MINISTRY OF HEALTH, WELLNESS & THE ENVIRONMENT
ST. VINCENT & THE GRENADINES

NATIONAL ACTION PLAN

for the

PREVENTION AND CONTROL OF
NON - COMMUNICABLE DISEASES

2017 – 2025

Pan American Health Organization

World Health Organization
REGIONAL OFFICE FOR THE Americas

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ACRONYMS

CARICOM	Caribbean Community
CCM	Chronic Care Management
CCH	Caribbean Co-operation in Health
FCTC	Framework Convention on Tobacco Control
GSHS	Global School-Based Health Survey
GYTS	Global Youth Tobacco Survey
MCMH	Milton Cato Memorial Hospital
MoE	Ministry of Education, Reconciliation & Ecclesiastical Affairs
MoHWE	Ministry of Health, Wellness & the Environment
MoA	Ministry of Agriculture, Rural Transformation, Forestry, Fisheries & Industry
MoFA & T	Ministry of Foreign Affairs, Trade, Commerce & Regional Integration
MoNM & SD	Ministry of National Mobilization, Social Development, Gender Affairs, Persons with Disabilities and Youth
MoNS	Ministry of National Security, Air & Sea Port Development
MoEP	Ministry of Economic Planning, Sustainability Development, Industry, Information & Labour
MoTS & C	Ministry of Tourism, Sports & Culture
MoTW	Ministry of Transport Works & Urban Development
NCDs	Non-Communicable Diseases
NHSSP	National Health Sector Strategic Plan
PAHO/WHO	Pan American Health Organization/World Health Organization
POSD	Port of Spain Declaration

FOREWORD

Non Communicable Diseases (NCDs) are the main causes of mortality and morbidity in St. Vincent and the Grenadines, as is the case in most of the countries in the world. At the UN High level Meeting in September 2011, St. Vincent and the Grenadines endorsed the UN resolution on NCDs; also at the Heads of Government of Caribbean Community (CARICOM) meeting in September 2007, St. Vincent and the Grenadines signed the *Port of Spain Declaration (POSD),* aimed at uniting to stop the epidemic of NCDs. This illustrates the government's commitment in the fight against the epidemic of NCDs.

One of the first priorities has been the development of this National Action Plan for the Prevention and Control of NCDs which provides a framework for a coordinated and integrated approach during the coming years in the fight against NCDs in our country.

The elements of the NCD plan focus on strengthening coordination and management of NCD prevention and control programmes, building healthy and active communities through multi-sectoral policies and partnership, health systems strengthening for NCDs and risk factors at all levels and all sectors, healthy lifestyle promotion to reduce NCD risk factors and strengthen protective factors and the strengthening of surveillance, research and information. For the coming years the priority NCDs namely cancer, cardiovascular disease and diabetes which account for 64% of mortality nationwide will be targeted.

The fight against NCDs cannot be successful without strong intersectoral collaboration which is crucial for healthy lifestyle promotion and risk factor reduction. This plan calls for a collective effort through the establishment of structured intersectoral cooperation with other ministries, private sector and civil society.

Periodic evaluations are essential part of the fight of all diseases and specifically of NCDs which require more complex interventions than the communicable diseases. This NCD plan is a dynamic document which will be periodically revised in order to enable us to keep on track towards the set goals.

As a health sector and as a nation we have to join hands, to be accountable and share responsibility to be able to really tackle the burden of NCDs.

We owe it to the next generation.

Hon. Robert T. L.V. Browne

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Minister of Health, Wellness and the Environment
St. Vincent and the Grenadines

EXECUTIVE SUMMARY

Non-communicable diseases (NCDs) are the leading causes of death globally as well as in St. Vincent and the Grenadines. These chronic diseases, especially malignant neoplasms, cardiovascular diseases, diabetes and respiratory diseases were the cause of 64% of deaths in St. Vincent and the Grenadines in 2013. NCDs place a high burden on St. Vincent and the Grenadines health care system and prevention and control of these diseases has become a public health priority. Feasible and cost-effective interventions exist to modify risk factors such as tobacco use, harmful alcohol use, unhealthy diet and physical inactivity, which are the underlying causes for the onset and progression of NCDs. Applying best cost effective interventions and policy options to reduce risk factors and create a protective and enabling environment, will requires all government effort.

The Ministry of Health, Wellness & the Environment in collaboration with partners from within and outside the health sector, has developed a plan, which outlines the course of action for St. Vincent and the Grenadines to combat the NCD epidemic that is profoundly affecting the population. The plan describes the epidemiological situation for NCDs in St. Vincent and the Grenadines and provides an overview of the risk factors underlying these NCDS, clearly demonstrating the need for an effective coordinated response. The plan also describes the input incorporated from global and regional strategies and initiatives as well as from local stakeholders engaged in the efforts to reduce the burden and impact of NCDs in St. Vincent and the Grenadines.

The plan focuses on five priority areas identified by these stakeholders, namely co-ordination and management of NCDs; healthy and active communities through integrated management; reducing NCD risk factors and increasing protective factors; strengthening of health systems and surveillance, research and information. Inherent in these priority areas are a set of objectives and activities. Targets are identified which will form the basis of the multi-sectoral approach required to affectively address NCDs in St. Vincent and the Grenadines. This approach also includes a reorientation of the national primary health care systems to be able to take on a role in the prevention, early detection and management of NCDs.

This plan is a first step in the implementation of efforts for the prevention and control of NCDs in St. Vincent and Grenadines. The plan will be presented by the MoHWE to the Cabinet for final approval and allocation of funds. Following this process, specific national guidelines will be drafted/adopted in the near future for each of the main NCD categories (diabetes, cardiovascular diseases, cancers and chronic respiratory diseases) providing further guidance to the partners engaged in these efforts.

DEVELOPMENT OF THE ACTION PLAN

Introduction

Non-communicable diseases (NCDs) are the leading causes of death in St. Vincent and the Grenadines. These chronic diseases dominate the health care needs of the population and therefore place the highest burden on the St. Vincent and the Grenadines health care system. Even with the emergence of HIV/AIDS as a major cause of mortality and morbidity in the past decade and the consequent resurgence of tuberculosis, NCDs remain the main causes of death in the country, as is the case globally. NCDs, especially cancers, cardiovascular diseases, and diabetes, were the cause of 64% of the deaths in St. Vincent and the Grenadines in 2013[1], and both hospitalizations and health centers visits increased significantly since 2009. In St. Vincent and the Grenadines, cardiovascular diseases occur primarily among men while diabetes and cancers impacts both men and women more equally.

These facts, coupled with the evidence that modifying risk factors can largely prevent the onset and progression of NCDs, reinforce that the prevention and control of NCDs are a public health priority requiring urgent action. There is a significant need for an effective coordinated response that is multi-sectoral and addresses social determinants of NCDs to strengthen health care for people, to develop enabling healthy environments and to support healthy individual behaviors. In addition, there is a need for a radical reorientation of the health care system towards service delivery models for chronic care as well as a strong focus on health promotion and partnerships with non-health sectors and communities. This reorientation involves strengthening the national Primary Health Care (PHC) systems to be able to take on a role in the prevention, early detection and management of NCDs. This NCD Action Plan outlines the course of action for St. Vincent and the Grenadines to combat the NCD epidemic that is profoundly affecting the population. Disease specific guidelines will be drafted/adopted for each of the main NCD categories, namely diabetes, cardiovascular diseases, cancers and chronic respiratory diseases.

This NCD Action Plan was developed under the direction of the Ministry of Health, Wellness and the Environment (MOHWE). The Pan-American Health Organization/ World Health Organization (PAHO/WHO), provided resources and technical support for the development and preparation this NCD action plan along with other partners.

Considerable input was received from various stakeholders through a process that involved several consultation meetings, starting with an NCD Workshop held in August 2014, involving representatives from the health sector, other ministries, private and public sectors, civil society and faith based organizations. During this workshop, participants identified components to include in a plan of action and gaps and priorities for implementing an integrated approach for addressing NCDs related to five areas. Coordination and management of NCD prevention and control, healthy and active communities through multisectoral policies and partnership, NCD

risk factors and protective factors, health system strengthening to NCDs and risk factors at all level and all sector, and surveillance, research, information and education.

Further input was provided during on-going consultation meetings in April 2015 and May 2016. Following these workshops, ongoing work continued with key personnel in the Ministry of Health, Wellness and the Environment. Early drafts of this Action Plan were reviewed by PAHO/WHO Technical Advisor on Chronic Diseases in February and August 2017, and the necessary adjustments were made. The plan was finalized in September 2017 by a working group in the Ministry of Health, Wellness and the Environment.

