Ministry of Health and Sports
The Republic of the Union of Myanmar

National Strategic Plan for Prevention and Control of NCDs (2017-2021)

Myanmar

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Contents

List of Abbreviation

DMS	-	Department of Medical Services
DoPH	-	Department of Public Health
EPI	-	Expanded Program on Immunization
FCTC	-	Framework Convention on Tobacco Control
GAVI	-	Global Alliance for Vaccines and Immunization
GF-ATM	-	The Global Fund to Fight AIDS, Tuberculosis and Malaria
HAI	-	HelpAge International
Hep B	-	Hepatitis B
HMIS	-	Health Management Information System
HRH	-	Department of Human Resource for Health
IUATLD	-	International Union against Tuberculosis and Lung Disease
MHSCC	-	Myanmar Health Sector Coordinating Committee
MMA	-	Myanmar Medical Association
MoHS	-	Ministry of Health and Sports
MRH	-	Maternal and Reproductive Health
NCDs	-	Non-communicable diseases
NHP	-	National Health Plan
NSP	-	National Strategic Plan
NTP	-	National Tuberculosis Program
PEN	-	Package of Essential Non-communicable Diseases Interventions
PSM	-	Preventive and Social Medicine
SARA	-	Service Availability and Readiness Assessment
UHC	-	Universal Health Coverage
UN	-	United Nations
UNICEF	-	United Nations Children's Fund
UNOPS	-	United Nations Office for Project Services
WB	-	World Bank
WHO	-	World Health Organization

Foreword

Non-communicable diseases (NCDs), including heart diseases, cancer, diabetes and chronic lung diseases, are collectively responsible for almost 70% of all deaths worldwide. One third of these deaths occur before the age of 70 years. Deaths due to NCDs are expected to increase by 21% over the next decade. In Myanmar loss of lives due to NCDs is as high as 59% as of 2014.

NCDs impose a heavy economic burden on countries due to the loss of productivity caused by death or illness; on individuals and families as the cost of treatment is borne by out of pocket expenditure and inability to earn a livelihood, on health systems due to the need for investment on high end technologies. Recognizing this, the United Nations General Assembly held a high-level meeting (HLM) for the second time in history to discuss a health issue in 2011 and issued a Political Declaration on the prevention and control of NCDs. The World Health Assembly endorsed the WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020 in May 2013 which aims for a 25% relative reduction in premature mortality by 2025. WHO's global monitoring framework on NCDs has listed 25 indicators and 9 voluntary targests for tracking of progress of NCDs by 2025, against a base line in 2010. It also urged national governments to develop their own action plans and national monitoring.

Myanmar, under the framework of National Health Vision 2030, strives earnestly to improve the health of its people. Universal Health Coverage (UHC) pathway is most appropriate and effective in securing access for all to promotive, preventive, curative and rehabilitative services at an affordable cost. In line with the strategic directions of UHC, the National Health Plan (NHP 2017-2021) was formulated. In the NHP, NCD component has been well taken up.

This National Strategic Plan for Prevention and Control of NCDs in Myanmar (2017-2021) was developed by the Ministry of Health & Sports in consultation with all other relevant stakeholders with the aim of "everyone in Myanmar lives a healthy and productive life – free of avoidable disability and death due to NCDs." The development of this National Strategic Plan for Prevention and Control of NCDs in Myanmar (2017-2021) laid down the path for action over the next five years for the government and other partners to follow in building a cohesive and effective response to the burden of NCDs in Myanmar.

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28.8.17

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Executive Summary

Non-communicable diseases (NCDs), including heart disease, stroke, cancer, diabetes and chronic lung disease, are collectively responsible for almost 70% of all deaths worldwide. NCDs impose a heavy economic burden on countries due to the loss of productivity caused by death or illness; on individuals and families as the cost of treatment is borne by out of pocket expenditure and inability to earn a livelihood; on health systems due to the need for investment on high end technologies. Recognizing this, The United Nations General Assembly held a high-level meeting (HLM) for the second time in history to discuss a health issue in 2011 and issued a Political Declaration on the Prevention and Control of NCDs. The World Health Assembly endorsed the WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020 in May 2013 which aims for a 25% relative reduction in premature mortality from NCDs by 2025. WHO's global monitoring framework on NCDs has listed 25 indicators and 9 voluntary targets for tracking of progress of NCDs, by 2025, against a baseline in 2010. It also urged national governments to develop their own action plans and national monitoring targets.

Ministry of Health and Sports (MoHS) in Myanmar has consistently focused on addressing NCDs including mental health and injuries. Myanmar ratified the Framework Convention on Tobacco Control (FCTC) in April, 2004 and followed it up with legislation on key provisions under the convention. NCDs have been recognized as public health priority in National Health Plan (2011-2016) as well as in new NHP (2017-2021). NCD national policy and plan of actions were developed in 2012. A dedicated NCD Unit was established under Department of Public Health (DoPH), MoHS in early 2015. Series of surveys among adults and adolescents enable measurement of the trends of some of the key risk factors. Despite this significant progress, important challenges need to be overcome to further scale-up and sustain an effective response to the NCD epidemic.

Scope: For the purpose of this document, the term NCDs has been used to denote the following diseases - cardiovascular diseases, cancer, chronic respiratory diseases, diabetes, selected mental disorders and injuries especially road traffic injuries and snakebites.

Purpose: The strategy will provide a framework for national action to combat non-communicable diseases and their risk factors in Myanmar within the context of the socioeconomic, culture and development agenda.

Vision: *"Everyone in Myanmar lives a healthy and productive life- free of avoidable disability and death due to NCDs."*

Goal: To reduce the preventable and avoidable burden of morbidity, mortality and disability due to non-communicable diseases so that every person in Myanmar reaches the highest attainable standards of health and productivity throughout the life and these diseases are no longer a barrier to socioeconomic development.

The core values are equity, inclusiveness, accountability, efficiency and sustainability.

The overarching principles of the National Strategic Plan are- geographical representation, primary health care, decentralized planning, systems approach, community engagement, multisectoral action, life-course approach, human rights approach, equity based approach evidence-based strategies, universal health coverage, balance between population-based and individual approaches.

Objectives: The objectives of the strategy are to

1. Raise the priority accorded to the prevention and control of non-communicable diseases in national agenda through sustained advocacy to governments, partners and other stakeholders.
2. Strengthen national capacity on leadership, governance and partnership development to accelerate multi-sectoral action through advocacy and dialogue.
3. Reduce modifiable risk factors for non - communicable diseases in the population through health promotion.
4. Achieve universal health coverage with key NCD related services by strengthening health systems through a people-centered primary health care approach.
5. Generate and synthesize evidence to support decision making for prevention and control of non-communicable diseases through strengthening national capacity to conduct high quality prioritized research.
6. Monitor the trends and determinants of non-communicable diseases and its risk factors through establishment of sustainable surveillance and evaluation mechanisms.

The strategies adopted to achieve these six objectives can be grouped into four broad thematic areas: Advocacy and Leadership for Multi-sectoral Action, Health Promotion, Health System Strengthening and Evidence Generation for decision making.

The key strategies and outcomes under the four thematic areas are summarized below.

Key Strategies	Key Outcomes
Advocacy and Leadership for Multi-sectoral Action	
• Establishing mechanisms of dialogue and coordination between the different ministries of government to ensure their policies are aligned with the needs of NCD prevention and control • Establishing an alliance of all partners and stakeholder for advocacy of NCDs to harmonize their efforts • Strengthening Ministry of Health and Sports to lead this action through higher resource allocation including human resources	• Increase in allocation of human and financial resources to address NCDs at national and sub-national level • Establishment of a functional mechanism for dialogue with key ministries with their defined roles and responsibilities • Establishment of a functional NCD alliance of non-governmental agencies
Health Promotion	
• Addressing each of the specific risk factor (tobacco and alcohol use, unhealthy diet and physical inactivity) by evidence based effective policy, fiscal and regulatory interventions • Conducting evidence informed mass media campaign to raise awareness on all aspects related to NCDs and their risk factors • Adopting Healthy Settings Approach in educational institutions, workplaces and townships • Strengthening national capacity for planning, intervention, monitoring and evaluation of health promotion activities	• Reduction of risk factor levels in children and adults. The risk factors include tobacco use, alcohol use, unhealthy diet, physical inactivity, obesity, raised blood pressure, sugar and cholesterol. • Improvement in knowledge and attitudes of target groups. • Increase in coverage with various provisions of global and national strategies. • Improved availability and affordability of healthier choices in different settings like schools and workplaces.
Health System Strengthening	
• Expanding the implementation of the Package of Essential NCD interventions to the whole country in a phased manner • Strengthening secondary and tertiary health facilities for provision of NCD related care for those who need them • Increasing the competency of the health work force in NCD prevention and control • Taking measures to reduce the financial impact of NCDs on individuals and families • Empowering communities and patients with NCDs to take care of themselves.	• Universal coverage of population with an essential package of NCD services • Increased competence of primary health care workforce to address NCDs • Availability of continuum of care from home to tertiary level • Improved access and coverage with various NCD care diagnostic and treatment services • Financial protection is provided to individuals and families suffering from selected NCDs.
Evidence generation for decision making	
• Strengthening capacity for regular monitoring of NCD programs • Establishing and implementing sustainable surveillance systems for different components of NCDs • Strengthening research in the priority areas of NCD prevention and control	• Time trends of key indicators identified as a part of the national monitoring framework are regularly available. • Establishment of a national system for surveillance of NCDs and their risk factors • Mechanism for regular comprehensive evaluation of the National Strategic Plan is developed. • National capacity for operational research on NCDs and their risk factors is strengthened.

