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Public Health
Prevent, Promote, Protect.
American Samoa
Department of Health

TERRITORY OF AMERICAN SAMOA NON-COMMUNICABLE DISEASES PREVENTION AND CONTROL STRATEGIC PLAN 2025-2030

Rowing together to a healthier American Samoa

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Message by the Governor of the Territory of American Samoa

Ladies and gentlemen, and fellow citizens of American Samoa,

To begin with, I am acutely aware of the pressing challenges our beloved territory faces—the escalating crisis of non-communicable diseases (NCDs). The stark reality is that NCDs, such as heart disease, cancer, diabetes, and respiratory diseases, account for a staggering 70% of all deaths worldwide. In American Samoa, the burden of NCDs has reached a critical level, demanding our immediate attention and united efforts.

The statistics are alarming, and they underscore the urgency of our response. The economic impact of NCDs is not to be underestimated; the World Economic Forum estimates a staggering \$47 trillion cost to the global economy by 2030. This not only strains our healthcare systems but also hampers economic growth and development.

The crisis extends beyond the economic realm—it disproportionately affects vulnerable populations, creating noticeable health disparities that perpetuate a vicious cycle. We must acknowledge the importance of economic and social determinants of health in our approach to tackling this issue.

Our strategic plan for 2025-2030 is not just a document; it is a blueprint for action, a call to arms in the face of a health crisis that demands our collective attention and determination. This plan, built upon ongoing efforts, aims to establish a comprehensive strategy for the prevention, treatment, and management of NCDs. It marks a significant milestone by incorporating mental health, and recognizing its interconnectedness with other NCDs.

Our objectives are clear: to provide adequate primary and preventive health services, ensure access to quality clinical healthcare, implement community risk factor profiling, undertake health system strengthening, and prioritize evidence-based action. But achieving these objectives requires more than just words; it demands a commitment from each one of us.

We must prioritize prevention strategies, invest in healthcare infrastructure, particularly innovative digital technologies, and foster international collaboration. Mental health, nutrition, smoking, physical inactivity, and alcohol are at the forefront of our interventional strategic approaches, as we recognize their significant contributory effect on the early development of NCDs in American Samoa.

Our approach is holistic, evidence-based, and rooted in the principles of integration and multisectoral collaboration. We acknowledge the life course and well-being perspective, recognizing that NCD risks can originate before birth and have lifelong consequences.

The strategic plan outlines specific goals and objectives, including a 25% reduction in premature mortality and the incidence of NCDs by 2030. This commitment requires a multisectoral approach,

improved service delivery, enhanced monitoring and evaluation, capacity building, optimized healthcare financing, and leveraging medical technologies.

Our framework of approach, structured around the "5 Pillars," emphasizes environmental interventions, healthy lifestyle promotion, appropriate clinical services, advocacy and communication, and monitoring and surveillance. These pillars are not just theoretical concepts—they represent the oars of the *fautasi*, guiding us through the perilous waters of the NCD crisis.

The metaphor of the *fautasi* journey reminds us that we are all paddlers in this collective effort. As we navigate the challenges ahead, unity and synchronized efforts are paramount. We have a visionary leader at the helm, guiding us toward a healthier future. The *fautasi* itself symbolizes our healthcare system—the vessel through which actions must be carried out.

In conclusion, my fellow citizens, the non-communicable disease crisis in American Samoa is not just a health issue; it is a challenge that defines our resilience and determination. Let us embark on this journey together, paddling as one, steering our *fautasi* away from the vortex of NCDs. Our health, our well-being, and the future of our beloved territory depend on our collective commitment and action.

Thank you, and may we navigate these waters with strength, unity, and a shared determination for a healthier American Samoa.

Lemanu Peleti Mauga
Governor of the Territory of American Samoa

Foreword by the Director of Health

Dear colleagues, partners, and stakeholders,

I am honored to present to you the strategic plan for Non-Communicable Disease (NCD) prevention and control in American Samoa for the years 2025-2030. As we navigate the complex waters of the global burden of NCDs, I extend my heartfelt appreciation to all those who have contributed to the development of this comprehensive and forward-thinking roadmap which inculcates and strengthens the building blocks of health promotion through primary health care beyond the realms of just prevention and control.

The urgency of our response to the NCD crisis cannot be overstated. The statistics are alarming, with NCDs accounting for 90% of American Samoa's health burden that extends far beyond the confines of our healthcare systems. The economic impact underscores the need for decisive action not only for the health and well-being of our citizens but also for the prosperity of our community and the sustainability of our economy.

American Samoa faces unique challenges in this regard, with the burden of NCDs reaching crisis levels. The alarming trends revealed in the 2004 WHO STEPs survey persist today, necessitating a comprehensive, whole-of-government, and whole-of-sector response. The strategic plan for 2025-2030 is our collective response—a call to action that integrates insights from various sources reflecting the voices of our community.

