

National Strategic Plan for Non-Communicable Disease



Medium Term Strategic Plan to Further Strengthen the
NCD Prevention and Control Program in Malaysia (2016-2025)

Department of Public Health
Ministry of Health Malaysia
2016

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First edition 2016

Published by:

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ISBN _____

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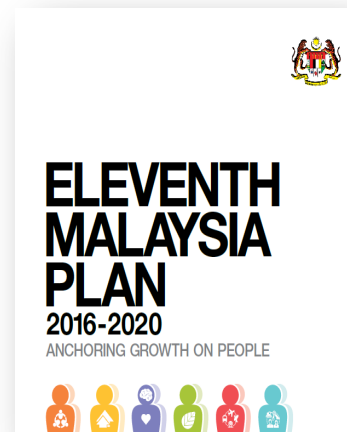
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EXCERPT FROM THE 11TH MALAYSIA PLAN 2016-2020

“Focus area A - Achieving universal access to quality healthcare”

Good health is essential for a good quality of life. Consequently, the Government remains committed to achieving universal access to quality healthcare during the Eleventh Plan by continuing efforts to improve the fundamentals of the health system. This means that every Malaysian will have equal access to affordable and good quality healthcare services, whether delivered by public or private providers.



“Intensifying Collaboration with Private Sector and NGOs to Increase Health Awareness”

Strategy A4 of the 11th Malaysia Plan 2016-2020 focused on measures that will be undertaken to reduce communicable diseases (CD) and non-communicable diseases (NCD), which includes the provision of preventive healthcare services and the promotion of a healthy lifestyle, where the role of the private sectors and non-governmental organisations (NGOs) are emphasised. The private sector will be encouraged to undertake corporate social responsibility (CSR) programmes and to collaborate with the Government in research and development. NGOs will be encouraged to provide health advocacy activities, health screening, and early health interventions, as well as to work with the private sector in carrying out health-related CSR programmes. Community participation in health promotion programmes, such as the use of public parks and recreational areas to promote healthy lifestyles will be encouraged. Intervention programmes where the community will be trained to promote health, such as KOSPEN, will continue to address lifestyle related diseases.

MESSAGE FROM THE MINISTER OF HEALTH MALAYSIA

It is a privilege and honour for me to present the 10-year National Strategic Plan for Non-Communicable Diseases (NSP-NCD) 2016-2025. This Strategic Plan follows the earlier NSP-NCD 2010-2014 and is presented at the right moment when the world recognises the impending danger of NCDs and their impact on economy as well as productivity of the nation.

The NSP-NCD was developed based on current global themes and mandates from the World Health Organization (WHO). This latest edition of the NSP-NCD will continue to provide the over-arching framework for strengthening NCD prevention and control in Malaysia. This Strategic Plan is in-line with the Global Action Plan for the Prevention and Control of Non-Communicable Diseases 2013-2020.

The NCD situation in Malaysia is like that of an epidemic and must be dealt with like any Public Health Emergency. The Ministry of Health (MOH) has taken the lead in the formulation of this Strategic Plan to combat NCDs where the risk factors are already known and well described. The emphasis on whole-of-government and whole-of-society approach to NCDs is important as health is not only MOH's responsibility but also everyone's responsibility. It relies on the support of all stakeholders and therefore I urge everyone to work together to implement the recommended interventions and make Malaysia a healthier place to live in.

Malaysia aspires to be a developed nation by 2020 and a great nation by 2050. Its greatest asset is the people, we Malaysians. We have to be a Healthy Nation first in order to reach those targets. Hence, we have to act now to prevent our population suffering from disability and premature deaths due to NCDs, including for our children who will reach early adulthood soon. This is the healthy future that we want for all Malaysians.

Datuk Seri Dr S. Subramaniam

Minister of Health

Malaysia

MESSAGE FROM THE SECRETARY GENERAL, MINISTRY OF HEALTH MALAYSIA

I am delighted to share my thoughts on our National Strategic Plan for Non-Communicable Diseases (NSP-NCD) 2016-2025. Facts and figures from our latest population-based health survey known as the National Health and Morbidity Survey (NHMS) in 2015 showed that the prevalence of NCD risk factors continue to rise. We now have an estimated 3.5 million adult Malaysians living with diabetes, 6.1 million with hypertension, 9.6 million with hypercholesterolemia and 3.3 million with obesity.

The rapid increase in the number of people suffering from NCDs presents one of the biggest challenges to the current healthcare system in Malaysia. Although much has been done for NCD prevention and control, there is scope for a more coordinated approach for better health returns. This will require multi-sectoral cooperation from government, public, private and communities to build up an environment that enables healthy living that makes healthier choices easier for Malaysians.

NCDs are preventable. It requires a shift in people's attitudes and preferences. The current behavior such as the detrimental eating patterns, sedentary lifestyles and smoking among many Malaysians adds to the increasing burden of NCD in this country. We must change this. Health is no longer the business of Ministry of Health alone. It has to be everyone's business. This Strategic Plan calls for concerted efforts on addressing these risk factors and sets out directions that will shape an environment that is conducive to NCD prevention and control.

Although the challenges we face due to NCDs may seem overwhelming, I am confident that the momentum that has been initiated by these and other efforts will continue to build and spread throughout the whole-of-government and society as we come together to fight these diseases and ensure that our communities promote healthy lifestyles.

Dato' Seri Dr Chen Chaw Min

Secretary General

Ministry of Health Malaysia

MESSAGE FROM THE DIRECTOR GENERAL OF HEALTH MALAYSIA

I am pleased to present the new edition of National Strategic Plan for Non-Communicable Diseases (NSP-NCD) 2016-2025 which sets out our role in addressing the significant and increasingly challenging threats posed by NCDs in Malaysia. I wish to congratulate the Public Health Division for the successful publication of this document.

There is no doubt that the lifestyle in Malaysia has changed over the years as a result of urbanisation and globalisation. These in turn give rise to the dual burden of diseases; increasing incidences of overweight, obesity and NCDs as well as micronutrient deficiencies. The number of people with NCDs such as diabetes, hypertension, cancers, and heart diseases keeps growing bringing the 'Health of the Nation' is at a critical crossroad.

NCDs are the leading causes of death and morbidity among adults in Malaysia, which have resulted in heavy emotional as well as financial toll on all of us. The increasing medical cost to treat patients with NCDs is of serious concern. If the trend of NCDs continue to rise, healthcare costs will not only be unsustainable, the human costs would be unimaginable.

