# (Draft) Thailand Healthy Lifestyle Strategic Plan Phase II 5-Year Non-Communicable Diseases Prevention and Control Plan (2017-2021) and related Action Plan

Thailand Healthy Lifestyle Strategic Plan Phase II

5-Year National Plan for Prevention and Control of Non-Communicable Diseases (2017-2021)

Background

Formulation of Thailand Healthy Lifestyle Strategic Plan Phase II: 5-Year National Plan for Prevention and Control of Non-Communicable Diseases was based on the preceding master plan for the period between 2011 and 2020. Its objectives and implementation strategies were, re-defined and refined to ensure clarity and alignment with the Global Heath Action Plan of the World Health Organization. Moreover, the Plan referred to the draft Integrated National Plan for Prevention and Control of Non-Communicable Diseases formulated by the Integrated National Plan for Prevention and Control of Non-Communicable Diseases Committee assembled in accordance with the National Health Committee Order, and chaired by the Director-General of the Department of Disease Control. Certain gaps of the National Plan for Prevention and Control of Non-Communicable Diseases were identified i.e. the lack of focal point and clear direction. Addressing these issues, the Bureau of Non-Communicable Diseases and the Thai Healthy Lifestyle Management Office were assigned the Plan Manager.

The plan was developed in response to implementation of disease prevention and control aiming to achieve 9 global objectives, which were adjusted to fit the context of Thailand and in line with the National Economic and Social Development Plan No. 12 and the 20-Year Thai Health Strategic Plan. The plan focuses on promoting participation of citizens, communities, local administrations, and all sectors where citizens will be encouraged to take better care of their health. In addition, while operating efficiency will be enhanced with data reference and the plan will be rolled out in an integrated manner with other national strategic plans and without redundancy. At the same time, current environment of non-communicable disease and relevant operations in the past five years will be analyzed. The Committee, via the delegated core team, formulated the action plan which was divided into three phases i.e. 2017, 2018, and 2019-2021.

Development overview and recommendations

The summary and recommendations based on the evaluation of the NCDs plan are as appeared below.

Mechanism, roles, and execution plan and measures

- 1. On national level: clear and undisrupted mechanism is required to follow up and to set direction for implementation in line with the national policy. The existing mechanism mainly emphasized health-related services rather than risk factors and citizen's awareness building.
- 2. On activity level: execution measures of the Ministry of Public Health were mostly project-based which lacked continuity, since campaigns were launched on a periodical basis. The strategic thinking needed to be clearer and more specific.
- 3. On implementation level: there was a lack of assessment on result, impact; thus, no lessons learned were further developed as clear operating measures
- 4. On action level: project-based works were carried out as unconnected operations based on roles and responsibilities of different agencies. As a result, integrated success as per the established goals and measures was barely seen. Albeit age-based integration achieved by functions under the Ministry of Public Health, these activities remained fragmented as neither clear nor integrated standard operating procedures were formulated on internal and cross-functional platform. This was mostly due to limitations in respect of budgets, management, objective setting, and policies of the central governing agencies, which tend to be activity-based rather than the overall steering measures enabling integrated operations with related entities such as schools, communities, and corporations. Additionally, there is no clear plan or mutual agreement on collaboration with organizations, namely Thai Health Promotion Foundation, National Health Security Office, and other professional associations.
- 5. On strategy level: there is no clear mechanism to strategies and measures which are goal-oriented and in line with the context of Thailand.
- 6. On lesson level: there are lessons learned from operations of Thai Health Promotion Foundation in collaboration with alliances, civil-societal sector, and community leaders to promote wellness and disease prevention in various forms as well as those of National Health Security Office for its facilitation provided to agencies responsible for health management and services in order to enhance their potential and coverage in different aspects. However, such knowledge has yet to be shared with other agencies of the Ministry of Public Health, resulting in extremely limited efficiency and results.

### Recommendations for NCDs development

Based on the current status, risks, and service systems discovered during the evaluation, our recommendations are as follows:

The target groups in focus for the current and next phases are youth and working age
population exposed to risks in all aspects, including smoking, drinking, inadequate vegetable
intake, lack of exercise, unhealthy and inactive lifestyle trends, and the increasing mortality rate
of population in their 30s (30-39 years of age).

- 2. Working-age male population is considered at risk due to less access to health and wellness services relating to medical screening and treatment. As such, these services and communications thereof should be improved for this demographic.
- 3. Obesity is considered key risk and should be focused as the flagship campaign. A systematic approach should be put in place to ensure monitoring and awareness building.
- 4. Standard operating procedures are to be established to communicate, create common understanding, and raise awareness about NCDs risk conditions on a regular basis, especially those relating to food.
- 5. Measures to integrate policies for prevention and control of diseases in other sectors are to be elevated. To further elaborate, specific agencies should be assigned to oversee the educational sector, business sector, food advertisement and production in order to ensure undisrupted surveillance as well as goal-oriented activities and measures.
- 6. Continual as well as effective measures to educate citizens about basic self-care for prevention and control of diseases remain vital.
- 7. Targeting approach should be adopted for medical services for specific demographic where tailor-made treatments are to be made available. Behavioral and social care should be underlined in parallel with medical treatment so as to enhance effectiveness and efficiency (treatment data is to be reviewed along with the quality enhancement of new NCD clinical services.)

