Republic of Botswana
Ministry Of Health & Wellness

BOTSWANA MULTI - SECTORAL STRATEGY

FOR THE PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES

2018 - 2023

WORLD HEALTH ORGANIZATION

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Foreword

Non-communicable diseases (NCDs) are now a leading cause of death globally, claiming 40.5 million lives of 56.9 lives annually and accounting for more deaths than HIV, TB and malaria combined (WHO, 2016). The burden of NCDs is rising rapidly in Botswana, where it is estimated that they cause 46% of all deaths (WHO, 2016). Furthermore, a population-based Non-Communicable Diseases and their risk factors survey (STEPS) conducted in the country in 2014 revealed adult prevalence of 29% for hypertension, 5% for diabetes, 30% for obesity, 18% for tobacco use, and 95% for unhealthy diet. These concerning figures, along with the recognition that the drivers of NCDs are broad, highlight the urgent need for a multi-sectoral and concerted national response.

The World Health Organization (WHO) Global Health Action Plan calls for the prevention and control of NCDs (2013-2020). Amongst the priority objectives is to reduce modifiable risk factors for NCDs and address underlying social determinants through creation of health promotion environments, including strengthening national policies as well as health and non-health systems.

It is against this backdrop that the Botswana Ministry of Health and Wellness, in partnership with World Health Organization, embarked on the development of this second *National Strategy for the Prevention and Control of NCDs* emphasizing multi-sectoral engagement and action. An iterative and inclusive process involving all relevant stakeholders and partners was undertaken, and particular care was given to conducting a detailed situation analysis to inform priority-setting and planning. This analysis considered cost-effective and innovative solutions, including those in the WHO Global Action Plan for Prevention and Control of NCDs 2013-2020.

Thus, this strategy serves as a roadmap to energize and guide our national response to NCDs. The strategy should put Botswana on track to meeting national and global targets including working towards the Sustainable Development Goals (2016-2030). The country's inclusion of NCDs in the 11th National Development Plan (2017-2022) is indeed a reflection of political will and the prioritization of NCDs, and is anticipated to support efforts described in this strategy.

I would like to acknowledge the national NCD program in the Department of Public Health for spearheading development of this strategy, and for the support of the various departments and programs within the Ministry of Health and Wellness as well as other Ministries. We are grateful for the technical support from the WHO and the valuable contribution of all stakeholders and partners across different sectors, who have made this strategy possible.

This strategy provides a commitment to continue to meet the needs of the people of Botswana in the prevention and control of NCDs. I therefore take great pleasure in presenting this NCD strategy; The Ministry of Health and Wellness looks forward to working together with all stakeholders in this country to see through the successful implementation of this strategy as we strive for a healthier Botswana.

Honourable Dr Alfred Madigele

Minister of Health and Wellness

Acknowledgements

The Ministry of Health and Wellness would like to extend sincere gratitude to all who contributed to the development of this strategy, including program officers across all ministries, stakeholders across sectors including private and non-governmental, and civil society.

The national Non-Communicable Diseases (NCDs) program played a key role in the development of this strategy through the coordination of stakeholder inputs and are acknowledged with thanks. Sincere gratitude goes to Mrs Shenaaz El-Halabi, former Permanent Secretary of Ministry of Health and Wellness, for her tireless support and wisdom in developing this strategic plan.

Appreciation is also extended to Dr Martins Ovberedjo and Mr Moagi Gaborone from the World Health Organization for their technical support and partnership throughout the process of development and launching of the strategy. Finally, the Ministry would like to thank ACHAP for their editorial review, design and printing of this strategy.

Ruth Maphorisa

Permanent Secretary
Ministry of Health and Wellness

Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
BHRIMS	Botswana HIV and AIDS Response Management System
BAIS	Botswana AIDS Impact Survey
BOCONGO	Botswana Council of Non-Governmental Organizations
BOSASNet	Botswana Substance Abuse Support Network
BITC	Botswana Investment and Trade Center
BP	Blood Pressure
CSO	Civil Society Organization
CVD	Cardiovascular Diseases
CBE	Clinical Breast Exam
CBO	Community-Based Organization
CHBC	Community Home-Based Care
DHMT	District Health Management Team
DHIS	District Health Information System
DHS	District Health Survey
EPI	Expanded Program on Immunization
FCTC	Framework Convention on Tobacco Control
GDP	Gross Domestic Product
GATS	Global Adult Tobacco Survey
GYTS	Global Youth Tobacco Survey
HIV	Human Immunodeficiency Virus
HIS	Health Information System
HPV	Human Papilloma Virus
IAEA	International Atomic Energy Agency
IARC	International Agency for Research on Cancers
IDSR	Integrated Disease Surveillance and Response
IEC	Information, Education and Communication
IPMS	Integrated Patient Management System
KITSO	Knowledge, Innovation and Training Shall Overcome AIDS
LEEP	Loop Electrosurgical Excision Procedure
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MoU	Memorandum of Understanding
MoHW	Ministry of Health and Wellness
NCDs	Non-Communicable Diseases
NDP 11	National Development Plan 11
NGO	Non-Governmental Organization
NCDMSP	Non-Communicable Diseases Multi-sectoral Strategic Plan
PIMS II	Patient Information Management System II
RAAB	Rapid Assessment of Avoidable Blindness survey
SDGs	Sustainable Development Goals
SRH	Sexual Reproductive Health
TB	Tuberculosis
TWG	Technical Working Group
UN	United Nations
VDC	Village Development Committee
VIA	Visual Inspection with Acetic Acid
WHO	World Health Organization

1. Introduction

1.1. Scope and purpose of a national multi-sectoral strategic plan for Non-Communicable Diseases

This national strategy will focus on the four major NCDs, which account for 82% of NCD-related deaths (cancers, cardiovascular diseases, diabetes, chronic respiratory disease), as well as the four common modifiable risk factors they are associated with (smoking, harmful use of alcohol, unhealthy diet, and physical inactivity). Broader definitions of NCDs are recognised, including injuries and mental illness, as well as those conditions referred to in the Brazzaville Declaration (hemoglobinopathies, oral disease, eye disease, rheumatic heart disease). While these conditions are important, the approach taken in this strategy was to maintain a narrow focus in order to address the areas of highest burden and areas with the greatest gaps, and facilitate effective implementation of their 'best buys' interventions.

The purpose of this strategy is thus:

- To identify national priorities for addressing NCDs, with emphasis on prevention, primary care, holistic approaches and multi-sectoral participation
- To outline a roadmap of efforts and critical activities that will be integrated by various stakeholders in addressing NCDs
- To identify primary indicators and targets in order to assess impact of efforts

The Strategy is accompanied by a comprehensive M&E framework, which will facilitate the generation of quality, timely, relevant information to measure the impact of the national response (see M&E section below for further details).

1.2. Process of strategy development

In support of the UN's High-Level Political Declaration September 2011, Botswana aims to accelerate prevention and control efforts and strengthen collaborations through a multi-sectoral NCD strategy.

The development and endorsement of this strategy involved a collaborative consultative process as follows:

- Internal review of progress and gaps observed in the implementation of NCD strategic plan 2011 – 2016, conducted with consultation of NCD program and relevant MoHW divisions and departments
- In consultation with key departments, divisions and programs within MoHW, an early version of the Strategy was drafted by a core team led by NCD program
- A multi-sectoral technical working group (TWG) was established, including representatives from various Ministries and partners
- This TWG reviewed and revised the early draft of the strategy, in particular defining roles and critical activities relevant to their sectors within each strategic objective. The TWG members also contributed to the development of the M&E framework by reviewing and refining process and outcome indicators used to track the progress of NCD efforts, and defining processes for reporting and information flow. Due to certain considerations uniquely relevant to cancers, a cancer multi-sectoral stakeholder consultative meeting was held in September 2016, and inputs from those discussions were also incorporated into the draft
- The draft was then presented to MoHW management, and subsequently to a high-level inter-ministerial forum for vetting and high-level commitment across sectors, as the final step in development and endorsement

The development of the strategy was multi-sectoral and aligned with NDP11, reflecting its key performance indicators.

2. Situation Analysis

2.1. NCD burden globally

Non-communicable diseases (NCDs) are now a leading cause of death globally, claiming 40.5 million lives annually (71% of all deaths) and accounting for more deaths than HIV, TB and malaria combined (WHO, 2016). The World Health Organization estimates that 86% of NCD-related deaths occur in low and middle-income countries. According to GLOBOCAN 2012 estimates, more African women die from cancer than from complications related to pregnancy and childbirth. Furthermore, the African region is expected to have the steepest rise in NCDs over the next decade compared with other regions.

2.1. NCD burden globally [continued]

Within this context, the global community has mobilized to address NCDs and their risk factors. Notable global efforts include the high-level UN meeting on NCDs in 2011, WHO's identification of 'best buys' and tools such as the WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020, and the Framework Convention on Tobacco Control. As a UN member state, and concerned by the burden of disease, Botswana subscribes to global priorities and targets, and continues to pursue multi-pronged approaches to reducing NCDs and their risk factors.

2.2. Burden of NCDs and their risk factors in Botswana

2.2.1. Overall burden of disease

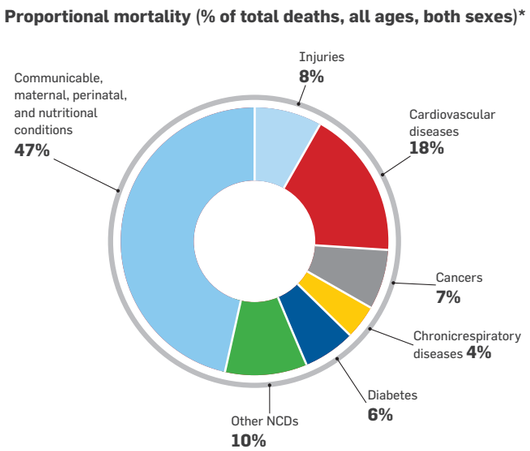
The rising global burden of NCDs and their risk factors is also reflected locally in Botswana. Following the success of development and healthcare programs (including HIV treatment) more people in Botswana are living longer, which introduces increased risk for NCDs. As an upper middle income country and one that has among the highest prevalence of HIV in the world, Botswana faces the double burden of urbanization (linked to a rapid adoption of unhealthy lifestyles), as well as increased NCD risk introduced for those living with HIV infection. This has resulted in the high prevalence of NCD risk factors. According to the Botswana STEPS survey of 2014, 30.6% of adults are overweight or obese, 18.5% smoke, and 95% do not eat enough fruits and vegetables.

While this is the case, many individuals who have an NCD are undiagnosed and unaware of it. The STEPS 2014 survey revealed that 23% of those with hypertension were not aware and not on treatment. Furthermore, 70% of cancers reported nationally with staging information available are diagnosed at advanced stage. This limits the impact of treatment and the chances of long-term survival.

Table 1: Summary of findings from Botswana's 2014 STEPS survey (NCD risk factors)

Risk factor	Both sexes
TOBACCO	
Current smokers	**18.3%**
ALCOHOL	
Current drinkers	**26.4%**
Binge drinking (6 or more drinks on any occasion in the past 30 days)	**18.5%**
DIET	
Insufficient fruit and vegetable intake (<5 combined servings per day)	**94.8%**
OBESITY	
BMI of 25 or more	**30.6%**

Figure 1: Causes of death in Botswana, (WHO, 2016)



2.2.2. Harmful use of alcohol

According to the 2014 World Health Organization (WHO) Global Status Report on Alcohol and Health, the global adult per capita consumption (APC) is 8.4 litres of pure alcohol per year. Among drinkers, this figure is estimated at 20.2 liters. Botswana, like most other African countries, has high alcohol abstention rates among men (54.3%) and women (85%) (WHO Global Status Report on Alcohol and Health 2011), however among the drinkers, there is significant drinking to intoxication (binge drinking).

The total adult per capita consumption (APC) in Botswana is 8 litres, however among drinkers per capita consumption is 26.5 liters, which is higher than the regional average. Botswana's national NCD risk factors (STEPS) survey undertaken in 2014 revealed an increase in the proportion of respondents who are alcohol users amongst both genders. The percentage of current alcohol drinkers was found to be 26.4% compared to 18.7% in 2007. Alcohol use among the youth is also a concern in the country. 12.3% of children aged 10-14 years and 30.5% of youth aged 15-19 years reported being intoxicated at least once in the past four weeks (Botswana Central Statistics Office, 2008). The majority of drivers involved in accidents for which alcohol was a contributory factor from January 2012 to January 2016 were between 18 and 35 years old.

In addition to road traffic accidents, alcohol use in Botswana has been linked to public concerns such as public nuisance, crimes and violence, problems in the family and the workplace, and risky sexual behaviour. In the Botswana National Strategic Framework for HIV/AIDS 2003–09 and the Substance Abuse and Drug Trafficking Strategic Plan 2003–07, alcohol was identified as one of the key sociocultural factors driving the HIV/AIDS epidemic.

2.2.3. Tobacco use

Globally, six million deaths per year are estimated to be tobacco-related (WHO NCD report, 2014). While the prevalence of tobacco use in Botswana is not as high as in some developing countries, there is a concerning trend of increased use, particularly amongst adolescents. According to the national STEPS 2014 survey, prevalence of tobacco use amongst 15-69 years olds was 20.9% (males 31.8%, females 9.7%). The same survey indicates that the majority of tobacco used is smoked (smoked 18.3%, smokeless 3.9%). Prevalence of smokeless tobacco use was found to be higher amongst women than men.

