# 5-Year National NCDs Prevention and Control Plan (2017-2021)

| Title:                   | 5-Year National NCDs Prevention and Control Strategic and Action Plan (2017-  |
|--------------------------|---|
|                          | 2021)   |
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#### Preface

Currently, non-communicable diseases or NCDs are the No.1 health issue around the world, including Thailand, both in terms of number casualties and burden of disease. The burden of disease of Thailand derives from major NCDs i.e. cardiovascular disease, diabetes, cancer, and chronic obstructive pulmonary disease (COPD). Risk-prone demographics have increased rapidly and continuously. In addition, social changes such as urban expansion, marketing strategies, and technological and communications advances have impact toward the way of life and cause more people to suffer from NCDs. In this regard, the current standards, criteria, and surveillance approaches are neither sufficient to handle such issues nor decrease the effect from NCDs in a comprehensive and efficient manner.

The Ministry of Public Health develops key policies to ensure review and preparation of 5-Year National NCDs Prevention and Control Strategic and Action Plan (2017-2021) in alignment with the 20-year national strategy of Thailand in the area of human potential development while ensuring the balance and development of the public management system and the 20-year national strategy (with regards to public health) through collaboration with various alliance networks to determine the direction to decrease NCDs with the vision of "Healthy Citizens, Free from the burden of disease of NCDs."

Ministry of Public Health

Part 1:

# Situation and Background

### NCDs situation

In the past decade, NCDs have been the cause of death of over 75 percent of all Thai mortalities or around 320,000 persons per year. Half of such number or around 55 percent was the death of people at the age of less than 70 years, which is considered by the World Health Organization (WHO) as premature death. Upon consideration of severity of the 4 major NCDs, which are the cause of premature death i.e. cerebrovascular disease, lschemic heart disease, diabetes, and chronic obstructive pulmonary disease (COPD) between 2012 and 2015 with reference on the death register of the Bureau of Registration Administration, Ministry of Interior which contained the cause of death given based on the medical standard, it was found that the deaths of people between 30 and 69 years of age caused by these 4 diseases are trending up. The highest increase was from the premature death from cerebrovascular disease i.e. from 33.4 to 40.9 per 100,000 population. Second in rank was Ischemic heart disease which rose from 22.4 to 27.8 per 100,000 population, followed by the premature death from diabetes which rose from 13.2 to 17.8 per 100,000 population. Lastly, the premature death from COPD increased from 3.8 to 4.5 per 100,000 population. Based on consideration of variance between deaths of each gender, it was found that deaths from cerebrovascular disease, lschemic heart disease, and COPD in male were 2-3 times higher than female counterparts. However, deaths in female at the age between 30 and 69 years of age were higher than male counterparts as seen in the table 1.

| 4 Major NCDs                             |      | 2012 |        |       | 2015 |        |  |
|--|------|------|--------|-------|------|--------|--|
|  |      | Male | Female | Total | Male | Female |  |
| 1. Cerebrovascular disease (I60-I69)     | 33.4 | 46.3 | 21.3   | 40.9  | 56.8 | 25.9   |  |
| 2. Diabetes (E10-E15)                    | 13.2 | 11.8 | 14.5   | 17.8  | 17.0 | 18.5   |  |
| 3. Ischemic heart disease (I20-I25)      | 22.4 | 32.5 | 12.9   | 27.8  | 40.5 | 15.8   |  |
| 4. Chronic obstructive pulmonary disease | 3.8  | 6.0  | 1.7    | 4.5   | 7.4  | 1.7    |  |

Table 1: Deaths at the age between 30 and 69 years of age during 2012 and 2015 caused by 4major NCDs

Source: Bureau of Non-Communicable Diseases processed the data from death register retrieved from the Bureau of Policy and Strategy, Office of the Permanent Secretary: Ministry of Public Health

NCDs resulted in the burden of disease due to the loss of DALYs of Thai population. Based on the 2013 data, it was found that the major cause of loss in male was alcohol addiction, followed by road accidents and cerebrovascular disease at 8.8%, 8.0%, and 6.9%, respectively. Female deaths were caused by cerebrovascular disease, followed by diabetes and depression at 8.2%, 7.9%, and 5.4%, respectively. The report on the 5<sup>th</sup> survey of the health of Thai population through physical check-up in 2014 indicated the increase of NCDs. One-third of Thai population through physical check-up in 2014 indicated the increase of NCDs. One-third of Thai popule at the 15 years of age and above suffered from NCDs. Prevalence of diabetes rose from 6.9 percent in 2009 to 8.9 percent or 4.8 million people in the past 5 years, or an increase of around 300,000 people per year. Prevalence of hypertension increased from 21.4 percent in 2009 to 24.7 percent or 13 million people in the past 5 years, or an increase of approximately 600,000 persons. Moreover, prevalence of overweight condition (BMI≥25kg/m<sup>2</sup>) increased from 34.7 percent in 2009 to 37.5 percent, respectively. In addition, social changes such as urban expansion, marketing strategies, and technological and communications advances all impacted the way of life and caused more people to suffer from NCDs.

The latest Behavioral Risk Factor Surveillance System (BRFSS) in 2015 indicated that prevalence of overweight condition was 30.5 percent, obesity was 7.5 percent, current smoking rate was 21.3 percent, alcohol consumption rate was 36.2 percent, heavy drinking in the last 30 days was 7.3 percent, alcohol binge drinking in the last 30 days was 13.6 percent, and consumption of fruit and vegetable of more than 5 standard units in the past 7 days was 24.3 percent as per table 2.

| Overall prevalence (%)                      | 2005        | 2007        | 2010        | 2015        |
|---|-------------|-------------|-------------|-------------|
| Targeted group                              | 15-74 years | 15-74 years | 15-74 years | 15-79 years |
| Subjects (persons)                          | 130,301     | 65,542      | 130,849     | 22,502      |
| 1. Overweight (BMI>25.0 kg/m <sup>2</sup> ) | 16.1        | 19.1        | 21.3        | 30.5        |
| 2. Obesity (BMI>30.0 kg/m <sup>2</sup> )    | 3.0         | 3.7         | 4.4         | 7.5         |
| 3. Current smoking                          | 22.3        | 21.5        | 18.7        | 21.3        |

Table 2: Prevalence and NCDS behavioral risk factors for 2005, 2007, 2010, and 2015

| 4. Current alcohol consumption            | 37.4 | 36.1 | 29.5          | 36.2   |
|---|------|------|---------------|--------|
| 5. Heavy alcohol drinking in the past 30  | 3.6  | 3.6  | 4.3           | 7.3    |
| days                                      |      |      |               |        |
| 6. Alcohol binge drinking in the past 30  | 14.0 | 13.7 | 9.2           | 13.6   |
| days                                      |      |      |               |        |
| 7. Consumption of fruit and vegetable of  | 17.4 | 22.5 | 21.7          | 24.3   |
| more than 5 standard units in the past 7  |      |      |               |        |
| days                                      |      |      | $\sim$        |        |
| 8. Global Physical Activity Questionnaire | 91.5 | 92.5 | 82.2          | 36.1   |
| (GPAQ)                                    |      | //X  | $\mathcal{L}$ | (CDC)* |

Source: Behavioral Risk Factor Surveillance System (BRFSS)

\*Remarks: 1. In 2015, Bangkok was excluded.

2. In 2005, 2007, 2010 and 2015, data weight and height was given by particular person // In 2015, both weight and height were actually measured.

3. GPAQ: Global Physical Activity Questionnaire, CDC, BRFSS Physical Activity Question 2008

#### Summary of current situation and issues which should be further developed in the next phase

The summary of NCDs evaluation during 2010 and 2014<sup>1</sup> consists of the following summary and recommendations.

#### Mechanisms, roles of related agencies, action plans, and implementation measures

- On national overview, there was a lack of clear and ongoing mechanism to monitor and determine direction for implementation of national policies. The existing mechanism focused more on health services than risk factors and increase of people's awareness.
- Activities and implementation of the Ministry of Public Health was project-based, resulting in the lack of continuity. These projects were specific campaigns which run for a periodical basis while the strategic thinking and strategies were neither clear nor specific as they were expected.
- 3. Implementation lacked evaluation of result and impact, leading to the lack of lessons learned and clear direction for further development.
- 4. Operations were carried out in a project-based nature where each topic was assigned under responsibility of each agency. Integration of goals and measures were achieved

only in some parts. Albeit integration of the age groups in the Ministry of Public Health, internal activities were assigned separately and the operations approaches were not clearly integrated, both between intra or inter-agencies. Most of these agencies encountered limitations in terms of budget management, management, determination of goals and cascading thereof, and communication from the central management unit were mostly made in a form of minor activity rather than the main measure implemented collaboratively with related agencies such as schools, local agencies and businesses. Furthermore, there is neither clear action plan nor agreement on coordination with organizations such as Thai Health Promotion Foundation (ThaiHealth), National Health Security Office (NHSO), and professional networks.

- 5. There lacked a clear system for determination of strategies and measures which are effective for each target and align with the Thai context, including sound support system to allow flexibility for adjustment in line with the main goals.
- 6. It was found that the lessons learned of ThaiHealth, which worked with the alliance agencies, as well as those of NHSO supported management agencies and health service units to enhance the potential of the service system and expand the coverage of specific health services in various areas. However, these lessons were not synchronized with the operations of the operations under responsibility of the Ministry of Public Health, resulting in limited coverage in different areas and hindering optimal efficiency.

Report on evaluation of NCDS action plan for Thailand for the fiscal year 2010-2014.

#### Recommendations for development of NCDS control operations

Based on the situation, risk, and service systems discovered during the evaluation, the Researching party would like to propose the following recommendations.

- The focus group for implementation in the current and following periods are youth and working ages, whose risks increased in all aspects, including smoking, alcohol consumption, fruit and vegetable intake, insufficient exercise, and inactive lifestyle as well as the rising trend of deaths of people between 30 and 39 years of age.
- 2. The male group which is of working age and those with less access to the health service and less use such service for medical screening should be considered a risk-prone group. Therefore, improvement should be made to the service approaches and communication should be enhanced for this group.
- A risk which should be focused to ensure proper movement is obesity, which should be monitored; and at the same time, awareness should be raised and surveillance should be made in a more systematic manner.
- Regarding measure and implementation, communication should be focused more while awareness and recognition should be continually raised on risk conditions of NCDSs, especially in respect of food.
- 5. More intensive measures to ensure coordination on a policy level to prevent and control diseases in other sectors, namely educational institutions, businesses, advertisement and food production. A specific agency should be assigned to ensure clear and continuous implementation as well as to launch a variety of activities and measures to achieve the goals.
- 6. It is critical to continue deploying measures to promote basic self-care for disease prevention among different demographics while more effective measures should be further developed.
- 7. Measures relating to medical treatment services should target each group of patients and they should be designed to provide inclusive treatment to each group, with a focus on social behavior hand in hand with the medical treatment to enhance efficiency and effectiveness of management (with a review of treatment result and the improved service of the new format of NCDs clinic).

#### Recommendations for implementation mechanisms and system management

- 1. NCDS management data system Currently, there are interests and investments in electronics database. However, confusion still looms over the current result and there are issues about correctness and completeness of the information, discrepancy of data from different sources. Moreover, the data for reference in forecasting, planning, and service evaluation was rather limited as the database management was for reporting to top management rather than case management. As such, the Researching party would like to provide the following proposals in respect of data system.
  - 1.1.Options should be developed for database management i.e. sentinel surveillance data system management, which can manage correctness and completeness of the data in certain areas for evaluation of different situations in various contexts.
  - 1.2. Surveillance may be arranged for certain demographics which indicate significant changes such as groups of people at 40-59 years of age, working age, and youth as their changes relating to illness and risk are faster than those of other groups.
  - 1.3. The data analytic system and data use of involved parties should be developed to enhance the potential of data use for optimal results on an area level. In addition, data should be utilized to determine proper implementation targets as well as the right area of development, both on central and regional levels.
  - 1.4.An agency should be established and developed to coordinate for data management from various databases for the purpose of surveillance and monitoring of disease evaluation as well as overall NCDs risks on a national level and regional level with enhanced clarity and quality.
- 2. Management and implementation relating to medical screening and service provision Based on the evaluation, it was found that the most medical service stations were experiencing higher workloads regarding continuous treatment and the medical screening services and various medical treatments based on different diseases were provided. This could probably result from the increase of NCDs prevalence by 50 percent while population has more access to the health service. Although the death rate was higher but less than the increase of prevalence rate. As a result, there are more accumulated patients, but at a

slower rate than that of prevalence. Also, it was found that the service quality for the past 5 years did not improve if no new management format was introduced. Thus, the following recommendations for development of the NCDs health service system are proposed.

- 2.1. In the area where risk and medical screening has been provided on an ongoing basis for a long period of time, the existing health screening procedures should be improved by officials so as to enhance the potential of self-screening by citizens. Furthermore, importance should be placed to groups of people lacking access to the medical services such as migrants and working age by modifying the screening approaches to be more fit to them.
- 2.2. Coordination and connection of data and check-up results should be made with related agencies of businesses in areas where there are migrated labors working at factories, businesses or outside residence zone.
- 2.3. The NCDs clinical services should emphasize on services provided at primary service networks by means of enhancing potential of the network and increasing collaborative efforts with them.
- 2.4.A review and analysis of targeted service recipients should be made so as to identify which groups need an improved service and which approaches would be more effective. General or one-approach-fits-all mechanism should not be adopted.
- 2.5. Personnel or agencies should be assigned to provide consultancy regarding the change of behavior, socio-psychological behavior to complement medical treatment at clinics in a clear and complete manner.

#### 3. Prevention and reduction of NCDs risk, which are primary prevention

The study revealed that works in this area which were carried out by agencies under the Ministry of Public Health were neither intensive nor continuous due to policy and budget limitation. In this regard, the works of ThaiHealth are carried out by capturing specific patterns of certain groups in certain areas. However, no systematic coordination was made with agencies of the Ministry of Public Health. Hence, we would like to propose the following recommendations.

3.1.Regarding the risk reduction policies and measures, the Ministry of Public Health should coordinate with primary agencies, namely ThaiHealth, local administrative

organizations, business-related agencies, and educational institutions, to develop a continuous, long-term risk reduction plan.

- 3.2.An agency of the Ministry of Public Health for central and provincial zones, namely the Health Promotion Department and the Consumer Protection Section should be assigned to act as coordinators for NCDs prevention and risk reduction.
- 3.3.Management should be ensured to reduce NCDs in certain settings in a more systematic manner i.e. to coordinate for management of NCDs and risk reduction in businesses, workplaces, and different levels of educational institutes. The Ministry of Public Health should adjust its role in terms of policy and laws to enhance efficiency.
- 3.4.Regarding communication and creating common understanding of the public relating to NCDs, rebranding should be conducted and social marketing should be deployed to develop the current communications.
- 3.5.Services should be improved; in other word, measures should be developed to provide knowledge, understanding, and consultancy to enhance effectiveness of risk reduction, both to general population and risk-prone groups.
- 3.6. Coordination should be made for budgetary resources related to social security and public official welfare, which should invest more in promotion, prevention, and control of NCDs.
- 4. Overall management and budget management

The following recommendations are proposed in order to ensure the efficiency and alignment of the operations for prevention and control of risk factors.

- 4.1.A central agency should be established in the Ministry of Public Health to act as coordinator for agreement about direction and guideline for integrated operations of all involved agencies as well as coordination with external agencies.
- 4.2. Integration could begin with determination of targeted population and mutual goals. Then, roles and responsibilities of each agency will be assigned so as to jointly achieve goals.
- 4.3. The situation data of disease and systems, experience, lessons learned, and 360degree operations should be referred to in determination of the national implementation guideline.

- 4.4. To determine the direction and action plan, consideration should be made on difference of areas in the context of social and physical aspects of population as well as potential and concepts of involved parties, both in managerial and servicing levels.
- 4.5.Budget allocation of each area should be flexible so that each area is allowed to make adjustment in line with its context.
- 4.6. Management should be put in place to enable monitoring and evaluation of projects implemented each year in a continuous and systematic manner to serve as a lesson learned in the development for enhanced effectiveness and efficiency.

#### 5. Study and research

In the past, there was no overall knowledge management for NCDs in respect of research as well as long-term planning. Consequently, there is a lack for decision-making data for planning and development of prevention, control and treatment system. As such, the following recommendations are made for study and research.

- 5.1.Research plan should be developed to progress NCDs operations both in short and long term in a clear and continuous manner, since these problems are complicated and time-consuming in terms of obtaining understanding and finding solutions.
- 5.2.Research on economics and impact from NCDs management should be further conducted by means of clinical research. For example;
  - 5.2.1. Study for estimated figures of total risk of population having NCDs
  - 5.2.2. Study of budget for operations relating to secondary and tertiary services when compared to expenses for prevention and control of disease and study of cost and expense for care and treatment of each NCDs.

Part II:

5-Year National NCDs Prevention and Control Strategic and Action Plan (2017-2021)

### 5-Year National NCDs Prevention and Control Strategic and Action Plan (2017-2021)

Preparation of the 5-Year National NCDs Prevention and Control Strategic and Action Plan (2017-2021) are the continuous development of the Thailand Healthy Lifestyle Strategic Plan 2011-2020, with certain adjustments for clearer goals and strategies and implementation strategies that align with the Global Action Plan for the Prevention and Control of NCDs 2013-2020 by WHO. The gap of the National NCDs Strategic Plan was the lack of main focal point and clear implementation. As such, the Bureau of Non-Communicable Diseases and the Office of Healthy Lifestyle Management were assigned to be the main responsible parties.

Development of this plan aims to respond to the disease prevention and control to achieve 9 global goals, which are adjusted to align with the situation of Thailand and the No. 12 National Economic and Social Development Plan and the 20-year National Strategic Plan (in relation to public health). The content of the Plan focuses on creating participation of population, communities, local administrations, and various sectors, improving the operating efficiency with the use of data, and enhancing potential of people to enable self-care of their health. Moreover, it will emphasize on integration with other strategic plans and avoid redundancy with other related national strategic plans as well as NCDs situation analysis and the situation of NCDs implementation system in the past 5 years.

#### Vision

"A country free of the avoidable burden of non-communicable diseases"

#### Objective

To reduce the avoidable burden of illness, death, and disability results from NCDs by means of cooperation between various alliance networks and collaboration on a national, regional, and global level to ensure population are of good health, to optimize the productivity of all age groups, and to ensure that these NCDs do not hinder the quality of life and economic development by 2021.

#### KPIs (by 2021)

- 1. Reduction of premature mortality from NCDs when compared to 2010
- 2. Volume of harmful use of alcohol decrease to not more than 6.7 liters per capita per year
- 3. Prevalence of physical inactivity decreases to 8 percent when compared to 2010
- 4. Average salt/sodium intake of population decreases by 24 percent when compared to 2010
- Prevalence of tobacco use in population of not more than 15 years of age decreases to not more than 15.7 percent
- 6. Prevalence of raised blood pressure decreases by 20 percent
- 7. Prevalence of diabetes and obesity does not increase when compared to 2010
- 8. Population at 40 years of age and above who are prone to cardiovascular diseases are provided with consultancy to ensure their proper behavior; and to be provided with drug therapy to prevent heart attack and stroke if their cardiovascular disease indicators are not less than 50 percent
- Necessary drugs and basic medical treatment technology are put in place to treat/serve NCDs patients are available at public and private medical station at 80 percent.

| Chart 1: The 9 goals for NCD prevention and control within 2025 and the goals within 2021 |
|---|
|   |

| Decrease       | Decrease    | Decrease        | CVD prone       |                 |
|----------------|-------------|-----------------|-----------------|-----------------|
| harmful use of | tobacco use | Raised blood    | population      |                 |
| alcohol        | 30%         | pressure        | receives drugs  |                 |
| 10%            | (15.7%)     | 25%             | and consultancy | Reduce          |
| (6.7 liters /  |             | (20%)           | 50%             | premature death |
| person/year)   |             |                 |                 | from NCDs       |
| Decrease       | Decrease    | Diabetes and    | Extensive       | 25%             |
| physical       | salt/sodium | obesity at same | necessary drug  | (20%)           |
| inactivity     | intake      | rate            | and technology  |                 |
| 10%            | 30%         |                 | 80%             |                 |
| (8%)           | (24%)       |                 |                 |                 |

#### Objectives

- To enhance the priority of NCDs prevention and control in the national development agenda by strengthening international collaboration and alignment of policy making
- 2. To strengthen the national potential, governance leadership, and joint operations between various alliance networks and expedite response to NCDs prevention and control
- 3. To reduce the risk factors and social factors impacting the NCDs risks
- 4. To strengthen and improve the health services in a form that such practice takes into account and responds to the NCDs prevention and control, including related basic social factors with reference to the basic public health principles through primary service, which are people-centric as well as to ensure that such services are accessible by all
- To promote and support the capability in terms of high-quality research and development of NCDs prevention and control; and
- To monitor the trend and factors impacting NCDs prevention and control as well as evaluate the prevention progress.

#### The objectives consist of the following 6 strategies

- Strategy 1: Development of public policies and laws that support NCD prevention and control
- Strategy 2: Expedition of social drivers to communicate about risks on an ongoing basis
- Strategy 3: Potential development for community / local administrations, and alliance networks
- Strategy 4: Development of monitoring and data management systems
- Strategy 5: Management reform to reduce risk and control the diseases in line with their situation and local context

Strategy 6: Development of system to support and drive integrated implementation

#### Details of strategies and strategic plan under each strategy

Strategy 1: Development of public policies and laws that support NCDs prevention and control

#### Strategic plan

- 1.1 Expedite the national public policy which focuses on NCDs management
- 1.2 Develop measures relating to finance, treasury, tax, production, marketing, and consumption relating to reduction of NCDs risks

- 1.3 Promote public policies on institutional and organizational level to create an environment that promote behavioral changes of targeted groups in a sufficient manner
- 1.4 Develop laws and strengthen the enforcement thereof for NCDs prevention and control purposes
- 1.5 Promote consent and obedience of laws by all

Strategy 2: Expedition of Social drivers to communicate about risks on an ongoing basis

#### Strategic plan

- 2.1 Develop management of communication to the public regarding health promotion and reduction of NCD risks on a continuous basis
- 2.2 Develop the networks to transfer knowledge on communication of risks for the purpose of promoting health care and reduction of NCD risks
- 2.3 Develop content of communication and increase communications channels which matches the targeted groups
- 2.4 Monitor and respond to information which causes harm to NCDs

Strategy 3: Potential development for community / local administrations, and alliance networks Strategic plan

- 3.1 Develop mechanism for people, local organizations, and alliance networks to participate in surveillance and promotion of health as well as disease control and prevention
- 3.2 Develop potential of health leader of the community in respect of health promotion as well as NCDs prevention and control

Strategy 4: Development of monitoring and data management systems

#### Strategic plan

- 4.1 Develop connection of information on district, provincial, regional, and national levels
- 4.2 Develop potential of data management and analysis to monitor NCDs on a national, provincial and district levels

- 4.3 Develop the NCDs and risk factor surveillance system on an organizational level and for targeted group
- Strategy 5: Management reform to reduce risk and control the diseases in line with their situation and local context

#### Strategic plan

- 5.1 Service reform for the purpose of screening and risk reduction in general population and various risk-prone groups in alignment with the specific nature of each riskprone group
- 5.2 Reform of health service for chronic patients (with or without complications) at medical service stations to ensure efficiency and support patients' self-management

Strategy 6: Development of system to support and drive integrated implementation

#### Strategic plan

- 6.1 Develop mechanism to drive implementation of strategies engaged by various alliances in an efficient manner
- 6.2 Develop the monitoring system for evaluation of NCDs prevention and control result on a national, regional, and provincial levels
- 6.3 Develop personnel of all related alliances to be able to deploy the strategies
- 6.4 Integrate research, knowledge management, and innovations to support the NCDs prevention and control system

## Strategic objectives, productivity, and KPIs

Strategy 1: Development of public policies and laws that support NCDs prevention and control

| Objectives/KPIs               | Strategies/Productivity         | KPIs                      |
|-------------------------------|---------------------------------|---------------------------|
| Strategic objective           | Strategy 1.1 Expedite the       | KPIs of strategy 1.1      |
| Decrease of NCDs risky        | national public policy which    | 1. Percentage of policies |
| behavior among population     | focuses on NCDs                 | undergoing evaluation of  |
| due to policies and law and   | management                      | impact toward risk        |
| enforcement thereof which     | Productivity 1.1.1              | factors of NCDs           |
| facilitates NCDs risk         | Appointment of National         | 2. Percentage of policies |
| reduction                     | NCDs Public Policy              | and recommended           |
|                               | Management Committee            | measures out of           |
| KPIs                          | Productivity 1.1.2 Availability | implemented               |
| Percentage of population      | of public policy focusing on    | management of             |
| with reduced 4-NCDs risks     | NCDs management                 | environment which         |
| (food, exercise, tobacco, and | Productivity 1.1.3 Framework    | facilitates reduction of  |
| alcohol)                      | for international collaboration | risk factors              |
| c. C                          | of trade and health in relation |                           |
|                               | to NCDs                         |                           |
|                               | Strategy 1.2 Develop            | KPI for strategy 1.2      |
| ()                            | measures relating to finance,   | 1. Percentage of          |
|                               | treasury, tax, production,      | financial and treasury    |
|                               | marketing, and consumption      | measures which are        |
|                               | relating to reduction of NCDs   | developed as              |
|                               | risks                           | determined                |
|                               | Productivity 1.2.1 Financial or |                           |
|                               | fiscal measures are put in      |                           |
|                               | place to provide more           |                           |
|                               | support to health               |                           |
|                               | organizations to focus more     |                           |
|                               | on promotion of disease         |                           |

|                     | prevention and control.        |                            |
|---------------------|--------------------------------|----------------------------|
|                     |                                |                            |
|                     | Productivity 1.2.2 There are   |                            |
|                     | measures relating to tax and   |                            |
|                     | others to promote access to    |                            |
|                     | healthy goods and to control   |                            |
|                     | products having health risk.   |                            |
|                     |                                | <u>,</u>                   |
|                     | Productivity 1.2.3 There are   | $\cdot$                    |
|                     | guidelines to promote          | $\times (\mathcal{O})$     |
|                     | alternative, healthy food      | $\mathcal{O}(\mathcal{V})$ |
|                     | choices.                       |                            |
|                     |                                |                            |
|                     | Strategy 1.3 Promote public    | KPI of strategy 1.3        |
|                     | policies on institutional and  | 1. Percentage of           |
|                     | organizational level to create | organizations putting in   |
|                     | an environment that promote    | place the policies and     |
|                     | behavioral changes of          | measures on an             |
| ).5.                | targeted groups in a           | organizational level       |
|                     | sufficient manner              | where they are             |
| ()                  |                                | implemented to adjust      |
| $\langle n \rangle$ | Productivity 1.3.1 Local       | the behavior of the        |
|                     | administrative organizations,  | targeted group in a        |
|                     | educational institutes,        | sufficient manner on an    |
|                     | businesses, workplaces, and    | institutional as well as   |
|                     | religious institutions have    | organizational levels      |
|                     | determined policies to create  |                            |
|                     | the environment to reduce      |                            |
|                     | risks.                         |                            |
|                     |                                |                            |
|                     | Productivity 1.3.2 There are   |                            |

|                   | recommended guidelines /      |                            |
|-------------------|-------------------------------|----------------------------|
|                   | standards for development of  |                            |
|                   | public policy on an           |                            |
|                   | organizational level.         |                            |
|                   |                               |                            |
|                   | Strategy 1.4 Develop laws     | KPI for Strategy 1.4       |
|                   | and strengthen the            | 1. Seventy percent of laws |
|                   | enforcement thereof for       | and requirements related   |
|                   | NCDs prevention and control   | to risk factors are        |
|                   | purposes                      | reviewed, developed,       |
|                   |                               | and considered by the      |
|                   | Productivity 1.4.1 New laws   | parliament (new laws       |
|                   | are put in place for NCDs     | about risk factor such as  |
|                   | prevention and control.       | ingredients of food, food  |
|                   |                               | labels, and food tax)      |
|                   | Productivity 1.4.2 There are  |                            |
|                   | review of related laws.       |                            |
|                   |                               |                            |
|                   | Strategy 1.5 Promote          | KPI for Strategy 1.5       |
|                   | consent and obedience of      | 1. Percentage of result    |
|                   | laws by all                   | for law enforcement        |
| $( \mathcal{O} )$ |                               | per risk reduction (the    |
|                   | Productivity 1.5.1 There are  | laws are enforced in       |
|                   | manuals and media to ensure   | a comprehensive and        |
|                   | that the laws are promoted to | efficient manner)          |
|                   | all audience.                 | 2. Percentage of           |
|                   |                               | complaints relating to     |
|                   | Productivity 1.5.2 Population | negligence of law          |
|                   | are aware of laws.            | enforcement, which         |
|                   |                               | are resolved and           |
|                   | Productivity 1.5.3 Personnel  | settled                    |
|                   |                               |                            |

| of related agencies          |  |
|------------------------------|--|
| understand the laws and      |  |
| enforcement thereof.         |  |
|                              |  |
| Productivity 1.5.4 There are |  |
| reports on monitoring and    |  |
| evaluation of law            |  |
| enforcement.                 |  |
|                              |  |
|                              |  |