Rationale

The global prevalence of chronic diseases is rising and is predicted to increase substantially in the next two decades [2]. In St. Vincent and the Grenadines, chronic disease mortality rates are high, with cancer remaining the number one leading mortality cause in the past five years. Socioeconomic differences, such as income, education and physical environment, add to the high chronic disease burden and mortality especially affecting vulnerable groups leading to ill health and restrictions within their living and working conditions [3].

Chronic diseases are a defining cause of absenteeism and occupational disability, can drive disadvantaged families further into poverty, and as such have profound national development and economic implications as they result in huge costs to the health care system as well as lost productivity.

St. Vincent and the Grenadines has an established health system, addressing both the rural and urban areas. However, advances in primary health care need to be better oriented towards addressing chronic diseases. Chronic diseases require a health system providing patient-centered care and a substantial capacity of providers and professionals in collaboration with individuals, families, communities and other sectors. They also demand a proactive role of the system in early detection of chronic diseases, guaranteeing continuity in care across the lifespan of individuals and continuity from home-based care to the tertiary level of care, with supporting patients with chronic diseases in self-care and maintaining quality of life despite their illnesses. This can only reach national scale and equitable services through decentralized health services and through strengthening of the Primary Health Care system.

Chronic disease risk factors, such as unhealthy diet and physical inactivity, are affected by sectors outside of the health system including agriculture, trade, transport and works. As a result, collaboration with partners from these sectors is essential to realize a multi-sectoral approach to chronic disease prevention and control. In addition, political and socio-economic realities have a significant influence on the epidemic of chronic diseases. Public policies, regulations and

allocation of resources towards cost-effective interventions in all relevant sectors can alter the risk factors that drive the epidemic. Therefore, this NCD plan proposes strategic objectives and comprehensive, integrated actions applicable to St. Vincent and the Grenadines, encompassing the collaboration of sectors outside of health.

High-level commitment of all sectors involved is required for the successful implementation of the activities included in this action plan in order to effectively reduce or eliminate the risk factors contributing to the onset and progression of NCDs in St. Vincent and the Grenadines.

Scope

While NCDs include a plethora of diseases and related risk factors linked by numerous causal pathways, current national trends indicate that there are four non communicable diseases that contribute primarily to mortality and morbidity in St. Vincent and the Grenadines: cancer, cardiovascular diseases, diabetes and chronic respiratory diseases. Evidence shows that with modification of key risk factors, particularly tobacco use, harmful use of alcohol, unhealthy diet, and physical inactivity these NCDs can largely be prevented or mitigated. By implementing effective interventions to address these risk factors it is possible to significantly reduce morbidity, mortality, and disability resulting from these four main categories of NCDs. As such, key lines of actions, objectives and activities designed to combat these NCDs and related risk factors are the main focus of this NCD Action Plan.

The concept of NCDs varies widely, often including mental health and injuries. Although both mental health conditions and injuries, especially road traffic related injuries, are of significant public health concern in St. Vincent and the Grenadines, they are not included in this Action Plan. The decision to exclude these priorities resulted from a careful examination of the health policy context in St. Vincent and the Grenadines. The St. Vincent and the Grenadines draft Mental Health Policy and Action Plan was finalized in June 2017 and preparations are underway to present the document to cabinet for approval. The area of Road Safety is being looked at by the traffic branch of the Royal St. Vincent and the Grenadines Police Force. Recognizing that the Mental Health Policy and Action Plan has been completed and that initiatives to address injury prevention are advancing, the decision was made not to integrate mental health and injuries into the NCD Action plan at this time to prevent duplication of efforts.

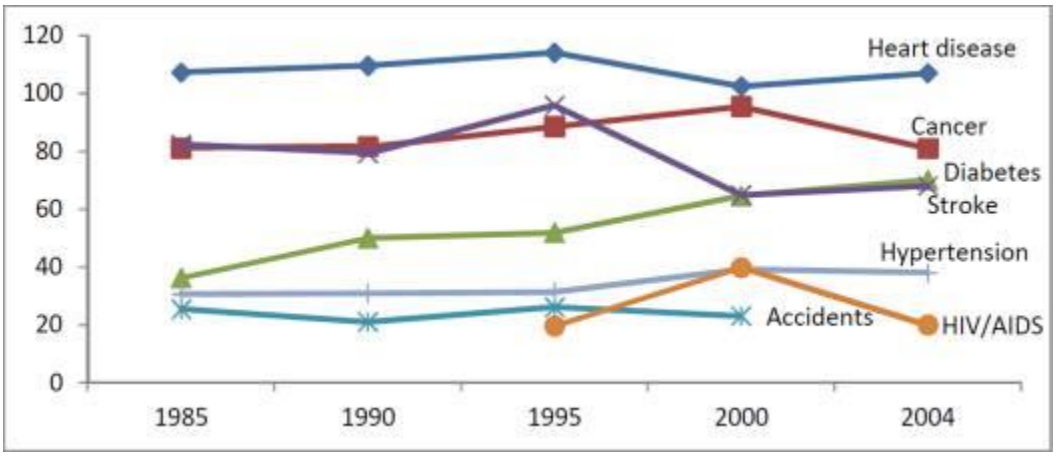
Situational Analysis

In 2008 an estimated 36 million people worldwide died from non-communicable diseases, mainly cardiovascular diseases, diabetes, cancer and chronic respiratory diseases [4]. Of these NCD deaths, nearly 80% (29 million) occurred in low-and middle income countries. NCDs are

the most frequent cause of death in most countries, exceeding deaths from all infectious diseases (including HIV/AIDS, malaria and tuberculosis), maternal and perinatal conditions and nutritional conditions combined[5]. While deaths from infectious diseases, perinatal conditions and nutritional deficiencies are expected to decline, deaths from NCDs are projected to increase by 15% globally between 2010 and 2020.

In the Americas, the Caribbean region has the highest prevalence of chronic non communicable diseases [6]. Mortality analysis showed a consistent trend of NCDs as the most common cause of death in the late 1900s [7]. In 2004, the leading causes of death were heart diseases, cancer, diabetes, stroke, hypertensive diseases, injuries (intentional and unintentional), and HIV/AIDS (Figure 1) [8].

Figure 1 Crude Mortality Rates (per 100,000 population) for Select Diseases: (1985-2004) CAREC member countries



Source: CAREC member countries based on country mortality reports Minus Jamaica. 2007

Similar to global trends, St. Vincent and the Grenadines is experiencing an increasing mortality attributable to NCDs, as seen in global trends, while mortality attributed to infectious diseases show significant decreases. Over the last decade, malignancies, cardiovascular diseases, and diabetes have been among the leading causes of death, with malignancies remaining the number one cause of death and show an upward trend (from 122 deaths in 2010 to 168 in 2014). Mortality from cardiovascular has been the second leading cause. In addition, injuries and violence and mental disorders are significant health problems.

Table 1 shows the top ten leading causes of mortality in St. Vincent and the Grenadines. These ten diseases have been the leading causes of death for more than 5 years and are represented as cause specific mortality rates per 100,000 populations.

Table 1: Top Leading Cause Specific Mortality in SVG (2010-2014)

	2010	2011	2012	2013	2014
Malignant Neoplasm	122	141	131	174	168
Ischemic Heart Diseases	106	118	107	130	139
Diabetes Mellitus	64	105	103	109	109
Cerebrovascular Disease	76	99	84	90	109
Communicable Disease	101	87	96	100	107
Hypertension Disease	72	61	55	54	87
Injuries and Violence	53	44	55	24	71
Heart Disease (Other Forms)	37	59	49	141	55
Diseases of the Perinatal Period	29	27	15	22	16
Disease of the Digestive System	36	28	23	37	32

Source: Ministry of Health, Wellness and the Environment; Health Information Unit, 2014

Cancer

Malignant neoplasms are the leading cause of death. Figures of cancer related mortality, among the ten leading causes of death, show an increasing trend, from 122 deaths in 2010 to 168 in 2014. During the period 2006-2009, malignant neoplasm remained the leading cause of death among males. Within this group, prostate cancer was the number-one cause, accounting for 38 deaths (54%), followed by skin cancer 7 deaths (10%). Breast cancer was the leading cause among females, accounting for 29 deaths (49%). Cervical and skin cancer each accounted for 9 females deaths (15%) [9].

During 2006-2010, by sub-group, the leading cause of death in the age group 25-64 years old was malignant neoplasm, with 200 deaths. In the elderly, malignant neoplasm accounted for 215 deaths (11.3%), 143 of males (7.5%) and 72 of females (3.8%) [9].

Cardiovascular Disease and Diabetes

Cardiovascular diseases have been the second leading cause of death for many years. The most prevalent are ischemic heart disease followed by cerebrovascular heart disease (coronary artery disease, diseases of the heart valves etc.). In 2008, persons under the age of 70 years accounted

for 35.4% of all deaths from NCDs. Hypertension, diabetes, and diseases of the digestive system were the main reasons for health care visits, according to health center records [9].

