



***INVESTING FOR WELLNESS***

**NATIONAL STRATEGIC PLAN  
FOR HEALTH**

**2016-2020**

**ANTIGUA AND BARBUDA**

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## FOREWORD

An unflinching commitment of the Government of Antigua and Barbuda is to improve the quality of life for all citizens. Indeed, Antigua and Barbuda aspires to become a developed country within 15-20 years. The attainment of optimum levels of health and wellness among the population are vital to the achievement of these ideals.

It is therefore with a deep sense of accomplishment that I present the National Strategic Plan for Health (2016-2020) which will serve as an instrument for moving health care in Antigua and Barbuda to the next level. The strategic goals, objectives and interventions are linked inextricably to the sustainable development dimensions contemplated by the National Medium-Term Development Strategy; while the document is bounded by the core principles of equity, shared responsibility, and good governance.

The Ministry of Health and the Environment is deeply committed to ensuring that this National Strategic Plan for Health remains a living document that will drive policy and programming for the entire health sector. In this context, the components of monitoring, evaluation and reporting assume particular significance.

It is fully recognized that the strategic goals of this National Strategic Plan for Health cannot be achieved through the single-handed efforts of the health sector. Strenuous efforts will therefore be made to harness the active support of all strategic partners including other Government Ministries and statutory agencies, private sector, civil society, regional health institutions and international development partners.

I acknowledge the officials of the Ministry of Health and the Environment and all other partners for their resolve in preparing a document of highest quality and strategic importance. It is a contribution for which the nation of Antigua and Barbuda shall be forever grateful.

May this investment in health and wellness bear abundant fruit!



**Hon. Molwyn Joseph,  
Minister of Health  
and the Environment**

## MESSAGE

It brooks no argument that national strategic planning is an absolute prerequisite to orderly and sustained health sector development. The National Strategic Plan for Health (2016-2020) will serve as a compass bearing for the Ministry of Health and the Environment in advancing health care for all residents of Antigua and Barbuda in the medium-term. Indeed, the strategic priorities contemplated emerge from a thorough situational analysis of the determinants of health and reflect the objective needs of the population.



**Mrs. Hildred Simpson**  
**Permanent Secretary**

The National Strategic Plan for Health is an embodiment of the national investment in health and wellness. It aspires to the achievement of three strategic goals - empowering individuals and families to manage their own health, strengthening the health system and community mechanisms, and expanding strategic partnerships. These goals are expressed through mutually reinforcing objectives, interventions and activities. The sum of these efforts will be improved health status and greater longevity among the population.

The Ministry of Health and the Environment recognizes fully that improvement in national health status cannot be accomplished solely by its own efforts. For this reason, concerted efforts were made to engage all strategic partners, public and private, in the development of the document. Similar efforts will be made to sustain this partnership during implementation.

Special recognition and thanks are extended to all professionals in the Ministry of Health and the Environment, as well as other strategic partners, for their tenacity in producing this excellent blueprint. I urge that we continue to join hands as we move the process forward from strategy to tangible results.

## MESSAGE

The global health landscape remains in a state of constant flux. Evidence of new, emerging and re-emerging disease conditions is well chronicled. This reality imposes the imperative for continuous evaluation and re-evaluation of strategies and approaches at national, regional and international levels to ensure appropriate and sustainable responses. The development of the Antigua and Barbuda National Strategic Plan for Health (2016-2020) is an important step in this direction.



**Dr. Rhonda Sealey-Thomas, Chief Medical Officer**

The health profile of Antigua and Barbuda has shifted markedly over time. Chronic non-communicable diseases now represent the new frontier in advancing the health and well-being. The impact on morbidity, disability and premature mortality are profound and pose a grave threat to the health and socio-economic development of our nation. Even so, communicable diseases remain a formidable challenge especially given the constant threat of emerging and re-emerging disease conditions notably HIV, multi-drug resistant tuberculosis, dengue, ebola, and chikungunya and zika virus infections.

This National Strategic Plan for Health is a crystallization of the measures that the Ministry of Health and the Environment will pursue in advancing its goal of universal health coverage over the medium-term. The focus will be on health risk reduction by improving service delivery at the primary and secondary levels, epidemiological surveillance, health planning and health information, pharmaceutical and medical supplies management, health financing, infrastructural development, and expanding strategic partnerships.

I take this opportunity to commend the entire staff of the Ministry of Health and the Environment for their invaluable contribution towards advancing the health of the nation over many decades. It is an incredible story of professional competence and tenacity in the face of wide-ranging challenges. As well, I express my profound gratitude to everyone who contributed towards the completion of this landmark document that will guide the national health response over the next five years.

## ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
CARICOM	Caribbean Community
CARPHA	Caribbean Public Health Agency
CCH	Caribbean Cooperation in Health
CDB	Caribbean Development Bank
GDP	Gross Domestic Product
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
HMN	Health Metrics Network
IHR	International Health Regulations
MBS	Medical Benefits Scheme
MDGs	Millennium Development Goals
MSJMC	Mount St. John's Medical Centre
MTDS	Medium-Term Development Strategy
NAP	National AIDS Programme
NCDs	Non-Communicable Diseases
NHA	National Health Accounts
NSPH	National Strategic Plan for Health
OECS	Organization of Eastern Caribbean States
PAHO	Pan American Health Organization
PANCAP	Pan Caribbean Partnership against HIV and AIDS
PPS	OECS Pooled Procurement Service
UNAIDS	United Nations Joint Programme on AIDS
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WHO	World Health Organization

## EXECUTIVE SUMMARY

The National Strategic Plan for Health, 2016-2020, (NSPH) provides a blueprint for advancing the national vision of “*attainment of optimal health and wellness for all residents of Antigua and Barbuda*”. It establishes medium-term priorities for the health sector, defines the manner in which the resources of all partners will be synergized, and balances national needs with available resources. The strategic goals and objectives are aligned with the sustainable development dimensions articulated in the Medium-Term Development Strategy (2016-2020) of the Government of Antigua and Barbuda.

The core principles of country relevance, equity, evidence-based decision making, and intersectoral involvement lie at the heart of the NSPH. The document conforms to the scientifically established attributes and criteria for the development of national health sector plans. Lessons learned and best practices emerging from past experiences have also been incorporated.

Health conditions in Antigua and Barbuda have shown worthwhile progress since the turn of the century. Death rate is the lowest among all CARICOM Member States, immunization coverage against preventable childhood illnesses has achieved a near perfect score, maternal deaths have virtually disappeared from the national health statistics, environmental health risks have been reduced, and credible gains have been recorded in building core capacities to implement international health regulations.

On the other hand, many challenges persist in key areas. Death rate among children below five years of age remains high and intractable, chronic non-communicable diseases are by far the major causes of morbidity and mortality, new HIV infections have shown an upward trajectory between 2012 and 2014 after many years of encouraging decline, and pharmaceutical supplies management is well below regional standards. Deficits also exist in the areas of policy and legislation, human resources for health and infrastructural maintenance.

This NSPH will build on the solid foundation of the health sector that has been constructed over time. The key strategic components are set out as follows:

<b>Vision</b>	Attainment of optimal health and wellness for all residents of Antigua and Barbuda.
<b>Mission</b>	Promote and provide high quality health services that are accessible and affordable to the people of Antigua and Barbuda supported by effective policy formulation, health regulation, and strategic partnerships.
<b>Goals</b>	<ol style="list-style-type: none"><li>1. Empower individuals and families to manage their own health.</li><li>2. Strengthen health systems and community support mechanisms.</li><li>3. Expand strategic partnerships.</li></ol>



The indicative cost of implementing the policy, legislative and programmatic interventions contained in the NSPH will be EC\$59.3 million. This translates into an average annual investment of about EC\$12 million for removing the bottlenecks identified in the situational analysis. This outlay will yield the following returns by strategic goals:

Goal 1: Empower individuals and families to manage their own health

- Increased health literacy among the general population
- Morbidity and mortality from NCDs reduced by 25 percent
- Under-five mortality rate reduced from 17.2 to 8.0 per 1000
- New HIV infections reduced by 50 percent and 90 percent of persons diagnosed with HIV infection receiving sustained antiretroviral treatment
- Improved standard of health and social services for the mentally ill, elderly, persons with disabilities and abandoned children improved

Goal 2: Strengthen health systems and community support mechanisms

- New and updated regulatory and administrative frameworks that enhance quality of care and access to services
- Modern and highly functional health planning and health information arrangements
- Improved epidemiological surveillance for disease prevention and control
- Reduction in health risk due to improved environmental health conditions
- Established benchmarks for management of pharmaceuticals and medical supplies achieved and maintained
- Optimal availability of human resources for health
- Improved standard of health infrastructure
- Available financial resources for health increased by 25 percent
- Improved cost efficiency, financial accountability and transparency within the health sector

Goal 3: Expand strategic partnerships

- Functional mechanisms to stimulate intersectoral partnerships established at all levels
- Health-related agreements acceded to by the Government of Antigua and Barbuda implemented routinely
- Formal and informal agreements with traditional and non-traditional international development partners and philanthropic organizations established

Although the ultimate responsibility for the effective implementation of the NSPH will reside with the Ministry of Health and the Environment, other strategic partners will be engaged to perform critical supporting roles. Three separate operational plans will be developed during the lifetime of the NSPH. A comprehensive stakeholder review will be undertaken upon expiration of each operational plan and the findings incorporated into successor documents.

Monitoring, evaluation and reporting will be a core component of the implementation process. The new Health Planning Unit will bear responsibility for coordinating these functions, with advisory support provided by a designated National Health-Monitoring and Evaluation Reference Group (H-MERG). All such functions will be undertaken in consonance with established international protocols and standards.

A set of performance indicators will be used to track progress and measure success in meeting strategic goals. The modernization and upgrading of the health information system will be a key component of the monitoring, evaluation and reporting processes. The system will also be designed to generate requisite data to support policy and planning across all sections of the Ministry of Health and the Environment.

The main risks associated with the effective implementation of the NSPH have been identified as fiscal constraints, inefficiencies within the health sector, inadequate stakeholder involvement, and ineffective monitoring and reporting. Appropriate strategies will be implemented to mitigate these risks.

# PART 1: INTRODUCTION AND CONTEXTUAL FRAMEWORK

## 1.1 Country Profile

Antigua and Barbuda is a Commonwealth Caribbean nation that comprises Antigua (280 km<sup>2</sup>), Barbuda (160 km<sup>2</sup>) and the uninhabited Redonda (2.6 km<sup>2</sup>) - a total land mass of 442.6 km<sup>2</sup>. It is located in the middle of the Leeward Islands chain at 17°03'N and 61°48'W. The low-lying terrain contrasts sharply with the generally mountainous islands of the Caribbean archipelago, with the highest point being Mount Obama (previously known as Boggy Peak) that rises to a height of 402 metres.

Internal communication is facilitated by a good network of roads. A deep water harbour located in the capital city of St. John's serves as the country's main sea port and a regional centre for movement of cargo and passengers. The state-of-the-art VC Bird International Airport serves as a gateway to and from the Caribbean.

Antigua and Barbuda is a founding member of the Caribbean Community of nations (CARICOM), the Organization of Eastern Caribbean States (OECS), and the Caribbean Development Bank (CDB). By Charter, these institutions promote political and financial stability, economic integration, and cooperation among Member States. Antigua and Barbuda is also an active member of the specialized agencies of the United Nations, including the Pan American Health Organization/World Health Organization (PAHO/WHO).

## 1.2 National Development Framework

The recently-completed Antigua and Barbuda Medium-Term Development Strategy, 2016-2020 (MTDS) embraces and expands on the policy levers that were pursued under the predecessor National Economic and Social Transformation Plan. It represents a set of strategies and actions to be undertaken in moving the country towards its long-term goals. Within this framework, Antigua and Barbuda will strive to become a developed country within 15-20 years. The overarching goal will be attained on the basis of the following four sustainable development dimensions:<sup>1</sup>

Figure 1.1: Map of Antigua and Barbuda



<sup>1</sup> Antigua and Barbuda Medium-Term Development Strategy (2016-2020), Ministry of Finance and Corporate Governance, Page 6

- Optimal generation of national wealth
- Enhanced social cohesion
- Improved health of the natural environment and sustained historical and cultural assets
- Enhanced citizen security

*“Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures”*

*WHO Constitution*

In June 2014, the Ministry of Health spearheaded the development of a National Strategy for Universal Health Coverage.<sup>2</sup> The Strategy embodies four broad lines of action:

- Expanding equitable access to comprehensive, qualitative, and community-oriented health services
- Strengthening stewardship and governance
- Increasing and improving financing, without out-of-pocket expenditures, with equity and efficiency
- Taking intersectoral action on the social determinants of health

### 1.3 Rationale for Strategic Plan

National Strategic Plans for Health are not ends in themselves. They serve to align country priorities with the objective health needs of the population, and to synergize the resources of all stakeholders in the quest for optimum health and improved quality of life.<sup>3</sup> Apart from the National Business Plan for Health (2008-2010), Antigua and Barbuda has not articulated a comprehensive national health sector strategy framework since 1997. It is a deficit that this initiative will remedy.

Further, the MTDS (*Page 48*) mandates the preparation of a Health Sector Plan that will include actions towards reducing the incidence and negative effects of non-communicable diseases, reducing the incidence of communicable diseases, improving health care infrastructure and services, providing for the disabled and the elderly, and promoting mental health.

Thus, this National Strategic Plan for Health, 2016-2020 (NSPH) will bridge the gap in health sector strategic planning in Antigua and Barbuda. Fundamentally, it will be linked to the goals of the MTDS and other related national policy frameworks. In addition, it will conform to internationally accepted principles and guidelines for strategic planning, and provide a robust framework for advancing the national goals and objectives of the health sector, public and private.

<sup>2</sup> Antigua and Barbuda, 2014, Draft Strategy for Universal Health Coverage, Pages 1-2

<sup>3</sup> WHO, 2015, National Health Policies, Strategies and Plans, Available at: <http://www.who.int/nationalpolicies/about/en/>

## 1.4 The Planning Process

The NSPH was developed utilizing the “systems thinking approach” that duly recognizes the interplay between the established building blocks of an effective health system.<sup>4</sup> The approach harnessed the rich reservoir of skills and experience available within and without the health sector in Antigua and Barbuda, incorporated lessons learned from the implementation of previous planning initiatives, and adopted relevant good practices. A central tenet of the approach was to achieve widest stakeholder engagement, while responding to opportunities for constructing strategic partnerships at all levels. The key features of the planning process were as follows:

- 1) Establishment of a National Strategic Plan Steering Committee responsible for coordinating the planning process.
- 2) Comprehensive review of all relevant documents including policy documents, evaluation reports, health service statistics, sector strategic plans, and regional and international commitments and obligations. All data collected were analyzed and validated through a process of triangulation.
- 3) Stakeholder engagement through wide-ranging interviews in order to garner additional information and clarify issues.
- 4) Formal stakeholder consultations involving the National Strategic Plan Steering Committee and other key players and interest groups in validating information, visioning, and priority setting.
- 5) Preparation of preliminary, first and second drafts of the NSPH that were reviewed at every stage of the process by the Strategic Plan Steering Committee and other key stakeholders.
- 6) Preparation of Final Version of the NSPH and Preliminary Biennial Operational Plan, 2016-2017.

## 1.5 Outline of the Strategic Plan

The NSPH is presented in six discrete but mutually reinforcing sections:

- 1) Section I presents the contextual framework and background information.
- 2) Section II provides a comprehensive situational analysis against the backdrop of the established determinants of health.
- 3) Section III details the strategic orientation of the NSPH and offers clarity on the vision, mission, guiding principles, goals and strategic objectives.
- 4) Section IV elaborates the strategic objectives, strategic interventions and outcomes that will contribute to the achievement of the defined strategic goals.
- 5) Section V sets out the mechanisms that will be applied in implementing, monitoring and evaluating the NSPH.
- 6) Section VI estimates the cost of implementing the NSPH.

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<sup>4</sup> “Systems thinking” concerns an understanding of a system by examining the linkages and interactions between the components that comprise the entirety of that defined system.