# Recommendations for operating mechanism and system management

- 1. NCDs management data system: electronic database is in the limelight and major investments have been made. However, current results remain confusing and there are issues regarding accuracy and coherence of data from various sources. In addition, the use of information for forecasting, planning, and measuring the service quality was limited as the database was mainly managed for reporting along the chain of command rather than for case management. The researcher thus would like to propose the following recommendations.
  - 1.1. Alternative database management should be developed i.e. database management for sentinel surveillance so as to ensure correctness and completeness of the information in certain areas to reflect different context.
  - 1.2. Certain demographics should be monitored, especially those with change tendency or those of significance; for example, 40-50 years of age, working age, and youth population, since they are exponentially sensitive to changes due to sickness and risks when compared to other demographics.

- 1.3. An analysis system should be developed to produce suitable data for related users in order to enhance efficiency of the data management on a local level. Moreover, data should be utilized to define the right operating targets and to highlight the focal point for national and regional development.
- 1.4. Agencies should be founded and developed to coordinate and manage data from various sources and to effectively monitor and follow up on the disease assessment as well as risks associated with the NCDs on a national and municipal level in a clear and continuous manner.
- 2. Service management and related operations on medical screening and medical care: Based on the evaluation, it was found that most health service stations under the Ministry of Public Health carried an increasingly large workload due to additional medical screening services and medical care for more diseases. It was because the prevalence of NCDs increased by over 50 percent, which outgrew the mortality rate; and the fact that more citizens were provided with access to health services. Consequently, the number of sick citizens accumulated, but relatively slower than the mortality rate. Also, it was found that the quality of service will not increase in five years without any new service management approach; therefore, the following recommendations for NCDs-related health service improvement were proposed.
  - 2.1. In the areas where risk and medical screening and has been undisputedly carried out for a long period of time, the health screening process should be modified to change the role of officers to maximize the potential of citizens to conduct self-screening. The focus should be shifted to extend service access to demographics such as moving and working-age population; and the screening formats may be modified accordingly.
  - 2.2. In the areas containing moving labors working at factories, corporations, or any locations away from their living zone, integration should be enabled for data system as well as medical check-up results maintained by all agencies related to such population.
  - 2.3. NCDs clinical services should focus on primary service network, which should be strengthened to ensure its readiness and collaboration.
  - 2.4. Service recipients of clinical services should be reviewed and analyzed to identify gap and room for improvement of services to any target group in particular in order to avoid 'one solution fits all' trap.
  - 2.5. Persons or agencies should be assigned to provide consultancy relating to behavioral changes and social-psychological care along with the medical care provided at clinics in a clear and complete manner.
- 3. Prevention and risk mitigation of NCDs which are not primary prevention: A study revealed that related operations of the Ministry of Public Health were neither extensive nor continuous due to

restrictions in terms of policies and budget. Meanwhile, operations of Thai Health Promotion

Foundation were rather specific to certain patterns and certain areas without any collaboration with agencies of the Ministry of Public Health in a systematic manner. Our recommendations are as follows:

- 3.1. Regarding risk mitigation policies and measures, the Ministry of Public Health should coordinate with key related authorities such as Thai Health Promotion Foundation, local administrative organizations, corporations, and educational institutions, to put in place the risk mitigation plan with long-term continual coverage.
- 3.2. Agencies responsible for national and provincial works of the Ministry of Health i.e. department of health promotion and consumer protection agency should be assigned to serve as coordinator for operations relating to NCDs prevention and risk mitigation.
- 3.3. Systematic management of NCDs risk mitigation in specific settings should be put in place i.e. coordination to ensure management of NCDs and risk mitigation at corporations, workplaces, and educational institutions of all levels. The Ministry of Public Health should adjust their role as stipulated by polices and laws to enhance efficiency.
- 3.4. Communication to create public understanding as regards NCDs: Rebranding and social marketing should be adopted to enhance efficiency of communications.
- 3.5. Service provision and related measures should be developed to enable effective dissemination of knowledge and understanding as well as risk mitigation consultancy to the general public and not only to risk-prone target groups.
- 3.6. Budget integration should be enabled for social security fund and government's welfare system in order to increase investment to prevent and control NCDs.
- 4. Overview and budget management: The following recommendations are proposed to ensure that operations to prevent and control NCDs and management thereof are carried out in an integrated and complimentary manner, delivering optimal results.
  - 4.1. A national agency of the Ministry of Public Health should be assigned to coordinate for mutually agreed directions and guidelines for integrated operations among relevant functions as well as third-party organizations.
  - 4.2. Integration could begin with determining mutually-agreed key demographics and desired results.