The median age for starting to smoke was 22 years old, with females starting at a later stage in life (at a median age of 28.5 years). The prevalence of tobacco use amongst the youth has increased over the years. According to the 2008 Global Youth Tobacco Survey (GYTS), 19.4% of the youth aged 13-15 used any tobacco product. This reflects an increase from the 2002 survey when tobacco use was 14.2%. In the same study, 38% of the youth reported to be exposed to passive smoking in their household. It is notable that Botswana does not commercially produce its own tobacco; rather the tobacco consumed is imported from neighbouring countries such as South Africa.

2.2.4. Unhealthy diet and inadequate physical activity

A large number of Batswana do not consume a healthy diet or engage in adequate physical activity. According to the Botswana 2014 STEPS survey, 94.8% of the participants ate less than 5 servings of fruit or vegetables on average per day. Prevalence of insufficient physical activity was 25.9% in women and 14.3% in men. Overall 30.6% of the participants were found to be overweight or obese, with a higher likelihood of 42.3% among females. 11% of adults in the survey had raised cholesterol or were currently on medication for raised cholesterol.

With regards to children, Nnyepi et al calculated the prevalence of overweight and obesity based on the Botswana Health survey 2007 where anthropometry data on children below five was collected. The findings were that 7.7% of Batswana children under 5 years of age were overweight and 7.5% were obese.

2.2.5. Hypertension and cardiovascular diseases

Cardiovascular diseases are estimated to cause 18% of mortality/death in the country (WHO NCD Country Profile, 2016). According to the National Health Statistics Report 2008-2010, stroke and cardiac failure are among the top 10 causes of inpatient mortality (Figure 2). Hypertension has remained the major cause of morbidity in both inpatient and outpatient cases (Table 2). In 2010 there were 41,604 new cases of hypertension.

2.2. Burden of NCDs and their risk factors in Botswana [continued]

Figure 2: Major causes of mortality among admitted patients in Botswana in 2009

[Adapted from National Health Statistics Report, 2009]

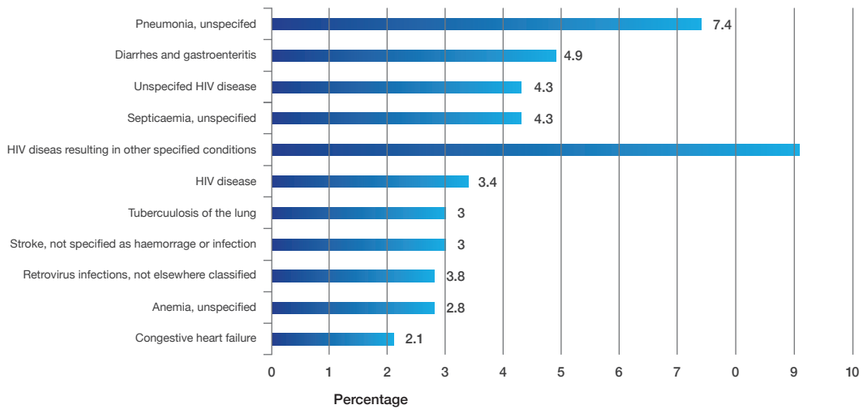


Table 2: Major causes of morbidity among admitted patients in Botswana in 2009

		Discharges			
Code	**Cause Group**	**Males**	**Females**	**Both Sexes**	**Percent**
A09	Diarrhea and gastroenteritis of presumed infectious origin	3,375	2,752	6,127	4.8
A16.2	Tuberculosis of lung without mention of bacteriological or histological confirmation	1,23	1,038	2,268	1.8
B33.3	Retrovirus infections, not elsewhere classified	1,958	2,504	4,462	3.5
B33.8	Other specified viral diseases	899	1,145	2,044	1.6
D64.9	Anaemia unspecified	828	1,763	2,591	2.1
E86	Volume depletion	863	610	1,473	1.2
I10	Essential (primary) hypertension	1,549	2,835	4,384	3.5
J18.9	Pneumonia specified	2,454	2,265	4,719	3.7
O06.4	Unspecified abortion, incomplete, without complication	0	4,675	4,675	3.7
O47.9	False labour at or after 37 completed weeks of gestation	0	3,960	3,960	3.1
Causes specified above		**13,156**	**23,547**	**36,703**	**29.0**
Other diagnosis		**35,550**	**54,128**	**89,678**	**71.0**
All diseases and conditions		**48,706**	**77,675**	**126,381**	**100.0**

Table 3: Major causes of morbidity among patients seen in outpatient consultations in 2009

Diagnosis (other diseases)	**Attendances**	**Percent**
Other diseases/conditions	1,189.837	27.0
Diseases of respiratory system (e.g. cough and cold)	949,658	21.6
Diseases of musculoskeletal system	475,648	10.8
Skin conditions	411,315	9.3
Hypertension	349,393	7.9
Eye diseases/conditions	150,269	3.4
Tonsillitis	137,21	3.1
Other external causes of injuries	122,533	2.8
HIV positive	88,079	2.0
Ear diseases/conditions	86,577	2.0
Causes specified above	3,960,519	90.0
Other diagnosis	438,757	10.0
Total (All attendances)	**4,399,276**	**100.0**

2.2.6. Diabetes

Diabetes Mellitus is estimated to cause 6% of all deaths in Botswana (WHO NCD Country Profile, 2016). There has been a steady increase in new cases of diabetes over the years. In 2010, 7954 new cases were recorded, an increase from the 6144 new cases in 2008.

The main cause of avoidable blindness associated with diabetes is diabetic retinopathy. Diabetic retinopathy and glaucoma accounted for 15% of the estimated prevalence of blindness by 1996 (Global Initiative for the Elimination of Avoidable Blindness, Action Plan 2006-2011). Diabetes is also a frequently associated risk factor for cataract, the common cause of avoidable blindness globally. According to the 2005 Rapid Assessment of Avoidable Blindness (RAAB) survey in Botswana, cataract was the leading cause of blindness. The 2014 RAAB survey revealed an increased magnitude of blindness from 10,000 in 2007 to 15,000. The three most common causes of blindness were found to be cataract (41%), glaucoma (23%) and corneal scar (14%) while the most common three causes of visual impairment were refractive error (53%), cataract (32%) and corneal scar (4%).

2.2.7. Chronic respiratory diseases

Nearly 90% of deaths from chronic respiratory diseases occur in low and middle-income countries (WHO NCD Global Report, 2014). Chronic respiratory disease accounts for 4% of all deaths in Botswana (WHO NCD Country Profile, 2016)
Data on chronic lung disease in Botswana is limited. Available data comes from the pneumoconiosis screening program for individuals who formerly worked as miners in South Africa; from 1999 to 2014, a total of 398 cases of pneumoconiosis were recorded.
Asthma is one of the major causes of childhood morbidity. 280 cases were recorded in 2009 while 264 were recorded in 2010 (National Health Statistics Report, 2009-2010)

2.2. Burden of NCDs and their risk factors in Botswana [continued]

Table 4: Major causes of morbidity (excluding neonatal conditions) among children under five years of age in 2009

		Discharges			
Code	**Cause Group**	**Males**	**Females**	**Both Sexes**	**Percent**
A09	Diarrhea and gastroenteritis of presumed infectious origin	1,907	1,358	**3,265**	18.8
J18.9	Pneumonia, unspecified	1,115	893	**2,008**	11.6
E86	Volume depletion	534	382	**916**	5.3
J18.0	Bronchopneumonia, unspecified	341	276	**617**	3.5
J06.9	Acute upper respiratory infection, unspecified	326	222	**548**	3.2
E46	Unspecified protein-energy malnutrition	242	201	**443**	2.5
J21.9	Acute Bronchiolitis, unspecified	256	181	**437**	2.5
R56.0	Febrile convulsions	246	122	**368**	2.1
J20.9	Acute bronchitis, unspecified	185	119	**304**	1.7
J45.9	Asthma, unspecified	156	124	**280**	1.6
N47	Redundant, phimosis and paraphimosis	280	0	**280**	1.6
Causes specified above		**5,588**	**3,878**	**9,466**	**54.5**
Other diagnosis		**4,577**	**3,341**	**7,918**	**45.5**
All diseases and conditions		**10,165**	**7,219**	**17,384**	**100.0**

2.2.8. Cancers

Cancers account for 7% of all deaths in Botswana (WHO NCD Country Profile, 2016). According to the population-based Botswana National Cancer Registry, 11,398 cancers were diagnosed and registered between the years 2005 and 2012. An average of 1,200 cancers are registered annually. Some contributing factors to the incidence of cancer in Botswana are the high HIV prevalence as well as increasing life expectancy. Using data from the period 2008-2012, the most common three malignancies for men are Kaposi's sarcoma (24%), oesophageal cancer (9%) and prostate cancer (7%). For women, they are cervical cancer (26%), breast cancer (16%) and Kaposi's sarcoma (14%). For children under 19 years of age, they are soft tissues and other extra osseous (28%), lymphomas (24%) and malignant bone tumours (10%). This is quite different to the incidence according to paediatric cancers seen at Princess Marina hospital, which ranked leukaemia as the highest at 19%, followed by sarcoma at 16% and wilms at tumour at 15%. The stage at diagnosis of the vast majority of cancers is not reported to the national cancer registry, however, among the 15% of those with reported stage, the majority were advanced stage. This finding is supported by anecdotal and facility level experience with most cancers diagnosed at advanced stage, with significant delays in referral, diagnosis and treatment initiation.

Figure 3: Major types of cancers diagnosed in adults Botswana, 2008-2012 (Source: Cancer Registry Incidence Report)

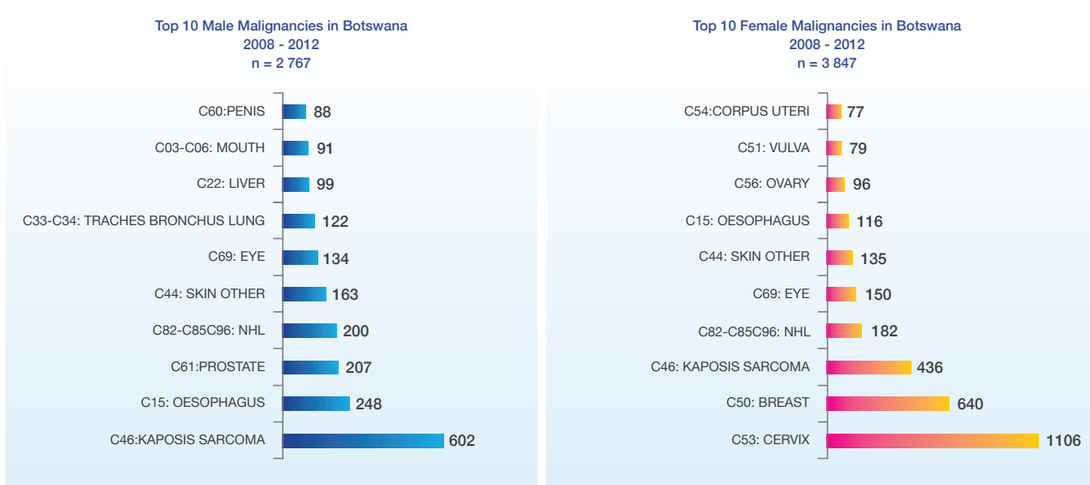
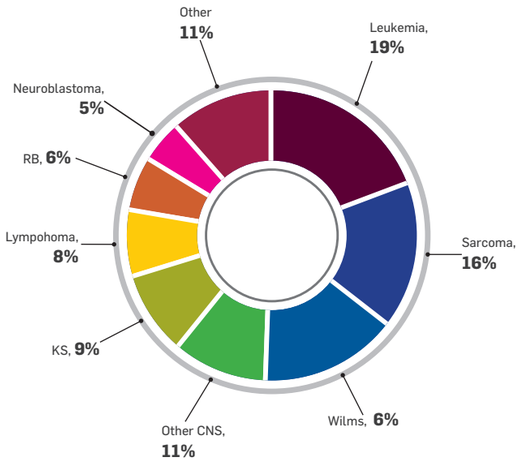


Figure 4: Major types of paediatric cancers diagnosed in Botswana (Source: Princess Marina Hospital – Baylor, 2016)

Proportional mortality (% of total deaths, all ages, both sexes)*



2.2.9. Mental health

In 2010, 13,363 new diagnoses of mental illness were made (National Health Statistics Report, 2010). In 2008, neuropsychiatric disorders were estimated to make up 4.6% of the total disease burden in Botswana (WHO Mental Health Atlas, 2011). According to the same study, 541.93 per 100,000 population were treated in mental health outpatient facilities, while 93.04 per 100,000 were admitted to mental hospitals. Schizophrenia continues to be the main reason for psychiatric attendances in both inpatient and outpatient settings, followed by depressive disorders (National Health Statistics Report, 2008-2010). Rates of male attenders tend to be higher than female in both inpatient and outpatient psychiatric attendances.