Strategy 2: Expedition of social drivers must be expedited to communicate about risks on an ongoing basis

| Objectives/KPIs              | Strategies/Productivity        | KPIs                       |
|------------------------------|--------------------------------|----------------------------|
| Strategic objective          | Strategy 2.1 Develop           | KPIs of strategy 2.1       |
| Population obtains health    | management of                  | 1. Percentage of proactive |
| knowledge.                   | communication to the public    | communications plan        |
| × .                          | regarding health promotion     | which is implemented on    |
| KPIs                         | and reduction of NCDs risks    | an ongoing basis           |
| An increase of 30 percent of | on a continuous basis          |                            |
| population obtaining health  | Productivity 2.1.1             |                            |
| knowledge when compared      | Appointment of NCDs Risk       |                            |
| to 2017.                     | Communication Working          |                            |
|                              | Group to minimize NCDs and     |                            |
|                              | risks thereof                  |                            |
|                              |                                |                            |
|                              | Productivity 2.1.2             |                            |
|                              | Proactive communication        |                            |
|                              | plan is put in place to reduce |                            |
|                              | the risk factors.              |                            |
|                              |                                |                            |

|   | Strategy 2.2 Develop the                          | KPI for strategy 2.2       |
|---|---|----------------------------|
|   | networks to transfer                              | Percentage of alliance     |
|   | knowledge on                                      | networks (public sector,   |
|   | communication of risks for                        | private sector, and civil  |
|   | the purpose of promoting                          | society) can transfer      |
|   | health care and reduction of                      | knowledge to minimize NCDs |
|   | NCDs risks  | risks in a correct manner  |
|   | Productivity 2.2.1                                |                            |
|   | There is an additional                            |                            |
|   | network of organizations                          | (10)                       |
|   | working on communication                          | <u>V</u> X                 |
|   | about NCDs.                                       | $\sim$                     |
|   | C   | 0                          |
|   | Productivity 2.2.2                                |                            |
|   | Personnel and networks on                         |                            |
|   | public health obtain proper                       |                            |
|   | knowledge to promote health                       |                            |
|   | and reduce the NCDs risk                          |                            |
|   | factors   |                            |
|   |   |                            |
|   | Productivity 2.2.3 There are                      |                            |
| $\sim$  | guidelines to promote                             |                            |
| $\mathcal{O}_{\mathcalO}_{\mathcal$ | alternative, healthy food                         |                            |
|   |   |                            |
|   | choices.  |                            |
|   |   |                            |
|   | Strategy 2.3 Develop content of communication and | KPI of strategy 2.3        |
|   | increase communication and                        | Percentage of targeted     |
|   | channels which matches the                        | groups which are aware of  |
|   | targeted groups                                   | how to minimize NCDs risk- |
|   | Serea 3.04bo                                      | prone behavior.            |
|   | Productivity 2.3.1                                |                            |
|   |   |                            |

|   | Series of knowledge and         |         |                       |
|---|---------------------------------|---------|-----------------------|
|   | information for risk            |         |                       |
|   | communication to minimize       |         |                       |
|   | NCDs risks for targeted         |         |                       |
|   | groups are available.           |         |                       |
|   |                                 |         |                       |
|   | Productivity 2.3.2              |         |                       |
|   | NCDs communications             |         |                       |
|   | channel for various targeted    |         |                       |
|   | groups                          | X       |                       |
|   |                                 |         |                       |
|   | Strategy 2.4 Monitor and        | KPI for | Strategy 2.4          |
|   | respond to information which    | 1.      | Percentage of         |
|   | causes harm to NCDs             |         | response to public    |
|   | occurrence                      |         | media which incurs    |
|   |                                 |         | negative impact       |
|   | Productivity 2.4.1              |         | toward health         |
|   | There is intra and inter-       | 2.      | One hundred percent   |
| 2.5   | connection for surveillance     |         | of implementation as  |
|   | information of the internal and |         | per the advertisement |
|   | external agencies whose         |         | consideration and     |
| $(\mathcal{O}_{\mathcal{O}}}}}}}}}}$ | roles involve surveillance and  |         | approval system       |
|   | response of information         |         |                       |
| $\left( \right)$  |                                 |         |                       |
|   | Productivity 2.4.2              |         |                       |
|   | There is a system to consider   |         |                       |
|   | and approve advertisement       |         |                       |
|   | (which places significance on   |         |                       |
|   | channels, content, and          |         |                       |
|   | possible negative impact        |         |                       |
|   | without any conflict of         |         |                       |

| interest) |  |
|-----------|--|
|           |  |

Strategy 3: Potential development for community / local administrations, and alliance networks

| Objectives/KPIs            | Strategies/Productivity       | KPIs                       |
|----------------------------|-------------------------------|----------------------------|
| Strategic objective        | Strategy 3.1 Develop          | KPIs of strategy 3.1       |
| Communities can engage in  | mechanism for people, local   | 1. Percentage of sub-      |
| management and promotion   | organizations, and alliance   | districts engaging in      |
| of health as well as NCDs  | networks to participate in    | integrated health          |
| prevention and control.    | surveillance and promotion of | management (70 percent     |
|                            | health as well as disease     | by 2017, 100 percent by    |
| KPIs                       | control and prevention        | 5 years)                   |
| Percentage of communities  | Productivity 3.1.1            | 2. At least 1 community in |
| which can engage in        | Agendas of various levels of  | the urban area per         |
| management of health       | committees, which are         | municipality/special       |
| promotion as well as NCDs  | engaged by the people         | municipality engage in     |
| prevention and control (50 | alliance network, include     | integrated health          |
| percent)                   | health promotion as well as   | management                 |
|                            | NCDs prevention and control   |                            |
|                            |                               |                            |
| (n)                        | Productivity 3.1.2            |                            |
|                            | There are health              |                            |
|                            | management communities        |                            |
|                            | conducting health promotion   |                            |
|                            | as well as NCDs prevention    |                            |
|                            | and control                   |                            |
|                            |                               |                            |
|                            | Productivity 3.1.3            |                            |
|                            | There are alliance networks   |                            |
|                            | to promote and support        |                            |

|                               | operations of communities     |                            |
|-------------------------------|-------------------------------|----------------------------|
|                               |                               |                            |
|                               |                               |                            |
|                               | Strategy 3.2 Develop          | KPI for strategy 3.2       |
|                               | potential of health leader of | 1. There are at least 30   |
|                               | the community in respect of   | health management          |
|                               | health promotion as well as   | volunteers/sub-district in |
|                               | NCDs prevention and control   | 2021.                      |
|                               |                               | 2. There are at least 4    |
|                               | Productivity 3.2.1            | million family health      |
|                               | There are health              | volunteers by 2021.        |
|                               | management volunteers         | 0                          |
|                               |                               |                            |
|                               | Productivity 3.2.2            |                            |
|                               | There are more health         |                            |
|                               | leaders undergoing potential  |                            |
|                               | development for surveillance, |                            |
|                               | health promotion as well as   |                            |
| 2.5                           | NCDs prevention and control   |                            |
|                               |                               |                            |
|                               | Productivity 3.2.3 There are  |                            |
| $\langle \mathcal{O} \rangle$ | guidelines to promote         |                            |
|                               | alternative, healthy food     |                            |
|                               | choices.                      |                            |
|                               |                               |                            |

#### Strategy 4: Development of monitoring and data management systems

| Objectives/KPIs                | Strategies/Productivity         | KPIs                      |
|--------------------------------|---------------------------------|---------------------------|
| Strategic objective            | Strategy 4.1 Develop            | KPIs of strategy 4.1      |
| Related agencies can identify  | connection of information on    | Percentage of related     |
| the risk-prone demographics,   | district, provincial, regional, | agencies on national,     |
| patient groups, risk area, and | and national levels             | regional, provincial, and |
| environments which are         | Productivity 4.1.1              | district level whose      |
| considered risk factors in a   | There are mechanisms for        | operations meet the NCDs  |
| correct, accurate, and timely  | development and monitoring      | surveillance standard.    |
| manner, leading to necessary   | of NCDs surveillance for data   |                           |
| support for the launch of      | integration.                    | · V                       |
| measures and                   | C.                              |                           |
| implementation of NCDs         | Productivity 4.1.2              |                           |
| prevention and control and     | There is surveillance           |                           |
| NCDs risk minimization in an   | information on illness and      |                           |
| efficient manner.              | risk-prone behavior on a        |                           |
|                                | service unit level, which       |                           |
| KPIs                           | extends from the existing       |                           |
| Percentage of related          | data system and reports in a    |                           |
| agencies which can identify    | complete, correct, and timely   |                           |
| the risk issues so as to       | manner.                         |                           |
| determine measures for         |                                 |                           |
| NCDs prevention and control    | Productivity 4.1.3              |                           |
| in correct, accurate, and      | There is a sentinel             |                           |
| timely manner                  | surveillance system for         |                           |
|                                | treatment profiles of patients  |                           |
|                                | suffering from type 2           |                           |
|                                | diabetes and hypertension of    |                           |
|                                | hospitals under the umbrella    |                           |
|                                | of Ministry of Public Health    |                           |

|                     | and medical institutes in       |              |
|---------------------|---------------------------------|--------------|
|                     | Bangkok.                        |              |
|                     |                                 |              |
|                     | Productivity 4.1.4              |              |
|                     | There is an information         |              |
|                     | system with correct and         |              |
|                     | complete data on death          |              |
|                     | related to NCDs.                |              |
|                     |                                 |              |
|                     | Productivity 4.1.5              | $(X \cup Y)$ |
|                     | There is data integration for   |              |
|                     | NCDs, risk-prone behavior,      | 0            |
|                     | and health-smartness in the     |              |
|                     | population survey database      |              |
|                     | to enable monitoring of         |              |
|                     | situation on a provincial level |              |
|                     |                                 |              |
|                     | Productivity 4.1.6              |              |
| 1.2                 | There is connection between     |              |
|                     | related data (environment,      |              |
| ()                  | risk-prone behaviors, illness,  |              |
| $\langle n \rangle$ | deaths, and abnormalities (5    |              |
|                     | dimensions)) to ensure an       |              |
|                     | integrated, systematic          |              |
|                     | surveillance for NCDs and       |              |
|                     | related risk factor on district |              |
|                     | and national levels.            |              |
|                     |                                 |              |
|                     | Productivity 4.1.7              |              |
|                     | There is evaluation of data     |              |
|                     | system for NCDs service         |              |
|                     |                                 |              |

| provision of public medial    |                            |
|-------------------------------|----------------------------|
| institutes to monitor the     |                            |
| quality of reporting and to   |                            |
| enable systematic             |                            |
| development.                  |                            |
|                               |                            |
| Productivity 4.1.8            |                            |
| There is a correct and        |                            |
| complete registration of      |                            |
| population with cancer on a   | $\mathcal{L}(\mathcal{O})$ |
| national level.               |                            |
|                               |                            |
| Strategy 4.2 Develop          | KPI for strategy 4.2       |
| potential of data             | 1. Percentage of           |
| management and analysis to    | personnel in related       |
| monitor NCDs on a national,   | agencies who can           |
| provincial and district level | manage data and            |
|                               | analyze NCDs               |
| Productivity 4.2.1            | information                |
| Personnel in medical          |                            |
| statistics and NCDs-related   |                            |
| information undergoing        |                            |
| NCDs data management          |                            |
| training                      |                            |
|                               |                            |
| Productivity 4.2.2            |                            |
| Personnel who are disease     |                            |
| managers or regional /        |                            |
| provincial / district NCDs    |                            |
| system managers               |                            |
| undergoing training for NCDs  |                            |
|                               |                            |

| data management, analysis,<br>and result processing in<br>alignment with the 5-<br>dimension surveillance<br>framework<br>Strategy 4.3 Develop the<br>NCDs and risk factor  | KPIs for Strategy 4.3<br>1. Percentage of   |
|---|---|
| surveillance system on an<br>organizational level and for<br>targeted group<br>Productivity 4.3.1<br>There is a system to observe<br>NCDs risk factors at<br>educational institutions<br>Productivity 4.3.2<br>There is a system to observe<br>NCDs risk factors at<br>businesses | <ol> <li>Percentage of<br/>educational institutions<br/>which can conduct<br/>NCDs-risk surveillance<br/>on student and<br/>undergrads on a timely<br/>manner</li> <li>Percentage of<br/>businesses which can<br/>conduct NCDs-risk<br/>surveillance on<br/>employees on a timely<br/>manner</li> </ol> |

# Strategy 5: Management reform to reduce risk and control the diseases in line with their situation and local context

| Objectives/KPIs            | Strategies/Productivity       | KPIs                     |
|----------------------------|-------------------------------|--------------------------|
| Strategic objective        | Strategy 5.1 Service reform   | KPIs of strategy 5.1     |
| Overall risk-prone         | for the purpose of screening  | 1. Percentage of service |
| demographics and NCDs      | and risk reduction in general | organizations and units  |
| patients can minimize risk | population and various risk-  | which can conduct        |
| conditions and have sound  | prone groups in alignment     | screening and minimize   |

control over their illness which can deter complications.

#### KPIs

- Decreasing percentage of population with riskprone conditions (obesity, hypertension, hyperlipidemia, diabetes, smoking, excessive alcohol consumption)
- Percentage of NCDs
   patients (cardiovascular
   disease,
   cerebrovascular
   disease, diabetes,
   cancer, and
   emphysema) who can
   access to standard

health care

with the specific nature of each risk-prone group

Productivity 5.1.1

There are options for integration of screenings of NCD risks in health service and improved connection to the risk and disease minimization system.

Productivity 5.1.2

There are guidelines for arrangement of service and media for integrated risk minimization in the community, schools, workplace, businesses, and medical institutions.

Productivity 5.1.3 There is a health service unit / provider giving consultancy to minimize NCDs risks on an individual and organizational levels

Productivity 5.1.4 There is an information There is an efficient risk minimizing service formats. NCDs risks of targeted groups in a manner that meets the standard

| Strategy 5.2 Reform of<br>health service for chronic<br>patients (with or without<br>complications) at medical<br>service stations to ensure<br>efficiency and support<br>patients' self-management<br>Productivity 5.2.1<br>Development of chronic<br>disease clinic, clinic for<br>change of behavior/ risk<br>minimization at hospitals to<br>enable management of<br>disease, risk minimization,<br>and complications in a<br>manner that meets the<br>standard<br>Productivity 5.2.2<br>The interdisciplinary team<br>with knowledge and skills to<br>provide service on prevention<br>of chronic disease and<br>complications, which | KPI for strategy 5.2 1. Percentage of service<br>units which have<br>developed an efficient<br>management formats<br>for chronic diseases<br>and support self-care of<br>patients with<br>complication with<br>quality that meets<br>standard |
|--|---|
|  |   |
| complications, which   |   |
| supports self-care and   |   |
| promotes risk minimization to  |   |
| promotes risk minimization to  |   |

| Productivity 5.2.3           |     |
|------------------------------|-----|
| There is a system to provide |     |
| continuous care for patients |     |
| and it is linked to service  |     |
| provision units.             |     |
|                              |     |
| Productivity 5.2.4           |     |
| The services for chronic     |     |
| diseases at primary health   | (U) |
| stations are comprehensive   |     |
| and efficient.               |     |
|                              |     |

# Strategy 6: Development of system to support and drive integrated implementation

| Objectives/KPIs                                      | Strategies/Productivity  | KPIs                      |  |
|--|--|---------------------------|--|
| Strategic objective                                  | Strategy 6.1 Develop   | KPIs of strategy 6.1      |  |
| Implementation is driven and                         | mechanism to drive   | 1. Percentage of projects |  |
| efficient support is given to                        | implementation of strategies   | which were integrated     |  |
| NCDs prevention and control                          | engaged by various alliances   | as planned which lead     |  |
|  | in an efficient manner   | to implementation         |  |
| KPIs<br>Percentage of success as<br>per the strategy | Productivity 6.1.1<br>There are mechanisms for<br>continuous management and<br>administration of strategic<br>implementation on national,<br>regional, provincial, and<br>district levels with the<br>engagement of alliance<br>networks |                           |  |
|  |  |                           |  |

| Γ |                                |                       |
|---|--------------------------------|-----------------------|
|   | Productivity 6.1.2             |                       |
|   | Integration of action plans    |                       |
|   | from all sectors and           |                       |
|   | implementation as planned.     |                       |
|   |                                |                       |
|   | Strategy 6.2 Develop the       | KPI for strategy 6.2  |
|   | monitoring system for          | 1. Percentage of NCDs |
|   | evaluation of NCDs             | prevention projects   |
|   | prevention and control result  | which are monitored   |
|   | on a national, regional, and   | and evaluated on      |
|   | provincial level               | each level            |
|   |                                |                       |
|   | Productivity 6.2.1             |                       |
|   | Monitoring and evaluation      |                       |
|   | plan and mechanism for         |                       |
|   | strategic plans and action     |                       |
|   | plans                          |                       |
|   | $\langle O \rangle$            |                       |
|   | Productivity 6.2.2             |                       |
|   | The system to manage series    |                       |
|   | of information which covers    |                       |
|   | and connects to all sectors    |                       |
|   | as per the strategy            |                       |
|   |                                |                       |
|   | Strategy 6.3 Develop           | KPI for Strategy 6.3  |
|   | personnel of all related       | 1. Percentage of key  |
|   | alliances to be able to deploy | personnel on each     |
|   | the strategies                 | level whose           |
|   |                                | implementation meets  |
|   | Productivity 6.3.1             | the standard          |
|   | The efficient chronic disease  |                       |
|   | system manager on national,    | 1                     |

| Γ                               |                            |
|---------------------------------|----------------------------|
| regional, provincial, district, |                            |
| and sub-district levels         |                            |
|                                 |                            |
| Productivity 6.3.2              |                            |
| Teams of public health and      |                            |
| interdisciplinary personnel     |                            |
| with knowledge and skills to    |                            |
| provide consultancy, change     |                            |
| behaviors, and care for         |                            |
| chronic patients in an          | $(\mathcal{O})$            |
| inclusive manner                | $\Delta / $                |
|                                 | 0                          |
| Productivity 6.3.3              |                            |
| Personnel of organizations      |                            |
| and networks such as            |                            |
| educational institutions,       |                            |
| businesses, local               |                            |
| administrative organizations,   |                            |
| and civil society have          |                            |
| knowledge and skills for        |                            |
| NCDs surveillance,              |                            |
| prevention, and control         |                            |
|                                 |                            |
| Strategy 6.4 Integrate          | KPIs for Strategy 6.4      |
| research, knowledge             |                            |
| management, and                 | 1. Percentage of NCDs      |
| innovations to support the      | research and knowledge     |
| NCDs prevention and control     | management, which are      |
| system                          | implemented as planned     |
|                                 | 2. Percentage of research, |
| Productivity 6.4.1              | series of knowledge and    |
| There are networks and          |                            |

| research plans, knowledge     | innovations which are   |
|-------------------------------|-------------------------|
| management, and innovation    | distributed and applied |
| development for appropriate   |                         |
| applications                  |                         |
|                               |                         |
| Productivity 6.4.2            |                         |
| There is a long-term plan for |                         |
| development of NCDs           |                         |
| management system.            |                         |
|                               | $(\mathcal{L})$         |
| Productivity 6.4.3            |                         |
| There are extension of        | 10                      |
| research and innovations for  |                         |
| the purpose of policy making  |                         |
| or commercial application     |                         |
|                               |                         |
|                               |                         |

Part III: Action Plan under 5-Year National NCDs Prevention and Control Strategy (2017-2021) Strategy 1: Development of public policies and laws that support NCDs prevention and control

Objectives: Decrease of NCDs risky behavior among population due to policies and law and enforcement thereof which facilitates NCDs risk reduction

**KPIs:** Percentage of population with reduced 4-NCDs risks (food, exercise, tobacco, and alcohol)

|                       |          | 2017                        |          | 2018                   |           | 2019 – 2021 –            |          | Respons          | sible units         |    |
|-----------------------|----------|-----------------------------|----------|------------------------|-----------|--------------------------|----------|------------------|---------------------|----|
| Productivity          |          | 2017                        |          | 2018                   |           | 2019 – 2021 –            |          | Primary          | Secondar            | у  |
| Strategy 1.1 Expedite | e the na | ational public policy which | focuses  | s on NCD managemer     | ıt        |                          |          |                  |                     |    |
| KPIs: 1. Percent      | tage of  | policies undergoing evalu   | ation of | impact toward risk fac | tors of N | NCDs                     |          |                  |                     |    |
| 2. Percen             | ntage of | policies and recommend      | ed meas  | sures out of implement | ed man    | agement of environment v | which fa | acilitates reduc | tion of risk factor | rs |
| 1.1.1 Appointment     | 1. A     | Appointment of Public       | 1.       | Two meetings of        | 1.        | Two meetings of          | - Bu     | reau of Policy   | - The Nationa       | 1  |
| of National NCDs      | P        | Policy and Law              |          | National NCDs          |           | National NCDs Public     | an       | d Strategy,      | Health              |    |
| Public Policy         | C        | Development Committee       |          | Public Policy          |           | Policy Development       | Of       | fice of          | Commission          | ۱  |
| Management            | W        | vhich focuses on            |          | Development            |           | Committee                | Pe       | rmanent          | Office              |    |
| Committee             | n        | ational NCDs                |          | Committee              | 2.        | Four meetings of         | Se       | cretary,         | - ThaiHealth        |    |
|                       | n        | nanagement                  | 2.       | Four meetings of       |           | Public Policy and Law    | Mi       | nistry of        | - NHSO              |    |
|                       | 2. A     | Appointment of Public       |          | Public Policy and      |           | Development Sub-         | Pu       | blic Health      | - Office of the     | ;  |
|                       | P        | Policy and Law              |          | Law Development        |           | Committee and            | - Th     | ailand           | National            |    |

