3 LOCAL STRATEGY AND ACTION PLAN FOR NON-COMMUNICABLE DISEASE PREVENTION AND CONTROL

3.1 GOAL AND OBJECTIVES

3.1.1 After thorough consideration of overseas experiences and evidence, together with the comprehensive review of local data on population health and behavioural risk patterns, as well as the state of preventive actions, the *"Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong"* (SAP) was drawn up.

3.1.2 The SAP aims to reduce non-communicable disease (NCD) burden including disability and premature death in Hong Kong by 2025, and it sets out to do so by achieving the following objectives:-

(a) Create equitable health-promoting environments that empower individuals to lead healthy lives;

(b) Strengthen health literacy and capacity of individuals to make healthy choices;

(c) Strengthen health systems for optimal management of NCD through primary healthcare and universal health coverage; and

(d) Monitor progress of NCD prevention and control actions with clear targets and indicators adapted from the World Health Organization (WHO)'s global monitoring framework (GMF).

3.2 SCOPE

3.2.1 Aligning with the WHO's *"Global Action Plan for the Prevention and Control of NCD 2013-2020"* (Global NCD Action Plan), the main focus of this SAP is on four NCD (namely cardiovascular diseases, cancers, chronic respiratory diseases and diabetes) and four shared behavioural risk factors (namely unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol). The Hong Kong Special Administrative Region Government recognises that there are many other conditions of public health importance that are closely associated with the four major NCD, for example, mental disorders, violence and injuries, poisoning, and other NCD. NCD and their risk factors also have strategic links to the health systems and universal health coverage. Despite the close links, one strategy and action plan to address all of them in equal detail would be unwieldy. Further, the tasks on control of some of these conditions have

been taken up by existing or other high-level steering or advisory committees[30]. There is thus a need to avoid overlapping of scope and duplicating efforts in NCD control.

3.3 ACCOUNTABILITY FRAMEWORK

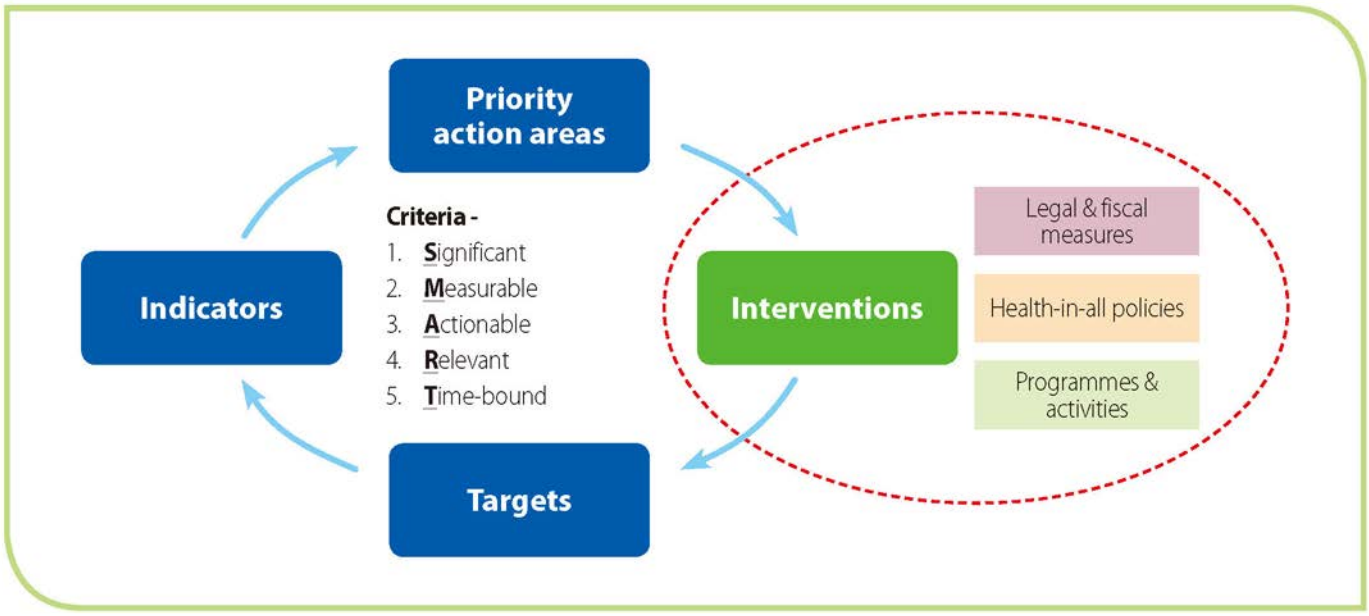
3.3.1 To achieve the set goal and objectives, an accountability framework with key components of priority action areas, interventions, targets and indicators (depicted in **Figure 1**) is adopted to steer accountable and cost-effective NCD actions. The accountability framework is underpinned by certain prerequisites:-

