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Social health protection for the elderly in the English-speaking Caribbean

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Abstract

The present paper seeks to contribute to the grow ing discussion on social protection through an assessm ent of the status of social health protection systems for the elderly within th e English-speaking Caribbean, and a review of the sy stems in Jam aica and Trinidad and Tobago. It was prepared as a background document for the Expert G roup Meeting on Social Health Protection for V ulnerable Populations w hich was held in Port of Spain on 31 October 2011.

Against the backdrop of dem ographic changes underw ay in the Caribbean, the paper analyses the schem es and m echanisms that have been instituted by Mem ber States towards ensuring decent living standards for the elderly by ensuring adequate provision of health care and long-term care. The paper highlights the em erging challenges and discusses the need for reform s and po licy interventions, in the context of the long-term impacts on the health and social security systems of a rapidly-ageing population and the parallel increase in the prevalence of non-communicable and chronic diseases.

Introduction

A. Population ageing in the Caribbean

The Caribbean subregion, like other less developed areas of the w orld, is undergoing a transform ation of its age structure due to the demographic force of population ageing. Population ageing describes a population that shows an increasing m edian age along w ith increasing num bers and proportions of elderly persons in its overall age structure (Shrestha, 2000; Zimmer and Martin, 2007). Today 's ageing populations are a result of past and current dem ographic trends of declining fertility and increasing life expectancy. The m ore developed regions of Europe and North America experienced this transition in the early twentieth century, whilst the majority of countries in the less developed regions of A sia, Africa and Latin America and the Caribbean began this dem ographic transition within the last 60 years, from 1950 to the present (Population Reference Bureau, 2004).

There has been m arked variation in the course of population ageing among subregions w ithin less developed regions. In 2009, the Caribbean subregion, the focus of the present paper, recorded 11.8% of its population aged 60 y ears and over. This surpassed the 8.5% that represented the proportion of adults 60 years and over in all of the less developed regions (United Nations, 2009a). Countries w ithin the Caribbean also displayed variations in the pace of population ageing.

The most recent United Nations Population Division ranking of 196 countries according to the proportion of adults aged 60 y ears and over (United Nations, 2009b) placed 15 Caribbean countries and territories among the top 50 countries. United States Virgin Islands

(20.2%), Puerto Rico (19.1%), Martinique (19%), Guadeloupe (17.7%), and Cuba (16.8%) w ere among the first quartile of countries with the highest proportion of older adults. Another 10 Caribbean countries were included in the second quartile: Barbados (14.9%), Jam aica (10.6%), Trinidad and Tobago (10.3%), the Baham as (10%), Saint V incent and the G renadines (9.5%), Saint Lucia (9.4%), Grenada (9.3%), Suriname and Guyana (9.2%), and the Dominican Republic (8.6%).

The shifting population age structure raises m any challenges to form al and inform al support systems. Formal support refers to any care provided by State and/or private institutions, while inform al support refers to that provided by the family, other household members and the community at large. An increasing elderly population, coupled with declining fertility and persistent internal and international migration of y ounger persons that is characteristic of the Caribbean subregion, places significant pressures on existing public and private instituti ons and on the lim ited number of family members available to negotiate care and support for the elderly . In particular, this changing dy namic influences the provision of social and health-care services, as well as the need for long-term care and incom e security. This calls for a revision of the interrelati onships between the State, the m arket and the fam ily with regard to the provision of care and support to individuals across the life course.

There has been overwhelming concern about the socio-economic status and quality of life among the elderly in developing countries, w here social protection sy stems are w eakly managed and do not provide adequate coverage for the elderly and other vulnerable groups, and w here health infrastructure is not fully equipped to meet the needs of the elderly (Lloyd Sherlock, 2000; Barrientos, 2000). This is largely the case in the Latin A merican and Caribbean region, w here only about one third of the elderly are covered by social security (Kidd and Whitehouse, 2009). The w ide gap in social security coverage is exacerbated by the broader socio-econom ic challenges of high levels of poverty and incom e inequality. A recent survey of poverty amongst older persons using national household survey s within 20 countries of the Latin A merica and Caribbean region [1] showed that around one quarter of elderly persons in a typical Latin A merican and Caribbean nation live on less than U S$ 2 per day (Gasparini and others, 2010). Som e countries, such as Guyana, however, have been m ore proactive in preventing or minimizing the incidence of old-age poverty . This has largely been a function of extending social protection coverage without regard to labour-market history.

The challenges faced by Caribbean countries to develop and/or improve their social protection systems, particularly income and health care, are com plicated by the fact that Latin Am erican and Caribbean countries are ageing at lower levels of economic development and m ore economic volatility relative to N orth American and European countri es (Weinberger, 2007). Slow economic growth, the increasing incidence of poverty, and the growing informality of labour raise concerns about the extent of market-based or public social insurance that will need to be provided. Furtherm ore, the vulnerabilities of the elderly population coexist w ith those of the y ounger population. Each generation has equally important health and income needs, collectively and individually.

The current study assesses the status of social protection systems for health within the English-speaking Caribbean. It assesses the m echanisms which the Governments of Jamaica and Trinidad and Tobago are utilizing to prepare for and circum vent the challenges of economic security and healthy life in old age. Both countries are currently experiencing 'm oderate to advanced' population ageing trajectories, although at different levels of econom ic development. It is hoped that the present comparative analysis will assist other Caribbean Governm ents and stakeholders in recognizing and preparing to meet the needs of their ageing societies m ore effectively, and that it will also dem onstrate the critical need to include population ageing in present and future national developm ent plans. The study aims to provide sound policy recommendations for governm ental and non-governm ental

[1] The countries covered in the study are Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.

organizations to move forward with improving risk management for all social groups in ageing Caribbean nations.

B. Outline of the study

The contents of the present study are structured so that the initial chapters provide a concise overview of the demographic and epidemiological characteristics of the Caribbean and the structure and status of its public health systems.

Chapter 1 introduces the definitions and concepts that guide the study of social protection for the elderly in the English-speaking Caribbean.

Chapter 2 outlines the United Nations position on ageing with reference to the recommendations of the Madrid International Plan of Action on Ageing 2002. This provides the overarching framework for assessing the progress of individual Caribbean countries with preparations to meet the demands of their rapidly ageing population structures.

Chapter 3 provides an analysis of the demographic transition and the pace of population ageing, specifically in the English-speaking Caribbean. It discusses past trends in the demographic determinants of population ageing and their projections to 2050, and highlights the variations in the older adult population in Caribbean States based on gender composition and urban-rural differences, where available.

Chapter 4 gives a broad overview of the epidemiological transition in the Caribbean and highlights the health demands in relation to ageing trajectories. This includes the prevalence and incidence of communicable and non-communicable diseases, disability and mortality. It presents a review of the structure of public health systems with a focus on health-care expenditure, access to health care, quality of the health care and social health-care protection.

Chapter 5 provides a detailed assessment of social protection in health for the case studies of Jamaica and Trinidad and Tobago. The analysis includes a review of the existing programmes that address the health-care needs of the elderly. It also examines the role of non-governmental organizations and outlines some of the challenges to ensuring the sustainability of those systems and the ways in which attempts are being made to circumvent some of these challenges.

Chapter 6 presents concluding remarks with recommendations on how Caribbean Governments should reframe ageing as a lifelong process as opposed to a stage in life, especially in the context of a globalized world in which increasing life expectancy presents nearly as many opportunities as risks.

I. Definitions and concepts

Social protection for all members within a society is recognized as a basic right of all individuals, as outlined by the United Nations in the 1948 Universal Declaration of Human Rights, Articles 22 to 26, and Article 9 of the 1966 International Covenant on Economic, Social and Cultural Rights. It has been one of the main aims and purposes of the International Labour Organization (ILO) since its inception in 1919. ILO recognizes social protection as being " about people and families having security in the face of vulnerabilities and contingencies, it is having access to health care, and it is about working in safety ." (Bonilla and Gruat, 2003). Likewise, social protection (Armando Barrientos, 2004) refers to " all interventions from public, private, voluntary organizations and social networks, to support communities, households, and individuals in their efforts to prevent, manage, and overcome a set of risks and vulnerabilities."

These interventions prevent, or reduce, the risks of experiencing declines in the living standards of individuals, families and households imposed by external shocks, by natural disasters, or by global economic crises. Poor quality or quantity of social protection in a country jeopardizes the individual's ability, regardless of age, to emerge from poverty and enjoy a healthy quality of life. This limits the individual's ability to capitalize on their human potential over their life course or to contribute fully to the development of their country . Effective social protection systems contribute to equitable growth, social stability and enhanced productivity, which can lay the groundwork for sustainable social and economic development. Public systems of social protection take two main forms: social insurance, also commonly referred to as social security (income), and social assistance (care).

A. Social health protection

As defined by ILO (2008, p. 3), social health protection is a "series of public measures, or publicly-organized and mandated private measures, against social distress and economic loss caused by the reduction of productivity, stoppage or reduction of earnings or the cost of necessary treatment that can result from ill-health." This concept of health protection advocates access to quality health care and financial protection in addressing sickness, regardless of age. It takes on greater significance in ageing societies, in which elderly persons are more inclined to experience disability and chronic diseases, and in which demands for quality health care are thus greater. The elderly should be assured of financial protection to address critical health problems, regardless of gender, geographical location, ethnicity or any other marker of social inequality in their society.

The concept of health coverage as used in the current study addresses two issues:

(a) First, who is legally qualified to be covered for income (social security) and health care (social assistance)?

(b) Subsequent to this legal mandate, what proportion of the population is actually benefitting from legal coverage?

Coverage, as it relates to income, refers to the proportion of the elderly population that is receiving an old-age pension through a contributory or non-contributory system. According to ILO (2008, p. 16), "social health protection coverage is coverage where the third-party payer is a social protection system." This system can be based either on a social insurance, or a social assistance system that offers health-care service as a benefit.

Health coverage identifies the proportion of the elderly able to access health care without any personal financial burden that will result in limited service or subpar quality health care. Income and health coverage are undoubtedly critical to a healthy and productive life course, but take on greater significance during retirement. In most cases, this is the stage of life when health conditions can become precarious and income generation is, expectedly, nulled, thus making it more difficult to finance health care independently.

II. United Nations and ageing

Over the last thirty years, the Vienna International Plan of Action on Ageing, adopted in 1982, has been the guiding framework for the United Nations position on the economic, social and political implications of global ageing. The Vienna International Plan of Action on Ageing emphasizes that the quality of life individuals experience in older ages is contingent on the degree to which persons are able to exercise their human right of full inclusion in society and their development over the life span. The General Assembly identified specific areas of concern for ageing individuals, such as health and nutrition, social welfare, income security and employment.

These areas of concern were later ratified in the United Nations Principles for Older Persons: To add life to the years that have been added to life, adopted by General Assembly resolution 46/91 in December 1991. These Principles for Older Persons have provided a working framework for Governments to formulate policies that cater to the diversity of needs and situations among older persons within their countries, while simultaneously appreciating the contributions older persons make to society's development. Governments were encouraged to mainstream the core principles of independence, participation, care, self-fulfilment and dignity into their national development agendas.

Central to the current study are the following stated principles:

"(11) older persons should have access to health care to help them to maintain or regain the optimum level of physical, mental and emotional well-being and to prevent or delay the onset of illness; and

(18) older persons should be treated fairly regardless of age, gender, racial or ethnic background, disability or other status, and be valued independently of their economic contribution."

These principles cement the human right to income and health security of all persons within a country but, more especially, the elderly, who may live in more risky conditions in these two domains. A lack of such security limits the extent to which older persons can contribute more fully to the development of society, but also highlights the degree to which older persons may currently be excluded from the benefits of development, or have been marginalized at earlier life stages. Addressing the varying forms of social exclusion over the life course provided the foundation for declaring 1999 the International Year of Older Persons with the central theme of creating a society for all ages.

The 1982 International Plan of Action on Ageing, the United Nations Principles for Older Persons, and The International Year of Older Persons provided the context for the Second World Assembly on Ageing in Spain, which produced the Political Declaration and Madrid International Plan of Action on Ageing (MIPAA) in 2002. The Madrid Plan of Action aims "to ensure that persons everywhere can age with security and dignity and to continue to participate in their societies as citizens with full rights" (Introduction, 10). MIPAA identified three main priority areas: (1) older persons and development, (2) advancing health and well-being into old age, and (3) ensuring enabling and supportive environments for action to fulfil the central objective. Within each priority area, several issues to be taken primarily by Governments were identified, objectives outlined in relation to the issues and actions recommended to fulfil the stated objectives.

In advocating ageing as a priority issue for the Caribbean, the Caribbean Community (CARICOM), in consultation with organizations within Member States, including the Pan American Health Organization (PAHO) and the World Health Organization (WHO), adopted the Caribbean Charter on Health and Ageing in 1999. The guiding principle of the Charter was "a coordinated, systematic approach for ensuring the health and full integration and participation of older persons in Caribbean societies and economies" (CARICOM, 1999). The main components of the Charter included: the provision of supportive environments for older persons in the home, community, and in long-term care facilities; primary health care and health promotion; and economic security, employment and other productive activities for healthy ageing.

In 2003, the Regional Strategy for the Implementation in Latin America and the Caribbean of the Madrid International Plan of Action on Ageing was developed at the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) Regional Intergovernmental Conference on Ageing in Santiago, Chile. The main purpose of the document was to " define priorities for the implementation of the Madrid International Plan of Action on Ageing," (ECLAC, 2003) for the ECLAC region within each of the main priority areas of MIPAA. The regional strategy was intended to provide a framework which each country could utilize based on their national capacity.

In 2007, Caribbean countries presented and discussed their progress in fulfilling the objectives in these priority areas at the Caribbean Intergovernmental Conference, follow-up to the Latin America and Caribbean Regional Plan of Action on population and development – Focus on ageing, held in Port of Spain, Trinidad and Tobago. The participating countries [2] highlighted programmes and policies implemented to protect the rights of the elderly but reported that progress had been uneven. A number of general challenges in the Caribbean subregion were identified, some of which were the exclusion of the elderly from the policymaking process, disaster preparedness, micro-credit, HIV and AIDS, employment and training, and low-income housing programmes that did not specifically target the elderly; and the lack of harmonized social policies on ageing within countries and in the subregion (ECLAC, 2007).

[2] Antigua and Barbuda, Dominica, Grenada, Jamaica, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Montserrat, and Netherlands Antilles.

The November 2007 meeting also produced the "Caribbean position on Ageing" with the stated goal of identifying priorities for the continued implementation of MIPAA in the Caribbean. Among the recommended courses of action for countries were: [3]

- Creating and sustaining employment opportunities for older persons
- Including the informal sector in pension schemes
- Establishing non-contributory pension schemes for those excluded from formal schemes
- Improving national budgetary allocations to programmes for the elderly
- Strengthening community health-care services
- Identifying mechanisms to ensure equal access to health-care services, inclusive of special treatments and medication to poor, vulnerable elderly persons.
- Establishing a Government regulatory framework to ensure that quality standards of care were provided to the elderly in public and private facilities.
- Streamlining social policies and programmes, allowing transfers of acquired pension and health-care benefits across the subregion, and sharing best practices.

In light of the above discussion, the present study also examines the extent to which countries in the English-speaking Caribbean have progressed in their implementation, monitoring and evaluation of the recommended courses of action related to the provision of services in health for the elderly.

[3] The full list of recommendations can be found in the report of the Caribbean Intergovernmental Meeting, available at: http://www.eclac.org/publicaciones/xml/3/30363/L.142.pdf.