Over the next 10 years, we will focus on five strategic priorities that are critical to the success in reducing the burden of NCDs in Malaysia. This strategic plan is built on current prevention themes, while drawing references from learnings of the earlier NSP-NCD 2010-2014. The Strategic Plan calls for whole-of-government and whole- of-society approaches in the prevention and control on NCDs. It spells out the need to address common risk factors of smoking, poor nutrition, physical inactivity and unhealthy use of alcohol, and improved disease control via re-oriented integrated healthcare services and personalised healthcare.

The Ministry of Health is committed in reducing the burden of NCDs and to work in partnership as a nation to save our people from this disease burden. Let us work together to implement this Strategic Plan so that we can realise our vision of a truly healthy nation.

Datuk Dr Noor Hisham Abdullah
Director General of Health Malaysia

EXECUTIVE SUMMARY

This National Strategic Plan for Non-Communicable Diseases (NSP-NCD) 2016-2025 is a continuation of the previous NSP-NCD 2010-2014. This Strategic Plan is evidence of the commitment of the Government in reducing the burden of Non-Communicable Diseases (NCDs) in Malaysia. The main focus of this Strategic Plan is on three types of NCD i.e. cardiovascular diseases, diabetes and cancer, and on four shared NCD risk factors i.e. tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol.

The NSP-NCD 2016-2025 has five main objectives, based on the Global Action Plan for the Prevention and Control of NCDs 2013-2020:

1. To strengthen national capacity, leadership, governance, multi-sectoral action and partnerships to accelerate country response for the prevention and control of NCDs.
2. To reduce modifiable risk factors for NCDs and underlying social determinants through creation of health-promoting environments.
3. To strengthen and orient health systems to address the prevention and control of NCDs and the underlying social determinants through people-centred primary health care and universal health coverage.
4. To promote and support national capacity for high-quality research and development for the prevention and control of NCDs.
5. To monitor the trends and determinants of NCDs and evaluate progress in their prevention and control.

An integrated approach is essential for effective implementation of the plan, and therefore the NSP-NCD 2016-2025 will be in-line, includes or over-arches the following actions plans and initiatives:

1. National Plan of Action for Nutrition of Malaysia (NPANM) III 2016-2025
2. National Strategic Plan for Tobacco Control 2015-2020
3. Policy Options to Combat Obesity in Malaysia 2016-2025
4. Salt Reduction Strategy to Prevent and Control NCD For Malaysia 2015-2020
5. National Strategic Plan for Active Living 2016-2025
6. Malaysia Alcohol Control Action Plan 2013-2020
7. National Strategic Plan for Cancer Control Program 2016-2020
8. Strengthening Chronic Disease Management At Primary Care Level through the Enhanced Primary Health Care (EnPHC) initiative
9. *KOmuniti Sihat PERkasa Negara* (KOSPEN) initiative

1. INTRODUCTION

Non-Communicable Diseases (NCDs), mainly cardiovascular diseases, cancers, chronic respiratory diseases and diabetes, are the biggest cause of deaths worldwide. More than 36 million die annually from NCDs (63% of global deaths), including 14 million people who die too young before the age of 70. More than 90% of these premature deaths from NCDs occur in low- and middle-income countries, and could have been largely prevented. Most premature deaths are linked to common risk factors, namely tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol.

The emergence of NCDs as the leading cause of death globally and including Malaysia were due to many changes occurred in socio-economic determinants in health such as globalisation of trade and marketing, lifestyle changes, shift of socio-demographic pattern, improved economic affordability, ease of travelling, economic transition and movement of unhealthy products, leading to high risk behavioral changes and increase metabolic risk factors.

Tobacco use, harmful alcohol use, unhealthy diet as consumption of less fruits and vegetables, high salt and trans-fat consumption, and physical inactivity are the common behaviorally modifiable risk factors of NCDs while overweight and obesity, raised blood pressure, raised blood glucose and abnormal blood lipids are the common metabolic risk factors.

Scientific knowledge demonstrates that the premature deaths due to NCD are largely preventable by enabling health systems to more effectively and equitably meet the healthcare needs of people with NCDs, and by influencing public policies in sectors outside of health that tackles the shared NCD risk factors described above.

This document follows the NSP-NCD 2010-2014 that was published in December 2010. In line with the earlier document, the main goal of the National Strategic Plan is to provide a roadmap for all relevant stakeholders in Malaysia to reduce the preventable and avoidable burden of morbidity, mortality and disability due to NCDs by means of multi-sectoral collaboration and cooperation at national and state levels. It is hoped that our population would reach the highest attainable standards of health and productivity at every age and NCDs are no longer a barrier to our well-being and negatively impacts Malaysia's socio-economic development.

The main focus of this document is on three types of NCD i.e. cardiovascular diseases, diabetes and cancer, and on four shared NCD risk factors i.e. tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol.

2. NSP-NCD 2010-2014

2.1 BACKGROUND

The National Health and Morbidity Surveys (NHMS) and the Burden of Disease Studies provide the evidence of the increasing burden of NCD and NCD risk factors in Malaysia. The National Strategic Plan for Non-Communicable Diseases (NSP-NCD) 2010-2014 was developed in 2010 to strengthen Malaysia's response to NCD prevention and control¹. The Cabinet chaired by the Prime Minister on 17 December 2010 had approved this document.

The NSP-NCD acknowledges that national policies in sectors other than health have a major bearing on the risk factors for NCD because the broad determinants of NCDs largely fall outside of the health domain. To support the implementation of activities under the NSP-NCD, a cabinet level committee was established, "Cabinet Committee for A Health Promoting Environment" (*Jawatankuasa Kabinet bagi Persekitaran Hidup yang Sihat or JKPHS*). This committee is chaired by the Deputy Prime Minister of Malaysia and comprised of 11 ministers:

1. Minister of Health
2. Minister of Education
3. Minister of Higher Education
4. Minister of Information, Communications, Arts & Culture
5. Minister of Rural & Regional Development
6. Minister of Agriculture and Agro-based Industry
7. Minister of Youth & Sports
8. Minister of Human Resource
9. Minister of Domestic Trade, Co-operatives and Consumerism
10. Minister of Housing and Local Governments
11. Minister of Women, Family and Social Affairs

The main terms of reference of this Cabinet Committee is to determine policies that creates a living environment that supports positive behavioural changes of populations of Malaysia towards healthy eating and active living.