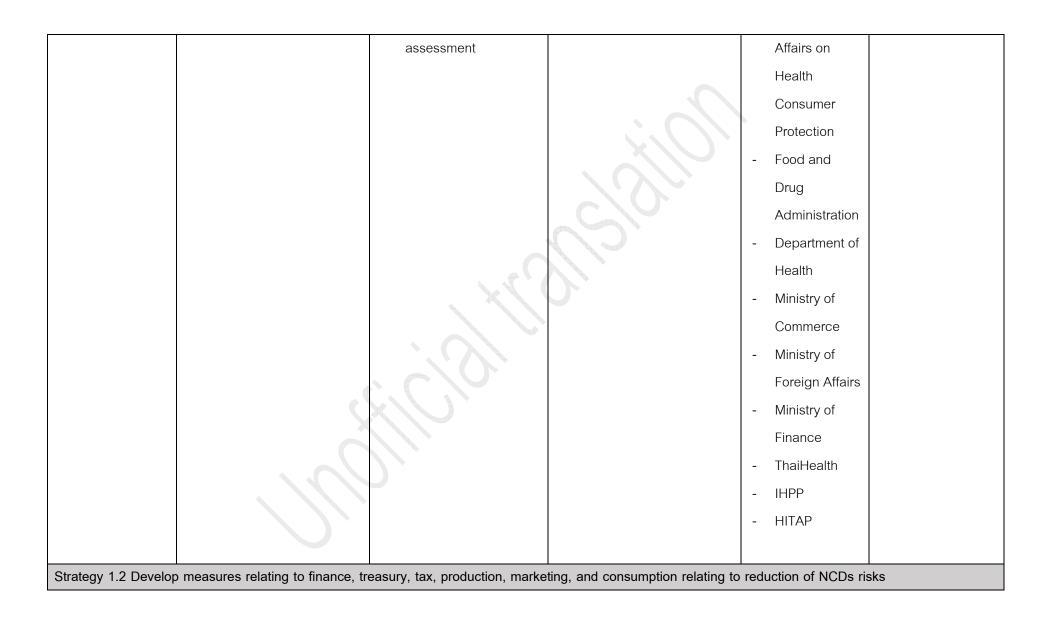
| Development Sub-       | Sub-Committee and  | Working Groups,             | Healthy    | Economic and    |
|------------------------|--------------------|-----------------------------|------------|-----------------|
|                        |                    | _                           |            |                 |
| Committee and Working  | Working Groups,    | which focus on the          | Strategic  | Social          |
| Groups, which focus on | which focus on the | various aspects             | Management | Development     |
| the following aspects  | various aspects.   | $\langle f \rangle \rangle$ | Office     | Board           |
| 1. National NCDs       |                    |                             |            | - Ministry of   |
| management             |                    | $\langle V \rangle$ .       |            | Commerce        |
| 2. Food management     |                    | CN                          |            | - Ministry of   |
| 3. Body and mind       |                    |                             |            | Foreign Affairs |
| activity management    |                    |                             |            | - Customs       |
| 4. Alcohol beverage    |                    | 5                           |            | Department      |
| management             |                    |                             |            | - Ministry of   |
| 5. Tobacco management  |                    |                             |            | Finance         |
| 6. Service system      | (C)                |                             |            | - Fiscal Policy |
| management             | XV)                |                             |            | Office          |
| 3. Meeting of National |                    |                             |            | - Ministry of   |
| NCDs Public Policy     |                    |                             |            | Education       |
| Development Committee  |                    |                             |            | - Department of |
|                        |                    |                             |            | Local           |
|                        |                    |                             |            | Administration, |
|                        |                    |                             |            | Ministry of     |

|                       |                                |   |                        |                 | Interior              |
|-----------------------|--------------------------------|---|------------------------|-----------------|-----------------------|
|                       |                                |   |                        |                 | - Department of       |
|                       |                                |   |                        |                 | Labor Protection      |
|                       |                                |   |                        |                 | and Welfare           |
|                       |                                |   |                        |                 | - Legal Center,       |
|                       |                                |   |                        |                 | Department of         |
|                       |                                |   |                        |                 | Disease Control       |
|                       |                                |   |                        |                 | - Bureau of Non-      |
|                       |                                | - C   |                        |                 | Communicable          |
|                       |                                |   |                        |                 | Disease               |
|                       |                                |   |                        |                 | - Bureau of           |
|                       |                                |   |                        |                 | Tobacco Control       |
|                       |                                | $\cdot$ |                        |                 | Bureau,               |
|                       |                                |   |                        |                 | Department of         |
|                       |                                |   |                        |                 | Disease Control       |
| 1.1.2 Availability of | Support for study, review,     | 1. Support for study,   | 1. Support for study,  | - Ministry of   | All related agencies. |
| public policy         | synthesis of related           | review, synthesis of  | review, synthesis of   | Public Health   |                       |
| focusing on NCDs      | information together with      | related information   | related information    | (Department of  |                       |
| management            | relating agencies and alliance | together with relating  | together with relating | Disease         |                       |
|                       | networks in an integrated      | agencies and alliance   | agencies and alliance  | Control, Health |                       |

|                             | r                       |                            |                  |
|-----------------------------|-------------------------|----------------------------|------------------|
| manner to prepare the       | networks in an          | networks in an integrated  | System           |
| proposal on development and | integrated manner to    | manner to prepare the      | Research         |
| improvement of public       | prepare the proposal    | proposal on                | Institute, IHPP, |
| policies and laws           | on development and      | development and            | HITAP)           |
|                             | improvement of public   | improvement of public      | - NHCO           |
|                             | policies and laws,      | policies and laws,         | - ThaiHealth     |
|                             | including law           | including law              | - External       |
|                             | enforcement and         | enforcement and overall    | agencies of      |
|                             | overall communication   | communication to the       | related          |
|                             | to the public.          | public.                    | agencies         |
|                             | 2. Driving and moving   | 2. Driving and moving      |                  |
|                             | forward the public      | forward the public policy, |                  |
|                             | policy, including the   | including the measures     |                  |
| C                           | measures to enforce     | to enforce the laws in     |                  |
| ~                           | the laws in actual      | actual practice of all     |                  |
|                             | practice of all sectors | sectors                    |                  |
|                             | - By means of           | - By means of meetings     |                  |
|                             | meetings to             | to provide                 |                  |
|                             | provide                 | clarification via          |                  |
|                             | clarification via       | channels and               |                  |

|     | 1                      | Г                         |  |
|-----|------------------------|---------------------------|--|
|     | channels and           | mechanisms of             |  |
|     | mechanisms of          | agencies,                 |  |
|     | agencies,              | organizations, and        |  |
|     | organizations, and     | related sectors to        |  |
|     | related sectors to     | drive and move            |  |
|     | drive and move         | forward the public        |  |
|     | forward the public     | policies as well as       |  |
|     | policies as well as    | law enforcement in        |  |
|     | law enforcement in     | actual practices of       |  |
|     | actual practices of    | all sectors.              |  |
|     | all sectors.           | 3. Creating engagement    |  |
|     | 3. Creating engagement | mechanism for private     |  |
|     | mechanism for private  | sectors and civil society |  |
| C C | sectors and civil      | in respect of             |  |
|     | society in respect of  | development of public     |  |
|     | development of public  | policy for NCDs           |  |
|     | policy for NCDs        | management                |  |
|     | management             | - Support for the         |  |
|     | - Support for the      | provincial health         |  |
|     | provincial health      | conference                |  |

|                     |                                | conference                |                             |                 |                      |
|---------------------|--------------------------------|---------------------------|-----------------------------|-----------------|----------------------|
| 1.1.3 Framework     | Appointment of Working         | 1. Four meetings of       | 1. Four meetings of         | - Ministry of   | All related agencies |
| for international   | Group for preparation of       | Working Group             | Working Group each          | Public Health,  |                      |
| collaboration of    | framework for collaboration of | 2. Preparation of         | year                        | Department of   |                      |
| trade and health in | trade and health between       | framework for             | 2. Preparation of framework | Disease         |                      |
| relation to NCDs    | countries related to NCDs      | collaboration of trade    | for collaboration of trade  | Control         |                      |
|                     |                                | and health between        | and health between          | - IHPP          |                      |
|                     |                                | countries related to      | countries related to        | - FDA           |                      |
|                     |                                | NCDs for a specific       | NCDs for a specific         | - Department of |                      |
|                     |                                | aspect each year          | aspect each year            | Health          |                      |
|                     |                                | 3. Preparation of report  | 3. Preparation of report on | - Ministry of   |                      |
|                     |                                | on study of impact        | study of impact             | Commerce        |                      |
|                     |                                | assessment from           | assessment from             | - Ministry of   |                      |
|                     | S S                            | entering into the         | entering into the           | Foreign Affairs |                      |
|                     | Ő                              | international trade       | international trade         | - Ministry of   |                      |
|                     |                                | agreement with the        | agreement with the focus    | Finance         |                      |
|                     |                                | focus on 5 health         | on 5 health impacts         |                 |                      |
|                     |                                | impacts                   | 4. Promotion of report on   | - ThaiHealth    |                      |
|                     |                                | 4. Promotion of report on | study of impact             | - The Office of |                      |
|                     |                                | study of impact           | assessment                  | International   |                      |



| KPI: Percentage of fi         | nancial and treasury measures w | hich are implemented as plan | ned                  |                |
|-------------------------------|---------------------------------|------------------------------|----------------------|----------------|
| 1.2.1 Financial or            | Development of measures         | 1. Development of            | 1. Development of    | - Ministry of  |
| treasury measures             | relating to finance and         | measures relating to         | measures relating to | Public Health  |
| are put in place to           | treasury to support and         | finance and treasury to      | finance and treasury | (Department    |
| provide more                  | promote healthy food and        | support and promote          | to support and       | of Disease     |
| support to health             | agricultural products           | healthy food and             | promote healthy food | Control, Food  |
| organizations to              |                                 | agricultural products        | and agricultural     | and Drug       |
| focus more on<br>promotion of |                                 | 2. Development of            | products             | Administration |
| disease prevention            |                                 | measures relating to         | 2. Development of    | , Department   |
| and control.                  |                                 | finance and treasury to      | measures relating to | of Health,     |
|                               |                                 | prevent access to            | finance and treasury | IHPP)          |
|                               |                                 | products with negative       | to prevent access to | - Ministry of  |
|                               |                                 | impact toward health         | products with        | Commerce       |
|                               | C C                             |                              | negative impact      | - Ministry of  |
|                               |                                 |                              | toward health        | Finance        |
|                               |                                 |                              |                      | - NHCO         |
|                               |                                 |                              |                      | - ThaiHealth   |
|                               |                                 |                              |                      | - NHSO         |
|                               |                                 |                              |                      |                |
|                               |                                 |                              |                      |                |

| 1.2.2 There are      | Development of                 | 1. Development of       | 1. Revision of one law and   | - Ministry of   |                      |
|----------------------|--------------------------------|-------------------------|------------------------------|-----------------|----------------------|
| measures relating    | measures/guidelines to         | measures/guidelines to  | enforcement thereof for      | Public Health   |                      |
| to tax and others    | control products with negative | control products with   | advertisement of             | (Department of  |                      |
| to promote access    | impact toward health           | negative impact         | products with no health      | Disease         |                      |
| to healthy goods     | - Appointment of Working       | toward health           | benefit for each year        | Control, Food   |                      |
| and to control       | Group on Development           | 2. Revision of one law  | 2. Limiting advertisement of | and Drug        |                      |
| products having      | of Measures to focus on        | and enforcement         | products with no health      | Administration, |                      |
| health risk.         | measure development            | thereof for             | benefit (Preparing 1         | Department of   |                      |
|                      |                                | advertisement of        | criteria for food            | Health, IHPP)   |                      |
|                      |                                | products with no        | advertisement)               |                 |                      |
|                      |                                | health benefit for each |                              | - Ministry of   |                      |
|                      |                                | year                    |                              | Commerce        |                      |
|                      |                                | yca                     |                              | - Ministry of   |                      |
|                      |                                |                         |                              | Finance         |                      |
|                      |                                |                         |                              | - NHCO          |                      |
|                      | (                              |                         |                              | - NBTC          |                      |
|                      | $\langle \rangle$              | J                       |                              |                 |                      |
| 1.2.3 There are      | 1. Support study and           | 1. Support study and    | 1. Support study and         | - Ministry of   | All related agencies |
| guidelines to        | innovation for production      | innovation for          | innovation for production    | Science and     |                      |
| promote              | of healthy food products       | production of healthy   | of healthy food products     | Technology      |                      |
| alternative, healthy |                                |                         |                              |                 |                      |

| food choices. |    | as alternative choices    |        | food products as         |                  | as alternative choices    | - | Ministry of   |  |
|---------------|----|---------------------------|--------|--------------------------|------------------|---------------------------|---|---------------|--|
|               | 2. | Promotion of prototype    |        | alternative choices      |                  | - Provide support in a    |   | Commerce      |  |
|               |    | organizations relating to |        | - Provide support in a   |                  | form of research          | - | Ministry of   |  |
|               |    | control of food shops to  |        | form of research         |                  | grant                     |   | Public Health |  |
|               |    | sell healthy food such as |        | grant                    | 2.               | Promotion of prototype    | - | Ministry of   |  |
|               |    | food which reduced        | 2.     | Promotion of prototype   |                  | businesses relating to    |   | Industry      |  |
|               |    | sweet or salty flavor and |        | businesses relating to   |                  | production of healthy     | - | Thailand      |  |
|               |    | fat; and promotion of use |        | production of healthy    | $\left( \right)$ | food as alternative       |   | Research      |  |
|               |    | of seasonings made of     |        | food as alternative      |                  | choices                   |   | Fund (TRF)    |  |
|               |    | natural ingredients       |        | choices                  | $\mathcal{O}$    | - Provision of training   |   | National      |  |
|               |    |                           |        | - Provision of training  |                  | for 250 businesses        |   | Research      |  |
|               |    |                           |        | for 250 businesses       | 3.               | Promotion of prototype    |   | Council of    |  |
|               |    |                           | 3.     | Promotion of prototype   |                  | organizations relating to |   | Thailand      |  |
|               |    |                           | X      | organizations relating   |                  | control of food shops to  |   | (NRCT)        |  |
|               |    |                           | $\sum$ | to control of food       |                  | sell healthy food such as |   |               |  |
|               |    |                           | $\sum$ | shops to sell healthy    |                  | food which reduced        |   |               |  |
|               |    |                           |        | food such as food        |                  | sweet or salty flavor and |   |               |  |
|               |    |                           |        | which reduced sweet      |                  | fat; and promotion of use |   |               |  |
|               |    |                           |        | or salty flavor and fat; |                  | of seasonings made of     |   |               |  |
|               |    |                           |        | and promotion of use     |                  | natural ingredients       |   |               |  |

|   |   | of seasonings made of   | - Promotion for   |  |                         |
|---|---|---|---|--|-------------------------|
|   |   | natural ingredients   | organizations to  |  |                         |
|   |   | - Promotion for   | participate as prototype  |  |                         |
|   |   | organizations to  | organizations   |  |                         |
|   |   | participate as  |   |  |                         |
|   |   | prototype   | $\langle O \rangle$   |  |                         |
|   |   | organizations   | $C \setminus O$   |  |                         |
|   |   |   | $(\mathcal{C}\mathcal{A})$  |  |                         |
| Strategy 1 3 Promote  | e public policies on institutional a  | nd organizational level to creat  | e an environment that promote be  | ehavioral changes of   | targeted groups in a    |
| onalegy 1.5 Fromotion   |   |   |   |  |                         |
| sufficient manner   |   | 0   | ·   | -  | 0 0 .                   |
| sufficient manner   |   | -   | brganizational level where they are   | e implemented to adj   |                         |
| sufficient manner <b>KPI:</b> Percentage of c   |   | policies and measures on an o   | organizational level where they are   | e implemented to adju  |                         |
| sufficient manner <b>KPI:</b> Percentage of c   | organizations putting in place the  | policies and measures on an o   | organizational level where they are   | e implemented to adju  |                         |
| sufficient manner<br>KPI: Percentage of c<br>targeted group in a s  | organizations putting in place the<br>sufficient manner on an institution   | policies and measures on an o<br>al as well as organizational lev   | organizational level where they are   |  | ust the behavior of the |
| sufficient manner<br>KPI: Percentage of c<br>targeted group in a s<br>1.3.1 Local   | organizations putting in place the sufficient manner on an institution<br>1. Development of guideline   | policies and measures on an o<br>al as well as organizational lev<br>1. Development of  | organizational level where they are<br>els<br>1. Development of guideline   | - Ministry of  | ust the behavior of the |
| sufficient manner<br>KPI: Percentage of c<br>targeted group in a s<br>1.3.1 Local<br>administrative   | organizations putting in place the<br>sufficient manner on an institution<br>1. Development of guideline<br>for the launch of public  | policies and measures on an o<br>al as well as organizational lev<br>1. Development of<br>guideline for the launch  | organizational level where they are<br>els<br>1. Development of guideline<br>for the launch of public   | - Ministry of<br>Interior  | ust the behavior of the |
| sufficient manner<br><b>KPI:</b> Percentage of o<br>targeted group in a s<br>1.3.1 Local<br>administrative<br>organizations,                                | organizations putting in place the<br>sufficient manner on an institution<br>1. Development of guideline<br>for the launch of public<br>policy on an  | policies and measures on an or<br>al as well as organizational lev<br>1. Development of<br>guideline for the launch<br>of public policy on an   | organizational level where they are<br>els<br>1. Development of guideline<br>for the launch of public<br>policy on an organizational  | <ul> <li>Ministry of</li> <li>Interior</li> <li>Ministry of</li> </ul>                                 | ust the behavior of the |
| sufficient manner<br>KPI: Percentage of o<br>targeted group in a s<br>1.3.1 Local<br>administrative<br>organizations,<br>educational                        | organizations putting in place the<br>sufficient manner on an institution<br>1. Development of guideline<br>for the launch of public<br>policy on an<br>organizational level in a                                     | policies and measures on an or<br>al as well as organizational lev<br>1. Development of<br>guideline for the launch<br>of public policy on an<br>organizational level in a                          | organizational level where they are<br>els<br>1. Development of guideline<br>for the launch of public<br>policy on an organizational<br>level in a manner that                                    | <ul> <li>Ministry of<br/>Interior</li> <li>Ministry of<br/>Public Health</li> </ul>                    | ust the behavior of the |
| sufficient manner<br><b>KPI</b> : Percentage of o<br>targeted group in a s<br>1.3.1 Local<br>administrative<br>organizations,<br>educational<br>institutes, | <ul> <li>brganizations putting in place the sufficient manner on an institution</li> <li>1. Development of guideline for the launch of public policy on an organizational level in a manner that encourage</li> </ul> | policies and measures on an or<br>al as well as organizational lev<br>1. Development of<br>guideline for the launch<br>of public policy on an<br>organizational level in a<br>manner that encourage | <ul> <li>prganizational level where they are els</li> <li>1. Development of guideline for the launch of public policy on an organizational level in a manner that encourage engagement</li> </ul> | <ul> <li>Ministry of<br/>Interior</li> <li>Ministry of<br/>Public Health<br/>(Department of</li> </ul> | ust the behavior of the |

| have determined    | organizations, educational   | administrative            | organizations, educational   | Control, HSSD)    |
|--------------------|------------------------------|---------------------------|------------------------------|-------------------|
| policies to create | institutions, and religious  | organizations,            | institutions, and religious  | - Ministry of     |
| the environment to | institutions so as to adjust | educational institutions, | institutions so as to adjust | Education         |
| reduce risks.      | the behavior pattern to      | and religious             | the behavior pattern to      | - Ministry of     |
|                    | benefit the NCDs             | institutions so as to     | benefit the NCDs             | Industry          |
|                    | prevention and control       | adjust the behavior       | prevention and control       | - ThaiHealth      |
|                    | - By means of providing      | pattern to benefit the    | - By means of providing -    | - Department of   |
|                    | training and                 | NCDs prevention and       | training and                 | Religious Affairs |
|                    | knowledge to leaders         | control                   | knowledge to leaders         |                   |
|                    | of local administrative      | - By means of             | of local administrative      |                   |
|                    | organizations,               | providing training        | organizations,               |                   |
|                    | educational                  | and knowledge to          | educational                  |                   |
|                    | institutions, and            | leaders of local          | institutions, and            |                   |
|                    | religious organizations      | administrative            | religious organizations      |                   |
|                    | - By means of providing      | organizations,            | - By means of providing      |                   |
|                    | support for building         | educational               | support for building         |                   |
|                    | prototype                    | institutions, and         | prototype                    |                   |
|                    | organizations for            | religious                 | organizations for            |                   |
|                    | behavioral adjustment        | organizations             | behavioral adjustment        |                   |
|                    | to enable NCDs               | - By means of             | to enable NCDs               |                   |

| control and prevention    | providing support      | control and prevention    |  |
|---------------------------|------------------------|---------------------------|--|
| and to arrange for        | for building           | and to arrange for        |  |
| memorandum of             | prototype              | memorandum of             |  |
| understanding for         | organizations for      | understanding for         |  |
| prototype                 | behavioral             | prototype                 |  |
| organizations for         | adjustment to          | organizations for         |  |
| behavioral adjustment     | enable NCDs            | behavioral adjustment     |  |
| to enable NCDs            | control and            | to enable NCDs            |  |
| control and prevention    | prevention and to      | control and prevention    |  |
| 2. Management of          | arrange for            | 2. Management of          |  |
| knowledge for building of | memorandum of          | knowledge for building of |  |
| the environment for the   | understanding for      | the environment for the   |  |
| purpose of behavioral     | prototype              | purpose of behavioral     |  |
| changes to enable NCDs    | organizations for      | changes to enable NCDs    |  |
| prevention and control    | behavioral             | prevention and control    |  |
| and knowledge sharing     | adjustment to          | and knowledge sharing     |  |
| - By means of providing   | enable NCD control     | - By means of             |  |
| support for               | and prevention         | providing support for     |  |
| knowledge                 | 2. Management of       | knowledge                 |  |
| management on             | knowledge for building | management on             |  |

| building the                 | of the environment for       | building the                     |
|------------------------------|------------------------------|----------------------------------|
| environment for the          | the purpose of               | environment for the              |
| purpose of                   | behavioral changes to        | purpose of behavioral            |
| behavioral changes           | enable NCDs                  | changes to enable                |
| to enable NCDs               | prevention and control       | NCDs prevention and              |
| prevention and               | and knowledge sharing        | control                          |
| control                      | - By means of                | 3. Driving the public policy for |
| 3. Driving the public policy | providing support            | the local administrative         |
| for the local administrative | for knowledge                | organizations, educational       |
| organizations, educational   | management on                | institutions, businesses,        |
| institutions, businesses,    | building the                 | workplaces, and religious        |
| workplaces, and religious    | environment for the          | institutions to build an         |
| institutions to build an     | purpose of                   | environment that facilitates     |
| environment that             | behavioral changes           | NCDs reduction                   |
| facilitates NCDs reduction   | to enable NCDs               | - By means of meeting            |
| - By means of meeting        | prevention and               | to drive the public              |
| to drive the public          | control                      | policy                           |
| policy                       | 3. Driving the public policy |                                  |
|                              | for the local                |                                  |
|                              | administrative               |                                  |

| 1.3.2 There are<br>recommended<br>guidelines /<br>standards for<br>development of<br>public policy on an<br>organizational | <ol> <li>Appointment of a<br/>committee to prepare<br/>guideline / standard for<br/>development of public<br/>policies in organizations</li> <li>By means of a meeting<br/>every 3 months</li> </ol> | <ul> <li>organizations,</li> <li>educational institutions,</li> <li>businesses, workplaces,</li> <li>and religious institutions</li> <li>to build an environment</li> <li>that facilitates NCDs</li> <li>reduction</li> <li>By means of meeting</li> <li>to drive the public</li> <li>policy</li> </ul> 1. Arrange for a meeting <ul> <li>every 3 months</li> </ul> 2. Preparation of <ul> <li>proposals for</li> <li>guidelines / standards</li> <li>for public policy</li> <li>development of each</li> </ul> | <ol> <li>Arrange for a meeting<br/>every 3 months</li> <li>Preparation of proposals<br/>for guidelines / standards<br/>for public policy<br/>development of each<br/>organizations i.e.</li> </ol> | <ul> <li>Ministry of<br/>Interior</li> <li>Ministry of<br/>Public Health<br/>(Department of<br/>Health,</li> </ul> | All related agencies |
|--|--|---|--|--|----------------------|
| public policy on an  | - By means of a meeting  | for public policy   | development of each  | (Department of<br>Health,  |                      |
| level.   | <ul><li>every 3 months</li><li>2. Preparation of proposals</li><li>for guidelines / standards for</li></ul>  | organizations i.e.<br>- Local administrative  | <ul> <li>organizations i.e.</li> <li>Local administrative</li> <li>organizations</li> </ul>  | Department of<br>Disease<br>Control,   |                      |
|  | public policy development of   | organizations   | - Educational institutions   | Department of  |                      |

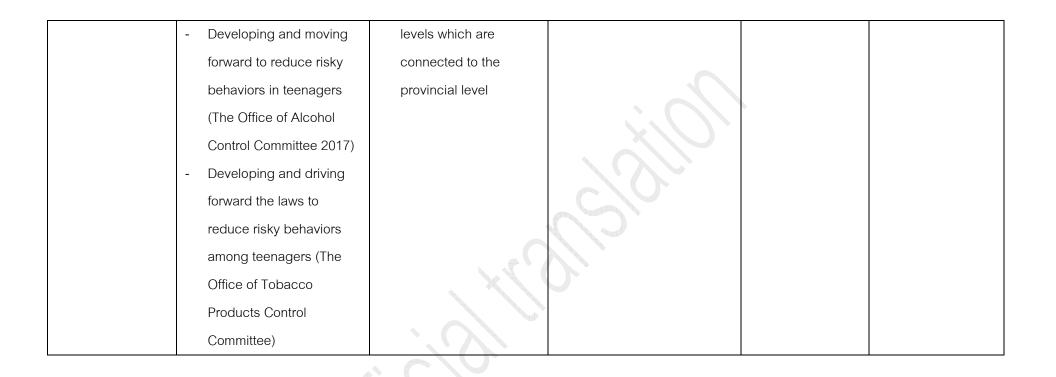
|                      | each organizations i.e.                     | - Educational                   | - Businesses                    | Health Service         |                        |
|----------------------|---|---------------------------------|---------------------------------|------------------------|------------------------|
|                      | - Local administrative                      | institutions                    | - Workplaces                    | Support)               |                        |
|                      | organizations                               | - Businesses                    | - Religious organizations       | - Ministry of          |                        |
|                      | - Educational institutions                  | - Workplaces                    | 10.1                            | Education              |                        |
|                      | - Businesses                                | - Religious                     |                                 | - Ministry of          |                        |
|                      | - Workplaces                                | organizations                   |                                 | Industry               |                        |
|                      | - Religious organizations                   |                                 | C.V.                            | - ThaiHealth           |                        |
|                      |   |                                 | $\sim$                          | - Department of        |                        |
|                      |   | 2.1                             |                                 | Religious Affairs      |                        |
| Strategy 1.4 Develop | a laws and strengthen the enforc            | ement thereof for NCDs preve    | ntion and control purposes      |                        |                        |
| KPI: Seventy percen  | t of laws and requirements relate           | d to risk factors are reviewed, | developed, and considered by th | ne parliament (new lav | vs about risk factor   |
| such as ingredients  | of food, food labels, and food tax          | :)                              |                                 |                        |                        |
| 1.4.1 New laws are   | Review of related laws and                  | Review of related laws and      | Review of related laws and      | - Ministry of          | - Ministry of Interior |
| put in place for     | proposal of new laws which $\smallsetminus$ | proposal of new laws which      | proposal of new laws which      | Public Health          | - Ministry of          |
| NCDs prevention      | correspond to the current                   | correspond to the current       | correspond to the current       | (Department of         | Finance                |
| and control.         | situation                                   | situation                       | situation                       | Health,                | - Ministry of          |
|                      | - Appointment of the                        |                                 |                                 | Department of          | Foreign Affairs        |
|                      | working group whose                         |                                 |                                 | Disease                |                        |
|                      | meetings will be held to                    |                                 |                                 | Control, Thai          |                        |
|                      | review the related laws                     |                                 |                                 |                        |                        |

|                   | and propose the new             |                        |                        | FDA)            |                      |
|-------------------|---------------------------------|------------------------|------------------------|-----------------|----------------------|
|                   | laws                            |                        |                        | - Ministry of   |                      |
|                   |                                 |                        |                        | Commerce        |                      |
|                   |                                 |                        | ()                     | - Ministry of   |                      |
|                   |                                 |                        |                        | Agriculture and |                      |
|                   |                                 |                        |                        | Cooperatives    |                      |
|                   |                                 |                        |                        |                 |                      |
| 1.4.2 There are   | Review of related laws and      | Review of related laws | Review of related laws | - Ministry of   | All related agencies |
| review of related | proposal of new laws which      |                        |                        | Public Health   |                      |
| laws.             | correspond to the current       |                        | 0.                     | (Department of  |                      |
|                   | situation                       |                        |                        | Health,         |                      |
|                   | Appointment of the working      |                        |                        | Department of   |                      |
|                   | group whose meetings will be    |                        |                        | Disease         |                      |
|                   | held to review the related laws |                        |                        | Control, Thai   |                      |
|                   | for the purpose of amendment    |                        |                        | FDA)            |                      |
|                   |                                 | )`                     |                        | - Ministry of   |                      |
|                   |                                 |                        |                        | Education       |                      |
|                   |                                 |                        |                        | - ThaiHealth    |                      |
|                   |                                 |                        |                        | - Ministry of   |                      |

|                      |                                  |                           |                                  | Interior      |  |
|----------------------|----------------------------------|---------------------------|----------------------------------|---------------|--|
| Strategy 1.5 Promote | e consent and obedience of laws  | by all                    |                                  |               |  |
|                      |                                  |                           | rced in a comprehensive and effi | cient manner) |  |
|                      | complaints relating to negligenc |                           |                                  |               |  |
| 1.5.1 There are      | 1. Preparation of manual and     | 1. Preparation of manual  | 1. Preparation of manual and     |               |  |
| manuals and          | communication for law            | and communication for law | communication for law            |               |  |
| media to ensure      | enforcement relating to NCDs     | enforcement relating to 1 | enforcement relating to 1        |               |  |
| that the laws are    | prevention and control for the   | aspect of NCDs prevention | aspect of NCDs prevention        |               |  |
| promoted to all      | civil sector                     | and control for the civil | and control for the civil sector |               |  |
| audience.            | - Appointment of working         | sector                    | 2. Building mechanism or civil   |               |  |
|                      | group whose meetings will be     | 2. Building mechanism or  | networks for communication       |               |  |
|                      | held for preparation of the      | civil networks for        | as well as public relation to    |               |  |
|                      | manual                           | communication as well as  | ensure common                    |               |  |
|                      |                                  | public relation to ensure | understanding among              |               |  |
|                      |                                  | common understanding      | population and enable            |               |  |
|                      |                                  | among population and      | connection with related public   |               |  |
|                      |                                  | enable connection with    | agencies                         |               |  |
|                      |                                  | related public agencies   | - By means of financial          |               |  |
|                      |                                  | - By means of financial   | support for communications of    |               |  |

|                    |                                  | support for communications    | civil network                    |                |                      |
|--------------------|----------------------------------|-------------------------------|----------------------------------|----------------|----------------------|
|                    |                                  | of civil network              |                                  |                |                      |
| 1.5.2 Population   | Distribution and public          | Distribution and public       | Distribution and public          | - Ministry of  | All related agencies |
| are aware of laws. | relations about laws relating to | relations about laws relating | relations about laws relating to | Public Health  |                      |
|                    | NCDs prevention and control      | to NCDs prevention and        | NCDs prevention and control      | (Department of |                      |
|                    | by creating knowledge            | control by creating           | by creating knowledge            | Health,        |                      |
|                    | corner, boards or public         | knowledge corner, boards      | corner, boards or public         | Department of  |                      |
|                    | relations via media such as      | or public relations via       | relations via media such as      | Disease        |                      |
|                    | television broadcast, local      | media such as television      | television broadcast, local      | Control, Thai  |                      |
|                    | radio stations, Internet, Line,  | broadcast, local radio        | radio stations, Internet, Line,  | FDA)           |                      |
|                    | and SMS to increase easy         | stations, Internet, Line, and | and SMS to increase easy         | - Ministry of  |                      |
|                    | accesses and channels for        | SMS to increase easy          | accesses and channels for        | Interior       |                      |
|                    | personnel to obtain              | accesses and channels for     | personnel to obtain              |                |                      |
|                    | knowledge                        | personnel to obtain           | knowledge                        |                |                      |
|                    |                                  | knowledge                     | - By means of financial          |                |                      |
|                    |                                  | - By means of financial       | support for public relations on  |                |                      |
|                    |                                  | support for public relations  | laws relating NCDs prevention    |                |                      |
|                    |                                  | on laws relating NCDs         | and control                      |                |                      |
|                    |                                  | prevention and control        |                                  |                |                      |
| 1.5.3 Personnel of | Development of potential of      | Development of potential of   | Development of potential of      | - Ministry of  | All related agencies |

| related agencies  | personnel involving in      | personnel involving in      | personnel involving in      | Public Health  |
|-------------------|-----------------------------|-----------------------------|-----------------------------|----------------|
| understand the    | enforcement of related laws | enforcement of related laws | enforcement of related laws | (Department of |
| laws and          |                             | - By means of               | - By means of supporting    | Health,        |
| enforcement       |                             | supporting training         | training arrangement        | Department of  |
| thereof.          |                             | arrangement                 |                             | Disease        |
|                   |                             |                             | /                           | Control, Thai  |
|                   |                             |                             | C V                         | FDA            |
| 1.5.4 There are   | Building mechanism for      | Building mechanism for      | Building mechanism for      | - Ministry of  |
| reports on        | monitoring of evaluation on | monitoring of evaluation on | monitoring of evaluation on | Public Health  |
| monitoring and    | law enforcement on          | law enforcement on          | law enforcement on          | (Department of |
| evaluation of law | community level which is    | community level which is    | community level which is    | Health,        |
| enforcement.      | connected to the provincial | connected to the provincial | connected to the provincial | Department of  |
|                   | level                       | level                       | level                       | Disease        |
|                   | - Determining mechanism     | - Determining               | - Determining mechanism     | Control, Thai  |
|                   | and providing support for   | mechanism and               | and providing support for   | FDA)           |
|                   | monitoring and evaluation   | providing support for       | monitoring and evaluation   |                |
|                   | of law enforcement on       | monitoring and              | of law enforcement on       |                |
|                   | community and civil levels  | evaluation of law           | community and civil levels  |                |
|                   | which are connected to      | enforcement on              | which are connected to      |                |
|                   | the provincial level        | community and civil         | the provincial level        |                |