(a) Recognise government leadership;

(b) Build community and cross-sectoral partnerships for achieving co-benefits;

(c) Enhance health services' response and engage primary care actors for health promotion and NCD reduction;

Figure 1: Formulating an action-focused accountability framework for NCD prevention and control for Hong Kong



[30] Some examples include:-

- the Steering Committee on Primary Healthcare Development was announced in the Chief Executive's 2017 Policy Address to comprehensively review the existing planning of primary healthcare services, develop a blueprint for the sustainable development of primary healthcare services for Hong Kong, devise service models to provide primary healthcare services via district-based medical-social collaboration in the community, and develop strategies to raise community awareness and exploit the use of big data to devise strategies that best fit the needs of the community;
- the Advisory Committee on Mental Health was established in December 2017 to advise on mental health policies, including the establishment of more integral and comprehensive approaches to tackle multifaceted mental health issues in Hong Kong;
- the Cancer Coordinating Committee was established in 2011 to give advice on strategies and steer the work on cancer prevention and control;
- the Committee on Promotion of Breastfeeding was set up in April 2014 to advise on strategies and actions to promote and support breastfeeding; and
- the Committee on Prevention of Student Suicides was established in 2016 to make recommendations on appropriate preventive measures to prevent student suicides at primary, secondary and tertiary education levels, etc.

(d) Strengthen surveillance and intelligence capacity; and

(e) Secure resources and build professional capacity.

3.4 OVERARCHING PRINCIPLES AND APPROACHES

3.4.1 Based on the WHO's Global NCD Action Plan[31], the SAP embraces the following overarching principles and approaches:-

(a) Upstream approach

Prevention is better than cure. Sufficient medical evidence is available to show that most premature deaths from NCD are preventable through lifestyle modification – quitting smoking, avoiding alcohol, having a balanced diet and engaging in regular physical activity – possible only within a supportive and health-enhancing environment. There has been suggestion that eliminating health risk behaviours would prevent 80% of heart disease, stroke, type 2 diabetes and 40% of cancers[32,33]. Therefore, by helping people practise healthy lifestyles, NCD can be prevented and overall health of the population can be improved. While appropriate treatment is important for those with diseases, the upstream approach offers the most cost-effective means for NCD control, saving billions of dollars required to provide secondary and tertiary care after people become sick.

(b) Life-course approach

The risks of developing NCD accumulate with age and are influenced by factors acting at all stages of life. Thus, interventions throughout life can help prevent progress of diseases. By utilising opportunities at all life stages, starting with proper infant feeding practices, including promotion of breastfeeding and health promotion for children, adolescents and youth followed by promotion of a healthy working life, healthy ageing and care for people with NCD in later life, it will be possible to achieve reduction in premature deaths in the highly productive stages of life, fewer disabilities, more people enjoying better quality of life, and lower costs of medical treatment and care services.

(c) Focus on equity

Policies and programmes should aim to reduce inequalities in NCD burden due to social determinants such as education, gender, socioeconomic status, ethnicity and migrant status.

[31] Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva: World Health Organization, 2013.

[32] Spring B., Moller A.C., Coons M.J. Multiple health behaviours: overview and implications. J Public Health (Oxf). 2012 Mar; 34(Suppl 1): i3–i10.

[33] Ezzati M, Lopez AD, Rodgers A, et al. Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors. Geneva: World Health Organization; 2004.

(d) Multisectoral actions

NCD prevention, tackling of underlying risk factors and health promotion must begin where people live, learn, work, worship and play. Effective NCD prevention and control necessarily requires multisectoral approaches at all levels of government including an all-of-government and whole-of-society approach across health, education, environment, food, social welfare, social and economic development, sports, trade, transport, urban planning, and not the least, finance, to create a health supporting environment which would enable people to make healthy choices and live healthily.

(e) Health system strengthening

Revitalisation and reorientation of healthcare services are required for health promotion, disease prevention, early detection and integrated care, particularly at the primary care level.

(f) Universal health coverage

All people, particularly the poor and vulnerable, should have access, without discrimination, to the needed promotive, preventive, curative, rehabilitative and palliative basic health services, as well as essential, safe, affordable, effective and quality medicines and diagnostics without exposing users to financial hardship.