¹ National Strategic Plan for Non-Communicable Disease (NSP-NCD) 2010-2014. Available at <http://www.moh.gov.my/index.php/pages/view/115>

2.2 ANALYSIS OF THE IMPLEMENTATION OF NSP-NCD 2010-2014

An evaluation of the NSP-NCD 2010-2014 was conducted in 2014 and 2015 by an external consultant through an Approved Program of Work (APW) under the World Health Organisation (WHO) Program Budget 2014-2015.² The first part of the evaluation in 2014 was to develop the tools for monitoring and evaluation, and to identify the required data sources. A logic framework was developed as part of the process. The second part of the evaluation in 2015 was to incorporate relevant data into the tools.

In summary, the evaluation reported uneven progress in achieving the stated objectives of the NSP-NCD 2010-2014. A SWOT analysis is shown in **Table 2.1**. Lack of additional and dedicated funding for the implementation of the NSP-NCD 2010-2014 may also have brought about limited progress. Only RM4 million was approved under MOH *Dasar Baru* for the implementation of activities under the NSP-NCD 2010-2014. This additional new funding was allocated solely for a new community-based NCD risk factor intervention initiative called MyNCDP-1M, the precursor to the current KOSPEN initiative (see **Section 5**).

Table 2.1 SWOT Analysis of NSP-NCD 2010-2014

<p>Strength</p> <ul style="list-style-type: none"> a) The NSP-NCD consolidates all programs on prevention of NCD in one document. b) The unification of “whole-of-government” and multi-sectoral involvement of other agencies on prevention of NCD. c) Provides the overall framework on strategies to prevent NCDs in Malaysia. 	<p>Weakness</p> <ul style="list-style-type: none"> a) Lack of indicators and evaluation criteria. b) No specific target for each strategy outlined. c) No specific measurable achievements in each strategy.
<p>Opportunity</p> <ul style="list-style-type: none"> a) Development of public-private partnerships. b) Document recognised worldwide and set as an example by WHO. c) Provided the mandate to implement policies and programs relating to prevention and control of NCDs. 	<p>Threat</p> <ul style="list-style-type: none"> a) Lack of support from other agencies. b) Political change may affect the direction of the overall agenda.

² The report is available upon request from the NCD Section, Disease Control Division, MOH

2.3 BURDEN OF NCD IN MALAYSIA

NCDs are already the main cause of death in Malaysia and the biggest contributor in terms of disability life-years (DALYs)³ (Figure 2.1)

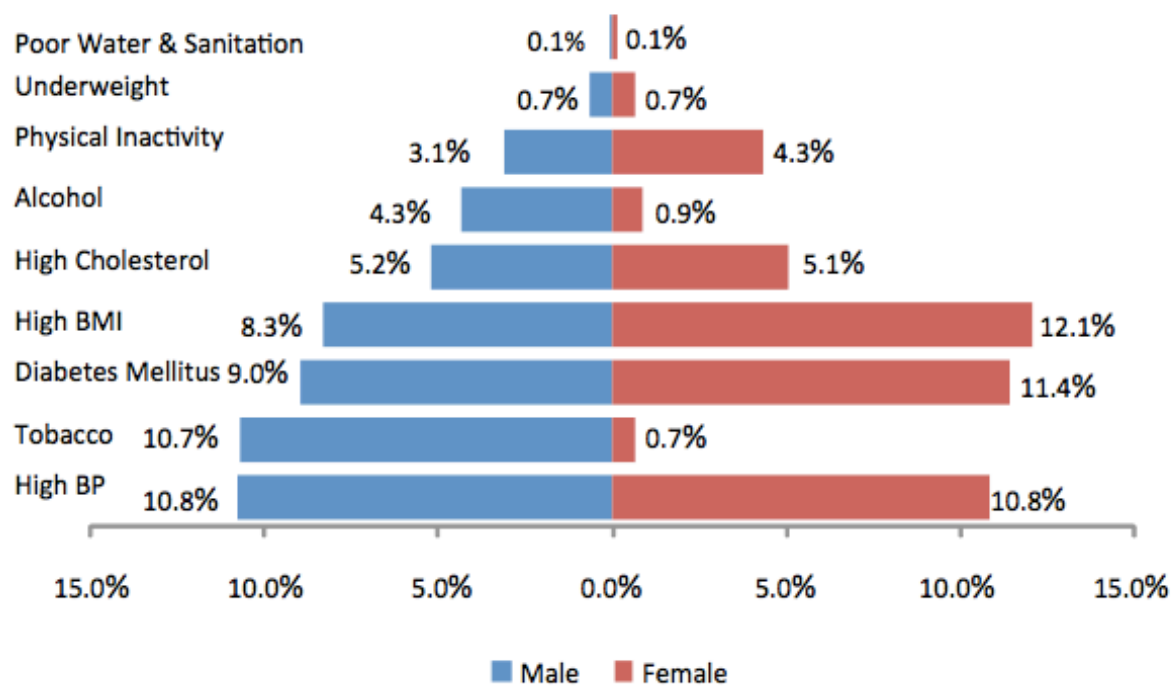


Figure 2.1 DALYs attributable to risk factors, Malaysia 2008

³ Noor Azah D, Mohd Azahadi O, Umami Nadiah Y, Teh Chien Huey. 2014. Burden of Disease Study: Estimating mortality & cause of death in Malaysia. Institute of Public Health

The overall increasing or high prevalence of NCD risk factors will further add to the burden of disease of NCDs in Malaysia. **Table 2.2** shows the trend of selected NCD risk factors for Malaysian adults age 18 years and above from 2006 to 2015⁴.

Table 2.2 Prevalence of selected NCD risk factors in Malaysia for adults age 18 years and above, 2006 to 2015

NCD risk factors	2006 (%)	2011 (%)	2015 (%)
Diabetes Mellitus	11.6	15.2	17.5
Hypertension	32.2	32.7	30.3
Hypercholesterolemia	28.2	43.9	47.7
Overweight	29.1	29.4	30.0
Obesity	14.0	15.1	17.7
Physical Activity	56.3	64.3	66.5
Smoking*	21.5	23.1	22.8
Alcohol (Current drinker)	11.4	11.6	7.7

***Note:** Data for population 15 years and above

MOH has made projections on the prevalence of diabetes in Malaysia based on available data firstly in 2006, and the projections were further revised in 2011 and 2015 as data from the NHMS 2011 and NHMS 2016 became available. **Figure 2.2** shows that each revision of the projection pushed the estimated prevalence of diabetes even further upwards. It is currently estimated that by year 2025, our diabetes prevalence will be about 31.3% for adults age 18 years and above, with an estimated population of 7 million adults with diabetes (both diagnosed and undiagnosed).