Strategy 2: Expedition of social drivers to communicate about risks on an ongoing basis Objective: Population obtains health knowledge.

KPIs: An increase of 30 percent of population obtaining health knowledge when compared to 2017

| Droductivity         | 2017  | 2018                         | 2019 - 2021                   | Responsible units |                 |  |  |  |  |
|----------------------|---|------------------------------|-------------------------------|-------------------|-----------------|--|--|--|--|
| Productivity         | 2011  | 2018                         | 2019 - 2021                   | Primary           | Secondary       |  |  |  |  |
| Strategy 2.1 Develop | Strategy 2.1 Develop management of communication to the public regarding health promotion and reduction of NCDs risks on a continuous basis |                              |                               |                   |                 |  |  |  |  |
| KPIs: Percentage c   | f proactive communications pla  | n which is implemented on an | ongoing basis                 |                   |                 |  |  |  |  |
| 2.1.1 Appointment    | 1. Appointment of a NCDs  | Meeting of the NCDs Risk     | Meeting of the NCDs Risk      | - Department of   | - Bureau of     |  |  |  |  |
| of NCDs Risk         | <b>Risk Communication</b>   | Communication Working        | Communication Working         | Risk              | Information,    |  |  |  |  |
| Communication        | Working Group to  | Group to reduce NCDs risk    | Group to reduce NCDs risk     | Communication     | Office of       |  |  |  |  |
| Working Group to     | minimize NCDs and   | factors in order to          | factors in order to determine | and Health        | Permanent       |  |  |  |  |
| minimize NCDs        | risks thereof   | determine the strategic      | the strategic plan and        | Behavior          | Secretary,      |  |  |  |  |
| and risks thereof    | 2. Meeting of the NCDs  | plan and guideline to drive  | guideline to drive the action | Development,      | Ministry of     |  |  |  |  |
|                      | <b>Risk Communication</b>   | the action plan. A meeting   | plan. A meeting is to be held | Department of     | Public Health   |  |  |  |  |
|                      | Working Group to  | is to be held every 3        | every 3 months (for each      | Disease Control   | - Department of |  |  |  |  |
|                      | reduce NCDs risk  | months and progress          | year) and progress            | - Center for      | Mental Health   |  |  |  |  |
|                      | factors in order to   | monitoring is to be put in   | monitoring is to be put in    | Public            | - Department of |  |  |  |  |

| determine the strategic  | place. | place. | Communication     | Medical          |
|--------------------------|--------|--------|-------------------|------------------|
| plan and guideline to    |        |        | - , Department of | Services         |
| drive the action plan. A |        |        | Health            | - Health         |
| meeting is to be held    |        | 10.5   |                   | Education        |
| every 3 months and       |        |        |                   | Division,        |
| progress monitoring is   |        |        |                   | Department of    |
| to be put in place.      |        | CV.    |                   | Health Service   |
|                          |        |        |                   | Support          |
|                          |        |        |                   | - Thai FDA       |
|                          |        | 0      |                   | - Department of  |
|                          |        |        |                   | Thai Traditional |
|                          |        |        |                   | and Alternative  |
|                          | N C V  |        |                   | Medicine         |
|                          | XV) i  |        |                   | - Ministry of    |
|                          |        |        |                   | Social           |
|                          |        |        |                   | Development      |
|                          |        |        |                   | and Human        |
|                          |        |        |                   | Security         |
|                          |        |        |                   | - Department of  |
|                          |        |        |                   | Public Relations |

|   |                     | - Ministry of    |
|---|---------------------|------------------|
|   |                     | Digital Economy  |
|   |                     | and Society      |
|   | $(\Omega)$          | - Thai NCD       |
|   |                     | Alliance Network |
|   |                     | - Raipoong       |
|   | CV.                 | Network          |
|   | $\langle n \rangle$ | - Major Risk     |
|   |                     | Factor Control   |
|   | 5                   | Section,         |
|   |                     | ThaiHealth       |
|   |                     | - Office of The  |
|   |                     | National         |
|   |                     | Broadcasting     |
| Č |                     | and              |
|   |                     | Telecommunicat   |
|   |                     | ions             |
|   |                     | Commission       |
|   |                     | (NBTC)           |
|   |                     | - BAOT Network   |

|   |  |  |        |   |  |                         | <ul> <li>Bureau of Public</li> <li>Relations for</li> <li>Society, NHSO</li> </ul> |  |
|---|--|--|--------|---|--|-------------------------|--|--|
| 2.1.2<br>Proactive<br>communication<br>plan is put in place<br>to reduce the risk<br>factors. | 1.<br>2.<br>3.   | Preparation for<br>proactive risk reduction<br>communication plan in<br>collaboration with<br>related agencies<br>Arrangement for<br>workshop to review the<br>proactive risk<br>communication plan<br>(every 6 months)<br>Arrangement for a<br>meeting to monitor<br>progress |        | Preparation for<br>proactive risk<br>reduction<br>communication plan in<br>collaboration with<br>related agencies<br>Arrangement for<br>workshop to review<br>the proactive risk<br>communication plan<br>(every 6 months)<br>Arrangement for a<br>meeting to monitor | Arrangement for a meeting to<br>monitor progress |                         | All related<br>agencies.   |  |
|   | progress       progress         Strategy 2.2 Develop the networks to transfer knowledge on communication of risks for the purpose of promoting health care and reduction of NCDs risks |  |        |   |  |                         |  |  |
|   | allianc  | ce networks (public sector,  | privat | e sector, and civil society   | y) can transfer knowledge to min                 | imize NCDs risks in a c | correct manner   |  |
| 2.2.1   | 1.   | Arrangement for training   | 1.     | Arrangement for   | 1. Arrangement for training                      | - Ministry of           | - Ministry of  |  |

| There is an              |    | on development of                                 |    | training on                                  |        | on development of                              | Publi | ic Health |   | Education             |
|--------------------------|----|---|----|--|--------|--|-------|-----------|---|-----------------------|
| additional network       |    | potential of network for                          |    | development of                               |        | potential of network for                       |       |           | - | Ministry of           |
| of organizations         |    | communicating about                               |    | potential of network for                     |        | communicating about                            |       |           |   | Interior              |
| working on communication |    | risks, health promotion,<br>and NCDs risks for    |    | communicating about risks, health promotion, |        | risks, health promotion,<br>and NCDs risks for |       |           | - | Ministry of           |
| about NCDs.              |    | central agencies of the                           |    | and NCDs risks for                           |        | provincial agencies                            |       |           |   | Social<br>Development |
|                          |    | Ministry of Public Health                         |    | regional agencies                            | 2.     | Arrangement for                                |       |           |   |                       |
|                          |    | and other agencies on                             | 2. | Arrangement for                              | ×      | meetings in collaboration                      |       |           |   | and Human             |
|                          |    | ministerial level                                 |    | meetings in                                  | $\geq$ | with other agencies to                         |       |           |   | Security              |
|                          | 2. | Arrangement for meetings                          |    | collaboration with other                     |        | expand engagement of                           |       |           | - | Department of         |
|                          |    | in collaboration with other                       |    | agencies to expand                           |        | network for public                             |       |           |   | Public                |
|                          |    | agencies to expand                                |    | engagement of                                |        | relations and to build full-                   |       |           |   | Relations             |
|                          |    | engagement of network                             |    | network for public                           |        | scale data management                          |       |           | _ | Ministry of           |
|                          |    | for public relations and to build full-scale data | X  | relations and to build<br>full-scale data    |        | system on a provincial<br>level                |       |           |   | Digital               |
|                          |    | management system on a                            |    | management system                            | 3.     | Arrangement of annual                          |       |           |   | Economy and           |
|                          |    | ministerial level                                 | P  | on a regional level                          |        | meeting/seminar for                            |       |           |   | Society               |
|                          |    |   | 3. | Arrangement of annual                        |        | networks and                                   |       |           |   |                       |
|                          |    |   |    | meeting/seminar for                          |        | organizations responsible                      |       |           |   |                       |
|                          |    |   |    | networks and                                 |        | for risk reduction                             |       |           |   |                       |

| 2.2.2   | organizations<br>responsible for risk<br>reduction<br>communication  | communication   |  |
|---|--|---|--|
| 2.2.2<br>Personnel and<br>networks on public<br>health obtain<br>proper knowledge<br>to promote health<br>and reduce the<br>NCDs risk factors | <ol> <li>Arrangement for 2<br/>workshops on health<br/>promotion and NCDs<br/>risk reduction to<br/>provide knowledge to<br/>health personnel and<br/>networks on a<br/>ministerial level</li> <li>Arrangement for<br/>training pre-test and<br/>post-test</li> <li>Arrangement for<br/>refresher course those<br/>personnel who do not<br/>pass the first training<br/>session</li> </ol> | <ul> <li>1. Arrangement for 2<br/>workshops on health<br/>promotion and NCDs risk<br/>reduction to provide<br/>knowledge to health<br/>personnel and networks<br/>on a ministerial level</li> <li>2. Arrangement for training<br/>pre-test and post-test</li> <li>3. Arrangement for<br/>refresher course those<br/>personnel who do not<br/>pass the first training<br/>session</li> </ul> |  |

| Strategy 2.3: Develo     | Strategy 2.3: Develop content of communication and increase communications channels which matches the targeted groups |    |                          |                                |               |   |               |  |
|--------------------------|---|----|--------------------------|--------------------------------|---------------|---|---------------|--|
| KPI: Percentage of t     | <b>(PI</b> : Percentage of targeted groups which are aware of how to minimize NCDs risk-prone behavior.               |    |                          |                                |               |   |               |  |
| 2.3.1                    | Development of series of  | 1. | Preparation of series of | Arrangement for workshop to    | - Ministry of | - | Ministry of   |  |
| Series of                | knowledge which address the   |    | knowledge for            | provide correct health         | Public Health |   | Education     |  |
| knowledge and            | 3 main targeted groups  |    | communicating about      | knowledge, including support   |               | - | Ministry of   |  |
| information for risk     | having NCDs risks i.e.  |    | risks as well as         | and coordination with other    |               |   | Interior      |  |
| communication to         | teenagers, working age, and   |    | reduction of risks and   | agencies to expand the         |               | - | Ministry of   |  |
| minimize NCDs            | older adult and aging groups  |    | NCDs                     | network for pubic relation and |               |   | Social        |  |
| risks for targeted       | in a manner that corresponds  | 2. | Testing of the series of | broadcasting of news update    |               |   | Development   |  |
| groups are<br>available. | to each area  |    | knowledge for            | and information in a           |               |   | and Human     |  |
|                          |   |    | communicating about      | comprehensive manner that      |               |   | Security      |  |
|                          |   |    | risks as well as         | match the targeted groups.     |               | _ | Department of |  |
|                          |   |    | reduction of risks and   | maton the targeted grouper     |               |   | Public        |  |
|                          |   | 0  | NCDs in 2 actual areas   |                                |               |   | Relations     |  |
|                          |   |    | to where they will be    |                                |               |   |               |  |
|                          | C   |    |                          |                                |               | - | Ministry of   |  |
|                          |   |    | applied                  |                                |               |   | Digital       |  |
|                          |   | 3. | Creation of health       |                                |               |   | Economy and   |  |
|                          |   |    | messages for 3 main      |                                |               |   | Society       |  |
|                          |   |    | targeted groups          |                                |               |   |               |  |
|                          |   |    | having NCDs risks i.e.   |                                |               |   |               |  |

| -                   |                            |                              |
|---------------------|----------------------------|------------------------------|
|                     |                            | teenagers, working           |
|                     |                            | age, and older adult         |
|                     |                            | and aging groups             |
|                     |                            | 4. Arrangement for           |
|                     |                            | selection process to         |
|                     |                            | ensure standardized          |
|                     |                            | series of information        |
|                     |                            | 5. Arrangement for           |
|                     |                            | meeting to certify the       |
|                     |                            | series of information        |
|                     |                            | and trying out the           |
|                     |                            | health message for           |
|                     |                            | each targeted group          |
| 2.3.2 NCD           | 1. Arrangement of 5        | Development of               |
| communications      | meetings to select         | diversification of           |
| channel for various | communication channels     | communication channels       |
| targeted groups     | for NCD prevention and     | for targeted groups,         |
|                     | control for the 3 targeted | especially digital platforms |
|                     | groups i.e. teenagers,     | which offer quick access to  |
|                     | working age, and older     | population.                  |

|                               | <ul> <li>adult and aging groups</li> <li>Five monitoring and<br/>evaluation of try-out result<br/>of communication<br/>channel for each targeted<br/>group</li> </ul> |                  |                           |       |                         |   |                |   |                  |
|-------------------------------|---|------------------|---------------------------|-------|-------------------------|---|----------------|---|------------------|
| Strategy 2.4 Monitor          | and respond to information which  | ch ca            | auses harm to NCDs occu   | ırren | се                      |   |                |   |                  |
| KPIs: - Percentage c          | f response to public media whic   | h inc            | curs negative impact towa | rd h  | ealth                   |   |                |   |                  |
| - One hundred                 | l percent of implementation as p  | er th            | e advertisement considera | ation | and approval system     |   |                |   |                  |
| 2.4.1                         | 1. Arrangement for meeting  | -                | Monitoring and            | 1.    | Monitoring and          | - | Ministry of    | - | Ministry of      |
| There is intra and            | to establish standard and   |                  | evaluation of method of   |       | evaluation of method of |   | Public Health  |   | Education        |
| inter-connection for          | guideline for monitoring of   |                  | surveillance and          |       | surveillance and        | - | Office of The  | - | Ministry of      |
| surveillance                  | news, which have  |                  | response to news          |       | response to news which  |   | National       |   | Interior         |
| information of the            | negative impact toward  | X                | which have negative       |       | have negative impact on |   | Broadcasting   | - | Ministry of      |
| internal and                  | NCDs occurrence and to  | $\left[ \right]$ | impact on NCDs            |       | NCDs occurrence         |   | and            |   | Social           |
| external agencies whose roles | provide correct health  | $\mathbf{N}$     | occurrence                | 2.    | Arrangement for a       |   | Telecommunicat |   | Development      |
| involve                       | news  | 2                | Coordination with         |       | meeting on an annual    |   | ions           |   | and Human        |
| surveillance and              | 2. Arrangement for training   |                  | alliance network for      |       | basis to review the     |   | Commission     |   | Security         |
| response of                   | on surveillance method  |                  | monitoring and            |       | method of surveillance  |   | (NBTC)         | - | Department of    |
| information                   | and how to respond to   |                  | inspection of channels    |       | and response to news    |   | . ,            |   | Public Relations |

|                    | negative news for NCDs       | and content for          | having negative impact       |                 | - Ministry of   |
|--------------------|------------------------------|--------------------------|------------------------------|-----------------|-----------------|
|                    | occurrence for               | information, news, and   | on NCDs occurrence and       |                 | Digital Economy |
|                    | community networks           | advertisement which      | to develop the system        |                 | and Society     |
|                    | 3. Arrangement for           | may have negative        | connecting surveillance      |                 |                 |
|                    | integrated meeting and       | impact                   | information between          |                 |                 |
|                    | the system connecting        |                          | networks of internal and     |                 |                 |
|                    | surveillance information     |                          | external agencies whose      |                 |                 |
|                    | between networks of          |                          | role is to conduct           |                 |                 |
|                    | internal and external        | e C                      | surveillance and             |                 |                 |
|                    | agencies whose role is to    |                          | response of news             |                 |                 |
|                    | conduct surveillance and     |                          |                              |                 |                 |
|                    | response of news             |                          |                              |                 |                 |
|                    | 4. Monitoring and evaluation | r C V                    |                              |                 |                 |
|                    | of surveillance and          |                          |                              |                 |                 |
|                    | response of news which       |                          |                              |                 |                 |
|                    | have negative impact on      |                          |                              |                 |                 |
|                    | NCDs occurrence              |                          |                              |                 |                 |
| 2.4.2 There is a   | 1. Amendment / review of     | 1. Amendment / review of | Monitoring and evaluation of | - Ministry of   | - Ministry of   |
| system to consider | laws and announcements       | laws and                 | the system for advertisement | Public Health   | Education       |
| and approve        | relating to advertisement    | announcements            | consideration and approval   | - Office of The | - Ministry of   |

| advertisement        | approval                   | relating to       | on an annual basis | National       | Interior         |
|----------------------|----------------------------|-------------------|--------------------|----------------|------------------|
| (which places        | 2. Preparation of          | advertisement     |                    | Broadcasting   | - Ministry of    |
| significance on      | manual/guideline for       | approval          | $\sim$             | and            | Social           |
| channels, content,   | consideration and          | 2. Monitoring and |                    | Telecommunicat | Development      |
| and possible         | approval of advertisement  | _                 | XV).               | ions           | and Human        |
| negative impact      | 3. Arrangement for meeting | system for        |                    | Commission     | Security         |
| without any conflict |                            | -                 | $\sim$             |                |                  |
| of interest)         | to clarify the method for  | advertisement     |                    | (NBTC)         | - Department of  |
|                      | consideration and          | consideration and |                    |                | Public Relations |
|                      | approval of advertisement  | approval          |                    |                | - Ministry of    |
|                      | to prevent any negative    |                   |                    |                | Digital Economy  |
|                      | impact and measures for    |                   | •                  |                | and Society      |
|                      | implementation in case of  |                   |                    |                |                  |
|                      | conflict of interest       | $\sim C V$        |                    |                |                  |
|                      | S                          |                   |                    |                |                  |

Strategy 3: Potential development for community / local administrations, and alliance networks

**Objective**: Communities can engage in management and promotion of health as well as NCDs prevention and control.

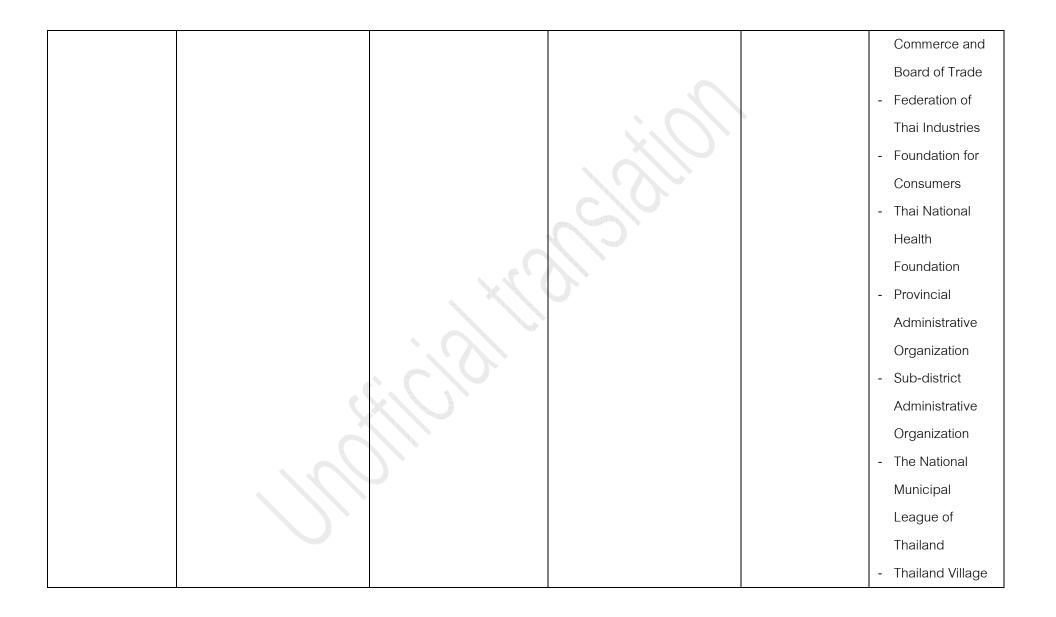
**KPIs**: Percentage of communities which can engage in management of health promotion as well as NCDs prevention and control (50 percent)

| Droductivity  | 2017                               | 2018                              | 2010 2021                        | Responsible units |                 |  |  |  |
|---|------------------------------------|-----------------------------------|----------------------------------|-------------------|-----------------|--|--|--|
| Productivity  | 2017                               | 2018                              | 2019 - 2021                      | Primary           | Secondary       |  |  |  |
| Strategy 3.1 Develop mechanism for people, local organizations, and alliance networks to participate in surveillance and promotion of health as well as |                                    |                                   |                                  |                   |                 |  |  |  |
| disease control and p   | prevention                         |                                   |                                  |                   |                 |  |  |  |
| KPIs: - Percentage  | of sub-districts engaging in integ | grated health management (70      | percent by 2017, 100 percent by  | y 5 years)        |                 |  |  |  |
| - At least 1 co   | ommunity in the urban area per n   | nunicipality/special municipality | y engage in integrated health ma | nagement          |                 |  |  |  |
| 3.1.1   | - Analysis of operating            | - Driving operations              | - Driving operations and         | - Health Service  | - Department of |  |  |  |
| Agendas of various  | mechanism of involved              | and monitoring of                 | monitoring of committees         | Support           | Disease Control |  |  |  |
| levels of   | committees at various              | committees                        |                                  | Department        | - Department of |  |  |  |
| committees, which   | levels                             |                                   |                                  |                   | Health          |  |  |  |

| are engaged by      | - Analysis of driving issues |   | - Department of      |
|---------------------|------------------------------|---|----------------------|
| the people alliance | of each year                 |   | Thai Traditional     |
| network, include    | - Driving operations and     |   | and Alternative      |
| health promotion    | monitoring of committees     |   | Medicine             |
| as well as NCDs     | 5                            |   | - Department of      |
| prevention and      |                              |   | Local                |
| control             |                              |   |                      |
|                     |                              |   | Administration       |
| 3.1.2               | - Preparation of health      | - Preparation of health - Preparation of health | - Ministry of Social |
| There are health    | promotion plan for NCDs      | promotion plan for promotion plan for NCDs      | Development          |
| management          | prevention and control       | NCDs prevention and prevention and control      | and Human            |
| communities         | through community            | control through through community               | Security             |
| conducting health   | engagement process           | community engagement process                    | - Thai Chamber of    |
| promotion as well   |                              | engagement process - Arrangement of meeting     | Commerce and         |
| as NCDs             | C C                          | - Arrangement of to monitor progress of         | Board of Trade       |
| prevention and      | X                            |   | - Federation of      |
| control             |                              | meeting to monitor health promotion             | Thai Industries      |
|                     |                              | progress of health operations and NCDs          |                      |
|                     |                              | promotion operations prevention and control of  | - Foundation for     |
|                     |                              | and NCDs prevention communities                 | Consumers            |
|                     |                              | and control of                                  | - Thai National      |
|                     |                              | communities                                     | Health               |

|                    |                          |                          |                          | Foundation         |
|--------------------|--------------------------|--------------------------|--------------------------|--------------------|
| 3.1.3              | - Arrangement of meeting | - Arrangement of meeting | - Arrangement of meeting | - Provincial       |
| There are alliance | of networks to exchange  | of networks to exchange  | of networks to exchange  | Administrative     |
| networks to        | knowledge and            | knowledge and            | knowledge and            | Organization       |
| promote and        | cooperation between      | cooperation between      | cooperation between      | - Sub-district     |
| support operations | different areas of       | different areas of       | different areas of       | Administrative     |
| of communities     | surveillance, health     | surveillance, health     | surveillance, health     | Organization       |
|                    | promotion, and NCDs      | promotion, and NCDs      | promotion, and NCDs      | - The National     |
|                    | prevention and control   | prevention and control   | prevention and control   | Municipal          |
|                    |                          |                          | <b>)</b>                 | League of          |
|                    |                          |                          |                          | Thailand           |
|                    |                          | $\langle 0 \rangle$      |                          | - Thailand Village |
|                    |                          | $\sim 10^{\circ}$        |                          | Health Volunteer   |
|                    | C C                      | $() \times$              |                          | Foundation         |
|                    | ~ (                      |                          |                          | - National Health  |
|                    |                          |                          |                          | Commission         |
|                    |                          |                          |                          | Office             |
|                    |                          |                          |                          | - National Health  |
|                    | <b>N</b>                 |                          |                          | Security Office    |
|                    |                          |                          |                          | - Thai Health      |

