal size. Using this method, the poverty rate among people aged 65 years and above is 40.1% (2006) (HKCSS 2008) (Table 2.5). While definitions of poverty vary, it appears that the poverty rate of Hong Kong's older population is the highest. This observation is consistent with other measures, including the low education level, low labor force participation, and the high degree of income inequality.

Expenditure on Accommodation

Expenditure on accommodation also affects the financial security of older people. Rent control programs for older persons are available in New York City, but not in Hong Kong and London. Nearly 60% of the older New Yorkers who rent live in some form of rent controlled or subsidized housing and about 20% live in public housing (Rodwin and Gusmano 2006). While there are no rent control programs in Hong Kong, rents for public housing are usually affordable, for example, the monthly rent of public housing ranges from HK$259–3,525 (or US$48–651 adjusted by PPP) (ISD 2010).

In New York City, about half of the older population (49%) own their own home, and it ranges from fewer than 15% in some of the poorest neighborhoods to more than 80% in some of the wealthiest neighborhoods (Rodwin and Gusmano 2006).

In Hong Kong, slightly more than half (51.9% in 2006) of the community-dwelling older population own their homes and the majority of them (73.9%) have paid off the mortgages on their homes (CSD 2008). In London, the proportion of older homeowners (63% in 2001) is higher and once again, the majority of them (83.5%) have paid off their mortgages (Nomis, Office for National Statistics, United Kingdom 2010). Nevertheless, rates of home ownership do not reflect the quality and condition of the housing stock which is highly variable and further investigation is needed.

Reverse mortgage is a financial tool that has been available in New York City and London since the late 1980s (Knapp 2001). It is believed that "house rich, cash poor" older home owners could make better use of their housing assets as collateral to generate income to support their daily expenses. In July 2011, The Hong Kong Mortgage Corporation Limited (wholly owned by the Hong Kong Special Administrative Region Government) launched The Reverse Mortgage Program to encourage banks to offer reverse mortgage to older people aged 60 years and above. While reverse mortgage is new to Hong Kong, Hong Kong could learn from the experience of New York City and London.

Expenditure on Medical Care

Besides the expenditure on accommodation, expenditure on medical care also affects financial security. In Hong Kong, there is no universal health insurance coverage, out-of-pocket payment is common. Health insurance programs are all privately administrated and usually cover medical consultation (including medication) and hospitalization costs. Only 10% of people aged 65 years and above are covered by self-purchased medical insurance and/or medical benefits supplied by employers/companies (2009–2010) (CSD 2010b). Since the majority of older people seek low-charge medical care provided by the public sector, the low insurance coverage may not cause a problem. On average, among the older population who paid for their medical expenses, the median of monthly medical expenses is about HK$500 (US$88 adjusted by PPP) (2005) (special tabulation by Research Office, Food and Health Bureau, Hong Kong). A rough calculation (the median of medical expenses divided by the median monthly income) shows that the out-of-pocket healthcare expenses are approximately 14% of their monthly income. By heavily subsidizing public services, the out-of-pocket charges for medical services in Hong Kong are very low. However, there are still some gaps in such services such as long waiting times for specialist consultations (Woo et al. 2011).

Similar to Hong Kong, there is no universal health insurance coverage in London. However, older Londoners enjoy significant protection provided by the English National Health Service (NHS) against the costs of healthcare. The English NHS provides excellent primary care which is free at the point of service, although there is a prescription charge for each item of prescription (pensioners exempted), and there is a charge for dental care. Nevertheless, historically, there is limited access to some high cost healthcare services, like kidney dialysis and revascularization, particularly for older people (Aaron and Schwartz 1984; Aaron et al. 2005).