⁴ Data from the National Health and Morbidity Surveys 2006, 2011 and 2016. The full reports are available at <http://www.iku.gov.my/> under "Our Surveys"

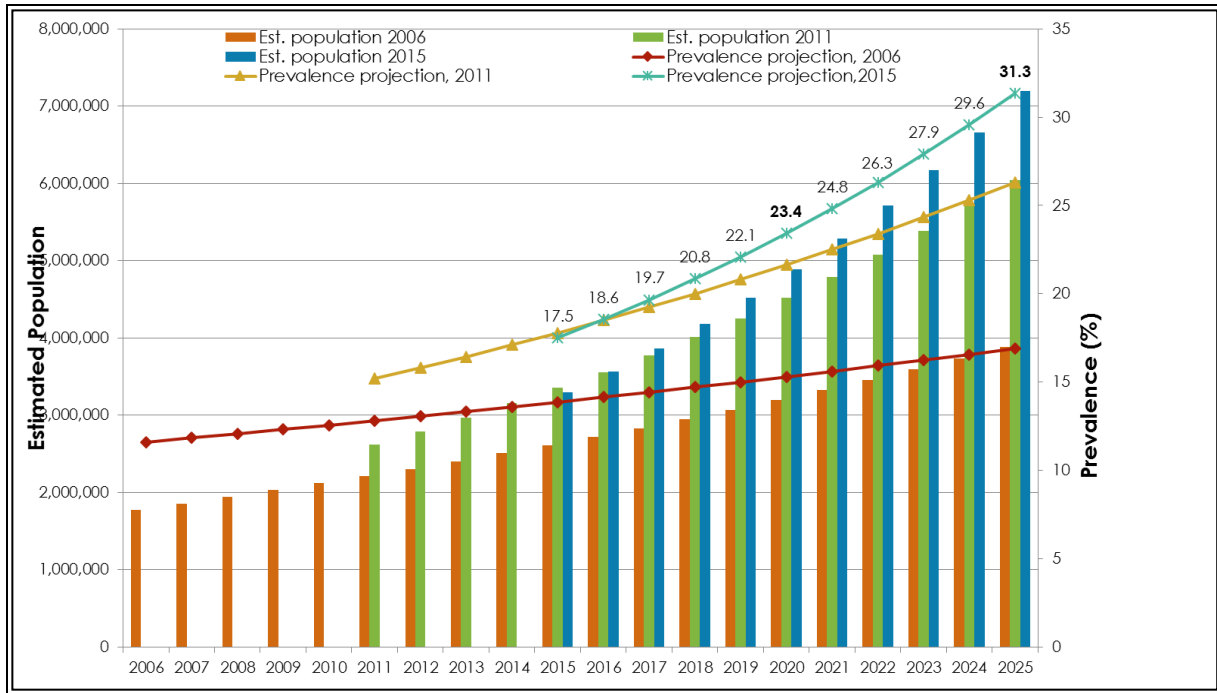


Figure 2.2 Projections on the prevalence of diabetes in Malaysia for year 2025

The impact of diabetes on society is substantial. The true economic burden of diabetes should incorporate not just the cost to the healthcare system but also economic losses due to loss of productivity and even the wellbeing of patients. Although Malaysia has a parallel public and private system, the majority of treatment for chronic diseases is provided by the public health system that is heavily subsidised by the government.

The cost of diabetes to the nation is significant and a macro-economic study done in 2011 showed the cost at approximately RM 2 billion, potentially representing 13% of the healthcare budget for the year 2011. This represents the cost of treating diabetes itself and also that of its complications. The sensitivity analysis reflects that this national cost could be as high as RM 3.52 billion; or as low as RM 1.44 billion. If societal costs were included, this cost would be even higher.

Table 2.3 shows the age-adjusted prevalence of selected NCD risk factors for the 10 ASEAN countries. Japan was included as a comparator for a developed country. As Malaysia aspires to be a developed nation by year 2020, our health indices for NCD risk factors unfortunately is still far behind compared to Japan. Among the ASEAN countries, Malaysia has the highest prevalence of diabetes and obesity.

Table 2.3 Prevalence of selected NCD risk factors for ASEAN countries and Japan⁵

	High Blood Sugar (2014)	Raised Blood Pressure (2014)	Raised Total Cholesterol (2008)	Obesity (2014)	Smoking (2011)	Physical Inactivity (2010)
MALAYSIA	9.9	22.1	15.4	13.3	21.9	52.3
Singapore	8.5	14.1	17.4	6.2	-	33.1
Thailand	9.7	21.3	16.7	8.5	23.5	14.8
Indonesia	8.7	23.3	7.7	5.7	34.9	23.7
Philippines	7.5	22.1	10.5	5.1	26.5	15.8
Viet Nam	6.5	22.2	8.2	3.6	23.1	23.9
Myanmar	7.1	23.7	6.4	2.9	22.0	9.9
Cambodia	8.2	24.4	5.8	3.2	21.8	10.3
Laos	8.6	24.1	6.7	3.5	25.7	10.3
Brunei	11.6	19.3	16.7	18.1	18.1	-
Japan	5.7	16.9	15.8	3.3	21.8	33.8

Note: The data displayed were percentage of age-adjusted prevalence rate (%)

⁵ Global Status Report on Non-Communicable Diseases 2014, World Health Organization

3. NSP-NCD 2016-2025

3.1. BACKGROUND

At the 65th World Health Assembly in May 2013, the Assembly adopted the Global Action Plan for the Prevention and Control of Non-Communicable Diseases (GAP-NCD) 2013-2020.⁶ At the same meeting, the Assembly also adopted the Global Monitoring Framework for NCD (GMF-NCD) with 25 indicators and nine voluntary global targets.⁷ The development of this document relies heavily on the GAP-NCD 2013-2020 and adopts the following overarching principles:

➤ **Life-course approach**

Opportunities to prevent and control NCDs occur at multiple stages of life; interventions in early life often offer the best chance for primary prevention. Policies, plans and services for the prevention and control of NCDs need to take account of health and social needs at all stages of the life course, starting with maternal health, including preconception, antenatal and postnatal care, maternal nutrition and reducing environmental exposures to risk factors, and continuing through proper infant feeding practices, including promotion of breastfeeding and health promotion for children, adolescents and youth followed by promotion of a healthy working life, healthy ageing and care for people with NCDs in later life.