## 1.6 Limitations and Challenges

The planning process for the development of this NHSP was propelled by several key factors. Among these features were the active support of the political directorate and other high-level policy-makers and programme managers, an exhaustive national consultative process spearheaded by the National Strategic Plan Steering Committee, and technical support provided by the PAHO/WHO. At the same time, some impediments have been noted:

- 1) The hiatus of almost two decades between strategic plans did not allow for a seamless linkage of past and present policies and programmes. Important insights may have been lost along the way.
- 2) The Ministry of Health and the Environment operates a largely manual health information system that does not support extensive analysis of health service data. This deficit reduced the robustness of the situational analysis and the specificity and measurability of some of the strategic objectives.
- 3) No recent National Health Accounts (NHA) have been produced in Antigua and Barbuda and validated information on the unit costs for producing goods and services for the health sector are largely unavailable. Thus, the cost estimates presented for implementing this NSPH are essentially indicative.

Notwithstanding the limitations and challenges, this NSPH presents a comprehensive assessment of health conditions in Antigua and Barbuda and an objective summation of the medium-term strategic requirements of the health sector.

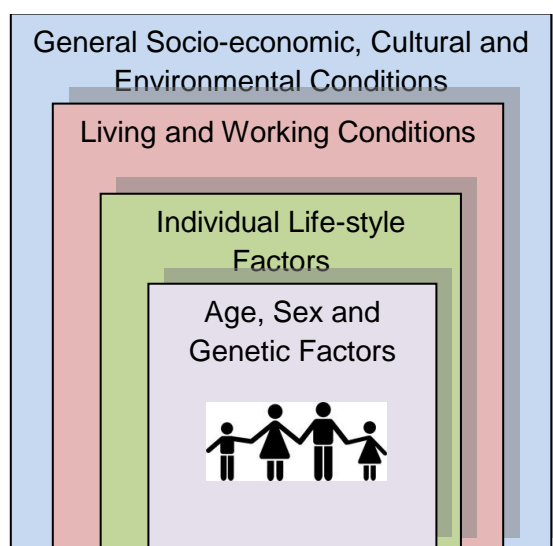
## PART II: SITUATIONAL ANALYSIS

### 2.1 Determinants of Health

National health sector planning is premised on an objective analysis of the well-established policy, social, biological, economic, and environmental determinants of health. These factors relate to the conditions in which people are born, grow, live, work, and age and are congruent with the principles associated with the WHO Life Course Approach to Health.<sup>5</sup> These principles imply that a confluence of factors determine the health and well-being of individuals and communities and must be accorded due recognition in the planning process.

Further, it is understood that the determinants of health extend well beyond the boundaries of the traditional public health sector to include other sectors such as education, housing, social development, gender, agriculture, environment and transportation. Thus, the Life Course Approach to Health requires a comprehensive and objective analysis of health risks and social hazards across sectors, and the results used to inform public policy and build the investment case for health. Figure 2.1 outlines the interplay of the myriad factors that impact on health.

**Figure 2.1: Determinants of Health by Category**



For the purpose of this NSPH, the following health-related components have been selected as the most pertinent for review and analysis:

- Response to Regional and International Health Commitments
- Macro Economic Developments

<sup>5</sup> World Health Organization, A Life Course Approach to Health, 2000, Available at: [http://www.who.int/ageing/publications/lifecourse/alc\\_lifecourse\\_training\\_en.pdf](http://www.who.int/ageing/publications/lifecourse/alc_lifecourse_training_en.pdf)

- Demographic Features
- Education
- Health Conditions and Trends
- Health Financing
- Social Support Services

## 2.2 Regional and International Commitments

Antigua and Barbuda has acceded to a range of health-related regional and international agreements and conventions. The list includes but is not limited to control of communicable and non-communicable diseases, international health regulations, occupational health and safety, tobacco control, rights of the child, care of the elderly, rights of persons with disabilities, and sustainable development. For the purpose of this situational analysis, the following commitments have been identified for special review:

### *Caribbean Cooperation in Health Initiative*

The Caribbean Cooperation in Health Initiative (CCH) was developed within the framework of functional cooperation among CARICOM Countries. The concept promotes collective and collaborative action to solve critical health problems best addressed through a regional approach rather than by individual country action. The third phase of the CCH Initiative (2010-2015) has expired and CARICOM has initiated the process for the development of the next phase.

Antigua and Barbuda has incorporated the principles and priority areas of CCH III into its planning and programming, and provides regular updates on progress at regional and sub-regional levels. The eight priority areas are:

Communicable Disease	Food and Nutrition
Non-Communicable Disease	Mental Health
Health Systems Strengthening	Family and Child Health
Environmental Health	Human Resource Development

Section 2.6 that addresses current Health Conditions and Trends in Antigua and Barbuda provides details on the status of implementation of these priority areas.

### *Millennium Development Goals*

Antigua and Barbuda has achieved most of the targets linked to the health-related Millennium Development Goals (MDGs), now known as Sustainable Development Goals. High performance levels have been displayed in the areas of access to universal primary education for both boys and girls, eliminating maternal deaths, and managing tuberculosis. On the debit side, the mortality rate among children below five years of age remains higher than the MDG target set for Antigua and Barbuda. (See Table 2.1)



**Table 2.1: Progress Report on Implementation of Health-related Millennium Development Goals**

Goals/Targets	Indicators	First Year		Latest year		% Change	
		Value	Year	Value	Year		
Goal 2: Achieve universal primary education							
Universal primary schooling	Net enrolment ratio in primary education	91.8	2007	96	2012	4.4	
Goal 3: Promote gender equality and empower women							
Equal girls' enrolment in primary school	Ratio of girls to boys in primary education	0.92	1992	0.93	2015	0.01	
Goal4: Reduce child mortality							
Reduce mortality of under-five-year-old by two-thirds	Under-five mortality rate (deaths of children per 1,000 births)	25.5	1990	18.1	2014	29.0	
Goal 5: Improve maternal health							
Reduce maternal mortality by three quarters	Maternal mortality ratio(maternal deaths per 1,000 live births)			1.7	2015		
Goal 6: Combat HIV/AIDS, Malaria and other diseases							
Halt and begin to reverse the spread of HIV/AIDS	HIV incidence rate (number of new HIV infections per year per 100 people aged 15-49)	0.8	2010	0.5	2012	37.5	
Halt and reverse spread of TB	Incidence rate and death rate associated with TB	No. of new cases per 100,000 population	8.2	2010	9.4	2013	14.6
		No. of deaths per 100,000 population	3.9	1990	-	-	-

### *International Health Regulations*

The International Health Regulations (IHR) core capacities are those required to detect, assess, notify and report events, and respond to public health risks and emergencies of national and international concern. A Report to the 68<sup>th</sup> World Health Assembly held in May 2015 indicates a perfect score for Antigua and Barbuda for six of the thirteen IHR core elements, and a better than average rating among CARICOM countries for five others. Still, there is much to be accomplished especially in the areas legislation, points of entry, surveillance and radiation emergencies. (See Table 2.2) In October 2015, the country became a member of the International Atomic Energy Agency. This level of involvement will help to improve readiness to radiological episodes.

**Table 2.2: Status of Implementation of IHR Core Elements in Antigua and Barbuda Compared with Other CARICOM Countries**

Core Capacities	Score	Regional Average
Legislation, policy, financing	100	55
Coordination and communication	100	71
Surveillance	100	85
Response	82	78
Preparedness	73	53
Risk communication	71	71
Human resources	100	49
Laboratory	81	77
Points of entry	86	54
Zoonotic events	100	82
Food safety events	100	63
Chemical events	85	37
Radiation emergencies	23	14

Source: Working Document for the 28<sup>th</sup> Meeting of the Council and Human and Social Development, Washington, DC, 26-27 September 2015

### 2.3 Macro Economic Developments

Antigua and Barbuda is categorized as an upper middle-income country with a high development index. UNDP's Human Development Index (HDI) Report, 2014 positioned Antigua and Barbuda at 61<sup>st</sup> out of 187 countries and territories world-wide. Among CARICOM countries, only Bahamas (51<sup>st</sup>) and Barbados (59<sup>th</sup>) have been ranked higher. This rating is based on an assessment of the three basic dimensions of human development - a long and healthy life, access to knowledge, and a decent standard of living. Table 2.3 provides data on these three dimensions of human development.

**Table 2.3: Human Development Index Indicators, 2010-2013**

Year	Life Expectancy	Years of Schooling	Mean Years of Schooling	GNI per Capita*	HDI
2010	75.4	14.0	8.9	20,632	0.776
2011	75.6	13.8	8.9	18,735	0.772
2012	75.8	13.8	8.9	18,713	0.773
2013	76.0	13.8	8.9	18,800	0.774

\* Gross National Income (GNI) per capita using Purchasing Power Parity (PPP) rates  
Source: UNDP Human Development Report, 2014

Estimated at 10.1 percent, Antigua and Barbuda has one of the lowest unemployment rates in the Caribbean region. High levels of employment exist among heads of households, with only 2.2 percent of male heads and 3.3 percent of female heads of households reported as

unemployed. Overall, the rate of unemployment among heads of households is estimated at 2.7 percent. An estimated 18.3 percent of the population lives at or below the poverty line.<sup>6</sup>

## 2.4 Demographic Features

The 2011 Population and Housing Census for Antigua and Barbuda returned a population of 85,567 persons, indicating an 11.3 percent growth since the previous head count in 2001. About 60 percent of the total population lives in the parish of St. John's, with 26 percent living in the capital city itself. Table 2.4 sets out the population by census year, sex distribution, and age-group.

**Table 2.4: 2001 and 2011 Population and Housing Census by Parish, Year by Sex**

Parishes	Census 2001			Census 2011		
	Total	Male	Female	Total	Male	Female
<i>Total</i>	76,886	36,109	40,777	85,567	40,986	44,581
St. John City	24,451	11,400	13,051	22,219	10,697	11,522
St. John Rural	20,895	9,754	11,141	29,518	14,095	15,423
St. George	6,673	3,166	3,507	8,055	3,826	4,229
St. Peter	6,439	2,595	2,804	5,325	2,538	2,787
St. Philip	3,462	1,643	1,819	3,347	1,579	1,268
St. Paul	7,848	3,652	4,196	8,128	3,857	4,271
St. Mary	6,793	3,212	3,581	7,341	3,533	3,808
Barbuda	1,325	687	638	1,634	861	773

Source: Antigua and Barbuda 2011 Population and Housing Census Report, April 2014

Almost one-quarter (24.3 percent) of the total population of Antigua and Barbuda is below the age of 15 years, translating into a youth dependency ratio of 35.9 percent. When combined with the elderly dependency ratio (10.4 percent), the total dependency ratio is in the order of 46.4 percent.<sup>7</sup> This index compares favourably with other CARICOM countries such as Barbados (42.3 percent), Trinidad and Tobago (42.4 percent), Saint Lucia (48 percent) and Jamaica (54 percent).<sup>8</sup> Table 2.5 provides a list of key demographic indicators.

<sup>6</sup> Caribbean Development Bank, Living Conditions in Antigua and Barbuda: Poverty in a Service Economy in Transition, August 2007

Poverty in a Services Economy in Transition, 2009, Available at: <http://www.caribank.org/uploads/publications-reports/economics-statistics/country-poverty-assessment-reports/AntBarbCPAMainReport.pdf>

<sup>7</sup> Age dependency ratio is the ratio of dependent – people younger than 15 years and older than 64 years – of the working age population 15-64 years. Available at: <http://data.worldbank.org/indicator/SP.POP.DPND>

<sup>8</sup> The World Bank, Data on Age Dependency Ratio, Available at: <http://data.worldbank.org/indicator/SP.POP.DPND.OL>

**Table 2.5: Selected Demographic Indicators, 2010-2014**

Indicators	2010	2011	2012	2013	2014
Crude birth rate	16.4	16.3	13.7	12.5	12.5
Adolescent fertility rate (births per 1,000 women between 15-19 years)	52	51	49	47	46
General fertility rate (per 1,000 women of childbearing age)	2.0	2.0	2.0	2.0	2.0
Crude death rate	5.7	5.7	5.7	5.7	5.7
Infant mortality rate	NA	NA	16.1	10.6	11.8
< 5 years mortality rate	NA	NA	18.7	17.3	18.1
Life expectancy at birth (years)	75.2	75.4	75.6	75.9	76.1

Source: Health Statistical Digest, 2014, Health Information Division, Ministry of Health, Antigua and Barbuda

During the inter-census period, 2001 and 2011, Antigua and Barbuda experienced an exponential rise of 47.7 percent in the number of dwelling units. Concomitantly, the average household size declined from 3.2 to 2.4 persons. Table 2.6 provides a comparison in the total number of households and average household size, 1991-2011.

**Table 2.6: Total Number of Households and Average Household Size, 1991-2011**

Census Year	Total Number of Households	Percentage Increase	Average Household Size
2011	30,213	47.7	2.4
2001	20,450	4.5	3.2
1991	19,561	-	3.0

Source: Antigua and Barbuda 1991, 2001 and 2011 Population and Housing Census Reports

## 2.5 Education

Education in Antigua and Barbuda is free and compulsory for all children between five and 16 years of age and, since 2013, universal secondary education has been introduced. Universal secondary education will be expanded to Barbuda as soon as additional classroom space, specialized programmes and staff are put in place.

An impressive 99 percent of all Antiguan 15 years and older have completed at least five years of formal education and are functionally literate. It is also noteworthy that 47.7 percent of heads of households possess some level of formal educational certification, with 19.2

percent having post secondary school qualification. Table 2.7 outlines the key enrolment indicators for the academic year 2014/2015.

**Table 2.7: Key Enrolment Indicators for Academic Year 2014/2015**

School Enrolment indicator	Value
Total enrolment in primary and secondary schools	17,874
School level distribution in:	
Primary Schools	56.5%
Secondary Schools	43.5%
School Type Distribution:	
Public	62.6%
Private	37.4%

Source: Antigua and Barbuda Education Statistical Digest, 2012-2015 (Tables F3, F4, F6)

## 2.6 Health Conditions and Trends

The information contained in this Section provides an analysis of the status of implementation of the priority health programmes and interventions adopted by Antigua and Barbuda, as well as their impact on universal health indicators. For the most part, these programmes and interventions coincide with the regional health priorities, goals, and targets established under CCH III.

### 2.6.1 Organization of the Health System

The health system includes all those organizations, institutions, resources and actions whose primary purpose is to promote, restore or maintain health. Thus, the health system of Antigua and Barbuda includes contributions from both public and private sectors.

#### *Management and Coordination*

The Ministry of Health and the Environment is the executive arm of the Government of Antigua and Barbuda with statutory responsibility in three essential areas - health policy formulation, regulation of the health system, and health service delivery. The Minister of Health and the Environment who is a Cabinet Member performs the role of chief policy-maker, while the Permanent Secretary and Chief Medical Officer serve as the administrative and technical heads of the Ministry, respectively.

#### *Service Delivery*

Essentially, there are three levels of care within the public health sector – primary, secondary and tertiary, including the Emergency Medical Services. Operationally, the services delivered at each level are integrated with an in-built referral mechanism. (See summary of service delivery at Table 2.8)

**Table 2.8: Levels of Care in the Public Health Sector**

Level of Care	Type of Care/Service	Services Offered
Primary	Health Centres (7) Sub-Health Centres (17)	Maternal and child health, reproductive health, medical services, mental health, oral health and pharmaceutical services
	Emergency Medical Services	Mobile response to medical emergency calls
	Environmental Health	Food safety, vector control, water quality control, waste management
	Nutrition	Food and nutrition information and education
Primary/Secondary	Hannah Thomas Hospital (8 beds)	Outpatient care, primary care, oral health, pharmacy
Secondary	Mount St. John's Medical Centre (185 beds)	Specialty care in internal medicine, general surgery, paediatrics, obstetrics/gynaecology, nephrology, ENT, orthopaedics, oncology, ophthalmology, neurosurgery, neurology, pathology, radiology, pharmacology, and physical rehabilitation
Tertiary	Clarevue Psychiatric Hospital (130 beds)	Acute and rehabilitative mental health care services
	Fiennes Institute (69 beds)	Health and social care of the elderly
	Vocational and Rehabilitation Services CARE Project	Vocational training for persons with disabilities  Care for children and adults with mental and physical disabilities or abandoned

### *The Planning Function*

The Ministry of Health and the Environment does not have a designated health planner or health planning unit. Instead, the planning function is executed collaboratively by programme managers under the direction of the Chief Medical Officer. Similarly, the establishment does not provide for a position of national epidemiologist and most of the related functions are undertaken by the Medical Officer of Health in conjunction with substantive responsibilities, and with the support of other programme managers.