2.3. Overview of Botswana's national response to NCDs

2.3.1. Overall national response

The rising burden of NCDs in the country is of great concern to the Government of Botswana and is a threat to the achievement of the Sustainable Development Goals 2016-2030 and Vision 2036. The prevention and control of NCDs has been prioritised and included in high-level national strategy documents such as the 11th National Development Plan (2017-2023), Ministry of Health and Wellness strategy 2017-2023 and the National Essential Health Services package. NCD diagnosis and management has also been incorporated into the National Strategic Framework III for HIV/AIDS. Finally, a national harmonisation of community-based interventions in health is underway, which will include standardised basic NCD prevention and control services offered by community health workers.

2.3.2. Harmful use of alcohol

While the country's efforts to curb harmful use of alcohol go as far back as the 1800s, Botswana has set itself apart in recent years by heeding some of the approaches included in WHO 'best buys'. Interventions have used a combination of policy, regulation and awareness to reduce harmful use, as well as offering rehabilitative services for those dependent on alcohol. In 2008, an alcohol levy of 30% was introduced aimed at increasing the cost of and reducing demand for alcoholic beverages. The levy has been gradually increased over the years and today stands at 55%, making it among the most aggressive in the region. A dedicated fund known as the Levy on Alcoholic Beverages Fund was also created "to promote projects and activities designed to combat alcohol abuse and minimise the effects of alcohol abuse." In its first five years of operation, the fund generated USD 150 million in collections, which have been used to support various interventions such as monitoring of advertising and promotion of alcohol, providing support for rehabilitation programmes, complementing law enforcement efforts at reducing drunk-driving, and supporting a cadre of 600 community volunteers in their public education and patient support group activities across the country. In 2010, management of the fund was moved from Ministry of Trade and Industry to MoHW, indicating Government's recognition of the public health impact of the harmful use of alcohol.

The National Alcohol Policy for Botswana was adopted in 2010, addressing issues of production, retailing, distribution, marketing and consumption of alcohol in the country. It further called for "a multi-sectoral, multi-pronged approach to dealing with the harmful and negative impact of alcohol." Other national policy documents that speak to reducing harmful use of alcohol are the National Youth Policy 1996 (revised 2010) and the National Strategy on Good Social Values 2009. The Liquor Act regulates the sale of alcohol in the country which includes licensing and hours of operation. Traditional beer regulation in 2011 stipulated and in some cases reduced days and times of sale of traditional alcoholic beverages, helping to address gaps in Trade and Liquor act of 2003. The Road Traffic (Limit of Alcohol) Regulations of 2013 reduced the alcohol limit for drivers charged with a driving offence. Other efforts include a ban on the alcohol industry sponsoring sports activities, a ban on alcohol advertising in government media and a ban on alcohol sachets.

While challenges remain and more analysis is needed, there is an indication that the country's efforts may be bearing fruit. There was a reduction in consumption of alcohol from 8L/per capita to 7L/per capita (Alcohol Levy Evaluation Report, 2012).

Challenges and gaps:

1. Cross-border alcohol marketing and purchasing
2. Alcohol remains closely tied to cultural and social activities such as weddings
3. There is need for more detailed evaluation of impact of interventions, and a lack of population-based data remains a huge challenge

Future priority actions:

1. Development of legislation for alcohol marketing (currently in draft stage)
2. Better evaluation of interventions against alcohol abuse and their impact

2.3.3. Tobacco use

In 1988, the first annual World No Tobacco Day commemoration was held in Botswana. It has been commemorated every year since then, rotating between different locations in the country. Members of Parliament officiate the commemoration, and during the day the public is sensitised about the harmful effects of tobacco. In 1992, the Control of Smoking Act was passed to control tobacco use. The Act was amended in 2004 to accommodate the most urgent articles of the WHO-FCTC. The law prohibits smoking in any enclosed, indoor-designated and non-smoking area or any private or public workplace. It also prohibits the advertising, promotion and sponsorship of tobacco products.

Also in 1992, a tobacco control unit within the Ministry of Health was established, with the mandate to develop and coordinate enforcement of the tobacco legislation and policy framework. In 1993, the National Coordinating Committee (NCC) was formed. Its responsibility was to implement the Control of Smoking Act. Botswana signed and ratified the WHO-FCTC in 2003 and 2005 respectively. The FCTC was developed in response to the global nature of the tobacco epidemic; the Convention itself contains 38 articles which serve as guiding principles for implementation of the FCTC.

In 2002 and 2008, Botswana participated in the WHO Global Youth Tobacco Survey (GYTS), a surveillance study of tobacco use among youth aged 13-15 years. In 2011 the Anti-Tobacco Network Botswana (ATN) was established. The ATN is an NGO that works hand-in-hand with MoHW, Office of the President, local authorities and NGOs to seek the full implementation and compliance of FCTC and enforcement of the Control of Smoking Act. In 2014, a 30% levy on tobacco products was introduced to curb demand. In 2017, Botswana participated in the WHO Global Adult Tobacco Survey (GATS). Currently, a revision of the Control of Smoking Act is underway; this will align the Act with FCTC principles and domesticate FCTC articles into local legislation. There are currently a number of active NGOs providing education, communication and awareness of the health risks of tobacco. These include, among others: Stop Smoking Support Group, Cancer Association of Botswana, Heart Association of Botswana, BOSASNet and SKY Girls BW.

Challenges and gaps:

1. Tobacco advertising, promotion and sponsorship
   i. Cross-border tobacco advertising
   ii. No ban on indirect advertising associated with tobacco products, such as discounts and retailer incentive programs
2. The current law does not set forth requirements for health warnings on tobacco packaging and labelling, nor does the law prohibit misleading packaging and labelling
3. Designated smoking rooms are permitted in most indoor public places and workplaces e.g. restaurants in cities
4. The 30% tax in Botswana is below the World Health Organization recommendation of at least 70% of retail price
5. Illegal trade of tobacco products. In 2013/14 a Botswana Police report stated that 7960 cartons of smoked tobacco products, 3153 cartons of smokeless tobacco products and 900kg of tobacco leaves were confiscated in the market.

Future priority actions:

1. Strengthen legislation to ensure a comprehensive FCTC-compliant legislation, and facilitate full implementation of FCTC
2. Set up a tracking system to address illicit trade on tobacco and tobacco products
3. Strengthen rehabilitation services for tobacco users
4. Decentralise tobacco control services to the local authorities

2.3.4. Early childhood nutrition

A nutrition and food control division was established within the Ministry of Health in the early 1970s, to design and implement programs to improve nutritional status. Botswana developed the National Plan of Action for Nutrition 2005-2010 following the International Conference on Nutrition. This Plan provided guidance for nutritional strategies and programs to improve the nutritional status of Botswana's population. In 2014-2015 MoHW intensively and comprehensively refined the national strategic documents on maternal, infant and young child nutrition.

The Botswana Nutrition Strategy 2015-2020 and the updated 2015 Infant and Young Child Policy documents integrated and better aligned nutrition programming with international global nutrition targets and NCD strategies. The Botswana Nutrition Strategy 2015-2020 makes reference to the Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2011–2016. The primary objective of the strategy is to reduce stunting amongst children under-five by 40%, from 31% in 2007 to 19% in 2020. The secondary objective of the strategy is to reduce the proportion of overweight and obese women of reproductive age. The Infant and Child Policy 2015 supports focused attention on the first 1000 days of life (conception to 24 months of age), so that the essential building blocks for brain development, healthy growth, a strong immune system and protection against non-communicable disease later in life are assured.

Challenges and gaps:

1. Insufficient data on prevalence of childhood NCDs.
2. Few resources, programs or implemented activities to address childhood nutrition (e.g. meals at school)

Future priority actions:

2.3. Overview of Botswana's national response to NCDs [Continued]

1. Promote exclusive breastfeeding up to 6 months as the best source of nutrition for most infants (even in the context of an HIV+ mother who is on antiretroviral treatment)
2. Create environments for easy access and consumption of fruits and vegetables
3. Restrict marketing of unhealthy food products to children
4. Expand on education on traditional food options to represent a healthy plate'

2.3.5. Health promotion: cross-cutting responses to NCD risk factors

A health education unit was established in 1974 under the Department of Primary Healthcare. The unit currently falls under the Health Promotion and Education Division, with the mandate to provide health promotion and education services to individuals, organisations and communities in general. The National Health Promotion Policy was published in 2015 as a guiding document for all health promotion strategies and actions in Botswana. The policy was developed to support the attainment of set strategies geared towards enabling people to increase control over their health and its determinants, and thereby improve their health.

The first School Health Policy was developed in 1999 by the Ministry of Health, Ministry of Education and Skills Development, and Ministry of Local Government and Rural Development. The overall goal was to "promote and provide quality and cost-effective health and nutrition interventions to all learners, teachers and other school staff in Botswana, so as to improve physical, social and mental wellbeing, as well as learning outcomes." The policy covers issues of NCD prevention by prohibiting tobacco, alcohol and harmful substances in schools. Prevention of accidents (including road traffic accidents outside schools) is also integrated within the policy. The strategies to implement the School Health Program are detailed in the National School Health Implementation Strategy 2015-2020.

The major components of the current program are:
- Surveillance of school community members' health status
- Immunization for prevention of communicable diseases
- Environmental and occupational health and safety
- Life skills education
- Nutrition, including school feeding and safe handling of food

The Curriculum Development Department within the Ministry of Basic Education has developed a Creative Arts and Performing Arts (CAPA) and Physical Education (PE) curriculum. These are designed to encourage adequate physical activity amongst students. The department is currently reviewing programs and working towards monitoring programs in schools to ensure full implementation.

A needs assessment conducted in 2005 found that 89% of adult workers indicated they had work-related stress, and 89% agreed a health workers program would work in their place of work. There was clear evidence of emerging health patterns including stress, hypertension, diabetes and obesity. A wellness coordinator has since been designated in every ministry to promote the health and wellbeing of employees. The Workplace Wellness Program minimum package includes the following functions relevant to NCD:

- Health promotion and education to encourage workers to adopt healthy behaviours and lifestyles.
- Health screening, treatment, care and support such as BMI and blood pressure measurement
- Psychosocial support for compassion, nurturing emotions and spiritual care. This includes support groups for smoking cessation
- Therapeutic recreation such as sports competitions

2.3.6. Diabetes and cardiovascular diseases

Between 2010-2014, APSA International Botswana collaborated with MoHW to provide diabetes care and management to the diabetic population, under a project sponsored by World Diabetes Foundation. The diabetes care was comprehensive and included integration of management of hypertension and other cardiovascular risk among the diabetes patients. The achievements of the project include the creation of 8 diabetes and foot care clinics of excellence, and capacitating healthcare professionals through training in diabetes management, and diabetes foot care and management. In addition, a significant number of patients were educated and empowered towards healthy lifestyle behaviours. Activities undertaken were the creation of diabetes training material, capacity-building a core group of health care professionals and development of an improved version of the diabetes management follow-up tool.

The 2005 RAAB estimated that 74.6% of blindness cases in adults aged 50 and above were avoidable. Following this finding, a 5-year strategic plan for 2007-2011 was developed. The 2014 RAAB however found an increase in magnitude of blindness, hence a new 5-year plan for eye care (2015-2019) was developed, with the goal to reduce blindness and visual impairment by at least 25% from the 2014 levels. The activities of this new plan include expansion of comprehensive eye care services in order to reduce blindness due to diabetic retinopathy. The National Eye Health Program (NEHP) has adopted the World Health Organization (WHO) Vision 2020, which is the global initiative for the elimination of avoidable blindness, a joint programme of the WHO and the International Agency for the Prevention of Blindness (IAPB).

2.3.7. Chronic respiratory diseases

The Pneumoconiosis Screening Program for RSA Ex-Miners was established in 1999 under the occupational health unit. The program's objective is to screen all Batswana who were formerly employed in the South African mining industry for occupational lung diseases. Over 160 focal persons have been trained throughout the country to sensitise and mobilise registration of ex-miners. So far from program inception to December 2014, over 5000 ex-miners have been screened and 2015 of them were found to have 1st degree pneumoconiosis while 193 were found to have 2nd degree pneumoconiosis. A clinic has been established for screening and assessment of the ex-miners and facilitation of compensation processes.

<u>Challenges and gaps:</u>
- Some clients do not have documentation as proof of having worked in the South African mines
- Insufficient data on burden of chronic lung diseases
- Limited treatment options once disease has set in

<u>Future priority actions:</u>
- Improve surveillance of disease
- Improve assessment of clients for severity of disease and facilitate linkage to care and support

2.3.8. Cancers

The Botswana National Cancer Registry (BNCR) was established in 1998. So far the registry has published 2 incidence reports, in 2006 and 2008. In 2005 it was registered as an associate member of the International Association of Cancer Registries (IACR) allowing it to benefit from up-to-date personnel training and networking.

Currently there are four hospitals that have been capacitated to provide cancer treatment. Two of the hospitals have developed Multi-Disciplinary Team (MDT) clinics offering varied services such as haematology, breast cancer, gynaecology-oncology, and palliative care services. They serve to coordinate care, provide multidisciplinary care, and provide linkages with HIV care and follow-up care. The Botswana National Essential Medicines List (EML) for cancer is 85.4% aligned with the WHO EML, a value higher than the median value in Africa and in high-income countries. The initiatives underway include developing national cancer diagnosis and treatment guidelines, and expansion of MDT clinics; follow-up clinics and new patient clinics. National primary guidelines have recently been finalised, which include cancer prevention interventions such as clinical breast examination as a screen for breast cancer.