This plan is not merely a document but a commitment to a healthier future. It recognizes the interconnectedness of mental health with other NCDs, the importance of addressing socioeconomic determinants, and the necessity of international collaboration. I commend the emphasis on prevention strategies, innovative healthcare infrastructure, and nuanced interventional probes targeting mental health, nutrition, smoking, physical inactivity, and alcohol.

Our objectives are clear, ambitious, and achievable. We aim for a 25% reduction in premature mortality and the incidence of NCDs by 2029. The "5 Pillars" structure, encapsulating environmental interventions, healthy lifestyle promotion, clinical services, advocacy and communication, and monitoring and surveillance, serves as our guiding oars, steering us away from the vortex of NCDs.

The metaphor of the fautasi journey encapsulates the essence of our collective effort. We are all paddlers in this endeavor, navigating the challenges with unity and synchronized efforts. The fautasi itself, representing our healthcare system, is the vessel through which we carry out actions—actions that are crucial for the well-being and future of American Samoa.

I express my gratitude to the Department of Health, collaborating organizations, and global partners for their unwavering support. The CDC's Division of Global Health Protection exemplifies the spirit of international collaboration, recognizing that every dollar invested in proven NCD interventions generates significant returns in economic development and reduced healthcare costs.

As we embark on the implementation of this strategic plan, let us remain committed to the core principles of a holistic approach, evidence-based action, integration, life course perspective, equity, and socio-cultural contextualization. These principles guide us toward a resilient and culturally sensitive strategy for NCD prevention and control, and health promotion in American Samoa.

Together, let us paddle our fautasi away from the NCD vortex, with a vision in ensuring a clear trajectory toward a healthier American Samoa.

Thank you for your commitment, dedication, and partnership.

Sincerely,

Motusa Tuileama Toatolu Nua
Director of Health
American Samoa Department of Public Health

Acronyms and Abbreviations

AA	Alcoholic Anonymous Program
ACE	Angiotensin-converting enzyme
ARB	Angiotensin-receptor blocker
AS	American Samoa
ASG	American Samoa Government
ASPA	American Samoa Power Authority
BMI	Body Mass Index
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control and Prevention
CHC	Community Health Center
CKD	Chronic Kidney Disease
CME	Continuing Medical Education
CMNN	Communicable, Maternal, Neonatal, and Nutritional diseases
COPD	Chronic Obstructive Pulmonary Disease
CSO	Civil Society Organization
CVD	Cardiovascular Disease
DGHP	Division of Global Health Protection
DHSS	Department of Human and Social Services
DALY	Daily Adjusted Life Year
DOA	Department of Agriculture
DOE	Department of Education
DOH	Department of Health
DPS	Department of Public Services
DYWA	Department of Youth & Women's Affairs
EBP	Evidence-Based Program
EHR	Electronic Health Record
EMR	Electronic Medical Record
ENDS	Electronic Nicotine Delivery Systems
EPA	Environmental Protection Agency
ESRD	End Stage Renal Disease
FBG	Fasting Blood Glucose
FBO	Faith-based Organization
GPW	WHO's General Programme of Work
GYTS	Global Youth Tobacco Survey
HDL	High-Density Lipoprotein
HIS	Health Information System
HRSA	Human Resources & Services Administration
IHME	Institute for Health Metrics & Evaluation
LBJ	LBJ Hospital/LBJ Tropical Medical Center

LDL	Low-Density Lipoprotein
MANA	Pacific Monitoring Alliance for NCD Action
MCH	Maternal and Child Health
MDRD	Modification of Diet in Renal Disease
NCD	Non-Communicable Disease
NGO	Non-governmental organization
ENNDS	Electronic Non-Nicotine Delivery Systems
NSAID	Non-steroidal anti-inflammatory drug
PEN	Package of Essential NCD Interventions
PHC	Primary Health Care
PICT	Pacific Island Countries & Territories
PIHOA	Pacific Island Health Officers' Association
PVD	Peripheral Vascular Disease
RCCE	Risk Communications & Community Engagement
RHD	Rheumatic Heart Disease
SBIRT	Screening Brief Intervention Referral Treatment
SPC	The Pacific Community
SNAPS	Smoking, Nutrition, Alcohol, Physical inactivity, and Sleep Deprivation
STEPS	WHO STEPwise approach to surveillance
SUD	Substance Use Disorder
TAOA	Territorial Administration on Aging
TEOW	Territorial Epidemiological Outcome Workgroup
UHC	Universal Health Coverage
US	United States
USDA	United States Department of Agriculture
VA	Veteran Affairs
WBC	Well Baby Clinic
WHO	World Health Organization
WIC	Women, Infants and Children Program
YLL	Years of Life Lost
YRBSS	Youth Risk Behavioral Surveillance System

Acknowledgments

The strategic plan was developed by members of the NCD steering committee under the leadership of the NCD coordinator's office. Subsequently, the Director of Health assumed stewardship, demonstrating a commitment to spearheading the NCD crisis campaign. Other essential contributors to this document included various DOH staff, particularly the five pillar leads. Close collaboration with key program managers and physicians from the CHCs was pivotal during the strategy's development, with engagement of respective stakeholders occurring later in the process.

