HEALTH SYSTEMS PROFILE

ST. KITTS AND NEVIS

MONITORING AND ANALIZING HEALTH SYSTEMS CHANGE/REFORM

2008

Area of Health Systems and Services HSS-SP
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EXECUTIVE SUMMARY

St. Christopher and Nevis is an independent, small island developing state. Similar to its neighbors, it has experienced a demographic transition characterized by increased life expectancy and aging of the population. Concomitantly, there was a shift in the epidemiological profile from diseases of nutritional deficiency and poor sanitation to preponderance of chronic non communicable diseases fuelled by an aging population and modifiable lifestyle factors.

The population enjoys high literacy rates, universal primary education and good access to secondary and tertiary education. The vast majority of the population has access to piped water and in-home excreta disposal facilities.

The Ministry of Health is the national entity responsible for the organization and management of health services. This is accomplished through its tripartite structure comprising of a lead programme, Office of Policy Development and Information Management that makes health policy and two subsidiary divisions – Community Based Health Services and Institution Based Health Services that deliver personal and population based health services. The ministry’s work is governed by the principles of equity, universal access, high quality, sustainability, and attention to vulnerable groups. Programme implementation is guided by its National Strategic Health Plan (2008 – 2012) that identifies seven key priorities for intervention.

While there is no discrete health sector reform initiative, public sector reform has been driving both administrative and financial reform of the health sector. There was renewed emphasis on efficiency of processes and accountability for health outcomes. A key area of focus was improving the quality of the workforce as well as the health services.

The Ministry experimented with alternative means of financing health services through the limited application of user fees and outsourcing of services through public-private partnerships (e.g. CT scan services). Major challenges include ensuring universal access while sustaining health care financing; adequate supply and distribution of human resources; and reorienting service delivery to emphasize health promotion and prevention of diseases.
1. Context of the health system

1.1. Health situation analysis

1.1.1. Demographic analysis

Saint Christopher (St. Kitts) and Nevis is an independent twin island federation located in the north-eastern Caribbean. The islands are of volcanic origin and are separated by a two-mile channel at their closest point. It is also the smallest nation in the Americas both in size (104 square miles) and population.

According to the most recent census data available, the 2001 Population Census, there were 46,325 residents with 76% occupying the larger island, St. Kitts. There are marked disparities in the population distribution of the two islands. In St Kitts, 37% of the population resides in the capital while in Nevis only 16.6% lives in the capital city of Charlestown. In Nevis, 49% of the population occupies the rural parishes of St. George and St. John while in St. Kitts no single rural parish has 10% of the population. The population is young with 46% of the inhabitants under the age of 25 years. Nevis has a slightly older population with 12.7% over the age of 60 years compared to 9.4% in St Kitts.

Figure 1. St. Kitts and Nevis: Population structure, by age and sex, 2001

Source: Health Information Unit.
Over the 15 year period (1990 – 2005) under review, there was a slight increase in the population. The gender distribution remained equitable with women comprising about 50% of the general population. The population is aging as a result of declining fertility and birth rates coupled with a concomitant decline in death rates. (Table 1)

Females continue to enjoy a longer life expectancy at birth than males and the gap seems to be increasing. This could be the result of the relative underutilization of health services by males perpetuated by a male culture of poor health-seeking behavior that results in delayed presentation for diagnosis and appropriate intervention. A gender-specific project was designed to promote wellness as a concept among men as well as increase their access to health–related information and utilization of health services. The project’s execution is delayed pending the availability of funds.


<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Total population (thousands)a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St Kitts Nevis</td>
<td>33,984</td>
<td>34,298</td>
<td>35,797</td>
</tr>
<tr>
<td>Male C</td>
<td>15,681</td>
<td>N/A</td>
<td>17,550</td>
</tr>
<tr>
<td>Female C</td>
<td>16,143</td>
<td>17,667</td>
<td></td>
</tr>
<tr>
<td>Proportion of urban population *</td>
<td>35</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Proportion of pop. under age 15*</td>
<td>35.6</td>
<td>29.6</td>
<td></td>
</tr>
<tr>
<td>Proportion of pop. age 60 and over*</td>
<td>11.7</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td>Natural increase</td>
<td>491</td>
<td>419</td>
<td>378</td>
</tr>
<tr>
<td>Male</td>
<td>258</td>
<td>193</td>
<td>184</td>
</tr>
<tr>
<td>Female</td>
<td>232</td>
<td>226</td>
<td>193</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.6</td>
<td>2.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Crude birth rate x 1,000 inhabitants</td>
<td>22.55</td>
<td>20.58</td>
<td>16.79</td>
</tr>
<tr>
<td>Crude death rate</td>
<td>9.16</td>
<td>9.24</td>
<td>8.8</td>
</tr>
<tr>
<td>Life expectancy at birth:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>66.7</td>
<td>67.78</td>
<td>69.8</td>
</tr>
<tr>
<td>Female</td>
<td>70.85</td>
<td>71.6</td>
<td>74.2</td>
</tr>
<tr>
<td>Migratory balance</td>
<td>273</td>
<td>2764</td>
<td>-860</td>
</tr>
</tbody>
</table>

*Percentage living in capital, C- Census data, a-Mid year estimates
Source: St Kitts and Nevis Demography Digest 2004, St Kitts and Nevis Annual Digest of Statistics 2002 – 2005, Health Information Unit
1.1.2. Epidemiological analysis

The Federation of St. Kitts and Nevis experienced a shift in the epidemiological profile from diseases of nutritional deficiency and poor sanitation to a preponderance of chronic non-communicable diseases fuelled by modifiable lifestyle factors. During the period 2000 – 2005, life-style related chronic diseases, such as diabetes and hypertension, accounted for the majority of medical visits and hospital discharges. Both the Chronic Disease Survey (2000) and the Diet and Exercise Survey (CFNI, 2001) confirmed that substantial segments of the population were overweight and did not engage in regular physical activity. The latter study also showed that 53.6% of the population had at least one chronic disease.

The available data (Table 2) reveals steady improvement in nutritional indicators. Levels of moderate and severe nutritional deficiency in children under five continued to decrease reflecting improvements in their social conditions. Despite this, there were low rates of exclusive breastfeeding up to 120 days. This is the result of cultural myths as well as early weaning in preparation for the resumption of work after the period of maternity leave (91 days) has elapsed.