The National Cervical Cancer Program is housed under Adolescent Sexual Reproductive Health at MoHW. The aim of the program is to reduce morbidity and mortality due to cervical cancer. The first strategy was initiated in 2004 and focused on cytology screening. The 2012-2016 strategy includes primary and secondary prevention of cancer of the cervix, through the following activities:

Primary prevention
- HPV vaccination: School-going primary pupils are offered HPV vaccination. Currently this is managed by the Expanded Program on Immunisation (EPI)

Secondary prevention
- See and treat services: the services have been expanded from Gaborone to other sites. Currently there are 45 VIA/ cryotherapy clinics and 25 colposcopy/LEEP clinics
- Secondary prevention algorithms have been created and availed to clinic staff members
- Laboratory histology and cytology equipment are available

<u>Challenges and gaps:</u>
1. Inadequate community mobilization
2. Trained personnel are transferred to different areas, and others leave for further studies (loss of skilled labour)
3. Limited skilled personnel for maintenance of equipment, leading to maintenance delays

2.3. Overview of Botswana's national response to NCDs [Continued]

Future priority actions:
1. Expansion of 'see and treat' services to cover entire country
2. Introduction of HPV DNA testing
3. Improve turn-around time of Pap smear and communication of results to patients
4. Strengthen linkage to care for those patients who are found to have disease during routine cervical cancer screening
5. Improve district-based capacity for equipment repair and maintenance

2.3.9. Mental health

The mental health system in Botswana is implemented through the 1971 Mental Disorders Act CAP: 63; 02 and the 2003 National Policy on Mental Health. Although general health services decentralised in 1978 and are now spread throughout the country, mental health services have remained in large part institutionalised rather than community-based. The Ministry of Health renders health services through 16 primary hospitals, 7 district hospitals and associated clinics, health posts and mobile stops spread across 27 District Health Management Team (DHMTs). Three referral hospitals operate independently from the DHMTs. Currently there are 140 psychiatric nurses, 6 psychiatrists and 9 clinical psychologists providing mental health services. Other team members include social workers, occupational therapists and primary healthcare providers, who support mental health services delivery from health facilities.

Challenges and gaps:
1. Limited community-based interventions
2. Inadequate coordination across districts, including sharing of mental health information/data and research

Future priority actions:
1. Decentralise mental health services to the community level to facilitate integration of clients into community life
2. Revision of the Mental Health Act

2.3.10. Palliative care

A Palliative Care (PC) situational analysis was conducted in 2003 through support from WHO. The analysis indicated high demand for PC basing on the high prevalence of HIV/AIDS and associated OIs, as well as the high prevalence of cancer. It further indicated that 78% of patients on Community Home-Based Care (CHBC) suffered from pain and distressing symptoms. A National PC Strategy 2013–2018 has been developed and deals with PC policies, capacity building, pain management and psychological support.

2.3.11. Resourcing for national response to NCDs

Funding

While resources for NCDs have been gradually increasing, there remains a significant gap in ensuring an effective national response to NCDs. Given that NCDs do not have a global funding mechanism similar to HIV, there is an urgent need to engage more partners across more sectors to contribute to resourcing the response to NCDs. According to Botswana's National Health Accounts Report of 2013-14, 14% of Botswana's total health spending was consumed by NCDs goods and services, while 37% of premature deaths are due to NCDs (according to WHO 2014 estimates).

The Government of Botswana is the primary source of funding for NCD goods and services, contributing 79% of total NCD spending, while the private sector and households contribute 10% each. HIV/AIDS spending constituted 16% of the total health spending, with Government contributing 57% of funds, private sector and households contributing 5% each, and external donors and partners contributing 38%. When looking at types of services accounting for NCD spending, 69% is spent in provision of inpatient (curative) services, 18% on outpatient services and 11% on governance and coordination.

Health information systems

There is relatively little data on NCDs in Botswana's health information system. Furthermore, the data that is collected is not routinely utilized. Challenges contributing to these gaps include: infrastructure limitations (power, internet and cellphone coverage, insufficient personnel and inadequate training/skills on data entry at point of care, limited infrastructure, lack of skills for data management and utilization, lack of mechanisms to interact with data sources across sectors including the private sector and research sector, lack of higher-resolution NCD data across the board, on both morbidity and health system response (e.g. treatment received, toxicity of medicines, control of disease achieved, retention in care).

Botswana carried out a population risk factors survey (STEPS) in 2007 and 2014, however NCD-specific data fields have not yet been incorporated in the traditional large population-based surveys such as DHS and BIAS. There are a small but increasing number of NCD research studies, the findings of which are not routinely reported or integrated to national monitoring systems.

Despite these gaps, Botswana has some notable strengths that can be leveraged to support strengthening of NCD monitoring and surveillance. There is a relatively complete births and deaths registry that can inform accurate measurement of mortality and survival. Botswana also has established electronic health information systems like the IPMS (rolled out to 27 of 28 hospitals), and PIMS 2 (rolled out to 314 clinics). There is also an ambitious plan to expand e-Health. The country also has a quality WHO/IARC-accredited cancer registry that routinely captures cancer incidence.

2.4. Summary of strengths and weaknesses of national response

Strengths:
- National policies and acts have laid the foundation for addressing NCDs (see Figure 5 below)
- Increasing discourse on NCDs, including by high level politicians
- Infrastructure developed for decentralized health services with majority of Batswana living within 5km of a health facility
- Successful and pioneering experience with HIV, a chronic condition that requires a multi-sectoral national response. Botswana has the opportunity to leverage this experience for NCDs including through civil society and district networks, national institutional arrangements, infrastructure at facilities and program design

Weaknesses:
- Insufficient multi-sectoral engagement and coordination
- Heavy focus on curative centralised services
- Weak monitoring and evaluation systems
- Insufficient funding, both locally and internationally. Sub-optimal use of existing opportunities for funding (e.g. IAEA) and resource re-allocation (e.g. integrating roles of existing staff such as community health workers, M&E officers)
- Absence of structures and mechanisms to facilitate multi-sectoral and coordinated national response
- Non-rationalised (without existing guidelines) use of resources for expensive treatments such as for selected cancer drugs
- Insufficient use of research and innovation to more efficiently improve services and accelerate response

Figure 5: List of Botswana Policies and Acts relevant to NCDs

1.	Liquor Act Chapter 43:11, 2003
2.	Control of Smoking Act Chapter 65:04, 1992, amended in 2004
3.	Mental Disorders Act, Chapter 63:02, 1971
4.	Traditional Beer Regulations, 2011
5.	Road Traffic (limit of alcohol) Regulations, 2013
6.	National Alcohol Policy, 2010
7.	National Youth Policy, 1996 (revised in 2010)
8.	National Strategy on Good Values, 2009
9.	Botswana Nutrition Strategy 2015-2020
10.	Infant and Young Child Policy, 2015
11.	National Health promotion policy, 2015
12.	School Health Policy, 1999
13.	National School Health Program Implementation Strategy 2015- 2020
14.	National Policy on Mental Health, 2003
15.	National Plan for Eye Care 2015-2019
16.	National Palliative Care Strategy 2013-2018
17.	National Hospice and Palliative Care Policy

3. Botswana Multi-sectoral Strategic Plan for Prevention and Control of NCDs, 2018-2023

3.1. Vision

A healthy lifestyle for all, free of preventable diseases or premature death

3.2. Mission

To reduce the burden of NCDs and their modifiable risk factors through evidence-based, cost-effective approaches and partnerships

3.3. Guiding principles

The following principles, which include tenets of Alma Ata primary care and Botswana National Health Policy's anchoring principles, will guide the implementation of the Botswana National Multi-sectoral Strategy for the Prevention and Control of NCDs:

Table 5: Guiding principles in the development of the NCD Strategy

Guiding principle	Description
People-centeredness	Services will be delivered professionally, with compassion, Botho, consideration of promptness and convenience, and sensitivity to cultural beliefs.
Equity and human rights	Respect for human dignity and rights will be considered at all times. Resources will be distributed equitably to guarantee access to services, including for the vulnerable, marginalised and underserved, irrespective of gender, political, ethnic or religious affiliations, or place of residence.
Community participation and ownership	Policies and interventions will be developed and implemented with broad involvement of all stakeholders, emphasising community empowerment and social accountability
Health system strengthening and integration	Services will be delivered in an integrated manner that leverages existing services and strengthens the primary care platform, building the overall capacity of the health system
Evidence-basis and innovation	Interventions will be outcome-oriented and where available, based on existing evidence and identified 'best buys.' Continuous exploration of new ideas will be pursued in order to facilitate delivery of effective sustainable interventions and home-grown solutions.
Multi-sectoral collaboration and partnership	Scale and impact of interventions will be enhanced through strengthened diverse partnerships with private sector, NGOs, bilateral and multilateral organisations, and civil society. Capacity building and better partner coordination will be emphasised.

3.4. Strategic priorities, objectives and outcomes of national response

Four priority areas have been identified as anchors for strategic objectives and activities for addressing NCDs in Botswana. These priority areas and their related strategic objectives are aligned with the WHO Global Action Plan for the Prevention and Control of NCDs (2013–2020) and include the three broad public health strategic domains for reducing disease burden, namely: a) prevention and health promotion, b) diagnosis and treatment, and c) monitoring, surveillance and research. The fourth priority area, governance and coordination, was identified as a particular area requiring strengthening, and critical to accelerating national NCD prevention and control efforts.

The four priority areas, their corresponding strategic goals, and a total of 10 strategic objectives are described below. Specific (national response) indicators related to strategic objectives are also detailed below.

3.4.1 Priority Area 1: Primordial Prevention and Health Promotion

Goal 1. Reduce risk factors through awareness, promotion of healthy lifestyles and creation of enabling environments

- **Objective 1.1. To raise public awareness and community mobilisation**
  - 80% of the general population with NCD prevention awareness by 2023
  - 80% of community structures supporting quality and cost-effective NCD prevention interventions by 2023

- **Objective 1.2. To create a legislative and policy environment conducive to healthy living**
  - Increase in the number of policy and legislative changes that promote healthy living
  - 30% reduction in tobacco use by 2025
  - 10% reduction in harmful use of alcohol by 2025
  - 0% increase in obesity by 2025
  - 30% increase in population consuming diet high in fruit and vegetables by 2025
  - 10% reduction in prevalence of physical inactivity (population with insufficient physical activity) by 2025

- Strategic actions:
  - Awareness
    - ☐ Develop a comprehensive NCD communication action plan for all stakeholders
    - ☐ Disseminate NCD information regularly in various media (radio, TV, print, social media)
    - ☐ Train and deploy community health agents (e.g. health education assistants) to conduct community outreach awareness and screening activities
    - ☐ Support village health committees and other community-based structures in effective approaches to reducing NCD risk factors
  - Tobacco use
    - ☐ Increase tobacco levy
    - ☐ Set up a tracking system to address illicit trade on tobacco and tobacco products
    - ☐ Fully implement FCTC (WHO Framework Convention on Tobacco Control) including: creation by law of completely smoke-free environments in all indoor workplaces, public places and public transport tobacco health warnings/labelling and plain packaging
    - ☐ Place comprehensive bans on advertising, promotion and sponsorship
    - ☐ Regulate (and enforce regulations) on the selling of cigarettes to adolescents
    - ☐ Decentralise tobacco control services (and enforcement of regulation) to local authorities
    - ☐ Strengthen smoking cessation and tobacco rehabilitation services
  - Harmful alcohol use
    - ☐ Finalise draft and pass regulation on marketing of alcohol to adolescents and minors
    - ☐ Place bans on advertising and promotion
    - ☐ Regulate commercial and public availability of alcohol, including to minors
    - ☐ Strengthen enforcement of drink–driving policies and counter measures
    - ☐ Conduct more in-depth evaluations of the impact of implemented interventions to reduce harmful use of alcohol

3.4. Strategic priorities, objectives and outcomes of national response [Continued]

- o Unhealthy diet and physical inactivity
  - ☐ Provide access to healthy food as part of school health programs
  - ☐ Strengthen physical activity programs at schools and workplaces
  - ☐ Manage food taxes and subsidies to promote healthy foods and discourage unhealthy foods (high fat, high sugar, high salt)
  - ☐ Create civil planning regulations and policies that promote physical activity (e.g. walkable cities, availability of outdoor recreational spaces, active transport)
  - ☐ Promote breastfeeding
  - ☐ Create financial incentives for healthy living (e.g. subsidies on sports equipment and bicycles)

- o Environmental exposures
  - ☐ Institute policies for appropriate management and disposal of waste
  - ☐ Develop and enforce regulations for use of personal protective equipment in relevant occupations (e.g. nuclear radiation and chemotherapy administration and the mining industry)

The risk factors accounting for 82% of NCD-related deaths (smoking, harmful use of alcohol, insufficient physical activity and unhealthy diet) are largely preventable or modifiable. Multi-pronged and multi-sectoral interventions are needed to reduce these risk factors and their impact, and can be deployed at the population level (primordial prevention), community level (primordial and primary prevention), or facility level through early diagnosis and quality treatment (secondary prevention). Interventions considered are summarised below, and many are included in global guiding strategies such as: WHO Framework Convention for Tobacco Control, WHO Global Strategy to Reduce Harmful Use of Alcohol, and the WHO Global Strategy on Diet, Physical Activity and Health.