Already, the Ministry of Health and the Environment has initiated discussions on streamlining its planning functions through the establishment of a Health Planning Unit, and

strengthening disease surveillance and the public health response through the appointment of a National Epidemiologist.

### *Private Sector*

The private health sector in Antigua and Barbuda has grown rapidly over time. Currently, it consists of about 64 private medical practitioners, five diagnostic medical laboratories, 20 pharmacies, four hospitals, and 10 recorded nursing homes. Family planning services are provided by the Antigua and Barbuda Planned Parenthood Association.

Notable gaps exist in the legislation and policy that govern the health sector, particularly in the regulation of medical practices and pharmaceuticals. A developed system of enforcing regulation and ensuring quality in the health sector is also lacking, especially for the private sector. In effect, the private sector operates as a parallel system rather than a coordinated and integral component of the overall health system. Nonetheless, some informal collaboration does exist particularly in the area of referral for specialty care.<sup>9</sup>

### *Regulation of Professional Conduct*

Statutory mechanisms exist for regulating the professional conduct of medical doctors, nurses and pharmacists practicing in Antigua and Barbuda. The Medical Council is vested with legislative responsibility for regulating the conditions of medical practice, including investigating alleged professional misconduct by medical practitioners. The primary responsibility of the Nursing Council is the maintenance and publication of the nurses register and regulating the conduct of examinations and nursing practice.

The Pharmacy Council advises the Minister of Health on matters relating to the qualification, examination and registration of persons qualified to practice as pharmacists; and is responsible for establishing and maintaining high professional standards of practice and conduct among pharmacists.

## 2.6.2 Morbidity and Mortality

The death rate for Antigua and Barbuda has remained relatively stable and is the lowest among all Member States of CARICOM.<sup>10</sup> (See Figure 2.1) The cluster of cardiovascular diseases, diabetes, malignant neoplasm and chronic respiratory diseases classified as Chronic Non-communicable Diseases (NCDs) account for more than 85 percent of all deaths. The highest ranking causes of years lost due to premature deaths are ischemic heart disease, diabetes mellitus and cerebrovascular disease.<sup>11</sup> In 2015, Cabinet approved a National Policy for the Prevention and Control of NCDs.

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<sup>9</sup> Antigua and Barbuda Health Systems and Private Sector Assessment, Abt and USAID, 2011

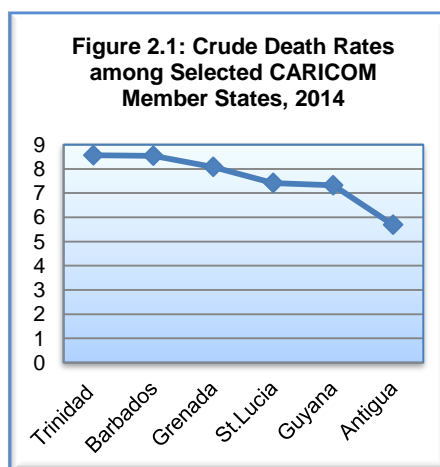
<sup>10</sup> World Fact Book, Available at: <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2066rank.html>

<sup>11</sup> Global Burden of Disease (GBD) Profile, Antigua and Barbuda, Available at: [https://www.healthdata.org/sites/default/files/files/country\\_profiles/GBD/ihme\\_gbd\\_country\\_report\\_antigua\\_and\\_barbuda.pdf](https://www.healthdata.org/sites/default/files/files/country_profiles/GBD/ihme_gbd_country_report_antigua_and_barbuda.pdf)

It is noteworthy that infectious diseases, including HIV and AIDS, and accidental and intentional injuries continue to feature among the ten leading causes of mortality in Antigua and Barbuda. (See Table 2.9) With respect to morbidity, NCDs account for most of the patient visits to primary health care facilities; while the most common infectious diseases have been influenza, chicken pox, conjunctivitis, impetigo, gastroenteritis and acute respiratory infections.

The public health system has been placed on high alert for the prevention and control of new and emerging infectious diseases such as ebola, chikungunya and zika. Measures are being undertaken in full collaboration with regional and international public health agencies, notably PAHO/WHO and CARPHA.

Cumulatively, 1,052 cases of HIV have been reported in Antigua and Barbuda since the beginning of the epidemic, with a 1.2:1 ratio of males to females. After several years of encouraging decline, the number of new cases of HIV increased by more than 60% between 2013 and 2014. The bulk of these new cases (70%) occurred in the age-group 20-34 years. There were 40 deaths from AIDS between 2012 and 2014.



**Table 2.9: Ten Leading Causes of Death by Rank Order, 2009-2012**

Causes of Death	Rank Order			
	2009	2010	2011	2012
Heart Diseases	1	2	1	2
Malignant Neoplasm	2	1	2	1
Diabetes Mellitus	3	3	4	3
Accidental and Intentional Injuries	4	8	8	7
Hypertensive Disease	5	6	7	5
Disease of the Respiratory System	6	4	6	7
Cerebrovascular Diseases	7	5	5	4
Infectious diseases and AIDS	8	7	3	6
Diseases of the Digestive System	9	-	10	9
Diseases of the Nervous System	10	10	9	-
Diseases of the Genitourinary System	-	9	-	10

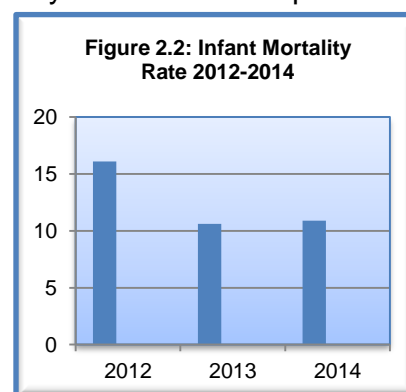
Source: Health Statistical Digest, 2014, Health Information Division, Ministry of Health, Antigua and Barbuda



### 2.6.3 Family and Child Health

Antigua and Barbuda boasts a vigorous maternal and child health programme that has resulted in creditable gains in key health indicators. Antenatal services are accessed routinely by pregnant women and all births are attended by trained health personnel. Maternal deaths have virtually disappeared from the health statistics although two deaths were recorded in 2015 following zero incidences for two consecutive years. At another level, immunization coverage has hovered around 100 percent for all the common childhood diseases - diphtheria, pertussis, tetanus, poliomyelitis, measles, mumps, and rubella.<sup>12</sup>

The infant mortality rate in Antigua and Barbuda has shown consistent decline since 2012. (See Figure 2.2)



However, the under-five mortality rate of 17.2 deaths per 1000 live births (2014) is a long distance away from the MDG target of 8.0 deaths per 1000 live births by 2015. On average, more than 70 percent of infant deaths occur during the neonatal period. The most prominent causes of these deaths have been birth asphyxia, prematurity, and injuries.

### 2.6.4 Food and Nutrition

In 2014, childhood under-nutrition in Antigua and Barbuda was reported at 2.9 percent among children 0-4 years attending public clinics. At the other end of the spectrum, obesity and overweight among adults are now emerging concerns. In 2012, public sector clinic data indicated that 29.3 percent of adults were overweight and 36.5 percent were obese. This situation prompted the Ministry of Health to launch food-based dietary guidelines aimed at promoting healthy eating habits and active lifestyles.

In 2012, the Government of Antigua and Barbuda launched the National Food and Security Policy. One of the key objectives was to ensure that all citizens achieve a state of nutritional well-being through food choices and consumption that reflect recommended dietary allowances.<sup>13</sup>

### 2.6.5 Dental Health

The Ministry of Health and the Environment provides a nation-wide decentralized oral health service to the general public, including primary and secondary schools and patients from government-owned health institutions. Considerable emphasis is placed on the age-group 6-12 years with an outreach in 54 schools. A renewal of the national fluoride treatment programme has been recommended.

<sup>12</sup> Immunization Summary, UNICEF and WHO, 2013 Edition, Available at: <http://www.unicef.org/immunization/files/EN-ImmSumm-2013.pdf>

<sup>13</sup> Antigua and Barbuda National Food and Security Policy, 2012

In 2011, an oral and maxilla-facial surgical programme was introduced. Since then, more than 300 cases have been reviewed and treated. A component of the programme relates to the early detection of oral cancer.

#### 2.6.6 Mental Health

The Clarevue Psychiatric Hospital is the only hospital in Antigua and Barbuda providing acute and rehabilitative mental health services. However, by statute, such services cannot be offered to persons under the age of 16 years and this constitutes a major gap in the care of the mentally ill. The main causes of hospital admission are drug-induced disorders, schizophrenia, and delusional and mood disorders. More than 60 percent of current residents are eligible for discharge but have no next-of-kin willing to accept them.

As a complementary service, the Ministry of Health and the Environment implements an effective community mental health programme that is undertaken jointly by staff of the Clarevue Hospital and the Community Nursing Service, with community mental health nurses playing a pivotal role. Essentially, this programme provides follow-up care at the level of health centres and through home visits to persons with a history of mental illness.

In 2013, the Ministry of Health developed a National Mental Health Policy with the following objectives:<sup>14</sup>

- To ensure that everyone in Antigua and Barbuda has access to mental health care that is affordable, equitable, accessible, and of adequate quality
- To provide comprehensive mental health care integrated into the general health care system
- To ensure the development of comprehensive services for alcohol and substance abuse
- To further develop human resources involved in mental health service provision
- To protect the human and constitutional rights of the mentally ill
- To implement programmes for mental health promotion and prevention

It is considered that improvement in the delivery of mental health in the short term will require three key interventions:

- I. Defining and institutionalizing a mechanism for early diagnosis, treatment and rehabilitation of persons under the age of 16 years with mental illnesses.
- II. Extensive rehabilitation of the physical infrastructure at the Clarevue Hospital.
- III. Modernizing the Mental Health Act and accompanying legislation consistent with new and emerging requirements for the effective management of mental illnesses.

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<sup>14</sup> Antigua and Barbuda National Mental Health Policy, Ministry of Health, 2013, Page 8

### 2.6.7 Care of the Elderly

Life expectancy at birth in Antigua and Barbuda is 76.4 years, with about 9.3 percent of the population being above 65 years of age.<sup>15</sup> About one-third of this cohort is 75 years and older. NCDs and disabilities present the most pressing challenge to health and social well-being of the elderly.

Institutional care for the elderly is provided at the publicly-operated Fiennes Institute. This facility provides health, recreational and rehabilitative services to residents. A notable deficit in the provision of comprehensive care is the absence of a designated ward to deliver acute care. In addition, the buildings that house the Institute are more than 80 years old and significant structural rehabilitation is urgently required.<sup>16</sup> In addition, the National Policy on Ageing identifies the following priority areas for attention:<sup>17</sup>

- Ensure that development policies address the needs of older persons
- Adopt health systems to the address challenges associated with the ageing of the population
- Create enabling and supportive environments

Although no precise data are readily available, it is known that the number of privately-operated nursing homes for the aged is increasing steadily. This recent development indicates the need for the introduction of an appropriate regulatory framework that establishes standards and protocols for the operation of such facilities, as well as monitoring and enforcement mechanisms.

### 2.6.8 Eye Health

Diabetic retinopathy is the most pervasive eye health problem in Antigua and Barbuda. It is estimated that in excess of 2,000 adults suffer from significant diabetic retinopathy, about 400 of whom need or will benefit from laser treatment.<sup>18</sup> There is no articulated national policy or plan for the management of diabetic retinopathy.

Screening for diabetic retinopathy is conducted at the MSJMC. Patients are referred from district clinics and private facilities. Patients obtain treatment either in the private sector or overseas and these services are paid for by the Medical Benefits Scheme. In 2014, the government received assistance from the Chinese and Venezuelan governments in the area of eye care. The Chinese government also donated equipment to the MSJMC and provided training to doctors and nurses.

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<sup>15</sup> Antigua and Barbuda Housing and Population Census Report, April 2014

<sup>16</sup> Antigua and Barbuda Estimates of Revenue and Expenditure, 2015, Page 213

<sup>17</sup> Antigua and Barbuda National Policy on Ageing, 2012, Page 16

<sup>18</sup> Eckstein M, Situational Analysis of Diabetic Retinopathy Services in Antigua and Barbuda, July 2013

## 2.6.9 Social Support Services

### *National Vocational and Rehabilitation Centre for Disability*

In 2006, the National Vocational and Rehabilitation Centre for Disability transferred from the Ministry of Labour to the Ministry of Health and the Environment. The Centre currently has an enrolment of 71 persons, 50 of whom attend classes regularly. A staffing complement of four full-time employees and six persons on stipends provide training in areas such as agriculture, horticulture, livestock farming, carpentry, carving, health care and computer skills.

The Centre has been beset by the perennial challenges of inadequate financial and human resources, poor physical accommodation, absence of user-friendly facilities, and inadequate transportation arrangements. Also, there are no arrangements for initial and on-going assessment of the health status and physical capacities of persons with disabilities enrolled in the Centre.

### *CARE Project*

The CARE Project caters to the needs of disabled and abandoned children and adults with disabilities. The residents display a range of conditions including cerebral palsy, autism, hydrocephalus, blindness, epilepsy, and other neurological conditions. The unavailability of trained staff is one of the main limitations to the meaningful implementation of the project.

In 2014, the Ministry of Health and the Environment sought to improve the Project by improving its governance, human resource capacity and financing. The Project receives significant contributions from the private sector and civil society and plans are well advanced for the construction of a user-friendly facility that will cater to the special needs of residents. Oversight is provided through a board that comprises the private sector, civil society and the government.

## 2.6.10 Pharmaceutical and Medical Supplies

The Ministry of Health and the Environment operates a three-pronged arrangement in the procurement of pharmaceuticals and medical supplies that is not synchronized. The Central Medical Stores procures pharmaceuticals and medical supplies through the OECS Pooled Procurement Service (PPS). In 2014, the value of pharmaceuticals and medical purchased through the PPS was EC\$1.8 million, the equivalent of 8.2 percent of all purchases by participating countries.<sup>19</sup>

Antigua and Barbuda occupies a place at the lower end of the spectrum for indicator-based performance among PPS member countries. At 12 percent, the weighted average of inventory variation is well above the established benchmark of three percent, and represents the second lowest performance among participating countries. The average availability of medicines of 80 percent is below the mean of 88 percent; while warehouse

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<sup>19</sup> OECS PPS Annual Report, 2014

assessment of 75 percent is the lowest in the sub-region. These deficits are largely the result of inadequate warehouse capacity and conditions, depleted human resources, and delayed payments for supplies received.

At the same time, the statutory entities of the Medical Benefits Scheme and the Mount St. John’s Medical Centre also procure pharmaceuticals and medical supplies independently, usually at higher cost than purchases made through PPS. A coherent procurement policy will serve to streamline the process and return cost savings.

2.6.11 Environmental Health

The vast majority of households in Antigua and Barbuda (86 percent) are served by the public water supply system that is managed by the Antigua Public Utilities Authority, with the remainder resorting to cisterns and wells. Meanwhile, water closets (84.3 percent) and pit-latrines (10.6 percent) constitute the main forms of sewage disposal among households. At the same time, 95 percent of all households benefit from public collection of solid waste, while most businesses employ a private collection system.<sup>20</sup>

The Environmental Health Department executes a vigorous food safety programme that is centred on the continuous training of food handlers and inspections. On average, more than 1,600 food handlers have been trained annually in the five keys to food safety over the past five years. (See Table 2.10)

**Table 2.10: Number of Food Handlers Trained, 2011-2015**

	2011	2012	2013	2014	2015
No. Trained	1,818	1,842	1,170	2,003	2,415

Source: Environmental Health Department Records

The Environmental Health Department also maintains an active vector control programme targeting mainly mosquitoes and rodents. In 2014, the household index for the aedes aegypti mosquito that transmits dengue fever, and chikungunya and zika viral infections was reported at 6.5 percent that is just outside the threshold of five percent established by WHO.<sup>21</sup>

2.6.12 Health Information System

Antigua and Barbuda does not possess a standardized and effective national health information system capable of providing comprehensive and consistent data for planning and programming. A Health Metrics Network (HMN) assessment conducted in 2012 identified deficiencies in all six standard components. The best-performing areas were data

<sup>20</sup> Antigua and Barbuda Population and Housing Census Report, 2011  
<sup>21</sup> World Health Organization, Vector Control and Surveillance, Available at: <http://www.who.int/csr/resources/publications/dengue/048-59.pdf>

sources, information products, and dissemination and use of information, with a highest rating of “adequate”.<sup>22</sup> It is noteworthy that the health information system is largely manually operated.