In order to monitor the progress in NCD prevention and control, a national NCD monitoring framework with twenty-two indicators and nine targets were finalized. As this National NCD Strategic Plan ends in 2021, the mid-term targets were aligned with that.

Indicators with targets	Baseline Levels (2010 WHO estimate)	Targets	
		2021	2025
1. Relative reduction in the unconditional probability of dying between ages 30 - 70 from cardiovascular disease, cancer, diabetes, or chronic respiratory disease	0.24[1]	15%	20%
2. Relative reduction in the age standardised prevalence of heavy episodic alcohol drinking among adults (%)	10.3 [3]	5%	10%
3. Relative reduction in the prevalence of current tobacco use in persons aged over 15 years (%)	Smoked - 22[1] Smokeless - 29.7[2]	5%	10%
4. Relative reduction in the prevalence of insufficient physical activity among adults (%)	12.7 [2]	5%	10%
5. Relative reduction in the mean population intake of salt/sodium (mgs/day)	Not available	10%	20%
6. Relative reduction in the prevalence of raised blood pressure (%)	28.9 [1]	10%	20%
7. Relative reduction in the prevalence of overweight and diabetes (%)	Overweight - 25.4[2] Diabetes - 10.5[3]	Halt the rise	
8. Increase in the proportion of eligible people receive drug therapy and counseling (including glycemic control) to prevent heart attacks andstrokes (%)	32[3] (2014)	25%	50%
9. Increase in the availability of affordable basic technologies and essential medicines, including generics, required to treat major NCDs in public facilities (%)	N/A	50%	80%

Conclusion

The development of this National Strategic Plan for Prevention and Control of NCDs in Myanmar (2017-2021) lays down the path for action over next five years for the government and other partners to follow in building a cohesive and effective response to the burden of NCDs in Myanmar.

Source for baseline

[1] Non communicable disease Country Profiles 2014 World Health Organization

[2] NCD RF Survey Myanmar 2009

[3] NCD RF Survey Myanmar 2014

1. Introduction

Non-communicable diseases (NCDs) are a group of diseases that are not spread by microbial agents, generally chronic, and require life-long treatment to prevent complications and mortality. While many diseases are included in NCDs, WHO categorizes cardiovascular diseases (Ischemic heart disease, hypertension and stroke), diabetes, cancers and chronic respiratory diseases as major NCDs which account for more than 80% of burden due to all NCDs. In the context of Myanmar, the national consensus is to include some key mental disorders and injuries as a part of the NCDs that need to be addressed on priority.

Non-communicable diseases (NCDs), including heart disease, stroke, cancer, diabetes and chronic lung disease, are collectively responsible for almost 70% of all deaths worldwide. (http:// www. who.int/ ncds/en/) In the South East Asia Region of WHO, 8.5 million lives are estimated to be lost due to NCDs. (http://www.searo.who.int/entity/noncommunicable_diseases/en/). One third of these deaths occur before the age of 70 years. Deaths due to NCDs are expected to increase by 21% over the next decade.[1] The loss of productivity due to death or illness, affects the overall economy. NCDs require expensive acute care or lifelong care often pushing individuals and families into poverty as most of the cost of treatment is borne by out of pocket expenditure of individuals and families. This is compounded by their inability to earn a livelihood. Treatment of NCDs also poses a significant threat to the already overburdened health system of developing countries.

The increasing burden of NCDs is driven by multiple transitions that are occurring in the world including in Myanmar. These include ageing populations due to declining mortality and decreasing fertility, globalization of economy, rapid unplanned industrialization and urbanization. This has resulted in increasing access to international markets and influences profoundly affecting the community environments and lifestyles of people living in these environments. These include key behaviours like tobacco and alcohol use, unhealthy diets and lack of physical activity.

Recognizing the urgent need to address NCDs globally, The United Nations General Assembly held a high-level meeting (HLM) for the second time in history to discuss a health issue in 2011 and issued a Political Declaration on the prevention and control of NCDs. It recognized NCDs as a major threat to health, economies and societies, and reaffirmed the need for multi-sectoral action and a 'health in all policies' approach to tackle NCDs and their determinants.

The World Health Assembly endorsed the WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020 in May 2013. The Global Action Plan provides member states, international partners and WHO with a road map and menu of policy options which, when implemented collectively between 2013 and 2020, will contribute to a 25% relative reduction in premature mortality from NCDs by 2025. WHO's global monitoring framework on NCDs will start tracking implementation of the Global Action Plan through monitoring and reporting on the attainment of the 9 global voluntary targets for NCDs, by 2025 against a baseline in 2010. (Annexure 1) Governments were also urged to (i) set national NCD

[1] *World Health Organization. Global Status Report on NCDs. 2017*

targets for 2025 based on national circumstances; (ii) develop multi-sectoral national NCD plans to reduce exposure to risk factors and enable health systems to respond in order to reach these national targets in 2025; and (iii) measure results, taking into account the Global Action Plan.[2] The UN General Assembly will convene a third high-level meeting on NCDs in 2018 to take stock of national progress in attaining the voluntary global targets by 2025.

Conspicuous by their absence in the Millennium Development Goals, NCDs now figure in the Sustainable Development Goals related to health. The 2030 Agenda for Sustainable Development adopted at the United Nations Summit on Sustainable Development in September 2015, recognizes NCDs as a major challenge for sustainable development. As part of the agenda, heads of State and Government committed to develop national responses to the overall implementation of this agenda, including to:

- Reduce by one third premature mortality from NCDs and promote mental health and wellbeing
- Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
- Achieve universal health coverage (UHC)
- Strengthen the implementation of the WHO Framework Convention on Tobacco Control (FCTC)
- Support the research and development of vaccines and medicines for NCDs that primarily affect developing countries
- Provide access to affordable essential medicines and vaccines for NCDs
- Halve the number of global deaths and injuries from road traffic accidents
- Provide access to safe, affordable, accessible and sustainable transport systems for all and improving road safety
- Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management[3]

These ambitious goals cannot be met by the efforts of health sector alone. They need multi-sectoral and multidisciplinary collaborative efforts. The progress toward this goal can only be realized through the coordinated efforts of all stakeholders and by policy level interventions in domains of trade, agriculture, food, taxation, education, urban development and many other sectors. This requires a very high level of political commitment combined with a strong resolve of the executive.

Ministry of Health and Sports (MoHS) in Myanmar has consistently focused on addressing NCDs including mental health and injuries. Myanmar signed the Framework Convention on Tobacco Control (FCTC) on the 23rd October, 2003, ratified on the 20th of April, 2004 and followed it up with legislation on key provisions under the Convention. NCDs have been recognized as public health priority in National Health Plan (NHP) (2011-2016) as well as in new NHP (2017-2021). NCD National Policy and plan of actions were developed in 2012. A dedicated NCD Unit was established under Department of Public Health (DoPH), MoHS in early 2015. Series of surveys among adults and adolescents have been carried out to measure the trends of some of the key risk factors.

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[2] *World Health Organization. Global Action Plan for the Prevention and Control of NCDs 2013-2020*

[3] *https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals*

Notwithstanding the significant progresses, important challenges need to be overcome to further scale-up and sustain an effective response to the NCD epidemic.

- Funding level for NCD programs is much lower than is required to scale-up programs to result in the necessary health impacts.
- Lack of understanding of the need for multi-sectoral partnerships among different ministries and sectors.
- The focus is still on improving treatment for NCDs and not on preventing risk factors through health promotion.
- While pilot projects for reducing treatment gaps for NCDs and mental disorders have shown success, reducing the NCD burden will require moving beyond pilot projects to nationwide scaling up of cost-effective interventions, with emphasis on population-based interventions.
- Comprehensive and sustainable NCD surveillance systems are still absent with little data to monitor disease-specific mortality, NCD risk surveys being not institutionalized and integrated into the national health information systems and the fact that most of the surveillance activities are externally funded.
- There is little research in the country to measure the epidemiological and economic burden due to NCDs and hardly any operational research to translate the evidence into action.