Access and addressing socioeconomic determinants of health
Socioeconomic determinants of health, such as poverty and level of education, are also crucial factors in determining the impact of NCDs and their risk factors on individuals, and accordingly need to be considered within these strategies. Access to the above services will be facilitated by public education on risk factors and illness (and that services are available), expansion of health system capacity and reach (including through community outreach), as well as continued deployment of financial risk protection strategies.

Legislature, regulations and fiscal policies
Legislative and regulatory measures can be taken to reduce the major NCD risk factors. These include, but are not limited to, placing bans on the advertising, promotion and sponsorship of undesired products (tobacco and alcohol), restricting use in public spaces (tobacco), taxation (alcohol, tobacco and unhealthy commercial foods), regulating civil planning and engineering to create walkable cities and active transport systems and instituting school and work-based programs to promote physical activity and healthy eating.

Particular attention is given to children and adolescents who are most at risk of influence, uninformed choice and/or involuntary exposure. Furthermore, children and adolescents stand to face the most cumulative harm if they develop habits related to these risk factors (e.g. smoking, eating unhealthy food) as they are likely to continue these habits for many years to come.

Community awareness and mobilisation, including school and workplace-based interventions
The key results for community mobilisation are strengthened community competence, involvement and participation to address health issues. Communities can be sensitised on NCD risk factors, their potential harm to health and how individuals can protect themselves. Women will also be educated on breast cancer awareness. These education initiatives can be delivered through various structures and forums such as community gatherings (e.g. pitso, funerals), schools, churches, microfinance networks (metshelo), traditional doctors' practices, village health committees and other civil society structures. Various media will be used to deliver these messages, including radio, TV and social media.

In addition to awareness, communities will be empowered to mobilise and effect change to promote healthy lifestyles and reduce risk factors. Support that will be made available includes livelihood skills development, advocacy and recognition of village health committees as a crucial cadre among health personnel. Examples of community-based programs that promote health and incentivise healthy entertainment are work-based wellness programs and neighbourhood football leagues.

Primary prevention
Interventions include community and facility-based primary prevention services such as antenatal services, child welfare clinics, and vaccinations (e.g. HPV, hepatitis B). Clinics and community-based institutions such as schools have a role to play in the prevention of NCDs. These include administration of vaccines (e.g. HPV) as well as enhancing awareness, advocacy and community buy-in of the preventive services available at health facilities (e.g. hepatitis B vaccination, various types of screening). It is also notable that HIV introduces excess risk to NCDs such as cardiovascular diseases and cancers, and thus treatment of HIV is also an effective strategy for prevention of some NCDs. The Government will promote establishment of patient peer support groups and patient advocacy organisations that will increase awareness on primary prevention interventions.

3.4.2 Priority Area 2: Primary Prevention, Early Detection, Quality Treatment, Care and Support

Goal 2: Treat and mitigate the impact of disease through health systems reorientation, early detection and provision of quality, people-centred services that begin at the primary care level

- **Objective 2.1. To prevent and detect disease early, integrating NCD interventions at the primary care level**
  - o 95% coverage for individuals eligible for HPV vaccine by 2023
  - o 95% coverage for individuals eligible for hepatitis B vaccine by 2023
  - o 80% cervical cancer screening coverage by 2023
  - o 60% breast and cervical cancers diagnosed early by 2023
  - o 25% increase in hypertension diagnosed in early stage by 2023
  - o 80% of non-insulin-dependent diabetes treated at primary care level by 2023
  - o 80% pathology (cytology and histology) achieving appropriate turnaround times

- Objective 2.2. To reorient and strengthen health systems to deliver timely, standardised, appropriate and patient-centred care
  - o 60% diabetics with glycaemic control by 2025
  - o 60% hypertensive patients with controlled blood pressure by 2025
  - o 80% key cancers treatment compliant with treatment guidelines by 2023
  - o 80% availability of key NCD medications by 2025
  - o 80% NCD patient satisfaction achieved by 2025

- Objective 2.3. To improve quality of life of patients through palliative care and rehabilitation
  - o 30% increase in opiate consumption for palliative care patients by 2025

- Objective 2.4. To build human capacity to address NCDs, employing task-shifting and long-term HR development planning
  - o 80% generalist clinicians at primary and secondary level trained in NCDs by 2023
  - o Achievement of 80% in set targets of training of NCD-relevant specialists by 2025

- Strategic actions:
  - o Continue to scale up cervical cancer screening
  - o Develop and implement guidelines that integrate and standardise NCD services at the primary level and enhance primary prevention and early detection
  - o Introduce systematic primary care-based screening for unhealthy living (overweight, tobacco use, harmful alcohol use), hypertension, depression, breast cancer (using clinical breast exam, for females only) for individuals aged 40 years and older
  - o Improve clinical program design to better serve patient needs (e.g. establish multi-disciplinary clinics for cancer, integrate services for HIV and NCDs at primary level)
  - o Introduce adult check-up as primary care-based early detection strategy (BMI, BP, clinical breast exam if eligible age, cervical cancer screening if eligible age, alcohol use, tobacco use, depression screening, general lifestyle counselling)
  - o Improve hepatitis B vaccination coverage
  - o Continue routine HPV vaccination for girls
  - o Treat and eliminate HIV and other infections that are associated with NCDs (e.g. H Pylori associated with gastric cancer, TB, pneumonia and schistosomiasis associated with chronic lung disease, and rheumatic fever associated with heart failure)
  - o Improve laboratory diagnostic capacity, including

3.4. Strategic priorities, objectives and outcomes of national response [Continued]

through enhanced work stream management, use of telepathology, and strengthened contractual agreements for equipment management
- o Improve diagnostic imaging capacity
- o Improve availability of cost-effective essential medicines to control disease, include through better stock monitoring and review of prescription policies
- o Detect and treat NCD-related causes of blindness (diabetic retinopathy, cataract)
- o Expand training and prescription roles for opiates
- o Support development of patient education and support resources (e.g. support groups, education)
- o Expand access to home-based palliative care rehabilitation services
- o Improve availability of cost-effective rehabilitative supplies such as prostheses, hearing and visual aids
- o Integrate NCDs into pre-service and in-service training, including the development of national innovative training on NCDs for all clinicians including primary level (similar to KITSO HIV training)
- o Include considerations of personnel needs to manage NCD burden in development of national human resources for health (HRH) plan

While broad population-based legislative, policy and lifestyle modification approaches can substantially reduce risk factors associated with NCDs, there are avenues to prevent and mitigate the impact of illness at the individual level, through services linked to health facilities. These interventions should be based on a primary care foundation, strengthening health systems while delivering integrated, people-centred services. These approaches should leverage Botswana's recent decision to revitalise community structures and resources such as the cadre of health education assistants.

Early detection
Early detection is an important approach that aims to address disease while it is more treatable/curable and care is ultimately less costly. Early detection relies on a population that is health-informed and will heed the call for screening or present for evaluation at health facilities as soon as symptoms develop. Early detection relies just as much on a functional health system with knowledgeable clinicians who can identify suggestive signs and symptoms and institute appropriate, timely evaluations to make accurate diagnosis. Examples of conditions where early detection plays a key role are routine clinical breast examination for breast cancer and BP screening for hypertension. The primary care setting and specifically the 'adult well check' will serve as a valuable avenue for early detection among individuals aged 40 and older (evaluation for obesity, depression and harmful use of alcohol)

Appropriate treatment and care
Treatment and care should encompass linkage to care at the community and primary levels, timely referral as indicated to other levels of care, and access to effective medications and technologies. These will facilitate appropriate treatment, monitoring and control of disease. All patients for whom curative intent treatment is no longer an option should have access to palliative services to relieve pain and suffering and to improve quality of life. Medicines and key technologies should be made available to support delivery of appropriate diagnosis and treatment services. In the selection of essential medicines for NCDs, considerations to be made include efficacy, safety and cost (including of generics) relative to the survival benefit conferred by use. The supply chain of medicines and consumables needs to be strengthened, including through stock monitoring systems and institution of efficient procedures in the case of emergency stock-out situations. Treatment adherence by patients should be facilitated by counselling and support groups, in addition to providing reliable convenient services.

Training of clinical personnel
There is a need to standardise comprehensive management of NCDs at all levels of care by capacitating health care workers.

Palliative care and substance use rehabilitation
Targeted training and sensitisation on the use of morphine will be expanded, and operational challenges in access addressed (such as availability of lockable cabinets and updating legal framework to allow for prescription by trained nurses). Care and support services for cessation of risky behaviour will be expanded, (e.g. counselling, support groups and detoxification). MoHW will work closely with other stakeholders including NGOs, CBOs, and community leadership to avail palliative care and rehabilitative services, particularly expanding community-based service delivery to complement services available at health facilities. As much as possible, services will be integrated within existing programs, and serve to strengthen the primary care service delivery platform.

Quality of care
Program-level monitoring, including audits, should be routinely performed not only to assess service uptake, but also evaluate quality of care with respect to disease outcomes and from the perspective of the patient (e.g. wait times, patient satisfaction). A culture of continued medical education will be fostered, particularly at larger district facilities leveraging deployment of students and post-graduate trainees. Training will be coupled with more structured longitudinal mentorship and supervision driven at the (DHMT) level. Periodic assessments of facilities' capacity to deliver quality care will be conducted.

3.4.3 Priority Area 3: Monitoring, Surveillance, and Policy Impacting Research

Goal 3: Perform monitoring, surveillance and research in order to understand burden of disease, identify innovative solutions and evaluate impact of interventions

- **Objective 3.1. To strengthen national response, information availability, management and utilisation for evidence-based planning**
  - o 80% complete and timely reporting of key data fields by 2023
  - o 25% increase in volume of NCD data fields collected relevant to burden of disease and risk factors, and impact of national response (this includes NCD data fields included in DHS, BIAS and new registries)
  - o Policy changes resulting from research findings

- **Objective 3.2. To build capacity for innovative and policy-impacting research**
  - o 25% increase in number of NCD publications in national and international journals by 2023
  - o 25% increase in NCD-related publications with Batswana as lead authors by 2023

- Strategic actions:
  - o Develop and implement a comprehensive M&E plan for NCDs, as operationalisation of comprehensive M&E framework
  - o Review legislation to facilitate reporting for NCDs
  - o Integrate key NCD data fields into existing health information systems infrastructure (e.g. DHIS, IDSR, IPMS) and large population based surveys (e.g. BAIS, DHS)
  - o Develop guidelines for appropriate procedures for data use and sharing of surveillance and monitoring data
  - o Enhance informatics capacity to facilitate linkage of data across key databases (e.g. BHIRMS, deaths registration, cancer registry) in order to leverage existing data systems to facilitate evaluation of national NCD response
  - o Plan for and conduct NCD risk factors (STEPS) every 5 years, ensuring comparability across time
  - o Build human capacity for information management, and build data systems infrastructure to support maintenance and utilisation of high quality NCD information
  - o Build human capacity for research, in particular innovative implementation research
  - o Strengthen institutional capacity for research, including ethics review and grants management procedures
  - o Improve coordination of stakeholders involved in NCD research, including through development of a national research agenda
  - o Develop mechanism to track NCD-related research conducted in Botswana, as an avenue for identifying policy-relevant findings
  - o Hold regional NCD symposium every 2 years to facilitate sharing of Botswana's experience in the region and internationally, facilitate best practices and join regional research agenda-setting

3.4.4 Priority Area 4: Governance, Partnerships and Multi-sectoral Coordination

Goal 4: Accelerate country response to NCDs, through strengthened national prioritisation, coordination, multi-sectoral action and partnerships

- **Objective 4.1. To strengthen prioritisation and investment in national response**
  - o 25% increase of total funds spent on NCDs across sectors by 2023

- **Objective 4.2. To strengthen multi-sectoral coordination and participation, to align stakeholder support to the national response at all levels**

3.4. Strategic priorities, objectives and outcomes of national response [Continued]

- Increase in number of multi-sectoral coordinating committee meetings held per year
- 100% of ministries, districts and parastatals implementing this Strategy minimum package by 2023
- 80% of key ministries, districts and parastatals with annual work plans that include NCD-related activities by 2023

- Strategic actions:
  - Disseminate NCD information regularly in national political forums (e.g. speeches, Parliament)
  - Conduct comprehensive innovative quantification of national cost of NCDs, and build a sustainable development case for investing in NCDs
  - Leverage alcohol and tobacco levy funds (and future sin taxation) to finance broader health promotion activities
  - Strengthen partnerships to emphasise social investment, and identify ideal criteria to be included in MOUs
  - Strengthen national NCD program personnel and infrastructure, and operationalise national coordinating committee and high-level steering council, in order to achieve strong coordination of national multi-sectoral NCD response
  - Integrate NCDs in all policies across sectors, leveraging Health in All Policies initiative
  - Implement minimum NCD package in all ministries, parastatals and partner institutions
  - Include key NCD indicators in National Development Plan and other high-level plans and policies
  - Produce annual NCD reports and actively disseminate to all stakeholders