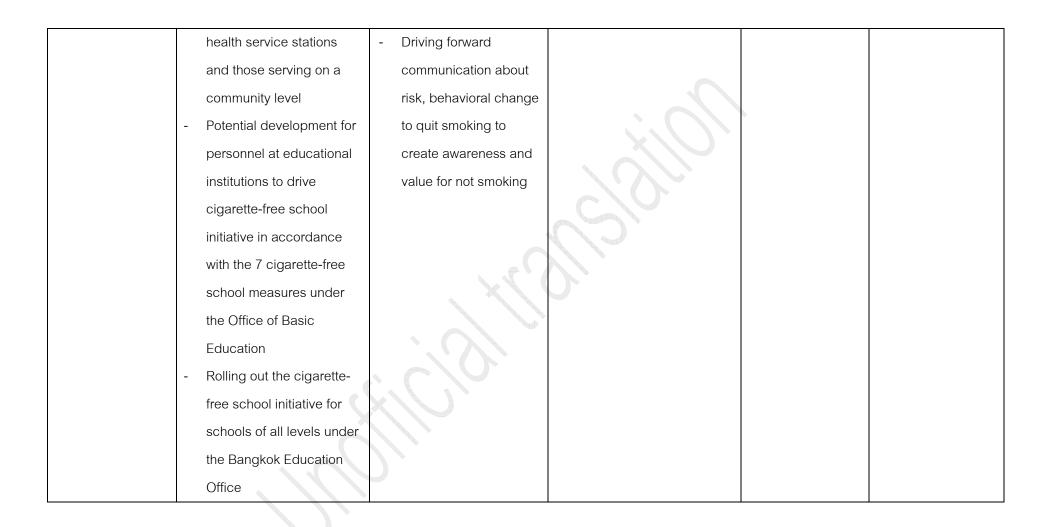
|   |                           |                       |                       |                  | Foundation           |  |  |  |  |
|---|---------------------------|-----------------------|-----------------------|------------------|----------------------|--|--|--|--|
| Strategy 3.2: Develop potential of health leader of the community in respect of health promotion as well as NCDs prevention and control |                           |                       |                       |                  |                      |  |  |  |  |
| KPI: 1. There are at least 30 health management volunteers/sub-district in 2021   |                           |                       |                       |                  |                      |  |  |  |  |
| 2. There are at least 4.0 million Family Health Volunteers in 2021  |                           |                       |                       |                  |                      |  |  |  |  |
| 3.2.1   | - Arrangement of training | - Arrangement of more | - Arrangement of more | - Health Service | - Department of      |  |  |  |  |
| There are health  | sessions to develop       | training sessions to  | training sessions to  | Support          | Disease Control      |  |  |  |  |
| management  | potential of health       | develop potential of  | develop potential of  | Department       | - Department of      |  |  |  |  |
| volunteers  | management volunteers     | health management     | health management     |                  | Health               |  |  |  |  |
| (Community Health   | handling NCDs             | volunteers handling   | volunteers handling   |                  | - Department of      |  |  |  |  |
| Volunteers).  | management in             | NCDs management in    | NCDs management in    |                  | Thai Traditional     |  |  |  |  |
|   | communities               | communities           | communities           |                  | and Alternative      |  |  |  |  |
|   |                           | $\langle O \rangle$   |                       |                  | Medicine             |  |  |  |  |
|   |                           | $\cdot c \setminus C$ |                       |                  | - Department of      |  |  |  |  |
|   | Ċ                         | ×U)×                  |                       |                  | Local                |  |  |  |  |
|   |                           |                       |                       |                  | Administration       |  |  |  |  |
|   |                           |                       |                       |                  | - Ministry of Social |  |  |  |  |
|   |                           | 5                     |                       |                  | Development          |  |  |  |  |
|   |                           |                       |                       |                  | and Human            |  |  |  |  |
|   |                           |                       |                       |                  | Security             |  |  |  |  |
|   |                           |                       |                       |                  | - Thai Chamber of    |  |  |  |  |



|                              |                            |  | Health Volunteer<br>Foundation<br>- National Health<br>Commission<br>Office<br>- National Health<br>Security Office |
|------------------------------|----------------------------|--|---|
|                              |                            |  | - Thai Health<br>Foundation   |
| 3.2.2                        | - Development of potential | - Development of - Development of potential    |   |
| There are more               | of 10 health leaders for   | potential of health of 10 health leaders for   |   |
| health leaders               | working age who are in     | leaders for working age working age who are in |   |
| undergoing                   | good shape and good        | who are in good shape good shape and good      |   |
| potential                    | health for each province   | and good health for all health on provincial,  |   |
| development for              | - Development and driving  | sub-districts regional, and national           |   |
| surveillance, health         | forward the healthy eating | - Development the levels                       |   |
| promotion as well<br>as NCDs | / active living /          | surveillance system for - Development the      |   |
| prevention and               | environmental health       | working age health and surveillance system for |   |
| control                      | policy through the civil   | data management working age health and         |   |
|                              | sector on a zone level.    | - Development and data management on           |   |

| <br>                         |                          |                             |
|------------------------------|--------------------------|-----------------------------|
| Emphasis is made on the      | driving forward the      | provincial, regional, and   |
| on less salt policy, active  | healthy eating / active  | national levels             |
| living policy, policy for    | living / environmental   | - Drive forward the Act for |
| availability of healthy food | health policy through    | Healthy Eating / Active     |
| at all agencies and          | the civil sector and the | Living / Environmental      |
| communities, policy to       | National Health          | Health Policy through the   |
| improve workplace to         | Assembly (Healthy        | civil sector and the        |
| ensure good environment      | eating emphasizes on     | National Health Assembly    |
| for good health, and so      | less salt consumption;   | (Healthy eating             |
| forth                        | active living focuses on | Cemphasizes on less salt    |
| - Potential development for  | a more active lifestyle; | consumption; active living  |
| personnel in respect of      | environmental health     | focuses on a more active    |
| surveillance, prevention     | stresses on availability | lifestyle; environmental    |
| and control of tobacco at    | of healthy               | health stresses on          |
| educational institutions by  | food shop at all         | availability of healthy     |
| transfer of knowledge as     | agencies and             | food shop at all agencies   |
| per the revised version of   | communities; the policy  | and communities; the        |
| "Tobacco detective (for      | to improve the           | policy to improve the       |
| youth)" curriculum to        | workplace to ensure      | workplace to ensure         |
| officials relating to public | healthy environment,     | healthy environment, and    |

|   | health sector (Office of    | and so forth)             | so forth)                    |  |
|---|-----------------------------|---------------------------|------------------------------|--|
|   | Disease Prevention and      |                           |                              |  |
|   |                             |                           |                              |  |
|   | Control 1-12/ Institute of  | - Rolling out the         | - Rolling out the cigarette- |  |
|   | Urban Disease Control       | cigarette-free school     | free school project at       |  |
|   | and Prevention/ Provincial  | project at schools of all | primary schools under        |  |
|   | Health Office in high-risk  | levels under Bangkok      | Office of Basic Education    |  |
|   | zones) for them to drive    | Education Office          | Commission                   |  |
|   | prevention and control of   | - Rolling out the         | - Rolling out the cigarette- |  |
|   | tobacco use among           | cigarette-free school     | free school project at       |  |
|   | youth, especially in the    | project at schools of all | Schools of all levels under  |  |
|   | areas with high tobacco     | levels under Office of    | Bangkok Education Office     |  |
|   | consumption as well as      | Basic Education           |                              |  |
|   | the cigarette-free school   | Commission                |                              |  |
|   | operations to ensure        | - Supporting and driving  |                              |  |
|   | coverage for the area       | cigarette-free school     |                              |  |
|   | under their responsibility  | initiatives in a broad    |                              |  |
| - | - Potential development for | perspective for schools   |                              |  |
|   | personnel providing         | under Secondary           |                              |  |
|   | consultancy of reduction    | Educational Service       |                              |  |
|   | and quitting of smoking at  | Area in all areas         |                              |  |



## Strategy 4: Development of monitoring and data management systems

**Objective**: Related agencies can identify the risk-prone demographics, patient groups, risk area, and environments which are considered risk factors in a correct, accurate, and timely manner, leading to necessary support for the launch of measures and implementation of NCDs prevention and control and NCDs risk minimization in an efficient manner.

**KPIs**: Percentage of related agencies which can identify the risk issues so as to determine measures for NCDs prevention and control in correct, accurate, and timely manner

| Droductivity      | 2017  | 2017 2018                      |                              | Responsible units                    |                      |  |  |  |
|-------------------|---|--------------------------------|------------------------------|--------------------------------------|----------------------|--|--|--|
| Productivity 2017 |   | 2010                           | 2019 - 2021                  | Primary                              | Secondary            |  |  |  |
| Strategy 4.1 Deve | Strategy 4.1 Develop connection of information on district, provincial, regional, and national levels |                                |                              |                                      |                      |  |  |  |
| KPIs: Percentag   | e of related agencies on na   | itional, regional, provincial, | , and district level whose o | perations meet the NCDs surveillance | e standard.          |  |  |  |
| 4.1.1             | 1. Appointment of   | 1. Arrangement of a            | 1. Arrangement of a          | - Bureau of Non-Communicable         | - Bureau of Policy   |  |  |  |
| There are         | working group to  | minimum of 4                   | minimum of 4                 | Diseases, Department of              | and Strategy, Office |  |  |  |
| mechanisms for    |   |                                |                              |                                      |                      |  |  |  |

| development       | integrate data for | meetings of                    | meetings of                       | Disease Control | of Permanent           |
|-------------------|--------------------|--------------------------------|-----------------------------------|-----------------|------------------------|
| and monitoring    | national NCDs      | working group to               | working group to                  |                 | Secretary, Ministry    |
| of NCDs           | surveillance       | integrate data for             | integrate data for                |                 | of Public Health       |
| surveillance for  | 2. Appointment of  | national / regional            | national / regional               | (0)             | - Bureau of Tobacco    |
| data integration. | working group to   | NCDs surveillance              | NCDs surveillance                 | X ( )           | Control                |
|                   | integrate data for |                                |                                   |                 |                        |
|                   | regional NCDs      |                                |                                   | 0               | - Office of Alcohol    |
|                   | surveillance       |                                |                                   |                 | Control Committee      |
|                   | surveillance       |                                |                                   |                 | - Bureau of Health     |
|                   |                    |                                | $\langle \langle \rangle \rangle$ |                 | Promotion,             |
|                   |                    |                                |                                   |                 | Department of          |
|                   |                    |                                |                                   |                 | Health                 |
|                   |                    |                                |                                   |                 | - Physical Activity    |
|                   |                    | .c.C.N                         |                                   |                 | and Health Division,   |
|                   |                    | $\langle \chi \rangle \rangle$ |                                   |                 | Department of          |
|                   |                    | $\langle \rangle \rangle$      |                                   |                 | Health                 |
|                   |                    | $\sim$                         |                                   |                 | - National Health      |
|                   |                    |                                |                                   |                 | Security Office        |
|                   |                    |                                |                                   |                 | - National Statistical |
|                   |                    |                                |                                   |                 | Office                 |

|                   |                         |                     |  |                                  | - Health Info Section |
|-------------------|-------------------------|---------------------|--|----------------------------------|-----------------------|
|                   |                         |                     |  |                                  | - Institute of        |
|                   |                         |                     |  |                                  | Population and        |
|                   |                         |                     |  |                                  | Social Research,      |
|                   |                         |                     |  |                                  | Mahidol University    |
|                   |                         |                     |  | $\sim$                           | - Department of       |
|                   |                         |                     |  |                                  | Epidemiology,         |
|                   |                         |                     |  |                                  | Prince Songkhla       |
|                   |                         |                     | $\langle \mathcal{A} \rangle_{\mathbb{R}}$ |                                  | University            |
|                   |                         |                     | X/O.                                       |                                  | - National Health     |
|                   |                         |                     |  |                                  | Examination Survey    |
|                   |                         |                     |  |                                  | Office, Department    |
|                   |                         | . C. C. \           |  |                                  | of Medical Services   |
|                   |                         | $\mathcal{O}$       |  |                                  |                       |
| 4.1.2             | 1. Provision of support | 1. Establishment of | 1. Rolling out pilot                       | - Bureau of Non-Communicable     | - Center for          |
| There is          | for adjustment and      | pilot hospitals to  | hospitals                                  | Diseases, Department of          | Information           |
| surveillance      | assortment of           | develop             |  | Disease Control                  | Technology and        |
| information on    | existing data           | connection of the   |  | - Bureau of Policy and Strategy, | Communication,        |
| illness and risk- | systems to put in       | 43- file system     |  | Office of Permanent Secretary,   | Office of Permanent   |
| prone behavior    | place the information   | between the area    |  | Ministry of Public Health        | Secretary, Ministry   |

| on a service unit | recording system,       | level (community     | of Public Health    |
|-------------------|-------------------------|----------------------|---------------------|
|                   | 5 1                     |                      |                     |
| level, which      | which includes the      | health stations, and | - Bureau of         |
| extends from      | information of health   | sub-district health  | Epidemiology,       |
| the existing data | stations at sub-        | stations) and the    | Department of       |
| system and        | district health         | provincial, health   | Disease Control     |
| reports in a      | stations and            | regions, and         | - Office of Tobaco  |
| complete,         |                         |                      |                     |
| correct, and      | hospitals consisting    | central levels for   | Products Contro     |
| timely manner.    | of illness information, | common use of 12     | Committee           |
|                   | treatment, and key      | pilot provinces (1   | - Office of Alcoho  |
|                   | risk-prone behaviors    | province per each    | Control Committ     |
|                   | 2. Coordination for     | health region)       | - Bureau of Nutriti |
|                   | management of the       | 2. Coordination with | Department of       |
|                   | existing health data    | related agencies to  | Health              |
|                   | center to enable        | set up the           | - National Health   |
|                   | monitoring of the       | individual NCDs      | Security Office     |
|                   | situation on            | health status data   |                     |
|                   | population and          | system with          |                     |
|                   | individual levels in a  | connection           |                     |
|                   | correct and             | between the health   |                     |
|                   | complete manner on      | stations where       |                     |

|                | provincial regional   | oitizono oon             |                      |                               |                   |
|----------------|-----------------------|--------------------------|----------------------|-------------------------------|-------------------|
|                | provincial, regional, | citizens can             |                      |                               |                   |
|                | and national level    | access their own         |                      |                               |                   |
|                |                       | individual               |                      |                               |                   |
|                |                       | information              |                      |                               |                   |
|                |                       | 3. Provision of training |                      |                               |                   |
|                |                       | session for medical      |                      | $\mathcal{N}$                 |                   |
|                |                       | personnel to             | C                    | 0                             |                   |
|                |                       | ensure they can          |                      |                               |                   |
|                |                       | record data of risk-     |                      |                               |                   |
|                |                       | prone behavior and       | $\times \int O$      |                               |                   |
|                |                       | illness with             |                      |                               |                   |
|                |                       | accuracy                 |                      |                               |                   |
| 4.1.3          |                       | 1. Survey of service     | 1. Survey of service | - Bureau of Non-Communicable  | - National Health |
| There is a     |                       | data at medical          | data at medical      | Diseases, Department of       | Security Office   |
| sentinel       |                       | institutions under       | institutions under   | Disease Control               |                   |
| surveillance   |                       | the Ministry of          | the Ministry of      | - Center for Information      |                   |
| system for     |                       | Public Health and        | Public Health and    | Technology and                |                   |
| treatment      |                       | those under              | those under          | Communication, Office of      |                   |
| profiles of    |                       | Bangkok                  | Bangkok              | Permanent Secretary, Ministry |                   |
| patients       |                       |                          |                      |                               |                   |
| suffering from |                       | Metropolitan area        | Metropolitan area    | of Public Health              |                   |

| type 2 diabetes  |                     | (sentinel              | (sentinel  |                      |
|------------------|---------------------|------------------------|--|----------------------|
|                  |                     | ,                      |  |                      |
| and              |                     | surveillance) to       | surveillance) to                                       |                      |
| hypertension of  |                     | monitor the result     | monitor the result of                                  |                      |
| hospitals under  |                     | of care provided to    | care provided to                                       |                      |
| the umbrella of  |                     | patients with          | patients with  |                      |
| Ministry of      |                     |                        |  |                      |
| Public Health    |                     | diabetes type 2        | diabetes type 2 and                                    |                      |
| and medical      |                     | and hypertension       | hypertension   |                      |
| institutes in    |                     | 2. Reporting of survey | 2. Reporting of survey                                 |                      |
| Bangkok.         |                     | data every 1 year      | data every 1 year                                      |                      |
| 4.1.4            | 1. Assessment of    | 1. Training is         | 1. Training is provided - Bureau of Non-Communicable - | Office of Civil      |
| There is an      | correctness and     | provided to            | to personnel related Diseases, Department of           | Registration,        |
| information      | completeness of     | teachers who           | to diagnosis of Disease Control                        | Department of        |
| system with      | death data is       | diagnose cause of      | Cause of death by - Bureau of Policy and Strategy,     | Local                |
| correct and      | conducted on a      | death to ensure the    | teachers who Office of Permanent Secretary,            | Administration,      |
| complete data    | regular basis.      | diagnosis meets        |  | Ministry of Interior |
| on death related | -                   |                        | Withouty of Fublic Floatur                             |                      |
| to NCDs.         | 2. Analysis of      | the criteria.          | training.  | National Statistical |
|                  | epidemiology        |                        | 2. Support is provided                                 | Office               |
|                  | situation of NCDs   |                        | for making of cause                                    | Institute of         |
|                  | death which is      |                        | of death diagnosis                                     | Population and       |
|                  | calibrated with the |                        | program.   | Social Research,     |

|                                 | result of evaluation      |                          |                          |   |                                |   | Mahidol University |
|---------------------------------|---------------------------|--------------------------|--------------------------|---|--------------------------------|---|--------------------|
|                                 | of coverage and           |                          |                          |   |                                |   |                    |
|                                 | accuracy of data is       |                          |                          |   |                                |   |                    |
|                                 | conducted on an           |                          |                          |   |                                |   |                    |
|                                 | annual basis              |                          |                          | X |                                |   |                    |
| 4.1.5                           | Arrangement of            | There are guidelines for | There are guidelines for |   | Office of Permanent Secretary, | - | Office of Tobacco  |
| There is data                   | meetings of NCDs          | conducting survey in a   | conducting survey in a   |   | Ministry of Public Health      |   | Products Control   |
| integration for                 | survey database           | manner that the data     | manner that the data     | - | Bureau of Non-Communicable     |   | Committee          |
| NCDs, risk-                     | administrators whose      | can be systematically    | can be systematically    |   | Diseases, Department of        | - | Office of Alcohol  |
| prone behavior,                 | data includes risk-prone  | integrated to the        | integrated to the        |   | Disease Control                |   | Control Committee  |
| and health-<br>smartness in the | behavior and health       | database.                | database.                | - | Bureau of Policy and Strategy, | - | Bureau of Health   |
| population                      | awareness on              | \$                       |                          |   | Office of Permanent Secretary, |   | Promotion,         |
| survey database                 | demographic levels so     | C                        | 5                        |   | Ministry of Public Health      |   | Department of      |
| to enable                       | as to jointly determine   | (X V)                    |                          | - | National Statistical Office    |   | Health             |
| monitoring of                   | the key KPIs and survey   | $\langle \rangle$        |                          |   |                                | - | Physical Activity  |
| situation on a                  | methodology to optimize   | $\langle \rangle$        |                          |   |                                |   | and Health         |
| provincial level                | the use of data up to the |                          |                          |   |                                |   | Division,          |
|                                 | provincial level          |                          |                          |   |                                |   | Department of      |
|                                 |                           |                          |                          |   |                                |   | Health             |
|                                 |                           |                          |                          |   |                                | - | Bureau of          |

|                          |                      |                       |                       |                           | Nutrition,<br>Department of<br>Health<br>- National Health<br>Security Office<br>- Health Service |
|--------------------------|----------------------|-----------------------|-----------------------|---------------------------|---|
|                          |                      |                       |                       |                           | Support<br>Department<br>- Health Info Section  |
| 4.1.6                    | 1. Coordination and  | 1. There is reporting | 1. There is reporting | - Bureau of Epidemiology, | - Bureau of Policy  |
| There is                 | management of        | on NCDs situation     | on NCDs situation     | Department of Disease     | and Strategy,   |
| connection               | existing database to | which connects the    | which connects the    | Control                   | Office of   |
| between related          | set up data archive  | data on death,        | data on death,        | - Bureau of Non-          | Permanent   |
| data                     | as well as key data  | illness,              | illness,              | Communicable Diseases,    | Secretary, Ministry   |
| (environment,            | resources, which     | environment, and      | environment, and      | Department of Disease     | of Public Health  |
| risk-prone<br>behaviors, | cover environmental  | risk-prone behavior   | risk-prone behavior   | Control                   | - Office of Tobacco   |
| illness, deaths,         | factors, risk-prone  | both from the         | both from the health  |                           | Products Control  |
| and                      | behavior, illness,   | health stations and   | stations and          |                           | Committee   |
| abnormalities (5         | death, and           | demographic level     | demographic level     |                           | - Office of Alcohol   |
| dimensions))             | abnormalities (5     | in the NCDs Board     | in the NCDs Board     |                           | Control Committee   |

| To ensure an                  | dimensions) | meeting on district,       | meeting on district,      |     | - Bureau of Health     |
|-------------------------------|-------------|----------------------------|---------------------------|-----|------------------------|
| integrated,                   |             | provincial, and            | provincial, and           |     | Promotion,             |
| systematic                    |             | regional levels.           | regional levels.          |     | Department of          |
| surveillance for              |             |                            |                           | (0) | Health                 |
| NCDs and                      |             |                            |                           | XV  | - Physical Activity    |
| related risk                  |             |                            |                           |     | and Health             |
| factor on a                   |             |                            |                           | 0   | Division,              |
| district and national levels. |             |                            | CA -                      |     | Department of          |
| national levels.              |             |                            | $\langle \rangle \rangle$ |     | Health                 |
|                               |             |                            | ×(`)                      |     | - Bureau of Nutrition, |
|                               |             |                            |                           |     | Department of          |
|                               |             | <u>`.</u> O                |                           |     | Health                 |
|                               |             |                            | <b>)</b>                  |     | - National Statistical |
|                               |             | (1/2)                      |                           |     | Office                 |
|                               |             | XII                        |                           |     |                        |
|                               |             | $\mathcal{O}(\mathcal{O})$ |                           |     | - Institute of         |
|                               |             | $\mathcal{N}$              |                           |     | Population and         |
|                               |             |                            |                           |     | Social Research,       |
|                               |             |                            |                           |     | Mahidol University     |
|                               |             | ~                          |                           |     | - Department of        |

|                  |                        |                      |                      |                               | Epidemiology,<br>Prince Songkhla<br>University<br>- National Health<br>Examination<br>Survey Office<br>- Health Service |
|------------------|------------------------|----------------------|----------------------|-------------------------------|---|
|                  |                        |                      | P.                   | <b>`</b>                      | Support<br>Department   |
| 4.1.7            | 1. Assessment on       | 1. Assessment on     | 1. Assessment on     | - Inspection Division         | - Bureau of Non-  |
| There is         | surveillance system    | surveillance system  | surveillance system  | - Center for Information      | Communicable  |
| evaluation of    | for diabetes and       | for diabetes and     | for diabetes and     | Technology and                | Diseases  |
| data system for  | hypertension at        | hypertension at      | hypertension at      | Communication, Office of      | - Bureau of Policy  |
| NCDs service     | health stations of the | health stations of   | health stations of   | Permanent Secretary, Ministry | and Strategy,   |
| provision of     | public sector is       | the public sector is | the public sector is | of Public Health              | Office of   |
| public medial    | conducted every 2      | conducted every 2    | conducted every 2    |                               | Permanent   |
| institutes to    | years.                 | years.               | years.               |                               | Secretary,  |
| monitor the      | ,                      | ,                    | ,                    |                               | Ministry of Public  |
| quality of       |                        |                      |                      |                               | Health  |
| reporting and to |                        |                      |                      |                               |   |
| enable           |                        |                      |                      |                               | - Bureau of   |

| systematic                  |                             |                          |                           |                                | Epidemiology,      |
|-----------------------------|-----------------------------|--------------------------|---------------------------|--------------------------------|--------------------|
| development.                |                             |                          |                           |                                | Department of      |
|                             |                             |                          |                           |                                | Disease Control    |
| 4.1.8                       | 1. There is a review        | 1. There is a review     | 1. There is a review on   | - National Cancer Institute of | - Bureau of Policy |
| There is a                  | on correctness and          | on correctness           | correctness and           | Thailand                       | and Strategy,      |
| correct and                 | completeness of             | and                      | completeness of           | - National Health Security     | Office of          |
| complete                    | cancer register.            | completeness of          | cancer register on        | Office                         | Permanent          |
| registration of             |                             | cancer register          | a national level.         | *                              | Secretary,         |
| population with cancer on a |                             | on a national            |                           |                                | Ministry of Public |
| national level.             |                             | level.                   | $X \setminus O$           |                                | Health             |
|                             |                             |                          |                           |                                | - Center for       |
|                             |                             | $\sim$                   |                           |                                | Information        |
|                             |                             | C.C.                     | <b>J</b>                  |                                | Technology and     |
|                             |                             | (X   V)                  |                           |                                | Communication,     |
|                             |                             | $\langle \rangle$        |                           |                                | Office of          |
|                             |                             | $\langle \rangle$        |                           |                                | Permanent          |
|                             |                             |                          |                           |                                | Secretary,         |
|                             |                             |                          |                           |                                | Ministry of Public |
|                             |                             |                          |                           |                                | Health             |
| Strategy 4.2 Deve           | lop potential of data manag | ement and analysis to mo | nitor NCDs on a national, | provincial and district level  |                    |

| 4.2.1          | 1. Provision of    | 1. Provision of training | - Praborommarajchanok         | - Bureau of Non-   |
|----------------|--------------------|--------------------------|-------------------------------|--------------------|
| Personnel in   | training / recover | J                        | Institute, Ministry of Public | Communicable       |
| medical        | for NCDs           | management and           | Health                        | Diseases           |
| statistics and | management and     |                          | - Thailand Healthy Strategic  | - Center for       |
| NCDs-related   | -                  |                          |                               |                    |
| nformation     | reporting for      | medical statistics       | Management Office, Ministry   | Information        |
| undergoing     | medical statistics |                          | of Public Health              | Technology and     |
| NCDs data      | personnel,         | including provision      |                               | Communication,     |
| management     | including          | of NCDs                  |                               | Office of          |
| training       | provision of NCD   | s surveillance           |                               | Permanent          |
|                | surveillance       | information              |                               | Secretary, Ministr |
|                | information        | U.                       |                               | of Public Health   |
|                | $(\mathcal{A})$    |                          |                               | - Bureau of Policy |
|                |                    |                          |                               | and Strategy,      |
|                |                    |                          |                               | Office of          |
|                |                    |                          |                               | Permanent          |
|                |                    |                          |                               | Secretary, Minist  |
|                |                    |                          |                               | of Public Health   |