The development of this National Strategic Plan for Prevention and Control of NCDs in Myanmar is but a next step in the direction of addressing NCDs more effectively. Once adopted, it lays down the path for action over next five years for the government and other partners to follow in building a cohesive and effective response to the burden of NCDs in Myanmar.

2. National Strategy for Prevention and Control of NCDs

Scope

For the purpose of this document, the term NCDs has been used to denote the following diseases - cardiovascular diseases, cancer, chronic respiratory diseases, diabetes, selected mental disorders and injuries especially road traffic injuries and snakebites. There are several other NCDs that are not focused in this strategy, such as neurological disorders including epilepsy, chronic kidney disease, deafness and oral health, purely for operational reasons and to focus on the most important diseases. However, many of the specific strategies will be applicable to other diseases as well and the overall strengthening of health and surveillance systems will also benefit other diseases.

This strategy and plan is aligned to the country's Comprehensive Development Plan Framework and National Health Vision 2030. The strategy takes into consideration and builds on previous national, regional and global initiatives and agreements to tackle NCDs. The strategy provides a framework of strategic directions for the national and all NCD stakeholders to take coordinated and coherent action to attain the global and national goals. This strategy recognizes the need for embracing multisectoral action by identifying and promoting actions across all sectors that have a stake in the prevention and control of non-communicable diseases.

Purpose

The strategy will provide a framework for national action to combat non-communicable diseases and their risk factors in Myanmar within the context of the socioeconomic, culture and development agenda. While health sector would play the leading role, the strategy recognizes the role of a wide range of players beyond the health sector. The purpose is to achieve greater awareness of the health and health equity consequences of policy decisions in different sectors and thereby move in the direction of healthy public policy and practice across sectors. Health system strengthening to address individuals with diseases and risk factors is an essential component of all national efforts to reduce disability and mortality due to NCDs. The strategy will also help formulate mechanisms for monitoring the progress achieved in preventing and controlling NCDs in Myanmar. These will not only help the country in revising its strategy from time to time as well as help in reporting this to WHO.

Vision

"Everyone in Myanmar lives a healthy and productive life- free of avoidable disability and death due to NCDs."

Goal

To reduce the preventable and avoidable burden of morbidity, mortality and disability due to non-communicable diseases so that every person in Myanmar reaches the highest attainable standards of health and productivity throughout the life and these diseases are no longer a barrier to socioeconomic development.

Core Values

Equity: Policies and programs will aim to reduce inequalities in NCD burden due to education, gender, socioeconomic status and other relevant social determinants.

Inclusiveness: The strategy will be inclusive in nature and try to bring all stakeholders and beneficiaries together and attempt joint decision-making mechanisms to the extent possible.

Accountability: The strategy will have clearly defined roles and responsibilities and targets as well as mechanisms to measure them independently at the national level.

Efficiency: Considering the resource scarcity in the health domain and more so in the area of NCDs prevention and control, all attempts will be made to adopt strategies which have been proven to be cost effective and that promote efficient use of resources.

Sustainability: While there is an urgent need for action for prevention and control of NCDs, the strategy recognizes the need for sustainable approaches that can only happen if there is a collaborative decision making and appropriate resources are made available for decided activities.

Overarching Principles

Geographical representation: The strategy will be operationalized nationwide to address NCDs in all parts of Myanmar in a phased manner, prioritizing townships with the greatest needs based on the disease burden. Townships, in which investments in service availability and readiness are to be initiated each year, will be determined by overall fiscal space for health and the capacity to deploy additional resources.

Primary Health Care: The strategy will emphasize the critical role of primary health care and the delivery of essential services and interventions at Township level and below, starting with the community. The definition of the essential package will grow over time, starting with the current package to be guaranteed for everyone by 2020.

Decentralized Planning: Inclusive planning at the local level will be essential to achieve the goals of National Strategy for Prevention and Control of NCDs. While there will be national guidelines and tools, townships can prioritize their approaches and packages based on their needs. Stakeholders at township level should be able to jointly plan and cost actions that need to be taken to address NCDs in their townships.

Systems approach: No strategy can be implemented in a sustainable manner unless a systems approach is taken. While it is recognized that the health system capacity to address NCDs is limited, efforts will be directed in strengthening the health system to not only provide relevant services but also to lead a multi-sectoral action.

Community engagement: The strategy will help communities to actively engage with government in activities for the prevention and control of non- communicable diseases, including advocacy, policy and program planning, implementation of laws and programs, as well as in monitoring and evaluation. The strategy will strive to empower them to make healthy choices for a healthy life.

Multi-sectoral action: The strategy recognizes that effective non-communicable disease prevention and control requires leadership, coordinated multi stakeholder engagement and multisectoral action for health

both at government level and at the level of a wide range of actors. It will adopt the concepts such as "health in all policies" and "whole of government" and "whole of society".

Life-course approach: Opportunities to prevent and control non-communicable diseases occur at all stage of life: from prenatal period to old age. Interventions in early life often offer the best chance for primary prevention. Older people to be given focused attention. NCDs interventions will be integrated with other national initiatives which focus on different age groups.

Evidence-based strategies: Strategies and practices for the prevention and control of non-communicable diseases need to be based on scientific evidence and/or best practice, cost-effectiveness, affordability and public health principles, taking cultural considerations into account.

Universal health coverage: All people should have access, without discrimination, to nationally determined sets of the needed promotive, preventive, curative, rehabilitative and palliative basic health services and essential, safe, affordable, effective and quality medicines and diagnostics. At the same time, it must be ensured that the use of these services does not expose them to financial hardship, especially the poor and populations living in vulnerable situations.

Balance between population-based and individual approaches: A comprehensive prevention and control strategy needs to balance an approach aimed at reducing risk factor levels in the population as a whole with one directed at people with disease or high-risk individuals.

Human rights approach: It should be recognized that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being, without distinction of race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status, as enshrined in the Universal Declaration of Human Rights.

Equity based approach: It should be recognized that the unequal distribution of noncommunicable diseases is ultimately due to the inequitable distribution of social determinants of health, and that action on these determinants, both for vulnerable groups and the entire population, is essential to create inclusive equitable, economically productive and healthy societies.

Objectives

The objectives of the strategy are to

1. Raise the priority accorded to the prevention and control of non-communicable diseases in national agenda through sustained advocacy to governments, partners and other stakeholders.
2. Strengthen national capacity on leadership, governance, and partnership development to accelerate multi-sectoral action through advocacy and dialogue.
3. Reduce modifiable risk factors for non-communicable diseases in the population through health promotion.
4. Achieve universal health coverage with key NCD related services by strengthening health systems through a people- centered primary health care approach.

5. Generate and synthesize evidence to support decision- making for prevention and control of non-communicable diseases through strengthening national capacity to conduct high quality prioritized research
6. Monitor the trends and determinants of non-communicable diseases and its risk factors through establishment of sustainable surveillance and evaluation mechanisms.

The strategies to be adopted to achieve these six objectives can be grouped into four broad thematic areas:

1. Advocacy and Leadership for Multi-sectoral Action
2. Health Promotion
3. Health System Strengthening
4. Evidence generation for decision making

These are described in some detail below.

Advocacy and leadership for Multi-sectoral Action

Actions under this area aim to increase advocacy, promote multi-sectoral partnerships and strengthen capacity for effective leadership at Ministry of Health and Sports to accelerate and scale-up the national response to the NCD epidemic. Advocacy is both within government and its ministries as well as other partners and stakeholders including private sector and national and international agencies and civil society organizations.

The specific strategies related to this include:

1. Establishing mechanisms of dialogue and co-ordination between the different ministries of government so that their policies are aligned with the needs of NCD prevention and Control
2. Establishing an alliance of all partners and stakeholder for advocacy of NCDs to harmonize their efforts
3. Strengthening the Ministry of Health and Sports so that it can effectively lead this action. The strengthening is to be achieved through higher resource allocation including human resources.

The key outcomes to be achieved in this thematic area are:

1. NCDs prioritized in the national health and development agenda in terms of an increase in allocation of human and financial resources to address NCDs at national and sub-national level.
2. Health Ministry effectively leading and coordinating the development and implementation of national NCD prevention plan in terms of
    a. Establishment of a functional mechanism for dialogue with key ministries with their defined roles and responsibilities
    b. Establishment of a functional NCD alliance of all non-governmental agencies.

Health Promotion

Actions under this area aim to promote the development of population-wide interventions to reduce exposure to key risk factors. Effective implementation of these actions should lead to reduction in tobacco use, increased intake of fruits and vegetables, reduced consumption of saturated fat, salt and sugar, reduction in harmful use of alcohol, increase in physical activity and reduction in household air pollution.