(g) Evidence-based strategies

Strategies and practices for the prevention and control of NCD need to be based on latest scientific evidence and/or best practices. While cost-effectiveness analysis is a useful tool, it should not be used as the sole basis for decision-making. When selecting interventions for the prevention and control of NCD, consideration should be given to effectiveness, cost-effectiveness, affordability, implementation capacity, feasibility, national circumstances, impact on health equity of interventions, and to the need to implement a combination of population-wide policies, setting-based programmes and individual interventions.

(h) Empowerment of people and communities

Empowerment is a process through which people gain control over decisions and actions that influence health. The public should be empowered, through enhancing healthy literacy of the population, to make healthy behavioural choices, equipped with appropriate skills to interact effectively with healthcare services, and provided with opportunities to assume responsibility and participate in self-care. Community partners should be empowered and involved in the activities for the prevention and control of NCD, including advocacy, policy, planning, service provision, monitoring, research and evaluation.

3.5 KEY PRIORITY ACTION AREAS

3.5.1 Considering NCD prevention should target upstream at risk factor prevention and reduction using a life-course approach, the following five key action areas (fitting the acronym **HeALTH**) has been adopted for Hong Kong.

- **He**althy Start
- **A**lcohol Free
- **L**ive Well and Be Active
- **T**obacco Free
- **H**ealthy Diet

3.5.2 Actions will be underpinned by the following strategic directions:-

(i) Government demonstrating leadership;

(ii) Schools transformed into healthy settings (e.g. Health Promoting Schools);

(iii) Supportive physical and social environments created for physical activity;

(iv) Effective partnerships with primary care professionals; and

(v) Consideration and adoption of "best buys" and other recommended interventions[34], such as banning of trans fats in food preparation, imposing sugar tax, restriction of alcohol marketing, raising alcohol tax, etc., at appropriate stages.

3.5.3 While working upstream, the Government recognises that considerable improvements have to be made in the healthcare system to achieve continuous and significant reduction in NCD morbidity and mortality by 2025. For examples, there should be better utilisation of existing and/or new public-private partnership programmes, introduction of effective healthcare financing models, greater application of healthcare vouchers, enhancements in the primary care system, and so on.

[34] Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva: World Health Organization, 2017.

3.6 FACTSHEETS OF NON-COMMUNICABLE DISEASE TARGETS, INDICATORS AND MULTISECTORAL ACTIONS

3.6.1 Based on a thorough stock-take of available NCD data and a selection process[35] to identify the most reliable and sustainable data sources for ongoing use, and consideration of the relevance of the WHO's GMF[36] to the local setting, a set of 9 targets and 34 indicators, comprising 25 key indicators (derived from the WHO's GMF) and 9 supplementary indicators (of local relevance[37]) have been adopted for local NCD monitoring. **Table 2 (Pages 24 – 27)** lists out an overview of the NCD targets and indicators for Hong Kong towards 2025. The baseline selected by WHO for all global voluntary targets and indicators is 2010. However, due to local data availability, the baseline adopted by Hong Kong for each target and indicator may vary, with the most recent available data adjacent to 2010 being selected. For easy reference to WHO's 25 indicators, the numbering of key indicators follows WHO's GMF. For the sake of easy differentiation, a letter "S" is used to indicate the supplementary indicators.

3.6.2 A range of NCD policies, programmes and actions have been included in this SAP insofar as they are significant (with substantial contribution to local NCD preventable mortality and morbidity), relevant (in the local and international contexts), actionable (by relevant sector of community and stakeholders), measurable (by WHO's GMF and ECHO report[38]) and time-bound (can be implemented based on a set time frame). These actions are included after consulting stakeholders from across sectors, and most importantly soliciting their support for and commitment in implementing them. The Department of Health (DH), Hospital Authority (HA) and various government bureaux and departments such as Leisure and Cultural Services Department, Education Bureau, Centre for Food Safety, Housing Authority, etc. have key roles to play.

[35] Factors taken into account in the selection process include age coverage, data collection/measurement methods, monitoring frequency, data ownership and comparability with official figures, etc.

[36] Details of the WHO's GMF can be found from the following link: http://www.who.int/nmh/global_monitoring_framework/2013-11-06-who-dc-c268-whp-gap-ncds-techdoc-def3.pdf?ua=1

[37] By taking reference from the WHO Global Reference List of 100 Core Health Indicators and recommendations by the WHO Commission on Ending Childhood Obesity, 9 supplementary indicators are added to make up the local set of NCD indicators. Some examples are breastfeeding rate, screen time and sleep time.