A core committee, consisting of members from the steering committee, played a crucial role in consolidating the various components of the strategic plan into a cohesive framework that accurately reflected the current NCD landscape in American Samoa. The invaluable support and advice from this team are sincerely acknowledged.

This strategic plan not only builds upon the foundation laid by earlier steering committees and NCD coalition partnerships but also extends the efforts initiated in the preceding Strategic Plan (2013-2018). The consultation process benefited significantly from the critical support of all participants, and their active contributions are gratefully acknowledged.

Executive Summary

The global burden of non-communicable diseases (NCDs), such as heart disease, cancer, diabetes, and respiratory diseases, accounts for 70% of all deaths worldwide. Economic impact estimates suggest that NCDs will cost the global economy \$47 trillion by 2030, necessitating urgent action. The disproportionate impact on vulnerable populations underscores the importance of addressing economic and social determinants of health.

American Samoa faces a crisis in NCDs, with alarming trends persisting since the last WHO STEPs survey in 2004. Despite efforts, a comprehensive response is urgently needed, incorporating mental health, nutrition, smoking, and alcohol, which significantly contribute to NCD development.

The Territorial NCD Strategic Plan for 2025–2030 integrates feedback from various surveys and studies. Key considerations include mental health, nutrition, and substance use. The plan aligns with global commitments and emphasizes a holistic, evidence-based, and culturally sensitive approach.

American Samoa experiences a high prevalence of NCD risk factors, with a notable impact on mortality rates. Cardiovascular diseases, diabetes, stroke, chronic kidney disease, chronic obstructive pulmonary disease, and various cancers are on the rise.

The strategic plan adheres to core principles, including a holistic approach, evidence-based action, integration and multisectoral collaboration, a life course and well-being perspective, equity in implementation, and socio-cultural contextualization.

The overarching goal is to contribute to a healthier American Samoa, aiming for a 25% reduction in premature mortality and NCD incidence by 2030. Objectives span multiple areas, including obesity, diabetes, chronic kidney disease, dietary habits, physical activity, tobacco use, substance use, cardiovascular diseases, cancer, mental health, policy-driven health agendas, legislative enforcement, public health surveillance, resource allocation, and more.

The strategic plan is structured around the "5 Pillars," addressing environmental interventions, healthy lifestyle promotion, appropriate clinical services, advocacy and communication, and monitoring and surveillance. Actions range from policy interventions to clinical management, emphasizing a continuum approach.

The strategic plan is designed for integration into annual operational plans, emphasizing collaboration and active involvement from various stakeholders. Monitoring and evaluation

utilize publicly available indicators and global platforms, ensuring adaptability and responsiveness.

The strategic plan is metaphorically represented as a fautasi journey, navigating the challenges of NCDs. The fautasi symbolizes the health care system, with coordinated efforts represented by paddlers, strategic interventions as oars, and visionary leadership at the helm.

In conclusion, the strategic plan for NCD prevention and control in American Samoa provides a comprehensive, evidence-based, and culturally sensitive roadmap. By addressing key risk factors and adopting a holistic approach, the plan aims to significantly reduce the burden of NCDs and contribute to a healthier and more resilient community.

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Background Information

The global burden of non-communicable diseases (NCDs) is a pressing issue demanding immediate attention. NCDs, such as heart disease, cancer, diabetes, and respiratory diseases, account for 70% of all deaths worldwide. This staggering statistic underscores the urgent need for action to combat these diseases.

One of the primary reasons NCDs pose a global burden is their economic impact. The World Economic Forum estimates that NCDs will cost the global economy \$47 trillion by 2030. This not only strains healthcare systems but also hampers economic growth and development.

Moreover, NCDs disproportionately affect vulnerable populations, creating noticeable health disparities that perpetuate a vicious cycle, underscoring the importance of economic and social determinants of health.

Addressing the global burden of NCDs requires a multi-faceted approach and a demographic shift, necessitating new perspectives on disease and technological innovation that has significant consequences for the epidemiology of and approaches to NCDs [1].

Governments must prioritize public health policies promoting healthy lifestyles and preventing risk factors such as tobacco use, unhealthy diets, physical inactivity, and harmful alcohol consumption. Additionally, increased investment in healthcare infrastructure is crucial to ensure access to affordable treatment options, including the improvement of primary healthcare services and the integration of innovative digital technologies, ensuring quality care in NCD interventions.

International collaboration is paramount in effectively tackling NCDs. Governments, non-governmental organizations (NGOs), and private sector entities must work together to share best practices, pool resources, and develop innovative solutions not only within countries and territories but also across borders.