| 4.2.2              |                             | 1. Provision of training | 1. Provision of training    | _     | Bureau of Non-Communicable  | _ | Bureau of Policy   |
|--------------------|-----------------------------|--------------------------|-----------------------------|-------|-----------------------------|---|--------------------|
| Personnel who      |                             | C                        |                             |       |                             |   |                    |
| are disease        |                             | / recovery for           | / recovery for NCDs         |       | Diseases                    |   | and Strategy,      |
|                    |                             | NCDs analysis and        | analysis and result         | -     | Thailand Healthy Strategic  |   | Office of          |
| managers or        |                             | result reading for       | reading for disease         |       | Management Office, Ministry |   | Permanent          |
| regional /         |                             | disease managers         | managers or NCDs            | X     | of Public Health            |   | Secretary,         |
| provincial /       |                             | or NCDs disease          | disease system              |       | Bureau of Health Promotion, |   | Ministry of Public |
| district NCDs      |                             | system manager           | manager on district,        |       | Department of Heath         |   | Health             |
| system             |                             |                          |                             |       | Dopuration: of Float        |   |                    |
| managers           |                             | on district,             | provincial, and             |       |                             | - | Bureau of          |
| undergoing         |                             | provincial, and          | regional level in line      |       |                             |   | Epidemiology       |
| training for       |                             | regional level in        | with the 5-                 |       |                             | - | Center for         |
| NCDs data          |                             | line with the 5-         | dimension disease           |       |                             |   | Information        |
| management,        |                             | dimension disease        | surveillance                |       |                             |   | Technology and     |
| analysis, and      |                             | surveillance             |                             |       |                             |   | Communication,     |
| result             |                             |                          |                             |       |                             |   | Office of          |
| processing in      |                             |                          |                             |       |                             |   | Permanent          |
| alignment with     |                             |                          |                             |       |                             |   |                    |
| the 5-dimension    | ~ 5                         |                          |                             |       |                             |   | Secretary,         |
| surveillance       |                             |                          |                             |       |                             |   | Ministry of Public |
| framework          |                             |                          |                             |       |                             |   | Health             |
|                    |                             |                          |                             |       |                             |   |                    |
| Strategy 4.3 Devel | op the NCDs and risk factor | r surveillance system on | an organizational level and | l for | targeted group              |   |                    |
|                    |                             |                          |                             |       |                             |   |                    |

|                             | tage of educational instituti<br>e of businesses which can |                      |               |                       |   | nt and undergrads on a timely ma<br>y manner | anne | er                  |
|-----------------------------|--|----------------------|---------------|-----------------------|---|--|------|---------------------|
| 4.3.1                       | - There is a   | 1. Pilot educational | 1.            | Rolling out pilot     | - | Office of Permanent                          | -    | Office of Basic     |
| There is a                  | mechanism to   | institutions are set |               | educational           |   | Secretary, Ministry of                       |      | Education           |
| system to                   | drive integration of                                       | up for NCDs          |               | institutions for NCDs | X | Education                                    |      | Commission          |
| observe NCDs                | NCDs surveillance  | surveillance         |               | health surveillance   |   | Bureau of Non-Communicable                   | -    | Bureau of Student   |
| risk factors at             | initiatives at   | 1.1. Integration and | 2.            | There are             |   | Diseases, Department of                      |      | Activities          |
| educational<br>institutions | educational  | management of        |               | guidelines for        |   | Disease Control                              |      | Development         |
| institutions                | institutions.  | students' health     |               | surveillance of       | - | Bureau of Health Promotion,                  | -    | Office of           |
|                             | - Gathering and  | recording system     | X             | NCDs and risk-        |   | Department of Heath                          |      | Vocational          |
|                             | analysis of health   | of educational       |               | prone behaviors at    |   |  |      | Education           |
|                             | data of students of  | institutions with    |               | workplaces on a       |   |  |      | Commission          |
|                             | each level of  | the public health    | $\mathcal{F}$ | national level        |   |  | -    | Bureau of Nutrition |
|                             | educational  | database             |               |                       |   |  | -    | Physical Activity   |
|                             | institutions are   | 1.2. A program is    |               |                       |   |  |      | Division            |
|                             | conducted by   | designed to          |               |                       |   |  | -    | Bureau of           |
|                             | related agencies.  | record and link      |               |                       |   |  |      | Epidemiology        |
|                             | - Gathering and  | the health data for  |               |                       |   |  | -    | Physical Education  |
|                             | coordination of  | the purpose of       |               |                       |   |  |      | Division, Health    |
|                             | NCDs health  | health status        |               |                       |   |  |      | Support Service     |

|                 | database at       | monitoring on      |                   |                              | Department           |
|-----------------|-------------------|--------------------|-------------------|------------------------------|----------------------|
|                 | educational       | individual and     |                   |                              | - Bureau of Tobac    |
|                 | institutions to   | studying age       |                   |                              | Control              |
|                 | relieve reporting | population levels. |                   |                              | - Office of Alcohol  |
|                 | burden of         | 1.3. Training is   |                   |                              | Control Committe     |
|                 | educational       | provided to        |                   | $\mathcal{N}$                | - National           |
|                 | institutions      | develop potential  | C                 |                              | Electronics and      |
|                 |                   | of health teachers |                   |                              | Computer             |
|                 |                   | at educational     | $\langle \rangle$ |                              | Technology Cen       |
|                 |                   | institutions to    | X / O.            |                              |                      |
|                 |                   | ensure they can    |                   |                              |                      |
|                 |                   | manage and         |                   |                              |                      |
|                 |                   | analyze primary    |                   |                              |                      |
|                 |                   | data.              |                   |                              |                      |
| 4.3.2           | 1. Appointment of | 1. There is        |                   | - Bureau of Non-Communicable | - Department of      |
| There is a      | working group to  | coordination and   |                   | Diseases                     | Welfare and          |
| system to       | coordinate and    | connection of NCDs |                   | - Bureau of Occupational and | Labour Protectio     |
| observe NCDs    | develop the NCDs  | health database of |                   | Environmental Diseases,      | - Bureau of Nutritio |
| risk factors at | surveillance      | businesses to      |                   | Department of Disease        | - Physical Activity  |
| businesses      | database at       | relieve their      |                   | Control                      | Division             |

| workplaces         | reporting burden.   | - Bureau of          |
|--------------------|---------------------|----------------------|
|                    |                     |                      |
| 2. Gathering and   | The guidelines are  | Epidemiology         |
| analysis of health | set up for          | - Physical Education |
| data of labors of  | surveillance of     | Division, Health     |
| businesses from    | NCDs and risk-      | Support Services     |
| related agencies   | prone behaviors of  | Department           |
|                    | businesses on a     | - Bureau of Tobacco  |
|                    | national level.     | Control              |
|                    | 2. There are pilot  | - Office of Alcohol  |
|                    | businesses for      | Control Committee    |
|                    | NCDs health         | - Bureau of Mental   |
|                    | surveillance        | Health and           |
|                    | 2.1.There are       | Development,         |
|                    | guidelines for      | Department of        |
|                    | NCDs                | Mental Health        |
|                    | surveillance at     | - Bureau of          |
|                    | pilot               | Environmental        |
|                    | businesses          | Health,              |
|                    | 2.2.A system is set | Department of        |
|                    | up to record        | Health               |

| health data of   | - Social Security   |
|------------------|---------------------|
| labors of pilot  | Office, Ministry of |
| businesses       | Labour              |
| 2.3.A program is |                     |
| designed to      |                     |
| record and link  |                     |
| the health data  |                     |
| for the purpose  |                     |
| of health status |                     |
| monitoring on    |                     |
| individual and   |                     |
| working age      |                     |
| population       |                     |
| levels.          |                     |
| 2.4.Training is  |                     |
| provided to      |                     |
| develop          |                     |
| potential of     |                     |
| health           |                     |
| personnel at     |                     |

|  | businesses to |  |  |
|--|---------------|--|--|
|  | ensure they   |  |  |
|  | can manage    |  |  |
|  | and analyze   |  |  |
|  | primary data. |  |  |
|  |               |  |  |

Strategy 5: Management reform to reduce risk and control the diseases in line with their situation and local context

**Objective**: Overall risk-prone demographics and NCD patients can minimize risk conditions and have sound control over their illness which can deter complications.

## KPIs:

- 1. Decreasing percentage of population with risk-prone conditions (obesity, hypertension, hyperlipidemia, diabetes, smoking, excessive alcohol consumption)
- 2. Percentage of NCDs patients (cardiovascular disease, cerebrovascular disease, diabetes, cancer, and emphysema) who can access to standard health care

| Droductivity   | 2017                  | 2019 | 2010 2021 | Responsible units |  |  |  |  |  |
|--|-----------------------|------|-----------|-------------------|--|--|--|--|--|
| Productivity   | 2017 2018 2019 - 2021 |      | Primary   | Secondary         |  |  |  |  |  |
| Strategy 5.1: Service reform for the purpose of screening and risk reduction in general population and various risk-prone groups in alignment with the |                       |      |           |                   |  |  |  |  |  |
| specific nature of eac   | ch risk-prone group   |      |           |                   |  |  |  |  |  |
| KPIs: Percentage of service organizations and units which can conduct screening and minimize NCDs risks of targeted groups in a manner that meets the  |                       |      |           |                   |  |  |  |  |  |
| standard   |                       |      |           |                   |  |  |  |  |  |
|  |                       |      |           |                   |  |  |  |  |  |

| 5.1.1              | 1. | Appointment of working     | 1. Development of tools or | 1.     | Transfer/development of     | - Bureau of Non-   | - Bureau of Mental  |
|--------------------|----|----------------------------|----------------------------|--------|-----------------------------|--------------------|---------------------|
| There are options  |    | group to identify options  | pattern for NCDs risk      |        | potential of primary        | Communicable       | Health and          |
| for integration of |    | for integration of NCDs    | screening, which forms     |        | agencies or service         | Diseases,          | Development,        |
| screenings of      |    | risk screening, which      | part of the health         |        | teams, and alliance         | Department of      | Department of       |
| NCDs risks in      |    | forms part of the health   | service provided at        |        | networks to be able to      | Disease Control    | Disease Control     |
| health service and |    | service, to screening of   | primary agencies,          |        | utilize tools or integrated | - Bureau of        | - Office of Alcohol |
| improved           |    | risks or other diseases    | schools, businesses,       |        | patterns for NCDs risk      | Nutrition,         | Control             |
| connection to the  |    |                            |                            | -      |                             |                    |                     |
| risk and disease   | 2. | Proposal on guidelines for | and workplaces             |        | screening as a part of      | Department of      | Committee,          |
| minimization       |    | NCDs risk screening        |                            |        | health service in an        | Health             | Department of       |
| system.            |    |                            |                            | $\cup$ | efficient manner            | - Bureau of Health | Disease Control     |
|                    |    |                            |                            | 2.     | There is mechanism to       | Promotion,         | - Bureau of         |
|                    |    |                            | $\langle O \rangle$        |        | develop cooperation         | Department of      | Tobacco Control     |
|                    |    |                            |                            |        | between the Ministry and    | Health             | - Physical Activity |
|                    |    | Ċ                          | XV)                        |        | alliance networks           |                    | Division,           |
|                    |    |                            |                            |        | regarding screening and     |                    | Department of       |
|                    |    |                            |                            |        | risk reduction for targeted |                    | Health              |
|                    |    |                            |                            |        | groups.                     |                    | - Bureau of         |
|                    |    |                            |                            |        |                             |                    | Academic            |
|                    |    |                            |                            |        |                             |                    | Medicine,           |
|                    |    |                            |                            |        |                             |                    | Department of       |

|   |    |                           |                           |        |                         |                    | Medical             |
|---|----|---------------------------|---------------------------|--------|-------------------------|--------------------|---------------------|
|   |    |                           |                           |        |                         |                    | Services            |
| 5.1.2                                   | 1. | There are a working group | 1. Development/ revision  | 1.     | Transfer/development of | - Bureau of Non-   | - Bureau of         |
| There are                               |    | to study or review the    | of tool kit, media        |        | potential of primary    | Communicable       | Alternative         |
| guidelines for                          |    | guidelines for service    | kit/curriculum for NCDs   |        | agencies or service     | Diseases,          | Medicine,           |
| arrangement of                          |    | arrangement and revised   | risk reduction for use in |        | teams of alliance       | Department of      | Department of       |
| service and media                       |    | media kit such as         | the communities,          |        | networks to enable the  | Disease Control    | Thai Traditional    |
| for integrated risk minimization in the |    | infographics containing   | medical institutions,     |        | use of tool kit, media, | - Bureau of Health | and Alternative     |
| community,                              |    | academic information for  | schools, workplaces,      |        | manual/curriculum for   | Promotion,         | Medicine            |
| schools,                                |    | targeted groups for       | and businesses            | $\cup$ | NCDs risk reduction in  | Department of      | - Center for Public |
| workplace,                              |    | integrated risk reduction |                           |        | communities, medical    | Health             | Communications      |
| businesses, and                         |    | in communities, medical   | $\sim 0.1$                |        | institutions, schools,  | - Primary Health   | , Department of     |
| medical                                 |    | institutions, schools,    | $\sim C \setminus C$      |        | workplaces, and         | Care Division,     | Health              |
| institutions.                           |    | workplaces, and           |                           |        | businesses              | Department of      | - Bureau of Risk    |
|   |    | businesses.               |                           |        |                         | Medical Support    | Communication       |
|   |    |                           |                           |        |                         | Service            | and Health          |
|   |    |                           |                           |        |                         |                    | Behavior            |
|   |    |                           |                           |        |                         |                    | Development,        |
|   |    |                           |                           |        |                         |                    | Department of       |
|   |    |                           |                           |        |                         |                    | Disease Control     |

|                               |                             |                         |                            |                    | - Thai NCD            |
|-------------------------------|-----------------------------|-------------------------|----------------------------|--------------------|-----------------------|
|                               |                             |                         |                            |                    | Network               |
|                               |                             |                         |                            |                    | - Ministry of digital |
|                               |                             |                         |                            |                    | Economy and           |
|                               |                             |                         |                            |                    | Society               |
| 5.1.3                         | 1. Development of tool kit, | 1. Development of       | 1. Expansion of operations | - Bureau of Non-   | - Bureau of Mental    |
| There is a health             | media kit/curriculum for    | primary units such as   | for service teams of       | Communicable       | Health and            |
| service unit /                | use of internal units       | community health        | alliance networks          | Diseases,          | Development,          |
| provider giving               | providing consultancy at    | center, health          |                            | Department of      | Department of         |
| consultancy to                | medical institutions,       | education unit at       | 5                          | Disease Control    | Disease Control       |
| minimize NCDs                 | schools, businesses, and    | schools / businesses to |                            | - Bureau of Health | - Thai NCD            |
| risks on an<br>individual and | primary service units in    | enhance their potential |                            | Promotion,         | Network               |
| organizational                | the community               | in providing            |                            | Department of      | - Department of       |
| levels.                       | d                           | comprehensive advice    |                            | Health             | Health                |
|                               |                             | which could reduce      |                            |                    | - Bureau of Health    |
|                               |                             | NCDs risks              |                            |                    | Administration,       |
|                               |                             |                         |                            |                    | Office of             |
|                               |                             |                         |                            |                    | Permanent             |
|                               |                             |                         |                            |                    | Secretary,            |
|                               |                             |                         |                            |                    | Ministry of Public    |

|                      |                                  |                                |                                   |                         | Health             |
|----------------------|----------------------------------|--------------------------------|-----------------------------------|-------------------------|--------------------|
| 5.1.4                |                                  | 1. Assessment and              | 1. Extraction of lesson           | - Department of         |                    |
| There is an          |                                  | development of                 | learned,                          | Disease Control         |                    |
| efficient risk       |                                  | technology                     | options/opportunities to          | •                       |                    |
| minimizing service   |                                  | 2. Setting up pilot risk-      | for expansion to other            |                         |                    |
| formats.             |                                  | reducing service in            | areas                             |                         |                    |
|                      |                                  | prototype zone                 | CV.                               |                         |                    |
| Strategy 5.2 Refor   | m of health service for chron    | ic patients (with or without   | complications) at medical ser     | vice stations to ens    | ure efficiency and |
| support patients' s  | elf-management                   |                                |                                   |                         |                    |
| KPIs: Percentage of  | service units which have develop | ped an efficient management fo | ormats for chronic diseases and s | support self-care of pa | tients with        |
| complication with qu | ality that meets standard        |                                |                                   |                         |                    |
| 5.2.1                | 1. Development of standard       | 1. Development of              | 1. There are clinics for          | - Bureau of Non-        | - Bureau of        |
| Development of       | to enhance the quality of        | guidelines / manual on         | chronic disease as well           | Communicable            | Academic           |
| chronic disease      | care and support for self-       | care for chronic               | as clinics for change of          | Diseases,               | Medicine,          |
| clinic, clinic for   | management of service            | disease to put in place        | behavior / risk                   | Department of           | Department of      |
| change of            | recipients and to reduce         | a comprehensive                | minimization and                  | Disease Control         | Medical            |
| behavior/ risk       | risk, which is opted by the      | module with integrated         | hospitals which can               | - Bureau of             | Services           |
| minimization at      | clinics for change of            | care for various chronic       | provide care for patients         | Alternative             |                    |
| hospitals to enable  | behavior / risk                  | diseases in a manner           | while managing risk               | Medicine,               |                    |
| management of        | minimization and hospitals       | that meets the standard        | reduction and                     | Department of           |                    |
| disease, risk        |                                  |                                |                                   | Department of           |                    |

| minimization, and  | as such as clinics for     | 2. Development of       | complication conditions | Thai Traditional |  |
|--------------------|----------------------------|-------------------------|-------------------------|------------------|--|
| complications in a | alcohol/tobacco addicts,   | mechanism to monitor    | as per the standards    | and Alternative  |  |
| manner that meets  | people with obesity, or    | complication of chronic |                         | Medicine         |  |
| the standard       | stress clinics             | disease                 |                         | b                |  |
|                    | 2. Development of standard |                         |                         |                  |  |
|                    | to enhance the quality of  |                         | $\langle O \rangle$     |                  |  |
|                    | care provided to patients  |                         | CV.                     |                  |  |
|                    | suffering specific chronic |                         | $(C \cap )$             |                  |  |
|                    | disease i.e. DM, HT, IHD,  | -C                      |                         |                  |  |
|                    | COPD, and cancer           |                         | 0.                      |                  |  |
|                    | - Development of tool      |                         |                         |                  |  |
|                    | kit and key                | $\sim 0.1$              |                         |                  |  |
|                    | knowledge base to          | $\sqrt{0}$              |                         |                  |  |
|                    | prevent and control        | (Ux                     |                         |                  |  |
|                    | CVD and CKD for            |                         |                         |                  |  |
|                    | public health service      |                         |                         |                  |  |
|                    | stations                   |                         |                         |                  |  |
|                    | - Preparation of           |                         |                         |                  |  |
|                    | standard tool for          |                         |                         |                  |  |
|                    | prevention and             |                         |                         |                  |  |

|                    | т                            |                         |                              |                   | 1               |
|--------------------|------------------------------|-------------------------|------------------------------|-------------------|-----------------|
|                    | control of DM and HT         |                         |                              |                   |                 |
|                    | for risk-prone groups        |                         |                              |                   |                 |
|                    | and patient groups at        |                         |                              |                   |                 |
|                    | public health service        |                         |                              | •                 |                 |
|                    | stations                     |                         |                              |                   |                 |
|                    | 3. Quality improvement for   |                         |                              |                   |                 |
|                    | guidelines and               |                         | C.V.                         |                   |                 |
|                    | assessment of NCDs           |                         | $\mathcal{O}$                |                   |                 |
|                    | clinics                      | -0                      |                              |                   |                 |
| 5.2.2              | 1. Development of capability | 1. Development of       | 1. Development of capability | - Bureau of Non-  | - Department of |
| The                | of interdisciplinary team to | capability of           | of interdisciplinary team    | Communicable      | Medical         |
| interdisciplinary  | be able to provide chronic   | interdisciplinary team  | to be able to provide        | Diseases,         | Services        |
| team with          | disease and complication     | to be able to provide   | chronic disease and          | Department of     |                 |
| knowledge and      | condition prevention         | chronic disease and     | complication condition       | Disease Control   |                 |
| skills to provide  | service as per the           | complication condition  | prevention service as per    | - Department of   |                 |
| service on         | standard to enhance the      | prevention service as   | the standard to enhance      | Medical           |                 |
| prevention of      |                              |                         |                              |                   |                 |
| chronic disease    | quality of care for patients | per the standard to     | the quality of care for      | Support           |                 |
| and complications, | suffering from specific      | enhance the quality of  | patients suffering from      | Services          |                 |
| which supports     | chronic diseases             | care for patients       | specific chronic diseases    | - PCC team        |                 |
| self-care and      | 2. Provision of training to  | suffering from specific | 2. Development of lecturer   | (Office of Public |                 |

| promotes risk   |                            |   | to one to renoviale        | Llaalth     |   |
|---|----------------------------|---|----------------------------|-------------|---|
| -   | develop capacity and skill | chronic diseases  | team to provide            | Health      |   |
| minimization to   | for VCD and CKD            | 2. Development of   | knowledge on behavioral    | Management) |   |
| service recipients  | operations for public      | lecturer team to  | change processes           |             |   |
|   | health personnel and       | provide knowledge on  |                            | •           |   |
|   | provision of training for  | behavioral change   |                            |             |   |
|   | transfer of DM/HT          | processes   | ///                        |             |   |
|   | standard set of knowledge  |   | 6                          |             |   |
| 5.2.3   |                            | 1. Development of data  | 1. Development of new data | -           | _ |
| There is a system<br>to provide<br>continuous care for<br>patients and it is<br>linked to service<br>provision units. | 50                         | system for care of<br>chronic patients,<br>namely<br>- Smartphone<br>application to<br>provide knowledge<br>on patient<br>monitoring by<br>means of<br>connecting the<br>application with the | system                     |             |   |

|                              |     | technology center of      |                             |                  |                  |
|------------------------------|-----|---------------------------|-----------------------------|------------------|------------------|
|                              |     | each agency, which        |                             |                  |                  |
|                              |     | is linked to the          |                             |                  |                  |
|                              |     | technology center of      | $(\Omega)$                  |                  |                  |
|                              |     | the province and          |                             |                  |                  |
|                              |     | that of the Ministry of   | $\langle V \rangle$         |                  |                  |
|                              |     | Public Health             |                             |                  |                  |
| 5.2.4                        |     | 1. Development of service | 1. Expansion of service to  | - Bureau of Non- | - Bureau of      |
| The services for             |     | to prevent and care for   | prevent and care for        | Communicable     | Alternative      |
| chronic diseases at          |     | chronic patients on       | Chronic patients on digital | Diseases,        | Medicine,        |
| primary health               |     | digital platform          | platform                    | Department of    | Department of    |
| stations are                 |     | $\langle O \rangle$       |                             | Disease Control  | Thai Traditional |
| comprehensive and efficient. |     | $\sim 1/2$                |                             | - Bureau of      | and Alternative  |
|                              | C C |                           |                             | Academic         | Medicine         |
|                              |     |                           |                             | Medicine,        | - Department of  |
|                              |     |                           |                             | Department of    | Medical          |
|                              |     |                           |                             | Medical          | Support Service  |
|                              |     |                           |                             | Services         | - Center for     |
|                              |     |                           |                             |                  | Information      |
|                              |     |                           |                             |                  | Technology and   |

|  |  |  |                       |   | Communication, |  |
|--|--|--|-----------------------|---|----------------|--|
|  |  |  |                       |   | Office of      |  |
|  |  |  |                       |   | Permanent      |  |
|  |  |  | $\langle n \rangle$   | • | Secretary,     |  |
|  |  |  |                       |   | Ministry of    |  |
|  |  |  | $\langle V \rangle$ . |   | Public Health  |  |
|  |  |  | C                     |   | - NECTEC       |  |
|  |  |  | $\mathcal{O}$         |   | - Thai Health  |  |
|  |  |  |                       |   | Promotion      |  |
|  |  |  | 5                     |   | Foundation     |  |
|  |  |  |                       |   |                |  |