The specific strategies under this thematic area include

1. Address each of the specific risk factor (tobacco and alcohol use, unhealthy diet and physical inactivity) by evidence based effective policy, fiscal and regulatory interventions.
2. Conduct evidence informed mass media campaign to raise awareness on all aspects related to NCDs especially on risk factor prevention
3. Adopt Healthy Settings Approach in schools, educational institutions, workplaces and town ships
4. Strengthen national capacity for planning, intervention, monitoring and evaluation of health promotion activities.

The strategy recommends establishing a new or identifying an existing agency to be a nodal agency for health promotion in Myanmar. This is because if health promotion has to be effectively scaled up nationally, a separate agency needs to be given full responsibility for that along with sufficient funding. The funds for this can be generated by earmarking funds generated from specific tax or additional cess for health promotion as well as by drawing private sector funds, subject to certain provisions that take care of conflict of interest. This agency should also undertake capacity building of partners as well as staff members in health promotion.

There is a need for formulating and implementing a comprehensive communication plan that is contextual innovative campaigns and messaging through multiple media channels would aid in reinforcing NCD related messages and will counter the adverse marketing of unhealthy foods and substances. In addition, WHO has in inventory of interventions that have been demonstrated to be effective for prevention of tobacco use like legislation to control advertising, marketing and sale of tobacco, health warnings as well as resorting to fiscal measures like taxes and subsidies to incentivize healthy behavior. For diet, these would include nutrition labeling, regulating advertising of foods and beverages to children as well as regulation on salt/sugar/fat content of processed and prepared foods.

"Healthy Settings" approach provides an excellent opportunity to integrate various approaches in a practical framework of implementation. Settings include schools and educational institutions, workplaces, communities and health facilities. Practical guidelines have to be drawn up and capacity for the staff of these settings needs to be augmented. These have to be scaled up nationally so that these become the "norms".

Key outcomes that are to be achieved include

1. Reduction of risk factor levels in children and adults. The risk factors include tobacco use, alcohol use, unhealthy diet, physical inactivity, obesity, raised blood pressure, sugar and cholesterol.
2. Improvement in knowledge and attitudes of target groups
3. Increase in coverage with various provisions of global and national strategies
4. Improved availability and affordability of healthier choices in different settings like schools and workplaces.

Health Systems Strengthening

While health promotion reduces the disease burden in long-term, in short to medium, burden can be reduced considerably by interventions aimed at individuals with NCDs or those who are at high risk. NCDs require a comprehensive health system that is affordable and comprises of a trained workforce to deliver affordable and available technologies and medicines with seamless movements within all tiers health systems. Actions under this area aim to strengthen health systems, particularly the primary health care system including the health workforce for moving towards universal health coverage. A strengthened health system directed towards addressing NCDs should aim to improve prevention, early detection, treatment and continuous management of people with or at high risk for major NCDs in order to prevent complications, reduce the need for hospitalization and costly high-technology interventions and deaths. Full implementation of actions in this area should lead to improved access to health-care services, increased competence of primary health care workers to address NCDs, and empowerment of communities and individuals for self-care.

The specific strategies are

1. Expanding the implementation of the Package of Essential NCD (PEN) interventions the whole country in a phased manner
2. Strengthening secondary and tertiary health facilities for provision of NCD related care for those who need them
3. Increasing the competency of the health workforce in NCD prevention and control
4. Take measures to reduce the financial impact of NCDs on individuals and families
5. Empower communities and patients with NCDs to take care of themselves

All people should have access, without discrimination, to nationally determined sets of promotive, preventive, curative and rehabilitative basic health services and essential, safe, affordable, effective and quality medicines. The WHO Package of Essential NCD Interventions (WHO PEN) for primary care gives a set of cost-effective interventions that can be adapted to national context and delivered at an acceptable quality even in low resource settings. Myanmar has already pilot tested this package and has demonstrated their applicability and effectiveness in its context. The stage is set for its expansion to the national level. Early detection of NCDs and their appropriate treatment prevent a significant proportion of complications like strokes and heart attacks, thus reducing the financial strain on individuals and health care system, while at the same time reducing mortality. Effective individual health-care interventions for NCDs include those for acute events managed in special units (coronary care, stroke care etc.) and complicated (co-morbidities) advanced cases. Both these require highly skilled human resource, high-end technology which are costly and usually available only in tertiary hospitals. At the same time it must be ensured that the use of these services does not expose the users to financial hardship.

The key outcomes of this strategy are:

1. Universal coverage of population with an essential package of NCD services
2. Increased competence of primary health care workers to address NCDs
3. Availability of continuum of comprehensive care from home to tertiary level
4. Improved access and coverage with various NCD care diagnostic and treatment services
5. Financial protection is provided to individuals and families suffering from selected NCDs.

Surveillance, Monitoring, Evaluation and Research

Surveillance, Monitoring, Evaluation and Research Monitoring is an integral part of implementation of any public health program. The purpose of this component is to know whether the intended results are being achieved as planned. The actions listed under this objective will assist in monitoring national progress in the prevention and control of non-communicable diseases, as per the national monitoring framework consisting of indicators and targets. Monitoring will provide internationally comparable assessments of the trends in non-communicable diseases over time. It will also provide the foundation for advocacy, policy development and coordinated action and help to reinforce political commitment.

The type of activities that this strategy include identifying sources of data and integrating surveillance into national health information systems and undertake periodic data collection on the behavioural and metabolic risk factors (harmful use of alcohol, physical inactivity, tobacco use, unhealthy diet, overweight and obesity, raised blood pressure, raised blood glucose, sodium intake and hyperlipidemia), and determinants of risk exposure such as marketing of food, tobacco and alcohol, with disaggregation of the data, where available, by key dimensions of equity, including gender, age (e.g. children, adolescents, adults) and socioeconomic status in order to monitor trends and measure progress in addressing inequalities.

Although effective interventions exist for the prevention and control of non-communicable diseases, their implementation is inadequate. Applied and operational research, integrating both social and biomedical sciences, is required to scale up and maximize the impact of existing interventions. WHO's prioritized research agenda for the prevention and control of non-communicable diseases drawn up through a participatory and consultative process provides guidance on future investment in noncommunicable disease research. Countries need to identify their own priority research needs and build capacity to address them.

There is presently a serious mismatch between the rising NCD burden and the research capacity and research output in Myanmar. There is both a quantitative (few people do research) as well as qualitative (poor research capability of existing researchers) deficit. The basic prerequisites to promote health research includes leadership, a competent research workforce, adequate financing, and adequately equipped research institutions.

The key outcome to be achieved by this strategy is the increase in availability of national evidence to support decision making by policy makers and program managers.

The specific outcomes are:

1. Time trends of key indicators identified as a part of the National Monitoring Framework are regularly available.
2. Establishment of a national system for surveillance of NCDs and their risk factors
3. Mechanism for regular comprehensive evaluation of the National Strategic Plan is developed and
4. National capacity for operational research on NCDs and their risk factors is strengthened.

3. National NCD Monitoring Framework

In keeping with the WHOs call for each country to develop its own national NCD monitoring framework, national consultations were held in February – March 2017 in Myanmar to deliberate on them. The data on NCDs and their risk factors as well as existing surveillance systems were reviewed and national monitoring indicators and targets were agreed upon. These provide the necessary monitoring framework to evaluate the progress of this National Strategy for Prevention and Control of NCDs.

While deciding, it was realized that these targets may be too ambitious for Myanmar as it has only recently started addressing NCDs through public health programs. A total of 22 indicators were finalized in the national monitoring framework. These along with possible sources of data for them are shown in table 1 below.

Targets were set for nine of them. Also as this National NCD Strategic Plan ends in 2021, the mid-term targets were aligned with that. While fixing the targets, the following points were taken note of:

1. Global voluntary targets set by WHO
2. Baseline levels in 2010 as estimated by WHO
3. Results of trends of many risk factors whose information was available through at least two national level surveys (See Annexure 2). Despite differences in age groups and some definitions used, the data is robust enough to discern trends for key risk factors.
4. Planned activities under the NSP for NCDs

The decided targets are shown in table 2. These targets (except for those of health system response) are relative reduction from a baseline of the levels at 2010. The national NCD risk factor Survey for 2009 provides a good indication of the baseline to be expected. For the indicators that were not measured in 2010 (raised blood glucose) 2014 data may be used. Some of the baseline estimates for 2010 have been prepared by WHO and are part of the country profiles generated by it in 2014.