    Next, the roles of each agency will be defined to ensure joint delivery.
  - 4.3. The following data i.e. disease status, system status, experience, lessons learned, and 360-degree operations should be taken into consideration to determine the guideline for national implementation.

- 4.4. Determination of directions and action plan should take into account different nature of each local administration in respect of civic society, physical conditions, potential, and concept of related personnel on executive and operational levels.
- 4.5. Budget allocated to local administrations should be flexible and open for each to manage and adjust service approach to fit its context.
- 4.6. Management should be put in place to monitor and evaluate measures and projects executed in each year in a systematic and continual manner in order to create lessons learned that enhance the effectiveness and efficiency of the implementation.
- 5. Research and development: No NCDs overall management and long-term plan had been established in the past, resulting in the lack of information for planning to develop the system to prevent, control, and treat NCDs. Thus, it is recommended as follows:
  - 5.1. Study and research development plan should be developed to advance both short-term and long-term NCDs-based operations in the continuous manner, since the issue is complicated and requires a certain period of time to understand and identify solution.
  - 5.2. An economics-based study as well as a study of impact from NCDs management should be conducted in addition to clinical research, namely:
    - 5.2.1. Study on estimated percentage of demographic prone to develop NCDs
    - 5.2.2. Study on budget for secondary and tertiary operations when compared to expenses to prevent and control as well as study of cost for caring and treatment of each NCD.

Content: (Draft) Thai Healthy Lifestyle Strategic Plan Phase II: 5-Year Prevention and Control of Non-Communicable Diseases Plan (2017-2021)

Vision: A country free of the avoidable burden of non-communicable diseases

### Goal:

To relieve the avoidable burden of sickness, death, and disability due to non-communicable diseases by means of collaboration between various entities and sectors as well as coordination on a national, regional, and global level to promote wellbeing of people and maximize productivity of all age groups and to prevent these diseases from obstructing the quality of life and economic development by the year 2021

## Key indicators (alignment is to be ensured by 2021)

- 1. Decrease of premature mortality rate from NCDs when compared to 2010
- 2. Decrease of harmful alcohol use of youth under 15 years of age to under 6.7 liter per person per year
- 3. Decrease of prevalence of physical inactivity by 8 percent when compared to that of 2010
- 4. Decrease of average salt/sodium intake of population by 24 percent when compared to 2010
- 5. Decrease of prevalence of tobacco use of youth under 15 years of age to under 15.7 percent
- 6. Decrease of prevalence of raised blood pressure condition by 20 percent
- 7. Flat prevalence of diabetes and obesity when compared to 2010
- 8. Not less than 50 percent of all population over the age of 40 discovered to have indicative conditions are provided with consultation for behavioral changes and preventive drug therapy for heart disease and stroke (including sugar control drug)
- Availability of necessary drugs and basic technology for treatment / service for key NCDs patients at
   percent of all public and private medical service stations

# Objectives

- 1. To elevate priority of NCDs prevention and control among national development agenda by means of strengthening international collaboration and joint policy-driven progress;
- To strengthen the potential of the country, leadership under good corporate governance, and collaborative efforts between various entities, sectors, and alliances to expedite responses to NCDs prevention and control;
- 3. To minimize risk factors and social factors impacting NCDs risks;
- 4. To strengthen and improve the health service system to take into account and correspond to NCDs prevention and control, including related basic social factors by referring to the primary health care principle reflected in people-centric primary services, which are accessible by all population
- 5. To encourage and support research and development competency to prevent and control NCDs

6. To monitor trends and factors impacting NCDs prevention and control as well as assess progress thereof

Six strategies are as follows:

Strategy 1: Development of public and legal policies which facilitate NCDs prevention and control Strategy

- 1.1. To expedite national policy underlining NCDs prevention and control
- 1.2. To develop measures relating to finance, treasury, tax, production, marketing, and consumption relevant to decrease of NCDs
- 1.3. To promote public policies for institutions and organizations to create the environment that encourages behavioral changes of the target group in an adequate manner
- 1.4. To develop laws and to strengthen legal enforcement measures for NCDs prevention and control
  - 1.5. To promote equal legal enforcement

Strategy 2: Expedition of social communication and public relations regarding risk on a continuous basis Strategy

- 2.1 To develop continuous public relation management relating to wellbeing and decrease NCDs risk factors
- 2.2 To develop a network to transfer knowledge base on communications of risks, health and wellbeing promotion, and decrease of NCDs risks
- 2.3 To develop the content of communication and increase the communications channels to match demands of the target group
  - 2.4 To monitor and respond to information with negative impact toward NCDs

Strategy 3: Potential Development for allied community / local administration, and networks Strategy

- 3.1 To develop mechanism for allied community / local administrations, and networks to participate in investigation and expedition of operations to prevent and control NCDs on different levels
- 3.2 To develop potential of public health volunteers and family volunteers to manage NCDs in the community with an emphasis on health literacy