III. The demography of ageing in the Caribbean

A. Introduction

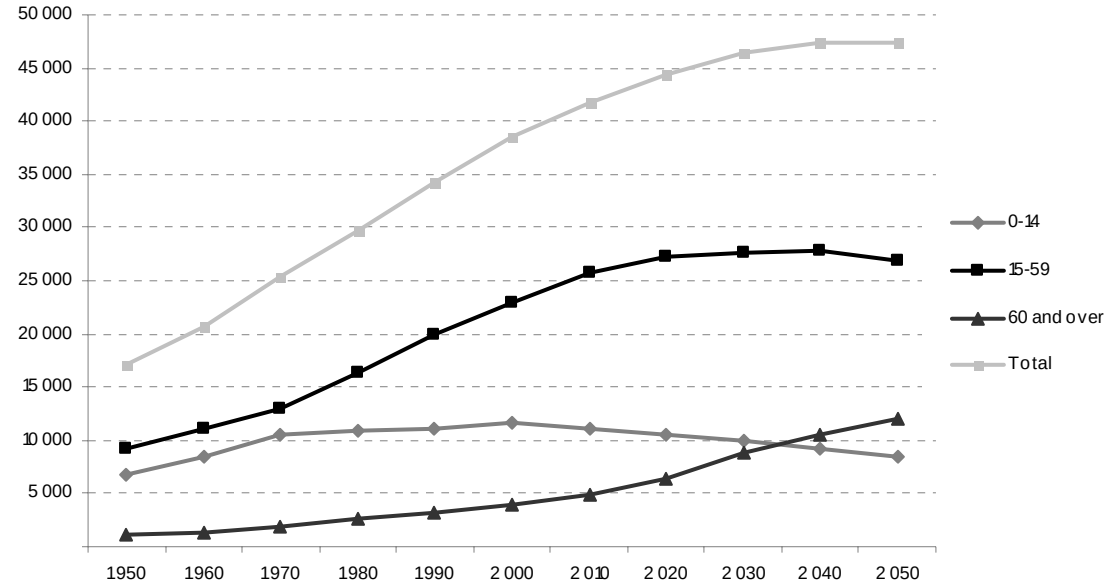
Population ageing is a direct result of countries experiencing the demographic transition from high to low mortality and fertility. This transition began in the majority of countries in the Latin American and Caribbean region from the mid-twentieth century onwards. There are variations in the onset and pace of the demographic transition among countries within the region, as previous reports (ECLAC, 2004; 2008) have demonstrated. The present chapter offers a closer examination of the demographic determinants and manifestations of population ageing within the English-speaking Caribbean.

The Caribbean has seen a significant change in its population structure over the past 60 years. As figure 1 shows, the total population has more than doubled between 1950 and 2010. Differentials in population growth by age group show a steady increase within the age groups '15 to 59 years' and '60 years and over', but minimal growth within the '0 to 14 years' age group. The upward growth of the older age group and declining growth of the youngest age groups are expected to converge in 2040 but then diverge again by 2050.

Figure 2 demonstrates that the decennial percentage change in the population of persons 60 years and over in the Caribbean has been greater than the decennial percentage change in population among younger age groups. Demographic projections to 2050 anticipate a continuation of this

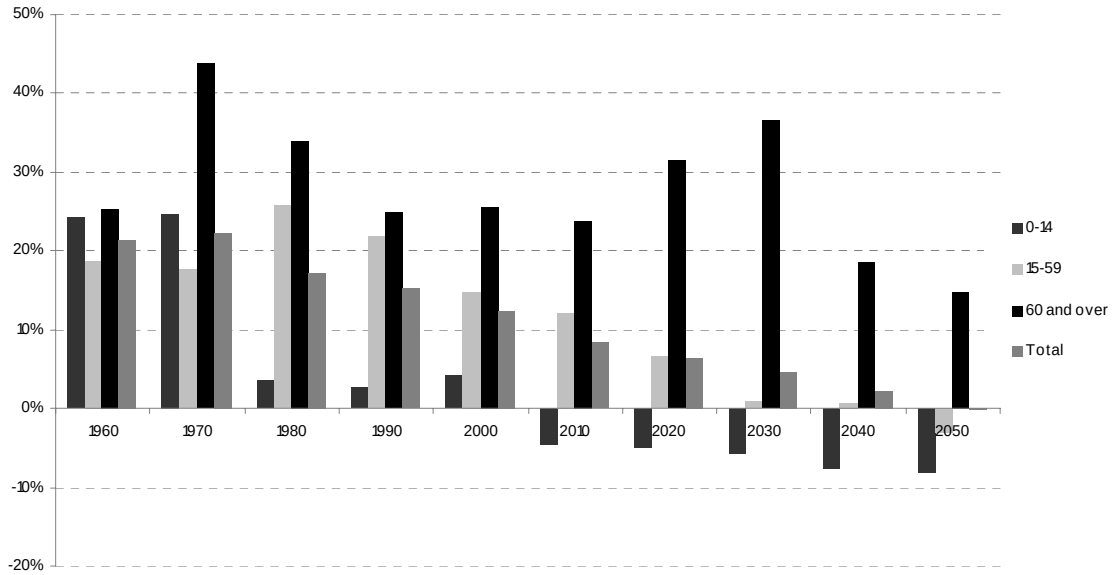
trend. Even with declines in the total population in the coming 40 years, the proportion of persons '60 years and over' will be higher than both the '15 to 59 years' and '0 to14 years' age groups. The two latter age groups are expected to have negative growth rates. Therefore, population ageing has been the driver of the growth and will lead the eventual anticipated decline in the Caribbean population.

FIGURE 1
DECENNIAL POPULATION CHANGE FOR THE CARIBBEAN SUBREGION BY AGE GROUP: 1950 TO 2050 (ABSOLUTE NUMBER)



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2010 Revision.*

FIGURE 2
DECENNIAL PERCENTAGE CHANGE IN POPULATION BY AGE GROUP FOR THE CARIBBEAN SUBREGION: 1950 TO 2050



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ource: United Nations, *World Population Prospects: The 2010 Revision* (2011).

Current demographic analysis, demonstrated in table 1, gives some insight into the pace of population ageing in the Caribbean. The absolute number and proportion of persons 60 years and over will more than double within the next 40 years. Likewise, the median age of the Caribbean population is expected to increase to 41 years. Siegel and Swanson (2004) noted that populations with median ages 30 years and over were considered 'old' (Nam 2009). The present ageing index [4] implies that the Caribbean subregion presently has a fairly reasonable ratio of older adults to children, with approximately 45 older adults for every 100 children. In 40 years, however, older adults will surpass children by 43%. This is one of the main implications of rapid population ageing. These estimates and projections are the result of past and current trends in fertility and life expectancy. However, there are marked variations amongst Caribbean nations due to country differences in socio-economic planning and development.

TABLE 1
INDICATORS OF POPULATION AGEING IN THE CARIBBEAN (2010, 2030, 2050)

Indicators	2010	2030	2050
Population 60 and over (thousands)	4 926	8 847	12 019
Percentage of population 60 years and over	11.8	19.1	25.4
Median age of population	29.6	35.5	41.1
Percentage of population 80 years and over	1.9	3.0	6.3
Ageing index	44.54	89.41	143.41

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2010 Revision.*

B. Variation in population ageing

Prior assessments of population ageing within the Latin America and Caribbean region grouped countries into four categories representing the different stages of population ageing: 'incipient', 'moderate', 'moderate to advanced', and 'advanced'. These categorizations were based on the proportion of adults aged 60 years and over in each country in 2000 and the total fertility rates and ageing indices recorded for the 1990s (ECLAC, 2004). The progress of Caribbean countries' ageing trajectories is presented here, as some groups may have changed categories depending on the pace of fertility declines.

The 'advanced' category represented countries that, in 2000, recorded the proportion of persons aged 60 years and over as already above 10% of the total population. In 2010, United States Virgin Islands (23%), Puerto Rico (18%), Cuba (16.9%), Barbados (16.4%), and Aruba (14%) could be considered the forerunners of population ageing. By 2050, the proportion of older adults in these countries is expected to be 30% and more (annex 1).

Countries that were grouped in the 'moderate to advanced' category posted between 8% and 10% of their populations as being aged 60 years and over in 2000. Utilizing this benchmark, the majority of Caribbean countries could be placed in this category based on their 2010 distributions of this age group. These included Jamaica and Trinidad and Tobago (10.6%), the Bahamas (10.4%), Saint Vincent and the Grenadines (9.6%), Grenada (9.5%), Saint Lucia (9.4%), and Suriname (9.3%). The subpopulation of persons 60 and over in these countries is expected to be within the 25% to 30% range by 2050.

Guyana and the Dominican Republic were categorized as experiencing 'moderate' ageing. The proportions of the population aged 60 years and over are currently 6.4% and 8.9%, respectively. Over

[4] The ageing index is defined as the number of persons 60 years and over per one hundred persons under age 15. It is calculated as population (60 years and over/population 0 to 14 years)*100.

the next 40 years, this subpopulation will increase rapidly to roughly 22% of the total population. Belize (5.7%) and Haiti (6.5%) were the two Caribbean representatives for the 'incipient' ageing category, as the proportion of persons 60 years and over was between 5% and 7% in 2010. The proportion of the population 60 years and over in these countries is expected to be between 15% and 18% by 2050.

C. Determinants of population ageing

Population ageing is led by the combination of declining fertility and increasing life expectancy. Migration is also an important demographic factor whose contribution to shifts in population structure is often overlooked.

1. Fertility

Population ageing in the Caribbean, and the variations in the stages thereof, is largely dependent on the pace of fertility decline. As shown in annex 2, all countries in the Caribbean have experienced declines in their total fertility rate since the mid-twentieth century and, in many cases, the rate has been halved within 60 years. The subregional average dropped from approximately 6 to 3 children per woman between 1950 and 2010. Some countries, such as Cuba, Barbados, Puerto Rico, Aruba, and the Bahamas, already had lower than average fertility rates in 1950 to 1955, and the trend has been maintained over time. The early onset and rapid fertility declines in these countries have been attributed to a complex socio-economic interaction of economic downturns, modernization, family planning programmes and sterilization (Diaz Briquets and Perez, 1982; Presser, 1980). The total fertility rate in Cuba, Barbados, Puerto Rico, Aruba, and the Bahamas is now at, or below, replacement level. These countries, with the exception of the Bahamas, are considered to be at the 'advanced' stage of population ageing.

Another group of countries[5] had total fertility rates at 6 to 7 children per woman in 1950 to 1955. These countries experienced later onset of fertility decline, which has helped to maintain a younger age structure for a longer period of time. Although the fertility rate was 2 to 3 children per woman by 2005 to 2010, these countries did not approach the subregional average until 1985 to 1990. These countries are included in the 'moderate to advanced' ageing category.

There is some variation in the fertility profiles between the two countries experiencing 'moderate' population ageing. Fertility rates in the Dominican Republic have been above the Caribbean average since 1950, whereas the total fertility rate in Guyana has been below the subregional average since 1980 to 1985.

The countries in the 'incipient' stage of ageing have very young age structures. Total fertility rates stood at approximately 6 to 7 children per woman in 1950-1955. There has been a steady decline in each country over the past 60 years such that, by 2005-2010, the rates have been halved to about 3 children per woman. The fertility rates in Haiti and Belize, particularly, still remain above the Caribbean average, at 3.55 and 2.94, respectively.

In sum, country differentials in fertility decline contribute in large measure to their current trajectories of population ageing. By 2050, however, all countries in the Caribbean will converge to a fertility rate of approximately 2 children per woman, although differences among countries will remain. The countries currently categorized as experiencing 'advanced' population ageing will have below-replacement fertility levels, which will result in faster population ageing and overall low to negative population growth.

[5] Saint Lucia, Saint Vincent and the Grenadines, Suriname and Grenada.

2. Life expectancy

Whilst fertility rates have been halved, life expectancy at birth for both sexes has increased by 20 years, on average, from 52 years during 1950 to 1955, to 71.6 years in 2005 to 2010. By 2045 to 2050, life expectancy at birth for the Caribbean will be an average of 78 years. Annex 3 shows that country differences in life expectancy, like fertility declines, reflect the dissimilarities in their stages of population ageing.

Among the 'advanced' ageing countries, the life expectancy at birth for both sexes has been 8 to 10 years above the subregional average since 1950. Life expectancy among countries experiencing 'moderate to advanced' ageing have also been higher than the Caribbean average with a difference of 3 to 5 years. Trinidad and Tobago, Jamaica, and Saint Vincent and the Grenadines are the exceptions, as life expectancy at birth in Trinidad and Tobago and Jamaica is currently below the Caribbean average, whereas Saint Vincent and the Grenadines has achieved the subregional average of 71.6 years.

Life expectancy in Guyana, although increasing, has consistently been 3 to 4 years below the Caribbean average since 1950. Similarly, the Dominican Republic, despite increasing life expectancy, has only as recently as 1990 approached and surpassed the subregional average.

The 'incipient ageing' countries, Haiti and Belize, have distinct patterns of life expectancy. Haiti, on the one hand, has the lowest life expectancy among Caribbean countries over the time period covered. Although the statistic has improved, life expectancy at birth in Haiti is currently 10 years below the Caribbean average. Belize, on the other hand, has maintained above-average life expectancy.

Gender differences in life expectancy at birth show that women in Caribbean countries, regardless of the stage of population ageing, can expect to live 5 to 8 years longer than men. More importantly, the gap in life expectancy between women and men has widened since 1950, from about a 3-year difference during 1950 to 1955, to an 8-year difference during the 2005 to 2010 period. This is displayed in annex 4.

3. Migration

Emigration from the Caribbean, internationally or within the subregion, has been said to be a normalized stage of the life course of a household or an individual (Thomas-Hope, 2005). International migration from the Caribbean subregion has been ongoing since the mid-nineteenth and early twentieth century, but has been most significant following World War II (Chamberlain, 2004). As a consequence, the Caribbean has one of the highest net migration rates in the world. It is estimated that approximately five million persons have emigrated over the past 50 years (Laraia and Kendall, 2010). Annex 5 shows the estimated net migration rates for selected Caribbean countries from 1950 to 2010 and projections to 2050. Barbados, Grenada, Guyana and Jamaica have had the highest emigration rates amongst the selected Caribbean States. Grenada, Guyana and Jamaica are expected to continue this trend in the coming 40 years.

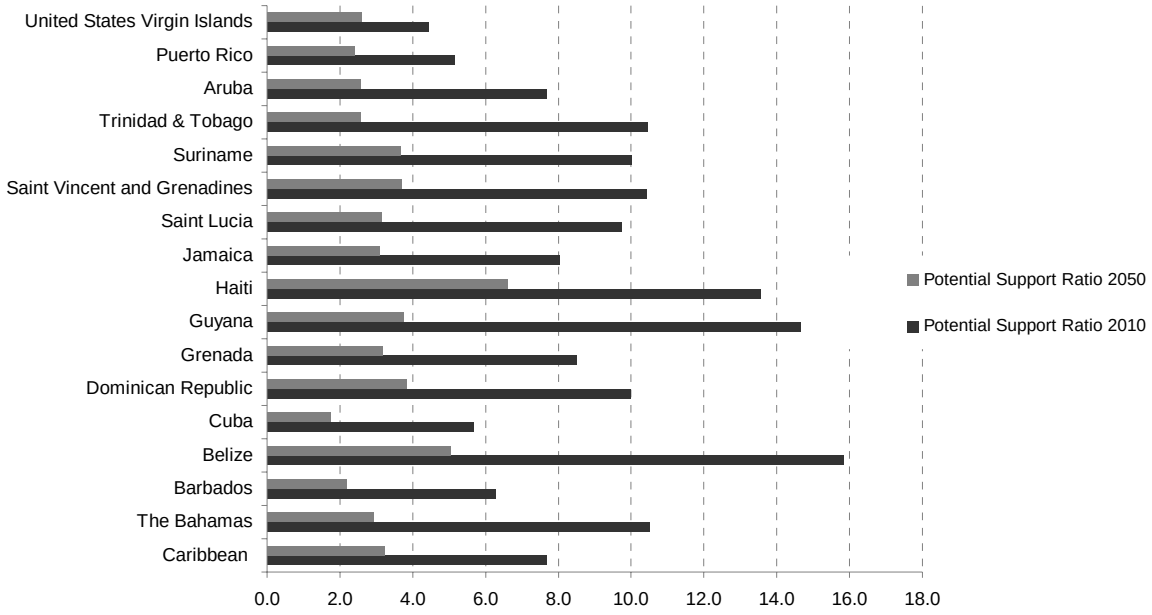
Migration has also played a critical role in the current rate of ageing of the Caribbean population, with the impact being greater in some countries. For instance, in Barbados, disproportionate emigration of women during the decade of 1960 to 1970 arguably contributed to declining fertility rates during this period (McElroy and de Albuquerque, 1990). This can be substantiated by the net migration rates of Barbados, shown in annex 4. Reviews of migrant stocks in the United States of America and Canada showed that, in every decade since the 1950s, women have accounted for over 50% of the migrant stock from Barbados and other Caribbean countries. The 1980 Canada Census reported that 74% of Barbadian immigrants were between the ages of 25 and 29 (Thomas-Hope, 2000; 2005). More recent return migration of elderly persons, disproportionately women, has also contributed to the ageing population structure in Barbados. Internal migration is also common within Barbados: the 2000 National Census documented that around 7% of the population changed parishes between 1995 and 2000 (Nam, 2009).