The Draft Health Information System Policy Framework recommends the following lines of action for modernizing operations:

- Develop a comprehensive and coordinated system for the generation and utilization of health information
- Establish a legislative framework that facilitates the effective functioning of the Health Information System
- Produce reliable information that is required for evidence-based decision-making
- Develop a culture of using information for planning and decision-making
- Provide requisite human and physical resources for the effective operation of system
- Promote the behavioural change required for functioning in an information-driven environment

#### 2.6.13 Human Resources for Health

Current data on the ratio of health personnel per population by category are not readily available. However, shortages have been reported in the complement of public health nurses, public health inspectors, family nurse practitioners, mental health professionals including psychiatrists and psychiatric nurses, occupational therapists, persons trained in gerontology, emergency medical services allied workers, dentists and other categories of medical staff. The Government of Cuba provides medical personnel to fill gaps particularly in the areas of nursing, laboratory, radiology, and medical specialties.

The Ministry of Health and the Environment does not possess a human resources plan and succession planning is not articulated. An assessment conducted in 2011 provided the following recommendations for improving the human resources for health situation:<sup>23</sup>

- Undertake a comprehensive human resources for health audit
- Develop a comprehensive HRH policy and implementation plan and strategy
- Develop and implement partnership strategies to meet need for specialists

#### 2.6.14 Health Financing

Public health expenditure consists of recurrent and capital spending from Government, external borrowings and grants, and social health insurance funds. Health expenditure in Antigua and Barbuda as a percentage of GDP has declined progressively since 2001 and now stands at 3.1 percent, which is somewhat lower than the international benchmark of 5-

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<sup>22</sup> Antigua and Barbuda Health Information System and Policy Framework, 2015

<sup>23</sup> Antigua and Barbuda Health Systems and Private Sector Assessment, Abt and USAID, 2011

6 percent of GDP.<sup>24</sup> (See Figure 2.3) The reality is that it is difficult to determine actual health expenditure with confidence, whether public or private, given the absence of a current set of NHA.

The architecture supporting public health financing in Antigua and Barbuda is a hybrid of three separate components (See Figure 2.4):

- a) The Ministry of Health and the Environment receives an annual allocation from the Government's consolidated fund. These resources are used to support the regulation and administration of the health system and the delivery of specified health services, particularly at the primary health care level.
- b) The Medical Benefits Scheme (MBS) is a statutory body that is governed by the Medical Benefits Act, 2010. The health services supported by MBS are financed through a mandatory 3.5 percent deduction from the wages and salaries of employees that is matched by a similar contribution from employers. Non-contributors to MBS may also access support under special circumstances and upon certification by a medical practitioner. The list of disease covered by MBS includes asthma, cancer, cardiovascular diseases, certified lunacy, diabetes, glaucoma, hypertension, leprosy, and sickle cell anaemia.
- c) The Mount St. John's Medical Centre (MSJMC) is the only secondary/tertiary care hospital owned by the state. Its operations are regulated by the MSJMC Act, 2009: Cap 284. The Ministry of Finance provides a subsidy directly to the institution from the consolidated fund based on a capitation calculation. MBS contributors accessing services at the hospital pay a fee that is subsidized, while non-contributors are billed at the full rate.

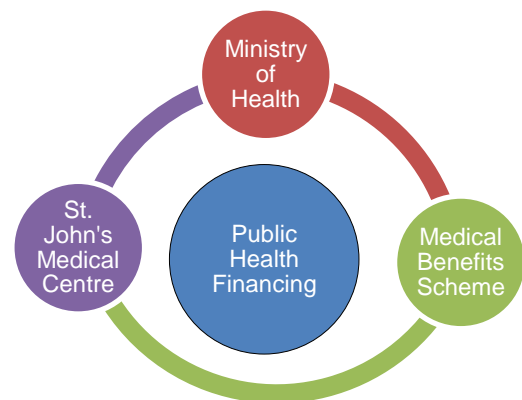
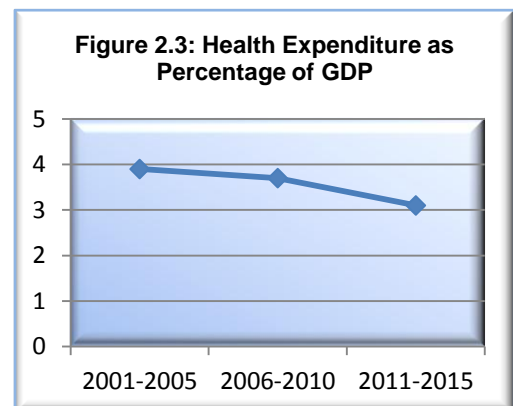


Figure 2.4: Sources of Public Health Financing

Essentially, the management and operations of these public health financing arrangements occur in parallel. There are no statutory requirements or operational policies that mandate collaboration. The establishment a formal coordinating mechanism that builds synergy and promotes cost efficiencies appears highly indicated.

<sup>24</sup> Public Health Expenditure, World Bank Data Book, 2015, Available at: <http://data.worldbank.org/indicator/SH.XPD.PUBL.ZS>

## 2.7 Strategic Partnerships

The importance of building and enhancing strategic partnerships at all levels in advancing the performance of the health sector is fully appreciated. For example, an intersectoral Wellness Committee has been established. This Committee will play a pivotal role in developing and coordinating national strategies for improved well-being of the population. The Wellness Committee will be expanded to a Wellness Commission in time. Also, close collaboration exists with the Ministry of Social Transformation in the execution of social support programmes for abandoned children and persons with disabilities. The community mental health programme and services provided to the elderly may also be similarly synergized.

The Ministry of Health and the Environment, through the Government of Antigua and Barbuda, enjoys extensive bonds of solidarity within regional entities such as CARICOM, OECS, CARPHA, PAHO/WHO and other bilateral and multilateral agencies. Bilateral agreements also exist with countries such as Venezuela, Cuba and China. There appears to be scope for deepening and expanding such partnerships.

## 2.8 Summary of Conclusions

The Section summarizes the main strengths and achievements of the health sector of Antigua and Barbuda over the past 5-10 years, particularly; as well as the main challenges. It also crystallizes the opportunities and threats identified in the national, regional and international landscape.

### *Strengths*

- Human Development Index continues on an upward trajectory
- Most of the health-related MDGs have been met
- Health care services are generally well-organized, accessible and affordable
- National policies have been established in key health service delivery areas
- Crude death rates are among the lowest in the Caribbean
- Immunization coverage against childhood illnesses is near optimal
- The newly-introduced oral and maxilla-facial surgical programme has yielded good results
- Social and environmental health indicators such as water quality, solid and liquid waste management, vector control and food safety are good
- A level of social support for persons with disabilities and other social needs exist
- Credible gains have been made in developing IHR core capacities.
- MBS is an innovative and important source of health care financing



### *Challenges*

- Many national health policies have not been translated into strategic actions
- Outdated or absence of requisite legislation impede health service delivery
- Health planning and epidemiological surveillance functions are diffused
- Shortages of human resources for health exist across many programme areas
- The National Health Information System remains largely under-developed
- NCDs present a major public health challenge
- Death rate among children under five years of age exceeds international target
- A resurgence of new HIV infections has occurred in recent years
- Obesity and overweight among adults is an emerging concern
- Pharmaceutical supplies management is below established regional standards
- Mental health services, including institutional and community care, require strengthening
- Emergency medical services require strengthening in critical areas
- Health expenditure as a percentage of GDP has been on the decline
- Public health financing arrangements are fragmented
- Health infrastructure across many programme areas requires rehabilitation
- Core capacities for implementation of IHR require strengthening in some areas

### *Opportunities*

- CCH-III and other regional initiatives provide an effective enabling environment
- Extensive bonds of solidarity exist with regional entities such as CARICOM, OECS, CARPHA, PAHO/WHO

### *Threats*

- Downward trend in international financial assistance to developing countries may affect resource availability
- Increased risks of imported new diseases such as ebola, chikungunya and zika and adverse implications for a tourism dominated economy

## PART III: STRATEGIC ORIENTATION

### 3.1 Corporate Policy Agenda

The MTDS enunciates a set of approaches and actions that will be undertaken in moving Antigua and Barbuda towards its long-term strategic goals. The attainment of this corporate vision will be guided by sustainable development dimensions in which the public sector machinery will be treated as a single system working towards the overarching imperative of improving the quality of life of all citizens.

One of the pillars of the sustainable development strategy will be to ensure adequate access to health care as a fundamental human right and to engender a sense of national dignity. In this context, the following actions will be pursued at the corporate level:<sup>25</sup>

- Strengthening health financing
- Strengthening the epidemiological function
- Strengthening inter ministerial/agency coordination with respect to wellness
- Strengthening legislation to prevent discrimination against people living with HIV and AIDS and to discourage wilful transmission of the disease

The NSPH will elaborate the policy directions contemplated by the MTDS. The strategic goals, objectives, interventions, actions, and targets of the NSPH will be anchored in the corporate policy agenda, while incorporating evidence-based priorities of the Ministry of Health and the Environment which will assure universal health coverage.

### 3.2 Health Sector Policy Agenda

The Ministry of Health and the Environment is the national public health agency vested with statutory responsibility for protecting and promoting the health and well-being of the population of Antigua and Barbuda. In 2014, the Ministry outlined four strategic lines of action for achieving Universal Health Coverage:<sup>26</sup>

- Expanding equitable access to comprehensive, quality, people-oriented health services
- Strengthening stewardship and governance
- Increasing and improving health financing with equity and efficiency
- Taking inter-sectoral action in responding to the social determinants of health

At the same time, the Ministry of Health and the Environment has adopted the “new strategic approach” to public health in the Caribbean region as enunciated in CCH-III. The key elements of this strategic approach include:

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<sup>25</sup> Antigua and Barbuda Medium-Term Development Strategy (2016-2020), Ministry of Finance and Corporate Governance, Pages 48-49

<sup>26</sup> Antigua and Barbuda Draft Strategy for Universal Health Coverage, June 2014, Pages 4-14

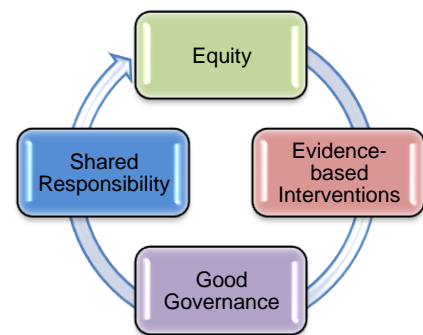
- People-oriented development
- User involvement and participation
- Leadership in public health coordinated across the region
- Outcome oriented planning, implementation and evaluation
- Stable resourcing for health and social protection <sup>27</sup>

### 3.3 Guiding Principles

The NSPH will adhere to four core principles in its formulation and execution:

- *Shared responsibility.* Harnessing the resources of all stakeholders and constituencies in a proactive and deliberate manner for the common good.
- *Equity.* A rights-based approach that caters to the needs of the entire population regardless of age, gender, social and economic status, or sexual preference.
- *Evidence-based interventions.* Investment decisions will focus on high-impact interventions that are based on the best available empirical evidence and respond to the objective needs of the country.
- *Good governance.* This will involve the effective, efficient and transparent use of human, financial and physical resources. This standard also incorporates continuous monitoring and evaluation of programmes and interventions and timely reporting.

Figure 3.1: Four Guiding Principles



### 3.4 Criteria for Strategic Priority Setting

Strategic priority setting is an inescapable imperative in resource constrained environments. In this context, the following criteria will be applied in establishing the strategic priorities of the NSPH:

- 1) *Alignment with established goals and targets:* Extent to which strategic interventions will advance the goals and targets outlined in the MTDS, other related national development plans, and international commitments.
- 2) *Level of urgency:* Extent to which an action is required in order to avoid near-term, system-critical disruptions or missed opportunities.
- 3) *Level of impact:* Extent to which strategic action will lead to visible and measurable improvements in quality of health and social well-being.

<sup>27</sup> Caribbean Cooperation in Health Phase III, Regional Health Framework 2010-2015, Investing for Health for Sustainable Development, Summary Document, Available at: [http://www.caricom.org/jsp/community\\_organs/health/cch\\_iii\\_summary.pdf](http://www.caricom.org/jsp/community_organs/health/cch_iii_summary.pdf)

- 4) *Availability of resources*: Extent to which resources – financial, human and physical - are readily available or can be easily mobilized.

### 3.5 Vision

The Vision of the Ministry of Health and the Environment is the “*Attainment of optimal health and wellness for all residents of Antigua and Barbuda*”.

### 3.6 Mission

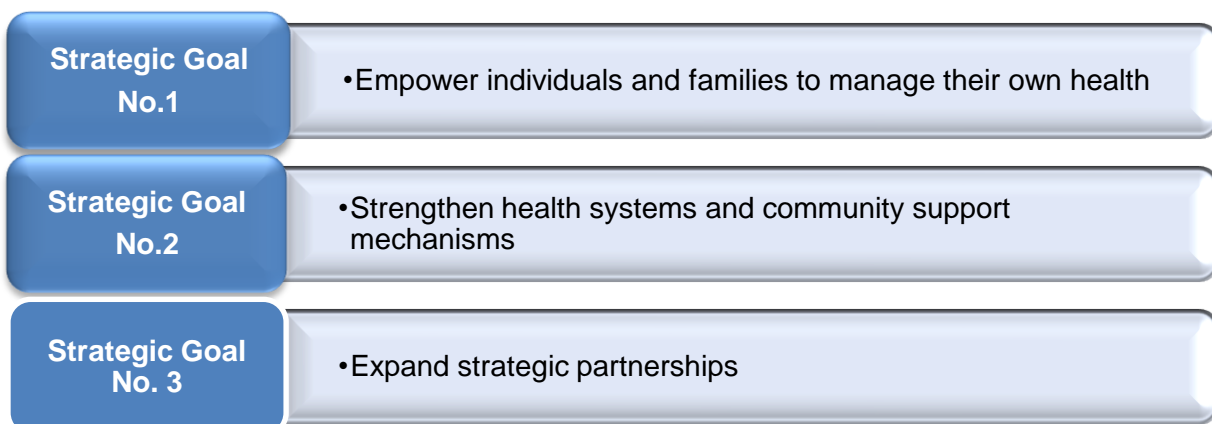
The Mission of the Ministry of Health and the Environment is to “*Promote and provide high quality health services that are accessible and affordable to the people of Antigua and Barbuda supported by effective policy formulation, health regulation, and strategic partnerships*”.

### 3.7 Strategic Goals

This NSPH will build on the solid foundation of the health sector that has been constructed over time. The thrust of the document will be on designing effective strategic approaches and interventions that will address the existing and emerging public health challenges that were identified during the situational analysis. These existing and emerging issues and challenges are summarized at Section 2.8.

Four strategic goals have been established based on national consensus. These strategic goals are inter-locking and mutually reinforcing and are embedded in the social development dimensions of the Government of Antigua and Barbuda as outlined in Section 3.1. Importantly, these goals will balance needs and expectations against available resources.

#### The Three Strategic Goals



## SECTION IV: STRATEGIC GOALS, OBJECTIVES, INTERVENTIONS AND OUTCOMES

Section 3.7 outlines the four strategic goals of the NSPH that are grounded in the key development areas identified in the situational analysis described in Section II. This Section will define the fundamental building blocks that will be used in the pursuit of these strategic goals – strategic objectives, strategic interventions, strategic actions and outcomes. This hierarchy of concepts is defined as follows:

- *Strategic goals* express in broad terms the direction that the strategic plan will take in achieving the vision of the Ministry of Health and the Environment
- *Strategic objectives* are the specific results that will contribute to the achievement of strategic goals
- *Strategic interventions* are approaches that describe how strategic objectives will be met
- *Strategic actions* are specific activities that are linked directly to strategic interventions
- *Outcomes* are results emerging from implementation of a strategic intervention or set of strategic interventions

### Goal One: Empower individuals and families to manage their own health

The health profile of Antigua and Barbuda has shifted markedly from communicable diseases to chronic forms of illnesses and the trend is expected to continue into the foreseeable future. Current evidence indicates that individuals and families who assume responsibility for self-management of their health conditions, whether communicable or chronic, and purposefully engage in a cluster of learned behaviours improve their health outcomes.<sup>28</sup> Healthy eating, exercise, self-advocacy, and adherence to medication are key components of self-management of health conditions.