<table>
<thead>
<tr>
<th>Periods/Indicators</th>
<th>1995-1999</th>
<th>2000-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual prevalence of moderate and serious nutritional deficiency in children under 5 years of age</td>
<td>4.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Prevalence of exclusive breast-feeding up to 120 days of age (%)</td>
<td>N/A</td>
<td>5.0</td>
</tr>
<tr>
<td>Total number of confirmed cases of vaccine-preventable diseases</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Total number of Influenza Infections</td>
<td>115</td>
<td>217</td>
</tr>
<tr>
<td>Total number of confirmed dengue cases</td>
<td>81</td>
<td>150</td>
</tr>
<tr>
<td>Total number of cases of gastroenteritis in children under 5 years</td>
<td>1759</td>
<td>873</td>
</tr>
</tbody>
</table>

N/A: not available

The major causes of morbidity in children included gastroenteritis and acute respiratory tract infections. The number of vaccine-preventable diseases decreased largely due to near universal coverage of the national immunization program. The majority of cases reported were attributable to chickenpox because the preventive vaccine is not included in the immunization schedule. Vaccines against influenza and rotavirus are not offered due to prohibitive costs.
The program for vector surveillance and control achieved island-wide coverage in St. Kitts. Dengue is endemic due to the presence of the vector; however successful source reduction (Breteau Index less than 5) through public education and active surveillance drastically reduced the number of cases annually. The last outbreak was in 2001 when program activity was concentrated in the urban areas. There were a total of 29 cases in the period 2002 – 2004 and no cases in 2005.

In 2006, the leading causes of mortality mirrored morbidity trends in the population with diseases of the circulatory system accounting for the majority of deaths (137). All other causes (99) ranked second which includes diabetes mellitus while malignant neoplasms ranked third (73). All causes of death were coded according to WHO International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10).

1.1.3. Millennium Development Goals

The Millennium Development Goals (MDGs) are eight goals to be achieved by 2015 that respond to the world’s major developmental challenges. The Government of St. Kitts and Nevis is committed to the achievement of the MDGs. The Planning Division in the Ministry of Finance is charged with the responsibility of coordinating the tracking of indicators related to these goals. Stakeholder discussions occurred in 2005 and key sectors were assigned responsibility for collecting information related to specific indicators. In mid-2008, the relevant information was collated in standardized databases and the empirical evidence indicates that almost all of the health-related MDGs have been achieved. To date, a comprehensive strategy for the attainment of all targets has not been articulated and data about advances or accomplishment of MDG is not currently available.

1.2. Determinants of health

1.2.1. Political determinants

St. Kitts and Nevis is a member of the Organization of Eastern Caribbean States (OECS) and collaborates with the other eight member states in defense issues, international diplomacy, and in economic policies. It is also a member of the wider Caribbean Community (CARICOM) reflecting an interest in regional integration and cooperation in health.
The Federation of St. Kitts and Nevis is democratic with universal suffrage, a multiparty structure, and enjoys equality of access to political activity and participative decision-making. There is a federal government in St. Kitts and a local government in Nevis. Nevis exercises autonomy in most areas with the exception of foreign affairs, defense and some aspects of economic policy. The constitution makes provision for secession of Nevis however at the last referendum in 1998 the required two thirds majority population vote was not achieved.

Since the early 1990s, the Government of St. Kitts and Nevis was keenly aware of the need for public sector reform. In 2001, its commitment to the reform initiative was demonstrated by the establishment of a Public Sector Reform Secretariat in the Office of the Prime Minister. This unit is mandated to plan, develop and lead the process for implementation of the Civil Service Improvement Project. The Project addresses all aspects of civil service operations and uses strategic management as the key approach. The anticipated end result is a transformation of the public sector into a new organization characterized by improved efficiency, emphasis on service excellence, and human resource development and management.

Priority political problems include public sector debt, public sector inefficiency, poverty and crime and violence. These issues are often the subjects of debate on various political platforms including Cabinet sessions, public meetings, and political party publications. A number of strategies were devised to address these critical issues that have the potential to erode the development gains. Efforts were made to improve revenue collection and curtail spending as key strategies in the fiscal stabilization program; there was increased investment in social programmes as well as sports to increase the opportunities for young persons to engage in constructive extracurricular activities.

1.2.2. Economic determinants

The Gross Domestic Product (GDP) per capita increased throughout the period under review, with marked increase between the periods 1990–1994 and 1995–1999. A number of natural disasters occurred in the late 1990s that dampened economic growth and resulted in resources being diverted to the reconstruction of the damaged infrastructure. Despite this shift, a boost occurred in 2000 attributable to increased activity in the construction and manufacturing sectors. Following the destruction of the World Trade Centre in 2001, there was a negative impact on
tourism resulting in slowed growth of the economy. Since 2003, the buoyancy of the economy improved as a result of continued growth in construction and tourism sectors. Real economic growth was estimated at 2% compared with 0.8% and 2.3% in 2002 and 2001, respectively.\footnote{www.bb.undp.org (Barbados and the OECS).} While St. Kitts and Nevis is overwhelmingly exposed to the vagaries of globalization and natural disasters, growth is projected to continue as the Federation continues its transition from an economy based on exportation of sugar to one based on tourism, financial services, non-sugar agriculture and construction. The burgeoning foreign debt is also likely to pose a challenge that will further constrain public expenditure including that for health.

Total public expenditure during the period 2000 – 2005 was double the expenditure during the period 1990 – 1994 (Table 3). Health expenditure as a share of GDP also increased although not to the same extent. This is a reflection of the escalating costs of medications and supplies, increases in personal emoluments as well as investments in medical technology and infrastructure. The health sector has benefited from an injection of financial resources through a loan from the European Union to renovate the Joseph N. France General Hospital and another from the World Bank to support the scaling-up of prevention and care, treatment and support for persons living with HIV/AIDS.

According to a UNDP report, the total stock of public sector debt grew by an estimated 18.7% to US$1,797.9m (177.8% of GDP) at the end of 2003 from US$1,514.3m (157.4% of GDP) at the end of 2002. The external debt rose by 22.4% to US$851m and the domestic debt increased by an estimated 15.6% to US$946.9m at the end of 2003. The rapid growth of the debt over the last five years reflected mainly the weak financial performance of the public sector and the financing of a large capital program. However, despite larger debt service obligations, the Government has always serviced its debt on a timely basis and has maintained good relations with its creditors. Plans are underway to contain and minimize the accumulation of debt and to rationalize the debt portfolio with a view to reducing debt service obligations.\footnote{www.bb.undp.org (Barbados and the OECS).}

Data on private and out of pocket expenditure was not available.

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<tbody>
<tr>
<td>GDP per capita in US$, in constant prices relative to the base year</td>
<td>3,370.21</td>
<td>4,290.15</td>
<td>4,578.95</td>
</tr>
<tr>
<td>Public expenditure per capita</td>
<td>962.41</td>
<td>1,619.62</td>
<td>2,570.66</td>
</tr>
<tr>
<td>Economically Active Population (EAP):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAP 15-59 years of age</td>
<td>54.93</td>
<td>58.17</td>
<td>60.22</td>
</tr>
<tr>
<td>Total public expenditure, as a % of GDP</td>
<td>28.47</td>
<td>37.58</td>
<td>56.12</td>
</tr>
<tr>
<td>Public expenditure on health, as a % of GDP</td>
<td>3.63</td>
<td>4.71</td>
<td>5.37</td>
</tr>
<tr>
<td>Annual inflation rate</td>
<td>2.9</td>
<td>4.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Remittance in terms of % GDP</td>
<td>10.2</td>
<td>12.4</td>
<td>16.2</td>
</tr>
<tr>
<td>Foreign debt, as a % of GDP</td>
<td>31.26</td>
<td>54.58</td>
<td>122.27</td>
</tr>
<tr>
<td>Service of the foreign debt, as a % of GDP</td>
<td>3.01</td>
<td>6.55</td>
<td>18.79</td>
</tr>
</tbody>
</table>

Source: Statistical Department, Ministry of Sustainable Development.