The evolving challenges facing Member States in the Western Pacific Region demand an equally evolving response from the World Health Organization (WHO). Thematic priorities such as NCDs and Aging, with a greater focus on healthy aging, present an opportunity to plan rather than viewing it solely as a burden of disease [2]. While there is a shifting paradigm towards a more systems-based approach, the current focus in the Territory is geared towards vertical approaches in primary healthcare due to the imperative nature of federal support and grant funding.

The rising burden of NCDs in American Samoa has reached a crisis level. The last World Health Organization (WHO) STEPs survey conducted in American Samoa in 2004 revealed alarming

trends in risk factors, unhealthy behaviors, and NCDs that persist to this day. Despite past efforts, there is an urgent need for a comprehensive, whole-of-government, and whole-of-sector response, with a greater emphasis on strong leadership from all stakeholders.

In the planning and revision of the 2013-2018 strategic plan, the Department of Health (DOH) conducted in-house consultations as a pre-emptive action towards consolidating efforts. The strategic plan for 2025-2030 incorporates feedback from various surveys, surveillance platforms, and repositories, including the Youth Risk Behavioral (YRBSS) & Behavioral Risk Factor Surveillance Systems (BRFSS), Territorial Hybrid Survey 2018, Human Resources and Service Administration Data (HRSA) Data Repository, Global Burden of Disease Study 2019, NCD Risk Factor Collaboration Surveys 2014-2018, and Institute for Health Metrics and Evaluation (IHME).

Notwithstanding the urgency of addressing NCDs in American Samoa, prioritizing prevention strategies, investing in healthcare infrastructure, particularly innovative digital technologies, and fostering international collaboration is crucial. Mental health, nutrition, smoking, and alcohol are mainstays of nuanced interventional probes informing the strategic plan and have a significant contributory effect on the early development of NCDs in American Samoa.

Good mental health is integral to well-being, and promoting and protecting mental health is critical to a well-functioning society. The Regional Framework for the Future of Mental Health in the Western Pacific 2023–2030 aims to support Member States in designing national strategies, plans, and policies on mental health [3]. The Territory faces diverse social vulnerabilities and pressures, including rapid and unplanned urbanization, poverty, digitalization of lifestyles, and increasing drug use, all contributing to threats to mental health and well-being.

Nutrition plays a vital role in preventing NCDs and enhancing cognitive development. Proper nutrition significantly influences cognitive development, particularly during early childhood [4, 5, 6]. Malnutrition, whether undernutrition or overnutrition, can have detrimental effects on cognitive abilities [7, 8]. A balanced diet, rich in fruits, vegetables, whole grains, and lean proteins, is essential for preventing obesity, diabetes, cardiovascular diseases, and certain types of cancer [9, 10].

Alcohol is a leading contributor to the global burden of disease, associated with cardiovascular disease, stroke, diabetes and poorer mental health [1]. Alcohol is also carcinogenic, with any level of consumption increasing the risk of developing several forms of cancer thus the WHO recommends that Member States enact policies to reduce levels of consumption as a harm-reduction priority [11].

Smoking is a significant risk factor for cardiovascular disease, promoting atherosclerosis, hypertension, and other adverse effects on blood vessels [12, 13, 14, 15] leading to debilitating diseases like strokes impacting economic burden [16, 17]. Electronic nicotine delivery systems (ENDS) or e-cigarettes have gained popularity, but growing evidence suggests their own set of harmful effects [18, 19, 20, 21, 22, 23], particularly on chronic lung conditions [24, 25] including cancers [26]. Urgent measures, including a complete ban on ENDS, are crucial to protect public health [27].

In support of the Department of Health’s strategic planning for 2025–2030, the CDC’s Division of Global Health Protection collaborates with global partners to enhance global health and economic security. Recognizing the urgency, every two seconds, someone dies prematurely of an NCD, and every dollar invested in proven NCD interventions in territories like American Samoa will generate at least USD\$7 in increased economic development or reduced healthcare costs by 2030 [28].

Globally and in the Western Pacific region, commitments for NCDs have been made as part of the broader "Regional Framework for NCD Prevention & Control in the Western Pacific," fully harmonized with the Global Action Plan for the Prevention and Control of Non-communicable Diseases (2013-2020) [1, 2, 29]. These commitments emphasize a systematic approach to NCD prevention and control, aligning with the WHO’s 13th General Program of Work (GPW-13) and the specific target of Universal Health Coverage (UHC) in the Sustainable Development Goals (SDGs).

Advancing UHC requires sustained political commitment and technical know-how, aiming for improved health for all under the framework of a resilient health system oriented towards primary healthcare.

Non-communicable disease crisis in American Samoa

American Samoa continues to grapple with a non-communicable disease crisis, mirroring the challenges faced by the other PICTs. In the context of this strategic plan, non-communicable diseases refer to those ailments linked to lifestyle factors and exhibiting interconnections.

Healthcare financing within the Territory relies on Medicaid, functioning as a third-party medical insurance scheme that extends coverage to 100% of residents. Additionally, funding sources encompass federal grants allocated to programs and institutional financing. Technical support mechanisms for activities related to non-communicable diseases involve collaboration with institutions such as PIHOA, CDC, SPC, and WHO.