Table 1: NCD Indicators in National NCD Monitoring Framework

No	Indicators	Data sources
1.	Unconditional probability of dying between ages 30-70 from cardio-vascular disease, cancer, diabetes, or chronic respiratory disease	Periodic National Surveys on causes of death
2.	Cancer incidence, by type of cancer, per 10,00,00 population	Cancer Registry
3.	Total (recorded and unrecorded) alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol	Administrative reporting Systems
4.	Age standardised prevalence of heavy episodic alcohol drinking among adolescents and adults as appropriate in the national context	National NCD RF Surveys for adults and adolescents based on standard methodology
5.	Age standardised prevalence of overweight and obesity among adults aged 18+ years (defined as body mass index greater than 30 kg/m^2)	
6.	Prevalence of overweight and obesity in adolescents (defined as two standard deviations BMI for age and sex overweight according to the WHO Growth Reference)	
7.	Age standardised prevalence of raised blood glucose/diabetes among adults aged 18+ years (defined as fasting plasma glucose value 126 mg/dl or on medication for raised blood glucose	
8.	Age standardised prevalence of insufficient physical activity in adults aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent)	
9.	Prevalence of insufficiently active adolescents (defined as less than 60 minutes per day of physical activity)	
10.	Age standardised prevalence of raised blood pressure among adults aged 18+ years and mean systolic blood pressure.	
11.	Age standardised mean population intake of salt per day in gms in persons aged 18+ years	
12.	Age standardised prevalence of current tobacco use (smoking and smokeless) among adults aged 18+ years	
13.	Prevalence of current tobacco use (smoking and smokeless) among adolescents	
14.	Age standardised prevalence of adults (aged 18+ years) consuming less than 5 total servings (400 gms) of fruit and vegetables per day	
15.	Age standardized prevalence of raised total cholesterol among persons aged 18+ years (> 5 mmol/l) and mean total cholesterol	
16.	Proportion of households using solid fuels as a primary source of energy for cooking	
17	Proportion of eligible adults (defined as aged > 40 years with a 10-year CVD risk greater >30% including those with existing cardiovascular disease) receiving drug therapy and counselling (including gylcemic control) to prevent heart attacks and strokes	
18.	Proportion of women aged between 30-49 screened for cervical cancer at least once	
19.	Availability of quality, safe and efficacious essential NCD medicines including generics, and basic technologies (in both public and private facilities	Health Facility Survey based on WHO-SARA method
20.	Vaccination coverage against hepatitis B virus monitored by number if third doses of Hep-B vaccine (Hep B3) administered to infants	EPI reports
21.	Availability of vaccines against Human Papilloma Virus as per national immunization schedule	Ministry of Health and Sports (EPI report)
22.	Policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans fatty acids, free sugar or salt	Ministry of Health and Sports

Table 2: List of Targets for NCD Prevention and Control in Myanmar

Indicators	Baseline Levels (2010 WHO estimate)*	Targets for Relative reduction from baseline		Comments/Justification
		2021	2025	
1. Relative reduction in the unconditional probability of dying between ages 30 - 70 from cardiovascular disease, cancer, diabetes, or chronic respiratory disease	0.24[1]	15%	20%	This was set at a lower level than global one as rest of the targets were also set lower than global one. Myanmar is at an early stage of addressing the NCD epidemic and this target is more realistic.
2. Relative reduction in the age standardised prevalence of heavy episodic alcohol drinking among adults (%)	10.3[3]	5%	10%	Despite challenges, it was felt that it might be good to stick to the global targets.
3. Relative reduction in the prevalence of current tobacco use in persons aged over 15 years (%)	Smoked - 22[1] Smokeless - 29.7[2]	5%	10%	The rates are stable between 2009-2014 for smoked tobacco though are increasing for smokeless tobacco. A more conservative target was preferred.
4. Relative reduction in the prevalence of insufficient physical activity among adults (%)	12.7[2]	5%	10%	There was a slight increase between the two surveys and it was decided to keep the global target.
5. Relative reduction in the mean population intake of salt/sodium (mgs/day)	Not available	10%	20%	This aspect has not been measured in the two surveys and a more conservative target was preferred as interventions are yet to be discussed at national level.
6. Relative reduction in the prevalence of raised blood pressure (%)	28.9[1]	10%	20%	The target was lowered as both tobacco and salt intake targets which are the two most important risk factors were kept low.
7. Relative reduction in the prevalence of overweight and diabetes (%)	Overweight - 25.4[2] Diabetes - 10.5[3]	Halt the rise		Global targets were retained.
8. Increase in the proportion of eligible people receive drug therapy and counseling (including glycemic control) to prevent heart attacks and strokes (%)	32[3] (2014)	25%	50%	Global targets were retained.
9. Increase in the availability of affordable basic technologies and essential medicines, including generics, required to treat major NCDs in public facilities (%)	N/A	50%	80%	Global targets were retained.

Source for baseline

[1] *Non communicable disease Country Profiles 2014 World Health Organization*

[2] *NCD RF Survey Myanmar 2009*

[3] *NCD RF Survey Myanmar 2014*

National Strategic Plan for Prevention and Control of NCDs (2017-2021) Myanmar

4. NATIONAL PLAN FOR PREVENTION AND CONTROL OF NCDs (2017-2021)

STRATEGIC AREA 1: ADVOCACY AND LEADERSHIP FOR MULTI-SECTORAL ACTION

Sub-Strategy	Actions	Outcome Indicators	Implementation Partners	Year of Implementation					Cost (US$)	Potential Budget Source
				17	18	19	20	21		
Strengthen MoHS capacity for effective leadership for multi-sectoral action	Hold regular meetings of National Technical Strategic Group on NCDs under MHSCC	Adequate national stewardship for NCDs	• NCD unit • MoHS	X	X	X	X	X	3,800	MoHS
	Establish and hold regular meetings of Technical Working Group for specific diseases/risk factors/areas			X	X	X	X	X	7600	MoHS
	Strengthen NCD unit in Ministry of Health with adequate human resources including consultant in specific areas as per need	A strengthened NCD unit in MoHS	• NCD unit • MoHS	X	X	X	X	X	550900	MoHS
	Identify specific training needs for leadership in multi-sectoral action for NCDs and send NCD unit staff for regional and global trainings			X	X	X			600	MoHS, WB
	To upgrade NCD unit to NCD Division by the end of the plan							X	20000	MoHS
Advocacy within government	Advocate to make NCDs as a line item in MoHS budget	Increase in allocation of funds for NCDs	• NCD Unit • MoHS • Ministry of Finance • Regional and State Governments		X				28200	MoHS
	Advocacy for earmarking a "sin" tax/cess on tobacco, alcohol and unhealthy food products for health system strengthening and health promotion for NCDs			X					10800	MoHS, WHO
	Advocacy with sub-national governments (States and Regions) for higher resource allocation for NCDs			X	X	X	X	X	8500	MoHS, WB
	Prepare a policy brief for government to advocate higher investment in NCD prevention and control	Availability of policy brief	• NCD Unit • WHO • HelpAge Int.	X					200	MoHS

Sub-Strategy	Actions	Outcome Indicators	Implementation Partners	Year of Implementation					Cost (US$)	Potential Budget Source
				17	18	19	20	21		
	Create a parliamentarian forum for advocacy on NCDs	Roles and responsibilities of Key Ministries in NCD prevention and control and Inter-ministerial mechanisms Identified	• NCD Unit • WHO and other international Partners • Identified Ministries		X				1000	MoHS, WB
	Hold an inter-ministerial consultation to discuss mechanisms for dialogue within ministries				X				200	MoHS, WB
	Prepare ministry specific background paper for key ministries					X			5400	MoHS
	Hold Ministry specific consultations to advocate for aligning their policies and programs with NCD prevention and control.						X		200	MoHS
Advocacy with non-governmental partners	Advocacy for establishment of NCD alliance with all stakeholders	An NCD alliance of all the stakeholders established and functional in Myanmar	• WHO • HelpAge Int. • Other Civil Society Partners	X					1900	MoHS, WB
	Hold annual National NCD meeting with all stakeholders to review progress and make joint plans for the next year.				X	X	X	X	40000	MoHS, WB
	Compile and disseminate National / International Good Practices in multi-sectoral actions through online/offline platforms				X		X		10400	MoHS
	Explore additional resources for NCD prevention and control from international partners and donors			X	X	X	X	X	2000	MoHS
	Mobilize the UN Country Team and link NCDs into the UNOPS processes	Inter UN Agency work harmonized	WHO & Other UN Agencies	X	X	X	X	X	2000	MoHS
			TOTAL SA 1 (USD)						**693700**	