**Poverty levels and employment conditions**

The Country Poverty Assessment (CPA) conducted in 1999-2000 revealed that 30.5%, or a little less than 1 in 3 individuals in St. Kitts were poor. This means that their monthly expenditure was less than the cost of meeting their minimal food and other basic requirements. In dollar terms, this amounts to an average monthly expenditure of EC$280.05 or EC$3,360.60 per annum.

Since the population is divided into 20 per cent groupings (quintiles), with quintile 1 being poorest, this means that all of quintile 1 and a half of quintile 2 fall below the poverty line. Poor households comprised 16% of the total number of households in the country. At the same time, 11%, or slightly more than 1 in 10 individuals in the country were found to be extremely poor or indigent. This means that their monthly expenditures were less than the cost of satisfying their minimal requirements for food –EC$177.93. These individuals comprised 4% of the total number of households of the island. The unemployment rate is high among women (9.1) whereas inexistent for males (0.0) in St. Kitts.

The characteristics of the poor were quite similar for each island with: (i) poverty being highest among individuals under the age of 25 years; (ii) a higher proportion of the female population than the male population living in poverty; and (iii) high participation rates of the poor in the labour force. The ‘working poor’ tended to engage in elementary, low-level occupations that
attracted low wages and required low levels of skills and educational achievement. The CPA identified lack of education and functional illiteracy as among the major causes of poverty.\(^3\)

The Ministry of Social and Community Development and Gender Affairs is the lead agency for poverty reduction. Programs targeted the most vulnerable groups identified in the assessment and attempted to improve their earning potential through increased opportunities for skills training as well as access to venture capital. There are plans to increase provisions for income support as part of an approach focused on improving human resource capacity as the foundation for sustainable human and economic development.

The information provided by the last CPA is dated and more current data are needed to inform poverty alleviation programs. With the closure of the sugar industry in July 2005, a significant segment of the population became vulnerable. This unprecedented change in levels of unemployment signalled the need to reassess levels of poverty. Another assessment was conducted in 2006 – 2007 but the results are not yet available.

1.2.3. Social determinants

The population of St. Kitts and Nevis enjoys high rates of literacy (97%). According to the 2001 Population Census, 25,779 persons reported their highest level of education as secondary school or higher. This represents 90% of the population aged 19 years and older. The existing legal provisions (Education Act 1975 amended in 2007) make it compulsory for children between the ages of 5 and 16 to attend school. Universal access to secondary schools for all children was achieved in 1972. The Clarence Fitzroy Bryant College of Further Education located in St. Kitts and Sixth Form College in Nevis provide in-state tertiary education. There was increased access to local and overseas tertiary education through the provision of scholarships and bursaries to qualifying individuals who have the aptitude and desire to pursue advanced courses. No information is available on domestic violence, child abuse, depressive states, or Manic-Depressive Disorders (MDD).

The majority of the population (98%) had access to piped water and 97% to excreta disposal services. Only 20% of the water is disinfected in St. Kitts in contrast to 90% in Nevis. There is a gap in the access to potable water in Nevis due to an inadequacy of supply versus demand,

\(^3\) [www.bb.undp.org](http://www.bb.undp.org) (Barbados and the OECS).
drinkable water comes from wells. Universal disinfection of the water supply was impeded by the absence of a central distribution system. In 2005, the Water Services Department received technical assistance from a number of developmental partners to assess the feasibility of universal disinfection of the water supply and a number of recommendations were made. Water disinfection is accorded high priority and is a component of the Water Supply Improvement Project.

During the past five years, St Kitts and Nevis continued to make steady progress despite worsening of its human developmental indices. In 2005, St. Kitts and Nevis ranked 54 according to the UNDP rating and this was consistently higher than any other OECS country. Collection of data for economical analysis has not been systematic for a long time and the collection of data on the economy of Nevis has only just started with the staffing of a Statistics Division in the Ministry of Finance in Nevis. Thus, statistical data on the performance of the economy of Nevis by itself do not exist.

1.2.4. Environmental determinants

The responsibility for environmental management is shared by several ministries including the Ministry of Health, Ministry of Sustainable Development and the Solid Waste Management Corporation. The Ministry of Health through its Environmental Health Department performs several functions including vector surveillance and control, monitors the quality of drinking water as well as waste water, premises inspection to ensure compliance with proper waste disposal and general sanitation. It also regulates the activities of the Solid Waste Management Corporation that has responsibility for collection, storage, transportation, disposal and treatment of solid and ship generated waste. The Department of Environment lies within the Ministry of Sustainable Development and is responsible for the protection and preservation of the natural environment including watersheds, ground water sources and coastal zones. Inter-sectoral collaboration is achieved partially through multi-sectoral representation on boards, such as the Development Control and Planning Board, which oversees new developments (residential and commercial). Integrated functioning is a challenge owing to the absence of an umbrella environmental management authority endowed with the appropriate infrastructure and resources.
All premises are visited regularly by environmental health officers in an effort to monitor compliance with hygiene and sanitation standards. Also, all persons who handle food for commercial sale or distribution must be certified. This ensures that they have been exposed to food safety training.

Several laws provide the legal framework for environmental management. Many of them are outdated and are in the process of revision to be more effective. The Public Health Act (1969) and the Litter (Abatement) Act (1989) provide the broad legal framework within which the Ministry of Health exercises its authority. Under the 1969 Public Health Act, there are provisions for surveillance related to air pollution, disposal of waste and excreta, and water pollution; the Act does not address the disposal of toxic and radioactive products. The Water Works and Water Courses Ordinance (1956) bestows responsibility on the Water Department for the control, management and supervision of all water courses, waterworks and the distribution of water as well as provides for surveillance of water supply systems.
2. Functions of the health system

2.1. Steering Role

The Ministry of Health is the national entity charged with the responsibility for the organization and management of health services and for formulating health policy. The public sector provides both population and personal health services through its subsidiary divisions. There are two parallel hierarchies within the Ministry namely medical/clinical and administrative. The Permanent Secretary is the Ministry’s Chief Accounting Officer and bears responsibility for the Ministry’s finance, budget and personnel administration. The Chief Medical Officer is the principal technical officer who advises the Minister and other Ministries on clinical matters. The role however goes beyond an advisory remit and includes responsibility for preparation and/or review of policies and plans, leading initiatives to improve quality and standards for clinical services and promoting and taking action to improve the population’s health.

2.1.1. Mapping of the Health Authority

There are two separate Ministries of Health; one on each island. Nevis maintains considerable autonomy and decision making but there is close collaboration and synergy in the areas of policy development and financing. Both ministries share a similar organizational and programmatic structure.