**Strategy 4**: Development of the data monitoring and management **Strategy** 

4.1 To develop information network on district, provincial, regional, and national levels

- 4.2 To maximize potential of information management and analysis to monitor NCDs and risk factors on district's and national level
- 4.3 To develop the NCDs surveillance system risk factors related to organizations and specific demographics

Strategy 5: Reform of services to reduce risk factors in line with the disease status and context in each area Strategy

- 5.1 To reform the service formats to enable screening and reduction of risks for the general public in alignment with nature of various risk-prone target groups
- 5.2 To reform the process of service provided to patients suffering from chronic diseases (with or without complications) at medical centers to enhance efficiency and promote self-care among patients

Strategy 6: Development of the support system for integrated operations Strategy

- 6.1 To develop mechanism that effectively drives operations in line with strategies mutually implemented by allied partners
- 6.2 To develop the tracking system to assess the result of NCDs prevention and control on provincial, regional, and national levels
- 6.3 To develop personnel of all related alliances to drive operations in line with the strategies
- 6.4 To integrate research and management of knowledge and innovation to facilitate NCDs prevention and control system

Strategy 1: Development of public and legal policies which facilitate NCDs prevention and control

Strategy / Key Performance Indicators	Strategy	Indicators	Action owner
(KPIs)			
Strategic goal	Strategy 1.1: To expedite national	Strategy 1.1 indicators	- Bureau of Policy and Strategy, Office of
	policy underlining NCDs prevention and		Permanent Secretary, Ministry of Public Health
	control		- Thai Healthy Lifestyle Management Office
Behavioral risk of population decreases	Product 1.1.1: Appointment of	Percentage of policies assessed	- Bureau of Non-Communicable Diseases
due to laws and policies and	Committee on National Public Policy for	for impact toward NCDs risk	- Health System Research Institute (HSRI)
enforcement thereof which encourage	NCDs Management	factors	- Bureau of International Health (BIH)
decline of NCDs risks		Percentage of policies and	- International Health Policy Program (IHPP)
		proposed measures to manage the	- The Health Intervention and Technology
		environment to encourage	Assessment Program (HITAP)
		decrease of risk conditions, and	- National Health Commission Office of Thailand
		NCDs, which were actually	- Thai Health Promotion Foundation
		implemented	- National Health Security Office (NHSO)
KPIs	Product 1.1.2: Launch of public policy		- Law Center Department of Disease Control
Percentage of population with	focusing on NCDs management		- Office of Alcohol Control Committee
decreasing behavioral risk for NCDs in			- Bureau of Tobacco Control
four aspects (food, exercise, tobacco,			- Department of Health
and alcohol)			- Health Service Support Department
	Product 1.1.3: Collaborative framework		- FDA Thailand
	for trade and health between countries		- Office of the National Economics and Social
	with relation to NCDs		

<u>Definition</u>	Strategy 1.2: To develop measures	Strategy 1.2 indicators	Development Board
National policy is defined as policies on	relating to finance, treasury, tax,		- Ministry of Commerce
international collaboration with impact	production, marketing, and		- Fiscal Policy Office, Ministry of Finance
toward health	consumption relevant to decrease of		- Ministry of Foreign Affairs
	NCDs		- Excise Department
	Product 1.2.1: Proposals in respect of	Percentage of financial and	- Ministry of Education
	finance and treasury which encourage	treasury measures, which were	- Ministry of Industry
	health-related agencies promote well-	developed as determined.	- Department of Local Administration,
	being and disease prevention and		Ministry of Interior
	control		Department of Labour Protection and Welfare
	Product 1.2.2: Proposals in respect of		- Ministry of Labour
	tax and others which encourage		Office of The National Broadcasting and
	access to health-promoting products		Telecommunications Commission
	and control of products, which induces		
	health-related risks		- Ministry of Science and Technology
	Product 1.2.3: Guideline to encourage		- Ministry of Industry
	health-promoting food choices		- Ministry of Agriculture and Cooperatives
	Strategy 1.3: To promote public	Strategy 1.3 indicators	- Thailand Research Fund (TRF)
	policies for institutions and		- National Research Council of Thailand (NRCT)
	organizations to create the environment that encourages behavioral changes of the target group in an adequate	- Department of Religious Affairs	
	manner		
	Product 1.3.1: Local administrative	Percentage of organizations having	

organizations, educational institutions, organiza	tional policies and
corporations, workplaces, and religious measure	s to create the
institutions determine policies to create environr	nent which adequately
the atmosphere which encourages risk encoura	ges behavioral changes on
decrease institutio	nal and organizational
levels	
Product 1.3.2: Guidelines / standard	
criteria are proposed for development	
of public policies on organizational	
level.	
Strategy 1.4: To develop laws and to Strategy 1.4	<u>indicators</u>
strengthen legal enforcement measures	
for NCDs prevention and control	
Product 1.4.1: New laws are imposed • 70 perce	ent of laws and
to prevent and control NCDs. requiren	nents about risk factors are
reviewed	d, amended, and
conside	red by the parliament (new
laws on	risk factors such as food
ingredie	nts, food labels, food tax).
Product 1.4.2: Proposals are made to	
review related laws.	
Strategy 1.5: To promote equal legal Strategy 1.5	<u>indicators</u>
enforcement	