STRATEGIC AREA 2: HEALTH PROMOTION											
Sub-Strategy	**Actions**	**Outcome Indicators**	**Implementation Partners**	**Year of Implementation**					**Cost (US$)**	**Potential Budget Source**
				17	**18**	**19**	**20**	**21**		
Create an Institutional framework for leadership and coordination for health promotion activities in the country	Establish new or identify an existing agency for leading health promotion activities in the country	An agency for health promotion established	• MoHS • NCD Unit • Health Literacy Promotion Unit	X					11200	MoHS
	Provide sufficient resources for its working through tax and public-private partnership				X	X	X	X	83200	MoHS
Conduct mass media campaigns on NCDs	Design mass media campaigns targeting different risk factors and risk groups	Increase in population level reach of IEC campaigns	• Identified National Health Promotion Agency	X	X	X	X	X	108500	MoHS, WB
	Print / publish / broadcast IEC materials including of related health programs			X	X	X	X	X	1765000	MoHS, WB
	Conduct events to promote awareness at national /subnational levels			X	X	X	X	X	600000	MoHS, WB
	Develop and maintain a website/ portal as a one stop resource on information related to NCDs			X	X	X	X	X	5000	MoHS
	Identify and use celebrities/leaders as role models to reinforce messages			X	X	X	X	X	26000	MoHS
Implement all provisions of FCTC effectively	Rationalize and simplify taxes on smoked and smokeless tobacco products	Increased compliance to WHO-mPOWER strategies	• Tobacco Cell		X				600	MoHS
	Start tobacco cessations services at selected secondary level hospitals in a phased manner				X	X	X	X	129870	MoHS
	Establish a national telephonic helpline for tobacco cessation					X			600	MoHS
	Mandatory warning on both smoked and smokeless tobacco products consistent with FCTC guidelines				X				1200	MoHS
	Stricter enforcement of ban on smoking in all public places			X	X	X	X	X	1000	MoHS, WB

Sub-Strategy	Actions	Outcome Indicators	Implementation Partners	Year of Implementation					Cost (US$)	Potential Budget Source
				17	18	19	20	21		
	Strengthen legislation to ban marketing of tobacco products through sponsorship, advertising and point of sale			X					66000	MoHS
	Strengthen efforts to eliminate illicit trade of tobacco products, including smuggling, illicit manufacturing and counterfeiting					X			800	MoHS
Initiate measures to reduce harmful use of alcohol	Develop a national alcohol policy consistent with WHO guidelines	Improvement in coverage with Global Alcohol Prevention Strategy provisions	• NCD Unit • Tobacco Cell			X			10200	MoHS
	Enact a national alcohol control legislation addressing sale, access and marketing of alcohol						X		200	MoHS
	Effectively implement current drink and drive legislations			X	X	X	X	X	11000	MoHS
	Raise tax on alcohol containing products for human consumption				X				800	MoHS
	Reduce the public health impact of illicit alcohol and informally produced alcohol through identified measures							X	33800	MoHS
	Substantially strengthen alcohol cessation services within and outside government sector in a phased manner			X	X	X	X	X	18500	MoHS
Promote Physical activity	Establish national guidelines for physical activity for adults and children	Improved compliance to Global Strategy on Diet and Physical Activity	• NCD unit • Department of Sports and Physical Education • Ministry of Education	X					20800	MoHS, WB
	Create demonstration projects within large cities for aligning urban transport policy to promote physical activity					X			9800	MoHS, WB
	Organize mass sports activities on special occasions.			X	X	X	X	X	545000	MoHS, WB
	Start a school and college based program for promoting sports culture among youth			X	X	X	X	X	103560	HAI
Promote Healthy Diet	Identify food products to be identified as "unhealthy" in the national context	Improved compliance to Global Strategy on Diet and Physical Activity	• NCD Unit • Nutrition Unit • Ministry of Agriculture		X				1575400	MoHS
	Levy additional tax/cess on the above identified unhealthy food products					X			200	MoHS

Sub-Strategy	Actions	Outcome Indicators	Implementation Partners	Year of Implementation					Cost (US$)	Potential Budget Source
				17	18	19	20	21		
	Enact a legislation to regulate marketing of sugar sweetened beverages and foods high in salt sugar and fat to children	Specific National level policies promoting healthy diet present	• Food and Food Processing Industry • Ministry of Trade and commerce • Nutritionist Associations • Food and Drug Administration				X		1800	MoHS
	Develop guidelines for nutrition labeling for all pre-packed and cooked food							X	3000	MoHS
	Enact a legislation to reduce levels of salt/ saturated fat, free and added sugar and to replace trans-fats in packaged foods				X				800	MoHS
	Invest in improving fruits and vegetable production and storage			X	X	X	X	X	4000	MoHS
	Harmonize the need of iodized salt program with salt reduction initiatives			X					1600	MoHS
	Promote breast feeding and supplementary nutrition programs aimed at pregnant women and children			X	X	X	X	X	4000	RCH Department; MoHS
	Ensure guidelines and mechanisms are in place to ensure food safety			X	X	X	X	X	15600	MoHS
	Initiate dialogue with Nutrition Unit and other sectors for an harmonized nutrition policy			X	X	X	X	X	0	MoHS
	Strengthen laboratory capacity for testing of food products for nutrients							X	800	MoHS
Promote Healthy Settings in various settings	Establish national guidelines for Healthy Schools, Healthy workplaces and Healthy Townships and villages	Increase in number of "settings" adopted Healthy settings approach	• Educational institutions, universities, school boards, industry partners, township and village local governments	X	X				24000	MoHS
	Implement and evaluate demonstration projects on Healthy Schools, Healthy workplaces and Healthy communities					X	X		38800	MoHS
	Disseminate widely among educational institutions and industry for their voluntary adoption							X	200	MoHS
Effectively address Outdoor and Indoor Air Pollution	Strengthen advocacy for transition to cleaner technologies and fuels (LPG, bio-gas, solar cookers, electric methanol, ethanol)	Increase in uptake of safer/cleaner alternatives	• Ministries of Energy	X	X	X	X	X	4000	MoHS

Sub-Strategy	Actions	Outcome Indicators	Implementation Partners	Year of Implementation					Cost (US$)	Potential Budget Source
				17	18	19	20	21		
	Develop and implement programs aimed at encouraging the use of improved cook-stoves, good cooking practices		• Ministry of Finance • Ministry of Urban planning • Ministry of Transport			X	X		212200	MoHS
	Use fiscal and regulatory measures to promote cleaner fuels for transport sector							X	1600	MoHS
	Conduct studies to identify share of different sources of out-door air pollution				X				10000	MoHS, WHO
	Strengthen public transport system and incentivize its use					X	X	X	1600	MoHS
	Replace in phased manner all public transport vehicles with vehicles using CNG or other cleaner fuels					X	X	X	2400	MoHS
Address effectively risk factors for road traffic injuries	Formulate and effectively implement a comprehensive legislation covering five key areas – speeding, drink-driving, helmet use, seat-belt use and child restraint	Improved compliance to national laws governing roads and road safety	• Ministry of roads • Ministry of transport, • Ministry of Law and justice	X	X	X	X	X	4000	MoHS
	Establish safety standards for vehicles and mechanisms for their regular monitoring				X	X	X	X	250900	MoHS
	Promote use of non-motorized transport by financial incentives and improved urban environment			X	X	X	X	X	3800	MoHS
	Advocate for improved design and construction of roads and their lighting			X	X	X	X	X	3800	MoHS
			TOTAL SA2 (USD)						**5715530**	

STRATEGIC AREA 3: HEALTH SYSTEM STRENGTHENING											
Sub-Strategy	**Actions**	**Outcome Indicators**	**Implementation Partners**	**Year of Implementation**					**Cost (US$)**	**Potential Budget Source**
				17	**18**	**19**	**20**	**21**		
Strengthen Primary Health Care facilities for addressing NCDs	Develop national guidelines for management of common NCDs and mental disorders at primary care level	Standard treatment Guidelines are available	• Relevant NCD Projects • NCD Unit, DPH • Medical Universities • WHO	X	X				1581300	MoHS, WB
	Include select NCD related medicines and technologies in the national essential medicine list	Increase in availability of essential technologies and medicines in primary care facilities	• NCD Unit, DPH • PSM Units, MoHS • MoHS • Regional and State Public Departments	X	X				14400	MoHS, WHO
	Make available essential technologies and medicines at primary care facilities			X	X	X	X	X	30806160	MoHS, WB
	Expand the implementation of the WHO PEN project to the whole of country			X	X	X	X	X	617200	MoHS
Strengthen linkages to secondary and tertiary care facilities	Implement demonstration projects for integrated technology based solutions including use of mHealth, eHealth, electronic medical records for NCD service provision	Decrease in treatment delays NCDs	• NCD Unit, DPH • HMIS, DPH • MoHS • Regional and State Public Health/Medical Departments • Ministry of Transport & Communications				X	X	87900	MoHS
	Make available free referral transport mechanisms for emergency care nationally				X	X	X	X	95200	MoHS, WB
	Strengthen secondary and tertiary health facilities for acute care needed for different NCDs in a phased manner			X	X	X	X	X	50000	MoHS, WB
Strengthen Cancer care	Launch a cancer screening program for common cancers	Improved access to affordable cancer care	• Cancer Project • DMS, MOHS • DPH, MOHS • NCD Unit • MRH Unit • Hospices		X	X			1600	MoHS, WHO
	Upgrade cancer treatment facilities in secondary and tertiary care facilities				X	X	X	X	200800	MoHS
	Establish palliative care in selected health facilities						X	X	597770	MoHS, WB