The Ministry of Health in St. Kitts is organized into three programs: the Office of Policy Development and Information Management; Community Based Health Services; and Institution Based Health Services as shown in Figure 2. The Office of Policy Development and Information Management is the lead program and the seat of the Honourable Minister, Permanent Secretary, Chief Medical Officer, Principal Nursing Officer and Health Planner.
Each program is further subdivided into sub-programs or activities. The Office of Policy Development and Information Management is divided into general administration and systems development; health information, planning and productivity enhancement. The Community Based Health Services Program is subdivided into administrative support and auxiliary services; environmental health services, family health services, and health promotion. The Institution Based Health Services Program is subdivided into patient and clinical services and administrative and auxiliary services.
2.1.2. Conduct/Lead

While there is no formal National Health Policy, the vision and mission of the ministry have been clearly articulated in the Ministry’s corporate plan (2006 – 2008) and annual budget submission. The Caribbean Cooperation in Health (CCH) Initiative phase II also informs priorities and the general policy direction of the Ministry. The Ministry’s values are reflected in its vision ‘People First, Quality Always’ and translated through its mission statement “to organize and develop its resources to ensure healthy population development by guaranteeing access to cost effective, optimal level of health care services which are appropriate, affordable, acceptable to the citizens of St Kitts and Nevis and are distributed solely according to need.”

The Ministry proposed a framework to develop its first National Health Plan in 2004 and work continued in 2005 to populate the plan through broad stakeholder consultation. The plan outlines the Ministry’s strategic direction over the period 2008 – 2012 and identifies key priority areas, objectives, indicators and expected results to be pursued.

Information sources on the health situation are easily identified within the National Health System. Reports are submitted on a regular basis from the various divisions and are consolidated by the Health Information Unit. The most comprehensive source of information is the Annual Digest of Statistics produced by the Statistical Department.

2.1.3. Regulation

The Public Health Act (1969) confers on the Minister responsible for health the duties, powers and functions to deal with all matters relating to the promotion and preservation of the health of the people in St. Kitts and Nevis. The Ministry of Health exercises its steering role through the provisions of this act as well as others such as the Medical Act (1938) and Institutions Based Health Services Management Bill (2001).

The Ministry of Health executes its functions through two main programmes: 1) Institution Based Health Services and 2) Community Based Health Services. Both programmes are managed by a director supported by administrative and clinical staff. While there is a clear demarcation of roles and responsibilities, an effort is made to ensure continuity of care as patients’ transition from primary to secondary care services.
Most of the enforcement of hygiene and sanitation regulations is through the Environmental Health Department. Environmental health officers monitor and report on compliance with sanitary standards. In many cases, the level of financial penalties for non-compliance is too low to serve as a disincentive to individuals.

Regulation of professional practice entails the registration and licensing of physicians, dentists, chiropractors, optometrists and nurses. The Medical Act grants authority to the Medical Board to confer and revoke licenses for selected health professionals. New legislation has been proposed to expand the coverage and frequency of regulation. It calls for, *inter alia*, the inclusion of traditional and complementary practitioners and for periodic revalidation of credentials. The 1956 Nurses Registration Act was replaced in 2006 by the Nurses and Midwives Act which makes provision for annual registration of nurses as well as mandates exposure to 30 hours of continuous medical education.

2.1.4. Development of the essential public health functions

The essential public health functions (EPHF) refers to the spectrum of competencies and actions that are required to reach the central objective of public health, improving the health of population. The measurement of the performance of the 11 EPHF in 2000 revealed that functions 11 (Reducing the impact of emergencies and disasters on health), 1 (Monitoring, evaluation and analysis of the health situation of the population) and 2 (Public health surveillance, research and control of risks and threats to public health) were the highest performing functions. The latter two areas have traditionally defined public health and therefore have been strengthened over the years. Much emphasis is placed on disaster preparedness in the wake of several hurricanes in the 1990s hence the reason for high scores in this area.

The lower performing functions were functions 10 (Research in Public Health), 9 (Ensuring the quality of population-based and personal health services) and 5 (Regulation and Enforcement). While there is still no formal public health research agenda, there has been significant capacity building of personnel. There have been several opportunities to collaborate with development partners such as PAHO/CAREC and Caribbean Food and Nutrition Institute (CFNI) in conducting research related to cervical cancer, HIV/AIDS, and nutrition in adolescents. There
has been an attempt to strengthen EPHF 5 and several pieces of legislation have been reviewed and updated including the Food Safety Act, Mental Health Act, and Pharmacy Act.

2.2. Financing and Assurance

2.2.1. Financing

The majority (over 92%) of financial resources for health are derived from the public treasury. Other sources of revenue include nominal user fees for selected outpatient services including pharmaceuticals, dental, radiology and ophthalmology services. A pro-rated system obtains payment of inpatient services to ensure that services are affordable. Persons who are unable to pay are not denied care. Primary health care services are free in the 17 health centres in the Federation.

There were increasing demands on the finite health budget attributable to continued advances in health care, increasing demand from an ageing population and rising patient expectations (Table 4). An ageing population portends a decline in the relative proportion of the working population further straining the available public finances. These stark realities have prompted policy makers to devise innovative strategies to ensure sustainable financing of the sector.

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public expenditure on health (USD per capita)</td>
<td>249</td>
<td>289</td>
<td>293</td>
<td>295</td>
<td>298</td>
<td>316</td>
</tr>
<tr>
<td>Public expenditure on health/Total public expenditure</td>
<td>10.4</td>
<td>10.4</td>
<td>10.9</td>
<td>9.7</td>
<td>11.4</td>
<td>9.6</td>
</tr>
<tr>
<td>Total expenditure on health, as a % of GDP</td>
<td>5.5</td>
<td>5.6</td>
<td>5.4</td>
<td>5.5</td>
<td>5.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Foreign debt in health/Total foreign debt</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: PAHO.

Scarce financial resources due also to other competing national priorities inevitably mean that health spending must be parsimonious to ensure that goals and targets are met. In 2005, of the resources received, two thirds were expended for Institution Based Health Services and one quarter for Community Based Health Services. Marked disparity in the distribution of funds continued in 2006 and 2007 however the gap seems to be narrowing with expenses related to Community Based Health Services accounting for one third of total recurrent health expenditure.
in 2007. This is a reflection of renewed emphasis on primary care as the vehicle for ensuring 'health for all'. It is noteworthy that 60% of recurrent expenditure is attributable to personal emoluments. The remaining 40% is allocated for programme implementation across seven national priority areas namely chronic non communicable diseases, family health, environmental health, mental health and substance abuse, HIV/AIDS and sexually transmitted diseases, human resource development and health systems development.

Since 2005, the ministry has utilized the National Health Accounts methodology to track funding for various projects. This has made it easier to demonstrate good governance and accountability for funds allocated to the health authority. On an annual basis, the Ministry makes representation to the Ministry of Finance to justify proposed increments in expenditure within the national budget.