In contrast, there is a near universal social insurance program—Medicare—that provides hospital, physician, and prescription drug insurance in New York City. The Medicare program has several distinct parts (Part A is a hospital insurance program; Part B, a voluntary supplementary medical insurance program; Part D, a new prescription drug benefit). For qualified beneficiaries, Medicare covers large portions of plan premiums and prescription cost sharing. Nationally, Medicare provides health insurance to about 99% of the older population. However, in New York City, which has a large number of immigrants, at least 15% of older population does not qualify for Medicare Part A, and these people are unlikely to afford Medicare Part B or D because they did not pay Medicare payroll taxes for at least 10 years (Gusmano et al. 2010). Furthermore, the out-of-pocket expenses associated with the Medicare program are significant, particularly for lower income beneficiaries. In 2005, Medicare beneficiaries spent, on average, US$4,394 on healthcare expenses and 10% of beneficiaries spent more than US$8,000 per year. The poorest Medicare beneficiaries spend about half of their income on healthcare expenses (AARP 2009). Although Medicare is a near universal system of coverage for older people, this program does not insulate them fully against the high costs of medical care services in the United States (Hacker 2004). Hong Kong is actively considering government-regulated health insurance to provide more options to use the private healthcare services (FHB 2010). In doing so, it may be helpful for Hong Kong to better understand the strengths and limitations of these different models for providing healthcare coverage.

Health Challenges

While people can live longer, it becomes crucial to maintain good health. Good health status minimizes not only lifespan with diseases and disabilities but also the financial burden of medical expenses. To maintain good health, it is important to promote healthy lifestyles and behaviors.

Health-Related Lifestyle and Behavioral Risks

None of the world cities stands out in terms of health-related lifestyle and behaviors including smoking, binge drinking, exercising, and dietary patterns. Older men in Hong Kong have the highest, and older women have the lowest, smoking prevalence. In Hong Kong, 11.4% of people aged 60 years and above are smokers (2008), with the rates for older men and women being 20.9 and 2.5%, respectively (CSD 2009b). In New York City, 9.1% of people aged 65 years and above are smokers (2008) with no apparent gender difference (9.0 and 9.1% for older men and women, respectively) (2008) (NYCDHMH 2009). In London, 16.3% of people aged 55 years and above are smokers (2006) (Coyle and Fitzpatrick 2009), but data on gender difference are not available. Meanwhile, the proportion of men who have never smoked in Hong Kong (49.2% for those aged 60 years and above) and New York

City (44.8% for those aged 65 years and above) are similar. This implies that the lower prevalence of older male smokers in New York City results from more smokers having given up smoking. More public health efforts at smoking cessation targeted to the male smokers should be organized in Hong Kong.

Another behavioral risk factor is binge drinking. The older population aged 65 years and above in Hong Kong has lower prevalence (1.0% in 2003–2004) of binge drinking (consumption of five or more alcoholic drinks on one occasion during the month prior to the survey) than their counterparts in New York City (3.6% in 2007) (DH 2005; NYCDHMH 2009). Older people aged 55 years and above in London have the highest prevalence of binge drinking (more than eight units for men and more than six units for women on the heaviest day of drinking in the week prior to survey), being 9.2% (in 2006) (Coyle and Fitzpatrick 2009). This comparison may be affected by differences in the definition of binge drinking and the age group covered by the London survey.

Performing exercise and physical activities is one component of a healthy lifestyle being promoted. Although data on physical activities are not directly comparable in the three cities, older people in New York City appear to be more active than those in London and Hong Kong. About 37.8% of people aged 65 years and above in New York City have five or more moderate sessions of physical activities lasting at least 30 min each, or three or more vigorous sessions lasting at least 20 min each, in a week (2006), 38.5% have less frequent or vigorous physical activities; and 23.7% have none at all (NYCDHMH 2009). The non-participation (not participating in exercise or physical activities in the month preceding a 2003/2004 survey) rate among older people aged 65 years and above in Hong Kong is high (36.7%); whereas 14.0 and 1.6% of the older population, respectively, report performing moderate and vigorous physical activities in the week preceding the survey (DH 2005). In London, about 14.5% of people aged 55 years and above report taking part in 0–3 h of sport or exercise in the week preceding the survey (2006) (Coyle and Fitzpatrick 2009). Meanwhile, 79.3% of the soon-to-be old Londoners report not participating at all in any sport or exercise. The London survey also reveals that the Asian or Asian British adult population (aged 18 years and above) have the highest non-participation rate among all ethnic groups. This is consistent with the observation that Hong Kong population, which is mainly Chinese, have high non-participation rate.