The NSPH considers that empowering individuals and families to manage their own health is the most effective and sustainable pathway to personal and national health improvement. The strategic objectives and interventions that follow are geared towards the achievement of this goal.

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<sup>28</sup> Ryan, P and Sawin KJ. The Individual and Family Self-management Theory: Background and Perspectives on Context, Process, and Outcomes, Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2908991/>

## Strategic Objectives

Five strategic objectives will be pursued in advancing the goal of empowering individuals and families to manage their own health. Achievement of these objectives will result in reduction in morbidity and mortality due to NCDs, achievement of the MDG target for mortality among the under-five population, reduction in incidence and mortality due to HIV, improvement in the quality of institutional and community health care for the mentally ill and elderly, and streamlining of the social services provided to abandoned children and persons with disabilities.

### Strategic Objectives Goal One: Empower Individuals and Families

Strategic Objective 1.1	• Increase health literacy of the general population based on defined outputs of the Health Literate Care Model
Strategic Objective 1.2	• Reduce morbidity and mortality from CNCDs by 25 percent consistent with the WHO Global Action Plan
Strategic Objective 1.3	• Reduce under-five mortality rate from 17.2 per 1000 to 8.0 per 1000 consistent with MDG target
Strategic Objective 1.4	• Reduce the number new HIV infections by 50 percent; and increase the number of persons diagnosed with HIV infection receiving sustained antiretroviral treatment to 90 percent
Strategic Objective 1.5	• Improve the standard of health and social services provided to the mentally ill, elderly, persons with disabilities and abandoned children

#### **Strategic Objective 1.1: Increase health literacy among the general population based on defined outputs of the Health Literate Care Model.**

Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information needed to make appropriate health decisions. The Health Literate Care Model is a tested approach for engaging individuals, families and communities in decision-making for health and self-management. It emphasizes health opportunities and risks, and employs a broad spectrum of communication modalities to achieve desired behaviours and responses.<sup>29</sup> This objective will ensure that all individuals, families and communities are provided with the information they need to promote, protect and preserve their own health.

<sup>29</sup> Health Literate Care Model: A Universal Precautions Approach, Available at: [http://health.gov/communication/literacy/Health\\_Lit\\_Care\\_Model\\_508.pdf](http://health.gov/communication/literacy/Health_Lit_Care_Model_508.pdf)

**Strategic Interventions 1.1**

- a) Institutionalize health promotion practice within the health service with special reference to education and training, policy development, advocacy, and research and evaluation.
- b) Build national capacity to deliver health promotion across sectors including health, education, agriculture and social development; as well as the private sector and non-governmental organizations.
- c) Establish intersectoral linkages with key partners to advance the health promotion agenda.

**Strategic Actions and Outcomes 1.1**

Strategic Interventions	Strategic Actions	Outcomes
a) Institutionalize health promotion practice within the health service	<ul style="list-style-type: none"> <li>• Establish a National Health Promotion Advisory Committee with membership drawn from relevant sectors and technical disciplines</li> <li>• Develop a national health promotion strategy</li> <li>• Develop and implement annual or biennial national health promotion plans of action, as appropriate</li> </ul>	<ul style="list-style-type: none"> <li>• Approved national health promotion strategy and plan of action implemented in relevant sectors</li> </ul>
b) Build national capacity to deliver health promotion	<ul style="list-style-type: none"> <li>• Develop a customized health promotion manual that provides guidelines for use across sectors</li> <li>• Convene on-going and annual training programmes in health promotion for key health and non-health workers</li> </ul>	<ul style="list-style-type: none"> <li>• Key health and non-health workers trained in health promotion and involved in implementation of national strategy and plans of action</li> </ul>
c) Establish intersectoral linkages with key partners	<ul style="list-style-type: none"> <li>• Develop a comprehensive list of key stakeholders to participate in executing the national health promotion plan of action</li> <li>• Advocate for inclusion of approved health promotion activities in on-going work plans of various partner agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Health promotion activities undertaken routinely by partner agencies</li> </ul>

**Strategic Objective 1.2: Reduce morbidity and mortality from NCDs by 25% consistent with the WHO Global Action Plan.**

It is certain that the future of health care in Antigua and Barbuda will be dominated by the challenges posed by NCDs. Their impact on morbidity, disability and premature mortality constitute a grave threat to social and economic development. Unhealthy lifestyle factors lie at the core of the burgeoning problem.

The achievement of this objective will improve the health status of the population, enhance quality of life and longevity, and promote national productivity. Four strategic lines of action will be undertaken consistent with the WHO Global Action Plan:

**Strategic Interventions 1.2**

- a) Implement CNCD Policy and Action Plan. This measure will address gaps and challenges in relation to the four main risk factors for NCDs – unhealthy diets, insufficient exercise, harmful use of alcohol and use of tobacco. The role of gender and the special needs of rural and urban communities will also be highlighted.
- b) Streamline and strengthen the national health system response to NCDs in order to achieve universal coverage, equitable access and quality of care. The primary care approach will be the dominant mode of promoting health-seeking and health-sustaining behaviours and building a culture of self-care among individuals, families and communities. A robust referral system will also be developed to ensure continuity of care between primary and secondary care levels.
- c) Strengthen the national capacity to conduct surveillance and research on NCDs, their risk factors and determinants. A national research agenda will be developed and a multidisciplinary group of health workers appropriately trained to undertake surveillance and research initiatives on a sustained basis.
- d) Build capacity for community-based actions that harnesses the resources of key partners and stakeholders in creating supportive environments for prevention and control of NCDs. The central focus of the intervention will be on building coalitions among community leaders and the general population in advocating for the prevention and control of NCDs.

**Box 1: WHO “Best Buys” for NCD Interventions**

- Reducing salt intake and salt content of food.
- Replacing trans fats in food with polyunsaturated fat.
- Promoting public awareness about diet and physical activity.
- Protecting people from tobacco smoke and banning smoking in public places.
- Raising taxes on tobacco.
- Restricting access to retailed alcohol.
- Enforcing bans on alcohol advertising.
- Raising taxes on alcohol.

**Source:** WHO Global Status Report on NCDs, 2011



**Strategic Actions and Outcomes 1.2**

Strategic Interventions	Strategic Actions	Outcomes
a) Implement CNCD Policy and Plan of Action	<ul style="list-style-type: none"> <li>Develop and implement annual actions plans using the approved national policy as guide</li> </ul>	<ul style="list-style-type: none"> <li>Key elements of National CNCD Policy implemented annually</li> </ul>
b) Streamline and strengthen the national health system response to NCDs	<ul style="list-style-type: none"> <li>Develop/customize guidelines and tools for management of NCDs</li> </ul>	<ul style="list-style-type: none"> <li>Improved management of NCDs, including referral between primary and secondary care</li> </ul>
c) Strengthen national capacity for surveillance and research on NCDs	<ul style="list-style-type: none"> <li>Establish protocols and guidelines for NCDs surveillance and reporting</li> <li>Develop and implement a research agenda for NCDs</li> </ul>	<ul style="list-style-type: none"> <li>Research on NCDs conducted routinely and results utilized for policy, planning and programming scheduled basis</li> </ul>
d) Build capacity for community-based actions	<ul style="list-style-type: none"> <li>Mobilize community groups and networks to become actively engaged in advocacy, prevention and control efforts on NCDs</li> <li>Train community groups and networks in advocacy, prevention and control efforts on NCDs</li> </ul>	<ul style="list-style-type: none"> <li>Community groups/networks actively engaged in advocacy, information and education and service delivery for NCDs</li> </ul>

**Strategic Objective 1.3: Reduce under-five mortality rate from 17.2 per 1000 to 8.0 per 1000 consistent with MDG target.**

In 2014, the death rate among children under five years of age in Antigua and Barbuda was recorded at 17.2 per 1000 population. This statistic is more than double the MDG target set for the country and represents only marginal improvement of 29 percent since 2001. Most infant deaths occur in the neonatal period. Three strategic lines of action will be undertaken to address this problem.

**Strategic Interventions 1.3**

- a) Develop and implement a comprehensive package of services for care of mothers and their newborns including assessment tools, norms and standards, reference guidelines and training materials to address issues affecting the standard of care at multiple levels.
- b) Strengthen child nutrition screening with a focus on preventing under-nutrition and stunting.

- c) Establish causes of neonatal deaths. A study will be undertaken to differentiate the geographical distribution of neonatal deaths and the main causes.

### **Strategic Actions and Outcomes 1.3**

Strategic Interventions	Strategic Actions	Outcomes
a) Develop and implement a comprehensive package of services for care of mothers and their newborns	<ul style="list-style-type: none"> <li>• Review and update national policies, norms and standards for care of mothers and their newborns</li> <li>• Utilize approved assessment tools for the delivery of quality ante-partum and post-partum care</li> <li>• Collect, audit and report on data generated from the application of ante-partum and post-partum care</li> <li>• Establish/streamline dedicated neonatal units managed by well-trained and competent professionals</li> <li>• Review midwifery training and supervision</li> </ul>	<ul style="list-style-type: none"> <li>• Effective system for assessment, referral and management of high-risk mothers and their newborns</li> </ul>
b) Strengthen child nutrition screening and intervention programmes	<ul style="list-style-type: none"> <li>• Implement updated national child nutrition policy guidelines</li> <li>• Promote vigorous breast-feeding programmes among infants and young children</li> <li>• Conduct sound culturally-sensitive education and counselling on appropriate infant feeding practices for mothers and fathers</li> <li>• Establish a low-cost supplementary infant feeding programme</li> </ul>	<ul style="list-style-type: none"> <li>• Improved nutritional status of infants and young children</li> <li>• Universal breast-feeding among infants 0-6 months old</li> </ul>
c) Establish causes of neonatal deaths	<ul style="list-style-type: none"> <li>• Conduct research on neonatal deaths to determine distribution, causes and services offered</li> <li>• Implement recommendations of neonatal study</li> </ul>	<ul style="list-style-type: none"> <li>• Improved quality of service for neonates</li> </ul>

**Strategic Objective 1.4:** Reduce the number new HIV infections by 50 percent; and increase the number of persons diagnosed with HIV infection receiving sustained antiretroviral treatment to 90 percent.

Prevention and treatment of HIV and AIDS in Antigua and Barbuda is at the crossroads. After more than a decade of continuous decline, new HIV infections increased by more than 60 percent between 2013 and 2014. Further, despite the widespread availability and accessibility of antiretroviral therapy, 40 persons died from AIDS between 2012 and 2014.

This relatively high case fatality rate may be partly explained by the fact that only 50 percent of AIDS patients adhere to their treatment regimen.

The National AIDS Programme (NAP) aspires to the achievement of the international goal of zero new HIV infections, zero AIDS-related deaths and zero HIV-related stigma and discrimination. As well, the NAP subscribes to the UNAIDS 90-90-90 Initiative that promotes increased counselling and testing, sustained antiviral therapy, and viral load suppression.<sup>30</sup> (See Box 2). This objective will advance the efforts of Antigua and Barbuda in achieving national and global targets for ending the AIDS epidemic.

**Box 2**

*By 2020, 90% of all people living with HIV will know their HIV status. By 2020, 90% of all people diagnosed with HIV infection will receive sustained antiretroviral therapy. By 2020, 90% of all people receiving antiretroviral therapy will have viral load suppression.*

*UNAIDS: 90-90-90  
An Ambitious Treatment Target to help end the AIDS Epidemic*

### **Strategic Interventions 1.4**

- a) Institutionalize evidence-based and culturally-sensitive behavioural change interventions across sectors. Particular emphasis will be placed on programmes that reach in-school and out-of-school youth, women and girls, workers, residents of institutions, uniformed personnel, men who have sex with men, and sex workers and their clients. These programmes will be designed to empower individuals and families in reducing risk from HIV infection and increasing protective behaviours.
- b) Implement a mix of clinical and medical approaches in conjunction with behaviour modification strategies. These biomedical interventions will include provision of sex and reproductive health services, male and female condoms, antiretroviral therapy for prevention of mother-to-child transmission, pre-exposure and post-exposure prophylaxis, treatment of sexually transmitted infections, and voluntary counselling and testing.
- c) Introduce/strengthen critical political and social enablers that contribute to controlling the spread of HIV. The components of this intervention will be policy reform, reducing stigma and discrimination, and eliminating gender inequality and gender-based violence.

### **Strategic Actions and Outcomes 1.4**

Strategic Interventions	Strategic Actions	Outcomes
a) Institutionalize evidence-based and culturally sensitive HIV information and	<ul style="list-style-type: none"> <li>• Review and revise curricula of formal education system at primary, secondary and tertiary levels to strengthen</li> </ul>	<ul style="list-style-type: none"> <li>• HIV information and education taught routinely in at primary, secondary and tertiary levels of the</li> </ul>

<sup>30</sup> UNAIDS, An ambitious target to help end the AIDS epidemic, Available at: <http://www.unaids.org/en/resources/documents/2014/90-90-90>

Strategic Interventions	Strategic Actions	Outcomes
<p>education programmes across sectors</p>	<p>HIV component</p> <ul style="list-style-type: none"> <li>• Train a core of selected teachers throughout the formal education system to provide HIV information and serve as counsellors</li> <li>• Implement scientifically developed HIV information and education programmes among vulnerable groups</li> <li>• Review, revise and implement work place policies and programmes</li> </ul>	<p>national school system</p> <ul style="list-style-type: none"> <li>• Vulnerable individuals and groups routinely exposed to high-impact community-based programmes</li> <li>• Work place programmes implemented routinely in public and private sectors</li> </ul>
<p>b) Implement a mix of clinical and medical approaches in conjunction with behaviour modification strategies</p>	<ul style="list-style-type: none"> <li>• Integrate HIV into sexual and reproductive health services, especially for youth</li> <li>• Develop/update and implement national policy on procurement, storage and use of male and female condoms</li> <li>• Develop and implement national policy on pre-exposure and post-exposure prophylaxis for HIV</li> <li>• Provide widespread voluntary counselling and testing for HIV at traditional and non-traditional sites</li> <li>• Streamline HIV treatment programme, with special emphasis on adherence</li> </ul>	<ul style="list-style-type: none"> <li>• Widespread utilization of sexual and reproductive health services by youth and other vulnerable groups</li> <li>• 90 percent of reproductive age-group know their HIV status</li> <li>• 90 percent treatment coverage for HIV infection</li> </ul>
<p>c) Introduce/strengthen critical political and social enablers</p>	<ul style="list-style-type: none"> <li>• Review/update and revise HIV-related policies</li> <li>• Establish and energize networks of people living with HIV in all health districts</li> <li>• Actively engage non-governmental organizations and civil society in advocacy, community mobilization and counselling and testing for HIV</li> </ul>	<ul style="list-style-type: none"> <li>• Networks of people living with HIV and other non-governmental organizations actively engaged actively involved in HIV-related activities free of stigma and discrimination</li> </ul>

**Strategic Objective 1.5:** Improve the standard of health and social services provided to the mentally ill, elderly, persons with disabilities, abandoned children.

Care of the mentally ill, elderly, persons with disabilities, and abandoned children means providing the right level of intervention and support to enable such persons to achieve and maintain maximum independence and control over their own lives. Such care may be provided at community and institutional levels. This approach will deliver a spectrum of services including domiciliary support, day care, nursing homes, and residential care. Other issues such as revision and enactment of legislation, provision of adequate human resources, and improvement in physical infrastructure will be addressed in relevant sections under Goal Two.