Internal, subregional or international migration of younger cohorts increases the probability that older adults will be without functional, financial, emotional or other material support during critical periods. Formal systems of support become increasingly important in the demographic context of ageing and mobile populations in the Caribbean.

D. Demographic consequences of population ageing

The increasing median age of the total population, along with an increasing old-age dependency ratio, are the two primary consequences of demographic ageing. As annex 6 indicates, half the populace in many Caribbean countries will be over 40 years of age by 2050. The countries experiencing 'advanced' ageing are projected to have the highest median ages in the Caribbean subregion. For instance, half of the total population of Cuba and Barbados, respectively, is expected to be close to 50 years of age. The old-age dependency ratio is the number of persons aged 65 and over per one hundred persons between the ages of 20 and 64. It is useful for identifying the approximate number of elderly persons who are supported or will need to be supported by the working-age population. The old-age dependency ratio for the entire Caribbean is expected to increase within 40 years from 13 to 31 older persons aged 65 years and over per 100 working-age persons.

FIGURE 3
POTENTIAL SUPPORT RATIO FOR THE CARIBBEAN AND SELECTED COUNTRIES: 2010 AND 2050



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2010 Revision.*

The potential support ratio (PSR) is another measure of the extent of dependency that is created by an ageing population structure. It is calculated as the number of working-age persons aged 15 to 64 per person aged 65 years and over. The PSR indicates the number of economically active persons that may be available to support the expected non-economically active population. Figure 3 demonstrates that in the Caribbean, many countries can expect a substantive decline in potential support ratio. Trinidad and Tobago, Guyana, the Bahamas, Cuba and Belize, for instance, can expect a 75% decline in their economically active populations over the coming years. This has significant implications for the economic and health security of current and future elderly persons.

E. Ageing amongst the elderly

1. Differences by age group

Global trends show that the fastest growing population cohort among the elderly is that of those aged 80 and over (United Nations, 2009). This group is commonly referenced as the 'oldest-old'. As shown in table 1, the Caribbean does not escape this trend. The estimates and projections of the United Nations Population Division show that the proportion of persons aged 80 and over in the total Caribbean population is expected to triple, from 2% to 6%, between 2010 and 2050.

Subregional and country differences in the growth of the 'oldest-old' subpopulation are displayed in table 2. Column 1 shows the share of persons aged 80 and over as a proportion of the population aged 60 and over in 2009 and projected to 2050. The data situate ageing amongst the elderly in the Caribbean in relation to the rest of the world. The share of persons aged 80 and over as a percentage of the population aged 60 and over within the entire Caribbean subregion had already surpassed that of the less and least developed regions of the world by 2009. Furthermore, differences among Caribbean countries have indicated that the share of the 'oldest-old' population as a percentage of the population aged 60 and over in Barbados, Belize, Grenada, Jamaica, Saint Lucia and Puerto Rico was already past that of the entire Caribbean subregion in 2009. Nevertheless, by 2050 most Caribbean nations will reach and, in some cases, surpass the world average of the proportion of 'oldest-old' persons amongst those aged 60 and over.

2. Gender and ageing

Population ageing is a gendered ageing phenomenon. Women outlive men due to longer life expectancies at birth and at age 60 (Weinberger, 2007). Thus, the sex ratio of the elderly population is unbalanced in favour of women. Caribbean countries are also showing this pattern, as displayed in table 2. Women aged 60 and over during the 2005-2010 period can expect to live, on average, 23 years longer, while men can expect to have an additional 20 years.

The sex ratios at both age 60 and age 80 also depict a gender imbalance, with women disproportionately represented amongst the 'oldest-old'. Differences among countries are also evident. Women tend to outnumber men among those aged 80 and over in countries with longer life expectancies at age 60. Barbados, Trinidad and Tobago and the Bahamas clearly exemplify this trend. They have the widest gender gap in life expectancy at age 60 and, correspondingly, the highest sex ratio among the oldest-old. In contrast, Haiti has the narrowest gender gap in life expectancy at age 60 but, like other countries in the Caribbean, the sex ratio among the elderly is also feminized.

It is critical that Caribbean countries develop and implement institutional structures that are sensitive to the gendered dimensions of ageing. Over the next 40 years of population change in the Caribbean, older women will constitute a significant proportion of each country's socio-economic fabric. Longer life expectancy of women does not always translate into longer years of independent and autonomous living for older women in developing countries. The Caribbean is no exception to this trend, as will be detailed in subsequent chapters. Lifetime inequalities along the lines of class, ethnicity and geography can create situations of social exclusion in old age. Each dimension intersects with gender.

3. Living arrangements

As women outlive men, a greater proportion of older women are likely to live alone and therefore face the burden of social exclusion alone (United Nations, 2005). Co-residence of elderly persons and their adult children is the typical household structure of Latin America and the Caribbean (Pelaez, 2002).

Declining fertility, current and future migration patterns, and gender differences in life expectancy at all ages, increase the likelihood that more elderly persons will live alone or in smaller households.

TABLE 2
SELECTED INDICATORS OF AGEING AMONGST THE ELDERLY IN THE CARIBBEAN AND OTHER WORLD REGIONS

	Share of persons aged 80 and over		*Sex ratio men per women*		*Life expectancy at age 60, (2005-2010)*	
	2009	*2050*	*60 +*	*80 +*	*Men*	*Women*
World	**14**	**20**	**83**	**59**	**18**	**21**
More developed regions	20	29	74	49	20	24
Less developed regions	11	17	89	70	17	20
Least developed countries	8	10	85	74	15	17
Caribbean	**15**	**24**	**87**	**73**	**20**	**23**
The Bahamas	11	23	78	45	18	23
Barbados	18	28	67	40	18	23
Belize	16	18	90	73	20	24
Cuba	15	31	91	82	21	24
The Dominican Republic	15	21	97	89	21	23
Grenada	20	15	72	53	18	21
Guyana	12	24	99	64	17	20
Haiti	8	13	84	74	16	17
Jamaica	18	25	87	61	19	22
Saint Lucia	17	19	82	70	18	21
St. Vincent and the Grenadines	15	17	87	63	17	19
Suriname	11	19	79	59	16	20
Trinidad and Tobago	12	17	68	40	15	20
Associate Member States						
Aruba	10	30	80	65	17	21
Puerto Rico	18	28	76	58	20	25
United States Virgin Islands	12	39	83	56	20	25

Source: United Nations, *Population Ageing and Development 2009* (2010).

Recent analysis of the 2000 round of censuses for 18 countries in the Caribbean supported gender differences in living arrangements among the elderly and simultaneously challenged the global gender trend. A greater proportion of older Caribbean men were reported to be living alone. The probability of solitary living, however, increased with age but without gender differentiation. Elderly persons aged 85 and over were more likely to be living alone than co-residing (Nam, 2009). This raises concerns regarding care and protection systems for members of this cohort, especially those with health-care dependencies such as functional limitations or chronic diseases.

Globally, older women have a greater likelihood of being economically disadvantaged because of lifetime inequalities in stable employment and earnings relative to men. Simultaneously, older women continue to be active contributors to their families and communities. The challenge arises when older women are left with unmet needs, whether in health, economic or other social support. The growing share of older persons in Caribbean countries implies that Governments will have to be prepared for

higher proportions of socio-economic vulnerability, always bearing in mind the gendered context that produces vulnerability.[6] Following from this, Caribbean Governments need to be gender-sensitive when addressing the vulnerability of future cohorts.

F. Government responses to population ageing

The foregoing review of the demography of ageing within the Caribbean subregion begs the question of the extent to which Caribbean Governments recognize population ageing as a potential problem for their countries. Table 3 shows the results of the United Nations Population Division 2009 (United Nations, 2010) review of Caribbean Government views and policies on population structure. In 2009, 11 of 16 participating countries within the Caribbean subregion indicated that population ageing was a major concern. However, only 3 of these 11 countries expressed the view that both population ageing and the corresponding size of the working-age population were areas of major concern.

TABLE 3
LEVEL OF GOVERNMENT CONCERN ABOUT POPULATION STRUCTURES: 2009

Countries	Size of working age population	Population ageing
Antigua and Barbuda	..	Major
The Bahamas	Minor	Major
Barbados	Minor	Major
Belize	Minor	Major
Cuba	Minor	Major
Dominica	Major	Major
The Dominican Republic	Major	Major
Grenada	..	Minor
Guyana	Major	Major
Haiti	Minor	Minor
Jamaica	Minor	Major
Saint Kitts and Nevis	Minor	Minor
Saint Lucia	Minor	Major
Saint Vincent and the Grenadines	Major	Minor
Suriname	Not a concern	Minor
Trinidad and Tobago	Major	Major

Source: United Nations, *World Population Policies 2009* (2010). Note: .. data not available

[6] The geographical context, rural or urban living, presents another dimension of unequal vulnerability. Generally, rural older adults experience worse health and economic insecurity relative to their urban peers. These risks are accumulated over a lifetime of being subject to inadequate or inefficient social services as a consequence of being excluded from the benefits of development.

This implied that many Caribbean Governments were more focused on the increasing health, welfare and other social services that need to be provided to an increasingly diverse elderly population, rather than on the socio-economic needs of younger cohorts. Fortunately, those countries that have indicated serious concern about the shifts in both the younger and older populations have recognized the implications of lowering potential support ratios and the potential burden that will be placed on existing formal and informal support systems.

IV. Epidemiological profile of the English-speaking Caribbean

A. Introduction

Population ageing can also be viewed as a demographic by-product of improvements in health and material well-being that accompany modernization and economic development. As populations age, partly due to increased longevity, there are accompanying shifts in the age, causes and profiles of mortality. The epidemiological transition that accompanies modernization and population ageing shifts the primary causes of death from infectious diseases to lifestyle-induced, non-communicable, chronic diseases like cancer and heart disease (Wilkinson, 2004).[7] According to the World Health Organization (WHO, 2008), non-communicable, chronic diseases are most prevalent in old age. In some developing countries, infectious diseases still account for a significant proportion of deaths in the entire population. WHO projects that non-communicable diseases will account for up to 75% or more of all deaths in developing countries by 2020.

The Caribbean fulfils the expectations of the epidemiological transition. Chronic and degenerative diseases such as heart disease,

[7] The main implication is that infant and child mortality declines, so there is an increase in life expectancy at birth. Meanwhile, continuous economic development brings about greater, more rapid technological improvements which help to curb mortality throughout the life course, and more so in later life. Thus, populations see a decline in mortality at both early and later life stages. Consequently, populations grow as a result of mortality declines and increasing proportions of persons live to older ages.

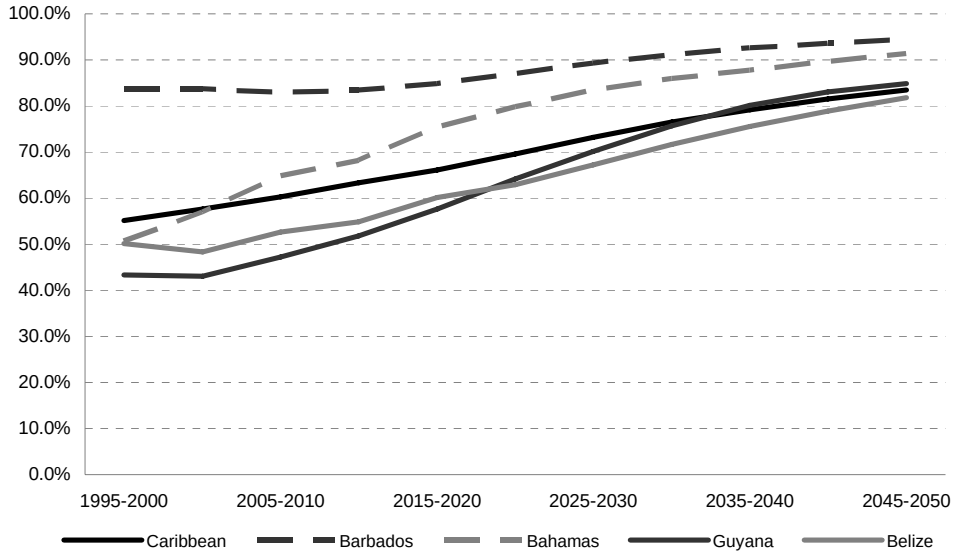
cancer, diabetes, cerebrovascular and hypertensive diseases have been ranked among the top five of the ten leading causes of death for both sexes since 1990 and 2000 (Laramie and Kendall, 2010). These conditions are more prevalent amongst the older age groups (annex 4). Simultaneously, the Caribbean is still experiencing increasing incidence of some communicable diseases, the highest-ranked being HIV-related diseases, most prevalent amongst those aged 25 to 44. This has direct implications for the investment in health-care systems required to manage, treat and prevent diseases adequately within both these segments of the population.

B. Population ageing and the epidemiological transition

1. Mortality

Country differences in mortality among the elderly reflect differences in the pace of population ageing. Figure 4 shows the increase in the percentage of deaths among persons aged 60 and over in the entire Caribbean, and within four countries at different stages of population ageing, over the period 1995 to 2050. As expected, mortality within the 'most advanced' ageing country, Barbados, has been above the Caribbean average since 1995, and will stay higher until 2050. The Bahamas, which has been classified as a 'moderate to advanced' ageing society, has seen a rapid increase in mortality among its older population, that reached and surpassed the Caribbean subregional average within 10 years. Compared to Barbados, Belize is expected to take approximately 50 years (2050) to attain the level of mortality Barbados recorded in 1995. These differences in mortality reflect differences in the age structures of these countries, as discussed in chapter 3, which are also linked to differentials in the causes of mortality. In countries with younger age structures, where the average age is 20 years or below, deaths from chronic and degenerative diseases are generally lower (Huenchuan, 2010). In contrast, countries like Barbados that are very advanced in the demographic transition show that more than 80% of deaths are due to chronic, degenerative diseases.

FIGURE 4
PERCENTAGE OF DEATHS AMONG THE POPULATION AGED 60 AND OVER: TOTAL CARIBBEAN AND SELECTED COUNTRIES: 1995 – 2050



Source: United Nations Department of Economic and Social Affairs, Population Division (2011). *World Population Prospects: The 2010 Revision*, CD-ROM Edition.