➤ **Empowerment of people and communities**

People and communities should be empowered and involved in activities for the prevention and control of NCDs, including advocacy, policy, planning, legislation, service provision, monitoring, research and evaluation.

➤ **Evidence-based strategies**

Strategies, programs and activities for the prevention and control of NCDs need to be based on latest scientific evidence and/or best practice, cost-effectiveness, affordability and public health principles, taking local socio-ethnic-cultural considerations into account.

➤ **Multi-sectoral action**

It should be recognised that effective NCD prevention and control require leadership, coordinated multi-stakeholder engagement for health both at government level and at the level of a wide range of stakeholders, with such engagement and action including,

⁶ http://www.who.int/nmh/events/ncd_action_plan/en/

⁷ http://www.who.int/nmh/global_monitoring_framework/en/

as appropriate, health-in-all policies and whole-of-government approaches across sectors such as health, agriculture, communication, education, employment, energy, environment, finance, food, foreign affairs, housing, justice and security, legislature, social welfare, social and economic development, sports, tax and revenue, trade and industry, transport, urban planning and youth affairs and partnership with relevant civil society and private sector entities.

3.2. NCD TARGETS FOR MALAYSIA

The national targets for Malaysia by year 2025 are shown in **Table 3.1**. This was developed based on the comprehensive global monitoring framework, including 25 indicators, and a set of nine voluntary global targets for the prevention and control of NCDs.⁸

Table 3.1 NCD Targets for Malaysia 2025

Indicator	Global target	Malaysia	
		Baseline	Target (2025)
1. Risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.	25% relative reduction	20%	15%
2. Prevalence of current tobacco use in person aged 15+ years	30% relative reduction	23%	15%
3. Mean population intake of sodium	30% relative reduction	8.7 gm	6.0 gm
4. Prevalence of insufficient physical activity	10% relative reduction	35.2%	30.0%
5. Harmful use of alcohol (prevalence of Heavy Episodic Drinking – HED)	10% relative reduction	≤1.2%	≤1.2%
6. Prevalence of raised blood pressure	25% relative reduction	32.2%	26.0%
7. Prevalence of diabetes and obesity	Halt the rise	≤15%	≤15%

⁸ Global Action Plan for the Prevention and Control of NCDs 2013-2020; Appendix 2, available at http://www.who.int/nmh/events/ncd_action_plan/en/

Malaysia has selected seven indicators with targets as the major NCD targets for the NSP-NCD 2017-2025, and the targets have been set in line with voluntary global targets. The baseline data was determined as follows:

- Indicator 1 was determined based on WHO estimates for 2010.⁹
- Indicator 2, 4, 5, 6 and 7 was determined from the results of the National Health and Morbidity Survey (NHMS) 2011.¹⁰
- Indicator 3 was based on a survey of a selected population (healthcare providers) using 24-hour urine conducted in 2011-2012.¹¹

The targets for year 2025 was determined based on the global targets; however some of the numbers have been adjusted (or rounded up) so as to make it easier to be remembered.

Indicators relating to “National Systems Response” to NCDs have not been included because in general the population is not faced with issues on accessibility and availability on first line clinical management of NCDs. Malaysia is more focused on issues relating to delivery of quality of care.

3.3. OBJECTIVES OF NSP-NCD 2016-2025

The NSP-NCD 2016-2025 has five main objectives, based on the Global Action Plan for the Prevention and Control of NCDs 2013-2020:

1. To strengthen national capacity, leadership, governance, multi-sectoral action and partnerships to accelerate country response for the prevention and control of NCDs.
2. To reduce modifiable risk factors for NCDs and underlying social determinants through creation of health-promoting environments.
3. To strengthen and orient health systems to address the prevention and control of NCDs and the underlying social determinants through people-centred primary health care and universal health coverage.
4. To promote and support national capacity for high-quality research and development for the prevention and control of NCDs.
5. To monitor the trends and determinants of NCDs and evaluate progress in their prevention and control.

⁹ Global Status Report on NCD 2014; report available at <http://www.who.int/nmh/publications/ncd-status-report-2014/en/>

¹⁰ NHMS 2011; report available at <http://www.iku.gov.my/> under “Our Surveys”

¹¹ Rashidah *et al.* 2014. Sodium intake among normotensive health staff assessed by 24-hour urinary excretion: A cross-sectional study. *Mal J Nutri.* 20(3):317-26

4. OPERATIONALISING NSP-NCD 2016-2025

4.1. BACKGROUND

In operationalising the earlier NSP-NCD 2010-2014 and following up on earlier activities prior to 2010, several specific “Action Plan” documents and initiatives relating to NCDs and NCD risk factors were developed and published by MOH. An integrated approach is essential for effective implementation of the plan, and therefore the NSP-NCD 2016-2025 will over-arch the following seven actions plans and initiatives:

1. National Strategic Plan for Tobacco Control 2015-2020
2. Policy Options to Combat Obesity in Malaysia 2016-2025
3. Salt Reduction Strategy to Prevent and Control NCD For Malaysia 2015-2020
4. National Strategic Plan for Active Living 2016-2025
5. Malaysia Alcohol Control Action Plan 2013-2020
6. National Strategic Plan for Cancer Control Program 2016-2020
7. Strengthening Chronic Disease Management At Primary Care Level through the Enhanced Primary Health Care (EnPHC) initiative

Specifically to Policy Options to Combat Obesity in Malaysia 2016-2025, the activities are in line with the National Plan of Action for Nutrition of Malaysia (NPANM) III 2016-2025¹², a 10-year plan to address food and nutrition challenges in the country using trans- and multi-sectoral approaches. The targets and strategies of NPANM III are in accordance to international targets, such as Global Nutrition Target 2025 and various plans of action and framework at international and local level. NPANM III underlines the importance of nutrition in enhancing population health, preventing and controlling diet-related diseases and strengthening food and nutrition security.

One of the three main objectives of NPANM III is to reduce diet related NCDs, through an Enabling Strategy called preventing and controlling obesity and diet-related NCDs. Implementation of the activities under NPANM III is spearheaded by MOH under the purview of the National Coordinating Committee of Food and Nutrition (NCCFN) and also the Food Safety and Nutrition Council. The members of these committees are representatives from relevant ministries and government agencies, research institutions, academia, professional bodies, non-government organisations and food industries.