**Strategic Interventions 1.5**

- a) Implement policies that support the delivery of comprehensive health care and social support to the mentally ill, elderly, persons with disabilities, and abandoned children.
- b) Modernize the quality of care offered by the public sector for the mentally ill, elderly, persons with disabilities and abandoned children. These measures will include setting of standards and rationalizing the range of services offered.
- c) Establish standards and policies for the delivery of services offered to the elderly by the private sector. These standards and protocols will include guidelines for service delivery, consistent monitoring and inspection, and enforcement.
- d) Develop and implement social support mechanisms for the mentally ill, elderly, persons with disabilities and abandoned children. These mechanisms will be developed and implemented with full involvement of relevant government agencies, notably the Ministry of Social Transformation and Human Resource Development and non-governmental organizations.

**Strategic Actions and Outcomes 1.5**

Strategic Interventions	Strategic Actions	Outcomes
a) Implement policies that support the delivery of comprehensive health care and social support	<ul style="list-style-type: none"> <li>• Develop and implement action plans consistent with existing national policies on mental health and ageing</li> <li>• Develop/update comprehensive national policy on health care and social support for abandoned children and adults with disabilities</li> <li>• Define and institutionalize mechanisms for early diagnosis, treatment and rehabilitation of persons under the age of 16 years with mental illnesses</li> </ul>	<ul style="list-style-type: none"> <li>• Health and social support services provided according to approved policies, guidelines and mechanisms</li> </ul>

Strategic Interventions	Strategic Actions	Outcomes
b) Modernize the quality of care offered by the public sector for the mentally ill, elderly, abandoned children, and persons with disabilities	<ul style="list-style-type: none"> <li>• Develop and implement a quality of care policy and plan of action plan for delivery of mental health services at Clarevue Hospital and at the community level</li> <li>• Develop and implement a quality of care policy and plan of action for delivery of services at the Fiennes Institute, including the delivery of acute care</li> </ul>	<ul style="list-style-type: none"> <li>• Mentally ill, elderly, persons with disabilities and abandoned children receiving quality care at institutional and community levels, as appropriate</li> </ul>
c) Establish standards and policies for the delivery of services offered to the elderly by the private sector	<ul style="list-style-type: none"> <li>• Develop national standards and protocols to govern all facets of operation of privately-operated nursing homes for the elderly</li> <li>• Establish a system of licensing for approved privately-operated nursing homes for the elderly</li> <li>• Implement a rigorous system of monitoring and inspection of privately-operated nursing homes</li> </ul>	<ul style="list-style-type: none"> <li>• All privately-owned nursing homes licensed and adhering to nationally approved standards</li> </ul>
d) Develop and implement social support mechanisms for the mentally ill, elderly, abandoned children, and persons with disabilities	<ul style="list-style-type: none"> <li>• Establish a national multi-disciplinary and intersectoral body to advise on strategies for enhancing social support for mentally ill, elderly, abandoned children, and persons with disabilities</li> <li>• Establish social support networks and family support groups at community level</li> <li>• Mobilize non-governmental organizations and private sector in providing for physical and social needs of mentally ill, elderly, persons with disabilities and abandoned children</li> </ul>	<ul style="list-style-type: none"> <li>• Social networks and family support groups established at national and local levels</li> </ul>

**Goal Two: Strengthen health systems and community support mechanisms**

Health systems strengthening is the process through which organizations, people, and actions are re-engineered to promote, restore and maintain health. This process consists of six building blocks that contribute to the responsiveness of the health sector. These building

blocks are governance, service delivery, health work force, health information, medical supplies, and health financing. At the same time, community involvement in health requires that residents take responsibility for their own health through effective participation.<sup>31</sup>

The health system of Antigua and Barbuda is generally well-organized, accessible and affordable and most of the sensitive health indicators have been met. Nonetheless, some challenges linger. These challenges relate to policy and planning, health information, legislation, service delivery, human resources, physical infrastructure and financing. This NSPH commits to reducing these deficits by strengthening health systems and community support mechanisms.

**STRATEGIC OBJECTIVES**

**Goal Two: Strengthen Health Systems and Community Support Mechanisms**

Strategic Objective 2.1	• Create requisite regulatory and administrative frameworks that will improve quality of care and access to health services
Strategic Objective 2.2	• Institutionalize health sector planning and programming, including health information management
Strategic Objective 2.3	• Enhance the capacity of the health sector to prevent and control disease conditions
Strategic Objective 2.4	• Reduce public health risk by improving environmental health conditions
Strategic Objective 2.5	• Achieve and maintain established benchmarks for management of pharmaceuticals and medical supplies
Strategic Objective 2.6	• Maintain adequate human resources to deliver effective health services at all levels
Strategic Objective 2.7	• Improve standard of accommodation and structural integrity of health care facilities
Strategic objective 2.8	• Increase financial resources available for health by 25 percent through the application of innovative financing mechanisms

**Strategic Objective 2.1: Create requisite regulatory and administrative frameworks that will provide unfettered access to available health services.**

Robust regulatory and supporting administrative frameworks are inescapable prerequisites to the operation of an effective health care system. Although modern health legislation exists in many areas, gaps in the provision of mental health services, care of the elderly,

<sup>31</sup> World Health Organization, Community Involvement in Health, Available at: <http://www.afro.who.int/en/clusters-a-programmes/hss/health-policy-a-service-delivery/features/2235-community-involvement-in-health.html>

social support to persons with disabilities and abandoned children, health information, HIV-related stigma and discrimination, and environmental health including international health regulations.

The responsibility of the Ministry of Health and the Environment is to exercise leadership in harnessing the resources of key sectors in the review and revision of out-dated legislation and the development of new ones, consistent with the needs of the health system. The strategic interventions that follow are designed to achieve this objective.

### **Strategic Intervention 2.1**

- a) Undertake comprehensive review of existing health legislation with a view to determining existing gaps. This process will recognize the several draft policies awaiting approval and enactment.
- b) Commission a modernization of all out-dated regulations and development of new instruments as appropriate. This initiative will adopt a multi-sectoral orientation with direct involvement of the Ministry of Legal Affairs and other key partners.
- c) Modernize administrative structures to support the implementation of current and new legislation.
- d) Implement all regional and international health commitments and regulations, including the WHO International Health Regulations.

### **Strategic Actions and Outcomes 2.1**

Strategic Interventions	Strategic Actions	Outcomes
a) Undertake comprehensive review of existing health legislation	<ul style="list-style-type: none"> <li>• Develop inventory of existing regulations within the health system</li> <li>• Conduct gap analysis of legislation required for optimum performance of the health sector</li> </ul>	<ul style="list-style-type: none"> <li>• National consensus on health legislation requiring revision/update</li> </ul>
b) Commission a modernization of all out-dated legislation and development of new instruments as appropriate.	<ul style="list-style-type: none"> <li>• Develop a plan of action for development or revision of legislation based on results of gap analysis</li> <li>• Obtain approval of political directorate for new and revised/updated legislation</li> <li>• Undertake formal publication and public dissemination of approved and enacted instruments according to established guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• New and revised/updated legislation and disseminated as appropriate</li> </ul>
c) Modernize administrative structures and	<ul style="list-style-type: none"> <li>• Conduct administrative review of health sector to rationalize relevant organizational arrangements,</li> </ul>	<ul style="list-style-type: none"> <li>• Administrative reform of the health sector</li> </ul>



Strategic Interventions	Strategic Actions	Outcomes
arrangements to support implementation of current and new legislation	<p>policies and procedures, and reporting arrangements</p> <ul style="list-style-type: none"> <li>• Develop and implement a plan of action for addressing approved recommendations of administrative review</li> </ul>	
d) Implement all regional health commitments and international health regulations	<ul style="list-style-type: none"> <li>• Develop an inventory of all regional health commitments and international health regulations</li> <li>• Implement a plan of action to achieve full compliance with regional health policies and international health regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Regional and international health policies and regulations according to plan of action</li> </ul>

**Strategic Objective 2.2: Institutionalize health sector planning and programming, including health information management.**

Strategic planning is the bedrock for orderly and sustained health sector development. The growing complexity of the health sector, shifts in epidemiological profile, and resource constraints amidst growing expectations of the population, provide cogent argument for a coordinated and effective planning arrangement. Currently, the establishment does not make provision for a professional health planner and the functions are diffused among programme managers at various levels.

Integral to the effective execution of the health planning function is the availability of current and accurate data to guide policy analysis, priority setting, and resource allocation. The existing Health Information Division does not possess the capacity to generate the scope, range and consistency of data required to support these functions.

The burden of this objective is to institutionalize strategic and operational planning within the Ministry of Health and the Environment and to modernize the health information system by applying two main strategic interventions.

**Strategic Intervention 2.2**

- a) Establish Health Planning Unit with the capacity to execute the planning function of the health sector with efficiency and effectiveness.
- b) Modernize the health information system in order to improve its level of functionality. Improvements will be undertaken against the background of recommendations emerging from the HMN Assessment conducted in 2012.

**Strategic Actions and Outcomes 2.2**

Strategic Interventions	Strategic Actions	Outcomes
a) Establish a Health Planning Unit	<ul style="list-style-type: none"> <li>• Develop an organizational framework for the establishment of a Health Planning</li> <li>• Capacitate the Health Planning Unit with required human and physical resources</li> <li>• Implement recommendations Health Metrics Network assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Functional Health Planning Unit with requisite resources, including a professional health planner</li> </ul>
b) Modernize the health information system in order to improve its level of functionality	<ul style="list-style-type: none"> <li>• Develop a coordinated system for generation and utilization of health information involving both public and private sector entities</li> <li>• Introduce an electronic health information system as a mechanism for timely and efficient generation and analysis of data</li> <li>• Conduct on-going training for key stakeholders involved in the generation and use of health information</li> </ul>	<ul style="list-style-type: none"> <li>• Electronic health information system introduced and accurate and time health information generated and disseminated</li> </ul>

**Strategic Objective 2.3: Enhance the capacity of the health sector to prevent and control disease conditions**

Epidemiology is the study of the patterns, causes and effects of disease conditions in defined human populations. It is the cornerstone of modern public health practice in tracking new, emerging and re-emerging diseases and their risk factors, as well as in shaping policy decisions for prevention and control. The practice involves the design of appropriate studies; collection, analysis and interpretation of data; and dissemination of results. This objective is designed to enhance the capacity of the Ministry of Health and the Environment to exercise these functions.

**Strategic Intervention 2.3**

- a) Strengthen the technical capacity of the health sector to conduct epidemiological surveillance. This strategy will involve developing standards and guidelines, recruiting or re-assigning specialist staff, and improving data quality.
- b) Establish strategic linkages with all programme areas within the public and private health sector to ensure fulsome involvement in epidemiological surveillance

activities. This approach will also ensure the development and maintenance of a close nexus with the Health Planning Unit and the Health Information Division.

### **Strategic Actions and Outcomes 2.3**

Strategic Interventions	Strategic Actions	Outcomes
a) Strengthen the technical capacity of the health sector to conduct epidemiological surveillance	<ul style="list-style-type: none"> <li>• Develop national standards and operating guidelines for essential aspects of epidemiological surveillance, consistent with international best practice</li> <li>• Appoint a National Epidemiologist with appropriate technical and physical support</li> </ul>	<ul style="list-style-type: none"> <li>• Functional Epidemiology Unit with requisite resources, including a trained National Epidemiologist</li> </ul>
b) Establish strategic linkages with all programme areas within the public and private health sector	<ul style="list-style-type: none"> <li>• Establish a National Epidemiology Surveillance Committee, including private sector representatives, to serve as an expert advisory body</li> <li>• Develop protocols for partner engagement with clear guidelines on responsibilities and obligations</li> <li>• Produce and disseminate quarterly epidemiological updates, or as otherwise required</li> </ul>	<ul style="list-style-type: none"> <li>• National Advisory Committee with public and private sector representation providing technical guidance to Epidemiology Unit</li> </ul>

### **Strategic Objective 2.4: Reduce public health risk by improving environmental health conditions**

Environmental health addresses all physical, chemical and biological factors that may potentially affect human health. In the case of Antigua and Barbuda, outstanding environmental health concerns include vector control, food safety, water quality and waste management. Already, wide ranging measures exist to prevent and control these problems and significant successes have been recorded. This objective is intended to build on those gains by strengthening existing systems, and reviewing and refining operational modalities.

### **Strategic Interventions 2.4**

- Strengthen environmental health systems and approaches to prevent and control disease, injury and disability. This intervention will focus on environmental issues of greatest concern including vector control, food safety, water quality and waste management.
- Promote healthy environments through an extensive process of public information and education and community engagement.

**Strategic Actions and Outcomes 2.4**

Strategic Interventions	Strategic Actions	Outcomes
a) Strengthen environmental health systems and approaches to prevent and control disease, injury and disability	<ul style="list-style-type: none"> <li>Streamline environmental health interventions in key areas based on epidemiological profile</li> <li>Produce and disseminate regular reports on key environmental health activities</li> </ul>	<ul style="list-style-type: none"> <li>Improvement in food safety, water quality and waste management and reduction in mosquito and rodent indices</li> </ul>
b) Promote healthy environments through an extensive process of public information and education and community engagement	<ul style="list-style-type: none"> <li>Engage all state agencies providing environmental health-related activities to ensure coordinated approach</li> <li>Mobilize community action around specific health issues including community groups, non-governmental organizations and private sector</li> </ul>	<ul style="list-style-type: none"> <li>Active community engagement in environmental health programmes</li> </ul>

**Strategic Objective 2.5: Achieve and maintain established benchmarks for efficient management of pharmaceuticals and medical supplies.**

Antigua and Barbuda is a participating country within the OECS/PPS. Most recent reports indicate that performance in terms of inventory variation, average availability of medicines, and warehouse assessment falls well outside established benchmarks. These deficits are largely the result of inadequate warehouse capacity and conditions, depleted human resources, and delayed payments for supplies received. This strategic objective will seek to correct these and other anomalies in the maintenance of a consistent and reliable supply of pharmaceuticals and medical supplies offered through the Ministry of Health and the Environment.

**Strategic Intervention 2.5**

- a) Strengthen the governance, management and operations of the Pharmaceutical Division. This initiative will include renewal of the Pharmacy Council, review and revision of pharmacy legislation as appropriate, and establishing procedural and operational norms and standards.
- b) Undertake a comprehensive review of existing pharmaceutical and medical supplies management system including forecasting and ordering, storage, inventory control and prescribing patterns. The results of this review will be used re-organize the system towards achieving greater efficiencies and more consistent and reliable supplies of pharmaceuticals.

- c) Generate pharmaceutical information for decision-making by conducting periodic drug utilization reviews and other research.
- d) Reinforce the drug information and education programme aimed at improving prescribing practices of health workers and engagement of the general public.

### **Strategic Actions and Outcomes 2.5**

Strategic Interventions	Strategic Actions	Outcomes
a) Strengthen the governance, management and operations of the Pharmaceutical Division	<ul style="list-style-type: none"> <li>• Establish a Pharmacy and Therapeutic Advisory Committee</li> <li>• Revise and update Pharmacy Act and Regulations</li> <li>• Establish procedural and operational guidelines for the pharmacy services at central and district levels</li> </ul>	<ul style="list-style-type: none"> <li>• Improved management and operation efficiency through application of updated regulations and procedural and operational guidelines</li> </ul>
b) Undertake a comprehensive review of existing pharmaceutical and medical supplies management system	<ul style="list-style-type: none"> <li>• Conduct review of key components of the medical supplies management system:               <ul style="list-style-type: none"> <li>- Forecasting and ordering</li> <li>- Storage</li> <li>- Inventory control</li> <li>- Prescribing practices</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in stock-outs of pharmaceutical and medical supplies</li> </ul>
c) Generate information for decision-making by conducting periodic drug utilization reviews and other research	<ul style="list-style-type: none"> <li>• Conduct annual drug utilization reviews and small-scale research, in collaboration with OECS PPS</li> <li>• Collect and analyze service data related to the operations of the Pharmaceuticals Division</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced data for planning and programming</li> </ul>
d) Reinforce drug information and education programme aimed at improving prescribing practices of health workers and engagement of the general public	<ul style="list-style-type: none"> <li>• Conduct training sessions on drug prescribing practices for health workers - doctors, family nurse practitioners, nurses, pharmacists</li> <li>• Produce and disseminate information guides for use at public clinics and hospitals and for the general public</li> </ul>	<ul style="list-style-type: none"> <li>• Improved prescribing practices among medical practitioners</li> </ul>

### **Strategic Objective 2.6: Maintain adequate number, mix and deployment of human resources available to deliver effective health services at all levels.**

Human resources for health are arguably one of the most important components of the health care delivery system. Thus, the performance of the system and the benefits to clients

depend heavily upon the availability, knowledge, skills and motivation of individuals responsible for delivering health services. Deficits in the number, mix and skills of health workers have been reported across many programme areas.