2. Chronic diseases

The Pan American Health Organization (PAHO, 2009) highlights that the Caribbean records the highest prevalence of chronic non-communicable diseases of all the subregions within the Americas. Cardiovascular disease and diabetes are the main causes of mortality in several Caribbean countries and prevalence is expected to increase in coming years. More importantly, the incidence of these diseases is increasing within the working-age population, thereby contributing to loss of economic productivity due to lost years of healthy living. Furthermore, mortality rates for these diseases are higher than those experienced in more developed regions. Samuels and Fraser (2010, p. 472) documented, "diabetes mortality in Saint Vincent and the Grenadines is 600% higher than in North America (United States of America and Canada), and cardiovascular disease mortality in Trinidad and Tobago, Guyana, and Suriname is 84%, 62% and 56% higher, respectively, than in North America."

The leading causes of death amongst those aged 60 and over are ischaemic heart disease, cerebrovascular disease and diabetes. Older men are more likely to die of ischaemic heart disease and cerebrovascular disease, followed by prostate cancer and hypertensive disease. Older women are more likely to die of diabetes, followed by hypertensive heart disease and heart failure (Laraia and others, 2010). These rates provide a context for the association between rapid population ageing and the epidemiological transition, which are both driven by the force of socio-economic development.

Table 4 presents estimated mortality rates in four Caribbean countries for men and women aged 65 and over disaggregated by cause of mortality. The rates substantiate that the risk of dying from chronic, degenerative diseases does, in part, depend on the trajectory of population ageing. Similar to Latin American countries (Huenchuan, 2010), the circulatory system, followed by malignant neoplasms are the main causes of mortality for both sexes aged 65 and over in all four Caribbean countries. Mortality rates in both categories are higher for men, however. Similar to Latin American countries, the mortality rates for chronic, degenerative diseases in the 'incipient' ageing country, Belize, are lower than those found in the 'advanced' and 'moderate' ageing societies. Notably, compared to the Bahamas, a 'moderate to advanced' ageing society, Belize has higher mortality rates for ischaemic heart disease for both men and women.

TABLE 4
ESTIMATED MORTALITY RATES FOR MEN AND WOMEN AGED 65 AND OVER: CAUSE AND COUNTRY

	The Bahamas		Barbados		Belize		Guyana	
	Women	Men	Women	Men	Women	Men	Women	Men
Communicable diseases	195.1	258.4	787.2	794.6	380.2	668.9	420.9	311.8
Circulatory system	1 898	1 981.1	2 041.8	2 351.9	1 506	1 743	2 281	2428.5
Ischaemic heart disease	372.5	455.3	449.0	646.3	456.3	528.1	807.3	817.6
Cerebrovascular disease	532.2	443.0	528.9	582.7	380.2	440.1	730.4	725.7
Malignant neoplasms	549.9	1 045.9	861.0	1 981.1	562.7	809.7	299.0	508.0
External causes	97.6	98.4	33.7	79.1	268.6	340.3	81.2	203.2

Source: Pan American Health Organization, Health Information and Analysis Project. Regional Core Health Data Initiative, Washington D.C. 2010

Although not reported in table 4, the prevalence of diabetes in the Caribbean is around 11%-18% and, like other non-communicable diseases, since 1985 Caribbean women (of all ages) have been at higher risk of dying of diabetes (Boyne, 2009). Obesity is one of the leading causes of diabetes and, in the Caribbean, obesity rates are also higher amongst women. The Caribbean Commission on Health and Development (2006) highlighted that diabetes-related deaths are primarily cardiovascular in nature so

that, although cardiovascular diseases lead mortality rates, diabetes needs to be addressed simultaneously. As seen in table 4, older women in the Bahamas and Guyana have a higher risk of dying of cerebrovascular diseases, but the underlying cause may be diabetes. Thus, critical attention needs to be given to the prevalence of diabetes and the circumstances encouraging such prevalence in these countries. Box 1 describes the expected costs of treating diabetes in the Eastern Caribbean over the coming 20 years.

Mortality due to chronic, non-communicable diseases is higher amongst elderly persons, but the risk of developing these diseases depends on individual and social health conditions from birth to adulthood. The most commonly cited individual-level risk factors are lifestyle-related, ranging from unhealthy diets and limited physical activity to substance abuse. Population-level risk factors point to urbanization, income inequality, globalization and population ageing (WHO, 2005). These social risk factors are commonly referenced as the social determinants of health. The effects of these social determinants differ for men and women, as both genders face different social expectations and inequalities throughout the life course.

For instance, alcohol abuse is higher among men. Deaths due to cirrhosis in Trinidad and Tobago and other Latin American and Caribbean countries are nearly three times higher in men compared to women (Pyne, Cleason and Correia, 2002). This does not necessarily mean that women have a lower risk of cirrhosis than men. Social norms of gender identity and gender socialization assume and dictate that women drink less than men. This can heighten the risks of women experiencing non-communicable, alcohol-related diseases at later life stages, because of limited resources being dedicated to early detection and treatment in women. In Barbados, tobacco consumption is higher among adolescent males aged 13 to 15, 34.5% versus 23.2% among females in the same age group (PAHO, 2010). Similarly, in Jamaica, results of the 2010 Global Youth Tobacco Survey showed that tobacco experimentation and current use increased between 2000 and 2010 among adolescents aged 13 to 15. More critically, there has been a steady increase in female experimentation over three cross-sections: 2000, 2006 and 2010 (Grizzle, 2010).

BOX 1:
POTENTIAL HEALTH CARE COSTS OF TREATING DIABETES IN THE ENGLISH-SPEAKING CARIBBEAN

A recent assessment of health-care systems among English-speaking countries in the Eastern Caribbean discussed, among other issues, the anticipated increase in expenditure for Caribbean States to treat diabetes. Tsounta (2009) estimated the potential costs of Eastern Caribbean countries treating diabetes under two financial circumstances: (1) health care costs rise in line with historical inflation rates and (2) future health care costs rise by 2% more than the historical average. Under the first scenario, Dominica and Saint Lucia could potentially see a tripling in the cost of treating diabetes by 2030. Continued population ageing exerts pressure on public and private finances, barring effective intervention to curb incidence of the disease.

Source: Tsounta, Evridiki. 2009. *Universal Health Care 101: Lessons for the Eastern Caribbean and Beyond*. International Monetary Fund WP/09/61.

3. Disability

Globally, women have lower prevalence of and mortality from non-communicable diseases relative to men, but they are more likely to experience morbidity (Robles, Vega and Corber, 2001). Thus, the

advantage women have over men in terms of a longer lifespan is not always equated to stress-free living. Any gains made in increased life expectancy can be easily reversed with population ageing.

A recent survey of data on disability in the Caribbean (ECLAC, 2011) showed that disability was more common among women. Moreover, in the 15 countries [8] sampled, the incidence of disability increased with age, such that nearly 25% of persons aged 60 and over had at least one disability. Analysis by type of impairment indicated that the majority of persons aged 60 and over had sight limitations (8%), followed by lower limb/mobility limitations (6.5%). Gender differences in the causes of disability were also apparent at older ages. Earlier case studies of Caribbean countries, by Schmid and Vezina (2007) and Schmid, Vezina and Ebbeson (2008), attested to women having a higher propensity to experience disability due to lifestyle-induced, non-communicable, chronic diseases, and that men were more likely to be disabled from birth or due to accident.

TABLE 5
DISABILITY STATUS OF MEN AND WOMEN AGED 60 AND OVER IN SELECTED CARIBBEAN COUNTRIES (2000)

	Number, urban		Number, rural	
Country	Male	Female	Male	Female
Belize	2 459	3 525	2 999	2 791
Jamaica	762	931	395	564
Saint Lucia	462	879	1 296	1 626
Saint Vincent and the Grenadines	377	612	607	894

Source: ECLAC, on the basis of in-house analysis of 2000 census data.

Population ageing represents an increase in the proportion of older persons relative to other age groups, but individuals continue ageing at different rates as well. The elderly, in the Caribbean and worldwide, are not homogeneous. Economic development has brought improvements in public health but an individual's health status in later life depends in large measure on their age, gender, social class, ethnicity and geographical residence: each of these social determinants carries different social meanings and implications across the life course. For instance, an assessment (Alvarado, Zunzunegui, Beland and Bamvita, 2008) of functional limitations in older adults in Latin America, using nationally representative samples of older persons aged 60 and over, has shown that poor material socio-economic conditions in childhood (hunger, for instance) and adulthood (minimal education) are linked to frailty in adulthood. They also found differences in frailty by country of residence and gender. Hence, they drew attention to the fact that the social context and social definitions of individuals can provide opportunities or limitations for individuals over their life course. Governments in Latin America and the Caribbean are faced with diverse ageing health profiles for the elderly because of life course differentials in socio-economic status. The history of inequality in the region increases the likelihood that a greater proportion of the elderly will experience ill-health and disability, which can be burdensome to health-care resources.

The trends in chronic diseases and disabilities in the Caribbean suggest that the health effects of gender inequalities across the life course come to fruition at later ages. Therefore, Caribbean countries can expect that older women will contribute a greater proportion to the increased critical health and social care demands that accompany the demographic and epidemiological transitions.

[8] Aruba, the Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, Netherlands Antilles, Saint Lucia, Trinidad and Tobago.

C.Mortality among younger cohorts

The Caribbean subregion faces the sim ultaneous challenges of addressing chronic, non-com municable diseases in conjunction w ith communicable diseases. While chronic, non-com municable diseases are the leading causes of m ortality in the Caribbean and a particular concern am ong the elderly population, communicable diseases constitute the major cause of m ortality among younger age groups. These diseases include HIV-related diseases, tuberculosis, tropical diseases like dengue, and others.

The Caribbean is the second region in the w orld most affected by HIV and has the highest incidence of reported AIDS cases within the Americas. In 2009, an estim ated 240,000 persons (adults plus children (range between 220,000 and 270,000), were living with HIV in the Caribbean (UNAIDS, 2010). Estimated AIDS-related deaths numbered 12,000 (range betw een 8,500 and 15,000). This represents a decrease of approxi mately 7,000 cases since 2001. The 2009 estim ated prevalence rate among young people aged 15 to 24 stood at 0.8% of w omen and 0.4% of men. Laraia and others (2010) have indicated that, in Trinidad and Tobago, y oung women within this age group accounted for three quarters of new ly-infected HIV cases, and in Jamaica in 2007, the num ber of infected y oung women aged 15 to 24 w as three times that recorded for sim ilarly-aged young men. Overall, young women are more vulnerable to the risk of H IV infection and its associated health threats, largely due to gender relations in the public and private spheres across the Caribbean subregion. Domestic violence may limits a woman's power to negotiate sexual relations in the home. In the public sphere, w omen's employment as female sex workers represents the double-edged sw ord of financial autonomy with heightened risk of contracting HIV.[9]

Unreported cases of persons living with HIV and AIDS have more detrimental consequences in the both short and long term for population and individual health. Many cases remain unreported largely due to socio-cultural attitudes regarding sexual relationships and sexual identity . This includes stigma and discrim ination regarding sam e-sex relationships, early initiation of sexual activity and the low appreciation of condom use. O ther contributing socio-economic factors include m igration and sexual tourism (Inciardi, Sy vertsen and Surratt, 2005). Regardless of the m ode of transm ission, the working-age segment of the population is the most affected, and y oung women the m ost vulnerable among this group. This age group re presents the bulk of potential car egivers in 'ageing' Caribbean countries; this creates additional pressures on social health protection systems.

Governments in the Caribbean view HIV and AIDS as a m ajor population issue. Table 6 shows that all Caribbean Governments have recognized that HIV-related diseases pose a serious threat to their respective States and that they have taken action to address this concern. Only 6 of the 16 countries that participated in the U nited Nations survey of population policies have im plemented anti-discriminatory legislation to protect persons living with HIV. The right to protection goes a long way towards reducing the incidence of new cases, because it reduces the associated stigma. Consequently, individuals will be more willing to get tested and receive counselling, which will help stop the spread of HIV.

D. Challenges for health-care systems

The incidence of HIV and AIDS, alongside chronic diseases and disability , heightens the need for Caribbean States to address the capacity of their health-care systems to organize and m anage long-term health care against a backdrop of increasing health costs alongside losses to econom ic productivity due to ill-health. The combination of demographic and epidemiological transitions brings significant health-related economic challenges to the Caribbean. Currently , many Caribbean States are not sufficiently

[9] In the capital city of Jamaica, the HIV prevalence rate among female sex workers was 4.9% in 2009. (UNAIDS, 2010).

well-positioned to meet the emerging health-care demands of their populations adequately and efficiently.

Governments need to invest in technology and surveillance to improve detection and provide comprehensive prevention, treatment, care and support for persons living with HIV and chronic, non-communicable diseases. In many countries, the public sector lags behind the private sector in technological equipment and laboratory services (Mullings and Paul, 2007). This leaves citizens to resort to the private sector, excluding from such health-care arrangements those who cannot afford it. This issue is revisited later in the present chapter. The PAHO (2002) assessment of the public health capacities of Caribbean countries showed that the subregion was below average in several critical areas. These included, but were not limited to, quality of data, timely responses to public health threats, and mechanisms to ensure access to necessary health services by all individuals. The lowest scores were in the areas of research and quality assurance (PAHO/CARICOM, 2006).

TABLE 6
HIV PREVALENCE, LEVEL OF GOVERNMENT CONCERN ABOUT HIV AND AIDS AND POLICIES TO ADDRESS HIV AND AIDS IN THE CARIBBEAN: 2009

Countries	People living with HIV(thousands)[a]	Adult prevalence (percentage)[a]	Level of concern	Measures introduced
Antigua and Barbuda	..	..	major	1, 2, 3, 5
The Bahamas	6.2	3	major	1,2,3,4,5
Barbados	2.2	1.2	major	1,2,3,4,5
Belize	3.6	2.1	major	1,2,3,4,5
Cuba	6.2	0.1	major	1,2,3,4,5
Dominica	..	..	major	1,2,3,5
The Dominican Republic	62	1.1	major	1,2,3,4,5
Grenada	..	..	major	1,2,3,5
Guyana	13	2.5	major	1,2,3,4,5
Haiti	120	2.2	major	1,2,3,5
Jamaica	27	1.6	major	1,2,3,5
Saint Kitts and Nevis	..	..	major	1,2,3,5
Saint Lucia	..	..	major	1,2,3,5
Saint Vincent and the Grenadines	..	..	major	1,2,3,5
Suriname	6.8	2.4	major	1,2,3,5
Trinidad and Tobago	14	1.5	major	1,2,3,5

Source: United Nations. 2010. *World Population Policies 2009*.

Notes: Measures implemented to respond to HIV and AIDS: (1) blood screening; (2) information/education campaigns; (3) antiretroviral treatment; (4) non-discriminatory policies; (5) distribution of condoms (a) Estimates refer to 2007 (b) .. Not available.

The shortage of qualified medical personnel is another critical area plaguing Caribbean health-care systems. Developing countries are critical suppliers of medical and other categories of long-term care workers to developed regions, where the demand is higher due to the higher proportions of elderly persons. Arguably, the relationship is symbiotic, as developing countries benefit from remittances from their highly-skilled workforce in developed countries. WHO (2006) projected that the demand for long-term health-care workers in developing countries will increase by over 400% in the coming 20 years (Higo and Williamson, 2011).