Diabetes ranks third among the ten leading causes of death (2010-2014). The Ministry of Health, Wellness and the Environment recognizes that complications of diabetes are increasing, in particular amputations and started to put measures in place to address this problem.

In April 2015, Heberprot-P drug was introduced from Cuba into St. Vincent and the Grenadines, and is included in the arsenal of treatment modalities for the management of diabetic foot ulcers. It is a brand name for a drug developed by scientists at the Center for Genetic Engineering and Biotechnology in Cuba, as a cure for diabetic ulcers. The product contains epidermal growth factor (EGF), to be applied by intraleisonal injections directly in the wound site [24]. Since its inception, figures showed decrease in amputation from 20 to 14 cases during the period June 2015 to the same period in 2016.

Lifestyle and Behavioural Risk Factors

Lifestyle and behavioural risk factors are major contributors to the NCD epidemic. Most NCDs are strongly associated and causally linked with four particular behaviors: unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol. These behaviors lead to four key metabolic/physiological changes: raised blood pressure, overweight/obesity, hyperglycemia and hyper lipedema [10].

Data from the National Health & Nutrition Survey 2013-2014 from 3,513 adults (18-69 years old) provided some insight regarding lifestyle and behavioral factors around NCDs: 61% were physically inactive, 91% smoked, 27% were obese (BMI>30) and 21% had high total cholesterol (>5.0 mmol/l) [11]. In addition, the Global School Health Survey 2007 among children aged 13-15 years showed that (13.3%) of children have physical activity of less than one hour per day. The survey data indicated that 40.3% of children spent three or more hours per day sitting and watching television, playing computer games, talking with friends or doing other sitting activities [12].

In 2003, St. Vincent and the Grenadines was classified as a net importer of food valued at more than USD $37.8 million [13]. Studies have shown that the nutritional contents (meats, dairy products, fats and oil) of most of these imported food items, have adversely affected the nutritional status of people in Caribbean. According to the Caribbean Food and Nutrition Institute (2000), most of the daily demands for energy and protein requirements are met by the importation of raw or processed food or its components [14]. The ripple effects of poor dietary intake have taken a toll in the high incidence, prevalence and economic burden of diet related non communicable diseases (NCDs), in the Caribbean region. Statistical data has shown that cardiovascular disease, high blood cholesterol, obesity, adult onset diabetes, osteoporosis, high

blood pressure and some cancers are now the leading causes of morbidity and mortality in Latin America and the Caribbean region [15].

Data from the 2011 Global Youth Tobacco Survey (GYTS) reported that among 1,102 students aged 13-15 years, 19.4% of students were current users of tobacco products. In addition, the survey indicates that students are exposed to second hand smoke: 49.9% lived in homes where others smoked, 70.1% were exposed to smoke around others outside of the home and 32.6% had at least one parent who smoked [16].

Smoking prevention in youth, smoking cessation in adults and reduction of exposure to second hand smoke are key issues in tobacco control and should be adequately addressed. These issues are incorporated in the Framework Convention on Tobacco Control (FCTC), which St. Vincent and the Grenadines signed in 2004 and ratified in 2010.

St. Vincent and the Grenadines are in the process of implementing this framework. In May 2015, the Ministry of Health, Wellness and the Environment under the guidance of a consultant, developed a draft of Tobacco Control Act. When the draft is finalized, it will be submitted to the office of the Attorney General for approval and ratification. This legislation will address the establishment of smoke-free environments, limitations on advertising and inclusion of health warnings on packages as well as other provisions aimed at reducing the use of tobacco products by the Vincentian population.

Harmful use of alcohol is another risk factor of concern. Results from the 2007 Global School Health Survey indicated that among the 1,333 Vincentian students, aged 13-15 years, who responded, 53.2 % consumed alcohol at least on one or more occasions in the past month and 35.1% drank so much alcohol that they were drunk on one more occasion [12].

The National Health and Nutrition Survey of non-communicable diseases risk factors in St. Vincent and the Grenadines was carried out from November 2013 to April 2014. The survey was a population-based survey of adults aged 18-69 years. A total of 3,513 adults participated in the survey. The overall response rate was 67.8%. Results indicated that 49% of Vincentians ages 18 to 69 reported being current drinkers (i.e. drinking in the past 30 days), while an additional 16.3% reported drinking in the past 12 month, but not currently. Overall, a significantly lower proportion in age group 45-69 years (37.2%) reported current drinking compared to age groups 18-29 years (53.6%) and 30-44 years (51.7%); this was consistent among male respondents. However, a significantly lower proportion of females in age group 45-69 years (22.1%) reported current drinking compared to the highest proportion of females in age group 18-29 years (37.1%) [11]. There is no written national alcohol policy and action plan. The above mentioned risk factors arise from the social determinants of health and the recognition of these risk factors reinforces the importance of coordinated actions far beyond the health sector in order to address

the determinants of NCDs.

The high costs of diagnosis and treatment of NCDs place a heavy financial burden on the health system in St. Vincent and the Grenadines. Costs for procedures such as kidney dialysis and for medications to control NCDs have increased significantly in recent years due to the increase of NCDs among the Vincentian population. Clients are usually referred to other countries for treatment not available in St. Vincent and the Grenadines, specifically to Barbados and Trinidad and Tobago for treatment of certain cancers, and heart and other surgeries have been necessary in previous years. NCDs also deeply affect the quality of life of persons suffering from these diseases as well as their families. NCDs result in loss of productivity of the workforce. Poor and vulnerable persons are disproportionately affected by NCDs, as a result of social, economic and political conditions, emphasizing that control of NCDs is not only a health problem, but a development issue which needs to be addressed through a multisectoral approach.

The Health Services

The Ministry of Health, Wellness and the Environment provides mainly primary and secondary health care services. Primary health care is offered through 39 health centers in the country's nine health districts, seven on the island of St. Vincent, and two in the Grenadines. Each health center is equipped to cover an average population of approximately 3,000 [9]. Geographic accessibility is good, with no one having to travel more than three miles to receive care. Morbidity data on health center utilization patterns for non-communicable diseases showed that visits totaled 29,868 in 2010, an increase of 10.4% over the 2005 figures. Persons with hypertension recorded the highest number of visits, 9,904, and persons with both hypertension and diabetes the second highest, 8,168. Diabetes accounted for the third highest number of visits, 2,724. Male visits totaled 8,667 (29%), and females visits 21, 019 (71%) [9]. Women are twice more likely than men to visit the clinics for diabetes and three times as likely for hypertension or a combination of diabetes and hypertension. Men are less likely to utilize health services and seek care; therefore they are entering the health care system at a later stage, and as a result suffer more complications due to chronic diseases than women.

Secondary care is mainly provided at the 211-bed Milton Cato Memorial Hospital, the country's only government-run secondary-care referral institution. In the 2006-2010 period, the number of hospital admissions ranged from 8,000 to 9,000 a year, with an occupancy rate averaging between 67% and 70%. The average length of stay was five days, and the leading reasons for hospitalization were obstetrical causes (32%), followed by medical (28.7%), surgical (23.6%), and pediatric (15.3%) causes. On average, 17, 568 persons visited specialist outpatient clinics each year during the period. Specialist services in cardiology, oncology, and endocrinology are not available in country. Hemodialysis services are offered at a privately owned and operated

facility at a cost of over EC$ 500.00 per cycle. Persons requiring urgent catastrophic care are usually air-lifted to another Caribbean island, most often Barbados or Trinidad and Tobago.

Currently, the Government is embarking on completion of the Modern Medical Complex, which is being constructed at Georgetown on the Windward side of the Island. The facility is scheduled to be completed by the end of 2017. This is being constructed at a cost of over 20 million EC$ by the Governments of Cuba and St. Vincent and the Grenadines. The Complex will be made up of a surgical, dialysis and outpatient units. Services that will be provided upon completion include: Renal Dialysis for adults and children, Intensive Care, Endoscopy, Ophthalmology, Radiology, Ultrasound, Laboratory and General Medical and Surgical Consultations. The objectives of the Modern Medical Complex are to expand secondary health care services to provide dialysis services, decentralize secondary health care services with respect to special diagnostic and medical surgical services and upgrade primary health care by increasing availability, accessibility and equity in the delivery of services.

Five rural hospitals, with a total bed capacity of 58 and an average annual admission of 600 persons, provided a minimum level of secondary care. The Maryfield Hospital in Lowmans Hill, with 12 beds, is privately owned and operated. The Government operates a 106-bed geriatrics facility for the indigent and a 186-bed rehabilitative health center, mainly for mentally challenged adults [9].

Health Expenditures and Financing

Public-sector health care is financed through a national consolidated fund and a fee-for-service system. The percentage of Government health expenditure remained constant at 3% to 4% of gross domestic product (GDP) during the period [26]. The Government provides funds for 63% of health care expenditures on an annual basis. In 2010, approximately 30% of the Government's annual health care expenditure was budgeted to primary health care, and the other 28% to administration, education, and pharmaceuticals and supplies.