Following the WHO STEPwise survey's publication in 2007, the prevalence of risk factors associated with non-communicable diseases was notably higher in American Samoa compared to most other Pacific Island Countries at that time. The incidence of individuals exhibiting multiple risk factors for non-communicable diseases (more than 3) in the age group of 25–64 years was alarmingly high, as illustrated in Table 1.

Table 1: American Samoa's Risk Factor Profile

Risk Factor	Overall prevalence	Males	Females
Smoking, daily	29.9%	38.1%	21.6%
Current alcohol consumption	63.5%	72.7%	41.3%
Binge drinking	41.8%	49.6%	33.9%
< 5 servings fruits and vegetables	86.7%	87.9%	85.6%
Low levels of physical activity	62.2%	58.6%	66%
Hypertension	34.2%	40.9%	27.5%
High blood sugar	47.3%	52.3%	42.4%
Overweight/obesity	93.5%	92.7%	94.4%
High cholesterol	23.4%	23.1%	23.7%
> 3 NCD risk factors (25-44 years)	69.2%	74.6%	64.3%
> 3 NCD risk factors (45-64 years)	76.7%	80.4%	73.1%

Source: American Samoa WHO STEPs survey, 2004 (data published 2007)

What risk factors drive the most death and disability combined?

● Metabolic risks
● Environmental/occupational risks
● Behavioral risks

Risk	2009 rank	2019 rank	Change in DALYs per 100k, 2009–2019
High body-mass index	1	1	↑ +1,249.9
High fasting plasma glucose	2	2	↑ +1,197.2
High blood pressure	3	3	↑ +784.7
Tobacco	4	4	↑ +553.7
Dietary risks	5	5	↑ +538.0
Kidney dysfunction	6	6	↑ +475.1
High LDL	8	7	↑ +285.9
Malnutrition	7	8	↓ -349.2
Air pollution	9	9	↓ -7.2
Low physical activity	11	10	↑ +120.2

Figure 1. Global Burden of Disease Study 2019 – American Samoa Risk Factor Profile

The strategy is designed to address the prevention and effective control of non-communicable diseases (NCDs), encompassing mental health considerations. This comprehensive approach is organized into distinct components, each targeting key areas associated with the escalating prevalence of SNAPS risk factors: high body-mass index, elevated fasting plasma glucose, hypertension, tobacco use, dietary risks, and kidney dysfunction, which has shown limited change. Additionally, there is an increased emphasis on the prioritization of high levels of LDL or "bad" cholesterol, as illustrated in Figure 1. These risk factors persistently contribute to the rising burden of morbidity and mortality associated with NCDs, thereby necessitating ambitious targets for each of the five pillars.

The Global Burden of Disease Study reveals significant increases in mortality rates per 100,000 population over 10 years (2009 to 2019) in American Samoa. Notably, the highest-ranked morbidities include cardiovascular disease, with a significant focus on ischemic heart disease, as well as diabetes mellitus, stroke, chronic kidney disease (CKD), chronic obstructive pulmonary disease (COPD), and various cancers, as depicted in Figure 2.

What causes the most deaths?

- Communicable, maternal, neonatal, and nutritional diseases
- Non-communicable diseases

Cause	2009 rank	2019 rank	Change in deaths per 100k, 2009–2019
Ischemic heart disease	1	1	↑ +25.5
Diabetes	2	2	↑ +13.1
Stroke	4	3	↑ +15.6
Chronic kidney disease	5	4	↑ +12.2
COPD	6	5	↑ +4.3
Lung cancer	8	6	↑ +5.1
Lower respiratory infect	7	7	↑ +2.9
Prostate cancer	10	8	↑ +3.3
Breast cancer	14	9	↑ +4.2
Endo/metab/blood/immune	9	10	↑ +2.1

Figure 2. Global Burden of Disease Study 2019 – American Samoa Mortality Profile

In the realm of mental health, available data is comparatively limited. While a draft strategy for mental health is currently in the planning stage, a comprehensive framework has not yet been finalized.

In 1990, non-communicable diseases (NCDs) accounted for less than half of the total global health loss. However, a noteworthy shift has occurred since then, with health loss progressively tilting towards an escalating burden from NCDs and a diminishing impact from communicable, maternal, neonatal, and nutritional (CMNN) diseases.

Strategic Plan 2025 – 2030

This strategic plan builds upon the ongoing efforts in American Samoa to address the non-communicable disease (NCD) crisis, drawing insights from past plans and approaches. It aims to establish a comprehensive strategy for the prevention, treatment, and management of NCDs, marking a significant milestone by incorporating mental health, which not only poses significant health challenges on its own but is also closely interconnected with other NCDs. The approach aligns with a Health & Wellbeing-centered perspective in line with the Department of Health's overarching focus and public health programs.