[38] Officially called "Report of the Commission on Ending Childhood Obesity". Details of the WHO's ECHO report can be found from the following link: http://www.who.int/end-childhood-obesity/publications/echo-report/en/

3.6.3 For the sake of easy communication with stakeholders, health promotion partners and the public, the local NCD targets, indicators and multisectoral actions are set out in greater detail under 9 target-based factsheets **(Targets 1 to 9, see Pages 28 – 95)** aligning with WHO's 9 global targets. Content of each factsheet is organised under the following headings:-

(a) ***"Preamble"*** highlights what the particular target is about and why it is important in the context of NCD prevention and control;

(b) ***"Local situation"*** presents the latest available figures and trends (over a reasonable timeframe) to describe the status of the NCD problem[39];

(c) ***"Local target"*** specifies the expected outcome by 2025;

(d) ***"Actions to achieve target"*** highlights the Government policies, strategies, programmes and actions of high impact that have been/are currently undertaken, as well as specific interventions to be introduced/enhanced/explored to achieve the stated NCD targets by 2025; and

(e) ***"Definitions and specifications of local indicators"*** specifies the most reliable data source(s) of key and/or supplementary indicators (as appropriate), what will be measured and how for each indicator.

3.7 FUTURE NON-COMMUNICABLE DISEASE SURVEILLANCE

3.7.1 The WHO has provided a STEPwise approach for NCD risk factor surveillance. These steps include questionnaire, physical measurements and biochemical measurements. To cater for future data need for local NCD surveillance and meet reporting requirements as specified in the WHO's GMF, DH will strengthen NCD surveillance with effect from 2018 by conducting household-based health behaviour questionnaire surveys every two years, supplemented by physical and biochemical measurements every four to six years. This would markedly improve the accuracy, reliability and usefulness of NCD risk factor and biomedical monitoring for the adult population, and facilitate monitoring of the Government's NCD actions.

3.7.2 As HA's services are currently used by majority of the local population, its clinical database is potentially the largest and most comprehensive data source to track NCD status. DH will consider to take reference from indicators (such as attendances for diabetes) already captured in HA's Key Performance Indicators reports, and explore the feasibility of tracking other NCD conditions (e.g. hypertension) via HA.

[39] Considering the need to monitor local trends and enable comparison with international counterparts, selected indicators may be presented as 'crude' rates and 'age-standardised' rates. Others such as Target 7 indicator "Detection rate of overweight and obesity in primary and secondary students" may be presented in two ways, one adopting the 'local definition of childhood overweight/obesity' and the other adopting 'WHO's definition using body mass index cut-off values'. Further, in Targets 6 and 7, WHO's definitions of hypertension, diabetes and high blood cholesterol were adopted to facilitate international comparison, therefore the prevalence figures of hypertension, diabetes and high blood cholesterol would be slightly different from those presented in the Report of PHS 2014/15.

Table 2: Summary of local NCD targets and indicators for NCD monitoring

Target 1: Reduce premature mortality from NCD

A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancers, diabetes, or chronic respiratory diseases by 2025

Key indicators *[Monitoring frequency]*

1. Unconditional probability of dying between ages of 30 and 70 from four non-communicable diseases (4 NCD), namely cardiovascular diseases, cancers, diabetes or chronic respiratory diseases *[Annual]*
2. Cancer incidence and mortality, by type of cancer, per 100 000 population breakdown by age and sex *[Annual]*
20. Access to palliative care assessed by morphine-equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer *[Annual]*
22. Availability of vaccines against human papillomavirus (HPV) as part of a national immunisation schedule *[Annual]*
24. Vaccination coverage of hepatitis B vaccine measured by proportion of children who received three doses of Hep-B vaccine (HepB3) and the timeliness of vaccination (as reflected by median and interquartile range) for HepB3 among preschool children *[Every 2-3 years]*
25. Proportion of women between the ages of 30 and 49 screened for cervical cancer at least once *[Every 2 years]*

Target 2: Reduce harmful use of alcohol

At least 10% relative reduction in the prevalence of binge drinking and harmful use of alcohol (harmful drinking/alcohol dependence) among adults and in the prevalence of drinking among youth by 2025

Key indicators *[Monitoring frequency]*

3. Estimated total alcohol consumption per capita (aged 15+ years) within a calendar year in litres of pure alcohol *[Annual]*
4a. Prevalence of binge drinking at least monthly among adolescents *[Every 1 or 2 years]*
4b. Age-standardised prevalence of binge drinking at least monthly among adults (aged 18+ years) *[Every 2 years]*
5. Proportion of persons (aged 15+ years) who had an Alcohol Use Disorders Identification Test (AUDIT) score of 16 or above, which indicates harmful drinking or probable alcohol dependence *[Every 2 years]*