3.5. Implementation Framework

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 1: primordial prevention and health promotion				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
1. To raise public awareness and community mobilisation				
Develop a comprehensive NCD communication action plan for all stakeholders	Comprehensive NCD communication awareness and mobilisation action plan developed	Establishment of drafting committee, number of meetings held	MoHW: Health Promotion and PR teams	Civil society (BOCONGO, patient associations), private sector (BITC), media (MISA), Ministry of Local Government and Rural Development, VDCs, DHMTs, health professional associations
Disseminate information on NCD prevention regularly in various media (radio, TV, print, social media)	Produced TV and radio shows, social media campaigns, speeches and adverts	Number of NCD awareness messages in media (adverts, mentions in speeches, radio and TV shows)	MoHW	All stakeholders
Train and deploy community health agents (e.g. health education assistants) to conduct community outreach awareness and screening activities	National guidelines for community health workers	Number of CHWs trained, number of individuals receiving education or training interventions from CHWs	MoHW	All stakeholders

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 1: primordial prevention and health promotion				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
1. To raise public awareness and community mobilisation [continued]				
Support village health committees and other community-based structures in effective approaches to reducing NCD risk factors	NCD reference package for community-based structures	Number of support visits, seed funding and trainings provided to community health structures	MoHW	All stakeholders
All schools to integrate NCD education in health promotion curriculum	NCD curriculum for primary and secondary schools	Curriculum developed, number of facilities delivering curriculum, number of students screened	MoBE (curriculum development department)	All stakeholders
MoHW	National guidelines for community health workers	Number of CHWs trained, number of individuals receiving education or training interventions from CHWs	MoHW	All stakeholders
2. To create a legislative and policy environment conducive to healthy living				
Fully implement FCTC (WHO Framework Convention on Tobacco Control), including creation by law of completely smoke-free environments in all indoor workplaces, public places and public transport, tobacco health warnings/labelling and plain packaging	Revised Tobacco Act	Submitted and adopted bill	Attorney General's chambers (with MoHW)	All stakeholders
Develop and implement national regulations to promote healthy diet, limit saturated fatty acids and virtually eliminate partially hydrogenated vegetable oils in the food supply, reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt	All stakeholders	Number of CHWs trained, number of individuals receiving education or training interventions from CHWs	MoHW	All stakeholders

3.5. Implementation Framework [Continued]

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 1: primordial prevention and health promotion				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
2. To create a legislative and policy environment conducive to healthy living [continued]				
Develop regulations to restrict alcohol use further, including regulating the marketing of alcohol to adolescents and minors	Regulations on marketing of alcohol to adolescents and minors passed	Number of adopted policies and regulations	MoHW	All stakeholders
Strengthen enforcement of drink–driving policies and counter-measures	Policies strengthened and enforced	Number of policies introduced or revised	Police	Ministry of Investment, Trade and Industry, BITC, MoHW, Ministry of Local Government and Rural Development, Police, Media (MISA), civil society (BOCONGO), development partners
Conduct more in-depth evaluations of the impact of implemented interventions to reduce harmful use of alcohol	Reports	Number of evaluative reports	MoHW	DHMT, civil society, development partners, Ministry of Tertiary Education, Research, Science and Technology
Promote access to healthy food, including at schools (taxation on imports of unhealthy foods, regulations on food provided at schools or packed from home in both private and public schools)	Guidelines on healthy foods developed	Number of schools with healthy options on menu, number of private schools with issued directive on packing healthy food	Ministry of Investment, Trade and Industry MoHW	Ministries of Education, Ministry of Local Government and Rural Development
Develop regulations to restrict alcohol use further, including regulating the marketing of alcohol to adolescents and minors	Regulations on marketing of alcohol to adolescents and minors passed	Number of adopted policies and regulations	MoHW	All stakeholders
Strengthen enforcement of drink–driving policies and counter-measures	Policies strengthened and enforced	Number of policies introduced or revised	Police	Ministry of Investment, Trade and Industry, BITC, MoHW, Ministry of Local Government and Rural Development, Police, Media (MISA), civil society (BOCONGO), development partners

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 1: primordial prevention and health promotion				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
2. To create a legislative and policy environment conducive to healthy living [continued]				
Promote access to healthy food, including at schools (taxation on imports of unhealthy foods, regulations on food provided at schools or packed from home in both private and public schools)	Guidelines on healthy foods developed	Number of schools with healthy options on menu, number of private schools with issued directive on packing healthy food	Ministry of Investment, Trade and Industry MoHW	Ministries of Education, Ministry of Local Government and Rural Development
Promote physical activity at the workplace, at schools and in communities	Guidelines and protocols developed	Number of schools with active PE programs Number of employment institutions with gym or benefit of access to gym	Ministry of Youth Empower-ment, Sports and Culture Development	Ministry of Investment, Trade and Industry, Ministries of Education, DHMT, Ministry of Local Government and Rural Development, major employers in private and parastatals (mining, banks, supermarket franchises
Institute fiscal incentives and subsidies to promote healthy foods and discourage unhealthy foods (high fat, high sugar, high salt)	Policies of food taxes	Number of policies and regulations	Ministry of Investment, Trade and Industry (with MoHW nutrition department)	Ministries of Investment, Trade and Industry, Finance and Economic Development, Agricultural Development and Food Security
Create civil planning regulations and policies that promote physical activity (e.g. walkable cities, availability of outdoor recreational spaces, active transport)	Civil planning regulations and policies created	Number of policies and regulations	Attorney General's chambers	Ministries of Infrastructure and Housing Development, Local Government and Rural Development
Institute policies for appropriate management and disposal of waste	Policies for appropriate management and disposal of wasted instituted	Number of policies and regulations	Ministry of Land Management, Water and Sanitation Services (with MoHW enviro-nmental health department)	Ministry of Land Management, Water and Sanitation, civil society

3.5. Implementation Framework [Continued]

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 1: primordial prevention and health promotion				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
2. To create a legislative and policy environment conducive to healthy living [continued]				
Develop and enforce regulations for use of personal protective equipment in relevant occupations (e.g. nuclear radiation and chemotherapy administration and the mining industry)	Regulations developed and reinforced	Number of policies and regulations	Ministry of Employment, Labour Productivity and Skills Development (with MoHW occupational health department)	Ministry of Mineral Resources, Green Technology and Energy Security
Priority area 2: primary prevention, early detection, quality treatment, care and support				
1. To prevent and detect disease early, integrating NCD interventions at the primary care level				
Vaccinate children under 5 against hepatitis B	Vaccinations	% coverage	MoHW	Ministry of Local Government and Rural Development, Private and parastatal sectors, media, civil society
Vaccinate girls aged 9-13 (both in and out of school) against HPV	Vaccinations	% coverage	MoHW	Ministries of Local Government and Rural Development, Basic Education, Youth Empowerment, Sports and Culture Development
Expand coverage of HIV treatment (90-90-90)	HIV treatment and viral suppression	% who are HIV+ on treatment, % on treatment viral load suppressed	MoHW	All ministries, private and parastatal sectors, media, civil society, development partners
Expand cervical cancer screening for women to detect pre-cancerous lesions (70% pap, 30% VIA)	Cervical cancer screening, early detection and treatment protocol	% coverage, % who screen positive linked to care	MoHW	Media, Ministry of Local Government and Rural Development, private sector (employers), civil society, academic partners, development partners, Ministry of Nationality, Immigration and Gender Affairs

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 2: primary prevention, early detection, quality treatment, care and support				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
1. To prevent and detect disease early, integrating NCD interventions at the primary care level				
Implement breast cancer early detection for women > 40 at primary care level	Guidelines and protocols developed and implemented	Protocol for early detection of breast cancer, number of facilities providing services, number of women screened	MoHW	Media, Ministry of Local Government and Rural Development, private sector (employers), civil society, academic partners, development partners, Ministry of Nationality, Immigration and Gender Affairs
Implement hypertension screening and cardiovascular risk assessment for males and females > 40 at primary care level	Guidelines and protocols developed and implemented	Number of facilities providing primary care screening services, number screened	MoHW	Media, Ministry of Local Government and Rural Development, private sector (employers), civil society, academic partners, development partners
Implement screening for overweight and unhealthy living (diet, exercise, smoking, alcohol) at primary care level	Guidelines and protocols developed and implemented	Number screened	MoHW	All relevant stakeholders
Conduct screening for overweight, tobacco, alcohol at schools	Guidelines and protocols developed and implemented	Number screened	Ministry of Basic Education MoHW	Private and parastatal sectors, media, civil society, development partners,
Conduct screening for overweight, tobacco, alcohol in the workplace	Guidelines and protocols developed and implemented	Number screened	Office of the President	Ministry of Land Management, Water and Sanitation, civil society
Conduct screening for obesity, tobacco, alcohol in communities (e.g. churches, places of trade)	Guidelines and protocols developed and implemented	Number of community-based campaigns/ activities, Number screened	Ministry of Local Government and Rural Development	Ministry of Land Management, Water and Sanitation, civil society
Strengthened referral processes for NCDs (referral algorithm with criteria for expediting, training, clinician with coordinator role)	Guidelines and protocols developed and implemented	Average referral scheduling wait times for suspected cancer	MoHW	Ministry of Finance and Economic Development, Ministry of Local Government and Rural Development

3.5. Implementation Framework [Continued]

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 2: primary prevention, early detection, quality treatment, care and support				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
2. To reorient and strengthen health systems to deliver timely, standardised, appropriate and patient-centred care				
Implement national primary care guidelines, including protocols for early detection and management with drug therapy and counselling services for major NCDs at primary care level	Availability of PHC guidelines (including diabetes, hypertension, asthma)	Number of new clinics delivering standardized hypertension care at PHC level, number of new clinics delivering standardised diabetes care at PHC level, number of patients managed for major NCDs at primary care level, % hypertension diagnosed early, % treatment success for diabetes	MoHW	Ministry of Local Government and Rural Development, private and parastatals, media, civil society, development partners, academic partners
Develop and implement evidence-based and resource-sensitive speciality treatment guidelines for major cancers	Guidelines developed	# guidelines available, % patients treated according to guidelines	MoHW	Academic partners, development partners, private and parastatals, media, civil society
Detect and treat NCD-related causes of blindness (diabetic retinopathy, cataract)	Guidelines developed	Number of cases detected and treated	MoHW	Ministry of Local Government and Rural Development, private and parastatals, media, civil society, development partners, academic partners
Improve availability of essential medicines to control disease, including through better stock monitoring and improved forecasting leveraging national treatment guidelines	Improved stock monitoring and forecasting systems	% availability of meds, number of stock out days for tracer drugs	MoHW	Ministry of Investment Trade and Industry, Ministry of Tertiary Education, Research Science and Technology, Ministry of Transport and Communication, private and parastatals
Strengthen coordination and patient-centeredness of care including through multidisciplinary clinics, customer-friendly service, care coordination support, and transport assistance for vulnerable patients	Improved patient-cantered care	Number of multidisciplinary clinics, % patient satisfaction	MoHW	Ministry of Local Government and Rural Development, private and parastatals, civil society

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 2: primary prevention, early detection, quality treatment, care and support				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
2. To reorient and strengthen health systems to deliver timely, standardised, appropriate and patient-centred care				
Improve diagnostic imaging and laboratory capacity to detect disease early (mHealth, telemedicine, equipment maintenance, workflow improvements etc.)	Early detection of disease	Median turnaround time of results, X-ray down time, median wait time for ultrasound	MoHW	Ministry of Tertiary Education, Science and Technology, Ministry of Investment Trade and Industry, private sector and parastatals, academic partners, development partners
3. To improve quality of life of patients through palliative care and rehabilitation				
Implement palliative care and pain management (Raga Ditlhabi) guidelines to avail pain and supportive medicines to all in need	Guidelines developed, trainings to be held	Guidelines available, Number of trainings held, per capita consumption of opiate, % availability opiates	MoHW	Ministry of Local Government and Rural Development, civil society, private sector and parastatals
Expand access to home-based palliative care services	Capacitation of CSOs and other partners	Number of CSOs and other partners delivering services, Number of patients receiving services	MoHW	Ministry of Local Government and Rural Development, civil society, private sector and parastatals
Strengthen services available for tobacco use cessation and rehabilitation (training, counselling service, cessation medicines)	Training and counselling services made available, provision of cessation medicines	Number trained and counselled, number provided with cessation medicine	MoHW	Ministry of Local Government and Rural Development civil society, private sector and parastatals
Improve availability of cost-effective rehabilitative supplies such as mobility devices, prostheses, hearing and visual aids	Improved supply chain management of rehabilitative supplies	% cost reduction for rehabilitative supplies	MoHW	Ministry of Investment Trade and Industry, academic partners, development partners, private sector and parastatals
Expand patient and family psychosocial supports, including through role of patient champions	Patient champions identified and recruited	Number of identified patient champions	MoHW	Ministry of Local Government and Rural Development, civil society, private sector and parastatals