To swiftly address the escalating burden of NCDs and ensure effective control, the health-related policy objectives outlined in this strategic plan include:

1. Provision of adequate primary and preventive health services to communities, encompassing home-based and outreach services to protect, promote, and support well-being.
2. Ensuring communities have access to effective and efficient health service delivery and quality clinical healthcare.
3. Implementing community risk factor profiling for NCDs with a focus on reversing behavioral trends.
4. Undertaking health system strengthening at all levels of the Department of Health.

These objectives are translated into 19 strategic objectives within five key action areas outlined in the 2025-2030 Strategic Plan of the Department of Health. The multi-sectoral approach emphasizes collaboration with various stakeholders, recognizing that addressing NCDs requires a collective effort beyond the Department of Health's scope. Socioeconomic factors influencing unhealthy behaviors associated with NCDs necessitate a diversified strategy.

The strategic plan, spanning five years, prioritizes activities based on indicated timings. Strategies set to commence sooner are given higher priority. A robust health system is considered integral to enhancing NCD prevention and treatment, with a focus on streamlining services for those at high risk and improving early detection. The Package of Essential NCD Interventions (PEN initiative) is instrumental in managing NCD treatment, employing primary healthcare facilities as settings for healthy living. This approach, aligned with evidence-based and cost-effective WHO 'Tackling NCDs' Best Buys, includes key medicines and technologies along with standardized protocols for management.

The inclusion of an indicators, monitoring, and surveillance pillar enables the Department of Health to establish benchmark targets based on current baseline NCD data, facilitating ongoing

monitoring of progression or regression. The strategy underscores the importance of research-related activities throughout, recognizing targeted research as crucial for guiding planning, policy decisions, and tailored interventions, including impact assessments.

Implementation of this strategic plan

This strategic plan is designed to be integrated into the annual operational plans of programs and units within the Department of Health (DOH), as well as corresponding action plans in other sectors. The DOH commits to offering support as necessary to facilitate the operationalization of this strategy in collaborating organizations. Each strategy outlined in this plan expects the active involvement of all implementing units, programs, or individuals in achieving the specified outputs. The overall governance of this strategic plan will be overseen by the DOH.

To ensure effective monitoring and evaluation (M&E) of this strategic plan, the surveillance and monitoring pillar sub-committee will utilize publicly available indicators on an annual basis. This includes the documentation of all relevant metadata such as data sources, calculation methods, reporting frequency, critical assumptions and risks, and interpretation and application of the data. Performance targets will be updated based on the progress of implementation, health outcomes, or other contextual factors.

For monitoring progress, global platforms on public domains such as the Pacific Alliance for NCD Action (MANA) dashboard, Global Burden of Disease Study 2019 data repository portal, World Heart Federation portal, WHO reporting, and the CDC and HRSA data warehouse portals will be the primary tools used.

A mid-term review of this strategy is anticipated and will be led by the monitoring and surveillance sub-committee. All stakeholders are expected to provide relevant information to facilitate the annual monitoring of this strategy. This review will assess progress against indicators and outcomes, consider new priorities, and account for changes in disease burden, as applicable. This iterative process ensures that the strategic plan remains adaptive and responsive to the evolving health landscape.

Core Principles

The Department of Health (DOH) has structured its NCD Prevention and Control framework on the following core principles:

1. Holistic Approach

- **Description:** Acknowledging that the NCD epidemic in American Samoa has advanced beyond its early stages, this principle emphasizes a comprehensive perspective covering the entire NCD continuum.
- **Implementation:** The plan incorporates population-based interventions, including policy and legislation, prevention/health promotion, lifestyle modifications targeting risk factors, and screening. Additionally, it includes targeted clinical interventions for high-risk individuals and groups.

2. Evidence-Based Action

- **Description:** Actions in the plan are selected based on the best available scientific evidence and cost-effectiveness data, aiming to maximize impact within resource and capacity constraints.
- **Implementation:** Priorities and targets are identified using the most current data, ensuring that the plan addresses the most critical issues for American Samoa.

3. Integration and Multisectoral Collaboration

- **Description:** Acknowledging and building on earlier initiatives, the plan emphasizes collaborations across sectors to achieve common health goals. It aims to integrate various existing action plans into an overall strategic approach.
- **Implementation:** Recognizing that several crucial actions for NCD prevention and control lie beyond the health sector, the plan promotes community engagement and involves non-health sectors in planning, implementation, and monitoring.

4. Life Course and Wellbeing Perspective

- **Description:** Recognizing that NCD risks can originate before birth and have lifelong consequences, the plan adopts a "womb to tomb" perspective, starting with maternal health and extending throughout an individual's entire life.
- **Implementation:** The plan incorporates interventions that consider the entire life spectrum, addressing health concerns at every stage of life.

5. Equity in Implementation

- **Description:** Acknowledging that NCDs affect all socio-economic groups, interventions are designed to address inequities. Special attention is given to reducing disparities within the population, particularly among poorer and less advantaged groups.