_			
	Product 1.5.1: Manuals and public	Percentage of legal enforcement,	
	relations materials on legal	which extends to decline of risk	
	enforcement are available.	factors (extensive and effective	
		legal enforcement)	
		Percentage of complaints about	
		neglected legal enforcement,	
		which are resolved, and conclusion	
		thereof is reached	
	Product 1.5.2: Citizens acknowledge		
	and understand the laws.		
	Product 1.5.3: Personnel of related		
	agencies acknowledge and understand		
	legal enforcement practice.		
	Product 1.5.4: Reporting of monitoring		
	and assessment result of legal		
	enforcement are made.		

Strategy 2: Expedition of social communication and public relations regarding risk on a continuous basis

Strategy / Key Performance Indicators	Strategy	Indicators	Action owner
(KPIs)			
Strategic goal	Strategy 2.1: To develop continuous	Strategy 2.1 indicators	- Bureau of Risk Communication and
	public relation management relating to		Health Behavior Development,
	wellbeing and decrease NCDs risk		Department of Disease Control
	factors		- Center for Public Communication,
Population are well-rounded about	Product 2.1.1: Appointment of working	Percentage of implemented	Department of Health
health.	group on reduction of risks and NCDs	proactive action plan for	- Bureau of Information, Office of
		communications	Permanent Secretary, Ministry of
KPIs	Product 2.1.2: Proactive action plan on		Public Health
Population's knowledge on health is 30	reduction of risk factors is formulated.		- Department of Mental Health
percent higher each year from 2017			- Department of Medical Service,
onwards.			MOPH
	Strategy 2.2: To develop a network to	Strategy 2.2 indicators	- Health Education Division, Health
	transfer knowledge base on		Service Support Department
	communications of risks, health and		- FDA Thailand
	wellbeing promotion, and decrease of		- Department for Development of Thai
	NCDs risks		
	Product 2.2.1: A series of knowledge	Percentage of allied network	Traditional and Alternative Medicine
	on communications to reduce NCDs	(public, private, and civil society	- Ministry of Social Development and
	risks are produced.	sectors) which can disseminate	Human Security
		knowledge to reduce NCDs risks in	- Department of Public Relations

	a correct manner	- Ministry of Digital Economy and
Product 2.2.2: Key network or entities		Society
communicating reduction of risks and		- Department of Local Administration
NCDs		- Thai NCD Alliance
Product 2.2.3: Public health personnel		- Network of Fatless Belly Thais
and network have the right knowledge		Health Risk Control I Section, Thai
to promote health and reduce NCDs		Health Promotion Foundation
risk factors.		- Office of The National Broadcasting
Strategy 2.3: To develop the content of	Strategy 2.3 indicators	and Telecommunications
communication and increase the		Commission
communications channels to match		- Press Network, Thai Broadcast
demands of the target group		Journalists Association
Product 2.3.1: A series of information	Percentage of awareness of target	- Information Consumer Services,
for communication to target group is	groups to reduce NCDs-prone	National Health Security Office
available.	behavior	
Product 2.3.2: NCDs communications		
channel for different target groups		
Strategy 2.4: To monitor and respond	Strategy 2.4 indicators	
to information with negative impact		
toward NCDs		
Product 2.4.1: Connection of	Decreasing percentage of public	
information on surveillance of network,	media with negative impact on	
both internally and across functions	health	

between all entities responsible for	•	Percentage of response to public	
monitoring and responding to		media made by surveillance	
information		network	
Product 2.4.2: Screening system to			
grant permission for advertisement			
broadcast (taking into account the			
channels, content, and possible			
negative impact without any conflict of			
interest)			

Strategy 3: Potential Development for allied community / local administration, and networks