3.5. Implementation Framework [Continued]

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 2: primary prevention, early detection, quality treatment, care and support				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
4. To build human capacity to address NCDs, employing task-shifting and long-term HR development planning				
Develop and implement national certifiable training curriculum on basic NCD care competency for all general nurses, doctors and community health workers	Training curriculum	Number of modules available, number trained, number of certifications available	MoHW	Ministry of Local Government and Rural Development, Private and parastatal sectors, media, civil society
Develop 'human resources for health plan' that take into account NCD burden of disease and primary care-based health system	Human resources for health plan	Availability of national HRH plan	MoHW	Ministry of Local Government and Rural Development, private and parastatals, media, civil society, development partners, academic partners
Integrate NCDs into pre-service curriculum at secondary and tertiary training level	Amendment of pre-service curriculum	Number of NCD-relevant training modules introduced, Number of NCD concentration tracks introduced at Masters or higher level	MoHW	Academic partners, development partners, private and parastatals, media, civil society

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 3: monitoring, surveillance, and policy-impacting research				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
1. To strengthen national response information availability, management and utilisation for evidence-based planning				
Operationalise a comprehensive M&E framework for NCDs that includes better measuring of quality of care, to facilitate monitoring of progress and impact of NCD strategic plan	Comprehensive M&E framework operations manual/guidelines for appropriate procedures for data use and sharing of surveillance and monitoring data	Number of stakeholders reporting on NCD indicators, % completeness and timeliness of core NCD indicators	Statistics Botswana	MoHW
Integrate key NCD data fields into existing health information systems infrastructure (e.g. DHIS, IDSR, IPMS) and large population-based surveys (e.g. BAIS, DHS)	Augmentation of health information systems and large population-based surveys	Number of key NCD data fields integrated into existing health information systems infrastructures	MoHW	Statistics Botswana
Enhance technology to strengthen NCD health data quality and enhance data collection efficiencies such as linkage of data elements across different program health information systems	Enhanced technologies	% completeness and quality of reporting, % of reports from electronic exports	Ministry of Infrastructure and Housing Development	Ministry of Tertiary Education, Research, Science and Technology, academic partners
Continue population-level assessment of NCD burden through surveys, e.g. STEPS, BAIS, DHS, GATS, GYTS	STEPS survey report	Number of reports relevant to NCDs, Number of NCD variables added to major population surveys such as BAIS	Statistics Botswana MoHW	Development partners, academic partners, civil society
Build human capacity for information management, and build data systems infrastructure to support maintenance and utilization of high quality NCD information	Increased human capacity, data systems infrastructure	Number trained, number hired, number SOPs on data systems maintenance and management, % compliance with SOPs	MoHW	Ministries of Education, academic partners, development partners, Office of the President – DPSM
Review policies and regulations to facilitate complete reporting for NCDs	Policy and regulation reviews	Number of policies and regulations	Attorney General's chambers MoHW	All stakeholders

3.5. Implementation Framework [Continued]

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 3: monitoring, surveillance, and policy-impacting research				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
2. To build capacity for innovative and policy-impacting research				
Build local human capacity for research, particularly through innovative implementation research	Increased human capacity	Number trained, number of publications with local lead authors, level of funding awarded by international partners for NCD research	Ministry of Tertiary Education, Research, Science and Technology	MoHW, academic partners, development partners, private partners supporting research and education
Facilitate translation of research to policy, and coordination of stakeholders carrying out research	Meetings and other stakeholder networking opportunities	Number of meetings for joint research agenda setting and sharing of findings, number of policy changes in response to research findings	MoHW	Academic partners, development partners, private partners supporting research and education, civil society, media, private sector, political leadership
Strengthen institutional capacity for research grants management	Capacity building on grants management	% of grants well managed	Ministry of Tertiary Education, Research, Science and Technology	Ministry of Tertiary Education, Research, Science and Technology, parastatals,
Strengthen ethical conduct of health research and data sharing practices, and streamline processes	Endorsement of Research Act	Number of SOPs developed and % compliance with them, reduced time for IRB review	MoHW	Attorney General's chamber, academic partners, Ministry of Tertiary Education, Research, Science and Technology

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 4: governance, partnerships and multi-sectoral coordination				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
1. To strengthen prioritisation and investment in national response				
Disseminate NCD information regularly in national political forums (e.g. public speeches and in Parliamentary debate)	Parliamentary minutes	Number of health forums to disseminate NCD information	Office of the President	Health promotions, DHMT, media, Ministry of Local Government and Rural Development, Ministry of Foreign Affairs and International Cooperation, private sector
Strengthen multi-sectoral funding of NCD prevention and control efforts including building a sustainable development case for investing in NCDs and promoting corporate social investment, and identify ideal criteria to be included in MOUs	Increased advocacy for NCD funding	Number of companies (and total funding) with social corporate investment in NCDs, number of MOUs reflecting strong partnership in NCDs	Ministry of Finance and Economic Development	Ministry of Presidential Affairs, Governance and Public Administration, civil society, private sector
Leverage alcohol and tobacco levy funds (and future sin taxation) to finance broader health promotion activities	Establishment of health promotion fund	Total amount of funds used for NCD prevention and control efforts across sectors	Attorney General's chambers	Ministry of Tertiary Education, Research, Science and Technology, academic partners
Expand access to preventive services and private sector contribution through universal insurance coverage for essential primary care package initiative	Establishment of essential primary care insurance package	Number of individuals enrolled in insurance plan	MoHW	BITC, health insurance companies

3.5. Implementation Framework [Continued]

Table 6: Botswana Multi-sectoral National Strategic Plan implementation framework

Priority area 4: governance, partnerships and multi-sectoral coordination				
Strategic objective	**Output**	**Indicators**	**Lead**	**Involved**
2. To strengthen multi-sectoral coordination and participation, to align stakeholders to support the national response at all levels				
Strengthen national NCD program personnel and infrastructure, and operationalise national coordinating committee and high-level steering council	Terms of reference for coordinating committee	Committee established, number of meetings, number of NCD program personnel hired	MoHW	Ministry of Local Government and Rural Development
Integrate NCDs in all policies across sectors, leveraging Health in All Policies initiative	Policy integration across sectors	Number of policies integrated into different sectors	MoHW	NGOs, all government ministries
Mainstream NCDs through inclusion in National Development Plan and action plans of all ministries, and major employers to implement minimum package including education and screening for employees	Improved multi-sectoral engagement	Number of NCD indicators in NDP11, number of ministries that have implemented the minimum care package, number of awareness campaigns, number of employees screened	Office of the President	All Ministries, parastatals, private sector, civil society and the media
Maintain stakeholder engagement including through annual NCD reports and active information dissemination to all stakeholders	Annual NCD reports	Number of annual reports produced and disseminated to stakeholders	MoHW	Ministry of Local Government and Rural Development, civil society
Conduct external midterm review of NCD strategy implementation	Review report	Review report, number of on-target scores on M&E framework metrics	External body (engaged through MoHW)	All stakeholders

4. Monitoring, Evaluation and Information Management for NCD National Response

4.1. The need for a comprehensive M&E framework for NCDs

The MoHW will assume the role of custodian for monitoring and evaluation of the national NCD response and assessing progress towards set targets. This will be facilitated by a comprehensive national NCD M&E framework and the strengthening of mechanisms for the generation of quality, harmonised, timely and relevant information. In effect, the M&E framework provides a yardstick by which the strategy's progress towards implementation and impact will be measured. The framework also leverages the HIV approach previously employed in Botswana, of the 'three ones': one national plan of action, one national coordinating authority (the NCD program as secretariat for the NCD strategic plan), and one national M&E system (described by the NCD framework).

The specific objectives of the comprehensive M&E framework are to:

- Specify a set of indicators and associated targets to provide meaningful information on the burden of NCDs and their risk factors, and impact of the national response to NCDs as described in the strategy
- Define these indicators and data collection methodologies in order to standardise measurement
- Specify mechanisms and procedures for indicator information flow, with an emphasis on streamlining and integration within existing health information system infrastructure where possible

Through achievement of these objectives, it is anticipated that there will be increased quality data available, and that this information will be utilised to better inform policy development and program decision-making in matters relating to quality improvement, financing, and workforce and resource management. The information derived from the M&E framework will also facilitate reporting on Botswana's performance against national and global targets, and may catalyse innovative policy-impacting research conducted in Botswana.

4.2. Indicators

This comprehensive M&E framework includes indicators describing a) risk factor burden (behavioural, physiologic and socioeconomic determinants), b) disease burden (mortality, morbidity and disability), and c) national health response (including access to essential medicines, policies and legislature put in place, and patient satisfaction). The ultimate outcome and impact indicators will be aligned with WHO voluntary indicators and global targets for 2025 as well as Sustainable Development Goals for 2030.

The approach used to develop this M&E framework took into account the following:

- Simple and prioritised indicators (emphasising outcomes and impact over outputs)
- Building upon and optimising what exists before expansion requiring additional resources, and supporting expansion in a phased manner
- Alignment with global targets and existing evidence

These indicators are to be expanded upon in a phased manner over time, to optimise the use of existing data and expand data collection as monitoring practices and infrastructure are strengthened, and more resources become available.

Figure 6 lists the key performance indicators and targets prioritised for achievement by 2025. Other indicators along the spectrum of M&E results chain (specifically input and output) are less the focus of national strategy, however would be identified for inclusion in cascaded ministerial and respective program work plans. A detailed compendium of the indicators is provided, with the following specified for each indicator: shorthand name, rationale, definition, unit of measurement, preferred method of data collection, frequency and level of data collection, source of data, dissemination of data, and timing/phase of implementation.

4.2. Indicators [Continued]

Figure 6: Key performance indicators

Mortality and Mortality

1. Probability of premature NCD-related mortality
2. Incidence of diabetes (facility-based)
3. Incidence of hypertension (facility-based)
4. Incidence of asthma
5. Incidence of breast cancer
6. Incidence of cervical cancer

Behavioural & Biological Risk Factors

1. Prevalence of overweight and obesity
2. Prevalence of physical inactivity
3. Prevalence of unhealthy diet
4. Prevalence of tobacco use
5. Prevalence of alcohol consumption
6. Prevalence of harmful alcohol use
7. Prevalence of raised blood glucose (population-based)
8. Prevalence of raised blood pressure (population-based)

National Systems Response

1. % population with NCD prevention information
2. % diabetes successfully treated
3. Access to palliative care (per capita morphine consumption)
4. % availability of essential NCD medicines
5. % cancers diagnosed early (breast, cervical)
6. Coverage of cervical cancer screening
7. Coverage of HPV vaccination
8. Coverage of hepatitis B vaccination
9. % total national funding allocated to NCD activities

Table 7: Indicators for national monitoring and evaluation for NCD prevention and control

WHO framework element (where relevant)	Indicator name	Baseline (year)	FY 2023 Target	Data source	Frequency of reporting	Reporting start year
Obesity	Age-standardised prevalence of obesity and overweight among adults aged 18+ years	30.5% (2014)	0% increase	STEPS survey	3 years	2020
Tobacco use	Age-standardised prevalence of current tobacco smoking among persons aged 15+ years	18.5% (2014)	30% relative reduction	STEPS survey	3 years	2020
Harmful use of alcohol	Total (recorded and unrecorded) alcohol per capita (15+ years old) consumption within a calendar year in litres of pure alcohol	8.1 litres (2016)	10% relative reduction	STEPS survey	3 years	2020
Physical inactivity (insufficient physical activity)	Age-standardised prevalence of insufficiently active adults aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent)	20.1% (2014)	10% relative reduction	STEPS Survey	3 years	2020
Unhealthy diet	Age-standardised prevalence of adult (aged 18+ years) population consuming less than five total servings (400 grams) of fruit and vegetables per day	94.8% (2014)	30% relative reduction	STEPS survey	3 years	2020
Diabetes	Age-standardised prevalence of raised blood glucose/diabetes among adults aged 18+ years (defined as fasting plasma glucose value ≥7.0 mmol/L (126 mg/dl) or on medication for raised blood glucose).	4.5% (2014)	0% increase	STEPS survey	3 years	2020
Hypertension	Age-standardized prevalence of raised blood pressure among adults aged 18+ years (defined as systolic blood pressure _140 mmHg and/or diastolic blood pressure _90 mmHg.	29.3% (2014)	25% relative reduction	STEPS survey	3 years	2020
Premature mortality from NCDs	Unconditional probability of dying between ages 30-70 years from cardiovascular disease, cancer, diabetes or chronic respiratory disease	21% (2014)	25% relative reduction	WHO country profile	Annual	2018 WHO, 2019 Statistics Botswana
Breast and cervical cancers	Proportion of cervical and breast cancers diagnosed early	30% (2016)	60%	NCD program, cancer registry	Annual	2019

4.2. Indicators [Continued]

WHO framework element (where relevant)	Indicator name	Baseline (year)	FY 2023 Target	Data source	Frequency of reporting	Reporting start year
Drug therapy to prevent heart attacks and stroke	Proportion of diabetics and hypertensives receiving CVD risk mitigation counselling and treatment, whose disease is controlled (defined as BP < 140/90 for hypertension, and HbA1c <= 7 or fasting glucose for diabetes)	33% (2016, selected facilities)	70%	NCD program, diabetes register, PHC NCD reporting tool for DHMTs and private facilities	Annual	2019
Palliative care	Access to palliative care assessed by morphine equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer	TBD (2016)	20% relative increase	Palliative care HBCB program	Annual	2019
Screening	Coverage of cervical cancer screening for women between ages 30–49 years	19% (2016)	80%	NCCP program	Annual	2019
Vaccination	Coverage of vaccination against hepatitis B among children under 5 years	78% (2017)	95%	EPI program	Annual	2019
Vaccination	Coverage of vaccination against human papillomavirus (HPV) among girls aged 11-13 years	97.5% (2016)	98%	EPI program	Annual	2019
IEC	Proportion of population with NCD prevention information (awareness)	TBD (2016)	80%	STEPS survey	3 years	2020
NCD Funding	National (multi-sectoral) per capita spending on NCDs	TBD (2016)	20% relative increase	Health accounts audit	3 years	2020

5. Coordination and Arrangements to Facilitate Implementation

Strong coordination and management of the national response will be critical for effective and truly multi-sectoral implementation, as well as realising desired results.