Another component of healthy lifestyle is consumption of five servings of fruits and vegetables daily. The proportion of older people aged 65 years and above report consuming five or more servings of fruits and vegetables a day in Hong Kong (17.1% in 2003–2004) doubles that in New York City (8.2% in 2008) (DH 2005; NYCDHMH 2009). Nevertheless, the proportion of seniors in Hong Kong meeting WHO recommendations (a daily consumption of five or more servings of fruits and vegetables) remains quite small. In London, 50.4% of people aged 55 years and above report consuming five or more portions of fruits and vegetables on the day before they were asked (2006) (Coyle and Fitzpatrick 2009). Although this proportion is the largest among the three world cities, it is surprising given the increasing prevalence of people who are overweight and obese.

Table 2.6 Cardiovascular risk factor profile of the older populations in the three world cities

	Hong Kong (aged 65+; 2008) (%)	New York City (aged 65+; 2006) (%)	London (aged 55+; 2007) (%)
Overweight and obese (BMI ≥ 25 kg/m^2)	27.5 (2003–2004)	59.6	64.8
Hypertension	41.6	61.0	–
High cholesterol	11.1	52.2	–

Cardiovascular Risk Factors (CRF)

With respect to CRFs such as overweight, hypertension and hypercholesterolemia, older Hong Kong residents are healthier than their counterparts in New York City and London (Table 2.6). First, the rate of older people (65+) who are overweight and/or obese (Body Mass Index (BMI) ≥ 25 kg/m^2) in Hong Kong is 27.5% (2003–2004)—much lower than that in New York City (59.6% in 2006) and the soon-to-be old population aged 55 years and above in London (64.8% in 2006) (DH 2005; NYCDHMH 2009; Coyle and Fitzpatrick 2009). The health risks of Asian populations associated with obesity occur at a lower BMI at 23 kg/m^2 (WHO 2000). If this standard is used, the prevalence of overweight and obese older population in Hong Kong is about 48.4%, which is still lower than their counterparts in New York City and London.

The self-reported prevalence rates of hypertension among the community-dwelling population aged 65 years and above (in 2008) in Hong Kong is 41.6%, which is substantially less than that in New York City (61.0%). Similarly, the rates of hypercholesterolemia in Hong Kong is 11.1%, which is only one-fifth of that in New York City (52.2%) (CSD 2009c; NYCDHMH 2009). Nevertheless, the prevalence of hypertension is high in both Hong Kong and New York City.

Cardiovascular Disease Prevalence and Mortality

The strikingly high prevalence of overweight, hypertension and hypercholesterolemia in New York City would be expected to result in a high prevalence of cardiovascular diseases. Although prevalence rates on heart disease and stroke in New York City are unavailable, self-reported prevalence of diseases of heart (namely, heart attack, angina, and coronary heart disease) among community-dwelling population aged 65 years and above in New York State is 18.8% and that for stroke is 6.1% (2007) (USDH 2007). In Hong Kong, based on self-reported chronic health conditions diagnosed by practitioners of Western medicine, only 8.9% of the community-dwelling population aged 65 years and above have heart diseases and 4.1% have stroke (in 2008) (CSD 2009c) (Table 2.7). The data suggest that older people in New York City may have higher prevalence of heart diseases and stroke compared with older people in Hong Kong.

Table 2.7 Prevalence of cardiovascular diseases of the older populations in Hong Kong and New York State, 2007–2008

	Hong Kong (%) (2008)	New York State (%) (2007)
Heart disease	8.9	18.8
Stroke	4.1	6.1

Table 2.8 Prevalence of diabetes and asthma of the older populations in Hong Kong and New York City, 2008

	Hong Kong (%)	New York City (%)
Diabetes	17.3	21.8
Asthma	2.3	10.8

Hence, it is not surprising for the population aged 65 years and above in New York City to have the highest mortality rates from diseases of heart (17.1 per 1,000 population) compared with Hong Kong (6.7 per 1,000) and London (ischemic heart diseases: 7.2 per 1,000) (CSD 2009a; Bureau 2010; ONS 2010d). However, it is striking that the older population in New York City has the lowest mortality rate from cerebrovascular diseases (1.1 per 1,000), while the rates in Hong Kong (3.7 per 1,000) and London (4.1 per 1,000) are substantially higher.