The Mandate

During the past 20 years, NCDs have increasingly become a priority globally, as well as in the Caribbean Region. Accordingly, many guiding initiatives have been developed to provide guidance for NCD prevention and control on national levels, including declarations, strategic plans, and initiatives.

This Action Plan is derived from one key declaration, linking the components of the Action Plan to statements found in the Declaration reflecting the commitments agreed upon by St. Vincent and the Grenadines. St. Vincent and the Grenadines have signed onto one key Regional

Declaration related to NCDs prevention and control, namely, *the Declaration* of *Port-of-Spain* (2007)**.**

The *Port-of-Spain declaration [18]* reiterated the need for comprehensive and integrated preventive and control strategies at all levels as well as collaborative programs, partnerships and policies supported by all stakeholders. This declaration also called for the establishment of comprehensive plans for the screening and management of chronic diseases and risk factors, in order to increase access to quality care and preventive education based on regional guidelines.

The High Level Regional Consultation Meeting of the Americas on NCDs and Obesity, which was preparation for the UN High Level meeting, in February 2011 ended with the *Mexico Declaration[*19], which reaffirmed many statements expressed in the previous declaration, related to the link between NCD and common risk factors, which in turn are linked to economic, social, gender, political, behavioural, and environmental determinants, concerns about NCDs not being integrated into internationally agreed upon development goals like the MDGs, the multisectoral approach, the importance of surveillance and promoting of access to comprehensive and cost-effective prevention, treatment and care as a necessary/essential component for integrated management of NCDs.

Finally, this Action Plan incorporates components of the declaration resulting from the UN High-level Meeting of the General Assembly on the Prevention and Control of Non-Communicable Diseases, held in New York in September 2011. This declaration specifically called out the link between maternal and child health and NCDs and their risk factors, specifically the effects of prenatal malnutrition and low birth weight as well as risks resulting from pregnancy conditions. The declaration, as previous ones, acknowledged the significant inequalities in the burden of NCDs and access to NCD prevention and control, reiterating that NCDs are not simply a health problem, but a development problem.

Relatedly, the objectives, strategies, and activities presented in this plan were developed in line with two regionally-based strategic plans: *Strategic Plan of Action for the Prevention and Control of Non-Communicable Diseases: For Countries of the Caribbean Community, 2011-2015,* from CARICOM [8] and; the *Regional Strategy and Plan of Action on an Integrated Approach to the Prevention and Control of Chronic Diseases 2008-2013* from PAHO [20]. Regional targets from these two plans were reviewed for feasibility and adapted to the Vincentian context. The Action Plan also follows recommendations from the Caribbean Cooperation in Health Initiative (CCH IV), a strategy setting direction and goals for public health. Prevention and control of NCD is one of the priority areas under this initiative.

This Action Plan also incorporates priorities identified by the Collaborative Actions for Risk Factor Prevention and Effective Management of Non-communicable Diseases (CARMEN)

Network a PAHO initiative designed to reduce risk factors associated with NCDs. Convened in November 2007, the CARMEN Network has set out to support member countries with implementation of relevant projects and development of appropriate tools. Additionally, the CARMEN Network aims to support collaboration among PAHO, member countries and partners to implement the *Regional Strategy and Plan of Action on an Integrated Approach to the Prevention and Control of Chronic Diseases.* The support garnered from the CARMEN Network has contributed to the development of this Action Plan and will contribute to the implementation of the initiatives incorporated in this Action Plan.

The prevention and reduction of the burden of NCDs is included in the draft National Health Sector Strategic Plan (NHSSP) of the Ministry of Health, Wellness and the Environment for the period 2015-2019, as the first priority [21]. Recognizing the complex nature imposed by this growing public health problem and that the progression of NCDs can largely be prevented by modifying risk factors, the strategies proposed in the draft National Health Sector Strategic Plan intend to strengthen health systems for NCD prevention, promotion, and control to deliver equitable health outcomes on the basis of a comprehensive approach.

The NHSSP is an offspring of the National Economic and Social Development Plan (NESDP) 2013-2025, and provides a blueprint for advancing the national vision for health as contemplated by the Government of St. Vincent and the Grenadines.

The NHSSP calls out the renewed approach to non-communicable diseases with a focus on the reduction of the burden of disease, disabilities, and premature deaths from the major NCDs and modifiable risk factors for all Vincentian peoples. The plan specifically mentions establishing NCD prevention and control as a national priority, with appropriate attention to a comprehensive approach; multisectoral actions (including civil society and private sector); surveillance and monitoring; and appropriate, effective evidence-based population-wide prevention and control measures. The NHSSP refers to this Action Plan for further national directions for NCD prevention, treatment and control in St. Vincent and the Grenadines.

Guiding Principles

This Action Plan is based on the MOHWE's commitment to protecting and improving the health of its people. The ultimate goal of the Action Plan is to achieve 16 % relative reduction in preventable premature deaths due to NCDs in St. Vincent and the Grenadines by 2025. The key strategies identified for tackling NCD prevention and control in St. Vincent and the Grenadines are: Strengthening coordination and management of NCD prevention and control, Healthy and active community through multisectoral policies and partnership, NCD risk factors and protective factors, Health system strengthening to NCDs and risk factors at all levels and all

sectors and Surveillance, research, information and education. The MOHWE is striving to reduce the burden of disease of NCDs in the Vincentian population using the following guiding principles.

Multisectoral approaches are essential for combating the complexity of the NCD epidemic. Successful NCDs prevention and control mechanisms require engaging all sectors in a broad-based response, and will require building and maintaining partnerships and alliances with public and private sectors, all levels of governmental and non-governmental agencies to address the key determinants of NCDs. This plan emphasizes partnerships to ensure stakeholder involvement in order to advance the NCD agenda and improve the health status of all people in St. Vincent and the Grenadines.

Integrated approach to prevention and control for both risk factors and NCDs within Primary Health Care is the most cost-effective measure to reduce the burden of NCDs in St. Vincent and the Grenadines. Health promotion strategies including the reorientation of health care to strengthen referrals and relationships between primary, secondary, and tertiary prevention must be incorporated. Appropriate integrated management and quality of care are accentuated in this Action Plan, emphasizing a public health perspective towards NCDs which includes screening and early detection, diagnosis, treatment, and rehabilitation.

The Chronic Care Model (see appendix 1), adopted by PAHO as the basis for managing chronic conditions, will be adapted to the Vincentian context and be used as a framework to evaluate and organize NCD management.

Capacity-building for both health care workforce and community-based actions is emphasized in this Action Plan. The health care workforce is instrumental in NCD prevention and control; therefore, building capacity of the workforce is necessary to provide effective care for NCDs. This Action Plan focuses health system strengthening to NCDs and risk factors at all levels and all sector, to achieve an appropriate skill mix to tackle the complexity of NCDs. Furthermore, this Action Plan emphasizes the need for the establishment of a focal point within the MoHWE, for co-ordination of NCD prevention and control in St. Vincent and the Grenadines, since, individuals and their environments contribute to the prevention and management of NCDs. Capacity building for community-based action to promote healthy lifestyles will positively influence individuals and their environments, which includes social norms, regulations, institutional policies, and the physical environment.

Incorporating Age, Gender and Ethnicity dimensions into NCD prevention and control initiatives is of grave importance to address the inequities between women and men and between ethnic groups and the impact of age with regards to risk factors for NCDs, onset and progress of disease and access to quality care. Incorporating age, gender and ethnicity will require an

understanding of the determinants of health in general and specifically of NCDs, and the design and implementation of age, gender and ethnicity specific interventions.

Health Promotion strengthens the capacity of individuals and communities to take control of their lives to achieve and maintain physical, mental, social and spiritual wellbeing, using a public health approach. This NCD Action Plan emphasizes health promotion principles and strategies from the *Caribbean Charter for Health Promotion [22]*, a strategic document developed as a result of the 13th Meeting of the Ministers Responsible for Health in the Caribbean. These principles and strategies are adapted to appropriate interventions for the Vincentian population. These guiding principles are reflected in the strategic areas identified by stakeholders from different sectors for the implementation of this plan. The strategic areas are reflected in the following.