Strategy / Key Performance Indicators	Strategy	Indicators	Action owner
(KPIs)			
Strategic goal	Strategy 3.1: To develop mechanism	Strategy 3.1 indicators	- Department for Development of Thai
	for allied community / local		Traditional and Alternative Medicine
	administrations, and networks to		- Primary Health Care Division, Health
	participate in investigation and		Service Support Department
	expedition of operations to prevent and		- Department of Local Administration
Population, community, local	control NCDs on different levels  Product 3.1.1: Communities and local	• 70	- Ministry of Social Development and
administrations, and allied partners	administrations have seats in the	70 percent of sub-districts is	Human Security
engage in management of health	provincial and district committee on	considered equipped with well	- Thai Chamber of Commerce and
promotion as well as NCDs prevention	NCDs prevention and control and is	integrated health management	Board of Trade of Thailand
and control	well connected to community's and	(100 percent is expected in 5	- Federation of Thai Industries
and control	local networks	years)	- Foundation for Consumers
	local fietworks	A minimum of 1 community in an	- National Health Foundation
1471		urban district is self-dependent	- Provincial Administration
KPIs	Product 3.1.2: Communities and local		Organization Council of Thailand
70 percent of sub-district, local	administrations have self-dependency		- National Municipal League of
administrations/ communities are self-	mechanism and engage in health		Thailand
dependent and engage in health	promotion as well as NCDs prevention		- Village Health Volunteer Club of
promotion as well as NCDs prevention	and control (on sub-district level)		Thailand
and control by 2021			

	Product 3.1.3: Network covering		- Health Assembly
	various areas engaging in health		- National Health Commission of
	promotion as well as NCDs prevention		Thailand
	and control in collaboration with local		- National Health Security Office
	administrative organizations		(NHSO)
<u>Definition</u>	Strategy 3.2: To develop potential of	Strategy 3.2 indicators	- Thai Health Promotion Foundation
Self-dependency and engagement in	public health volunteers and family		- Department of Physical Education,
sub-district's integrated health	volunteers to manage NCDs in the		Ministry of Tourism and Sports
management process	community with an emphasis on health		
	literacy		
The term is defined as sub-district	Product 3.2.1: Key persons to manage	A minimum of 1.0 million of health	
/communities having process to	NCDs among health volunteers and	volunteers and 4.0 million of	
promote health underlining	family volunteers	family volunteers with such	
development of people, local		potential by 5 years (0.5 million of	
administrations, and all sectors of the		family volunteers in the first year	
local administrations in an integrated		and 1.0 million each of the	
manner where all members contribute,		following years)	
identify, and determine health problems			
and its future; and roll out activities as			
well as social measures, and			
innovations to improve health. All			
actions are made voluntarily with public			
mind; and focus on engagement and			

1	l I	
joint learning process. Community		
business activities are encouraged to		
reduce expenses while increasing		
income to enable self-reliance while		
reducing problems and risk factors		
regarding child development,		
accidents, NCDs, senior citizens, and		
health-related issues, which vary in		
each area, in order to help citizens		
maintaining good health in a		
sustainable manner.		
Community health innovation is defined	Product 3.2.2: A series of information,	
as ideas, practice, or inventions	kits, and manuals are available for	
relating to health, which are newly	citizens, community, and local	
invented or introduced; or those	administrations to enable self-care to	
recently modified for modern day use	reduce NCDs in the community	
and enhanced effectiveness.		
Innovation can promote improved		
health of patients or efficiency and		
effectiveness of personnel while saving		
time, cost, and manpower.		
	Product 3.2.3: Strong integrated	
	network collaborating to promote NCDs	

prevention and control	
Product 3.2.4: Prototype	
community/local administrations for	
self-reliance and engagement in NCDs	
prevention and control	

Strategy 4: Development of the data monitoring and management

Strategy / Key Performance Indicators	Strategy	Indicators	Action owner
(KPIs)			
Strategic goal	Strategy 4.1: To develop information	Strategy 4.1 indicators	- Bureau of Non-Communicable
	network on district, provincial, regional,		Diseases, Department of Disease
	and national levels		Control
Related agencies can identify	Product 4.1.1: Mechanism to develop	Percentage of agencies on	- Bureau of Epidemiology, Department
population in risk-prone group,	and monitor information integration for	district's, provincial, and national	of Disease Control
sickness group as well as red zones	NCDs surveillance purposes is	level which can perform NCDs	- Bureau of Policy and Strategy, Office
and risk-prone environment in an	available.	surveillance in accordance with the	of Permanent Secretary, Ministry of
accurate and timely manner leading to		required standards	Public Health
timely support needed for launching			- ICT Center, Office of Permanent
measures to effectively prevent and			Secretary, Ministry of Public Health
control NCDs			- National Statistical Office
<u>KPIs</u>	Product 4.1.2: Information on sickness		- Health Information System
Percentage of agencies which can	and risk-prone behavior monitoring at		Development Office
identify risk issues to determine	health service stations stemming from		- National Health Security Office
measures to prevent and control NCDs	existing reporting and information		(NHSO)
in a correct, complete, and timely	system is available in a correct,		- Bureau of Registration
manner	complete, and timely manner.		Administration, Ministry of Interior
	Product 4.1.3: Sentinel surveillance		- Bureau of Occupational and
	system for result of medical care given		'

to patients with type II diabetes and high blood pressure by hospitals under supervision of the Ministry of Public Health and medical centers in Bangkok Product 4.1.4: Accurate information system to record NCDs-related death Product 4.1.5: Integration of information on NCDs surveillance, risk-prone behavior, health intelligence from population surveys to enable continuous updates on provincial level Product 4.1.6: Connection of relevant information (environment, risk-prone behavior, sickness, death, and abnormalities (5 dimensions)) to create integrated surveillance system for NCDs and risk factors on district and national levels Product 4.1.7: Assessment of information system for NCDs service available at public medical centers to track the quality of reporting and ensure systematic development