Supplementary indicators *[Monitoring frequency]*

S1. Prevalence of ever drinking, 12-month drinking and 30-day drinking among young people *[Every 2 or 4 years]*
S2. Proportion of adolescents reported having the first sip at age below 16 years *[Every 2 years]*
S3. Proportion of adolescents reported starting a monthly drinking habit at age below 16 years *[Every 2 years]*

Table 2: Summary of local NCD targets and indicators for NCD monitoring (cont'd)

Target 3: Reduce physical inactivity

A 10% relative reduction in the prevalence of insufficient physical activity among adolescents and adults by 2025

Key indicators *[Monitoring frequency]*

6 Prevalence of insufficiently physically active adolescents *[Annual]*

7 Age-standardised prevalence of insufficiently physically active persons aged 18+ years *[Every 2 years]*

Target 4: Reduce salt intake

A 30% relative reduction in mean population daily intake of salt/sodium by 2025

Key indicators *[Monitoring frequency]*

8 Age-standardised mean intake of salt (sodium chloride) per day in grams among persons aged 18-84 years *[Every 4-6 years]*

Target 5: Reduce tobacco use

A 30% relative reduction in the prevalence of current tobacco use in persons aged 15+ years by 2025 when compared to the baseline prevalence in 2010

Key indicators *[Monitoring frequency]*

9 Prevalence of current tobacco use among adolescents *[Every 2 years]*

10 Age-standardised prevalence of daily cigarette smoking among persons aged 18+ years *[Every 2-3 years]*

Supplementary indicators *[Monitoring frequency]*

S4 Prevalence of daily cigarette smoking among persons aged 15+ years *[Every 2-3 years]*

Table 2: Summary of local NCD targets and indicators for NCD monitoring (cont'd)

Target 6: Contain the prevalence of raised blood pressure

Contain the prevalence of raised blood pressure by 2025

Key indicators *[Monitoring frequency]*

11a Age-standardised (and crude) prevalence of raised blood pressure among persons aged 18-84 years *[Every 4-6 years]*

11b Age-standardised (and crude) mean systolic blood pressure (SBP) among persons aged 18-84 years *[Every 4-6 years]*

Target 7: Halt the rise in diabetes and obesity

Halt the rise in diabetes and obesity by 2025

Key indicators *[Monitoring frequency]*

12 Age-standardised (and crude) prevalence of raised blood glucose/diabetes among persons aged 18-84 years *[Every 4-6 years]*

13 Detection rate of overweight and obesity in primary and secondary students, based on:

- Local definition *[Annual]*
- WHO's definition *[Annual]*

14 Age-standardised (and crude) prevalence of overweight and obesity in persons aged 18-84 years, based on:

- Local classification *[Every 4-6 years]*
- WHO's classification *[Every 4-6 years]*

15 Age-standardised mean proportion of total energy intake from saturated fatty acids in persons aged 18+ years *[About every 10 years]*

16 Age-standardised prevalence of low fruit and vegetables consumption among persons aged 18+ years *[Every 2 years]*

17 Age-standardised prevalence of raised total cholesterol and mean total cholesterol among persons aged 18-84 years *[Every 4-6 years]*

21 Adoption of national policies that limit saturated fatty acids and eliminate partially hydrogenated vegetable oils (the main source of industrially produced trans fats) in the food supply

23 Adoption of national policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans fatty acids, free sugars, or salt

Table 2: Summary of local NCD targets and indicators for NCD monitoring (cont'd)

Target 7: Halt the rise in diabetes and obesity

Halt the rise in diabetes and obesity by 2025

Supplementary indicators *[Monitoring frequency]*

- **S5** Prevalence of overweight and obesity in children under 5 years of age *[Annual]*
- **S6** Ever breastfeeding rate on discharge from hospitals *[Every 2 years]*
- **S7** Rate of exclusive breastfeeding for 4 months *[Every 2 years]*
- **S8** Proportion of upper primary and secondary school students who spent 2 hours or more a day on the internet or electronic screen products for purposes not related to school work *[Annual]*
- **S9** Proportion of upper primary and secondary school students who had sleep time less than 8 hours a day on a typical night of a school day *[Annual]*

Target 8: Prevent heart attacks and strokes through drug therapy and counselling

No specific local target at the moment due to lack of quantifiable indicators

Target 9: Improve availability of affordable basic technologies and essential medicines to treat major NCD

No specific local target at the moment due to lack of quantifiable indicators