¹² nutrition.moh.gov.my/wp-content/uploads/2016/12/NPANM_III.pdf

4.2. SUMMARY OF ACTION PLAN AND INITIATIVES

4.2.1. National Strategic Plan for Tobacco Control 2015-2020

As a member to the Framework Convention on Tobacco Control (FCTC), the National Strategic Plan for Tobacco Control has been developed to ensure the smoking issue ends with a smoking prevalence target of less than 5% and is known as the end of the game (The End Game). It is in line with the country's commitment to the FCTC's treaty since 2005 and to ensure the country's desire to achieve the Global NCD targets by 2025 and the End Game.

This plan outlines the strategies according to MPOWER by WHO; **M**onitor tobacco use and prevention policies, **P**rotect people from tobacco smoke, **O**ffer help to quit tobacco use, **W**arn about the dangers of tobacco, **E**nforce bans on tobacco advertising, promotion and sponsorship and **R**aise taxes on tobacco. It denotes the active involvement of inter-ministries and multi-sectoral in achieving the target: A Smoke Free Generation.

The document is available at www.moh.gov.my/index.php/pages/view/115.

4.2.2. Policy Options to Combat Obesity in Malaysia 2016-2025

The rise in the prevalence of obesity in the community calls for immediate actions to combat obesity in Malaysia. In 2014, the Minister of Health requested the formation of a national-level task force. This task force was chaired by the Deputy Director General of Health (Public Health) MOH and members comprised of various experts from the government, universities, professional bodies and NGOs.

This documents outlines the priorities of the potential policy options to address obesity in Malaysia. Based on a prioritisation and feasibility exercise, the document lists 48 policy options across three settings: (i) schools: 7 policies; (ii) higher learning & workplace: 11 policies; and (iii) general setting: 30 policies. As stated earlier, the policy options are in line with National Plan of Action for Nutrition of Malaysia (NPANM) III 2016-2025¹³.

Further information can be obtained from the Nutrition Division MOH.

4.2.3. Salt Reduction Strategy to Prevent and Control NCD For Malaysia 2015-2020

Salt reduction strategy is the simplest and most cost effective measure for reducing cardiovascular diseases because of its high impact on health, high feasibility and low implementation costs. Without strategic interventions to reduce salt intake, we will likely see an increase in the prevalence of hypertension and potentially more fatalities resulting

¹³ nutrition.moh.gov.my/wp-content/uploads/2016/12/NPANM_III.pdf

from cardiovascular diseases. Based on Malaysia's latest burden of disease study, high blood pressure is estimated to contribute to 42.2% of deaths and 21.6% of disability adjusted life years (DALY), the largest contributor for both men and women.

The general objective of this Salt Reduction Strategy is to promote, educate and collaborate with all related stakeholders to reduce salt intake among the Malaysian population, working towards achieving the 30% reduction of the average salt intake (from 8.7 g/day to 6.0 g/day) of the adult population by year 2025. Based on the major sources of salt/sodium in Malaysia, modification of the population's behaviour would have the biggest impact, but unfortunately the interventions would be the most challenging. Through the M-A-P strategies (Monitoring-Awareness-Product), Malaysia hopes to build upon existing work in a more systematic manner to strengthen current interventions.

The document is available at www.moh.gov.my/index.php/pages/view/115.

4.2.4. National Strategic Plan for Active Living 2016-2025

The National Strategic Plan for Active Living (NASPAL) is expected to intensify the continuity and structure of NCD prevention and control programs and activities in Malaysia. NASPAL provides a more holistic approach in the physical activity promotion programs and activities given that NASPAL outlines strategies not only for government and health sectors but also in collaboration of non-government and non-health sectors. Public health concepts particularly from the work of WHO have been adopted and utilised in the formulation of NASPAL.

NASPAL contains six key thrusts in creating a healthy and active community:

- (1) To strengthen public policies that support active living
- (2) To expand appropriate environments
- (3) To increase public motivation and understanding through public education
- (4) To intensify behavior change programs
- (5) To enhance partnerships & collaboration
- (6) To strengthen evaluation, monitoring & research

The six key thrusts will focus on strategies involving multi-sectors such as Federal Government, corporate/business industries, learning institutions, transportation, health sectors as well as media. The evidence-based strategies are outlined to promote physical activity through implementation and monitoring in a more efficient manner in four key settings: education, community, workplace and healthcare.

The document is available at www.moh.gov.my/index.php/pages/view/115.

4.2.5. National Action Plan: Prevention and Harmful Use of Alcohol 2013-2020

The main objective of this National Action Plan: Prevention and Harm Reduction of Alcoholism (PeTA) 2013-2020 is to raise public awareness about the harm of alcohol, to be responsible for their own health, and to prevent and reduce harmful use of alcohol.

PeTA strategies are based on public health principles:

- (1) Strengthening health campaigns "healthy without alcohol"
- (2) Reducing the risk of harmful use of alcohol
- (3) Reducing the impact of harmful use of alcohol
- (4) Limiting the availability of alcoholic beverages
- (5) Sustainability of the prevention and harmful use of alcohol programs

The document is available at www.moh.gov.my/index.php/pages/view/115.

4.2.6. National Strategic Plan for Cancer Control Program 2016-2020

The National Strategic Plan for Cancer Control Programme (NSPCCP) 2016-2020 aims to reduce the negative impact of cancer by decreasing the morbidity, mortality and to improve the quality of life of cancer patients and their families. The NSPCCP has identified nine areas of focus, where their respective objectives, targets and strategic action essential for instituting total cancer care in the country till 2020.

The NSPCCP addressed the cancer care and management from a holistic viewpoint that spans across primary prevention, screening, early detection, diagnosis, treatment, rehabilitation, palliative care as well as traditional and complementary medicine (T&CM) and research. The NSPCCP calls for the support and commitment from all stakeholders, strengthening of existing networks and better collaboration between the public and private sector agencies, and in particular, private cancer centers, professional bodies and NGOs to address cancer burden and management issues in the country. Continuous monitoring and evaluation of the various initiatives is very important in ensuring the successful implementation of the NSPCCP 2016-2020.

The document is available at www.moh.gov.my/index.php/pages/view/115.