The Ministry of Health has not experimented with a variety of methods to distribute funds among different insurance providers. There are currently no incentives for persons to purchase private insurance. The available data suggest that the poor, with complicated medical problems, may not qualify for medical insurance since insurers select healthier persons for coverage to limit the number and cost of medical claims. In the absence of subsidies to encourage companies to cover persons of above average risk, these individuals potentially face large expenditures in the event of catastrophic illnesses.

There are no objective means for resource allocation. Economic evaluations are not usually performed to guide selection and prioritization of interventions given the scarcity of resources. The notable exception to this is found in the National HIV/AIDS Program where cost-effectiveness studies provide a compelling rationale for increasing access to antiretroviral medications.

Prior to 2006, all medications dispensed at public pharmacies were free of charge. As costs associated with medical care continue to escalate, nominal user fees were introduced in an effort to promote cost sharing and reduce the burden on public financing. This measure is not expected to produce major savings since there are relatively large numbers of persons categorized as “vulnerable groups” who are fee exempted in order to promote access to services. Anecdotal evidence however suggests that the measure has had some impact on
consumer moral hazard (inappropriate use of the service because of the absence of charges). A more in-depth evaluation is needed to confirm these observations.

The Ministry of Health has experimented with public/private partnerships in the provision of health care services. An example is the availability of computer tomography (CT) at the Joseph N. France Hospital through a joint venture between the Government and the Perrot Group from Martinique.

An attempt was made to take advantage of opportunities to promote healthy lifestyle choices through policy levers that fall outside of the traditional purview of health policy makers. For instance, given the health impact of alcohol and tobacco, taxation was increased on importation and sale of these commodities in an effort to reduce consumption of these commodities.

The health sector has successfully attracted external financial resources to support a number of projects. The World Bank and the Global Fund for Tuberculosis, AIDS and Malaria (GFTAM) currently support local HIV/AIDS projects. The European Union (EU), World band and Caribbean Development Bank have funded the infrastructural improvements at the Joseph N France General Hospital as well as a Water Supply Improvement Project. The Republic of China on Taiwan provided funding for medical equipment and vehicles.

2.2.2. Assurance

There is no national health insurance scheme that covers the population. Vulnerable populations such as children (defined as persons less than 18 years), persons over the age of 62 years, prisoners, and the indigent are exempt from all charges and user fees. All public servants benefit from a non-contributory insurance scheme that covers a basic package of services including outpatient visits, prescriptions, hospitalization, selected surgical procedures, laboratory and radiological investigations. Several of the larger private sector companies also provide medical insurance coverage for their employees and their families.

All employed persons are mandated to contribute to the Social Security Fund in exchange for sickness and retirement benefits that are commensurate with the level of contribution. There was concerted effort to increase enrolment of persons working in the informal sector.
Legislation regulates the activity and performance of private health insurance providers as well as membership in peer professional organizations such as LOMA and LIMRA.\textsuperscript{4} The Ministry of Health, through the Financial Services Department, monitors the financial solvency of private insurance providers.

### 2.3. Service Provision

#### 2.3.1. Supply and demand for health services

Primary health care in the public sector is delivered through a network of eleven health centers in St Kitts and six in Nevis. Facilities are strategically located throughout the two islands such that each household is within three miles of a clinic. A variety of services including maternal and child health, chronic disease management, and general medical services are offered by a cadre of qualified and professional staff. These services are free of charge at the point of delivery.

The country’s main referral centers are the 150-bed Joseph N. France General Hospital in St Kitts and the 50-bed Alexandra Hospital in Nevis. There are two district hospitals in St Kitts; Mary Charles and Pogson that offer basic inpatient services. At this writing, the Pogson facility is being renovated. Given the low occupancy rate at Joseph N. France Hospital and concerns about efficiency, plans are underway to reorient service delivery so that it functions as a multidisciplinary centre with limited in-patient capacity. It will offer a range of primary care services and serve as a facility for stabilization for urgent medical condition. There are no private hospitals.

Within the past five years, there was a proliferation of senior citizens homes reflecting increased demand from an aging population and reluctance and/or inability of families to care for their elderly members. The Cardin Home and the Saddler’s Senior Citizen’s Home in St. Kitts and Flamboyant Senior Citizens Home in Nevis are operated and managed through the public sector. The latter facility employs a fee-for-service model. The Grange Nursing Home and Health Care Facility, Brimstone View Nursing Home and the St Georges Senior Citizens Home are privately-run senior citizen facilities.

\textsuperscript{4} LOMA and LIMRA are not acronyms, but the actual name of the professional organizations
2.3.2. Human Resources Development

Human Resources Training

A number of entities are responsible for the training of health professionals. The majority of local physicians are graduates of the University of the West Indies and U.S. Medical schools. The number of graduates trained in Cuban Medical Schools has increased steadily since 2002. A few nationals were trained at the offshore medical schools in St. Kitts that caters primarily to international students.

Since 1995, the training of nurses locally is done through the Health Sciences Division at the Clarence Fitzroy Brant College where there is also a training program for nursing assistants and nursing attendants. For the first time in 2005, a number of scholarships were awarded to persons to pursue training in nursing in Cuba. The Robert Ross International School of Nursing commenced operation in St Kitts in 2004. It caters solely to international students who spend the first two semesters on the island and subsequently, complete the undergraduate program in U.S-based hospitals.

Health sector personnel received many opportunities to participate in regional and local training workshops in an effort to build capacity and increase competencies in various areas. An In-service Education Unit was established at the Joseph N. France General Hospital in 2000 with the responsibility for coordinating the in-service training of nursing professionals. Annually, a training plan is developed to addresses the training needs of nursing and allied health professionals. A culture of continued medical education (CME) is slowly being inculcated in the medical field and weekly CME sessions are held for various categories of health professionals.

Supply and distribution of human resources

In 2004, the estimation of doctors per 10,000 population was 11.8. There was a steady increase in the total number of physicians from 39 in 1994, to 46 in 1999 and 68 in 2005. This is largely due to the availability of scholarships to pursue training in medicine in Cuba. The market is dominated by generalists and there is still a shortage of specialists in some areas such as ophthalmology, orthopedics, pathology, otolaryngology and general surgery. Visiting specialists compliment the local cadre of physicians.
Over the period under review, there was a steady decline in the number of registered nurses. In 1991, there were 63.4 nurses per 10,000 and it decreased to 49.3 in 1997, with a further decrease to 37.9 in 2005. The excessive migration of nurses to developed countries coupled with the aging/retirement of nurses overwhelms local training capacity. The relative shortage is compounded by an inability to attract persons who are interested in a career in nursing. In responding to these challenges and to ensure effective and responsive service delivery, there was an increase in the number and use of nursing auxiliaries. This allowed the registered nurse to concentrate on complex and specialized tasks and facilitated task-delegation to this category of worker.