Environmental Disease, Department of Disease Control

- Bureau of Tobacco Control
- Office of Alcohol Control Committee
- Bureau of Health Promotion,

  Department of Health
- Department of Physical Activity and Health, Department of Health
- Bureau of Nutrition, Department of Health
- Health Education Division, Health
  Service Support Department
- Institute for Population and Social
   Research , Mahidol University
- Epidemiology Unit, Prince of Songkla
  University
- Health System Research Institute
- Office of the Basic Education

  Commission
- Bureau of Student Activities

  Development
- Office of Vocational Education

  Commission

Product 4.1.8: Correct and complete		- National Electronics and Computer
database of population having cancer		Technology Center
on national level is available.		- Department of Labour Protection and
Strategy 4.2: To maximize potential of	Strategy 4.2 indicators	Welfare, Ministry of Labour
information management and analysis		- Social Security Office, Ministry of
to monitor NCDs and risk factors on		Labour
district's and national level		
Product 4.2.1: Personnel working in	Percentage of personnel of	
medical statistics and information	relevant agencies mastering NCDs	
relating to NCDs surveillance, whom	surveillance information	
are provided with NCDs information	management and analysis	
management training		
Product 4.2.2: Personnel assigned to		
manage a specific disease or regional		
NCDs System Manager on sub-district,		
district, and provincial levels whom are		
provided with training relating to		
information management, analysis, and		
reading result of NCDs information as		
per the 5-dimension surveillance		
framework		
Strategy 4.3: To develop the NCDs	Strategy 4.3 indicators	
surveillance system risk factors related		

to organizations and specific	
demographics	
Product 4.3.1: Surveillance system for	Percentage of educational
NCDs risk factors at educational	institutions mastering timely
institutions	surveillance of NCDs risks among
	students and university students
Product 4.3.2: Surveillance system for NCDs risk factors at business premise	<ul> <li>Percentage of corporations     mastering timely surveillance of     NCDs risks among employees</li> </ul>

Strategy 5: Reform of services to reduce risk factors in line with the disease status and context in each area

Strategy / Key Performance Indicators	Strategy	Indicators	Action owner
(KPIs)			
Strategic goal	Strategy 5.1: To reform the service	Strategy 5.1 indicators	- Bureau of Non-Communicable
	formats to enable screening and		Diseases, Department of Disease
	reduction of risks for the general public		Control
	in alignment with nature of various risk-		- Bureau of Nutrition, Department of
	prone target groups		Health
Risk-prone population and NCDs	Product 5.1.1: Integrated options are	Percentage of agencies and	- Bureau of Medical Technical and
patients can reduce risk conditions and	available for screening of NCD risks as	service units mastering screening	Academic Affairs, Department of
obtain sound control of sickness while	a part of health service and connected	and reducing NCDs risks of target	Medical Services
an extensive coverage is provided in	to risk mitigation care system to	group in line with the required	- Office of Alcohol Control Committee
terms of minimizing complications.	enhance effectiveness of disease	quality and standards	
	mitigation.		- Bureau of Tobacco Control
<u>KPIs</u>	Product 5.1.2: Guideline for provision of		- Bureau of Occupational and
Decreasing percentage of	service and modified, integrated		Environmental Disease, Department
population prone to NCDs (obesity,	communications media to reduce risks		of Disease Control
high blood pressure, cholesterol,	in communities, schools, workplaces,		- Bureau of Mental Health Promotion
diabetes, smoking, excessive	business premises, and health care		and Development
			- Bureau of Dental Health, Department
alcohol consumption)	stations		of Health
Percentage of NCDs patients	Product 5.1.3: Availability of health		- Department of Physical Activity and
(coronary artery disease, stroke,	agency/consultant to reduce NCDs risk		Health, Department of Health
diabetes, cancer, and	on individual level		

	Ī		
Emphysema) accessing services			- Bureau of Health Promotion,
and health care treatments in line			Department of Health
with required standard			- Bureau of Environmental Health,
	Product 5.1.4: Availability of health		Department of Health
	agency/consultant to reduce NCDs risk		- Institute of Thai Traditional Medicine
	on organizational level		- Department for Development of Thai
	Product 5.1.5: Effective risk reduction		Traditional and Alternative Medicine
	service model		- FDA Thailand
	Strategy 5.2: To reform the process of	Strategy 5.2 indicators	- National Health Security Office
	service provided to patients suffering		(NHSO)
	from chronic diseases (with or without		- Ministry of Labour
	complications) at medical centers to		- Ministry of Education
	enhance efficiency and promote self-		- Department of Local Administration,
	care among patients		Ministry of Interior
	Product 5.2.1: Expanding chronic	Percentage of service units	- Social Security Office, Ministry of
	disease services to ensure extensive	deploying improved chronic	Labour
	and effective services at primary	disease management which are	- Sweet Enough Network, Thailand
	medical centers	more effective and facilitate self-	- Low Salt Thailand Network
		care of patients with chronic	- Network of Fatless Belly Thais
		disease and complications on a	- Chairman of Thai NCD Alliance
		continual basis in line with required	
		quality and standard	
	Product 5.2.2: Develop chronic		