4.2.7. Strengthening Chronic Disease Management At Primary Care Level through the Enhanced Primary Health Care (EnPHC) initiative

The proposed EnPHC model focuses initially on improving the management of three major NCDs that contribute to a very high burden of disease and premature mortality in Malaysia, high blood pressure, Type 2 diabetes mellitus, and ischemic heart disease, and their risk factors. Initial introduction will be followed by a rapid scale-up of the EnPHC model in terms of diseases managed and number of public and private primary health centers implementing the new care model.

EnPHC will involve the development of a new care model intensively targeting these three NCDs and risk factors through six major interlinked components:

- (1) population enrollment
- (2) risk profiling
- (3) integrated care pathways for a cardiovascular care bundle, underpinned by digital health information technology
- (4) Clinical and Prescribing Audit
- (5) information systems, analytics, and monitoring
- (6) organisational change – including the development of Family Health Teams

Further information can be obtained from the Family Health Development Division MOH.

4.3. MAIN ACTIVITIES UNDER EACH OBJECTIVE OF NSP-NCD 2016-2025

4.3.1. Objective 1: To strengthen national capacity, leadership, governance, multi-sectoral action and partnerships to accelerate country response for the prevention and control of NCDs

- (1) Enhance governance
- (2) Mobilise sustained resources in coordination with relevant ministries and organisations
- (3) Strengthen National NCD Programmes
- (4) Conduct needs assessment and evaluation
- (5) Strengthen multi-sectoral action
- (6) Improve accountability
- (7) Strengthen institutional capacity and the workforce
- (8) Forge partnerships
- (9) Empower communities and people, through the KOSPEN program (see **Section 5**)

4.3.2. Objective 2: To reduce modifiable risk factors for NCDs and underlying social determinants through creation of health-promoting environments

- (1) Implementation of activities under the:
 - (a) National Strategic Plan for Tobacco Control 2015-2020
 - (b) Policy Options to Combat Obesity in Malaysia 2016-2025
 - (c) Salt Reduction Strategy to Prevent and Control NCD For Malaysia 2015-2020
 - (d) National Strategic Plan for Active Living 2016-2025
 - (e) Malaysia Alcohol Control Action Plan 2013-2020
- (2) Implementation of relevant activities under the National Plan of Action for Nutrition of Malaysia (NPANM) III 2016-2025

4.3.3. Objective 3: To strengthen and orient health systems to address the prevention and control of NCDs and the underlying social determinants through people-centred primary health care and universal health coverage

- (1) Implementation of the Enhanced Primary Health Care (EnPHC) initiative
- (2) Implementation of activities under the National Strategic Plan for Cancer Control Program 2016-2020

4.3.4. Objective 4: To promote and support national capacity for high-quality research and development for the prevention and control of NCDs

- (1) Investment in research
- (2) Capacity strengthening in research and development
- (3) Evidence to inform policy
- (4) Accountability for progress in research

4.3.5. Objective 5: To monitor the trends and determinants of NCDs and evaluate progress in their prevention and control

- (1) Monitoring
- (2) Disease registries
- (3) Surveillance
- (4) Capacity strengthening in surveillance and monitoring
- (5) Dissemination and use of results

5. EMPOWERING MALAYSIANS THROUGH KOSPEN

5.1. BACKGROUND

The brainchild of Datuk Seri Dr S. Subramaniam, the Health Minister of Malaysia, this MOH flagship initiative is an NCD risk factor community-based intervention program developed in response to the increasing prevalence of NCD risk factors, particularly on the high proportion of those undiagnosed. There is a strong need to empower the Malaysian population to take more responsibility on their own health status. Known as *KOmuniti Sihat PERkasa Negara* (or KOSPEN), the program aims at bringing the NCD risk factor interventions to the community level by creating trained health volunteers, who will function as “agents of change” or health enablers, who will introduce and facilitate healthy living practices amongst their respective community.

The main objectives of KOSPEN are to empower the community in adopting and practicing healthy lifestyles and enhance their participation and involvement in programs aiming at preventing and controlling NCD in Malaysia. KOSPEN has five main scopes, promoting:

- (1) healthy diet
- (2) active living
- (3) smoke-free
- (4) weight management
- (5) routine community NCD risk factor screening.

Launched in 2014, the Ministry of Health (MOH) is currently collaborating with the Ministry of Rural and Regional Development (through the Department of Community Development or KEMAS) in implementing KOSPEN in rural areas, and collaborating with the Department of National Unity and Integration (through *Rukun Tetangga*) for urban and sub-urban areas.

A group of health volunteers within the identified residences or community registered under both collaborating agencies are provided with training that will enable them to promote healthy behaviours, advocate for healthy policy adoption and facilitate environmental changes within the local community that support healthy practices. These trained volunteers are also capable of conducting basic health screening consisting of measuring blood pressure, blood glucose levels and body mass index (BMI). The volunteers also conduct semi-structured interventions, and those of high risk would be referred to nearby health clinics for further investigation and management.

5.2. EVALUATION OF PHASE 1 IMPLEMENTATION

MOH have conducted an evaluation of the effectiveness of implementation of KOSPEN Program in Malaysia: Phase 1¹⁴. The study revealed that most implementers were aware of their role in implementing the KOSPEN program and understood the objectives of the program. More than 90% of implementers perceived KOSPEN as a good community intervention program. However, implementation wise, inadequate funding, training and quantity of screening equipment were issues highlighted by the implementers.

The majority of the volunteers had positive perception of KOSPEN. Most of them were aware of their roles and functions in implementing KOSPEN program. Almost all of the volunteers knew of their responsibilities in conducting health screening among the community and to refer those with risk of NCDs to the nearest health clinic. Apart from the screening, the volunteers also knew of their role in advocating the community to participate in healthy lifestyles activities.

Almost two thirds of the communities from the study area were aware of the existence of the KOSPEN program, in which majority of them understood that health screening, physical activity and non-smoking were the core activities of KOSPEN. All of them had positive perceptions about the program and its basic elements and they agreed with the practice of drinking plain water and consuming more fruits and vegetables. Nevertheless, only 45.2% of them participated in KOSPEN activities and 41.1% reported difficulties in participating due to time constraints.