The Caribbean is no exception. The emigration of nurses has been a major threat to the ability of health-care systems to adapt appropriately, efficiently and sustainably to the changing health profile of the Caribbean. The export of nurses from CARICOM countries to the developed regions of Canada, England and the United States of America has occured within the context of political and economic globalization. The Caribbean Commission on Health report (2006) has credited this professional outmigration to the bilateral agreement between CARICOM member States and the World Trade Organization (WTO) General Agreement on Trade in Services (GATS) that allows for the movement of persons with particular services. Added to this, the neoclassical economic factors of poor working conditions, low standards of living, low pay and limited employment opportunities in the Caribbean have pushed nurses out, while the opposite labour market conditions in destination countries have attracted nursing staff (PAHO/CARICOM, 2006; Mullings and others, 2007). The benefits of migration, however, have not been merely for the individual. The opportunity to send remittances to maintain and improve the families and households of medical personnel has also been critical to the eventual decision to emigrate (PAHO/CARICOM, 2006).

Population ageing has signalled that the demand for primary health care and long-term care services in the Caribbean will increase rapidly. In light of this, health sectors reforms have been ongoing since the late 1990s aimed at strengthening institutional capacity. The responses of Governments throughout the Caribbean have included decentralization to the intermediate and local levels of health-care resources and responsibilities that were once centralized within the Ministries of Health. There have been improvements in the supply of primary health-care services both for the general population and targeted vulnerable groups. There is still much to be done with regard to secondary and tertiary health care.

BOX 2:
INTERGENERATIONAL AND INFORMAL CAREGIVING SUPPORT IN DEVELOPED AND DEVELOPING COUNTRIES

Population ageing increases the urgency for political and social clarification of which body – State, market or family – holds the bulk of the responsibility for the care of older persons. In both developed and developing countries, informal caregiving for older adults is commonplace. The main differences between developed and developing countries lie in the degree of informal care, the drivers of such care, and the persons who typically provide such care.

Developed countries have more well-established systems of institutionalized care for the elderly because their welfare states are more economically robust. Developed countries have also had more time to prepare for growing proportions of elderly as they experienced the demographic transition earlier in their histories and over a longer time frame. The demographic transition produced changes in family structures and size as well. As a consequence, nuclear families are the main family structures in developed countries but there are both variations among ethnic groups and regional differences. Family structures have continued to change over time due to increasing divorce and remarriage rates, but fertility has remained low. Thus, informal caregivers of older adults are mainly spouses. Older people are more likely to live apart from their children.

Informal caregiving in developing countries is almost the polar opposite. Developing countries have recently started their demographic transitions, so extended or multiple-generation families are still abundant. These structures, however, do coexist with nuclear and childless families. In general, children are expected to care for older adults, regardless of the geographic proximity of the child and the availability of institutional care. For instance, in South Korea, 90% of older adults depend on informal care by their children despite the availability of formal services.

Source: Ovseiko, Pavel. 2007. "Long-term care for older people. Ageing Horizons Brief." Oxford Institute of Ageing. Available at <http://www.ageing.ox.ac.uk/system/files/brief_ltc.pdf> Accessed on August 7th 2011.

Health promotion programmes have been implemented to both instigate and mobilize the movement away from curative primary health care and towards preventive health care. One of the fundamental challenges to the success of such models is the day-to-day implementation of healthy lifestyles in the context of continued economic and social exclusion. The recruitment and retention of quality health-care personnel remains an obstacle for the foreseeable future. Uncertainty about the future demand for long-term caregiving abounds. Informal caregiving may stall or slow the demand for long-term caregivers, as many countries in the Caribbean still have young populations and cultural values may transcend formal provisions (see box 2). Lifestyle changes are another factor. On the one hand, future cohorts of the elderly may be healthier due to improved education and healthier living

campaigns. On the other hand, the challenge of economic inequality will offset healthy living for many. This factor, combined with overall global economic integration of the Caribbean, allows unhealthy diet options in more abundance as international food chains establish subsidiaries in the subregion. It does not negate, however, that health services will eventually need to be provided by the State or the market, in larger quantity and more exceptional quality.

E. Health inequalities: Access to health care and health insurance coverage

Primary health care is widely available in all Caribbean countries and, in most cases, primary health-care services are free of charge. The availability of secondary and tertiary health-care services varies by country. In most cases, the latter are sought regionally or internationally and some countries assist citizens in this regard, but such benefits are disproportionately reaped by citizens with higher incomes (Laraia and Kendall, 2010). Differential access to primary health-care services, however, both geographically and economically, remains one of the foremost challenges to health-care systems in the Caribbean subregion.

The most recent Country Poverty Assessments of the English-speaking Caribbean attested to the challenges that the most at risk groups, women, the elderly, those in rural areas, and the poor, have consistently faced with regard to accessing health-care services. Expectedly, poorer, older adults in rural areas face the most difficulty in accessing health care and, in some circumstances, may even have no access. Income inequalities in access to health-care services are not displayed in the first choice locations of visits upon illness, as the majority of citizens, regardless of socio-economic status, choose the public health facilities. However, this does not deny a positive correlation between income and the use of private health care.

TABLE 7
SOCIAL INSURANCE COVERAGE OF HEALTH CARE BENEFITS IN THE ENGLISH-SPEAKING CARIBBEAN

Country	Salaried	Self-employed	Domestic	Rural
Antigua and Barbuda	x	x		x
Bahamas (the)	x	x	x	x
Barbados	x	x	x	x
Belize	x	x		x
Dominica	x	x		x
Grenada	x	x		x
Guyana	x	x		x
Jamaica		x	x	
Saint Kitts and Nevis	x	x		x
Saint Lucia	x	x		x
Saint Vincent and the Grenadines	x	x		x
Trinidad and Tobago	x		x	x

Source: Mesa-Lago, Carmelo (2001). "Social Assistance on Pensions and Health Care for the Poor in Latin America and the Caribbean." Pp. 175-215 in *Shielding the Poor: Social Protection in the Developing World*. Edited by Nora Lustig: IADB Brookings Institute Press, Washington, D.C.

This positive correlation between income status and health-care service utilization is further endorsed by the inequalities in health insurance coverage. English-speaking Caribbean countries, with the exception of Belize, do not have established national health insurance systems. Citizens holding

health insurance are covered by a combination of private health insurance and social security. The majority of countries in the English-speaking Caribbean offer health-care protection through their national insurance schemes. Under the social insurance systems, health protection takes the form of cash benefits for illness, injuries related to work, and maternity. This does not necessarily mean that all of the required health-care needs are covered by social insurance but, in the event of an incident that threatens the health status of the worker, he or she receives some form of benefit during the period that income becomes limited.

Table 8 shows the statistical coverage of health insurance in selected English-speaking Caribbean countries for the total population and the poorest and wealthiest income quintiles. These figures reflect private health insurance coverage. In general, health insurance coverage for the population in each country is very low, but this is not universal. Those in the highest income quintile have a higher probability of being covered by health insurance relative to those in the poorest quintile.

TABLE 8
STATISTICAL HEALTH INSURANCE COVERAGE IN SELECTED ENGLISH-SPEAKING CARIBBEAN COUNTRIES: PROPORTION OF TOTAL POPULATION, LOWEST AND HIGHEST INCOME QUINTILES

Country	Country Poverty Assessment year	Percentage of total population	Percentage of Quintile I	Percentage of Quintile V
Antigua and Barbuda	2007/2008	51.1	35.0	65.1
Belize	2009	8.0	3.0	19.0
Dominica	2008/2009	13.4	1.9	31.1
Grenada	2007/2008	7.4	0.9	19.4
Saint Kitts and Nevis	2007/2008	28.8	12.8	48.1
Saint Lucia	2005/2006	26.3	5.7	40.9
Saint Vincent and the Grenadines	2007/2008	9.4	3.5	23.1

Source: Caribbean Development Bank, Country Poverty Assessment Reports.

F. Health expenditure

The World Health Organization (WHO, 2003) has acknowledged that there has been an overall growth in health-care expenditure worldwide over the past 25 years (Huenchuan, 2010) but that this has varied by country. This reflects changes in the demand for health care discussed up to this point. Table 9 shows how Caribbean States have negotiated health care expenditure between the State, market and family, and the potential impact of this interaction on health care for the elderly. The figures compare health expenditure as a proportion of gross domestic product (GDP) in English-speaking Caribbean States at different stages of population ageing. It then compares the distribution of total health-care services expenditure across the public and private sectors and within the private sector only.

Regardless of the stage of population ageing, total health-care expenditure in the English-speaking Caribbean as a percentage of GDP is above the regional average for the Americas (this figure includes the United States of America). There are no major differences in health spending between 2007 and 2009, with the exception of Saint Lucia which showed a 2% increase in total health expenditure. Saint Lucia also had a 12% increase in public spending on health between 2007 and 2009. All other countries had minimal increases or stable public spending on health as a proportion of total health expenditure.

The public-private mix, in all countries but Guyana and Belize, reflects a more or less equal share in the burden of financial responsibility for health care. Private expenditure on health was lowest in

Guyana. In all countries, however, out-of-pocket expenditure was above the regional average for the Americas, had either increased or stabilized between the two time periods, and accounted for more than 70% of the private health expenditure in most countries. Only in Suriname and the Bahamas was out-of-pocket expenditure, interpreted as family expenditure, lower than 50% of private health expenditure. In contrast, families in Belize and Guyana bore the full brunt of private health expenditure. In summary, out-of-pocket expenditure or family spending in most English-speaking Caribbean States was higher than public spending on health. Thus, the family would be responsible for the highest proportion of health care expenditure should a situation of illness arise. Within the family, women bear the brunt of care-giving; as the majority of this responsibility is unpaid, it cannot be granted a dollar amount to gauge the total cost of family expenditure.

TABLE 9
DISTRIBUTION AND LEVEL OF HEALTH EXPENDITURE: 2007 AND 2009

	Total health expenditure as a percentage of GDP		Public expenditure as a percentage of total health expenditure		Private expenditure as a percentage of total health expenditure		Out- of-pocket expenditure as a percentage of private expenditure		Total health expenditure /capita at PPP	
	2007	2009	2007	2009	2007	2009	2007	2009	2007	2009
Incipient ageing										
Belize	4.5	5.1	70.3	71.0	29.7	29.0	100.0	100.0	310.1	365.2
Moderate ageing										
Guyana	8.2	8.1	87.7	89.7	12.3	10.3	100.0	100.0	238.5	257.5
Moderate to advanced ageing										
Antigua and Barbuda	4.7	5.1	69.4	74.8	30.6	25.2	86.6	85.4	939.5	949.8
The Bahamas	6.6	7.2	47.6	45.0	52.5	55	40.7	42.4	1 505.1	1 633.4
Dominica	6.1	6.4	62.5	63.9	37.5	36.1	83.2	84.2	561.6	626.2
Grenada	7.0	7.4	51.1	51	48.9	49	97.2	97.7	607	620.2
Jamaica	4.9	5.1	52.0	55.9	48.0	44.2	71	71	370.9	382.9
Saint Kitts and Nevis	6.1	6	57.8	59.3	42.2	40.7	94.4	94.4	876.4	839.3
Saint Lucia	6.4	8.1	54.2	66.5	45.8	33.5	94.4	94.6	618.9	774.5
Saint Vincent and the Grenadines	5.4	5.7	61.3	56.6	38.8	43.4	100	100	480.9	517.7
Suriname	6.6	7.2	47.6	45.0	52.5	55	40.7	42.4	1 505.1	1 633.4
Trinidad and Tobago	5.0	5.7	49.2	48.2	50.9	51.8	81.5	81.8	1 259.3	1 733.4
Advanced ageing										
Barbados	7.0	6.9	64.0	64.3	36	35.7	80.7	80.6	1 527.1	1 456.6

Source: The World Health Organization (WHO), *World Health Statistics*, 2010.

It is commendable that the countries with younger age structures – Belize and Guyana – should have the highest proportion of public spending on health, although they simultaneously have the highest proportion of family spending. This implies that these countries' health expenditures may be along the lines of improving infrastructure, technologies and education to curtail communicable diseases. This may be largely funded through user fees, hence the high out-of-pocket expenditure.

In the absence of social health protection systems that cater to, and meet the needs of, the population, a serious long-term illness such as a disability, a chronic, non-communicable disease, HIV or AIDS, or a combination of these factors in one family or household, places the domestic economic unit in a state of extreme financial vulnerability for an undetermined period of time. The available data

suggest that the incidence of disability and other illnesses is more likely to occur among persons in poverty and among women. Poor persons and women in rural areas may be uninsured, and not be able to access health-care services due to geographical barriers. Additionally, urban poverty may limit utilization if individuals cannot pay user fees. The extent of family expenditure on health suggests that health protection needs to be incorporated within the framework of social protection systems. Furthermore, social health protection needs, whether universal or targeted, require the removal of geographic, ethnic, gender and class barriers.

G. National health insurance plans

In congruence with health sector reforms and Governments' stated commitments to ensuring the fundamental right to quality health care, since 2000 Caribbean States have been discussing the implementation of universal national health insurance plans in their respective countries. The implementation of a comprehensive national health insurance plan, however, presents some serious challenges for most economies.

The economic challenges take precedence, as Governments are charged with determining the appropriate form of financing a national health insurance plan. According to a review and assessment of the potential for national health insurance in the English-speaking Caribbean (Tsouant, 2009), the two main options for the subregion are general taxation and payroll contributions. The payroll option presents obstacles for creating sustainable revenue because of the nature of labour markets – the large informal sector, unstable formal employment, and high underemployment and self-employment. Apart from the practical element of job stability, social security financing requires administration to enforce collection. Social security contributions impose additional costs in labour which can reduce formal-sector job growth, increase informal-sector employment and eventually limit economic growth. General taxation can be a more viable option through sales taxes on goods, but the introduction of the increases in taxes needs to be progressive to avoid an additional burden on poorer segments of the society.

Consideration must be given to the services, risks or eventualities to be covered by a universal national health insurance plan. Given the current and projected epidemiological and demographic profile of the Caribbean, national health insurance plans should meet the basic needs for the most prevalent conditions, which are HIV-related diseases and chronic, non-communicable diseases. Within this plan, additional coverage should be extended to those in poverty, such as coverage for secondary and tertiary health care.

H. National initiatives addressing elderly health care

The present section provides a broad overview of programmes that have been implemented in different English-speaking countries in the Caribbean, with the exception of Jamaica, Trinidad and Tobago and Barbados, to address the health-care needs of the elderly with the aim of alleviating and/or preventing the financial burdens imposed by ill-health.[10]

1. Antigua and Barbuda

[10] The information presented comes primarily from the recent Country Poverty Assessment reports in each country. These can be accessed via the Caribbean Development Bank, available at < http://www.caribank.org/titanweb/cdb/webcms.nsf/75f7ba2c7557c2e50425745900719b7a!OpenView>
The PAHO *Health in the Americas* (2007) *Country Health Profiles* and the PAHO-USAID *Country Health System Profiles of Latin America and the Caribbean* provide supplementary information.

Social health protection is provided through both social insurance and social assistance sy stems. Under the social insurance system, all employees and employers are required to contribute 3.5% of their wages to the national Medical Benefits Scheme. Contributors aged 16 to 60 can receive free medical treatment for nine chronic diseases (hypertension, diabetes, cancer, cardiovascular disease, m ental illness, glaucoma, asthma, leprosy and sickle-cell anaem ia). Coverage for medications is extended to non-contributors, regardless of age, suffering from any of the nine chronic diseases. Elderly persons aged 60 and over are entitled to free m edication through the Medical Benefits Schem e (PAHO, 2010). The Government of Antigua and Barbuda has implemented several social assistance program mes that provide physical and nutritional health care to the elde rly. The care of the elderly is one of the four main responsibilities of the Citizens Welfare Divisi on, which adm inisters the elderly home-help care programme. Home-help workers employed by the Division assist the elderly with daily chores. More vulnerable elderly persons – those who have lim ited familial support – are given institutionalized care though the Fiennes Institute.