Other Diseases: Prevalence and Mortality

Apart from cardiovascular diseases, Hong Kong seniors have a lower prevalence of diabetes and asthma than their counterparts in New York City. Based on self-reported chronic health conditions diagnosed by practitioners of Western medicine, about 17.3% of the community-dwelling population aged 65 years and above in Hong Kong have diabetes and 2.3% have asthma (2008) (CSD 2009c). In New York City, the corresponding rates based on self-reported chronic illnesses diagnosed by physicians, nurses, or other health professionals are 21.8% for diabetes and 10.8% for asthma (2008) (NYCDHMH 2009) (Table 2.8).

The overall mortality rate standardized to WHO population for the older population in Hong Kong (2008) is 32.1 per 1,000, which is similar to New York City (30.5 per 1,000) but lower than London (36.5 per 1,000) (authors' calculation). Cancer is the leading cause of death in Hong Kong (9.4 per 1,000) and London (11.3 per 1,000), but ranks second (8.2 per 1,000) in New York City, after diseases of the heart (CSD 2009a; Bureau 2010; ONS 2010d). While some cancers can be prevented by leading a healthy lifestyle (e.g., not smoking), some can be detected early and managed. The high mortality rate from cancer in Hong Kong is consistent with the weak primary care system (Chau et al. 2011), which will be discussed in the next section.

Challenges Related to Service Provision

Access to services, both social and healthcare, can affect the seniors' quality of life. Apart from financial barriers that we discussed earlier in this chapter, the organization and provision of the services are also important determinant of access.

Healthcare Systems

Hong Kong's older residents are healthier than their counterparts in New York City, and London, yet the hospital discharge rates for avoidable hospital conditions—a well-accepted indicator for assessing access to timely and effective primary care—of the population aged 65 years and above in Hong Kong (49.5 per 1,000 older population) is not the lowest when compared to New York City (55.7 per 1,000) and London (36.2 per 1,000) (authors' calculations). This suggests that older people in Hong Kong face significant barriers to primary care, although they enjoy access to an extensive public hospital system.

The healthcare system in Hong Kong combines a hospital system dominated by the public sector with a primary care system dominated by private fee-for-service general practitioners (GPs). Over 90% of inpatient services are provided by hospitals run by the Hospital Authority (HA), a statutory body in Hong Kong, whereas the private sector provides 70% of the outpatient services (Leung et al. 2005). The Department of Health in Hong Kong is responsible for providing immunization and other public health programs.

The English National Health Service (NHS), the healthcare system in London and the rest of the United Kingdom, emphasizes free care at the point of delivery and aims to provide care on the basis of patient "need." The well-developed primary care system is based on GPs who are the patient's first point of contact with the healthcare system and gate keeper to hospital referrals. There are also financial incentives to these GPs to meet performance measures, including proportion of patients having preventive screening programs.

In contrast to London, the healthcare system in New York City and the rest of the United States consists of a complex patchwork of public and private insurance with large gaps in coverage. For those under 65 years, most of them are covered by health insurance provided by their employers. The general population with low income or resources are also covered by Medicaid, the nation's largest health insurance program. The older people and those with disabilities are covered by Medicare program which is a social insurance program. However, the rate of persons without health insurance in New York City is twice the national average. The uninsured have to rely on a patchwork of safety-net providers. Meanwhile, the public hospital system of New York City is operated by the NYC Health and Hospitals Corporation (HHC), which covers almost 20% of the total admissions in the city to acute hospital beds. Similar to the HA in Hong Kong, the HHC in New York City is also responsible for outpatient services and emergency departments. In Hong Kong, dedicated elderly healthcare

Table 2.9 Density of healthcare resources in the three world cities, 2008–2009

	Hong Kong	New York City	London
Physicians per 1,000 older people	13.7	32.2	28.5
Hospital beds per 1,000 older people	34.5 (public and private)	24.9 (private nonprofit and public)	28.8 (under NHS)

centers in Hong Kong are operated by Department of Health, while the private sector and the Hospital Authority provide clinic services for all ages. Healthcare centers in New York City are operated by multiple parties such as Department of Health, HHC, and nonprofit agencies.