disease clinics as well as behavioral change/ risk management clinics at hospitals to enable disease treatment and mitigation of risks and complications in line with the required standards Product 5.2.3: The multi-disciplinary team is equipped with knowledge and skills to provide services relating to prevention of chronic diseases and complications by facilitating self-care and encouraging mitigation of riskprone behaviors of service recipients Product 5.2.4: Information system to provide undisrupted care for patients, which is connected to the network of various health service units

Strategy 6: Development of the support system for integrated operations

Strategy / Key Performance Indicators	Strategy	Indicators	Action owner
(KPIs)			
Strategic goal	Strategy 6.1: To develop mechanism	Strategy 6.1 indicators	- Thai Healthy Lifestyle Management
	that effectively drives operations in line		Office
	with strategies mutually implemented		- Bureau of Non-Communicable
	by allied partners		Diseases
To drive actions and to enable effective	Product 6.1.1: Mechanism to facilitate	Percentage of projects	- Office of the National Economics and
NCDs prevention and control	undisrupted operations as per	implemented in an integrated	Social Development Board
operations	strategies on district, provincial, and	manner	- Bureau of Policy and Strategy, Office
	national levels, which are carried out by		of Permanent Secretary, Ministry of
	all participating allied entities		Public Health
<u>KPIs</u>	Product 6.1.2: Integrated action plan of		- National Health Security Office
Percentage of success in	all sectors and implementation thereof		(NHSO)
alignment with strategic goals			- Thai Health Promotion Foundation
	Strategy 6.2: To develop the tracking	Strategy 6.2 indicators	- Health System Research Institute
	system to assess the result of NCDs		(HSRI)
	prevention and control on provincial,		- Social Security Office, Ministry of
	regional, and national levels		Labour
	Product 6.2.1: Plan and mechanism to	Percentage of projects on chronic	- Department of Medical Services
	track and assess the result of strategic	NCDs prevention and control	- Department of Health
	plan and action plan thereof	tracked and assessed on each	- Dopartment of Floatin

	level	- Health Service Support Department
Product 6.2.2: Management system for		- Department for Development of Thai
a series of information to enable		Traditional and Alternative Medicine
inclusive tracking and assessment that		- FDA Thailand
connects to all sectors in line with the		- Department of Mental Health
strategies		- Department of Local Administration,
Strategy 6.3: To develop personnel of	Strategy 6.3 indicators	Ministry of Interior
all related alliances to drive operations		- Office of Permanent Secretary,
in line with the strategies		Ministry of Education
Product 6.3.1: Effective manager team	Percentage of key personnel on	- Office of the National Primary
undertaking chronic disease on sub-	different delivering operations in	Education Commission
district, district, provincial, regional,	line with required standards	- Office of the Basic Education
and national level		Commission
Product 6.3.2: Public health team and		- Office of the Higher Education
multi-disciplinary team equipped with		Commission
knowledge and skills to provide advice,		- International Health Policy Program
induce behavioral change, and care for		(IHPP)
patients with chronic diseases in an		- Institute of Nutrition, Mahidol
inclusive manner		University
Product 6.3.3: Personnel in		- Institute of Research, Knowledge
organizations and network such as		Management, and Standards for
educational institutions, business		Disease Control (IReM)
premises, local administrative		
<u> </u>		

organizations , and civil society sector having knowledge, awareness as well as skills to monitor, prevent, and contro NCDs  Strategy 6.4: To integrate research and management of knowledge and innovation to facilitate NCDs prevention and control system  Product 6.4.1: Development of research network and plans, knowledge management, and innovations for the purpose of proper application  Product 6.4.2: Long-term research plant to develop the chronic disease management system  Product 6.4.3: Further development of researches and innovations, which pave way for policies or support for commercial production	Strategy 6.4 indicators      Percentage of NCDs research plan and knowledge management implemented as planned	<ul> <li>Primary Health Care Division (Primary Health Care Region)</li> <li>Bureau of the Budget</li> <li>Bureau of Inspection and Evaluation, MOPH</li> <li>Regional Health Office</li> <li>Office of Disease Prevention and Control</li> <li>Provincial Health Office</li> <li>District Health Office</li> <li>District and provincial hospitals, subdistrict health Service stations</li> <li>District Health Coordinating Committee (DHCC)</li> <li>PCC, DHS, DHB</li> <li>Local administrative organizations</li> </ul>
---	---	--