**Governance and Conflict in the Health Sector**

The Labor Department is the government entity charged with the responsibility of safeguarding the employment rights of workers. It provides an interpretation of the labor laws with respect to employee benefits as well as mediates in employee-employer conflicts, when requested. During the period under review, a post was created for an ombudsman who will investigate claims of impropriety brought against public authorities.

**2.3.3. Medicines and other health products**

There is pooled procurement of drugs and some medical supplies through the OECS Pharmaceutical Procurement Services (PPS) in St Lucia. This bulk purchasing arrangement allows countries to acquire medication and other medical supplies at reduced unit cost to the public sector. Vaccines are also procured collectively through the PAHO Revolving Fund. At country level, drugs are distributed to the various public sector pharmacies from the Central Drug Purchasing Unit based on periodic requisitions.

There is no essential medicines observatory neither is there a national essential medicines policy. Providers are guided by the list of medicines included in the OECS Formulary. It is revised every three years through consultation with the various countries.
The existing legislation restricts the dispensation of medicines to pharmacists. There are four pharmacies in the private sector that dispense a wide variety of over-the-counter and prescription medications.

2.3.4. Equipment and technology

The Joseph N. France General Hospital on St. Kitts (156 beds total) is the major trauma facility. There are physicians and specialized surgeons on staff. Accidents and emergencies are dealt with immediately and minor cases are seen in order of severity. The hospital has an x-ray machine, blood bank and diagnostic laboratory. Patients requiring hemodialysis, CT scans, or a hyperbaric chamber have to be taken off island. There is no burn center. Ambulance crew/Emergency Medical Technicians (EMT) are allowed to perform CPR and start IV lines.

The Alexandra Hospital in Nevis is the major medical facility with 52 beds. The hospital has an x-ray machine and CT scan but no dialysis facilities or blood bank. The closest hyperbaric chamber is on St. Eustatius. The diagnostic laboratory has a limited capacity. There is no burn center. Ambulance crews are allowed to perform IV, general stabilization, and advanced first aid functions. Emergencies are dealt with immediately. This hospital can facilitate minor to moderate surgeries. Most surgeries are done on the island with the exception of open-heart, major orthopedics and brain surgery; these are referred to Trinidad, Puerto Rico and Miami. There are 9 doctors and three surgeons on staff.

The supply of diagnostic technological resources increased in recent years. Most of the proliferation occurred in the private sector stimulated by public expectations and client demand for ready access to these services. There are three ultrasound machines within the private sector (the majority within offices of obstetricians) that complement the two machines in the public sector. There is one private clinical laboratory that performs basic hematological and chemistry studies. The more specialized studies are outsourced to its overseas affiliated laboratories. There are two blood banks, one on each island.

The maintenance of diagnostic equipment within the public sector was problematic. Previously maintenance staff lacked the capacity to trouble shoot major problems and infrequently services were suspended while awaiting a technician from overseas. Efforts were made to develop a preventative maintenance program for the medical equipment in an effort to optimize their
functioning, avert disruptions in service, and reduce the cost of maintenance. A biomedical engineer was added to the cadre of staff in the health sector.

2.3.5. Quality Assurance

There is a draft Operations Manual (2006) for public health centers that defines components of core services such as antenatal care, child health and chronic disease management. There are also a number of regional guidelines that were adapted such as those for diabetes care, hypertension, and management of cervical cancer.

Access to sound health information to frame evidence-based policies, monitor progress, and assess dimension of quality was a challenge. In 2000, the Ministry appointed a quality assurance officer to demonstrate its commitment to quality assurance. This quality orientation supports efforts to assess the quality of services compared with prescribed standards. Clinical guidelines will be developed and implemented for the treatment of such diseases as HIV/AIDS and diabetes mellitus.

The Joseph N. France General Hospital is currently performing a self study as part of the process for accreditation by Accreditation Canada (formerly The Canadian Council on Health Services Accreditation).

Further improvements in quality depend on improved systems to record and track data. Paper medical records, prescriptions and lab reports do not currently support accuracy, easy access to, and sharing of information. Initiatives are underway to improve the health information systems with the goal of achieving real time availability and transfer (robust and adaptable electronic platforms) of demographic, needs, utilization, impact, and other information among key health providers while safeguarding the privacy and confidentiality of the information.

Historically, systematic evaluation of programmes was not part of the organizational culture. However, the past five years has seen concerted attempts to introduce monitoring and evaluation systems for assessing the performance of health organizations. This has been prompted by trends in public policy that have placed increasing emphasis on clinical and fiscal accountability for quantity and quality of service delivery. Each program produces an annual report based on a set of agreed indicators largely focused on outcomes.
Despite this progress, performance evaluation is still in its infancy and suffers from a number of limitations. There is no link or consensus on the appropriate responses to either good or poor performance. If performance is substandard, should funding be reduced and if so who would be helped or harmed? There is no universal, standardized electronic health record. This deficiency has been recognized and the Ministry is incrementally moving towards optimization of its health information systems.

Limited success was achieved in efforts to encourage practitioners to use standardized protocols for management of selected disease conditions (e.g. HIV/AIDS, diabetes mellitus, hypertension, asthma and conventional sexually transmitted diseases). Despite these norms and guidelines, there is variance in provider behavior particularly among private sector practitioners.

The greatest challenge ahead lies in making performance measurement count at the national level in relation to management audits and funding. Financial allocations are now aligned to specific programs as well as across operational activities (e.g. supplies, maintenance, and administrative support).
3 MONITORING HEALTH SYSTEMS CHANGE/REFORM

3.1. Impact on “Health Systems Functions”

There was no move towards the establishment of regional authorities or similar devolved structures at the local or community level. To date, considerable skepticism exists as to whether this approach will result in an increased patient focus or control cost. The subtle changes made in the period under review related to either financial or administrative reform.

While the Ministry still maintains its centralized hierarchical bureaucracy, efforts were made to divest both authority and accountability for facilities management to its subsidiary divisions. These agencies are empowered to manage daily administrative/operational issues (e.g. personnel, maintenance, supplies). However, expenditure thresholds remain relatively low resulting in micromanagement of the financial resources allocated to these agencies.

Stronger linkages were created between the Ministry of Health and other ministries to integrate policies and programmes related to health and welfare. One example is the integration of training for health care professionals. The Health Science Division of the Clarence Fitzroy Bryant College (CFBC) is now responsible for the training of nurses. Previously, the training programme was located at the Joseph N. France General Hospital and was isolated from other educational institutions. Students benefit from the experience of a wide array of teaching professionals and easy access to library and internet services while maintaining links to the hospital/health centres for their practical training.

Another example of integration of programming is the collaboration of the Environmental Health Department with the Multipurpose Laboratory. Equipment at the laboratory is used for testing of water and food samples by the environmental health officers under the general supervision of lab staff. The capacity to perform testing and certify wholesomeness is a key public health function that is satisfied through the mandate of the laboratory. This obviates the need for separate laboratory facilities and provides the opportunity to share operating costs.