The differences in the healthcare systems of these cities are also shown by the provision of healthcare resources. In Hong Kong, the ratio of registered doctors to older population is 13.7 per 1,000 population aged 65 years and above (2009) (Hong Kong Hospital Authority 2010). In New York City and London, equivalent figures are 32.2 per 1,000 and 28.5 per 1,000, respectively (Armstrong and Forte 2010; NHS 2010). As for hospital beds (acute and non-acute beds in public and private hospitals) in Hong Kong, the ratio of beds to older population is 34.5 per 1,000 population aged 65 years and above (2008–2009) (HA 2010). In New York City, the ratio is 24.9 per 1,000 (including private nonprofit and public hospitals) (DH 2011). In London, the equivalent figure is 28.8 per 1,000 (hospitals under NHS) (DH 2010) (Table 2.9). Hong Kong has the highest ratio of hospital beds to older population but a relatively low density of physicians; this further reveals a weak system of primary care and a notoriously hospital-centered healthcare system. As a result, patients do not have easy access to community-based primary care, which is less expensive and continuous in nature.

The patterns of healthcare services utilization also differ in the three cities. When compared to New York City, older people in Hong Kong and London have higher medical consultation rates, but lower dental consultation rates. In Hong Kong, 33.1% of the community-dwelling population aged 65 years and above have consulted a doctor during the month preceding the survey (2008) (CSD 2009c). In New York City, the consultation rate among the older community-dwelling population who have a personal doctor or healthcare provider is 95.5% in the 12 months preceding the survey (2008) (NYCDHMH 2009). Based on pooled General Household Survey 1998–2001, the rate of consultation in London is 21.3% in the 2 weeks preceding the survey (authors' calculation). Since the medical consultation rates in three cities are based on different reference periods (2 weeks, 1 and 12 months), we have roughly adjusted for the time period in order to compare them. Using 12 months as time period, the GP or doctor consultation rates among the older population are 99.2% in Hong Kong, 95.5% (for those who have personal doctor or healthcare provider) in New York City and 99.8% in London (authors' calculation). The high rate in London may be partly explained by the free services covered by NHS and that in Hong Kong by the low-cost public outpatient clinics. The low rate in New York City reflects the various obstacles in getting primary care, including ineligibility for Medicare and high out-of-pocket costs.

The situation is quite different for dental consultation. While comparable data in London are not available, the dental consultation rate (in the 12 months preceding the survey) among those aged 65 years and above in Hong Kong is 13.3% (2008), which is far lower than that in New York City (61.4% in 2007) (CSD 2009c; NYCDHMH 2009). Furthermore, the dental consultation rate among the older population in Hong Kong is substantially lower than that for the younger age groups, but such age disparities are not observed in New York City. The low dental consultation rate among the older population and the age disparity in Hong Kong, as compared to New York City, suggests that seniors in Hong Kong may not be receiving adequate dental care. This may reflect low public awareness toward oral health, as well as possible obstacles such as the lack of low cost or free dental care. As medical and dental consultations can be affected by various factors, in-depth studies are needed to address the issue.

As for inpatient services, based on hospital discharge data, 22.8% of people aged 65 years and above in Hong Kong have been admitted to public hospitals in a year (2006) and the hospitalization rate is 382.9 public inpatient episodes per 1,000 older people (counting inter-hospital transfers as one episode) (HA 2008) (authors' calculations). As most of the older population is admitted to public hospitals, the hospitalization rate that included admission to private hospitals will only be slightly higher than these values. In London-based General Household Survey 1998–2001, 14.2% of community-dwelling older population had been admitted to hospital in the year preceding the survey (authors' calculations). As the institutional population generally has much higher hospitalization rate, the hospitalization rate including the institutional older population is much higher than 14.2%. Based on hospital discharge data, the hospitalization rates are 350.8 hospital discharges per 1,000 older people in New York City (2006) and 533.8 inpatient episodes per 1,000 older people in London (1998–2001) (DH 2008) (authors' calculations). These comparisons are subject to some limitations. First, the Hong Kong data only include public hospitals, but those from New York City include both public and private hospitals. In London, the database includes all hospitalizations paid for by the NHS (can take place in public or private hospitals), but they do not include inpatient stays in private hospitals paid for with private financing. Second, since inter-hospital transfers in Hong Kong are recorded as multiple discharges in the database, these discharges are grouped as episodes for comparison with the other cities. Nevertheless, misidentifications may be possible.

Since access to healthcare Hong Kong's public hospitals is heavily subsidized and patients can directly seek hospital care without going through the primary care system, it is not surprising to find higher hospital utilizations in Hong Kong than in New York City (in terms of hospitalization rate) and London (in terms of proportion of older people having admitted to hospital). There are various other possibilities, such as the higher density and affordability of hospitals and poorer health of residents, to explain the higher hospital utilizations. As hospital administrative data are not capable to reflect the relationship between need and use, in-depth studies are needed to address the issue.