## Strategy 6: Development of system to support and drive integrated implementation

## Objective: Implementation is driven and efficient support is given to NCDs prevention and control

**KPIs:** Percentage of success as per the strategy

| Productivity                | 2017   | 2018                             | 2019 – 2021                         | Responsible units   |                 |  |  |  |
|-----------------------------|--|----------------------------------|-------------------------------------|---------------------|-----------------|--|--|--|
| Productivity                |  |                                  |                                     | Primary             | Secondary       |  |  |  |
| trategy 6.1 Develop         | o mechanism to drive implemer  | ntation of strategies engaged by | y various alliances in an efficient | manner              |                 |  |  |  |
| KPIs: Percentage            | KPIs: Percentage of projects which were integrated as planned which lead to implementation |                                  |                                     |                     |                 |  |  |  |
| 6.1.1                       | <u>Central unit</u>  | Central unit                     | <u>Central unit</u>                 | - Office of Healthy | - Office of the |  |  |  |
| There are                   | 1. Arrangement of a  | 1. Arrangement of a monthly      | 1. Arrangement of a                 | Lifestyle           | National        |  |  |  |
| mechanisms for              | monthly core team  | core team meeting to             | monthly core team                   | Management          | Economic        |  |  |  |
| continuous                  | meeting to drive and   | drive and coordinate for         | meeting to drive and                | - Bureau of Non-    | and Social      |  |  |  |
| management and              | coordinate for initiatives   | initiatives asper the            | coordinate for initiatives          | Communicable        | Development     |  |  |  |
| administration of           | asper the strategy   | strategy                         | asper the strategy                  | Diseases,           | Board           |  |  |  |
| strategic<br>implementation | 2. Arrangement of  | 2. Arrangement of                | 2. Arrangement of                   | Department of       | - Department    |  |  |  |
| on national,                | Administration   | Administration                   | Administration                      | Disease Control     | - of Local      |  |  |  |
| regional,                   | Committee Meeting  | Committee Meeting                | Committee Meeting every             |                     | Administratio   |  |  |  |
| provincial, and             | every 6 months   | every 6 months                   | 6 months                            |                     | n, Ministry of  |  |  |  |
| district levels with        | 3. Arrangement of 6-   | 3. Arrangement of 6-             | 3. Arrangement of 6-                |                     | Interior        |  |  |  |

| the engagement |    | strategy sub-committees   |    | strategy sub-committees   |    | strategy sub-committee    | - | Office of     |
|----------------|----|---------------------------|----|---------------------------|----|---------------------------|---|---------------|
| of alliance    |    | every 3 months to         |    | every 3 months to         |    | every 3 months to         |   | Permanent     |
| networks.      |    | prepare action plan to    |    | prepare action plan to    |    | prepare action plan to    |   | Secretary,    |
|                |    | drive NCDs operations     |    | drive NCDs operations     |    | drive NCDs operations     |   | Ministry of   |
|                |    | which will be proposed    |    | which will be proposed    |    | which will be proposed to |   | Education     |
|                |    | to the cabinet, to        |    | to the cabinet, to        |    | the cabinet, to integrate | - | Office of the |
|                |    | integrate operations and  |    | integrate operations and  |    | operations and to ensure  |   | Private       |
|                |    | to ensure monitoring      |    | to ensure monitoring      |    | monitoring process        |   | Education     |
|                |    | process.                  |    | process                   | 4. | Expedition and            |   | Commission    |
|                | 4. | Expedition and            | 4. | Expedition and            |    | implementation to         | - | Office of the |
|                |    | implementation to         |    | implementation to         |    | establish the coordinator |   | Basic         |
|                |    | establish the coordinator |    | establish the coordinator |    | team between CCS          |   | Education     |
|                |    | team between CCS          |    | team between CCS          |    | (Country Cooperation      |   | Commission    |
|                |    | (Country Cooperation      | Ċ  | (Country Cooperation      |    | Strategy) and the public  | - | Office of the |
|                |    | Strategy) and the public  | X  | Strategy) and the public  |    | and private sector to     |   | Higher        |
|                |    | and private sector to     |    | and private sector to     |    | enable integrated         |   | Education     |
|                |    | enable integrated         |    | enable integrated         |    | operations with           |   | Commission    |
|                |    | operations with           |    | operations with           |    | collaboration from all    | - | IHHP          |
|                |    | collaboration from all    |    | collaboration from all    |    | departments and           | - | Institute of  |
|                |    | departments and           |    | departments and           |    | bureaus, operated by      |   | Nutrition,    |

|                      |                             | C 11 12 CC                |                |
|----------------------|-----------------------------|---------------------------|----------------|
| bureaus, operated by | bureaus, operated by        | full-time officers        | Mahidol        |
| full-time officers   | full-time officers          | 5. Arrangement of meeting | University     |
|                      | 5. Arrangement of meeting   | to announce happy         | - Health       |
|                      | to announce happy           | operating policies and    | Systems        |
|                      | operating policies and      | directions to officers on | Research       |
|                      | directions to officers on   | regional and provincial   | Institute      |
|                      | regional and provincial     | levels                    | - NHSO         |
|                      | levels                      |                           | - Social       |
|                      |                             |                           | Security       |
|                      |                             | 0                         | Office         |
|                      |                             |                           | - Department   |
|                      | $\langle Q \rangle$         |                           | of Medical     |
|                      | CV.                         |                           | Services       |
|                      | $(\mathcal{V},\mathcal{V})$ |                           | - Department   |
|                      |                             |                           | of Health      |
|                      |                             |                           | - Thai FDA     |
|                      |                             |                           | - Department   |
|                      |                             |                           | of Mental      |
|                      |                             |                           | Health         |
|                      |                             |                           | - Institute of |

|                        |                        |                        |                 | Research,     |
|------------------------|------------------------|------------------------|-----------------|---------------|
|                        |                        |                        |                 | Knowledge     |
|                        |                        |                        |                 | Management    |
|                        |                        | $(\Omega)$             |                 | , and         |
|                        |                        |                        |                 | Standards of  |
|                        |                        | $\langle V \rangle$    |                 | Disease       |
|                        |                        | CN                     |                 | Control,      |
|                        |                        |                        |                 | Department    |
|                        |                        |                        |                 | of Disease    |
|                        | X/                     | 0.                     |                 | Control       |
|                        |                        |                        |                 | - Bureau of   |
|                        |                        |                        |                 | Policy and    |
|                        | C.C.V.                 |                        |                 | Strategy      |
|                        |                        |                        |                 | - ThaiHealth  |
| 0                      | $\langle \rangle$      |                        |                 | - NHSO (Civil |
|                        |                        |                        |                 | Health        |
|                        |                        |                        |                 | Regions)      |
| Regional units         | Regional units         | Regional units         | - Health Region | - Related     |
| 1. Arrangement of NCDs | 1. Arrangement of NCDs | 1. Arrangement of NCDs | - PHO           | hospitals and |
| Board meeting on       | Board meeting on       | Board meeting on       |                 | DPH           |

|                   | regional and provincial   | regional and provincial   | regional and provincial    |                      |                   |
|-------------------|---------------------------|---------------------------|----------------------------|----------------------|-------------------|
|                   | levels to monitor and     | levels to monitor and     | levels to monitor and      |                      |                   |
|                   | drive NCDs operations     | drive NCDs operations     | drive NCDs operations      |                      |                   |
|                   | 2. Arrangement of         | 2. Arrangement of         | 2. Arrangement of          |                      |                   |
|                   | management                | management committee /    | management committee /     |                      |                   |
|                   | committee /               | assessment on district    | assessment on district     |                      |                   |
|                   | assessment on district    | level (DHCC) / DHS /      | level (DHCC) / DHS /       |                      |                   |
|                   | level (DHCC) / DHS /      | DHB to drive and monitor  | DHB to drive and monitor   |                      |                   |
|                   | DHB to drive and          | NCDs operations           | NCDs operations            |                      |                   |
|                   | monitor NCDs              |                           | C                          |                      |                   |
|                   | operations                |                           |                            |                      |                   |
| 6.1.2             | Central units             | Central units             | Central units              | - District Executive | - District / sub- |
| Integration of    | 1. Arrangement of         | 1. Arrangement of         | 1. Arrangement of meetings | /Evaluation          | district          |
| action plans from | meetings to prepare the   | meetings to prepare the   | to prepare the integrated  | Committee (EC)       | hospitals         |
| all sectors and   | integrated plan from all  | integrated plan from all  | plan from all sectors      | - PCC, DHS, DHB      | - Regional        |
| implementation    | sectors (twice)           | sectors (twice)           | (twice)                    | - LAO                | NHSO              |
| as planned.       | <u>Regional units</u>     | <u>Regional units</u>     | <u>Regional units</u>      |                      |                   |
|                   | 1. Prepare the integrated | 1. Prepare the integrated | 1. Prepare the integrated  |                      |                   |
|                   | plan from all sectors on  | plan from all sectors on  | plan from all sectors on   |                      |                   |
|                   | provincial and district   | provincial and district   | provincial and district    |                      |                   |

|  | <ul> <li>levels</li> <li>2. Expedition for</li> <li>community action plan</li> <li>that ensure engagement</li> <li>of all sectors to solve</li> <li>NCDs issues in their</li> <li>area</li> </ul>   | <ul> <li>levels</li> <li>2. Expedition for<br/>community action plan<br/>that ensure engagement<br/>of all sectors to solve<br/>NCDs issues in their<br/>area</li> </ul>  | <ul> <li>levels</li> <li>2. Expedition for community action plan that ensure engagement of all sectors to solve NCDs issues in their area</li> </ul>   |  |   |
|--|---|---|--|--|---|
|  |   | evaluation of NCDs prevention a<br>ects which are monitored and ev<br>1. Arrangement for  | and control result on a national, in valuated on each level  | regional, and provincial le  | - Inspection  |
| Monitoring and<br>evaluation plan<br>and mechanism<br>for strategic<br>plans and action<br>plans | <ul> <li>meetings to review</li> <li>strategies and</li> <li>implementation of NCDs</li> <li>operation</li> <li>2. Supervision on</li> <li>monitoring of progress of</li> <li>NCDs operations and</li> <li>monitoring of drivers for</li> <li>deployment of strategies</li> </ul> | <ul> <li>meetings to review</li> <li>strategies and</li> <li>implementation of NCDs</li> <li>operation</li> <li>2. Supervision on monitoring</li> <li>of progress of NCDs</li> <li>operations and</li> <li>monitoring of drivers for</li> <li>deployment of strategies</li> </ul> | <ul> <li>meetings to review</li> <li>strategies and</li> <li>implementation of NCDs</li> <li>operation</li> <li>2. Supervision on</li> <li>monitoring of progress</li> <li>of NCDs operations and</li> <li>monitoring of drivers for</li> <li>deployment of</li> </ul> | Lifestyle<br>Management<br>- Bureau of Non-<br>Communicable<br>Diseases,<br>Department of<br>Disease Control | Division<br>- Center for<br>Information<br>Technology<br>and<br>Communicatio<br>n, Office of<br>Permanent<br>Secretary, |

|          | on national NCDs             | on national NCDs            | strategies on national       |                     | Ministry of     |
|----------|------------------------------|-----------------------------|------------------------------|---------------------|-----------------|
|          | prevention and control       | prevention and control on   | NCDs prevention and          |                     | Public Health   |
|          |                              |                             |                              |                     | T UDIIC Fleatur |
|          | on regional level (12        | regional level (12 regions) | control on regional level    |                     |                 |
|          | regions) and provincial      | and provincial level        | (12 regions) and             |                     |                 |
|          | level                        | 3. Development of           | provincial level             |                     |                 |
|          | 3. Monitoring and            | evaluation mechanism        | 3. Development of            |                     |                 |
|          | assessment of operation      | and academic support by     | evaluation mechanism         |                     |                 |
|          | of NCD prevention in         | experts to oversee the      | and academic support         |                     |                 |
|          | working age group            | overall NCDs operations     | by experts to oversee        |                     |                 |
|          | (2017)                       | (meetings, analysis and     | the overall NCDs             |                     |                 |
|          |                              | assessment of situation     | operations (meetings,        |                     |                 |
|          |                              | every 2 months)             | analysis and                 |                     |                 |
|          |                              | · C/U.                      | assessment of situation      |                     |                 |
|          |                              | $(\mathcal{V},\mathcal{V})$ | every 2 months)              |                     |                 |
| <u> </u> | Regional units               | Regional units              | Regional units               | - Regional Public   | - Office of     |
|          | 1. Regional Health Office in | 1. Regional Health Office   | 1. Regional Health Office in | Health Office       | Disease         |
|          | collaboration with Office    | in collaboration with       | collaboration with Office    | - Provincial Public | Prevention and  |
|          | of Disease Prevention        | Office of Disease           | of Disease Prevention        | Health Office       | Control in each |
|          | and Control jointly          | Prevention and Control      | and Control jointly          | - District Public   | Health Region   |
|          | conduct supervision of       | jointly conduct             | conduct supervision of       | Health Office       | - Provincial    |

| 6.2.2  | <ul> <li>NCDs operation of each province in each region</li> <li>Provincial Public Health supervises NCDs operation in each district</li> <li>District Public Health supervise NCDs operation of each district</li> </ul>  | <ul> <li>supervision of NCDs         <ul> <li>operation of each</li> <li>province in each region</li> </ul> </li> <li>Provincial Public Health         <ul> <li>supervises NCDs</li> <li>operation in each district</li> </ul> </li> <li>District Public Health         <ul> <li>supervise NCDs</li> <li>operation of each district</li> </ul> </li> </ul> | NCDs operation of each<br>province in each region<br>2. Provincial Public Health<br>supervises NCDs<br>operation in each district<br>3. District Public Health<br>supervise NCDs<br>operation of each district   |   | hospital<br>- District<br>hospitals   |
|--|--|--|--|---|---|
| o.2.2<br>The system to<br>manage series of<br>information which<br>covers and<br>connects to all<br>sectors as per<br>the strategy | <ul> <li>Central units         <ul> <li>Analysis and reporting<br/>achievement of the<br/>operation with the use<br/>of national NCDs data<br/>system and reporting to<br/>management and<br/>related parties for<br/>acknowledgement</li> </ul> </li> <li>Regional units</li> </ul> | <ul> <li>Central units         <ul> <li>Analysis and reporting<br/>achievement of the<br/>operation with the use<br/>of national NCDs data<br/>system and reporting<br/>to management and<br/>related parties for<br/>acknowledgement</li> </ul> </li> <li>Regional units</li> </ul>   | <ul> <li>Central units</li> <li>Analysis and reporting<br/>achievement of the<br/>operation with the use<br/>of national NCDs data<br/>system and reporting to<br/>management and<br/>related parties for<br/>acknowledgement</li> <li>Regional units</li> </ul> | <ul> <li>Office of Healthy         <ul> <li>Lifestyle</li> <li>Management</li> </ul> </li> <li>Bureau of Non-         <ul> <li>Communicable</li> <li>Diseases,</li> <li>Department of</li> <li>Disease Control</li> <li>Health Regions</li> <li>Provincial Public</li> <li>Health Office</li> </ul> </li> </ul> | <ul> <li>Center for</li> <li>Information</li> <li>Technology</li> <li>and</li> <li>Communicatio</li> <li>n, Office of</li> <li>Permanent</li> <li>Secretary,</li> <li>Ministry of</li> <li>Public Health</li> </ul> |

|                                       | <ul> <li>Analysis and reporting<br/>achievement of the<br/>operation with the use<br/>of regional, provincial,<br/>and district NCDs data</li> </ul> | - Analysis and reporting<br>achievement of the<br>operation with the use of<br>regional, provincial, and<br>district NCDs data | <ul> <li>Analysis and reporting<br/>achievement of the<br/>operation with the use<br/>of regional, provincial,<br/>and district NCDs data</li> </ul> | <ul> <li>District Public</li> <li>Health Office /</li> <li>Hospitals</li> </ul> |
|---------------------------------------|--|--|--|---|
|                                       | system   | system   | system   |   |
| Strategy 6.3: Deve                    | lop personnel of all related allia   | nces to be able to deploy the s  | strategies   |   |
| KPIs: Perce                           | ntage of key personnel on each   | level whose implementation me  | eets the standard  |   |
| 6.3.1                                 | Central units  | Central units  | <u>Central units</u>   | - Department of -   |
| The efficient                         | - Provision of training /  | - Provision of training /  | - Provision of training /  | Disease Control   |
| chronic disease                       | recovery of potential for  | recovery of potential for  | recovery of potential for  | - Department of   |
| system manager                        | the chronic management   | the chronic  | the chronic  | Health  |
| on national,                          | system manager team of   | management system  | management system  | - Department of   |
| regional,                             | the health region,   | manager team of the  | manager team of the  | Medical Support   |
| provincial,                           | provincial public health   | health region, provincial  | health region, provincial  | Services  |
| district, and sub-<br>district levels | office, community  | public health office,  | public health office,  | - Department of   |
|                                       | hospitals, and district  | community hospitals,   | community hospitals,   | Medical Services  |
|                                       | public health office   | and district public  | and district public health   | - Department of Thai  |
|                                       | (once/year)  | health office (once/year)  | office (once/year)   | Traditional and   |
|                                       |  |  |  | Alternative   |

|                   |                             |                             |                             | Medicine             |
|-------------------|-----------------------------|-----------------------------|-----------------------------|----------------------|
|                   |                             |                             |                             |                      |
|                   | Regional units              | Regional units              | Regional units              |                      |
|                   | - Arrangement for NCDs      | - Arrangement for NCDs      | - Arrangement for NCDs      |                      |
|                   | learning process to         | learning process to         | learning process to         |                      |
|                   | develop the system          | develop the system          | develop the system          |                      |
|                   | manager (SM) to build       | manager (SM) to build       | manager (SM) to build a     |                      |
|                   | a teamwork                  | a teamwork                  | teamwork environment        |                      |
|                   | environment to drive        | environment to drive        | to drive NCDs               |                      |
|                   | NCDs operations             | NCDs operations             | operations                  |                      |
| 6.3.2             | - Provision of training for | - Provision of training for | - Provision of training for | - Department of -    |
| Teams of public   | development / recovery      | development / recovery      | development / recovery      | Disease Control      |
| health and        | of potential for teams of   | of potential for teams of   | of potential for teams of   | - Department of      |
| interdisciplinary | public health personnel     | public health personnel     | public health personnel     | Health               |
| personnel with    | and the                     | and the interdisciplinary   | and the interdisciplinary   | - Department of      |
| knowledge and     | interdisciplinary team to   | team to equip them with     | team to equip them with     | Medical Support      |
| skills to provide | equip them with             | knowledge and skill for     | knowledge and skill for     | Services             |
| consultancy,      |                             |                             |                             |                      |
| change            | knowledge and skill for     | providing consultancy       | providing consultancy       | - Department of      |
| behaviors, and    | providing consultancy       | on behavioral change        | on behavioral change        | Medical Services     |
| care for chronic  | on behavioral change        | and care for NCDs           | and care for NCDs           | - Department of Thai |

| patients in an                     | and care for NCDs            | patients in an inclusive       | patients in an inclusive       | Traditional and |                 |
|------------------------------------|------------------------------|--------------------------------|--------------------------------|-----------------|-----------------|
| inclusive manner                   | patients in an inclusive     | manner (once/year)             | manner (once/year)             | Alternative     |                 |
|                                    | manner (once/year)           |                                |                                | Medicine        |                 |
|                                    |                              |                                | $\sim$                         |                 |                 |
| 6.3.3                              | 1. Provision of training for | 1. Provision of training for   | 1. Provision of training for   | - Department of | - Networks      |
| Personnel of                       | development / recovery       | development / recovery         | development / recovery         | Disease Control | - Civil Society |
| organizations                      | of potential for             | of potential for               | of potential for               | - Department of | - IHPP          |
| and networks                       | organizations and            | organizations and              | organizations and              | Health          |                 |
| such as                            | networks to provide          | networks to provide            | networks to provide            |                 |                 |
| educational                        | knowledge and increase       | knowledge and                  | knowledge and increase         |                 |                 |
| institutions,<br>businesses, local | awareness on NCDs            | increase awareness on          | awareness on NCDs              |                 |                 |
| administrative                     | surveillance, prevention     | NCDs surveillance,             | surveillance, prevention       |                 |                 |
| organizations,                     | and control                  | prevention and control         | and control                    |                 |                 |
| and civil society                  | 2. Establishment of          | 2. Establishment of            | 2. Establishment of            |                 |                 |
| have knowledge                     | operating mechanism for      | operating mechanism            | operating mechanism            |                 |                 |
| and skills for                     | alliance networks and        | for alliance networks          | for alliance networks          |                 |                 |
| NCDs                               | civil sector to solve        | and civil sector to solve      | and civil sector to solve      |                 |                 |
| surveillance,                      | NCDs issues                  | NCDs issues                    | NCDs issues                    |                 |                 |
| prevention, and                    |                              |                                |                                |                 |                 |
| control                            |                              |                                |                                |                 |                 |
| Strategy 6.4 Integr                | ate research, knowledge mana | gement, and innovations to sup | port the NCDs prevention and c | control system  |                 |

| KPIs:- Percentage of NCDs research and knowledge management, which are implemented as planned |   |                          |    |                         |        |                          |   |                    |   |               |
|---|---|--------------------------|----|-------------------------|--------|--------------------------|---|--------------------|---|---------------|
| - Percentage  | - Percentage of research, series of knowledge and innovations which are distributed and applied |                          |    |                         |        |                          |   |                    |   |               |
| 6.4.1   | 1.  | Arrangement of meeting   | 1. | Arrangement of meeting  | 1.     | Arrangement of meeting   | ľ | Department of      | - | Center for    |
| There are   |   | to prepare the research  |    | to prepare the research |        | to prepare the research  |   | Disease Control    |   | Information   |
| networks and  |   | plan and NCDs            |    | plan and NCDs           |        | plan and NCDs            | - | Department of      |   | Technology    |
| research plans,   |   | knowledge management     |    | knowledge               |        | knowledge management     |   | Health             |   | and           |
| knowledge   |   | as well as monitor and   |    | management as well as   |        | as well as monitor and   | - | Department of      |   | Communicatio  |
| management,   |   | evaluate progress of the |    | monitor and evaluate    |        | evaluate progress of the |   | Medical Support    |   | n, Office of  |
| and innovation<br>development for   |   | plan implementation      |    | progress of the plan    | $\sum$ | plan implementation      |   | Services           |   | Permanent     |
| appropriate   | 2.  | Organizing National      |    | implementation          | 2.     | Organizing National      | - | Department of      |   | Secretary,    |
| applications  |   | NCDs Forum to present    | 2. | Organizing National     |        | NCDs Forum to present    |   | Medical Services   |   | Ministry of   |
|   |   | research works which     |    | NCDs Forum to present   |        | research works which     | - | Department of Thai |   | Public Health |
|   |   | will be applied to the   |    | research works which    |        | will be applied to the   |   | Traditional and    |   |               |
|   |   | operations (once/year)   |    | will be applied to the  |        | operations (once/year)   |   | Alternative        |   |               |
|   | 3.  | Establishment of         | X  | operations (once/year)  | 3.     | Establishment of         |   | Medicine           |   |               |
|   |   | knowledge base and       | 3. | Establishment of        |        | knowledge base and       | - | IHPP               |   |               |
|   |   | NCDs knowledge           |    | knowledge base and      |        | NCDs knowledge           | - | Health Research    |   |               |
|   |   | sharing                  | *  | NCDs knowledge          |        | sharing                  |   | System Institute   |   |               |
|   |   |                          |    | sharing                 |        |                          | - | Thai NCD Network   |   |               |
|   |   |                          |    |                         |        |                          | - | Institute of       |   |               |

|                       |                           |   |                           | Research,            |        |
|-----------------------|---------------------------|---|---------------------------|----------------------|--------|
|                       |                           |   |                           | Knowledge            |        |
|                       |                           |   |                           | Management, and      |        |
|                       |                           |   | $(\Omega)$                | Standards of         |        |
|                       |                           |   |                           | Disease Control,     |        |
|                       |                           |   | $\langle V \rangle$       | Department of        |        |
|                       |                           |   |                           | Disease Control      |        |
|                       |                           |   |                           | - Society and Health |        |
|                       |                           |   | $\sum$                    | Institute (SHI)      |        |
|                       |                           |   | 0.                        |                      |        |
|                       |                           | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |                           |                      |        |
| 6.4.2                 | 1. Arrangement of meeting | 1. Arrangement of meeting                 | 1. Arrangement of meeting | - Department of      | - IHPP |
| There is a long-      | to prepare the long-term  | to prepare the long-term                  | to prepare the long-term  | Disease Control      |        |
| term plan for         | research plan for         | research plan for                         | research plan for         | - Department of      |        |
| development of        | development of NCDs       | development of NCDs                       | development of NCDs       | Health               |        |
| NCDs                  | management system         | management system                         | management system         | - Department of      |        |
| management<br>system. | (conducted in line with   | (conducted in line with                   | (conducted in line with   | Medical Support      |        |

| 6.4.3<br>There are<br>extension of<br>research and<br>innovations for<br>the purpose of<br>policy making or<br>commercial<br>application | 2. | research and innovations<br>that can be extended to<br>policy, which will enable<br>implementation/commer<br>cial production by<br>means of | 2. | the activity 1 of the<br>productivity 6.4.1)<br>Development of<br>knowledge base and<br>innovation for Thai<br>traditional medicine and<br>alternative medicine for<br>NCDs health care<br>Consideration of<br>research and<br>innovations that can be<br>extended to policy,<br>which will enable<br>implementation/comme<br>rcial production by<br>means of | 2. | research and innovations<br>that can be extended to<br>policy, which will enable<br>implementation/commerc<br>ial production by means<br>of providing/finding | - | Services<br>Department of<br>Medical Services<br>Department of Thai<br>Traditional and<br>Alternative<br>Medicine<br>Health Research<br>System Institute<br>Department of<br>Disease Control<br>Department of<br>Health<br>Department of<br>Health<br>Services<br>Department of | - | IHPP<br>Health<br>Research<br>System<br>Institute |
|--|----|---|----|---|----|---|---|---|---|---|
| the purpose of policy making or  |    | cial production by  |    | implementation/comme rcial production by  | 2. | ial production by means   | - | Medical Support<br>Services   |   | Institute   |

| 2. De | evelopment of Thai     | research (once/year)   | traditional medicine and | Alternative |  |
|-------|------------------------|------------------------|--------------------------|-------------|--|
| tra   | aditional medicine and | 2. Development of Thai | alternative medicine for | Medicine    |  |
| alt   | ternative medicine for | traditional medicine   | NCDs health care         |             |  |
| NO    | CDs health care        | and alternative        | $\sim$                   |             |  |
|       |                        | medicine for NCDs      |                          |             |  |
|       |                        | health care            |                          |             |  |

# ANNEX

## Сору

Ministerial Order

No. 345/2560

### RE: Appointment of the 5-Year National NCDs

#### Prevention and Control Action Plan (2017-2021) Drafting Committee

Reference is made to the Directive of the Ministry of Public Health No. 2237/2559 dated 1 December 2016 appointing the Thai Healthy Lifestyle Phase II Implementation Committee: Appointment of the 5-Year National NCDs Prevention and Control Action Plan (2017-2021) where the Department of Disease Control, the Bureau of Non-Communicable Diseases, and the Thailand Healthy Strategic Management Office to jointly draft the national NCDs strategic plan and the action plan to put in place a guideline for operations to reduce preventable NCDs which are in line with the prevention and control works to achieve the 9 global targets and the context of Thailand.

To ensure smooth and efficient implementation of the national NCDs prevention and control strategic plan, the Public Health Minister, by the authority given under Section 20 of the Government Administration Act B.E 2534 and amendment thereof, has issued a directive as follows.