The key strategies identified for tackling NCD prevention and control in St. Vincent and the Grenadines are:

Strategic Area 1:
Strengthening coordination and management of NCD prevention and control programmes

Strategic Area 2:
Building healthy and active communities through multi-sectoral policies and partnership

Strategic Area 3:
Addressing NCD risk factors and protective factors

Strategic Area 4:
Health system strengthening for NCDs and risk factors at all levels and all sectors

Strategic Area 5:
Improving surveillance, research and information

RESULTS FRAMEWORK

GOAL: To achieve a 16% relative reduction in premature deaths from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases by 2025

Indicators/Target	Means of Verification	Critical Assumption
A 16% relative reduction of premature mortality due to NCDs by 2025	• National Registry • National Health Information Unit, MoHWE • NCD Minimum Data Set – Annual Report • Surveillance for NCDs reported from Primary Health Care and Hospitals	MoHWE will conduct national periodic health surveys

EXPECTED RESULTS

Strategy 1: Coordination and management of NCD prevention and control programmes strengthened

Indicators/Target	Means of Verification	Critical Assumption
• Existing programmes in the MoHWE reviewed and restructured for an integrated approach for NCD prevention and control by 2018 • Effective coordination mechanism for NCD prevention and control with focal point in the Health planning unit, MoHWE established by 2017. • National Health and Wellness Commission established and functioning by 2017	• Assessment report and Standard Operating Procedure for technical cooperation (on cross cutting issues) in MoHWE developed • Budget allocation for NCD activities • Activity Report • Operational Plan indicated specific activities by each unit/programme developed and coordinated by NCD Coordinator • An operational plan for NHWC • Annual Report for the NHWC produced and disseminated	• National Health and Wellness Commission approved and operationalized

Strategy 2: Multisectoral policies and partnerships developed and implemented

Indicators/Target	Means of Verification	Critical Assumption
• Reduction strategies and actions implemented to reduce the impact on children re: marketing of foods and non-alcohol beverages high in saturated fats, trans-fatty acid, sugars and salt by 2019. • Guideline and Protocol for engagement of private sectors to manage conflict of interest developed and operationalized by 2020. • National Child Nutrition Policy and Action Plan for the control of children in marketing of foods (high in saturated fats, trans-fatty acids, sugars and salt and non-alcoholic beverages) approved and implemented by 2018.	• Activity Report produced by the MoHWE • Annual Report produced by National Health and Wellness Commission • Guidelines/protocol for private sector engagement • PAHO/WHO Country NCD Capacity Survey Report (Biannual)	• National Health and Wellness Commission Annual Report. • PAHO/WHO Country NCD Capacity Report (Biannual) • Ministries of Health, Agriculture, Education, Social Development and Rural Transformation supported

Strategy 3: NCD risk factors reduced and protective factors strengthened

Indicators/Target	Means of Verification	Critical Assumption
• 5% relative reduction of harmful use of alcohol (+15) Alcohol Per Capita Consumption by 2025. • Baseline for adolescents (13-18) physical inactivity established by 2018 • 10% relative reduction in physical inactivity by adolescents (13-18) by 2025 • 10% relative reduction of adult physical inactivity by 2025 • Baseline established for at least 2 food (bread & green seasoning) categories before adopting national salt targets by 2018.	• WHO Global Alcohol Report (Baseline 2016) • Global School-based Student Health Survey (GSHS) Report (Baseline 2007 and planned implementation in 2017 • National Health	• MoHWE secures appropriate budget for national, sub-national survey (PanAm STEPS, Mini-STEPS, GSHS etc.), implement, collect data and prepare report(s) • St. Vincent and the Grenadines has a mechanism to respond to risks in real time

Indicators/Target	Means of Verification	Critical Assumption
• 10% relative reduction in salt consumption by 2025 • 15% of relative reduction in smoking prevalence of tobacco in adolescents by 2025 • A 15% of relative reduction in smoking prevalence of tobacco in adults by 2025 • National sensitization for tobacco control conducted and Tobacco Control Act enacted by 2020 • At least 7 national campaigns, sensitizations, public education on salt reduction conducted by 2025. • 25% relative reduction in age-standardized of raised blood pressure by 2025 • 5% relative reduction in overweight and obesity in by 2025 • 5% relative reduction in age-standardized of diabetes by 2025 • 5% relative reduction in age-standardized of raised cholesterol by 2025 • 5% relative increase in adolescent fruit and vegetables consumption (at least 5 servings per day) by 2025 • 5% relative increase in adult fruit and vegetables consumption (at least 5 servings per day) by 2025	Surveys (PanAM STEPS Survey, Mini-STEPS etc.) Baseline 2014 and planned implementation in 2019 • National Child Nutrition Policy	• Regional institutional infrastructural (CARICOM, CHOSOD, PAHO, CARPHA) support and multisectoral policies in place • MoHWE and MoE conduct national awareness campaigns on healthy diets and increasing physical activity. • MoHWE oversight and implement national survey • Private Sectors and Civil Society engage active participation and collaboration.

Strategy 4: Health system response to NCDs and risk factors strengthened at all levels of health services and accessibility and quality improved

Indicators/Target	Means of Verification	Critical Assumption
• At least 60% of eligible persons received drug therapy (heart attacks & strokes) by 2025	• Assessment of Chronic Illness Care	• MoHWE established a National NCD prevention and control

Indicators/Target	Means of Verification	Critical Assumption
• At least 80% of public primary health care facilities provide essential medicines and technologies for NCD by 2025 • HPV vaccines for girls at 11 years (targeted 100% coverage) introduced into national immunization schedule by 2017 • Introduction of Hepatitis B (100% of 3 doses, including birth dose) vaccines by 2017. • At least 60% of women (30-49) received a screening test for cervical cancer using any of the following methods: VIA, PAP Smear and HPV test by 2025 • List of available essential medicines for NCDs from OECS/PPS updated and available by 2017. • At least 75% of patients with hypertension and diabetes controlled by 2025 • 5% relative reduction in age-standardized prevalence of raised blood glucose/diabetes by 2025 • 5% relative reduction in age-standardized prevalence of overweight/obesity in persons aged 18+ by 2025 • 5% relative reduction in age-standardized prevalence of overweight/obesity in school-aged children and adolescents by 2025 • 70% of women (aged 30-49) received cervical cancer screening by 2025 • 50% of women (aged 50-69) received breast cancer screening by 2025 • At least 75% of eligible people received drug therapy and counselling to prevent heart attacks and strokes by 2025	(ACIC) report. • A revised edition of essential mediation list. • Annual report of prevalence of overweight/obesity prepared • Annual report of # of women received screening for cervical and breast cancer prepared	programme • Commitment from MoF for appropriate budget for NCD prevention and control programme secured • MoHWE implement an integrated management of NCD prevention and Control programme • Stakeholders (NGOs, FBOs, private sectors) support and "buy-in" to the National NCD programme • A mechanism for data collection at PHC and reporting established • MoHWE developed National Guidelines and Protocol for cancer screening and management of risk factors for NCDs

Strategy 5: Sustainable NCD surveillance system established and collected data utilized for effective policy and program development

Indicators/Target	Means of Verification	Critical Assumption
• 16 % relative reduction in premature mortality from the 4 leading NCDs (cancers, CVD, diabetes & chronic respiratory diseases) by 2025 • High-quality mortality data for the 4 main NCDs collected by 2025 • Quality cancer incidence data, by type of cancer per 100,000 population collected by 2025 • At least two nationally representative population survey conducted by 2025. • Annual reports with analysis on NCDs and risk factors produced and disseminated. • Research agendas that include operational research studies on NCDs and risk factors for strengthening evidence-based policies, program development set every 2 years.	• Annual report of NCD minimum data set prepared and submitted to PAHO and CARPHA • PAHO/WHO STEPS Survey, Mini STEPS Survey etc. • Report of Public education	• MoH (HID) will establish systematic data collection mechanism (surveillance, survey) on mortality and morbidity due to NCDs. • Appropriate human and financial resource will be allocated for surveillance.

Activity Plan

Strategic Line of Action 1:

Strengthening coordination and management of NCD prevention and control programmes. (Impact: Coordination mechanism strengthened)

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
1.1 Strengthen Multisectoral Action	1.1.1 Establish a Coordinating mechanism for effective NCD prevention and control within the Health Planning Unit of MoHWE	An operational plan for integrated approaches for NCD prevention and control developed	MoHE, CMO and Medical Officer of Health, NCD Coordinator.	2017	$0
	1.1.2 Health and Wellness Commission foster multisectoral partnerships, sensitize high level national authorities to retain NCD Agenda as high priority	At least 3 of Political Dialogues with national authorities conducted	MoH, CMO & PS	2017	$ 0
	1.1.3 Engage with various stakeholders for effective resource mobilization, advocacy and accountability	At least 3 MOUs exchanged (trade, agriculture and education) NCD plan of action widely disseminated and implemented	Minister of Health, CMO & PS	2017 - 2018	$10,000