Sub-Strategy	Actions	Outcome Indicators	Implementation Partners	Year of Implementation					Cost (US$)	Potential Budget Source
				17	18	19	20	21		
Reduce the financial impact of NCDs on individuals and families	Consider fiscal measures including use of price control mechanisms and revision of import duties for making NCD drugs affordable especially that of cancers, insulin etc.	Reduction in financial impact due to NCDs on individuals and families	• MOHS • Ministry of Planning & Finance • Ministry of Commerce • UMFCCI • Private Entrepreneurs				X	X	2800	MoHS
	Initiate an insurance scheme to cover the population below poverty line for treatment of NCDs					X	X	X	2400	MoHS
	Establish a national fund to provide free treatment of cancers and other NCDs to patients below poverty line					X	X	X	3600	MoHS
	Promote the use of generic medicines in public health facilities			X	X	X	X	X	2000	MoHS
Strengthen capacity of Workforce to deliver NCD services	Identify/Revise competencies for all levels of health workforce based on their roles and responsibilities	Increased in quantitative and qualitative competencies among health workforce	• NCD Unit, DPH • DMS • HRH • All\Medical Universities • University of Nursing • University of Community Health • MMA • WHO	X	X				4800	MoHS
	Develop training manuals for all levels of health workforce based on above competencies				X	X			60000	MoHS
	Revise and implement revised curriculum of all cadres of health workforce to address NCDs effectively					X	X		800	MoHS
	Create a pool of institutions/trainers in public and private sector for conducting training of workforce					X			400	MoHS
	Train existing workforce on NCD activities including health promotion					X	X	X	39600	MoHS
Early detection and treatment of common NCDs	Draft national guidelines for screening for selected NCDs and conditions	Early detection of cases	• Relevant NCD Projects • NCD Unit, DPH • MOHS • Medical Universities • WHO	X					31800	MoHS, WB, WHO
	Launch a pilot project for implementing screening program based on those guidelines				X				277900	MoHS, WB
	Expand pilot projects for reduction of treatment gaps for mental disorders based on WHO mhGAP interventions			X	X	X	X	X	11200	MoHS, WB

Sub-Strategy	Actions	Outcome Indicators	Implementation Partners	Year of Implementation					Cost (US$)	Potential Budget Source
				17	18	19	20	21		
Empower persons / communities with NCDs for self/family care	Develop national guidelines on home-based care for management of NCDs	Increase in community/patient empowerment for managing NCDs	• NCD Unit • WHO • NGOs/INGOs • Civil Society Organizations			X			630400	MoHS, WB, WHO
	Encourage the formation of patient self-help groups and build their capacity					X			397200	MoHS, WB
	Establish guidelines and pilot projects for community based rehabilitation for stroke, mental disorders.						X		710800	MoHS, WB, WHO
	Strengthen consumer safety forums to ensure consumer rights						X	X	20000	MoHS, WHO
Involve private sector in provision of NCD Care	Establish guidelines/ Develop schemes for involvement of NGOs and private sector for NCDs related service provision	Higher involvement of private sector in management of NCDs	• NCD Unit, DPH • MMA • Medical Universities • WHO		X	X			11600	MoHS, WHO
	Provide appropriate training to the NGOs and PCPs for provision of services as per national standard treatment guidelines						X		3400	MoHS, WB
	Conduct pilot testing of the schemes in select districts							X	60800	MoHS
Ensure integration of NCD activities into other health programs	Expand coverage with Hepatitis B vaccine in children	Increased coverage with key NCD services	• EPI Unit, DPH Hepatitis Programme, DPH • GAVI • UNICEF	X	X	X	X	X	3800	MoHS
	Initiate immunization program with HPV vaccine			X	X	X	X	X	3800	MoHS
	Integrate risk detection and risk reduction strategies with school health programs		• School Health Unit, DPH • Diabetes Project • MRH Unit, DPH • Blindness Project • NTP, DPH • WHO • UNICEF • IUATLD • GF-ATM		X	X	X	X	3200	MoHS
	Conduct a pilot study on inclusion of diabetic retinopathy in the national blindness program					X	X	X	21400	MoHS, WB
	Initiate pilots on gestational diabetes screening program within existing antenatal care programs					X	X	X	12300	MoHS
	Initiate bi-directional screening for diabetes and tuberculosis					X	X	X	12300	MoHS, WB

Sub-Strategy	Actions	Outcome Indicators	Implementation Partners	Year of Implementation					Cost (US$)	Potential Budget Source
				17	18	19	20	21		
Strengthen trauma care facilities	Establish a roadside highway assistance network of hotlines and ambulance services for early transportation of trauma cases	Increased access to trauma care services	• Ministry of Transport & Communications • Myanmar Police Force • Injury Project • DMS,MoHS • WHO		X	X	X	X	3200	MoHS
	Strengthen trauma care units in medical colleges and tertiary facilities					X	X	X	21200	MoHS
	Train first level responders like police and ambulance drivers in pre-hospital trauma care			X	X	X	X	X	87000	MoHS, WB
Prevent Mortality due to snake bites	Supplement the production of anti-snake venom in the country	Increased access to treatment of snakebites	• Snakebite Project • NCD Unit • PSM Units, MoHS • WHO	X	X	X	X	X	103800	MoHS
	Train basic health staff in prevention of snake bites, identification of poisonous snakes and standard first aid measures			X	X	X	X	X	139000	MoHS, WB
	Improve availability of anti-snakebite venom in health facilities				X	X	X	X	33000	MoHS, WB
			TOTAL SA 3 (USD)						**36767830**	

STRATEGIC AREA 4: EVIDENCE GENERATION FOR DECISION MAKING

Sub-Strategy	Actions	Outcome Indicators	Implementation Partners	Year of Implementation					Cost (US$)	Potential Budget Source
				17	18	19	20	21		
Strengthen regular monitoring of NCD programs	Incorporate the data needs of NCD Program into existing Health Management Information System	Better monitoring of the NCD programs and initiatives	• NCD Unit MoHS		X				60300	MoHS, WB
	Develop web based system for reporting and compiling of all health facility data including by private sector for NCDs					X			10200	MoHS, WB
	Hold annual review meeting of the NCD Program Managers					X	X	X	30000	MoHS
	Develop training programs to strengthen capacity of program in program implementation and monitoring						X	X	13200	MoHS
Establish and implement sustainable surveillance systems for NCDs	Establish a National Technical Working Group on NCD Surveillance to guide all surveillance activities	Better availability of information on key parameters at national NCDs	• NCD Unit • Identified Institutions	X					600	MoHS
	Identify an institution/agency for coordination of all national NCD surveillance activities			X					400	MoHS
	Strengthen capacity for NCD surveillance in select individuals and institutions				X	X			74300	MoHS
	Conduct a survey to estimate salt intake and the source of salt in the diet as separate or integrate with existing nutrition surveys				X				13300	MoHS
	Conduct a nationally representative cause of death survey every five years		• International partners, WHO	X					13300	MoHS
	Conduct a nationally representative survey to measure the national targets for risk factor in adults						X		13300	MoHS
	Conduct next round of school based survey to measure NCD related risk factors among adolescents						X		13300	MoHS