There is a day-care centre for the elderly that cat ers to a maximum of 12 persons. A monthly fee of US$ 320 is required, how ever, unless the elderly person can secure sponsorship. This excludes elderly persons who cannot access financing for this type of care. The two m ajor drawbacks of this service are that it does not provide m edical services and that the centre operates on the basis of volunteers, thus limiting health coverage for the elderly even further. N utritional assistance is provided through the meals-on-wheels operation attached to the day-care centre, which serves hot meals to around 20 persons in poorer communities who live alone and are unable to access the centre.

2. The Bahamas

In an effort to stymie the impacts of population ageing on the public health sector, the G overnment of the Bahamas has been proactive in im plementing several porgrammes to address older adult health as early as possible in order to ensure healthy living. A mong the services that are m anaged and administered by the Ministry of Health is the Community Nursing programme, whereby geriatric nurses conduct home visits to older residents on a m onthly basis. These visits entail care (m edication, baths, dressing), counselling and referrals. There are also tw o gerontology clinics to cater to the needs of the elderly. Five hom es for the aged are under the purview of the Government and there are eleven privately-owned and -m anaged homes for the aged. [11] A day-care centre for older adults is organized under the Health Social Services Department. At this centre, more able-bodied, older adults provide care and assistance to their lesser-abled peers.

3. Belize

Targeted social health insurance is provided through the N ational Health Insurance (N HI) system introduced in 2000 and amended in 2002 to serve the south-side of Belize, which is recognized as one of the poorest regions in Belize. This includes the Southern H ealth Region (nam ely Toledo and Stann Creek) and the southern end of Belize City (PAHO, 2010). Health insurance covers a prim ary care package that offers a range of basic m edical consultations and screening, from communicable and chronic non-communicable diseases to fam ily planning services. The N HI is funded by the Belize Social Security Board, the Ministry of Finance, the Ministry of Health, and patients' co-payments. The elderly are exempt from co-payment.

The Human Services Department provides institutionalized care for the elderly , as one of its vulnerable populations. H elpAge Belize and the N ational Council on A geing are tw o major non-

[11] Further details can be accessed via the webpage f or the Governm ent of the Bahamas, Ministry of Health, via the f ollowing link: <http://www.bahamas.gov.bs/wps/portal/public/!ut/p/b1/04_Sj9CPykssy0xPLMnMz0vMAfGjzOKNDdx9HR1NLHz9jUIsDTwNnQ3NvENNDSxcTPQLsh0VAQgwHC4!/>.

governmental organizations working together to address the health-care issues of the elderly. Help Age has been instrumental in constructing three homes for older persons and establishing home care and meals-on-wheels programmes to meet the nutritional and physical needs of older persons across the country.

4. Dominica

The elderly population in Dominica is recognized as one of the target beneficiary populations of the Dominica Social Investment Fund. This Fund, an initiative of the European Union, is intended to invest in preventing already-vulnerable groups from falling into poverty. The Government of the Commonwealth of Dominica recently implemented the "Yes We Care" Programme to supplement existing programmes for the elderly and thereby improve their well-being. This programme is reinforced by The Dominica Council on Ageing, which advocates for agencies that are involved in the care of the elderly. Social assistance in health care to the elderly is available through the home for the elderly, and by older persons (aged 65 and over) being exempted from hospital fees. Coverage of the home for the elderly is limited, as it accommodates 14 residents. Healthy lifestyle initiatives have been undertaken by the Health Promotion Resource Centre of the Ministry of Health.

5. Grenada

Older adults (aged 60 and over) do not pay for medication. Medications are subsidized, but sometimes elderly persons have to resort to the private sector for medications when these are unavailable in the public health system. This incurs a cost, and those elderly persons who are unable to pay usually do without. Thus, inequalities in access to health care remain. The Community Health Department has initiated wellness programmes to encourage individuals to adopt healthier lifestyles, but marketing presents a major challenge. In addition, the high cost of living, combined with the costliness of healthier consumption items, restricts the ability of those in the lower socio-economic strata to adopt healthier habits.

6. Guyana

Public health care is free of charge, but the Government of Guyana does not have any programmes that specifically target the elderly to ensure that they have cost-effective and efficient health-care services. Homes for the aged are available throughout the country, but there is only one free home, the Palms, that caters mainly to the poor and indigent elderly who do not possess informal support networks. Elder health care in Guyana is largely the responsibility of the family.

7. Saint Kitts and Nevis

Universal coverage of primary health care is available to citizens of Saint Kitts and Nevis. Primary care is accessible to the majority of the population. Secondary health-care services have service fees attached to them, but the elderly and children are exempt from these fees. If individuals need tertiary care, this needs to be sought abroad, but the State will assist in such situations on a case-by-case basis. Apart from an initial administrative fee of $ 10, services provided by the Community Health Centres are free of charge. Persons suffering from diabetes, hypertension and other chronic illnesses, and HIV-related diseases, do not pay for medication (Government of Saint Kitts and Nevis, Country Poverty Assessment, 2008).

There exist various homes for senior citizens that are both privately and publicly managed. On the island of Saint Kitts, The Cardin Home and Saddler's Senior Citizen's Home are public facilities. Private facilities include the Grange Nursing Home and Health Care Facility, Brimstone View Nursing Home and the St.Georges Senior Citizens Home. On the island of Nevis, clients of the Flamboyant Senior Citizens Home are expected to pay a fee for service (PAHO, 2010). Social-service agencies have also developed home-care programmes for the elderly, especially those who are considered shut-ins.

8. Saint Lucia

Universal health-care coverage is available to all persons suffering from diabetes or diabetes with hypertension. Under the Hospital Fees Regulation, SI No. 68 of 1992, the National Insurance Scheme allows persons aged 60 and over and receiving less than EC$ 6,000 annually exemption from hospital fees (PAHO, 2010).[12] Thus, the concession assists low-income, elderly persons.

As in Belize, HelpAge International has been instrumental in addressing the health-care needs of elderly Saint Lucians. The HelpAge Saint Lucia National Council of and for Older Persons[13] has established a day-care centre for the elderly that also provides opportunities for older persons to earn an income through vegetable farming. The centre is described as preventative and rehabilitative. It allows older persons to remain in their homes and communities as opposed to receiving institutionalized care. Nutritious meals, which also cater to specific dietary needs, are also provided to the elderly.

Another centre for the elderly is the Marion Home, which has been established since 1945. According to the 2006 Saint Lucia Country Poverty Assessment, it houses 66 residents but caters to those who can pay for the services provided. Rates depend on accommodation. Another is the Malgretoute Senior Citizens Home in Soufriere, where services are free of charge but residents are admitted on the basis of a means test conducted by the Saint Lucia Department of Human Services and Family Affairs. Elderly persons have also benefitted from a Home Improvement Loan Programme introduced in 2000, funded by the Government of Saint Lucia.

9. Saint Vincent and the Grenadines

Elderly persons (aged 60 and over) are one of the designated groups in Saint Vincent and the Grenadines that do not pay for drugs in both public and private sectors. Caregiving to the elderly is provided through both the public and private health sectors. The Lewis Punnett Home, which specifically caters to indigent elderly, and the Thompson's Home for the Elderly, both provide shelter. Additionally, there are five private homes for the aged. There is also a public assistance home-care programme and two day-care centres for the elderly.

10. Suriname

The Pan American Health Organization (PAHO, 2007, p. 652) review of health promotion strategies in Suriname highlights that, "all Surinamese nationals over the age of 60 are entitled to a monthly financial compensation from the Government under the coordination of the Ministry of Social Affairs and Housing." As one of the Suriname Government priorities to reduce poverty in Suriname, the Ministry of Social Affairs and Housing has implemented several programmes to address the living conditions of older adults in poverty. These include subsidized, long-term care facilities and free medical services, among other benefits.

[12] This concession is also extended to persons receiving an income of less than US$ 2,222 per annum, indigents, children of indigent or low-income persons, members of the national nursing service, police force, prison services or fire services and contributors to NIS.

[13] More details of projects and mandate of the Council can be accessed via the link: <http://lucianshelpinglucians.com/helpage.htm>.

V. Country studies

A. Introduction

Jamaica and Trinidad and Tobago represent two countries within the English-speaking Caribbean that are experiencing a 'moderate to advanced' trajectory of population ageing. The proportion of persons aged 60 and over is currently 10.6% in both countries. Although population ageing indicators in both countries mirror that of the Caribbean subregion, population projections (shown in table 10) estimate that within the coming 40 years, Trinidad and Tobago will experience a more intense ageing process relative to Jamaica. Among the elderly subpopulation in both countries, as noted in chapter 3, older adult women outnumber their male counterparts among the 'young-old' and 'oldest-old' age groups. The epidemiological transition within both countries also resembles that of the entire Caribbean. Non-communicable diseases are the leading cause of death among person aged 65 and older, with diabetes mellitus as the second among the top five causes of death among the elderly in both countries (see table 11).

TABLE 10
POPULATION AGEING INDICATORS FOR JAMAICA AND TRINIDAD AND TOBAGO: 2010, 2030 AND 2050

Indicators	2010	2030	2050	2010	2030	2050
Population aged 60 and over (thousands)	290	534	666	143	280	407
Percentage of population aged 60 and over	10.6	18.8	25.9	10.6	20.7	31.6
Median age of population	27	33.6	41.7	30.8	41	44.4
Percentage of population aged 80 and over	1.9	2.5	6.8	1.3	2.5	6
Ageing index	36.4	84.1	150.7	51.8	123.3	203.5

Source: United Nations (2011). *World Population Prospects: The 2010 Revision.*

TABLE 11
TOP 5 CAUSES OF DEATH AMONG ELDERLY PERSONS AGED 65 AND OVER IN JAMAICA AND TRINIDAD AND TOBAGO

Jamaica (2006)		Trinidad and Tobago (2007)	
Cause of death	**%**	**Cause of death**	**%**
Cerebrovascular disease	16.5	Ischaemic heart disease	18.4
Diabetes mellitus	14.5	Diabetes mellitus	17.1
Ischaemic heart disease	9.0	Cerebrovascular disease	12.2
Hypertensive disease	8.0	Malignant neoplasms of the prostate	5.1
Malignant neoplasms of the prostate	5.2	Hypertensive disease	4.8

Source: Pan American Health Organization, *Mortality Database* (2010.).

The population of the Caribbean is ageing rapidly within lower levels of socio-economic development relative to the experiences of more developed regions. Countries differ in their trajectories of socio-economic development, as exemplified by Jamaica and Trinidad and Tobago. According to the World Bank, Trinidad and Tobago is categorized as a high-income country, while Jamaica is classified as upper middle-income. As table 12 shows, per capita gross national income in Jamaica is roughly 70% lower than that of Trinidad and Tobago; the national unemployment rate in Jamaica is twice that of Trinidad and Tobago; and, unlike Trinidad and Tobago, economic growth, as measured by the annual rate of GDP growth, contracted in Jamaica in 2010.

TABLE 12
ECONOMIC PROFILES OF JAMAICA AND TRINIDAD AND TOBAGO

Indicators	Jamaica	Trinidad and Tobago
GNI per capita PPP (international US$), 2010	7 450	24 040
GNI per capita (Atlas method), 2010	4 770	15 400
Average annual growth rate in GDP (%), 2010	-0.5	0.1
Unemployment rate (2009)	11.4	5.3

Source: The World Bank Group Databank (2011).

Although both countries share similarities in their demographic and epidemiological transitions, their distinct economic contexts present different opportunities and constraints for State- and market-based provision of health protection. The current section presents the findings of the detailed assessment of the existing systems of social health protection in Jamaica and Trinidad and Tobago. The purpose of the country case studies is to gain insight into the status of existing health systems in place for the elderly and to examine national efforts at preparing for the imminent challenges to health-care

systems as a result of population ageing and the accompanying epidemiological transition. The analysis for each country consists of: (i) an overview of the national policy on ageing; (ii) an outline of penetration of health insurance and social assistance programmes for the elderly; (iii) an account of the status of provision of long-term care for the elderly, in terms of its current status as well as steps towards expanding health care in light of the ageing population; and (iv) a summary of the status of health promotion activities and programmes.

B. Jamaica

1. National policy on ageing

Jamaica adopted a National Policy for Senior Citizens in 1997. The policy was formulated to reflect the United Nations Principles for Older Persons which espoused the core values of independence, participation, care, self-fulfilment and dignity. In addition, the policy reflected the core components of the Vienna International Plan of Action on Ageing and recommendations of other United Nations conferences including the Beijing Conferences on Women and the World Summit for Social Development. The policy, by its very nature, stressed the developmental approach to ageing and therefore encouraged the mainstreaming of ageing into all national policy areas.

The main goal of the 1997 Senior Citizens policy was to " meet the challenges of a growing, healthier and more active senior citizen population, by ensuring that senior citizens are able to meet their basic human needs, that those in need are assisted, and that older persons are protected from abuse and violence and are treated as a resource and not a burden" (Government of Jamaica, National Policy for Senior Citizens, 1997). The achievement of the overall goal of the policy was articulated through nine interdependent areas, including health, social welfare and income security. Given the significant increases in the elderly population since the formulation of the policy in 1997, the Government of Jamaica has initiated a revision process to reflect its 2030 vision.

2. Health protection

(a) Social health insurance and social health assistance

Public health care in Jamaica is delivered through a network of primary, secondary and tertiary facilities. Since April 2008, free health care has been available to all citizens and legal residents through the public health service. Owing to health sector reforms that commenced in the 1990s, the health services have been decentralized and are managed by four Regional Health Authorities (South-East, North-East, Western and Southern). Each regional health authority has direct responsibility for the management and delivery of public health-care services within a defined geographical area through a network of hospitals, clinics and health centres. While health care has been provided largely through the public sector system, private health systems also play a significant role in health-care delivery, thereby supplementing the coverage provided through the Government-funded system.

In the absence of a national health insurance scheme, the Government, in 2003, established the National Health Fund (NHF) as a means of providing institutional financial support to the public health system. The mission of the NHF is to "reduce the financial burden of health care on the public sector, in Jamaica, by providing funding and information to support improvements in health and to continually improve our processes to better serve our beneficiaries" (Government of Jamaica, National Health Fund, 2011).[14] The Fund provides two categories of benefits: individual benefits and institutional benefits. Individual benefits provide assistance for the purchase of prescription drugs for the treatment and

[14]Further details are available via the link < http://www.nhf.org.jm>./

management of chronic diseases. Institutional benefits provide assistance to private- and public-sector organizations for the implementation of projects to improve the infrastructure and delivery of health services.

The Jamaica Drug for the Elderly Programme (JADEP), which was launched in 1996 by the Ministry of Health and is currently managed by the National Health Fund, is the main programme that targets the elderly. JADEP aims to improve access to essential drugs of Jamaican residents aged 60 and older who suffer from chronic diseases. Through the programme, prescription drugs for 10 chronic diseases are provided free of cost to senior citizens. The ailments covered by the programme include: asthma, arthritis, cardiac or heart disease, diabetes, glaucoma, hypertension, high cholesterol, benign prostate hyperplasia, psychotic conditions and vascular or circulatory conditions. Government spending on health care represents 4% to 5.5 % of the national budget.

In 2002, the Government of Jamaica, through its Social Safety Net Reform Programme, established the Programme of Advancement Through Health and Education (PATH), which provides cash benefits to poor families and individuals living in extreme poverty. The primary beneficiaries are children, but the programme also targets the elderly, persons living with disabilities, and pregnant and lactating mothers. Eligibility of access by the elderly to PATH is limited to persons from poor families and cannot be accessed by National Insurance pensioners. While PATH is known to contribute to improving access to health care for children, there is little reported benefit to the elderly subpopulation. An analysis of the programme based on the 2009 Jamaica Survey of Living Conditions is presented in box 3 below.