Community Support and Residential Care Services

The vast majority of older population continue to live in their homes as they age. The proportion of older people aged 65 years and above who live in domestic households is 90.0% in Hong Kong (2006), which is much lower than that in New York City (95.1% in 2006) and London (96.6% in 2001) (CSD 2008; USCB 2011; Nomis 2010). Community support services are important to help these community-dwelling populations to age in place.

There are a variety of community support services designed to meet different levels of needs of older people who manage to live in their own home but need assistance with daily living. It should be noted that although the terminology of the care services in the three cities is similar, the staffing and provision may differ substantially. In a broad sense, there are two modes of delivery. First, services delivered in the community refer to facilities like senior centers where older people go within their neighborhoods to receive the services. Second, care provided in the home refers to healthcare or social care delivered to the home of the older people.

It is common in the world cities that independent older people visit "elderly center" (Hong Kong) or "senior centers" (New York City) to participate in social and recreational activities provided at district and neighborhood levels. In these centers, congregate meals are also available.

For in-home services, older people in Hong Kong can apply for home help personal care services, or so-called non-medical services, such as meal delivery, homemaker services and escort services to outpatient clinics. Integrated Home Care Services (IHCS) and Enhanced Home and Community Care Services (EHCCS) cover a wider range of services, including medical services such as in-home nursing care and rehabilitation. Older New Yorkers also receive "home help" non-medical personal care and assistance services such as cleaning, cooking and bathing. In addition, care management services are designed to assess the needs of older people and refer them to additional services, such as home-delivered meals. In London, home-attendant services (such as bathing and dressing) and housekeeping services (such as cooking and cleaning) are provided for the seniors.

In Hong Kong, community support services are mainly provided by NGOs and the majority of places are subsidized by the government. Although government-subsidized services are not means-tested, clients must satisfy strict criteria of care needs (Standardized Care Need Assessment). If the services are enrolled to capacity which is always the case, those in need will be placed on the waiting list.

In New York City, the 254 Senior Centers are funded by the New York City Department for the Aging (DFTA), which is an "Area Agency on Aging" (AAA) created by the Older Americans Act and funded partly by the federal government, and a local New York City Government agency that relies on state and local funding. Meanwhile, the federal and state governments-funded Medicaid is the single most important payer for community support services. Medicaid home care services are means-tested and the services available depend on the older person's medical

condition, social service needs, and housing situation. In rare cases, the Medicaid program will fund in-home nursing care with 24-h supervision. Older people who are too wealthy to be eligible for Medicaid can receive publicly funded home care services through the DFTA's home care program, of which services are restricted to housekeeping but not personal care.

In London, home-attendant services are funded by the Home Care Services Unit of each local authority. Some local authorities provide these services directly and others contract with independent organizations for their provision. Local authorities also vary in terms of out-of-pocket charges for these services. Similar to New York City, home help services in London are means-tested.

When older people become more dependent in daily living, but institutional care is not required, they may consider living in facilities with a variety of on-site care and support services. London and New York City have developed a range of "community residential options," which represent an innovative use of existing urban resources. These options can be grouped into two major categories: congregate housing with common services (usually new facilities purposefully constructed) or individual apartments with attached and collective services (adding services to existing housing units).

For both New York City and London, placement to congregate housing is means-tested and availability is quite limited. New York City has the greatest number of such assisted living alternatives. The two most common community-based residential options in New York City are enriched housing and assisted living programs. Enriched housing is a means-tested program and is usually attached to a particular apartment complex with subsidized apartments. In addition, older people who are poor enough to qualify for services under the Medicaid program can receive personal assistance in an assisted living program (ALP) including medical services. Unlike New York City, residential homes in London are funded by each local authority, just as the case of home help services.