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
1.2 Advocacy	1.2.1 Conduct 15 public awareness campaign and advocacy on prevention and control of NCDs and risk factors for specific targeted populations	At least 10 public awareness campaigns and advocacy on prevention and control of NCDs and risk factors for specific targeted populations conducted	MoH, Health Promotion Unit, National Health & Wellness Commission.	2017-2021	$ 40,000
1.3 Strengthen resource mobilization	1.3.1 - Lobby for tax subsidies for healthy foods for schools and hospitals. - Do costing for specific areas where tax revenue will be used for the prevention and control of NCD	Approved Cabinet paper Costing exercise conducted showing areas for utilization of tax revenue by 2018	Minister, CMO, PS, Medical Officer of Health. Health Planner, Health Planning unit, Health Promotion Unit.	2018	$50,000

(Currency in Eastern Caribbean Dollars)

Strategic Line of Action 2:

Building healthy and active communities through multisectoral policies and partnerships. (Impact: Multisectoral policies developed and implemented through wide range of partnerships)

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
Strengthen Multisectoral policies and partnerships	2.1.1 Develop and implement National multisectoral policies and plans for the prevention and control of NCDs (including alcohol, tobacco, salt, sugar, trans fat, obesity etc.)	National Health, Wellness & Promotion policy approved and implementation initiated by 2018	MOHWE/ CMO/ Chief Nutritionist & Chief Health Promotion Officer, Chief Nursing Officer, SNO/ Community Health Service	2018	$ 40,000
		National Child Nutrition Policy (including childhood obesity prevention) and Plan of Action approved and implementation initiated by 2018	MOHWE/Chief Nutritionist, Chief Health Promotion Officer/SNO Community Health Service	2018	$40,000
		School Nutrition Policy and Plan of Action approved and implementation initiated by 2018	MOHWE/Chief Nutritionist, Chief Health Promotion Officer/SNO Community Health Service	2018	
		80% of primary and secondary schools	MOHWE/Chief Nutritionist, Chief Health		

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
		implemented School Nutrition Policy by 2019	Promotion Officer/SNO Community Health Service		
		"Healthy Village, Healthy Islands Project" – Smart School, Smart Community demonstration project implemented and supported by School Health Policy by 2018	MOHWE/ MOH, Chief Nutritionist, Chief Health Promotion Officer/SNO Community Health Service		$50,000
		Health and Wellness Promotion Policy and Plan of Action approved and implemented by 2018	MOHWE/ MOH, Chief Health Promotion Officer, Chief Nutritionist & /SNO CHS		$20,000
	2.1.2 Assess national capacity for prevention and control of NCDs Identify measures for improving national capacity for prevention and control of NCDs	National Country Capacity for NCDs assessed by 2019 No. of new policies, guidelines etc developed and implemented by 2019	MOHWE, NCD Coordinator in Health Planning Unit	2019- every 2 years	$ 20,000

(Currency in Eastern Caribbean Dollars)

Strategic Line of Action 3:

Addressing NCD risk factors and protective factors

(Impact: Policies in place and implemented to reduce prevalence of risk factors and strengthen protective factors)

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
3.1 Strengthening Legal and Policy Framework	3.1.1 Strengthen NCD Risk Factor component of the Health & Family Life Curriculum	At least 80% of schools implementing strengthened health & family life education curriculum	MoH, Health Promotion Unit, Ministry of Education	2017-2021	$ 200,000
	3.1.2 Implement WHO FCTC (Tobacco Control Act.)	Tobacco control act approved and enacted by 2020	Minister of Health, PS, CMO, Health Promotion Unit, Cabinet, Legal Affairs	2019-2021	$ 5,000
	3.1.3 Adopt Regional Standard on food labeling (front-of--package] to be adopted by Nation Bureau of Standards.	National standard developed and approved by 2018	MoH, Bureau of Standards	2018-2020	$ 5,000
3.2 Reduce risk factors and strengthen protective factors via cost-effective interventions	3.2.1 Strengthening maternal and child health programme (with emphasis on exclusive breast feeding at least first 6 months at primary and secondary birthing centers). (*Refer to **CNP&POA**)	Report prepared and at least 55% of mothers exclusive breast feeding at 6 months (*Refer to Child Nutrition Policy and Plan of Action - **CNP&POA**)	MoH, Nutrition Unit, Health Promotion Unit, Maternal and Child Health Committee	2017-2021	$ 20,000

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
	3.2.2 Incorporate recommendations for strengthening school feeding programs for prevention and control of diet-related diseases. (*Refer to **CNP&POA**)	Monitoring and evaluation conducted on school feeding programs by 2020. (*Refer to **CNP&POA**)	MoH, Nutrition Unit	2017-2021	$ 5,000
	3.2.3 Implement Child Friendly School Initiative. Prevent and reduce obesity to protect children from marketing of foods and non- alcoholic beverages high in saturated fats, trans fatty acids, free sugars (*Refer to **CNP&POA**)	At least 70% of schools joined and implement the initiative by 2020 (*Refer to **CNP&POA**)	MoH, Health Promotion Unit, Ministry of Education (UNICEF)	2018-2021	$ 10,000
	3.2.4 Implement, monitor and evaluate cost-effective interventions on salt and sugar reduction	Baseline survey conducted for mean salt intake (sodium chloride) in grams per day and glucose levels in persons aged 18 + by 2019 by STEPS Survey Salt & Sugar reduction demonstration project implemented using	MoH, Nutrition Unit, Health Promotion Unit, Salt Smart Coalition,	2017-2021	$ 130,000

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
		social marketing approach by 2018 National salt target and timeline in selected food categories identified (e.g. bread and green seasoning) by 2019 Physiological parameters and Knowledge, Attitude and Behavior change evaluated by 2020 National Food Based Dietary Guidelines revised and widely disseminated by 2019 Establish baseline on salt, sugar and saturated/trans fat intake At least 75% of School Cafeteria Meals reviewed and reformed for reduction of salt and sugar intake			

(Currency in Eastern Caribbean Dollars)

Strategic Line of Action 4:

Health system strengthening for NCDs and risk factors at all levels and all sectors

(Impact: Accessibility to quality of care and affordability for essential medications and technologies improved)

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
4.1 Strengthen health system response to NCDs and risk factors at all levels	4.1.1 Implement and scale up a model of integrated management for NCDs (e.g. CCM, WHO PEN)	Chronic Illness Care Assessment conducted in 100% of primary health care facilities. Chronic Care Model adapted/ implemented in 80% of health facilities by 2018. Chronic Care Passport adapted, disseminated and implemented including training to health care workers in Primary Health Care management by 2018 Integrated evidence-based guidelines/ protocols for screening, prevention and control of specific NCDs in place by 2019. 80% of at risk populations screened and treated according to evidence-based guidelines in public and private health sector by 2021. Programmes for early detection, treatment and care of cancers	Implementation Agency: MoH Executing Agency: MoH, CMO, Medical Officer of Health, CNO, HNS, SNO MCMH, SNO Community	2017-2021	$ 80,000

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
		integrated into primary health care services by 2020. Training for public health care professional related to primary prevention of risk factors contributing to NCDs such as tobacco, and alcohol use, unhealthy diets and insufficient physical activity conducted annually.			
	4.1.2 Develop and implement tracking system for effective referral, discharge, follow-up and feed-back	Unique patient ID established and used in all levels of health service delivery. Guidelines and protocols for referral, discharge, feed- back and follow-up developed and implemented, At least 60% of eligible persons received drug therapy and counselling (heart attacks & strokes) by 2025 At least 85% of public primary health care facilities provide essential medicines and technologies for NCD by 2020 HPV vaccines (girls at 11 yrs. only targeted 100% coverage) introduced	MoH, HIS, MCMH, District Hospitals/Clinics, Chief Pharmacist, Co-ordinator Immunization programme, Chief Laboratory Technician	2018-2021	$75,000

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
		into national immunization schedule by 2017 Four doses of Hepatitis B vaccine maintained at 100% coverage by 2021 At least 60% of women (30-49) received a screening test for cervical cancer using any of the following methods: VIA, PAP Smear and HPV test by 2025 List of available essential medicines for NCDs from OECS/PPS updated and available by 2017 At least 75% of patients with hypertension and diabetes controlled by 2020 5% relative reduction in age-standardized prevalence of raised blood pressure 5% relative reduction in age-standardized prevalence of raised blood glucose/diabetes by 2020 5% relative reduction of age-standardized prevalence of overweight/obesity in			

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
		persons aged 18+ and in school-aged children and adolescents by 2020 70% of women (aged 30-49) received cervical cancer screening by 2020 50% of women (aged 50-69) received breast cancer screening by 2020			
	4.1.4 Standardize and implement screening for NCDs (cancer, cardiovascular diseases, kidney diseases/failure etc.) and its reporting format	A list of eligible persons to receive drug therapy and counseling established as baseline (both public & private) by 2017 Screening for NCDs implemented by 2018	MoH, Medical Officer Health, SNO Community Nursing, Health Planning Unit, HIS, Community Pharmacists	2017-2021	$ 110,000
4.2 Continue empowering patients and strengthen community linkage	4.2.1 Provide health education and promotion for all and counselling for patients with NCDs and their family with healthy	At least 25 nation-wide health education sessions conducted by 2021. 100% of patients with NCDs and their families receive counselling by	Implementation Agency: MoH Executing Agency: MoH/Health Promotion Unit, Nutrition Unit, Community based Nurses.	2017-2021	$ 150,000