No formal sector-wide assessment of the human resource needs of the Ministry of Health and the Environment has been attempted and human resource for health planning is not institutionalized. This cross-cutting objective will focus on ensuring the availability of adequate number, mix and skills within the health system as a whole.

### **Strategic Intervention 2.6**

- a) Establish health work force needs across all sections of the Ministry of Health and the Environment. This process will involve the full engagement of all programme managers and will balance programme expectations with available resources.
- b) Institutionalize succession planning as a mechanism for renewing the health work force and achieving orderly transition.

### **Strategic Actions and Outcomes 2.6**

Strategic Interventions	Strategic Actions	Outcomes
a) Establish health work force needs across all sections of the Ministry	<ul style="list-style-type: none"> <li>• Conduct comprehensive sector-wide assessment of human resources for health needs</li> <li>• Develop and implement a comprehensive Human Resources for Health Plan that reflect current and future needs of the Ministry</li> <li>• Fill all existing vacancies across all programme areas based on priority considerations</li> <li>• Mobilize technical and physical resources at national, regional and international levels to support implementation of Human Resources Plan for Health</li> </ul>	<ul style="list-style-type: none"> <li>• Human Resources for Health Plan developed and implemented</li> <li>• Key health positions filled consistent with Human Resources for Health Plan</li> </ul>
b) Institutionalize succession planning	<ul style="list-style-type: none"> <li>• Develop matrix listing of persons with potential to assume greater responsibility across programme areas</li> <li>• Provide critical development experiences and training to persons identified for higher-level responsibilities</li> <li>• Build a database of retirement dates for health workers to facilitate replacement planning</li> </ul>	<ul style="list-style-type: none"> <li>• Human resources succession plan developed and implemented</li> </ul>

**Strategic Objective 2.7: Improve standard of accommodation and structural integrity of health care facilities.**

Inadequacies in health system infrastructure often limit access and contribute to poor quality health care and outcomes. Physical health infrastructure in Antigua and Barbuda has been supported by an on-going construction and rehabilitation programme and is, for the most part, quite good. However, deficiencies have been reported in areas such as Clarevue Hospital, Fiennes Institute, and the National Vocational and Rehabilitation Centre for Disability. This cross-cutting objective will embrace all programme areas and ensure improvement in the standard of accommodation and structural integrity of all health care facilities.

**Strategic Interventions 2.7**

- a) Conduct comprehensive national assessment of all health care facilities to determine physical condition and need for repairs and/or upgrading. This national assessment will take into consideration the special services offered by individual facilities and provide a priority listing of physical infrastructure requiring attention.
- b) Upgrade and modernize, as appropriate, physical health infrastructure based on recommendations of national assessment.

**Strategic Actions and Outcomes 2.7**

Strategic Interventions	Strategic Actions	Outcomes
a) Comprehensive national assessment of all health care facilities to determine physical condition and need for repairs or improvement	<ul style="list-style-type: none"> <li>• Conduct a national assessment of the physical condition and needs of all health care facilities</li> <li>• Secure approval of policy makers for priority listing, financing and schedule for infrastructural improvement</li> </ul>	<ul style="list-style-type: none"> <li>• Priority listing of health infrastructure requiring attention</li> </ul>
b) Upgrade and modernize, as appropriate, physical health infrastructure based on recommendations of national assessment	<ul style="list-style-type: none"> <li>• Implement health infrastructure repair/modernization programme according to priority listing and schedule</li> </ul>	<ul style="list-style-type: none"> <li>• Health infrastructure development programme implemented according to priority needs</li> </ul>

**Strategic Objective 2.8: Increase financial resources available for health by 25 percent through the application of innovative financing mechanisms.**

As a percentage of GDP, health expenditure in Antigua and Barbuda has been on a downward path for more than a decade and falls well below the internationally accepted

benchmark. Furthermore, the financial resources provided by the Government through the consolidated fund coupled with contributions from the Medical Benefits Scheme have proven insufficient to satisfy the high and rising costs of health care. Expanding the resource envelope for health utilizing innovative financing mechanisms is therefore an urgent necessity.

By definition, innovative financing includes not only mechanisms designed to raise additional funds but also employing strategies to increase efficiency in the use of those resources. The Ministry of Health and the Environment will be employ four innovative financing interventions in attaining the objective of increasing available resources for health in Antigua and Barbuda.

**Strategic Interventions 2.8**

- a) Perform central leadership role in the establishment of a National Health Insurance (NHI). The leadership role will be undertaken in collaboration with other key stakeholders such as the Ministry of Finance, MBS and MSJMC and will reinforce its regulatory responsibility in the provision of health care.
- b) Streamline and expand existing pooled procurement initiatives to assure economies of scale. Specifically, the existing mechanisms for purchase of pharmaceutical and medical supplies and vaccines through PPS and PAHO will be streamlined; while opportunities for pooled procurement of other categories of goods and services will be explored.
- c) Identify and quantify inefficiencies in the public health sector. In this context, special attention will be paid to services with highest cost such as human resources, pharmaceuticals and medical supplies, and procurement of good and services.
- d) Establish Trust Fund to support tertiary care especially for those health conditions that require overseas interventions. This Trust Fund will be established in partnership with private sector entities.

**Strategic Actions and Outcomes 2.8**

Strategic Interventions	Strategic Actions	Outcomes
a) Perform central leadership role in establishment of NHI	<ul style="list-style-type: none"> <li>• Maintain full membership on Planning Committee for establishment of NHI</li> <li>• Provide policy guidance and technical support to Planning Committee for establishment of NHI</li> <li>• Define regulatory and service delivery responsibilities within the framework of NHI</li> <li>• Conduct training and sensitization sessions for staff of Ministry of Health on NHI</li> </ul>	<ul style="list-style-type: none"> <li>• NHI plan document reflect key policy, regulatory and technical considerations proposed by Ministry of Health</li> </ul>



- |  |  |   |
|--|--|---|
| b) Streamline and expand pooled procurement initiatives  | <ul style="list-style-type: none"> <li>• Conduct comprehensive review of pooled procurement through OECS/PPS and PAHO with a view towards increased efficiency</li> <li>• Develop a mechanism for pooled procurement of pharmaceuticals on behalf of Ministry of Health and MBS</li> <li>• Conduct a small-scale study of other goods and services utilized by Ministry of Health that may benefit from pooled procurement</li> <li>• Implement recommendations of operational review and study</li> </ul> | <ul style="list-style-type: none"> <li>• Single source procurement of pharmaceuticals by Ministry of Health and MBS</li> <li>• Cost savings from procurement of specified goods and services</li> </ul> |
| c) Identify and quantify inefficiencies in the public health sector                            | <ul style="list-style-type: none"> <li>• Conduct inventory and performance management review of high-cost services within the public health sector</li> <li>• Modernize existing financial accounting systems based on approved recommendations of inventory and performance management review</li> </ul>  | <ul style="list-style-type: none"> <li>• Efficient accounting system and cost containment</li> </ul>  |
| d) Establish Trust Fund to support tertiary care in collaboration with private sector entities | <ul style="list-style-type: none"> <li>• Conduct sensitization sessions with umbrella private sector agencies such as Chamber of Commerce and Industry, Employers' Federation, Hotels and Tourism Association, and off-shore Universities on the benefits of a Trust Fund</li> <li>• Develop protocols, guidelines and statutory arrangements for operation of Trust Fund</li> <li>• Inaugurate Trust Fund consistent with legislative requirements</li> </ul>   | <ul style="list-style-type: none"> <li>• Trust Fund established as a public/private sector partnerships with pledged financial, technical and physical resources</li> </ul>                             |

### Goal Three: Expand strategic partnerships

Strategic partnerships are formal agreements between distinct entities to share expertise, resources or competencies for mutual benefit. Such partnerships flourish in conditions of national ownership, mutual trust and shared objectives. Currently, Antigua and Barbuda enjoys functional cooperation with regional entities such as CARICOM, OECS, CARPHA and PAHO; and bilateral agreements international development partners and friendly governments.

National resource constraints, the encompassing determinants of health, and the constant threat of new, emerging, and re-emerging diseases underline the need for encouraging strategic partnerships. The NSPH will pursue three strategic objectives in expanding such partnerships:



**Strategic Objective 3.1: Create mechanisms to stimulate intersectoral partnerships**

The Government of Antigua and Barbuda is by far the largest health care provider (75 percent) in the country, with smaller but significant contributions from the private sector and other non-governmental organizations. Other public sector entities such as the Ministries of Education, Social Development and Agriculture also provide important health-related services. This objective will synergize the policies and resources all national partners involved in the delivery of health-related services and two strategic interventions will be undertaken in so doing.

**Strategic Interventions 3.1**

- a) Promote institutionalization of intersectoral planning within the public sector under the leadership of the Ministry of Finance, the Economy and Public Administration.
- b) Formally designate and empower a high-level staff member within the Ministry of Health and the Environment to act as public/private sector liaison to foster strategic relationship with respect to planning, programming and resourcing for national health.

**Strategic Actions and Outcomes 4.1**

Strategic Interventions	Strategic Actions	Outcome
a) Promote the institutionalization of intersectoral planning	<ul style="list-style-type: none"> <li>• Develop and implement Intersectoral plans incorporating relevant</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of intersectoral plans that define health-related</li> </ul>

Strategic Interventions	Strategic Actions	Outcome
within the public sector	components of the NSPH <ul style="list-style-type: none"> <li>• Rationalize budgetary allocations and other resources in intersectoral plans</li> <li>• Develop strategies for building synergy and avoiding duplication of efforts</li> <li>• Prepare annual intersectoral reports that highlight areas of collaboration, progress and constraints</li> </ul>	areas for coordination and cooperation
b) Formally designate and empower a high-level staff member within the Ministry of Health to act as public/private sector liaison	<ul style="list-style-type: none"> <li>• Assign high-level staff member as intersectoral coordinator with clear terms of reference</li> <li>• Conduct annual joint meetings of public, private and civil society entities on health</li> </ul>	<ul style="list-style-type: none"> <li>• Functional public/private sector liaison within Ministry of Health and the Environment</li> </ul>

**Strategic Objective 3.2: Implement all health-related agreements acceded to by the Government of Antigua and Barbuda**

Already, Antigua and Barbuda enjoys many benefits from its membership within key regional health institutions. This objective will seek to deepen those partnerships and establish new ones, where appropriate. Two strategic interventions will be used to achieve this objective.

**Strategic Interventions 3.2**

- Rigorously implement all regional agreements, protocols and guidelines approved by the Government of Antigua and Barbuda within the framework of CARICOM, OECS, CARPHA and PAHO.
- Establish bilateral arrangements with regional entities within and outside of the established frameworks of cooperation and collaboration. These arrangements may extend to non-English speaking countries.
- Establish an Office of International Relations in Health. This office will be responsible for stimulating regional and international strategic partnerships and coordinating all related matters.

**Strategic Actions and Outcomes 3.2**

Strategic Interventions	Strategic Actions	Outcomes
a) Rigorously implement	<ul style="list-style-type: none"> <li>• Develop an inventory of all</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with</li> </ul>

Strategic Interventions	Strategic Actions	Outcomes
all agreements, protocols and guidelines approved by the Government of Antigua and Barbuda	<p>approved regional agreements, protocols and guidelines</p> <ul style="list-style-type: none"> <li>• Incorporate provisions of agreements, protocols and guidelines into national policy and planning</li> </ul>	agreements, protocols and guidelines
b) Establish bilateral arrangements with regional entities within and outside of the established frameworks.	<ul style="list-style-type: none"> <li>• Prepare inventory of opportunities for bilateral collaboration among all Caribbean countries – English, Dutch, Spanish</li> <li>• Develop and implement strategies for accessing available opportunities</li> <li>• Undertake continuous assessment of benefits and challenges</li> </ul>	<ul style="list-style-type: none"> <li>• Improved and expanded benefits from bilateral and multilateral partnerships</li> </ul>
c) Establish an Office of International Relations in health	<ul style="list-style-type: none"> <li>• Develop comprehensive terms of reference for the Office of International Relations in health</li> <li>• Secure Cabinet approval for establishment of Office</li> </ul>	<ul style="list-style-type: none"> <li>• Increased number and range of regional and international strategic partnerships</li> </ul>

**Strategic Objective 3.3: Deepen relationships with traditional and non-traditional international development partners**

The delivery of health care in Antigua and Barbuda has been strengthened over time by technical and financial support from various international development partners. Such support has been critical in advancing universal access to quality health care services. This objective will serve to deepen relationships with international development partners through two strategic actions.

**Strategic Interventions 3.3**

- a) Develop and implement a comprehensive strategy and plan of action for mobilizing technical and financial resources from international development partners. This plan of action will be developed in collaboration with the Ministry of Finance and Economic Development and the Ministry of Foreign Affairs and will embrace traditional and non-traditional development partners and philanthropic organizations.
- b) Engage the services of overseas Consulates, Missions and Embassies of Antigua and Barbuda in marketing the plan of action.

**Strategic Actions and Outcomes 3.3**

Strategic Interventions	Strategic Actions	Performance Standards
<p>a) Develop and implement a comprehensive strategy and plan of action for mobilizing technical and financial resources from international development partners</p>	<ul style="list-style-type: none"> <li>• Prepare inventory listing of all current and prospective international development partners</li> <li>• Develop strategic lines of action for mobilizing resources from international partners</li> <li>• Implement plan of action with periodic review and reporting on progress</li> </ul>	<ul style="list-style-type: none"> <li>• Additional technical and financial resources mobilized incrementally</li> </ul>
<p>b) Engage the services of overseas Consulates, Missions and Embassies affiliated to Antigua and Barbuda in marketing the plan of action</p>	<ul style="list-style-type: none"> <li>• Undertake orientation of all Consulates, Missions and Embassies on plan of action, including formal presentation using cost-effective technologies and approaches</li> <li>• Engage foreign service entities in resource mobilization</li> </ul>	<ul style="list-style-type: none"> <li>• Foreign Service entities actively pursuing resource mobilization efforts for health</li> </ul>

## PART V: IMPLEMENTATION ARRANGEMENTS

### 5.1 General

This Section describes the roles and responsibilities of all strategic partners that will be engaged in key aspects of implementation of the NSPH, consistent with the principles outlined in Section 2.7. It also discusses potential risks to effective implementation and proposes practical strategies for mitigating such risks.

### 5.2 Strategic Partners: Roles and Responsibilities

The overarching responsibility for the effective implementation of the NSPH will reside with the Ministry of Health and the Environment. However, other strategic partners at the national, regional and international levels will also be mobilized to perform critical supporting roles. Table 5.1 outlines the key roles and responsibilities of the main strategic partners.

**Table 5.1: Strategic Partners for Implementation of NSPH**

Strategic Partners	Roles and Responsibilities
Cabinet	National development planning Policy and administrative reform Resource allocation
Ministry of Finance, the Economy and Public Administration	Corporate leadership and oversight Budgetary support and advocacy
Ministry of Health and the Environment	Policy and planning Service delivery Monitoring and evaluation Resource mobilization Building national, regional and international partnerships Public information
Other Line Ministries	Integrated planning and programming Support sustainable environment initiatives Poverty reduction Gender mainstreaming Community mobilization for health
Private Sector	Integrated planning and programming Technical and financial support Information sharing
Civil Society/Non-Governmental	Integrated planning and programming Advisory support

Organizations	Community mobilization Gender mainstreaming Social support to vulnerable groups Technical and financial support Information-sharing Service delivery
Bilateral and Multilateral Partners	Technical support, including advisory services
International Development Partners	Technical and financial support

### 5.3 Guidelines for Implementation

The NSPH is an expression of the strategic goals, objectives, interventions and outcomes that the Government of Antigua and Barbuda, through the Ministry of Health and the Environment, will be pursue over the medium-term. As a strategic plan, it does not detail routine activities and delineate tasks. Instead, such essentials form the essence of implementation plans that focus on shorter periods of time, usually 1-2 years.