- **Implementation:** Interventions are tailored to reduce disparities and promote good health outcomes for all members of society.

6. Socio-Cultural & Religious Contextualization

- **Description:** Actions and interventions are chosen to address the specific needs of American Samoa, considering the socio-cultural and religious nuances of societal life.
- **Implementation:** The core principles reflect the values of the DOH and align with the Global Action Plan for NCDs, ensuring that strategies resonate with the cultural and religious context of the population (as depicted in Figure 3).

By adhering to these core principles, the DOH aims to establish a robust and culturally sensitive strategy for NCD prevention and control in American Samoa.

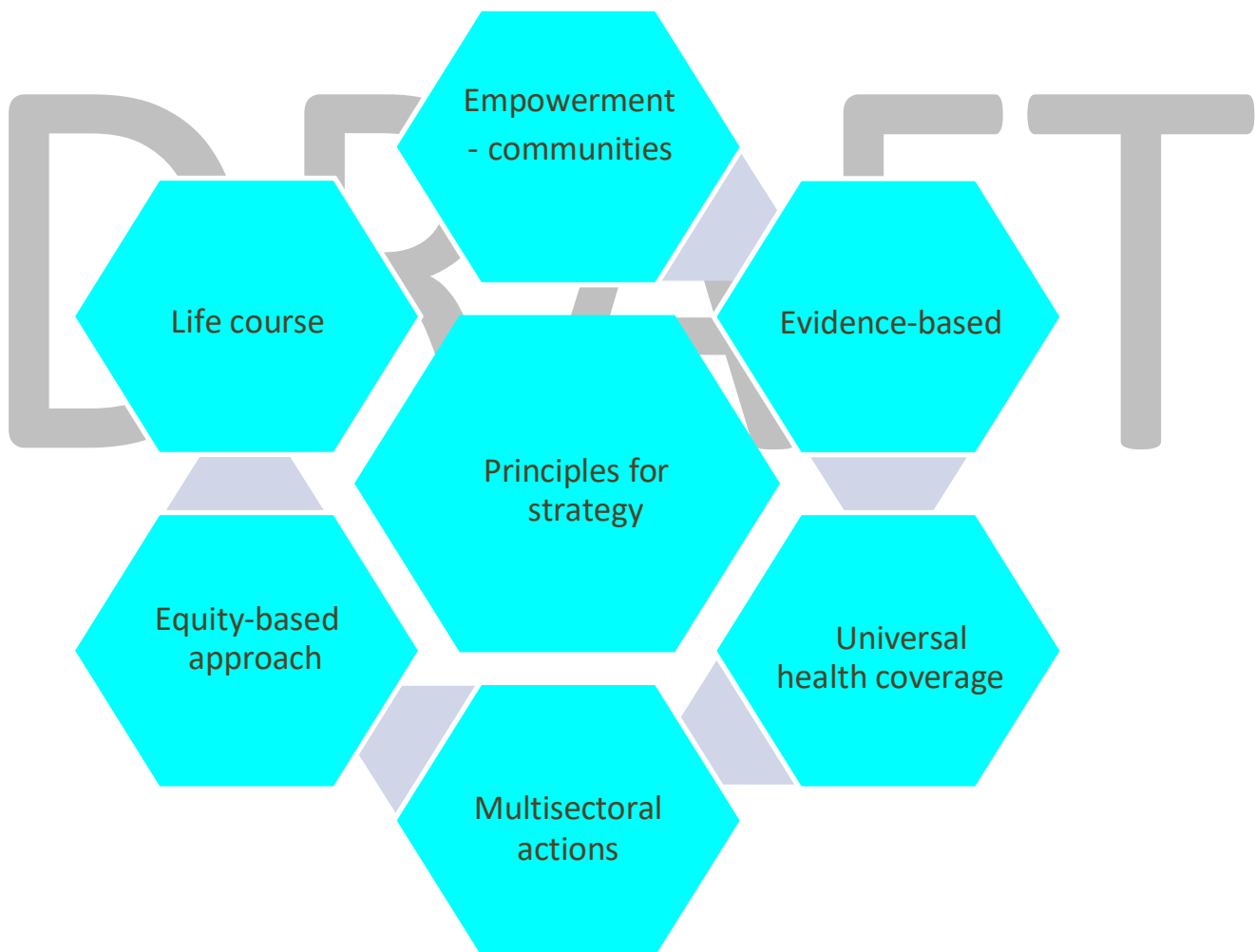


Figure 3. Values

Goal and Objectives of this Strategy

Goal: To contribute to the overall goal of a healthier American Samoa, with a specific aim to achieve a 25% reduction in premature mortality and the incidence of Non-Communicable Diseases (NCDs) by the year 2029.

Commitment to this goal will require:

1. Multisectoral Approach

- Collaborative efforts across sectors to address the multifaceted nature of NCDs.