The results of a multivariate analysis of the Jamaica Survey of Living Conditions for 2002 and 2007 revealed that, in 2007, only 21 out of every 100 Jamaicans possessed health insurance coverage (Bourne, 2009). The analysis identified area of residence, income, consumption, marital status and social support as the main determinants of private health insurance in 2002 and 2007 and showed that, in 2007, age, gender and social class influenced the purchase of private health insurance.

3. Long-term care

As is the case in most developing countries, the family is the main provider of informal health care for the elderly in Jamaica. Institutionalized forms of long-term care, although available, are still in short supply. Uche and others (2010) identified the inadequacy of homes for the elderly as a shortcoming and recommended that non-governmental organizations and private sector institutions take up this shortfall by investing in that niche.

Notwithstanding the shortages in the provision of formal geriatric care and services, and recognizing the role to be played by formal institutions in response to the rapidly-ageing population, the State sought to improve the quality of care provided in nursing homes by amending the Nursing Homes Registration Act in 2003. The amendment introduced a number of guidelines and minimum standards for the operation of nursing homes, and set regulations for compliance. Monitoring and ensuring adherence to the standards was provided through the Standards and Regulation Division which was instituted within the Ministry of Health in 1999 as part of the reforms to the health sector.

4. Health promotion

Cognizant of the increasing trends in chronic and lifestyle-related diseases which pose a challenge to the current health system, and the limitations on the resources for providing curative services to citizens, the Ministry of Health and Environment has been at the forefront of activities to promote a more holistic and preventive approach to health care. To that end, the Ministry has redistributed some its resources to the promotion of healthy lifestyles through outreach, education and the provision of greater access to preventive care. Activities target citizens at all levels of the community, including schools and

workplaces. Health-promotion activities are framed around the goals and objectives of the National Policy for the Promotion of Healthy Lifestyles in Jamaica, launched in 2004. The policy encompasses the core strategies of the Caribbean Charter on Health Promotion which include: formulating healthy public policies, reorienting health services, developing/ increasing personal health skills, empowering communities to achieve well-being, creating supportive environments, and building alliances, with emphasis on the media.

BOX 3
PROGRAMME OF ADVANCEMENT THROUGH HEALTH AND EDUCATION

The PATH programme, which was initiated in 2002 under the Social Safety Net Reform Programme, is a conditional cash transfer programme which targets poor and vulnerable families. The programme is a consolidation of three former income-transfer programmes, namely, the Food Stamp programme, the Old Age and Incapacity Allowance and the Outdoor Poor Relief programme. The main objectives of the initiative are to "achieve better targeting of welfare benefits to the poor and to increase human capital by conditioning receipt of the benefits on participants meeting certain requirements for school attendance and health-care visits" (Levy, 2007). According to the 2009 National Report by Jamaica on the Millennium Development Goals, approximately US$ 120 million was spent on PATH between 2002 and 2007.

One of the main features of PATH is the use of a means test to determine eligibility. The means test is based on the Jamaica Survey of Living Conditions and comprises a series of questions assessing a range of socio-economic factors. A composite score, which is based on a weighted average, is computed for each household, and applicants who fall below the specified cut-off point are selected as beneficiaries.

Benefits under PATH are organized under two main categories: health and education grants. Receipt of benefits is conditional on beneficiaries meeting specific educational and health requirements. The requirements for each grant are as follows:

Type of grant	*Conditionality*
Health:	
Less than 12 months (in age)	Visit health centre once every two months
One to six years not enrolled in primary school	Visit health centre once every six months
Pregnant and lactating	Four visits to health centre or pro rata basis
Elderly, persons with disabilities, other destitute adults	Visit health centre once every six months
Education:	
Six years and enrolled in school but not less than 18 years	Minimum 85 per cent attendance level at school

Impacts on health and education

The *Evaluation of the Jamaica PATH Programme* (Levy, 2007) reported that the programme had impacted positively on children aged 0 – 6 years by facilitating increases in the use of preventive health care for that cohort. The analysis indicated an increase of approximately 38% in health-care visits for children. However, the analysis revealed that PATH had had little impact on the health-care visits by the elderly, and the authors suggested that the lack of enforced sanctions on health-care visits could explain the limited impact on elderly participants.

Source: ECLAC, on the basis of information obtained from "Eye on PATH: Tracking the progress of the social assistance programme", Jamaica Gleaner, 24 September 2006.

The National Health Fund also supports health promotion through the provision of public information, and has identified this role as the third benefit provided by the body. Community sensitization on the importance of healthy lifestyles and the need for self-empowerment of citizens is organized through a number of promotional activities, including NHF Community Days, health fairs and other sponsored events. Community health days are held monthly in towns and districts throughout Jamaica. The locations and programme components are specifically designed to target the poor and vulnerable.

The National Council for Senior Citizens has been at the forefront of activities aimed at promoting greater inclusion of older persons in national activities and community life in Jamaica. In 2010, the Council conducted 20 health seminars, 12 health-care workshops and 72 health clinics in the

area of health education, which impacted a total 3,158 persons (National Council for Senior Citizens, 2010).

C. Trinidad and Tobago

1. National policy on ageing

The Government of Trinidad and Tobago began the formulation of its national policy on ageing in 2000, in response to a symposium on social welfare issues held prior to the Madrid International Plan of Action on Ageing and follow-up strategic meetings (Rouse, Ramkissoon and Ramdoo, 2010). The policy, officially launched in 2007 following Cabinet approval in 2006, is in congruence with the United Nations Principles for Older Persons. Its stated goal is "to ensure the sustainable well-being of the population of older persons in Trinidad and Tobago, by facilitating the attainment of their basic human needs, that those in need are assisted, and that older persons are treated as an important resource rather than a burden to society." (National Policy on Ageing for Trinidad and Tobago (2007), 12). Chief among the twelve policy objectives are promoting greater access to more affordable, quality health care for older persons, and enhancing the self-reliance and functional independence of older persons. These two objectives encompass the health and economic well-being of older adults.

2. Health protection

(a) Social health insurance and social health assistance

Public health care is free to citizens, and is Government-funded. Currently, there is no national health insurance system, but the Ministry of Health has been developing a National Health Service which has been granted Cabinet approval. Ideally, the National Health Service would guarantee a package of services based on the epidemiological needs of the country. This package would include services that would complement the Chronic Disease Assistance Programme, which is a form of social health assistance. The Programme is to provide free medication to all persons suffering from chronic illnesses.[15] These include diabetes, asthma, cardiac disease, arthritis, glaucoma, mental depression, high blood pressure, benign prostatic hyperplasia (enlarged prostate), epilepsy, hypercholesterolemia, Parkinson's disease, and thyroid diseases. One of the proposed value added benefits of the National Health Service would be the ability of citizens to choose their service providers (PAHO, 2008; Rouse and others, 2010).

Private insurance, as provided by the market, is the only form of health insurance currently available to citizens of Trinidad and Tobago. This is the potential explanation for the high level of out-of-pocket expenditure recorded in 2009, 82% of private health expenditure (table 9). Concomitantly, the most recent Survey of Living Conditions in Trinidad and Tobago (2005) documented that the majority of the population did not have health insurance coverage. Less than 20% of the total population was covered, and inequalities in coverage persisted across socio-economic status: only 4% of the population among the poorest income quintile, as opposed to 34% in the wealthiest income bracket, had health insurance coverage.

The Government, nonetheless, has implemented a series of social health assistance programmes to ease the financial burden of care and medical treatment for illnesses, especially those that are long-term. A list of social health-assistance initiatives that benefit the elderly, if not directly targeted, is

[15] The structure of the programme does not allow an assessment of the demographic profile of the beneficiaries of this programme. Thus, neither the number of elderly persons nor the differentiation by age group among the elderly who utilize this programme is known.

provided below. These programmes are included as part of the response by the Ministry of the People and Social Development to the realization of the right to health of older persons.

- Necessitous Patients Programme/Medical Aid Programme: provides financial assistance to citizens who require life-saving treatment that is unavailable locally.
- Adult Cardiac Surgery Programme
- Cataract Eye Surgery: provided free of charge to senior citizens at public hospitals.
- Memory Clinic: offers a free service of screening the general population and elderly persons, in particular for memory loss, on the condition that they are referred by public health centres.

3. Long-term care

The State has directed more efforts toward building the capacities of secondary and tertiary, as opposed to primary, health care. Included in secondary and tertiary medical care is demand for long-term care which, as discussed Chapter 4, is expected to increase in the upcoming 20-plus years. The current state of long-term health-care facilities in Trinidad and Tobago was generally described as inadequate, both in terms of quantity and quality (Rouse and others, 2010). As a consequence, institutionalization of the elderly is quite uncommon but may become more necessary over time. In 2004, the incumbent Government administration conceptualized and approved a Continuum of Health and Social Support Services for Older Persons to provide a variety of services to elderly persons with health-care needs ranging from acute to severe. Among the initiatives discussed and implemented were various forms of long-term institutional care.

The Ministry of Health is planning to establish long-term care facilities for patients classified as 'Level 4' – having complex health-care needs – in their respective communities. The dual purpose of such facilities is to improve bed space at hospitals and thereby reduce overcrowding. The Ministry of Health is awaiting Cabinet approval for these facilities. In the meantime, there are a total of 130 homes for the aged in Trinidad and Tobago, 9 of which are State-managed,[16] while the bulk of available homes operate in the private sphere. The State-managed homes are primarily financed by the Ministry of Social Development, but residents fund the cost of residence via their pensions. Trinidad and Tobago is recognized as one of the English-speaking Caribbean countries with the highest rates of pension coverage, estimated at 82% of the elderly population aged 65 and over (Pettinato and Cassou, 2005). This is largely attributed to the combination of contributory and non-contributory pension programmes. However, the dependence on pensions to meet the cost of residence in any State-managed home for the aged marginalizes the segment of the population of elderly persons who do not receive pensions. Furthermore, it raises concerns even amongst those who are receiving pensions, regarding the adequacy of pensions to meet the residential cost of the homes for the aged. Elderly persons who are able to stay in privately-managed homes for the aged are likely to meet the financial costs through a combination of savings, pensions and family support. This brings to bear the critical need to assess and address the type and extent of long-term care needs among elderly persons who are either not receiving a pension or do not have available financial support from informal sources. It also calls attention to the need to understand their coping strategies and the impacts on their health. The quality of care provided to elderly persons who stay in public or private homes is supervised by the Division of Ageing. This division of the State has the responsibility of ensuring that these facilities operate in accordance with the

[16] Chaguanas Home for the Aged; Couva Home for the Aged; Toco Home for the Aged; San Fernando J.C. MacDonald Home for the Aged; La Brea Home for the Aged; Point Fortin Home for the Aged; Mararo Home for the Aged; Sangre Grande Home for the Aged.

stipulations put forth by the Homes for Older Persons Act of 2007 and the Homes for Older Persons Regulations of 2009.

The Ministry of Social Development recently conducted a needs assessment of the nine Government-subvented homes for the aged to determine the needs of elderly persons residing at these homes, and to assess the extent to which the homes are adhering to the regulations for care as outlined in the Homes for Older Persons Act, 2007. The assessment revealed that, among the 109 respondents from all the homes combined, the 'oldest-old' represented 50% of residents, with an even split of male and female elderly. The assessment revealed further that 63% of those sampled reported some illness, the most frequently cited being diabetes and hypertension, and that 48% had some disability, mainly frailty that limited mobility, while visual impairments followed closely in frequency. Doctors visits to the Sangre Grande and J.C. MacDonald homes were conducted every two months, but residents paid for these visits. At the other homes, residents visited their respective Community Health Centres of their own accord. Although residents generally expressed satisfaction with the homes, many expressed transportation problems in accessing their community health and banking centres. This need for transportation services by the elderly has been further endorsed through the Older Persons Information Centre at the Division of Ageing. Loneliness is also evident, due to reductions in or stoppages of visits from family members.

The elderly home-care programme, the Geriatric Adolescent Partnership Programme (GAPP), was developed in 1993 to complement institutionalized care. The programme was designed as an intergenerational exchange between the elderly and the youth populations, to sensitize youth to the ageing process through geriatric-care training. The beneficiaries of this programme are older adults, aged 65 and over. The Golden Age/Adolescents Partnership Programme in operation in Tobago is a similar programme providing long-term care for the elderly. According to the 2009 Social Sector Investment Programme report, between October 2007 and June 2008, beneficiaries of GAPP were, disproportionately, older women (1,535 women versus 100 men). The programme, apart from financial constraints and decreased budgeted allocations, faces the significant challenge of insufficient youth subscribers to effectively meet the demand for home care among senior citizens.

The establishment of senior citizens' centres is another initiative that is included in the Continuum of Health and Social Support Services for Older Persons. There are nine centres throughout the country that cater to persons aged 55 years and over who are in good health and can still engage in society. The most recent evaluation of the Senior Citizens Centres conducted in 2008 via telephone interviews showed that female elderly persons were more likely to participate. The centres also attract, or cater to, elderly persons within close proximity, but accessibility to some of the centres remains an issue. Other hindrances to accessibility include illness and caregiving to family members (including grandchildren).

4. Health promotion

Failing the availability of national health insurance and the adoption of private insurance, the bulk of the responsibility for the health of the population would be left to the State. Patently, the current and future reliability of the State to provide quality primary, secondary and tertiary health care hangs in the balance. One approach to reducing health costs to the individual, family and State would be to encourage healthy lifestyles. The Ministry of Health has proposed several legislative bills designed around the prevention, care and treatment of chronic, non-communicable diseases.

The proposed measures to address risk factors for chronic diseases include promoting healthy lifestyle and behavioural changes among school-aged children, building knowledge and health skills among the population, and empowering communities to achieve well-being. Targeting children from preschool through to secondary school on the subject of healthy lifestyles has the potential to curtail the future incidence of chronic, non-communicable diseases. To this end, the Ministry of Health is collaborating with the Ministry of Education and the Ministry of the People and Social Development to draft a national school health policy that would be part of a coordinated school health programme. According to the 2011 Social Sector Investment Programme, this national school health policy would be

encompassed within the broader framework of the Caribbean Charter on H ealth Promotion. O ne example of legislative measures aligned with prevention is the proposed preparation by the Ministry of Health of regulations for the 2009 Tobacco Control Act.

VI. Conclusions and recommendations

Within the English-speaking Caribbean, the age distribution of the population will undergo a profound transformation. This will, undoubtedly, have an impact on society, especially when it comes to health care and services for the growing cohort of the elderly in the population. The demographic and associated epidemiological transition will compound the challenges already being faced in addressing and meeting some of the internationally agreed development goals, such as lowering infant and maternal mortality and improving sanitation and access to water. Ensuring that the growing number of elderly has access to the necessary health care and services as well as support during old age should, therefore, be a priority for Caribbean Governments. Policy responses should be put in place ahead of time in order to support less problematic adaptation to the imminent demographic changes.

Population ageing will challenge existing health systems and place even greater strain on national resources as a result of the mounting demand for health and long-term care. Moreover, the care of the elderly continues to operate predominantly in the private sphere of the family (Rawlins, 1999). It is anticipated that there will be greater demand for informal caregiving for the elderly in countries with limited health protection, as health profiles changes in tandem with the demographic transition. The degree to which the family can continue to provide adequate informal care, financial or otherwise, to current and future cohorts of elders hangs in the balance, because of changes in family structures stemming from declining fertility and high rates of internal and international migration. To date, there is no clear indication of how Caribbean States will support family caregiving capacity in lieu of stable

systems of income protection across the life course.

Further investigation into the socio-economic circumstances of households supporting elderly members and of the ways in which these socio-economic circumstances differ by class, ethnicity and geography in countries is needed. Information is needed on:

- the proportion of households with elderly persons that also house working-age adults.
- the proportion of households with elderly persons that have working-age adults residing nearby, if not co-resident.
- the proportion of multigenerational households that house working-age adults with vulnerable employment and health circumstances.
- the proportion of households with elderly members dependent on remittances, either domestic or international.
- the way in which pensions, whether social or contributory, are utilized.