In Hong Kong, under the current housing policy, there are public rental housing units for older people (Housing for Senior Citizens/Sheltered Housing for the Elderly) based on hostel-type accommodation with shared facilities. Means-tested individual home units for groups of six older people are provided with warden for handling emergency situations. However, these units are not popular among older people and quarrels among the residents are not uncommon. Meanwhile, there are self-contained small flats equipped with facilities for older people in public rental housing estates. However, these are not supported by warden services. In 2003, a new initiative (Senior Citizen Residences Scheme) has been introduced to provide integrated housing tailored for the middle-income older population. There are 576 self-contained units under this scheme and facilities both inside and outside the units are designed for the needs of the older people. Round-the-clock professional medical and personal care services as well as communal and recreational activities are available. As the residents have to pay an "entry contribution" in order to enjoy lifelong residence without having to pay any monthly rental, those who are less well-off cannot apply for these units. Due to the popularity of this scheme, two more such housing blocks are being constructed. Yet, there is a need for Hong Kong to introduce more innovative forms of housing with on-site services, as in the case of New York City and London.

Table 2.10 Institutionalization rate of the older populations in the three world cities, 2000–2004

	Hong Kong (2004)	New York City (2000)	London (2001)
Institutionalization rate (%)	6.8	3.9	2.3

When the dependency level of older people declines and they become too frail to live in these settings or at home with support from community services and/or informal caregivers, they have to rely on nursing homes/institutionalized long-term care. This is particularly true for Hong Kong which lacks housings equipped with various forms of assistance. In Hong Kong, institutional care services are called "Residential Care Homes for the Elderly" (RCHE), which are provided both by NGOs and by the private sector. In 2008, there were 73,178 institutional care places (or 83.2 places per 1,000 people aged 65 years and above), with about one-third being subsidized places (SWD 2008). To be eligible to apply for subsidized homes, older people have to satisfy criteria under the Standardized Care Need Assessment. Since the quality of care is generally better but the costs are lower for subsidized homes, most older people prefer subsidized homes in comparison to the homes operated by the private sector, resulting in long queue for these homes. In contrast, despite the abundant supply of homes operated by the private sector (over two-thirds of all places), the occupancy rate in these homes is low. If these could be fully utilized, the waiting time for institutional care would be shortened substantially.

Nursing homes in the United Kingdom are means-tested and availability is limited. Public financing for long-term care in the United States is more limited than that in the United Kingdom. Medicare only pays for the first 100 days of nursing home care. Medicaid includes a skilled nursing benefit and is the primary source of funds for nursing homes. However, since Medicaid is means-tested and limited to older people with very limited incomes, most seniors "spend down" their assets to make themselves eligible. There are about 15.8 nursing home places per 1,000 older people in London (2001) and 45.3 per 1,000 older people in New York City (2006) (DH 2007; UHF 2009).

The older population aged 65 years and above in Hong Kong has the highest institutionalization rate (6.8% in 2004 and 6.5% in 2008) when compared to New York City (3.9% in 2000) and London (2.3% in 2001) (CSD 2005, 2009b; USCB 2001; Nomis 2010) (Table 2.10). There is no evidence on whether the population being able to live in the community in Hong Kong is more dependent or not as compared to the other cities. Based on limited data, the prevalence of older people who have difficulties in performing one of the simple tasks in daily living is 8.9% in Hong Kong (tasks include transferring between a bed and a chair, mobility, dressing, eating, toileting, and bathing) and 13.2% in New York City (tasks include dressing and bathing) (CSD 2009b; USCB 2011). Meanwhile, the prevalence of older people who have difficulties in performing one of the more complicated tasks in independent living is 28.5% in Hong Kong (tasks include meal preparation, ordinary house work, managing finance, managing medications, phone use, shopping, and transportation) and 22.1% in New York City (tasks include visiting a doctor's office and shopping).

It is uncertain as to whether the high institutionalization rate in Hong Kong is a result of inadequate community supports, inadequate housings with various forms of assistance, inadequate space to allow for home modification for those with increasing dependency, or some combination of these factors. This is an area of inquiry that deserves greater attention.