Figure 7: Key stakeholders and their various roles in national NCD response

	Ministry/stakeholder	Awareness and advocacy	Legislation development and enforcement	Services for prevention, treatment and support	Information management and dissemination	Coordination and resource mobilisation	Minimum package
1	Presidential Affairs, Government and Public Administration					X	X
2	Health and Wellness	X		X	X	X	X
3	Local Government and Rural Development	X		X	X	X	X
4	Agricultural Development and Food Security			X			X
5	Basic Education	X		X			X
6	Tertiary Education, Research, Science and Technology	X		X	X		X
7	Investment, Trade and Industry		X	X			X
8	Youth Empowerment, Sports and Culture Development	X		X			X
9	Employment, Labour Productivity and Skills Development			X			X
10	Internal Affairs and Cooperation				X		X
11	Finance and Economic Development						X
12	Infrastructure and Housing Development					X	X
13	Transport and Communication						X
14	Defence, Justice and Security		X				X
15	Environment, Natural Resources, Conservation and Tourism						X
16	Land Management, Waste and Sanitation						X
17	Mineral resources, Green Technology and Energy Security						X
18	Nationality, Immigration and Gender Affairs						X
19	Private sector	X		X	X		X
20	Civil society	X		X			X
21	Media	X			X		X
22	Development partners			X	X	X	X
23	Parastatals (roles variable depending on mandate of institution)						X

5. Coordination and Arrangements to Facilitate Implementation [Continued]

Stakeholder participation will be leveraged across sectors and diverse partnerships will be forged to facilitate implementation of the Strategy. Stakeholders will participate in the review and formulation of national strategies, policies and plans to curb NCDs. Mainstreaming of NCD activities will be pursued, and technical, fiscal and other resources will be maximised. The private sector will be encouraged to consider participation in the NCD national response as part of their social investment, through creation of healthier individuals who live longer and will add to the number of employees and market for the relevant industry in the future. All sectors should consider that addressing NCDs is of development interest given that NCDs affect a large proportion of the population, including the most economically able.

All stakeholders, regardless of sector, are expected to institute the minimum package of NCD response by 2022. This package is graduated, to facilitate phased implementation over time.

The minimum package entails the following:

1. Ensuring staff awareness on NCD risk factors and services available
2. Embarking upon intensive campaign to link staff to screening services for obesity, hypertension, diabetes and cervical cancer
3. Setting up of mechanisms for reporting NCD-related activities
4. Including NCD programs, projects or activities in annual action plan
5. Establishing a sector budget line for NCD-related programming

Additional roles vary by sector and institution, and are described below.

5.1.1. Role of the Government of Botswana (public sector)

5.1.1.1. Ministry of Health and Wellness

- Coordination of national response and planning
- Implementation of health sector-based interventions
- Surveillance
- Monitoring and evaluation
- Epidemiologic and operational research
- Technical support

5.1.1.2. Ministry of Local Government and Rural Development

- Contributing to population-wide awareness and sensitisation
- Engaging and mobilising communities to ensure participation in awareness, planning and response implementation
- Providing care and support services for patients and their families, including for those who are socioeconomically vulnerable
- Integration of NCD-related activities into district development plans and annual work plans
- Coordinating district-level NCD activities and information gathering

5.1.1.3. Ministry of Agricultural Development and Food Security

- Expanding access to healthy food options, including through expanded local production and promotion of traditional/indigenous foods
- Supporting provision of care and support services for patients and their families, including for those who are socioeconomically vulnerable
- Supporting engagement and mobilisation of rural communities in NCD awareness, planning and response implementation

5.1.1.4. Ministry of Basic Education & Ministry of Tertiary Education, Research, Science and Technology

- Integrating NCDs across all levels of the education system
- Integrating NCDs into teacher training and curriculum development
- Including NCD risk factors in curriculums for primary and secondary education
- Instituting programs that encourage healthy living habits early (prioritising physical activity and sports, providing healthy meals at school)
- Reviewing pedagogical methods to ensure successful implementation of behavioural change
- Enforcing regulations and restrictions on tobacco and alcohol use
- Providing psychosocial support for cessation
- Engaging parents and guardians through parent-teacher associations
- Producing skilled professionals in clinical and other fields relevant to NCD prevention and control
- Building capacity for conducting policy impacting research

5.1.1.5. Ministry of Presidential Affairs, Governance and Public Administration

- Providing high-level support and leadership to facilitate policy and institutional arrangements that promote multi-sectoral participation (Office of the President)
- Facilitating integration of NCD-related activities into each sector's strategic plan
- Leveraging the Performance Management System to ensure the accountability of relevant public servants in achieving planned NCD strategy objectives (Directorate of Public Service Management)
- Contributing to human resource planning and projections across government to achieve NCD strategy objectives
- Facilitating the process of legal and legislative reforms relevant to NCDs, including for alcohol, tobacco and unhealthy foods and beverages (Attorney General's chambers)
- Enforcing legislation relating to alcohol use, tobacco use and marketing of unhealthy foods and beverages particularly to children (Botswana Police Services)

5.1.1.6. Ministry of Finance and Economic Development

- Integrating HIV/AIDS into the national and district development planning process
- Effecting resource mobilisation, allocation and disbursement to achieve targets of NCD strategy, including ensuring creating of NCD-specific budget lines across ministries
- Coordinate financial contributions of development partners to NCD national response
- Ensuring financial accountability
- Conducting manpower and economic planning, incorporating projections and analyses from available NCD information

5.1.1.7. Ministry of Investment, Trade and Industry

- Supporting imports and supply chain for availability of essential medicines, technologies and consumables for NCD prevention, treatment and care
- Integrating an NCD agenda into key trade-related laws (e.g. Trade and Liquor Act) and advocating for development of new regulations and laws that will strengthen NCD national response
- Encouraging development of NCD policies and programming by businesses and industry (e.g. fulfilment of minimum package prior to registration)
- Integrating NCDs into relevant policy documents

5.1.1.8. Ministry of International Affairs and Cooperation

- Contributing to dissemination of Botswana's national status regarding NCDs to the global community
- Assisting with mobilisation of additional international resources and partnerships for national NCD response
- Facilitate the ratification of international frameworks and agreements relevant to NCDs

5.1.1.9. Ministry of Transport and Communications

- Integrating NCD issues into existing programming, including talk shows, publications, advertisements, and outreach programs
- Effecting behaviour change communication through development and broadcasting of new and innovative NCD programming
- Contributing to dissemination of NCD information and Botswana's national response with stakeholders across all levels

5.1.2. Role of private sector and parastatals

- Providing funding and identifying funding opportunities to support national efforts
- Providing technical support for implementation and addressing gaps in implementation
- Providing opportunities for human resources development (academia)
- Rigorously evaluating progress and provide recommendations for improvement in approaches
- Delivering the minimum package of wellness services for employees

5.2. Institutional Arrangements and Mechanisms for Multi-sectoral Coordination [Continued]

5.1.3. Role of civil society

- Participating in implementation of national efforts, in particular individual and community-based interventions, including in hard-to-reach and vulnerable areas
- Raising awareness and mobilising communities
- Delivering community-based services for health promotion
- Identifying and advocating for community-level issues and gaps in NCDs national response

5.1.4. Role of development partners

- Providing funding and identifying funding opportunities to further implementation of strategy
- Providing technical support for implementation and addressing gaps in implementation
- Supporting global advocacy for resourcing of Botswana's efforts and sharing of Botswana's experience

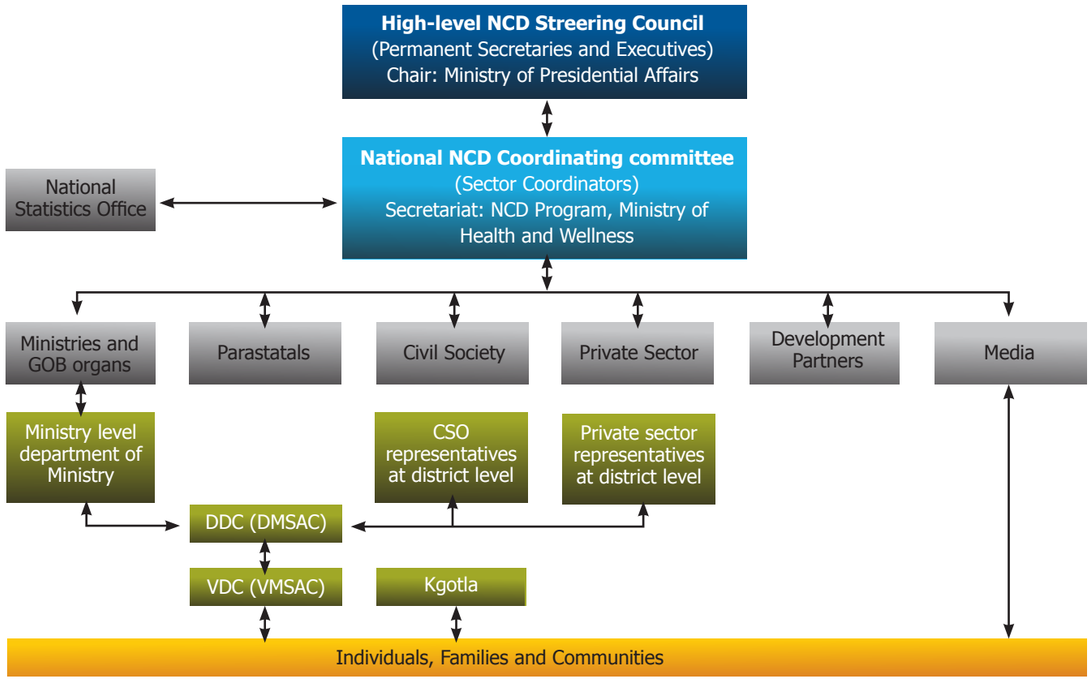
5.1.5. Role of the media

- Raising awareness and advocacy across the population, employing various types of media (e.g. print, TV, radio, edutainment, social media)

5.2. Institutional Arrangements and Mechanisms for Multi-sectoral Coordination

In order to facilitate multi-sectoral participation and strengthen coordination of NCD prevention and control efforts, key structures and processes will need to be instituted. Figure 8 is a schematic illustration of information flow across sectors and stakeholders at all levels. Institutional arrangements necessary to support effective, timely, accurate and reciprocal information-sharing are detailed in the next section.

Figure 8. Schematic illustration of institutional arrangements for multi-sectoral coordination of NCD response



5.2.1. National NCD program

A multi-sectoral national response requires strong coordination. The mandate of the national NCD program within the MoHW is to serve as this coordinating unit and custodian of the strategic plan.

5.2.2. National NCD coordinating committee

The committee will comprise program officers from key ministries and other stakeholders, and will meet on a quarterly basis. The chairperson of the committee will be the MoHW Director of Public Health, and NCD program staff will serve as the secretariat. The major roles of the committee will be to provide a planning, monitoring and evaluation forum for strategy implementation activities, and to ensure information exchange. Specifically, the functions of the committee will be as follows:

- To facilitate MoHW's provision of strategy implementation guidance to other government bodies and other stakeholders, including through joint annual work planning
- To serve as a forum for submission of and communication of NCD M&E framework results on a quarterly basis
- To serve as a forum for stakeholder contribution to compilation and review of annual performance reviews, and cascading of the annual review to respective sectors and constituencies
- To facilitate sharing of experiences and developments among peers, for best practices exchange and to enhance synergies (reduce duplication) in implementation

5.2.3. High-level multi-sectoral NCD steering council

The council will be coordinated out of the Office of the President, and will meet biannually. The council will be chaired by the Vice President and its membership will be senior leadership (Permanent Secretary and Minister) from key ministries and partner institutions. The council's functions will be as follows:

- To provide cabinet-level policy guidance on NCD-related matters
- To ensure appropriate allocation of resources to support successful implementation of the strategy, including identifying budgets and plans within participating Ministries and stakeholder institutions
- To review progress on national commitments and report them at global forums such as the UN General Assembly and WHO World Health Assembly

5.3. Phased Implementation

This strategic plan will be implemented over six years in alignment with the National Development Plan 11 (2017-2023). Implementation will be in a phased manner that takes into account resources available, initially with activities that emphasise more efficient use of available resources and better monitoring and coordinating mechanisms, and gradually those that require additional resources. An external review of this strategy's progress will be conducted at year 3 (mid-term) and year 6 (end-of-term).

Annexture 1: Contributors to the Strategy

Name	Organisation
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