5.3. STATUS OF IMPLEMENTATION

As of December 2016, 5,900 KOSPEN localities or sites have been established throughout Malaysia, with more than 36,000 volunteers trained. Within the localities, almost 400,000 adult residents have been screened for NCD risk factors; about 75% have been referred for diabetes confirmatory tests, 35% for hypertension and 9% due to obesity class 2 (BMI ≥ 35 kg/m²)

To date, KOSPEN volunteers have conducted weight management programs in 200 KOSPEN localities. Initial analysis indicates that 90% of the programs had successfully achieved its targets. In 2017, further work will be put in to further strengthen the NCD risk factor intervention components as well as exploring options in ensuring the sustainability of the KOSPEN program. In addition, 2017 will see the implementation of KOSPEN-plus, a workplace-based NCD risk factor intervention program.

¹⁴ Lim KH, M Fadhli Y, Omar M, Rosnah R, M. Nazaruddin B, Sumarni MG *et al.* Technical Report: Evaluation of effectiveness of implementation of KOSPEN programme in Malaysia: Phase 1

6. MONITORING AND EVALUATION

6.1. GLOBAL LEVEL

Following the Political Declaration on NCDs adopted by the UN General Assembly (UNGA) in 2011, WHO developed a global monitoring framework to enable global tracking of progress in preventing and controlling major NCDs and their key risk factors. The framework comprises nine global targets and 25 indicators, adopted by the World Health Assembly in May 2013. Several of these indicators have also been incorporated into the Sustainable Development Goals (SDGs) under Strategy #3: Good Health and Well-being. It is based on this global target that Malaysia has set her own targets as shown in **Table 3.1** (Section 3.2). In addition, several time-bound indicators were also agreed upon during the NCD UNGA follow-up meeting in 2014¹⁵.

WHO also conducts periodic assessment of national capacity for NCD prevention and control through the use of a global survey to all Member States known as the NCD Country Capacity Survey (NCD CCS)¹⁶. Such periodic assessment allows countries and WHO to monitor progress and achievements in expanding capacities to respond to the epidemic of NCDs. The questionnaire, which covers the following topics: health system infrastructure; funding; policies, plans and strategies; surveillance; primary health care; and partnerships and multilateral collaboration, is completed by national NCD focal points. NCD CCS have been carried out in 2000, 2005, 2010, 2013 and 2015.

6.2. NATIONAL LEVEL

Two inter-agency committees have been created to support the work of the “Cabinet Committee for A Health Promoting Environment” chaired by the Deputy Prime Minister. The memberships of these two committees mirror the membership of the Cabinet level committee.

- (1) “Inter-Agency Steering Committee for a Health Promoting Environment and Healthy Lifestyle” chaired the Secretary General of the Ministry of Health.

The main terms of reference for the Steering Committee is to provide guidance on strategic planning and implementation of policies and initiatives to reduce the burden of NCD in Malaysia.

¹⁵ <http://www.who.int/nmh/events/2014/a-res-68-300.pdf>

¹⁶ http://www.who.int/chp/ncd_capacity/en/

- (2) “Inter-Agency Technical Committee for a Health Promoting Environment and Healthy Lifestyle” chaired by the Deputy Director General of Health (Public Health), Ministry of Health.

The main terms of reference for the Technical Committee is to provide technical input on strategic planning of policies and initiatives, coordinate implementation and monitor the progress of planning and implementation of policies and initiatives to reduce the burden of NCDs in Malaysia.

At the MOH level, the “Public Health Steering Committee for Non-Communicable Diseases” (*Jawatankuasa Pemandu Kesihatan Awam untuk Penyakit NCD – JKPKA-NCD*) chaired by the Deputy Director General of Health (Public Health) MOH, coordinates and monitors the implementation of the agreed policies and initiatives.

For the other Ministries involved, they either have specific Committees or use existing Committees to coordinate and monitor implementation at their respective Ministries. Special arrangements have been made to include a representative from MOH to be a member of these specific or existing Committees.

6.3. NATIONAL INDICATORS AND TARGETS

As indicated earlier, the National outcome indicators and targets are shown in **Table 3.1** (Section 3.2). Most of the mechanisms for surveillance are currently in place and some are being strengthened to enable Malaysia to have more accurate data.

MOH is currently finalising a verbal autopsy methodology to improve the accuracy of data on cause of death in Malaysia, planned for nationwide implementation by end of 2017. For indicators on tobacco use, physical inactivity, harmful use of alcohol, raised blood pressure, diabetes and obesity, the data will be from the National Health and Morbidity Survey (NHMS) for NCD risk factors, to be conducted every four years starting from 2011. The next surveys will be in year 2019 and 2023.

For mean population intake of sodium, MOH will embark on a population-based survey in 2017 using 24-hour urine collection to have a more accurate picture of the sodium in Malaysia.

As mentioned earlier, NSP-NCD 2016-2025 will be in line, includes or over-aches several other relevant action plans and initiatives:

1. National Plan of Action for Nutrition of Malaysia (NPANM) III 2016-2025
2. National Strategic Plan for Tobacco Control 2015-2020
3. Policy Options to Combat Obesity in Malaysia 2016-2025
4. Salt Reduction Strategy to Prevent and Control NCD For Malaysia 2015-2020
5. National Strategic Plan for Active Living 2016-2025
6. Malaysia Alcohol Control Action Plan 2013-2020
7. National Strategic Plan for Cancer Control Program 2016-2020
8. Strengthening Chronic Disease Management At Primary Care Level through the Enhanced Primary Health Care (EnPHC) initiative
9. *KOmuniti Sihat PERkasa Negara* (KOSPEN) initiative

Each of the above action plans and initiatives has their own respective set of indicators and targets over a specified time-frame. These process, outputs and short-term outcome indicators will be used to monitor the progress of NSP-NCD 2016-2025. At the beginning of each year, a few selected key indicators will be selected from all of the above action plans and initiatives to be monitored at the end of the year.

7. CONCLUSION

Most of the premature deaths due to Non-Communicable Diseases (NCDs) are largely preventable by influencing public policies in sectors outside of health that tackle the shared risk factors, namely tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol. NCDs are not well-studied and understood. Many studies have been published on the impact of various population-based interventions to reduce the burden of NCDs in many countries. In addition, many case studies have been published that demonstrates the effectiveness various interventions to reduce the exposure of populations to NCD risk factors.

The main goal of the NSP-NCD 2016-2025 is to provide a roadmap for all relevant stakeholders in Malaysia to reduce the preventable and avoidable burden of morbidity, mortality and disability due to NCDs by year 2025. This can be achieved by means of multi-sectoral collaboration and cooperation at national and state levels. It is hoped that our population would reach the highest attainable standards of health and productivity at every age and NCDs are no longer a barrier to our well-being and negatively impacts Malaysia's socio-economic development.