Other Challenges

Apart from the demographic, financial, health, and social care challenges that affect the daily lives of the seniors, there are hidden challenges associated with emergency situations. Emergency situations in a world city include fires, heat wave, cold spells, hurricanes, earthquakes, tsunami, ice storm, and even nuclear power plant event (such as the case in Tokyo). The WHO states that older people are one of the most seriously affected groups in emergency situations which are increasing globally (WHO 2011b). For example, older people with some functional impairments can live independently in the community, but they may have difficulties in escaping from danger using the staircase during a fire. Another example is that older people living alone and without adequate financial resources may not be able to regulate indoor temperature during heat wave or cold spell due to the lack of air-conditioning facilities or shortage of money to pay for the power supply. However, when developing emergency plans, the specific health and social needs of the older people are usually not taken into account. It is important to have a holistic consideration of the health and social factors, like physical health, function status, family support, and economic situation, in developing the emergency plans such that older people at risk can be identified and taken care of in all phases (before, during, and after) of an emergency. Older people are not only the vulnerable group, but also valuable resources because they know their community well, have rich experience with past emergencies, and are respected within families and communities (WHO 2011b). Older people should not be neglected by policies and practices in relation to the emergency situations.

Gusmano et al. (2006) have developed a vulnerability index for New York City according to a set of poverty and social support indicators, so that neighborhoods with particularly high numbers of vulnerable elders can be identified. Six indicators are used to identify the vulnerable neighborhoods among the New York City's census tracts. These indicators include (1) number of people aged 75 years and above (older people), (2) percent of older people living below poverty level, (3) percent of older people living alone, (4) percent of older people reporting at least one disability, (5) percent of older people who are linguistically isolated, and (6) rate of hospitalization for avoidable hospital conditions. A summary index of neighborhood vulnerability index (VI score) is obtained based on these. The indicators and VI score not only assist stakeholders in developing an emergency preparedness plan for New York City but can also help service providers to promote healthy and productive aging and serve vulnerable older people. While the VI score cannot be used to identify individuals who are socially isolated and at the highest

risk for premature death and abandonment in the event of an emergency, it can identify neighborhoods where special efforts should be made to reach vulnerable older people. Consequently, resources can be allocated to assist these vulnerable older people and emergency plans can be devised according to their economic, social, and cultural characteristics.

For Hong Kong, an equivalent index has not been available. Yet, direct adaptation of the methodology may not be feasible. First, due to cultural difference, some indicators may not be valid for Hong Kong. For example, since over 99% of the older population in Hong Kong are Chinese and 96.5% can speak Cantonese (CSD 2008), the indicator on linguistic isolation may not be so relevant to Hong Kong. Instead, disparity in education level, which is more a problem in Hong Kong, may be considered in the construction of a local VI. A study on developing a similar index for Hong Kong is underway.

Addressing the Challenges

Hong Kong, New York City, and London face similar challenges related to urban aging. Yet, the ways they deal with these challenges differ. The WHO (2011a) suggests four main strategies to address these challenges:

1. To ensure a basic level of financial security so as to avoid poverty among vulnerable older people.
2. To develop age-friendly environments so as to achieve independent living of older people.
3. To provide accessible and affordable healthcare so as to maintain the health of the older people. In particular, effective primary care can prevent, detect, and manage illnesses early; an integrated continuum of long-term care can facilitate older people to age in place; institutional care can support older people with high level of dependence.
4. To maintain social life for older people so as to enhance their well-being.

Our review suggests that the pursuit of these strategies, while important, are insufficient for evaluating how well cities are addressing the challenges associated with population aging. Documenting the financial security of older people, despite differences in the definition of poverty, is clearly possible and important. Our findings suggest that poverty is a significant problem in all three cities, but the problem is most significant in Hong Kong. Furthermore, levels of income inequality appear to be higher in Hong Kong and New York City compared with Greater London. Similarly, residents of Greater London enjoy the best access to timely and effective primary care. The primary care system in Hong Kong is not well developed and there are significant neighborhood and ethnic disparities in access to primary care among older people in New York City.

In contrast to financial security and access to primary care, our ability to assess social life and "age-friendly" environments is limited and reflects a lack of conceptual

clarity and specificity by WHO. For example, what does it mean to "achieve independent living for older people"? Does Hong Kong fail to achieve this because fewer people live alone or does this reflect a cultural preference for living with others that has little to do with "independence"? Indeed, our study highlights why the WHO strategies, while possibly helpful, are clearly insufficient. For municipal policymakers must think carefully about the meaning of such generic strategies in their urban contexts. And researchers must continue to improve the kinds of comparative empirical assessments we have begun to conduct and to operationalize relevant criteria for evaluating how well different cities (and even neighborhoods within them) are meeting the challenge of population aging.

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