Three separate operational plans will be developed during the lifetime of the NSPH. (See Figure 5.1) A comprehensive stakeholder review will be undertaken upon expiration of each implementation plan and the findings incorporated into the successor document. Each implementation plan will contain the following:

- Clear objectives
- Activities and tasks linked to objectives
- Implementation schedule
- Coordinating responsibility
- Budget

Figure 5.1: Operational Planning Process



The Ministry of Health and the Environment will establish a Health Planning Unit that will be vested with the responsibility for overseeing the implementation of the NSPH, including the development of requisite operational plans, monitoring, evaluation, and reporting.

### 5.4 Risk and Risk Management

The strategic interventions proposed by the NSPH are exposed to many risks that hold potential for undermining success. The main risks identified, along with mitigation strategies, are set out in Table 5.2. The proposed mitigation strategies are not exhaustive and will be subject to continuous review and revision.

**Table 5.2: Risk and Risk Mitigation Strategies**

Risks	Assessment Ranking	Mitigation Strategies
<p><i>Fiscal constraints:</i> As a percentage of GDP, health expenditure in Antigua and Barbuda has been on the decline for more than a decade. The current expenditure level of 3.1 percent is considerably lower than the international benchmark of 5-6 percent. Moreover, continuing global financial instability is likely to constrain Government's capacity to significantly increase its contribution to the development of the public health sector.</p>	High	<ul style="list-style-type: none"> <li>• Explore extra-budgetary funding options</li> <li>• Reform the health system with greater emphasis on cost efficiency</li> <li>• Diversify funding sources with less reliance on donor support</li> <li>• Rational allocation of resources geared towards achieving highest impact</li> </ul>
<p><i>Inefficiencies within the health sector:</i> Many deficits exist in the management and organization of the health sector that undermine efficiency and effectiveness. These deficits revolve mainly around policy and planning, legislative arrangements, organization of services including referral systems and health infrastructure, human resources, epidemiological surveillance, and health information. Failure to address these discrepancies adequately will jeopardize progress.</p>	High	<ul style="list-style-type: none"> <li>• Reform of the health sector in key areas to respond to current and future needs</li> <li>• Establish essential structures that will strengthen human resources for health, health planning and health information and epidemiological surveillance</li> <li>• Mobilize technical and financial support from regional institutions and bilateral and multilateral partners to implement the health sector reform agenda</li> </ul>
<p><i>Inadequate stakeholder involvement:</i> Successful implementation of the NSPH is premised on the effective and continuous engagement of a broad spectrum of stakeholders, within and without the health sector. Traditionally, sustained involvement of all relevant sectors has been an area of relative weakness in the implementation of health programmes.</p>	Medium	<ul style="list-style-type: none"> <li>• Institutionalize intersectoral strategic and operational planning and reporting at the corporate and sector levels</li> <li>• Negotiate and document expected roles and responsibilities of all stakeholders and share information widely</li> </ul>
<p><i>Ineffective monitoring, evaluation and reporting:</i> Currently, these functions are diffused and not linked strategically. It is</p>	Medium	<ul style="list-style-type: none"> <li>• Establish a comprehensive and coherent monitoring, evaluation and reporting framework, including the</li> </ul>



instructive that no consolidated and coherent periodic health sector reports are produced. It will be impossible to measure the performance and impact of the NSPH unless these functions are streamlined.

appointment of an oversight Monitoring and Evaluation Reference Group

- Conduct multi-stakeholder annual programme reviews
- Produce comprehensive performance reports based on established protocols and schedules

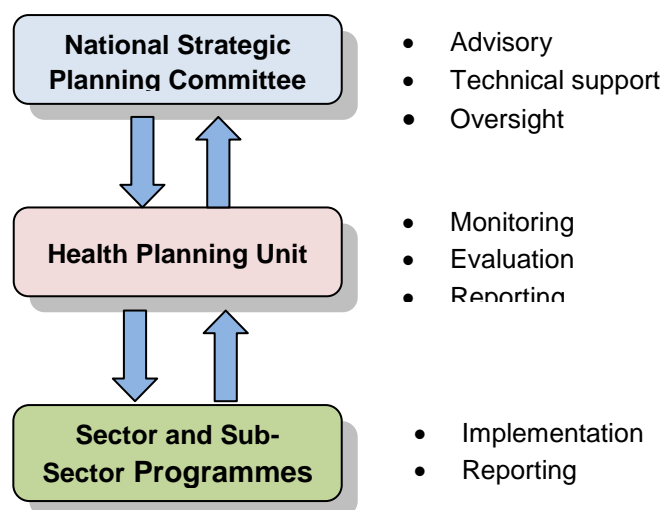
## PART VI: MONITORING, EVALUATION AND REPORTING

### 6.1 Institutional Arrangements

Monitoring, evaluation and reporting will be a core component of the implementation of the NSPH. The ultimate purpose is to track progress and determine the extent to which the strategic objectives have been accomplished. The institutional responsibility for this function will reside with the new Health Planning Unit, with technical advisory support provided by a designated National Strategic Planning Committee.

In effect, the National Strategic Planning Committee will function as a Health-Monitoring and Evaluation Reference Group (H-MERG) consistent with international protocols and standards. This advisory body will provide technical guidance in establishing and refining indicators, and analysis and interpretation of data. All management, operational and reporting procedures will conform to the standard policies and practices of the Ministry of Health and the Environment.

**Figure 6.1: Monitoring, Evaluation and Reporting Arrangements**



### 6.2 Monitoring, Evaluation and Reporting Processes

#### 6.2.1 Operational Planning

Successive biennial operational plans will provide the framework for the methodical implementation of the strategic actions outlined in this NSPH. These operational plans will be used for tracking progress and will define the responsibilities of all strategic partners. More details on the operational planning process are available at Section 5.3.

### *6.2.2 Data Collection and Reporting*

The health information system operated by the Health Planning and Information Unit will be the driving force for data collection, analysis and reporting. The success of this operation will be assured by the full involvement of other strategic partners as outlined in Section 5.2. The following reports will be produced according to established schedules:

- Quarterly service delivery reports with relevant and detailed analyses
- Annual reports on performance of all aspects of operational plans
- Reports on annual joint performance review meetings

These reports will be subjected to the careful review by the National Strategic Planning Committee and the results used as bases for planning and re-planning of programmes as appropriate.

### *6.2.3 Joint Annual Performance Reviews*

Joint annual performance reviews of operational plans will be undertaken during the final quarter of each calendar year. These performance reviews will be attended by all strategic partners as described in Table 5.1. Progress reports on operational plans will form the basis of discussion during joint performance reviews and recommendations will be factored into subsequent cycles of the planning process. Reports of joint performance reviews will be prepared for widespread dissemination.

### *6.2.4 Programme Evaluation*

Approved evaluation methodology will be employed in measuring the outcomes and effectiveness of the NSPH against the backdrop of the core indicators outlined in Performance Framework at Section 6.3. A Mid-Term Review will be done in June 2018 and will:

- Assess progress of implementation
- Identify and propose adjustments to the NSPH and accompanying operational plans
- Review appropriateness of processes and desired outcomes
- Review the costing and financing mechanisms

An End-of-Term Evaluation will be conducted during the final six months of the life of the NSPH in order to facilitate inclusion of findings and recommendations into the successor strategic plan. This final evaluation will answer the following questions:

- Relevance: To what extent did the NSPH address priority problems
- Efficiency: Were inputs used in the best possible way
- Effectiveness: Have planned outputs and outcomes been achieved
- Impact: What has been the contribution of the NSPH to meeting higher level development goals

### 6.3 Performance Framework

The Performance Framework incorporates a set of core indicators that will be used to evaluate the level of success that was achieved in removing the problems and bottlenecks in the health sector that were identified in the situational analysis. Thus, this Performance Framework will serve as the instrument for guiding the mid-term and end-of-term evaluations.

The key performance indicators have been set at the outcome level and will measure the extent to which the fifteen (15) strategic objectives outlined in the NSPH have been met.

Available data were used to establish baselines for targets. In instances where such data were tenuous or unavailable, the framework provides flexibility for them to be determined during the first year of implementation. See Table 6.1 for details.

**Table 6.1: Performance Framework**

Strategic Objectives	Key Performance Indicators	Targets		
		Baseline	2018	2020
<b>Goal One: Empowering individuals and families to manage their own health</b>				
1.1 Reduce morbidity and mortality from NCDs	% of public clinic visits due NCDs	65	50	40
	% of total deaths due to NCDs	85	80	75
1.2 Reduce under-five mortality rate	Death rate among children under-five per 1000 population	17.2	12.0	8.0
	Neonatal death rate per 1000 live births	0.7	0.5	0.2
	% with evidence of stunting and under-nutrition	2.9	1.0	0
1.3 Reduce new HIV infections and increase sustained treatment with ART	New infection rate among 15-49 year age-group	0.9	0.5	0
	% of persons with HIV receiving sustained treatment coverage with ART	50	80	90
1.4 Improve scope and quality of health and social services for mentally ill persons	Approved National Mental Policy	0	1	1
	Updated mental legislation enacted	0	1	1
	Approved national policy on management of persons under 16 years of age with mental illness	0	1	1
1.5 Improve scope and quality of health and social services for the elderly	Approved National Policy on Ageing	0	1	1
	Establishment of acute care ward at Fiennes Institute	0	1	1

Strategic Objectives	Key Performance Indicators	Targets		
		Baseline	2018	2020
<b>Goal Two: Strengthening health systems and community mechanisms</b>				
2.1 Create requisite legislative framework across programmes	% of required legislation developed/modernized and enacted	TBD*	50	100
2.2 Institutionalize health sector planning, including health information	Health Planning and Health Information Unit fully established	0	1	1
	Fully functional electronic health information system	0	1	1
2.3 Enhance capacity for epidemiological surveillance	Appointment of National Epidemiologist	0	1	1
2.4 Improve environmental health	% aedes aegypti household index	6.5	5.0	3.5
2.5 Improve management of pharmaceutical and medical supplies	% availability of medicines	80	90	100
	% average weighted inventory variation	12	6	0
	% average availability of medicines	80	90	100
2.6 Maintain optimum levels of human resources for health	Approved human resources for health plan implemented	0	1	1
	Institutionalized succession plan for human resources for health implemented	0	1	1
2.7 Improve standard of accommodation and structural integrity of health facilities	Approved priority listing and plan of action for building maintenance and improvement	0	1	1
2.8 Increase available resources for health	% GDP spending on health	3.1	4.0	5.0
<b>Goal Three: Expand strategic partnerships</b>				
4.1 Create mechanisms for improving intersectoral partnerships	% of public sector agencies with plans that incorporate health	0	50	80
4.2 Implement regional and international agreements	% of health-related agreements implemented	TBD	50	100

\*TBD – To be determined

## PART VII: COST ESTIMATES FOR IMPLEMENTING THE NATIONAL STRATEGIC PLAN FOR HEALTH

### 7.1 Costing Methodology

An adaptation of the Marginal Budgeting for Bottlenecks (MBB) framework developed jointly by the World Bank, WHO and UNICEF<sup>32</sup> was the primary tool used in arriving at the cost estimates for the implementation of the NSPH. This analytical and costing methodology incorporates four components:

- 1) Analysis of system-wide challenges and bottle-necks.
- 2) Assessment of key indicators and expected results against established baselines.
- 3) Selection of types, quantities and costs of additional inputs.
- 4) Analysis of budgetary implications and the comparison of the marginal costs to available fiscal space.

Availability of accurate health expenditure data is critical to the useful application of the MBB tool. Such data are usually contained in NHA. Antigua and Barbuda has never undertaken a detailed analysis of its health expenditure and unit costs for services provided could not be accessed. Alternatively, average values drawn from National Estimates of Revenue and Expenditure were applied in projecting the cost of implementing activities and delivering services.<sup>33</sup>

### 7.2 Cost Estimates

The estimated cost of implementing the NSPH for the entire five-year period, 2016-2020, is EC\$59.3 million. This translates into an average annual investment of about EC\$12 million for achieving the strategic goals and objectives that have been outlined in this NSPH. These estimates do not include the costs for the operation of the public health sector as a whole.

The bulk of the financial resources will be applied to strengthening health systems and community support mechanisms (55.1 percent) and empowering individuals and families to manage their own health (40.1 percent). Expanding strategic partnerships will account for the remaining 4.8 percent. Programmatically, infrastructural improvement will consume the largest proportion of financial resources (35.1 percent); followed by prevention and control of NCDs (18.4 percent); and health and social services for the mentally ill, elderly, persons with disabilities and abandoned children (11.7 percent). Table 7.1 below provides a breakdown of these costs by strategic goals and objectives.

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<sup>32</sup> World Bank, Marginal Budgeting for Bottlenecks: A New Costing and Resource Allocation Practice to Buy Health Results, Available at: [www.devinfofive.info/mbb/mbbsupport/download.php?file](http://www.devinfofive.info/mbb/mbbsupport/download.php?file)

<sup>33</sup> Antigua Estimates of Revenue and Expenditure, 2015, pages 209-245

**Table 7.1: Cost Estimates, 2016-2020 (EC\$ Millions)**

Strategic/Programme Areas	Cost Estimates by Year (EC\$M)					Total Cost	% of Total
	2016	2017	2018	2019	2020		
<b>Goal 1: Empowering individuals and families</b>							
• Health literacy improvement	0.2	0.3	0.3	0.4	0.4	1.6	2.6
• Prevention and control of NCDs	1.9	2.4	2.3	2.2	2.1	10.9	18.4
• Maternal and child health	0.3	0.4	0.4	0.4	0.5	2.0	3.3
• HIV prevention and treatment	0.4	0.5	0.5	0.5	0.5	2.4	4.1
• Health and social services for mentally ill, elderly, abandoned children and persons with disabilities	0.9	1.4	1.5	1.5	1.6	6.9	11.7
<b>Sub-Total</b>	<b>3.7</b>	<b>5.0</b>	<b>5.0</b>	<b>5.0</b>	<b>5.1</b>	<b>23.8</b>	<b>40.1</b>
<b>Goal 2: Strengthen health systems and community support mechanisms</b>							
• Regulatory and administrative frameworks	0.1	0.3	0.2	0.1	0.1	0.8	1.3
• Health sector planning and programming, including health information management	0.4	0.6	0.2	0.2	0.2	1.6	2.7
• Epidemiological surveillance for prevention and control of diseases	0.3	0.3	0.2	0.2	0.2	1.2	2.1
• Environmental health management	0.3	0.3	0.3	0.3	0.3	1.5	2.5
• Pharmaceuticals and medical supplies management	0.4	0.6	0.6	0.5	0.5	2.6	4.4
• Human resources management	0.3	0.4	0.3	0.3	0.3	1.6	2.7
• Infrastructural improvement	0.5	9.2	10.0	0.8	0.8	21.3	35.9
• Financing mechanisms, management and control	0.5	0.6	0.4	0.3	0.3	2.1	3.5
<b>Sub-Total</b>	<b>2.8</b>	<b>12.3</b>	<b>12.2</b>	<b>2.7</b>	<b>2.7</b>	<b>32.7</b>	<b>55.1</b>
<b>Goal 3: Expand strategic partnerships</b>							
• Strengthening national partnerships	0.2	0.3	0.3	0.3	0.3	1.4	2.4
• Implementing health-related agreements	0.1	0.2	0.2	0.2	0.2	0.9	1.5

Strategic/Programme Areas	Cost Estimates by Year (EC\$M)					Total Cost	% of Total
	2016	2017	2018	2019	2020		
• Relations with regional and international partners	0.1	0.1	0.1	0.1	0.1	0.5	0.9
Sub-Total	0.4	0.6	0.6	0.6	0.6	2.8	4.8
<b>Grand Total</b>	<b>6.9</b>	<b>17.9</b>	<b>17.8</b>	<b>8.3</b>	<b>8.4</b>	<b>59.3</b>	<b>100.0</b>

### 7.3 Limitation

The MBB tool used for estimating the cost of implementing this NSPH is scientifically sound and quite adaptable to varying national conditions. Even so, a direct relationship exists between the quality and completeness of available health expenditure data and the efficacy of the tool. In the absence of validated unit costs for health care services across sectors, the less reliable method of estimating these costs from the national budget was adopted. As such, the cost estimates generated were not as robust as they otherwise might have been.