No. 1 The Appointment of the 5-Year National NCDs Prevention and Control Action Plan (2017-2021) Drafting Committee as follows.

| (1) | Public Health Minister                    | Chairman to the |
|-----|---|-----------------|
|     |   | Committee       |
| (2) | Public Health Permanent Secretary         | Vice Chairman   |
| (3) | Interior Permanent Secretary              | Member          |
| (4) | Education Permanent Secretary             | Member          |
| (5) | Commerce Permanent Secretary              | Member          |
| (6) | Permanent Secretary of Ministry of Social | Member          |

|      | Development and Human Security                        |                   |
|------|---|-------------------|
| (7)  | Labor Permanent Secretary                             | Member            |
| (8)  | Director-General of Department of Local               | Member            |
|      | Administration Ministry of Interior or representative |                   |
| (9)  | Director-General of Department of Labor               | Member            |
|      | Protection and Welfare, Ministry of Labor or          |                   |
|      | representative  |                   |
| (10) | Director-General of Department of Public              | Member            |
|      | Relations or representative                           | $\langle \rangle$ |
| (11) | Director-General of Department of Medical             | Member            |
|      | Services, Ministry of Public Health or                |                   |
|      | representative  | 0                 |
| (12) | Director-General of Department of Health or           | Member            |
|      | representative  |                   |
| (13) | Director-General of Department of Mental Health       | Member            |
|      | or representative                                     |                   |
| (14) | Director-General of Health Service Support            | Member            |
|      | Department, Ministry of Public Health or              |                   |
|      | representative  |                   |
| (15) | Director-General of Department of Medical             | Member            |
|      | Sciences, Ministry of Public Health or                |                   |
|      | representative  |                   |
| (16) | Director-General of Department of Thai Traditional    | Member            |
|      | and Alternative Medicine, Ministry of Public          |                   |
|      | Health, or representative                             |                   |
| (17) | Secretary to the Food and Drug Administration,        | Member            |
|      | Ministry of Public Health, or representative          |                   |
| (18) | Secretary to Office of the Higher Education           | Member            |
|      | Commission, Ministry of Education, or                 |                   |
|      | representative  |                   |
| (19) | Secretary to Social Security Office, Ministry of      | Member            |

|       | Labor, or representative                             |        |
|-------|--|--------|
| (20)  | General Manager to the Thai Health Foundation,       | Member |
| (20)  | or representative                                    |        |
| (21)  | Secretary to the Office of the National Economic     | Member |
| (21)  | and Social Development Board, Office of Prime        |        |
|       | Minister, or representative                          |        |
| (22)  | Director of National Statistical Office, Ministry of | Member |
| (22)  | Information and Communication Technology, or         | Member |
|       |  |        |
| (00)  | representative                                       | Mambar |
| (23)  | Director of Health System Research Institute,        | Member |
| (2.1) | Ministry of Public Health, or representative         |        |
| (24)  | Secretary to National Health Security Office, or     | Member |
|       | representative                                       | ·      |
| (25)  | Secretary to The National Health Commission          | Member |
|       | Office, or representative                            |        |
| (26)  | Director of The International Health Policy          | Member |
|       | Program, Thailand, Office of Permanent Secretary     |        |
|       | to Ministry of Public Health, or representative      |        |
| (27)  | President of Thai NCD Alliance, or representative    | Member |
| (28)  | President of The Royal College of Physicians of      | Member |
|       | Thailand, or representative                          |        |
| (29)  | President of The Federation of Thai Industries, or   | Member |
|       | representative                                       |        |
| (30)  | Chairman of The Thai Chamber of Commerce and         | Member |
|       | Board of Trade of Thailand, or representative        |        |
| (31)  | President of The National Municipal League of        | Member |
|       | Thailand, or representative                          |        |
| (32)  | President of Foundation for Consumers, or            | Member |
|       | representative                                       |        |
| (33)  | President of Thailand Village Health Volunteer       | Member |
|       | Foundation, or representative                        |        |

| (34) | President of Provincial Administrative             | Member              |
|------|--|---------------------|
|      | Organization, or representative                    |                     |
| (35) | President of Sub-district Administrative           | Member              |
|      | Organization, or representative                    |                     |
| (36) | Secretary to The Thai National Health Foundation,  | Member              |
|      | or representative                                  |                     |
| (37) | Prof. Emeritus Prakit Vathesatogkit                | Member              |
| (38) | Representative of World Health Organization        | Member              |
| (39) | Director-General of Department of Disease          | Member and          |
|      | Control, Ministry of Public Health                 | Secretary           |
| (40) | Director-General of Bureau of Policy and Strategy, | Member and          |
|      | Office of Permanent Secretary, Ministry of Public  | Assistant Secretary |
|      | Health   |                     |
| (41) | Director of Thailand Healthy Strategic             | Member and          |
|      | Management Office, Office of Permanent             | Assistant Secretary |
|      | Secretary, Ministry of Public Health               |                     |
| (42) | Director of Office of Non-Communicable Disease,    | Member and          |
|      | Department of Disease Control, Ministry of Public  | Assistant Secretary |
|      | Health   |                     |
| R    |  | •                   |

No. 1.2 The appointed Committee shall be empowered to carry out the following duties.

- To establish direction and strategies to support NCDs prevention and control on a national level;
- (2) To manage, coordinate, and support operations as per the 5-year national NCDs prevention and control strategies (2017-2021) and the action plan thereof;
- (3) To monitor and evaluate implementation of the 5-year national NCDs prevention and control strategies (2017-2021);
- (4) To establish sub-committee to fulfill requirements; and
- (5) To carry out other assignments as delegated by the Public Health Minister

No. 2 The Directive of the Ministry of Public Health No. 2237/2559 dated 1 December 2016 appointing the Thai Healthy Lifestyle Phase II Implementation Committee: Appointment of the 5-Year National NCDs Prevention and Control Action Plan (2017-2021) is hereby canceled.

This Directive is now put in effect.

Issued as at the 8<sup>th</sup> of March 2017.

(Signed) (Mr. Piyasakol Sakolsatayadorn) Public Health Minister

## Сору

Order of the 5-Year National NCDs

Prevention and Control Action Plan (2017-2021) Drafting Committee

No. 1/2560

RE: Appointment of the 5-Year National NCDs

Prevention and Control Action Plan (2017-2021) Drafting Sub-Committee

By the power of Clause no. 1.2 (4) of the Directive of the Ministry of Public Health No. 345/2560 dated 7 March 2017, the 5-Year National NCDs Prevention and Control Action Plan (2017-2021) Drafting Committee hereby issues this Directive to establish 6 of the 5-Year National NCDs Prevention and Control Action Plan (2017-2021) Drafting Sub-Committees whereas their compositions and authorities are described below.

- 1. Sub-Committee 1: Strategy for Development of public policies and laws that support NCD prevention and control
  - 1.1. Composition

| (1) | Delegated Deputy Permanent Secretary, Ministry of Public  | Chairman to the |
|-----|---|-----------------|
|     | Health  | Sub-Committee   |
| (2) | Ms. Supattra Srivanichchakorn                             | Member          |
|     | Acting MD Expert, Department of Disease Control, Ministry |                 |
|     | of Public Health  |                 |
| (3) | Representative of The National Health Commission Office   | Member          |
| (4) | Representative of the Office of the National Economic and | Member          |
|     | Social Development Board, Office of Prime Minister        |                 |
| (5) | Representative of the Ministry of Commerce                | Member          |
| (6) | Representative of the Customs Department, Ministry of     | Member          |
|     | Finance   |                 |

| (7)    | Representative of Fiscal Policy Office, Ministry of Finance   | Member        |
|--------|---|---------------|
| (8)    | Representative of Department of Local Administration,         | Member        |
|        | Ministry of Interior  |               |
| (9)    | Representative of Department of Labor Protection and          | Member        |
|        | Welfare, Ministry of Labor                                    |               |
| (10)   | Representative of Ministry of Social Development and          | Member        |
|        | Human Security  |               |
| (11)   | Representative of the National Health Security Office         | Member        |
| (12)   | General Manager to the Thai Health Foundation, or             | Member        |
|        | representative  | $\mathcal{O}$ |
| (13)   | Director of Legal Division, Department of Disease Control,    | Member        |
|        | Ministry of Public Health, or representative                  |               |
| (14)   | Director of Office of Alcohol Control Committee, Department   | Member        |
|        | of Disease Control, Ministry of Public Health, or             |               |
|        | representative  |               |
| (15)   | Director of Bureau of Tobacco Control, Department of          | Member        |
|        | Disease Control, Ministry of Public Health, or representative |               |
| (16)   | Director of The International Health Policy Program,          | Member        |
|        | Thailand, Office of Permanent Secretary, Ministry of Public   |               |
|        | Health, or representative                                     |               |
| (17)   | Representative of the Food and Drug Administration,           | Member        |
| $\sim$ | Ministry of Public Health                                     |               |
| (18)   | Director of the Bureau of Medical Laws, Department of         | Member        |
|        | Medical Services, Ministry of Public Health                   |               |
| (19)   | Representative of the Permanent Secretary Office, Ministry    | Member        |
|        | of Education  |               |
| (20)   | Representative of the Office of the Higher Education          | Member        |
|        | Commission, Ministry of Education                             |               |
| (21)   | Representative of Office of Vocational Education              | Member        |
|        | Commission, Ministry of Education                             |               |

| (22) | Representative of Office of Basic Education, Ministry of     | Member     |
|------|--|------------|
|      | Education  |            |
| (23) | Representative of Office of Non-Formal Education, Ministry   | Member     |
|      | of Education   |            |
| (24) | Representative of Office of the Private Education            | Member     |
|      | Commission, Ministry of Education                            |            |
| (25) | Representative of Public Health Laws Management Center,      | Member     |
|      | Department of Health, Ministry of Public Health              |            |
| (26) | Representative of Raipoong Network                           | Member     |
| (27) | Representative of Low Salt Network                           | Member     |
| (28) | Representative of StopDrink Network                          | Member     |
| (29) | Representative of The Thai Chamber of Commerce and           | Member     |
|      | Board of Trade of Thailand                                   |            |
| (30) | President of The Federation of Thai Industries, or           | Member     |
|      | representative   |            |
| (31) | Representative of Foundation for Consumers                   | Member     |
| (32) | President of Thailand Village Health Volunteer Foundation    | Member     |
| (33) | Representative of World Health Organization in Thailand      | Member     |
| (34) | Director of Office of Non-Communicable Disease,              | Member and |
|      | Department of Disease Control, Ministry of Public Health     | Secretary  |
| (35) | Director of Thailand Healthy Strategic Management Office,    | Member and |
|      | Office of Permanent Secretary, Ministry of Public Health     | Secretary  |
| (36) | Director-General of Bureau of Policy and Strategy, Office of | Member and |
|      | Permanent Secretary, Ministry of Public Health               | Secretary  |

2. Sub-Committee 2: Strategy for Expedition of Social drivers to communicate about risks on an ongoing basis

| (1) | Delegated Deputy of Department of Health, Ministry of | Chairman to the |
|-----|---|-----------------|
|     | Public Health   | Sub-Committee   |
| (2) | Representative of Thai NCD Alliance Network           | Member          |

| (3)  | Representative of Bureau of Non-Communicable Diseases,      | Member     |
|------|---|------------|
|      | Department of Disease Control, Ministry of Public Health    |            |
| (4)  | Representative of Raipoong Network                          | Member     |
| (5)  | Representative of Law Salt Network                          | Member     |
| (6)  | Representative of StopDrink Network                         | Member     |
| (7)  | Representative of Department of Physical Education,         | Member     |
|      | Ministry of Tourism and Sports                              |            |
| (8)  | Representative of Department of Public Relations, Office of | Member     |
|      | Prime Minister  |            |
| (9)  | Representative of Bureau of Information, Office of          | Member     |
|      | Permanent Secretary, Ministry of Public Health              |            |
| (10) | Representative of Public Relations Division, Department of  | Member     |
|      | Health  |            |
| (11) | Representative of Office of Corporate Communications,       | Member     |
|      | Department of Thai Traditional and Alternative Medicine,    |            |
|      | Ministry of Public Health                                   |            |
| (12) | Representative of Primary Health Care Division, Department  | Member     |
|      | of Health Service Support, Ministry of Public Health        |            |
| (13) | Representative of Health Education Division, Department of  | Member     |
|      | Health Service Support, Ministry of Public Health           |            |
| (14) | Representative of Public Consumer Affairs Division, Thai    | Member     |
|      | Food and Drug Administration, Ministry of Public Health     |            |
| (15) | Representative of Major Risk Factor Control Section, Thai   | Member     |
|      | Health Foundation   |            |
| (16) | Representative of National Health Security Office           | Member     |
| (17) | Representative of Foundation for Consumers                  | Member     |
| (18) | Representative of Center for Public Communications,         | Member and |
|      | Department of Health, Ministry of Public Health             | Secretary  |
| (19) | Representative of Bureau of Risk Communication and          | Member and |
|      | Health Behavior Development, Department of Disease          | Secretary  |
|      |   | 1          |

- 3. Sub-Committee 3: Potential development for community / local administrations, and alliance networks
  - 3.1. Composition

| ,    |  | [               |
|------|--|-----------------|
| (1)  | Delegated Deputy Director-General of Department of Health  | Chairman to the |
|      | Service Support, Ministry of Public Health                 | Sub-Committee   |
| (2)  | Representative of of Department of Thai Traditional and    | Member          |
|      | Alternative Medicine, Ministry of Public Health, or        |                 |
|      | representative   |                 |
| (3)  | Director of Bureau of Nutrition, Department of Health,     | Member          |
|      | Ministry of Public Health, or representative               |                 |
| (4)  | Representative of Department of Local Administration,      | Member          |
|      | Ministry of Interior                                       |                 |
| (5)  | Representative of Ministry of Social Development and       | Member          |
|      | Human Security   |                 |
| (6)  | Chairman of Sub-Committee, The Thai Chamber of             | Member          |
|      | Commerce and Board of Trade of Thailand                    |                 |
| (7)  | President of The Federation of Thai Industries             | Member          |
| (8)  | President of Foundation for Consumers                      | Member          |
| (9)  | President of National Health Foundation                    | Member          |
| (10) | President of Provincial Administrative Organization        | Member          |
| (11) | President of Sub-district Administrative Organization      | Member          |
| (12) | President of The National Municipal League of Thailand, or | Member          |
|      | representative   |                 |
| (13) | President of Thailand Village Health Volunteer Foundation  | Member          |
| (14) | Representative of The National Health Commission Office    | Member          |
| (15) | Representative of the National Health Security Office      | Member          |
| (16) | Representative of Thai Health Foundation                   | Member          |
| (17) | Representative of Office of Non-Communicable Disease,      | Member          |
|      | Department of Disease Control, Ministry of Public Health   |                 |
| (18) | Director of The Office of Alcohol Control Committee,       | Member          |

|      | Department of Disease Control, Ministry of Public Health, or |               |
|------|--|---------------|
|      | representative   |               |
| (19) | Director of The Office of Tobacco Products Control           | Member        |
|      | Committee, Department of Disease Control, Ministry of        |               |
|      | Public Health, or representative                             |               |
| (20) | Director of Primary Health Care Division, Department of      | Member and    |
|      | Health Service Support, Ministry of Public Health            | Secretary     |
| (21) | Representative of Bureau of Risk Communication and           | Member and    |
|      | Health Behavior Development, Department of Disease           | Secretary     |
|      | Control, Ministry of Public Health                           | $\mathcal{O}$ |

#### 4. Sub-Committee 4: Development of monitoring and data management systems

#### 4.1. Composition

| 4.1. Composition |  |                  |
|------------------|--|------------------|
| (1)              | Delegated Deputy Permanent Secretary of Public Health        | Chairman to the  |
|                  | Ministry   | Sub-Committee    |
| (2)              | Ms. Wanna Harnchaoworakul                                    | Vice Chairman to |
|                  | Acting MD Expert, Department of Disease Control, Ministry    | the Sub-         |
|                  | of Public Health   | Committee        |
| (3)              | Representative of the National Health Security Office        | Member           |
| (4)              | Representative of Thai Health Foundation                     | Member           |
| (5)              | Director of Bureau of Non-Communicable Diseases,             | Member           |
|                  | Department of Disease Control, Ministry of Public Health, or |                  |
|                  | representative   |                  |
| (6)              | Director of Bureau of Epidemiology, Department of Disease    | Member           |
|                  | Control, Ministry of Public Health, or representative        |                  |
| (7)              | Head of Health Intelligence Unit, Bureau of Policy and       | Member           |
|                  | Strategy, Office of the Permanent Secretary, Ministry of     |                  |
|                  | Public Health  |                  |
| (8)              | Director of Bureau of Occupational and Environmental         | Member           |
|                  | Diseases, Department of Disease Control, or representative   |                  |
| (9)              | Director of Center of Information and Communication          | Member           |

|      | Technology, Office of the Permanent Secretary: Ministry of    |        |
|------|---|--------|
|      | Public Health, or representative                              |        |
| (10) | Director of Planning Division, Department of Health, Ministry | Member |
|      | of Public Health, or representative                           |        |
| (11) | Representative of the Thailand Healthy Strategic              | Member |
|      | Management Office, Office of the Permanent Secretary:         |        |
|      | Ministry of Public Health, or representative                  |        |
| (12) | Director of Social Statistics Bureau, National Statistical    | Member |
|      | Office, Ministry of Digital Economy and Society               |        |
| (13) | Director of StopDrink Network Office, or representative       | Member |
| (14) | Director of Tobacco Control Research and Knowledge            | Member |
|      | Management, Mahidol University, or representative             |        |
| (15) | Director of Office of Alcohol Control Committee, Department   | Member |
|      | of Disease Control, Ministry of Public Health, or             |        |
|      | representative  |        |
| (16) | Director of Bureau of Tobacco Control Bureau, Department      | Member |
|      | of Disease Control, Ministry of Public Health, or             |        |
|      | representative  |        |
| (17) | Representative of Social Security Office, Ministry of Labour  | Member |
| (18) | Representative of Office of the Permanent Secretary:          | Member |
|      | Ministry of Education   |        |
| (19) | Representative of the Office of the Higher Education          | Member |
|      | Commission, Ministry of Education                             |        |
| (20) | Representative of Office of Vocational Education              | Member |
|      | Commission, Ministry of Education                             |        |
| (21) | Representative of Office of Basic Education, Ministry of      | Member |
|      | Education   |        |
| (22) | Representative of Office of Non-Formal Education, Ministry    | Member |
|      | of Education  |        |
| (23) | Representative of Office of the Private Education             | Member |
|      | Commission, Ministry of Education                             |        |

| (24) | Representative of World Health Organization in Thailand | Member        |
|------|---|---------------|
| (25) | Prof. Vichai Ekpalakorn                                 | Member        |
|      | Faculty of Medicine Ramathibodi Hospital, Mahidol       |               |
|      | University  |               |
| (26) | Mr. Attakiat Karnchanapiboonwong                        | Member and    |
|      | Office of Non-Communicable Disease, Department of       | Secretary     |
|      | Disease Control, Ministry of Public Health              |               |
| (27) | Ms. Sumanee Vatcharasin                                 | Member and    |
|      | Office of Non-Communicable Disease, Department of       | Secretary     |
|      | Disease Control, Ministry of Public Health              | $\mathcal{O}$ |
| (28) | Mr. Piboon Waikayee                                     | Member and    |
|      | Ayutthaya Provincial Public Health Office               | Secretary     |
| (29) | Ms. Kamolthip Vichitsoonthornkul                        | Member and    |
|      | Office of Non-Communicable Disease, Department of       | Secretary     |
|      | Disease Control, Ministry of Public Health              |               |

5. Sub-Committee 5: Management reform to reduce risk and control the diseases in line with their situation and local context

5.1.Composition

| (1) | Delegated Deputy Director-General of Department of          | Chairman to the  |
|-----|---|------------------|
|     | Disease Control, Ministry of Public Health                  | Sub-Committee    |
| (2) | Delegated Deputy Director-General of Department of          | Vice Chairman to |
|     | Health, Ministry of Public Health                           | the Sub-         |
|     |   | Committee        |
| (3) | Deputy Director-General of Department of Medical            | Vice Chairman to |
|     | Services, Ministry of Public Health                         | the Sub-         |
|     | (Mr. Prapon Tangsrikertikul)                                | Committee        |
| (4) | Ms. Supattra Srivanichchakorn                               | Member           |
|     | Acting MD Expert, Department of Disease Control, Ministry   |                  |
|     | of Public Health  |                  |
| (5) | Director of Office of Alcohol Control Committee, Department | Member           |

|      | of Disease Control, Ministry of Public Health, or              |               |
|------|--|---------------|
|      | representative   |               |
| (6)  | Director of Bureau of Tobacco Control Bureau, Department       | Member        |
|      | of Disease Control, Ministry of Public Health, or              |               |
|      | representative   |               |
| (7)  | Director of Bureau of Occupational and Environmental           | Member        |
|      | Diseases, Department of Disease Control, Ministry of Public    |               |
|      | Health, or representative                                      |               |
| (8)  | Director of Physical Activity and Health Division,             | Member        |
|      | Department of Health, Ministry of Public Health, or            | $\mathcal{O}$ |
|      | representative   |               |
| (9)  | Director of Bureau of Health Promotion, Department of          | Member        |
|      | Health, Ministry of Public Health, or representative           |               |
| (10) | Director of Bureau of Dental Health, Department of Health,     | Member        |
|      | Ministry of Public Health, or representative                   |               |
| (11) | Director of Bureau of Environmental Health, Department of      | Member        |
|      | Health, Ministry of Public Health, or representative           |               |
| (12) | Director of Bureau of Food, Food and Drug Administration,      | Member        |
|      | Ministry of Public Health, or representative                   |               |
| (13) | Director of Thai Traditional Medicine Institute, Department of | Member        |
|      | Health, Ministry of Public Health, or representative           |               |
| (14) | Director of Alternative Medicine Institute, Department of      | Member        |
|      | Health, Ministry of Public Health, or representative           |               |
| (15) | Director of Bureau of Academic Medicine, Department of         | Member        |
|      | Medical Services, Ministry of Public Health, or                |               |
|      | representative   |               |
| (16) | Director of Nursing Division, Office of Permanent Secretary,   | Member        |
|      | Ministry of Public Health, or representative                   |               |
| (17) | Director of Bureau of Health Administration, Office of         | Member        |
|      | Permanent Secretary, Ministry of Public Health, or             |               |
|      | representative, Department of Mental Health, Ministry of       |               |

|      | Public Health, or representative                             |            |
|------|--|------------|
| (18) | Director of Bureau of Promotion and Development of Mental    | Member     |
|      | Health   |            |
| (19) | Representative of Ministry of Education                      | Member     |
| (20) | Representative of the Ministry of Commerce                   | Member     |
| (21) | Representative of Department of Local Administration,        | Member     |
|      | Ministry of Interior   |            |
| (22) | Representative of the National Health Security Office        | Member     |
| (23) | Representative of Social Security Office, Ministry of Labour | Member     |
| (24) | Representative of Sweet Enough Network                       | Member     |
| (25) | Representative of Low Salt Network                           | Member     |
| (26) | Representative of Raipoong Network                           | Member     |
| (27) | Representative of Thai Health Professional Alliance against  | Member     |
|      | Tobacco  |            |
| (28) | President of Thai NCD Alliance Network                       | Member     |
| (29) | Representative of Thai Health Foundation                     | Member     |
| (30) | Representative of World Health Organization in Thailand      | Member     |
| (31) | Director of Office of Non-Communicable Disease,              | Member     |
|      | Department of Disease Control, Ministry of Public Health     |            |
| (32) | Director of Bureau of Nutrition, Department of Health,       | Member and |
|      | Ministry of Public Health, or representative                 | Secretary  |
| (33) | Director of Bureau of Academic Medicine, Department of       | Member and |
|      | Medical Services, Ministry of Public Health, or              | Secretary  |
|      | representative   |            |
| (34) | Ms. Chureeporn Kongprasert                                   | Member and |
|      | Bureau of Non-Communicable Diseases, Department of           | Secretary  |
|      | Disease Control, Ministry of Public Health                   |            |
| (35) | Representative of Bureau of Risk Communication and           | Member and |
|      | Health Behavior Development, Department of Disease           | Secretary  |
|      | Control, Ministry of Public Health                           |            |

Sub-Committee 6: Development of system to support and drive integrated implementation
 6.1. Composition

| (1)  | Delegated Deputy Public Health Minister                        | Chairman to the |
|------|--|-----------------|
|      |  | Sub-Committee   |
| (2)  | Ms. Supattra Srivanichchakorn                                  | Member          |
|      | Acting MD Expert, Department of Disease Control, Ministry      |                 |
|      | of Public Health   |                 |
| (3)  | Director of Social Development Strategy and Planning           | Member          |
|      | Office, Office of the National Economic and Social             | $\mathcal{O}$   |
|      | Development Board, Office of Prime Minister, or                |                 |
|      | representative   |                 |
| (4)  | Representative of Department of Local Administration,          | Member          |
|      | Ministry of Interior   |                 |
| (5)  | Ms Thanapan Sooksa-ard   | Member          |
|      | The International Health Policy Program, Thailand, Office of   |                 |
|      | Permanent Secretary, Ministry of Public Health                 |                 |
| (6)  | Mr. Veerasak Jongsuwiwatwong, Prince SongKhla                  | Member          |
|      | University   |                 |
| (7)  | Mr. Suwat Jariyalerdsak, Research Institute for Health         | Member          |
|      | Science, Chiangmai University                                  |                 |
| (8)  | Ms. Angsana Boontham, Mahidol University                       | Member          |
| (9)  | Representative from Institute of Nutrition, Mahidol University | Member          |
| (10) | Mr. Kasem Nakhonkhet, Physical Activity Research Center,       | Member          |
|      | Thai Health Foundation   |                 |
| (11) | Representative of Health Systems Research Institute            | Member          |
| (12) | Representative of National Health Security Office              | Member          |
| (13) | Representative of Thai Health Foundation                       | Member          |
| (14) | Representative of World Health Organization in Thailand        | Member          |
| (15) | Representative of Social Security Office                       | Member          |
| (16) | Director of Bureau of Academic Medicine, Department of         | Member          |

| (17) F | Medical Services, Ministry of Public Health, or<br>representative<br>Representative of Department of Health, Ministry of Public | Member |
|--------|---|--------|
| (17) F | Representative of Department of Health, Ministry of Public  | Member |
| F      |   | Member |
|        |   |        |
| (18) F | Health  |        |
|        | Representative of Food and Drug Administration, Ministry of   | Member |
| F      | Public Health   |        |
| (19) F | Representative of Department of Mental Health, Ministry of  | Member |
| F      | Public Health   |        |
| (20) F | Representative of Health Service Support Department,  | Member |
| Ν      | Ministry of Public Health   |        |
| (21) F | Representative of Bureau of Policy and Strategy, Office of  | Member |
| t      | he Permanent Secretary: Ministry of Public Health   |        |
| (22) F | Representative of Institute of Research, Knowledge  | Member |
| Ν      | Management, and Standards of Disease Control,   |        |
| C      | Department of Disease Control, Ministry of Public Health  |        |
| (23) F | Representative of Center of Information and Communication   | Member |
| Т      | Fechnology, Office of the Permanent Secretary: Ministry of  |        |
| F      | Public Health   |        |
| (24) F | Representative of Bureau of Alternative Medicine,   | Member |
| 0      | Department of Thai Traditional and Alternative Medicine,  |        |
| Ν      | Ministry of Public Health   |        |
| (25) F | Representative of Office of the Permanent Secretary:  | Member |
| N      | Ministry of Education   |        |
| (26) F | Representative of the Office of the Higher Education  | Member |
| C      | Commission, Ministry of Education   |        |
| (27) F | Representative of Office of Vocational Education  | Member |
| C      | Commission, Ministry of Education   |        |
| (28) F | Representative of Office of Basic Education, Ministry of  | Member |
| E      | Education   |        |
| (29) F | Representative of Office of Non-Formal Education, Ministry  | Member |
| c      | of Education  |        |

| (30) | Representative of Office of the Private Education            | Member     |
|------|--|------------|
|      | Commission, Ministry of Education                            |            |
| (31) | Director of Thailand Healthy Strategic Management Office,    | Member and |
|      | Office of the Permanent Secretary: Ministry of Public Health | Secretary  |
| (32) | Director of Office of Non-Communicable Disease,              | Member and |
|      | Department of Disease Control, Ministry of Public Health     | Secretary  |
| (33) | Mr. Somporn Netiratthakorn                                   | Member and |
|      | Thailand Healthy Strategic Management Office, Office of the  | Assistant  |
|      | Permanent Secretary: Ministry of Public Health               | Secretary  |

- 7. The Sub-Committees as stated in the clauses No. 1-6 shall be empowered to carry out the following duties.
  - 7.1. To drive the 5-Year National NCDs Prevention and Control Action Plan (2017-2021) to achieve the goal
  - 7.2. To coordinate and prepare for the action plan under the 5-Year National NCDs Prevention and Control Action Plan (2017-2021) by engaging alliance networks of all sectors
  - 7.3. To monitor and evaluate the implementation in alignment with the strategy and report the related performance to the Committee
  - 7.4. To establish working groups as deemed appropriate
  - 7.5.To work on assignments as delegated by the 5-Year National NCDs Prevention and Control Action Plan (2017-2021) Drafting Committee

This Directive is now put in effect.

Issued as at the 8<sup>th</sup> of March 2017.

(Signed)

(Mr. Piyasakol Sakolsatayadorn)

Public Health Minister

Chairman of 5-Year National NCDs Prevention and Control Action Plan (2017-2021) Drafting Committee