The health sector reform framework provided impetus for restructuring hospital services with a focus on eliminating excess capacity and improving the efficiency of resource use. While the
policy direction for future health reforms is not explicit, it is evident that the competing goals of ensuring access, containing costs and preserving quality are key drivers of change.

One of the major drivers of health sector reform was the Public Sector Reform (PSR) Initiative. The popular mantra of PSR is that we must do better with the resources that we have. The expectation is that government agencies (including the Ministry of Health) will operate according to the same cost minimizing paradigms that characterize private sector agencies while maintaining high quality services.

3.2. Impact on “Guiding Principles of Health Sector Reforms”

3.2.1. Equity

Equity in the local context is defined as access to services based on need. This is a principle and a mandate funded by the taxpayer. There are no barriers – gender, age, religion, income, national orientation, sexual orientation, etc.

Coverage

It is generally accepted that government is responsible for ensuring access to appropriate and timely health care to all citizens and residents. In recent years, it became evident that this commitment does not imply that government should bear sole responsibility for the financing and delivery of all health care services. Opportunities for private involvement in both financing and delivery of health care were explored. To this end, the current computerized tomography (CT) scanning and dialysis services became available through public/private partnerships.

Persons requiring tertiary-level care, such as e.g. chemotherapy and radiotherapy, are referred overseas often at considerably cost to the individual and public purse. The idea of shared services was discussed on a subregional level but a discrete initiative did not materialize. The government continues to explore options to secure affordable and convenient, high-quality tertiary care services for the population.
Distribution of resources

With the changing epidemiological profile characterized by increasing prevalence of chronic non communicable diseases, the ministry has been forced to evaluate its current health care model and place greater emphasis on health promotion. A Health Promotion Unit was created in 2000 to coordinate programs related to empowerment and education of the general public. Given the fiscal constraints and sizeable share of hospital expenditures, the challenge is how to reallocate resources from hospital to primary care and health promotion. This requires definition of the role of hospitals in the context of a financing system that gives primacy to wellness as opposed to sickness. It also requires a willingness to send the right signals to patients and providers that encourage appropriate uptake of wellness services and de-emphasizes curative services.

The trend towards the statutorization of public facilities/services (e.g. Solid Waste Management Corporation) was driven by the need to institute user charges and the belief that separation of roles between the state and service providers would encourage efficiency. Tipping fees at the landfill and nominal fees for collection and disposal of domestic solid waste were introduced in 2002.

Access

The Ministry has an open access policy that guarantees citizens and residents the right to access health services according to need regardless of their ability to pay. In 2004, a Patient Satisfaction Survey was conducted among patients utilizing public health centers in St. Kitts. The findings reported high levels of satisfaction with services. While the majority of visits had been scheduled, clients reported being able to get an appointment at a time convenient to their circumstances.

According to the Country Poverty Assessment (1999 – 2000), the poor receive health services from health centers to a greater degree (42.4%) and report lower levels (6.4%) of ill health than the rest of the population. This suggests that vulnerable persons, such as the poor, face few barriers to access needed health services.
3.2.2. Effectiveness

Infant and maternal mortality

The infant mortality rate is a sensitive indicator of the level of unmet health needs and unfavorable environmental factors. Infant mortality rates were highest during the period 1995-1999, with marked improvement occurring during 2000-2005. Table 5 shows the trend in neonatal, post neonatal, infant and combined under five mortality rates. It can be seen that the neonatal mortality rate has contributed significantly to the infant mortality rate. The majority of deaths in the neonatal period was concentrated in the first week of life and was largely attributable to factors such as prematurity and congenital defects. Throughout the period, post neonatal and post infant deaths remained relatively low reflecting the improvements in the control of infectious diseases and better nutrition.


<table>
<thead>
<tr>
<th>Periods</th>
<th>Neonatal (0 to 28 days)</th>
<th>Post neonatal (28 days to 1 year)</th>
<th>Infant (0 to 1 year)</th>
<th>Post-Infant (1 to 4 years)</th>
<th>Total (under 5 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-1994</td>
<td>17.37</td>
<td>N/A</td>
<td>21.52</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1995-1999</td>
<td>18.15</td>
<td>3.84</td>
<td>22.50</td>
<td>4.27</td>
<td>27.20</td>
</tr>
<tr>
<td>2000-2005</td>
<td>14.4</td>
<td>1.98</td>
<td>16.38</td>
<td>3.89</td>
<td>20.23</td>
</tr>
</tbody>
</table>


The number of maternal deaths declined with 5, 3, 2 deaths occurring during the periods 1990-1994, 1995-1999, and 2000-2005 respectively. This is a reflection of improved access to essential obstetric care for all pregnant women. Ninety-nine percent of women currently deliver in hospitals under the supervision of skilled health attendants and have access to life saving interventions for any complications arising during labor and delivery.

Mortality due to malignant neoplasms

Diagnostic services for both breast and cervical cancer are available in both the public and private sector. While mortality from breast cancer does not rank among the five leading causes of death, the incidence has been increasing. Since 2000 to the present, there have been 152 cases of breast cancer diagnosed in the Federation. During the period 2002-2005, of 704 female deaths, 22 (3.1%) were due to breast cancer and 10 (1.4%) to cervical cancer. The incidence of breast cancer is likely to continue to increase as a result of increased awareness.
and uptake of screening but mortality is expected to decrease due to early diagnosis and treatment.

**Incidence of tuberculosis, HIV/AIDS and malaria**

The number of incident cases of tuberculosis peaked during the period 1995-1999 with a total of 24 cases (Table 6). Ten of these cases occurred in 1997 and case investigation revealed that alcoholism, coupled with poor nutrition, was a significant predisposing factor among cases. A coordinator for tuberculosis-related activities was appointed and assigned the responsibility for surveillance and follow-up of cases. Directly Observed Therapy (DOTS) was instituted for cases to improve compliance. Mortality from tuberculosis was low as a result of good access to diagnostic and treatment services.


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual number of confirmed malaria cases</td>
<td>N/A</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total number of incident cases of TB</td>
<td>N/A</td>
<td>24</td>
<td>5</td>
</tr>
<tr>
<td>Total number of reported HIV positive cases</td>
<td>55</td>
<td>103</td>
<td>79</td>
</tr>
<tr>
<td>Ratio of HIV/AIDS cases (man/woman)</td>
<td>2:1</td>
<td>1.3:1</td>
<td>1:1.1</td>
</tr>
</tbody>
</table>


The number of reported HIV-positive cases fluctuated throughout the period under review. (Figure 3) There was a noticeable peak in the period 1996–1997 because some individuals were tested multiple times at different sites. To alleviate this problem, a coding system for persons who are HIV-positive was introduced in 1998. The system generates a unique code for each client and since then the reported number of HIV-positive persons has declined. Since 2000, there has been a feminization of the epidemic as evidenced by a reversal in ratio of males to females infected. Women have emerged as a vulnerable group because of gender norms that relegate them to subordinate positions in matters related to sex.
There was little variation in AIDS deaths during the periods 1995-1999 and 2000-2005 when there were 23 and 24 deaths respectively. Access to antiretroviral drugs has improved and since 2003, these drugs are provided free of charge in the public sector for those who meet the established clinical criteria. It is anticipated that mortality from AIDS will decline due to increased access to voluntary counseling and testing (VCT) resulting in early diagnosis and intervention.