Strategies	Activities	Performance Indicators	Responsible	Time	Cost
	lifestyle education (diet, PA, maintain healthy weights, quit smoking etc.)	2021.			
	4.2.2 Promote timely and specific medical interventions (patients and providers) for management and care for NCDs	At least 75% of clients with CVDs and DM received effective drug therapy and counselling by 2020.	Implementation Agency: MoH Executing Agency : HNS, CMO, Private Healthcare Facilities, Community Pharmacist	2018-2021	$ 8,000
	4.2.3 Improve patients adherence to medications, follow-up care through health education	100% of clients with chronic diseases utilize the Chronic Care Passport(CCP), and patient record updated by 2021	Implementation Agency: MoH Executing Agency : MoH/CMO, Medical Officer of Health, HNS	2017-2021	$ 8,000
4.3 Scale up health professionals skills and motivation	4.3.1 Provide continued training for health professionals to effectively deal with NCD prevention and control	Training/update provided every 3 months for health professionals.	Implementation Agency: MoH Executing Agency : MOH, (Partnership Donors)	2017-2021	$ 70,000

(Currency in Eastern Caribbean Dollars)

Strategic Line of Action 5:

Improving surveillance, research and information

(Impact: High quality mortality data due to major NCDs collected and a 20% relative reduction in premature mortality from the 4 leading NCDs achieved by 2019)

Strategies	Activities	Performance Indicators	Responsible	Time	Cost (ECD)
5.1 Capacity Training	5.1.1 Provide training for health professionals to collect and report quality data routinely	Annual training sessions conducted, resources secured and survey implemented	Implementation Agency: MoH Executing Agency : MoH, Epidemiologist, PAHO, CARPHA	1st quarter, 2019	40,000
5.2 Secure appropriate budget allocated for sustainable surveillance system	5.2.1. Secure at least US $ 5000.00 for establishment of sustainable surveillance system for NCDs and monitoring risk factors	Budget allocated for surveillance on NCDs and risk factors by 2018.	Implementation Agency: MoH Executing Agency: CMO, Epidemiologist, HIS, Medical Officer of Health.	1st quarter, 2020	150,000
	5.2.2 Collaborate with various sectors such as academia to strengthen surveillance system	Support obtained (including in-kind contributions) as needed. Analyze the collected data and produced report annually. Data reported from private sector annually.	Implementation Agency: MoH Executing Agency : MoH, Epidemiologist, Health Planning Unit	2nd quarter, 2019	
	5.2.3 Produce quality data for effective policy development and	High quality CMO Report produced every year. Health system programs			20,000

Strategies	Activities	Performance Indicators	Responsible	Time	Cost (ECD)
	improving programmes and services	and services improved based on data collected by 2021.			

Summary Budget

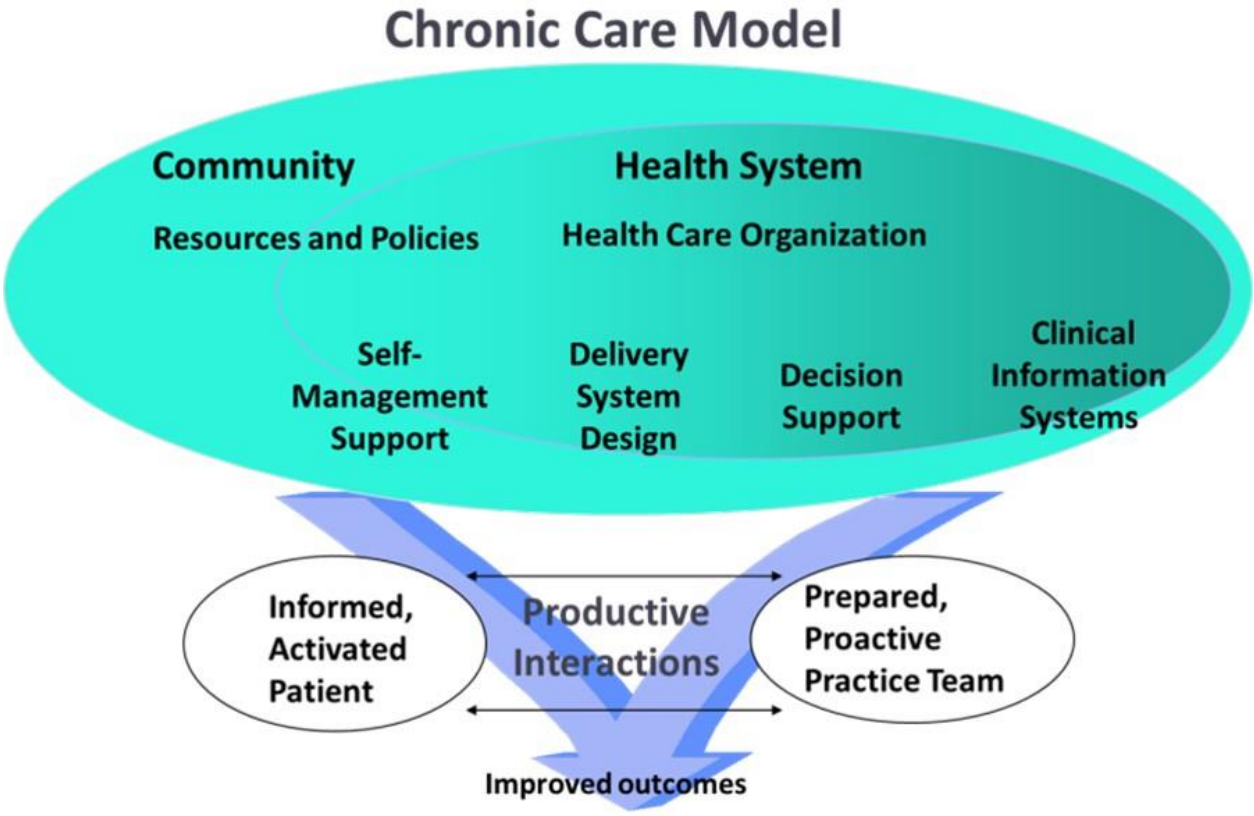
Action	Source of Funding				Unfunded Budget	Funded Budget	Total Budget
	MoH	MoE	MoA	NGO Others			
S1: Strengthening coordination and management of NCD prevention and control							100,000
S2: Healthy and active community through multisectoral policies and partnership							170,000
S3: NCD risk factors and protective factors							375,000
S4: Health system strengthening to NCDs and risk factors at all levels							501,000
S5: Surveillance, research, information and education							210,500
Total Budget							**1,356,000**

(Currency in Eastern Caribbean Dollars)

ANNEXES/APPENDICES

ANNEX 1: Chronic Care Model

The Chronic Care Model has been adopted by the WHO/PAHO to manage chronic diseases. PAHO recommends this model be adapted for use in the region as a framework to evaluate and organize NCD management. Implementation of the integrated chronic care model can lead to more comprehensive and sustainable cardiovascular care, strengthen patient self-care, and improve coordination between levels of care [25].



Developed by: The MacColl Institute & ACP-ASIM Journals and Books
Source: http//www.improvingchroniccare.org/index.php?p=the chronic care model8ls=2

ANNEX 2: Policy Links for NCD Prevention & Control with Various Sectors

The table below connects the response to NCDs with the priorities of other sectors, making these links explicit and preparing for harmonization of policies across sectors.

Sector	Policy Links
Finance and Trade	• Approving dedicated staff and budget for NCD's. • Granting concessions on monitoring equipment to persons with NCD's • Endorsing Trade treaties supporting ban of trans fat
Social Development	• Ensuring the equity of access to prevention and care for services related to NCDs • Reducing the disparities in burden of NCDs among people of different social class (defined by age, sex, income, occupation, education, and geographic location
Education	• Enhancing the academic performance of school children through promotion of healthy behaviors • Strengthening the work on health promoting schools and related activities to improve the health of students, teachers using the Food Based Dietary Guidelines.
Agriculture,	• Ensuring food availability and security as outlined in the Food and Nutrition Security Policy. (e.g. introduction of new fruits and vegetables for agriculture, promotion of local products) • Promoting the messages of the Food Based Dietary Guidelines
Civil society	• Work with civil society and women's groups to enhance the social norms to adopt behaviors that reduce the risk of NCDs • Empower individuals and communities to manage and cope with existing burdens of NCDs through education, self-management to enjoy improved health and wellness.