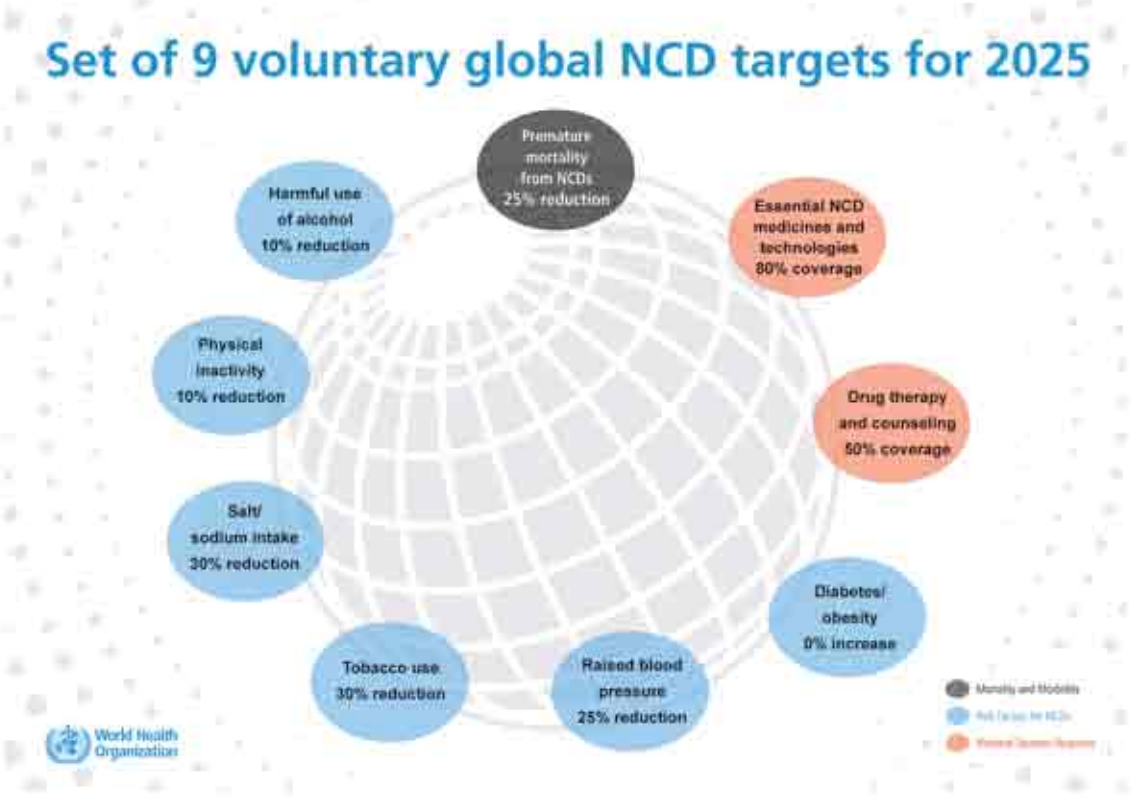
Sub-Strategy	Actions	Outcome Indicators	Implementation Partners	Year of Implementation					Cost (US$)	Potential Budget Source
				17	18	19	20	21		
	Conduct a Service Availability and Readiness Assessment including for NCDs, mental health and injuries						X		103300	MoHS
	Create and maintain a website for dissemination of all surveillance reports to public				X	X	X	X	5800	MoHS, WB
	Expand Cancer Registries in at least four sites in the country			X	X	X	X	X	23200	MoHS, WB
	Strengthen hospital based injury surveillance system in select sentinel sites				X	X	X	X	23200	MoHS, WB
Strengthen research in the priority areas of NCD prevention and Control	Conduct survey to estimate Mental Health treatment gaps	Better availability of evidence to support evidence based decision making.	• WHO, IUATLD and other international partners		X				10000	MoHS
	Hold a national consultation to identify research priorities			X					400	MoHS, WB
	Strengthen capacity of identified researchers and institutions					X			40000	MoHS, WB
	Liaise with donors/funders of research for creating a pool of resources			X	X	X	X	X	7600	MoHS, WB
	Establish an operational research group with members from departments and universities				X				3800	MoHS
	Identify and fill gaps in estimation of epidemiological and economic burden due to NCDs including mental health in Myanmar			X					10000	MoHS
			TOTAL SA 4 (USD)						**469500**	
			Grand Total (USD)						**43646560**	

Annexures

Annexure 1. Global monitoring indicators and targets

Framework Element	Target	Indicator
MORTALITY & MORBIDITY		
Premature mortality from noncommunicable disease	1. A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	1. Unconditional probability of dying between ages of 30 and 70 from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
Additional indicator		2. Cancer incidence, by type of cancer, per 100,000 population
BEHAVIOURAL RISK FACTORS		
Harmful use of alcohol	2. At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context	3. Total (recorded and unrecorded) alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol, as appropriate, within the national context 4. Age-standardized prevalence of heavy episodic drinking among adolescents and adults, as appropriate, within the national context 5. Alcohol-related morbidity and mortality among adolescents and adults, as appropriate, within the national context
Physical inactivity	3. A 10% relative reduction in prevalence of insufficient physical activity	6. Prevalence of insufficiently physically active adolescents, defined as less than 60 minutes of moderate to vigorous intensity activity daily 7. Age-standardized prevalence of insufficiently physically active persons aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent)
Salt/ sodium intake	4. A 30% relative reduction in mean population intake of salt/ sodium	8. Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years
Tobacco use	5. A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years	9. Prevalence of current tobacco use among adolescents 10. Age-standardized prevalence of current tobacco use among persons aged 18+ years
BIOLOGICAL RISK FACTORS		
Raised blood pressure	6. A 25% relative reduction in the prevalence of raised blood pressure or containg the prevalence of raised blood pressure, according to national circumstances	11. Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure 2140 mmHg and/or diastolic blood pressure > 90mmHg) and mean systolic blood pressure
Diabetes and obesity	7. Halt the rise in diabetes & obesity	12. Age-standardized prevalence of raised blood glucose/ diabetes among persons aged 18+ years (defined as fasting plasma glucose concentration > 7.0 mmol/l (126 mg/dl) or on medication for raised blood glucose) 13. Prevalence of overweight and obesity in adolescents (defined according to the WHO growth reference for school - aged children and adolescents, overweight - one standard deviation body mass index for age and sex, and obese - two standard deviations body mass index for age and sex) 14. Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as body mass index > 25 kg/ m^2 for overweight and body mass index > 30kg/m^2 for obesity)
Additional Indicators		15. Age-standardied mean proportion of total energy intake from saturated fatty acids in persons aged 18+ years 16. Age-standardized prevalence of persons (aged 18+ years) consuming less than five total servings (400 grams) of fruit and vegetables per day 17. Age-standardized prevalence of raised total cholesterol among persons aged 18+ years (defined as total cholesterol > 5.0 mm0l/l or 190 mg/dl); and mean total cholesterol concentration

Framework Element	Target	Indicator
NATIONAL SYSTEMS RESPONSE		
Drug therapy to prevent heart attakcs and strokes	8. At least 50% of eligible people receive drug therapy and counselling (including glycaemic contro) to prevent heart attacks and strokes	18. Proportion of eligible persons (defined as aged 40 years and older with a 10-years cardiovascular risk ≥ 30% including those with existing cardiovascular disease) receiving drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes
Essential noncommunicable disease medicines and basic technologies to treat major noncommunicable diseases	9. An 80% availability of the affordable basic technoligies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities	19. Availability and affordability of quality, safe and efficacious essential noncommunicable disease medicines, including generics, and basic technologies in both public private facilities
Additional indicators		20. Access to palliative care assessed by morphine - equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer 21. Adoption of national policies that limit saturated fatty acids and virtually eliminate partially hydrognated vegetable oils in the food supply, as appropritate, within the national context and national programmes 22. Availability, as appropriate, if cost - effective and affordable, of vaccines against human papillomavirus, according to national programmes and policies 23. Policies reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans fatty acids, free sugars, or salt 24 Vaccination coverage against hepatitis B virus monitored by number of third doses of Hep-B vaccine (HepB3) administered to infants 25 Proportion of women between the ages of 30-49 screened for cervical cancer at least once, or more often, and for lower or higher age groups according to national programmes or policies


Set of 9 voluntary global NCD targets for 2025
Premature mortality from NCDs 25% reduction
Harmful use of alcohol 10% reduction
Essential NCD medicines and technologies 80% coverage
Physical inactivity 10% reduction
Drug therapy and counseling 50% coverage
Salt/ sodium intake 30% reduction
Diabetes/ obesity 0% increase
Tobacco use 30% reduction
Raised blood pressure 25% reduction
World Health Organization

Annexure 2. Trends of Risk Factors for NCD - Myanmar (2009-2014)

	2009[1]			2014[2]		
	M	F	T	M	F	T
Age Group (years)	15-64	15-64	15-64	25-64	25-64	25-64
Sample Size	2862	4567	7429	3079	5678	8757
Proportion of people who use smoked tobacco currently (%)	44.8	7.8	22.0	43.8	8.4	26.1
Proportion of people who use Smokeless tobacco currently (%)	51.4	16.1	29.7	62.2	24.1	43.2
Proportion of people with alcohol consumption in last 30 days (%)	38.1	1.5	19.8	31.2	1.5	12.9
Proportion of poeple with intake of < 5 combined daily servings of fruits and vegetables (%)	89.8	90.6	90.3	85.2	87.9	86.6
Proportion of people with Inadequate/ Low Physical actitvity (%)	10.4	14.1	12.7	12.5	18.8	15.7
Prevalence of raised blood pressure (%)	31.0	29.3	30.0	24.7	28.0	26.4
Prevalence of Overweight (%)	17.7	30.3	25.5	14.1	30.8	22.4
Prevalence of raised fasting blood sugar (%)	Not Done	Not Done	Not Done	4.7	7.0	5.9

Soure :

[1] World Health Organization (2011) Noncommunicable Disease Risk Factor Survey Myanmar 2009. Delhi

[2] Ministry of Health, World Health Organization and World Diabetes Federation. Report on National Survey on Diabetes mellitus and risk factors for noncommunicable diseases in Myanmar (2014), Yangon.

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