The National Strategic Plan for the National Expanded Response to HIV/AIDS (2001 – 2005) emphasizes care and treatment for persons living with HIV/AIDS (PLWHA) as well as scaling up VCT as critical strategies for comprehensively managing the HIV/AIDS epidemic. Through a World Bank Loan in 2003, the national HIV/AIDS program pursued aggressively these strategies while building capacity in other sectors to realize a truly multisectoral response to one of the most formidable challenges to human and economic development.

During the period 1995 – 2005, there were six imported cases of malaria. In 2005, the Breteau Index was 4, below the threshold for vector borne disease outbreaks.
3.2.3. Sustainability

Sustainability of the health care system both from a social and financial perspective are key concerns of the Ministry of Health. Concerted efforts were made to understand and examine those determinants that can affect health care expenditures such as developments in medical technology through their impact on medical practice; patterns in underlying demand and utilization of care; provider efficiency; community-based versus institutional care; and annual population growth.

If the gains realized in the performance of the health system are to be sustained, the available health resources must be appropriately and efficiently used to achieve social goals. The government continued to intensify its efforts to improve efficiency and equity in financing and delivery of health care. The Government is contemplating the introduction of National Health Insurance as a means to further ensure universal coverage and financial sustainability in health care expenditure. Emphasis on cost-sharing through increasing user fees is not seen as a feasible strategy because of large exempt categories, fear that patients’ cost sharing will decrease appropriate as well as inappropriate use of public sector health care services and a lack of political will. Attempts to address other inefficiencies, such as overcapacity in the health sector and heavy reliance on inpatient care, continue to be a challenge.

Resources coming from international aid and technical cooperation agencies are variable in flows and the government has little capacity to influence their appropriation system.

3.2.4. Social Participation

The Ministry is cognizant of the multiple determinants of health and strives for broad stakeholder involvement in planning and implementation of health activities. The strategic planning process that informed the development of both the National Health Plan (2008 – 2012) and the National Strategic Plan for HIV/AIDS (2009 – 2013) employed broad stakeholder consultation to ensure ownership and buy-in for the plans’ implementation. Additionally strategic alliances have been built with the corporate community. The National AIDS Secretariat received sponsorship from the major local telecommunications giant for its National VCT Days. The ‘Bright Smile, Bright Future’ dental health program and the Johnson and Johnson School Nurse Interventions for children are executed in partnership with RAMS Ltd, a local retailer and store company.
3.3 Impact on the “Health System”

The reforms have only been instituted within the past five years hence it is difficult to attribute any improvements or deterioration in specific mortality/morbidity indicators to administrative or financial changes.

3.4. Analysis of Actors

The table below summarizes the main actors supporting the health sector and key contributions.

**Table 7: Key actors in the health sector**

<table>
<thead>
<tr>
<th>Name of actor</th>
<th>Role/function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>International Cooperation Agencies and Organizations</strong></td>
<td></td>
</tr>
<tr>
<td>PAHO</td>
<td>Training, Financial resources, Programme development and evaluation</td>
</tr>
<tr>
<td>CAREC</td>
<td>Epidemiological surveillance, Training, Research</td>
</tr>
<tr>
<td>CFNI</td>
<td>Training, Research, Programme development and evaluation</td>
</tr>
<tr>
<td>CHRC</td>
<td>Training, Research, Programme evaluation</td>
</tr>
<tr>
<td>OECS HAPU</td>
<td>Financial resources for HIV programme</td>
</tr>
<tr>
<td>CEHI</td>
<td>Performs specialized tests, Consultancy</td>
</tr>
<tr>
<td>World Bank</td>
<td>Financial resources, Consultancy</td>
</tr>
<tr>
<td>DFID</td>
<td>Financial Resources to support HIV Programme</td>
</tr>
<tr>
<td>European Union</td>
<td>Financial resources</td>
</tr>
<tr>
<td>CARICOM</td>
<td>Policy development, legislative reform, financial resources</td>
</tr>
<tr>
<td><strong>Civil Society</strong></td>
<td></td>
</tr>
<tr>
<td>Rotary Club</td>
<td>Advocacy for persons living with diabetes, financial resources</td>
</tr>
<tr>
<td>Red Cross Society</td>
<td>HIV Peer Education</td>
</tr>
<tr>
<td>Caines Foundation</td>
<td>Donation of equipment</td>
</tr>
<tr>
<td><strong>Private Sector</strong></td>
<td></td>
</tr>
<tr>
<td>RAMS</td>
<td>Sponsors dental and reproductive health School Programme, participates in outreach screening for diabetes mellitus</td>
</tr>
<tr>
<td>Insurance companies</td>
<td>Financial resources</td>
</tr>
<tr>
<td>Cable and Wireless</td>
<td>Promotional items</td>
</tr>
<tr>
<td>Admiral Enterprises</td>
<td>Disposal of solid waste, rental of portal toilets</td>
</tr>
<tr>
<td><strong>Public Sector (Quasi)</strong></td>
<td></td>
</tr>
<tr>
<td>Social Security</td>
<td>Financial resources, workplace screening for selected chronic non-communicable diseases</td>
</tr>
<tr>
<td>Solid Waste Management Corporation</td>
<td>Management and disposal of solid waste</td>
</tr>
<tr>
<td><strong>Health related Organized Civil Society</strong></td>
<td></td>
</tr>
<tr>
<td>St Kitts Diabetes Association</td>
<td>Advocacy for persons living with diabetes, coordinates World Diabetes Day activities</td>
</tr>
<tr>
<td>Mental Health Association</td>
<td>Advocacy for persons with mental health disorders, financial resources</td>
</tr>
<tr>
<td>Reach for Recovery Breast Cancer Support Group</td>
<td>Advocacy for persons living with breast cancer, mobilize financial resources to assist members to obtain treatment, emotional support of its members</td>
</tr>
<tr>
<td>FACTTTS (Facilitating Access to Confidential Testing and Treatment Services)</td>
<td>Advocacy for PLWHA, psychological and financial support for members</td>
</tr>
<tr>
<td>Republic of China on Taiwan</td>
<td>Financial resources, human resources (medical mission), training</td>
</tr>
<tr>
<td>Australian High Commission</td>
<td>Financial resources</td>
</tr>
<tr>
<td>Government of Cuba</td>
<td>Training, human resources (provision of specialists and medical missions)</td>
</tr>
</tbody>
</table>
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6. St Christopher and Nevis Estimates for the year 2008
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15. Barbados and the OECS: Available at www.bb.undp.org
List of institutions that have participated in the elaboration of the profile

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- Ministry of Social Development and Gender Affairs
- Ministry of Sustainable Development
- Social Security

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