Sector	Policy Links
Private sector (Include private sector medical)**	• Seeking opportunities for work place health promotion extending the concept of occupational health to cover the prevention of NCDs • Seeking opportunities for consultation and cooperation where appropriate (e.g. physical activity promotion, salt reduction, food product reformulation) • Seeking opportunities for resource mobilization (financing) • Setting standards and enforcing these as and where appropriate
Health	• Developing the capacity for health policy makers and civil society to understand the policy concerns of other sectors and to engage in meaningful and lasting dialogue • Health in All Policies takes into account health implications of decisions, seeks synergies, and avoids harmful health impacts, in order to improve population health and health equity. It ensures that the health implications of all policies are considered in the policymaking process, regardless of the sector in which the policies are being developed. It recognizes that public policies and decisions made in policy areas other than health have a significant impact on population health and health equity.

ANNEX 3: Summary of Responsible Organization for the Prevention and Control of NCDs and Risk Factors

Stakeholders address Risk Factors	Tobacco	Unhealthy Diet	Harmful use of alcohol	Physical inactivity
Ministry of Health, Wellness & Environment	○	○	○	○
Ministry of Education, Reconciliation & Ecclesiastical Affairs	○	○	○	○
Ministry of Agriculture, Rural Transformation, Forestry, Fisheries & Industry	○	○		
Ministry of Foreign Affairs, Trade, Commerce and Regional Integration	○	○	○	○
Ministry of Economic Planning, Sustainable Development, Industry, Information & Labour	○	○	○	○
Ministry of National Mobilization, Social Development, Family, Gender Affairs, Persons with Disabilities and Youth	○	○	○	○
Ministry of Tourism, Sports & Culture	○	○	○	○
Ministry of Transport, Works, Urban Development and Local Government	○	○	○	○
Government: Ministry of National Security, Air & Sea Port Development	○	○	○	○
NGOs, FBOs, Civil Society, Private Sectors, Academic Institute	○	○	○	○
International Organizations: PAHO/WHO, UNCEF, FAO, UN Women, WTO, UNFPA, UNDP,CARPHA, IICA, JICA	○	○	○	○

ANNEX 4: Summary of Stakeholder Analysis

Assumption of potential collaboration to tackle NCD prevention and control

Stakeholder	Institutional Interest	Capacity (**H**uman, **F**inancial & **T**echnical resources)	Political Influence	Motivation to Produce Change	Possible Actions
Government: Ministry of Health, Wellness & Environment	Promote and support risk factors reduction, protective factors strengthening for prevention and control of NCDs and health improvement and overall wellness	H: Medium F: Medium T: High	High	Strengthening multisectoral policies and actions for an integrated approach for prevention and control of NCDs	Provide adequate resources (human, financial, technical); Provide leadership and coordination
Government: Ministry of Education, Reconciliation & Ecclesiastical Affairs.	Promote students' performance by eliminating risk factors which might cause absenteeism, bullying, lack of interest in academics	H: Medium F: Low T: Medium	Medium	Strengthen holistic approach for human development for Antigua and Barbuda	Provide a setting for supportive environment for children and network with community
Government: Ministry of Agriculture, Rural Transformation, Forestry, Fisheries & Industry.	Promote and support creating healthy food environment (food and nutrition security-food safety, availability, accessibility,	H: High F: Low T: High	Medium	Strengthen infrastructure development for food production for all	Provide leadership and technical support for agricultural development

	affordability)				
Government: Ministry of Foreign Affairs, Trade, Commerce and Regional Integration	Reduce national and regional importation level of unhealthy, energy-dense processed foods high in sugar, salt, trans fat.	H: Low F: Medium T: High	Medium	Creating a culture encompassing health, physical activity and healthy eating.	Provide technical support for implementation of the multisectoral action plan
	Ensure that health, trade, agriculture sectors executing the policy in accordance with multilateral, regional standards and WTO trade agreement	H: Medium F: Medium T: Medium	High	Strengthen compliance of the national products and importations in line with WTO	Provide implementation support
Government: Ministry of Economic Planning, Sustainable Development, Industry, Information & Labour.	Sensitize nation by disseminating policy, health information, and messages.	H: Medium F: Medium T: High	High	Increasing awareness of healthy lifestyle and prevention and control of NCDs.	Provide health information to various sectors both private and public
	Ensure appropriate budget allocations for cost-effective programmes for NCD prevention and control	H: Medium F: Medium T: High	High	Executing the national budget for cost-effective impact	Provide financial support for cost-effective programme on NCD prevention and control

Government: Ministry of National Security, Air & Sea Port Development.	Ensure Public Health Act. to be revised and in place and domestic Tobacco Control Legislation enacted	H: Low F: Low T: Medium	High	Ensuring St. Vincent and the Grenadines legally comply with Regional (Port of Spain Declaration) and International Conventions	Provide timely technical review of legislations related to NCDs to facilitate the approval process
Government: Ministry of National Mobilization, Social Development, Family, Gender Affairs, Persons with Disabilities and Youth	Promote social safety net for vulnerable population to ensure access to healthy foods	H: Low F: Medium T: Medium	Medium	Strengthen community linkage to address NCDs and risk factors	Provide access to families at risk and share assessment and referral mechanism to other sectors and agencies
International Organizations: PAHO/WHO, UNCEF, FAO, UN Women, JICA, IICA, WTO, UNFPA, UNDP, CARPHA, CARDI, CLAC,	Promote and provide health for all and human and social development	H: High F: Medium T: High	High	To achieve ultimate UN Goal	Provide technical support and guidance and resource mobilizations
Civil Society Groups Diabetes & Hypertension Association, Lions Club, Rotary Club, FBOs, Soroptimist Int.	Promote and support risk factors reduction, protective factors strengthening for prevention and control of NCDs through community out reach	H: Low F: Low T: Medium	High	Strengthening multisectoral policies and actions through community-based networking	Provide advocacy and support for people living with NCDs Provide partnerships, resource mobilization and networking

Private Sectors Banks, private companies, Hotels, Restaurants, Chambers of Commerce , Insurance, retail and whole sellers, distributors	Ensure high level of productivity Make a profit by reducing medical costs due to NCDs Health and well-being of the nation	H: High F: High T: High	High	Increase cooperate image	Provide sponsorships and partnerships for NCD prevention and control programme
Academia UWI (Medical Schools, SVGCC Division of Nursing Education). Other universities and research institutes	Conduct research for evidence-based decision making	H: High F: Medium T: High	Medium	Contribute to reduce premature deaths due to NCDs and risk factors via research	Provide technical support for research, education and publication on NCDs prevention and control

ANNEX 5: Glossary of terms

Chronic disease prevention and control: All activities related to surveillance, prevention and management of the chronic non-communicable diseases.

Counselling: Receiving advice from a doctor or other health worker to quit using tobacco or not start, reduce salt in diet, eat at least five servings of fruit and/or vegetables per day, reduce fat in diet, start or do more physical activity, maintain a healthy body weight or lose weight.

Drug therapy and counselling to prevent heart attacks and stroke: Percentage of eligible persons (defined as aged 40 years and older with a 10-year cardiovascular disease (CVD) risk >_ 30%, including those with existing CVD) receiving drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes.

Drug therapy: Taking medication for raised blood glucose/diabetes, raised total cholesterol, or raised blood pressure, or taking aspirin or statins to prevent or treat heart disease.

Essential medicines: Those medicines that satisfy the priority health care needs of the population.

Guidelines/standards: A recommended evidence-based for chronic diseases course of action to prevent a chronic disease/condition or treat or manage a chronic disease/condition aiming to prevent complications, improve outcomes and quality of life of patients.

Harmful use of alcohol: Consumption of pure alcohol (ethanol) in litres per person aged 15+ during one calendar year.

Health: A state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity.

Health promotion: The process of enabling people to increase control over, and to improve their health.

Non-communicable disease: Is a medical condition or disease that is not caused by infectious agents (non-infectious or non-transmissible), and tends to be of long duration and is the result of a combination of genetic, physiological, environmental and behavioural factors.

National strategy or action plan: 1. Strategy: A long-term plan designed to achieve a particular goal.

Action Plan: A scheme for a course of action which may correspond to a policy or strategy, which defined activities indicating who does what (type of activities and people responsible for implementation), when (time frame), how and with what resources to accomplish an objective.

Primary health care: Essential health care made accessible at a cost affordable to a country and community, with methods that are practical, scientifically sound and socially acceptable.

Premature NCD mortality: Probability of dying between the exact ages 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases.

Raised blood pressure: Systolic blood pressure >_ 140 and/or diastolic blood pressure >_ 90 among persons aged 18+ years.

Raised blood glucose: Fasting plasma glucose value >_ 7.0 mmol/l (126 mg/dl) or on medication for raised blood glucose among adults aged 18+ years.

Raised total cholesterol: Total cholesterol >_ 5.0 mmol/l (190 mg/dl)

Salt intake: Mean population intake of salt in grams

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