With regard to health care, information is needed on whether elderly persons use their pensions for their health care needs, for instance, for visits to private health providers for their personal ailments, or whether pensions are used for the health-care needs of younger household members. The latter response may take on increasing significance as the incidence of accelerated ageing is observed amongst younger cohorts who may co-reside with elderly parents, thus increasing the care burden. More importantly, the increasing incidence of chronic diseases amongst younger cohorts presents another threat to the availability of potential caregivers for future cohorts of elderly persons.

The answers to such questions will help the understanding of the coping strategies of households with elderly persons, and the coping strategies of individual elderly persons in vulnerable situations. These coping strategies can take the form of complementary, alternative health systems that may have less of a financial burden on the household and simultaneously improve, or maintain, individual health status.

Increased life expectancy also increases the likelihood of experiencing morbidity due to disability and chronic disease. The immediate implication is the growing need for health-care facilities, transportation, housing and a host of goods and services. The need for highly skilled health-care workers is more critical to the situation of elderly persons in the Caribbean, but emigration of such personnel has been increasing (Schmid, 2003) without sufficient replacement to meet demand. Caribbean nations, generally, are not well positioned to cope with the loss of skilled health-care workers. Their epidemiological profiles demonstrate an increasing prevalence among the elderly of chronic, degenerative diseases like diabetes in conjunction with disabilities, alongside an increasing incidence among younger age groups of cases of communicable diseases such as HIV and AIDS. Both types of health profile demand long-term, high-quality care.

The incidence of chronic disease and disability among the elderly population is highly correlated to poverty, which reflects the broader context of socio-economic inequality (Huenchuan, 2010). Chronic diseases in old age reflect the lifestyles people have carried at different stages of their life cycle, their access to health care, and the quality of health care delivered. This requires that Governments provide equitable access to quality health-care services from childhood to old age as preventative mechanisms. Caribbean nations are thus faced with the challenge of preparing for diverse elderly health and income profiles because of life course differentials in socio-economic status. The history of socio-economic inequality increases the likelihood that a greater proportion of the elderly population will experience ill-health and disability, and this can be burdensome to health- care resources. Health policies need to take stock of the new services that will be required based on changing health demands, while simultaneously improving gender-sensitive access to quality health care. This includes financial and geographical access throughout all stages of life.

It is incumbent on nation States to provide social protection for their citizens across the life course. Assessment of the inefficiencies and gaps in coverage within the pension and health-care

systems will help to address the extent to which older adults are dependent on informal support. This will provide current and future cohorts of the elderly with the opportunity to exercise autonomy, independence and gainful social participation over their life span. The central premise of the present paper, in line with previous reports on the state of social protection in Latin America and the Caribbean undertaken by ECLAC (2006, 2007), and the 2004 Caribbean Symposium on Population Ageing, is that population ageing is not exclusive to persons aged 65 and older, but rather, impacts every social group.

Thus, addressing the challenges to health security within Caribbean States across the life course of all citizens will require concerted, sustained effort from a wide array of stakeholders.

The following recommendations are presented:

a. Strengthen civil society groups that cater to the elderly

In both Jamaica and Trinidad and Tobago, it is critical to have non-governmental organizations collaborating with community-based organizations to lobby and advocate for health protection for the whole population, but particularly for the elderly subpopulation most vulnerable to poverty. This requires a strengthening of civil society interest-based groups that cater to the elderly, such as the Trinidad and Tobago Association for Retired Persons, to expand their services to the elderly beyond the provision of discounts at supermarkets, to becoming the voice of advocacy for the elderly.

b. Address health-care financing

This includes, but is not limited to: professional geriatric training; maintaining the attractiveness to younger cohorts of investing in geriatric care; provision of secondary and tertiary health-care services within individual countries to avoid, or limit, out-of-pocket expenditure; investment in continuous, population-based social research on the shifting ability of vulnerable households to support themselves across the individual and family life course; and the eventual determination of the best-fit health-care packages that should be provided by the state.

c. Increase the involvement of the media to sustain social awareness of health protection

Apart from non-governmental organizations, the media represent a pivotal social institution that can sustain the advocacy of health protection for citizens.

d. Expand social health insurance to all workers

The sustainability of social insurance systems is dependent on employee contributions to social insurance funds. The current design of social insurance systems in the Caribbean is tied to formal sector employment. The welfare of the citizenry is thus contingent on the structure of labour markets in the subregion. This means that Caribbean Governments are faced with the challenge of increasing job opportunities in the formal sector, safeguarding vulnerability to unemployment, or regularizing, and simultaneously limiting, the expansion of the informal sector. The main long- and short-term benefit of incorporating informal sector workers into social health insurance schemes is the reduction in government expenditure on social welfare if workers' contributions provide for their own health insurance.

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Annexes

Annex 1
Percentage distribution of total population aged 60 years and over in the Caribbean (2010 and 2050)

	Percentage of population aged 60 years and over	
Countries	2010	2050
Total Caribbean	11.8	25.4
Advanced		
Cuba	16.9	39.2
Barbados	16.4	33.7
Puerto Rico	18.0	31.5
Aruba	14.3	30.0
United States Virgin Islands	23.0	29.9
Moderate to Advanced		
Grenada	9.5	29.1
The Bahamas	10.4	28.1
Saint Lucia	9.4	27.7
Jamaica	10.6	25.9
Trinidad & Tobago	10.6	31.6
Saint Vincent and the Grenadines	9.6	24.0
Suriname	9.3	23.8
Moderate		
Guyana	6.4	22.4
The Dominican Republic	8.9	22.2
Incipient		
Belize	5.7	18.5
Haiti	6.5	15.3

Source: United Nations, *World Population Prospects: The 2010 Revision*

Annex 2
Total fertility rates (children per woman): Subregional Caribbean averages and ECLAC Member States, estimates and projections: 1950 to 2050

	1950-1955	1960-1955	1970-1975	1980-1985	1990-1995	2000-2005	2005-2010	2020-2025	2045-2050
Caribbean (1): Regional average	5.27	5.48	4.37	3.41	2.84	2.49	2.36	1.07	1.83
ECLAC- Caribbean Member States (2)									
The Bahamas	4.05	4.50	3.54	3.05	2.64	1.87	1.91	1.82	1.81
Barbados	4.42	4.27	2.72	1.92	1.73	1.50	1.53	1.66	1.84
Belize	6.65	6.45	6.25	5.40	4.35	3.35	2.94	2.31	1.84
Cuba	4.15	4.68	3.60	1.85	1.65	1.63	1.5	1.47	1.74
Dominican Republic (the)	7.60	7.35	5.68	4.15	3.31	2.83	2.67	2.20	1.79
Grenada	5.80	6.40	4.60	4.23	3.46	2.43	2.3	1.96	1.73
Guyana	6.68	6.15	4.90	3.26	2.55	2.43	2.33	1.97	1.79
Haiti	6.30	6.30	5.60	6.21	5.15	4.00	3.55	2.61	1.96
Jamaica	4.22	5.64	5.00	3.55	2.84	2.54	2.4	2.05	1.82
Saint Lucia	6.00	6.79	5.69	4.20	3.15	2.10	2.05	1.70	1.61
Saint Vincent and Grenadines	7.33	7.02	5.54	3.64	2.85	2.24	2.13	1.78	1.66
Suriname	6.56	6.56	5.29	3.70	2.60	2.60	2.42	2.03	1.80
Trinidad & Tobago	5.30	4.99	3.45	3.22	2.10	1.61	1.64	1.63	1.75
Associate member States (3)									
Aruba	5.65	4.40	2.65	2.36	2.17	1.82	1.74	1.64	1.80
Puerto Rico	4.97	4.37	2.99	2.46	2.18	1.84	1.83	1.66	1.72
United States Virgin Islands	5.57	5.50	4.98	3.70	3.09	2.15	2.05	1.78	1.70

Source: United Nations Department of Economic and Social Affairs, Population Division (2011), *World Population Prospects: The 2010 Revision*, CD-ROM Edition. Available at < esa.un.org/unpd/wpp/Excel-Data/fertility.htm> [4 July 2011].

Notes: (1) Includes Anguilla, Antigua and Barbuda, British Virgin Islands, Cayman Islands, Dominica, Montserrat, Saint Kitts and Nevis, and Turks and Caicos Islands (2) Member States of ECLAC 3) Associate member State

Annex 3
Life expectancy at birth in the Caribbean, both sexes: Caribbean average and ECLAC Member States, 1950 to 2050

	1950-1955	1960-1955	1970-1975	1980-1985	1990-1995	2000-2005	2005-2010	2020-2025	2045-2050
Caribbean (4)	52.0	58.3	62.9	65.5	67.8	70.2	71.6	74.5	78.1
ECLAC-Caribbean Member States (5)									
The Bahamas	59.8	64.2	66.5	68.3	69.4	72.6	74.8	78.3	81.1
Barbados	57.5	66.1	69.8	72.8	75.0	75.7	76.2	78.5	81.3
Belize	57.2	62.2	67.2	70.9	72.8	73.8	75.3	78.1	80.1
Cuba	59.1	65.1	70.8	74.0	74.6	76.9	78.5	80.7	83.1
The Dominican Republic	45.9	53.5	59.8	63.9	68.8	71.5	72.5	75.5	78.7
Grenada	62.6	63.6	64.6	65.5	70.7	74.3	75.3	77.7	80.6
Guyana	49.2	53.7	57.2	60.0	61.4	65.7	68.7	73.2	77.3
Haiti	37.5	43.5	48.0	52.0	56.0	58.9	61.0	65.3	71.6
Jamaica	58.5	65.6	68.9	71.0	70.4	70.9	72.2	74.8	78.0
Saint Lucia	54.7	59.2	65.0	70.2	71.3	72.2	73.9	76.4	79.8
Saint Vincent and Grenadines	51.2	56.5	61.6	66.8	69.8	70.6	71.6	74.1	77.3
Suriname	56.0	60.5	64.0	66.5	67.6	68.1	69.6	72.9	76.3
Trinidad & Tobago	58.3	64.5	65.6	67.7	69.1	68.3	69.4	72.6	76.2
Associate member States (6)									
Aruba	60.4	66.6	70.0	72.9	73.6	74.0	74.8	76.7	79.9
Puerto Rico	63.7	69.3	72.4	74	74.2	77.8	78.7	80.5	83.1
United States Virgin Islands	59.2	64.6	68.7	72.2	75.5	78.1	78.9	80.8	83.5

Source: United Nations *Population Prospects: The 2010 Revision*.

Annex 4
Life expectancy at birth by gender: Caribbean averages and ECLAC Member States, estimates 1950 to 2050

	1950-1955	1960-1955	1970-1975	1980-1985	1990-1995	2000-2005	2005-2010
Female life expectancy at birth							
Regional averages							
Caribbean (4)	54	60	65	68	70	73	74
ECLAC-Caribbean Member States (5)							
The Bahamas	61	67	70	72	73	75	78
Barbados	60	68	72	75	77	79	80
Belize	58	63	68	72	75	75	77
Cuba	61	67	72	76	76	79	81
The Dominican Republic	47	55	62	66	71	74	75
Grenada	65	66	67	67	72	76	77
Guyana	52	56	59	62	65	69	72
Haiti	39	45	49	53	57	60	62
Jamaica	60	67	71	73	73	74	75
Saint Kitts and Nevis	..	..	..	..	..	..	..
Saint Lucia	57	61	67	73	74	74	77
Saint Vincent and Grenadines	52	58	63	69	72	73	74
Suriname	58	62	66	70	71	72	73
Trinidad & Tobago	60	67	68	71	73	72	73
Associate member States (6)							
Aruba	62	68	73	75	76	76	77
Puerto Rico	66	72	76	77	79	82	83
United States Virgin Islands	61	67	72	76	80	81	82
Male life expectancy at birth							
Regional averages							
Caribbean (4)	51	57	61	64	66	68	69
ECLAC-Caribbean Member States (5)							
The Bahamas	58	61	63	65	66	70	72
Barbados	55	64	67	70	72	73	73
Belize	56	61	66	70	71	72	74
Cuba	57	64	69	72	73	75	77
The Dominican Republic	45	52	58	62	66	69	70
Grenada	60	61	62	63	69	73	74
Guyana	47	52	56	58	58	63	66
Haiti	36	42	47	51	55	58	60
Jamaica	57	64	67	69	68	68	70
Saint Lucia	52	57	62	67	69	71	71

(continues)

Annex 4 (continued)

	1950-1955	1960-1955	1970-1975	1980-1985	1990-1995	2000-2005	2005-2010
Saint Vincent and Grenadines	50	55	60	65	67	69	70
Suriname	54	59	62	64	64	65	66
Trinidad & Tobago	57	62	63	65	65	65	66
Associate member States (6)							
Aruba	59	65	68	71	71	72	72
Puerto Rico	62	66	69	71	70	74	75
United States Virgin Islands	58	62	66	69	72	75	76

Source: United Nations, *Population Prospects: The 2010 Revision*.

Note: .. data not available

Annex 5
Net migration rates (per 1000 population) for the Caribbean, subregional average and estimates for selected countries: Estimates and projections 1950 to 2050

	1950-1955	1960-1965	1970-1975	1980-1985	1990-1995	2000-2005	2010-2015	2020-2025	2030-2035	2040-2045	2045-2050
Caribbean	- 5	- 6	- 5	- 4	- 3	- 4	- 3	- 3	- 2	- 2	- 2
The Bahamas	- 0	23	1	0	0	4	2	2	2	1	1
Barbados	- 6	- 16	- 6	- 4	- 4	0	0	0	0	0	0
Belize	- 9	- 6	- 17	- 6	- 2	- 1	- 1	- 0	- 0	- 0	- 0
Grenada	- 18	- 21	- 25	0	- 9	- 10	- 9	- 9	- 9	- 10	- 10
Guyana	3	- 1	- 16	- 26	- 13	- 9	- 9	- 7	- 6	- 5	- 4
Jamaica	- 5	- 18	- 11	- 7	- 9	- 6	- 7	- 7	- 7	- 7	- 8
Saint Lucia	- 23	- 20	- 20	- 14	- 7	- 1	- 1	- 1	- 1	- 1	- 1
Saint Vincent and the Grenadines	- 14	- 21	- 17	- 14	- 15	- 9	- 9	- 5	- 2	0	0
Trinidad and Tobago	- 3	- 16	- 11	- 4	- 4	- 3	- 3	- 3	- 1	- 0	- 0

Source: Source: United Nations, *Population Prospects: The 2010 Revision*.

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Annex 6
Selected population ageing indicators: Caribbean subregional averages and ECLAC Member States (2010 and 2050)

	Median age		Old-age dependency ratio	
Countries	2010	2050	2010	2050
Caribbean (1)	29.6	41.1	13	31
ECLAC-Caribbean Member States				
The Bahamas	30.9	43.3	11	34
Barbados	37.5	47.9	18	46
Belize	21.8	35.9	8	20
Cuba	38.4	52	20	57
The Dominican Republic	25.1	38.2	12	26
Grenada	25	42.5	13	32
Guyana	23.8	42.1	8	27
Haiti	21.5	33.5	9	15
Jamaica	27	41.7	15	32
Saint Lucia	27.4	43.6	12	32
Saint Vincent and Grenadines	27.9	41.3	12	27
Suriname	27.6	40.6	11	27
Trinidad & Tobago	30.8	44.4	11	39
Associate member States (3)				
Aruba	38.3	45.8	15	39
Puerto Rico	34.4	46.1	22	41
United States Virgin Islands	38.8	44.9	25	39

Source: United Nations *World Population Prospects: The 2010 Revision*

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