2. Improved Service Delivery

- Integration of prevention, early diagnosis, and treatment at all levels of primary healthcare.

3. Improved Monitoring and Evaluation

- Enhanced mechanisms for monitoring and evaluating the progress of the strategic plan.

4. Capacity Building

- Strengthening the health workforce and allied institutions to effectively deliver services aligned with the health agenda.

5. Optimized Healthcare Financing

- Aligning healthcare financing mechanisms with the priorities outlined in the plan.

6. Leveraging Medical Technologies

- Utilizing new medical technologies for service efficiency and patient-focused care.

Overall Objectives:

1. Obesity

- No increase in obesity prevalence in adults or adolescents by 2030.

2. Diabetes

- No increase in diabetes prevalence in adults by 2030.

3. Chronic Kidney Disease (CKD)

- No increase in CKD prevalence in adolescents or adults by 2030.

4. Dietary Habits

- Reduced consumption of trans-fats, high salt content, and sugar-sweetened beverages by 20% by 2030.

5. Physical Activity

- The prevalence of insufficiently physically active adolescents reduced by 5% by 2030.
- The prevalence of insufficiently physically active persons aged 21 years and above reduced by 10% by 2030.

6. Tobacco Use

- Reduced prevalence of current tobacco use among adolescents by 30% by 2030.
- The prevalence of current tobacco use among persons aged 21 years and above reduced by 30% by 2030.
- Increase in the number of tobacco-free settings by 40% by 2030.

7. Substance Use

- Prevalence of binge and underage drinking among adolescents and adults reduced by 5% by 2030.
- Reduced prevalence of mental and illicit substance use disorders by 30% by 2030.

8. Cardiovascular Diseases (CVD)

- Reduced prevalence of CVD by 5% by 2030.

9. Cancer

- Increased detection of precancerous lesions by 20% by 2030.
- Reduced prevalence of cancers in women (breast, uterine, cervical) by 30% by 2030.
- Reduced prevalence of cancers of prostate, lung, and colon by 40% by 2030.

10. Mental Health

- Reduced prevalence of mental and illicit substance use disorders by 30% by 2030.

11. Policy-Driven Health Agendas

- Increased policy-driven health agendas in legislative adoption and amendments.

12. Legislative Enforcement

- Strengthen legislative enforcement of health initiatives.

13. Public Health Surveillance

- Improve NCD public health surveillance capacity to drive data for decision-making.

14. Resource Allocation

- Increased resources' allocation for NCDs in line with the scale of the crisis.

Framework of Approach: NCD Prevention & Control in American Samoa

American Samoa's strategic plan for Non-Communicable Disease (NCD) prevention and control is structured around the Pacific NCD framework [29], emphasizing five key action areas, referred to as the "5 Pillars," designed for effective NCD prevention and control:

1. Environmental Interventions

- Focuses on multisectoral policy and regulatory interventions to address environmental determinants promoting unhealthy lifestyles.

2. Healthy Lifestyle Promotion

- Aims to promote healthy lifestyle interventions to target common and intermediate risk factors through population-level behavior change.

3. Appropriate Clinical Services

- Involves clinical interventions at the level of established disease, including screening for the entire population, modifying risk factors for high-risk individuals, and managing established diseases, necessitating a strengthened health system for effective service delivery.

4. Advocacy and Communication

- Essential across the continuum to engage community stakeholders, mobilize partnerships, and cultivate champions and leaders.

5. Monitoring and Surveillance

- Critical throughout the entire continuum, requiring data for intervention selection, progress monitoring, and informed decision-making.

This framework recognizes the continuum of NCD development, where environmental determinants contribute to unhealthy lifestyles, leading to common risk factors and established diseases. Unchecked, these factors result in premature mortality, chronic disability, and economic losses.

The framework incorporates interventions aligned with the WHO "Tackling NCDs" 'Best Buys,' a set of cost-effective, evidence-based interventions updated since 2019 [30]. These interventions include pro-health taxes and advertising bans for tobacco and alcohol, reformulation policies for healthier food and drinks, and promotion and support for optimal breastfeeding practices. Additionally, new 'Best Buys' encompass secondary prevention for rheumatic fever, acute and long-term management of asthma and chronic obstructive pulmonary disease, and various cancer control interventions, including cervical, breast, colorectal, liver, and childhood cancer, as well as comprehensive cancer treatment for those living with HIV.

The strategic plan addresses actions at different stages of the continuum:

- **Environmental Level:** Multisectoral policy and regulatory interventions.
- **Common and Intermediate Risk Factors:** Promotion of healthy lifestyle interventions for population-level behavior change.
- **Established Disease Level:** Clinical interventions targeting screening for the entire population, risk factor modification for high-risk individuals, and clinical management for those with established diseases.

Advocacy and communication are essential for community engagement, partnership mobilization, and leadership cultivation. Continuous monitoring and surveillance are crucial for data-driven decision-making and progress tracking throughout the entire continuum of NCD prevention and control.

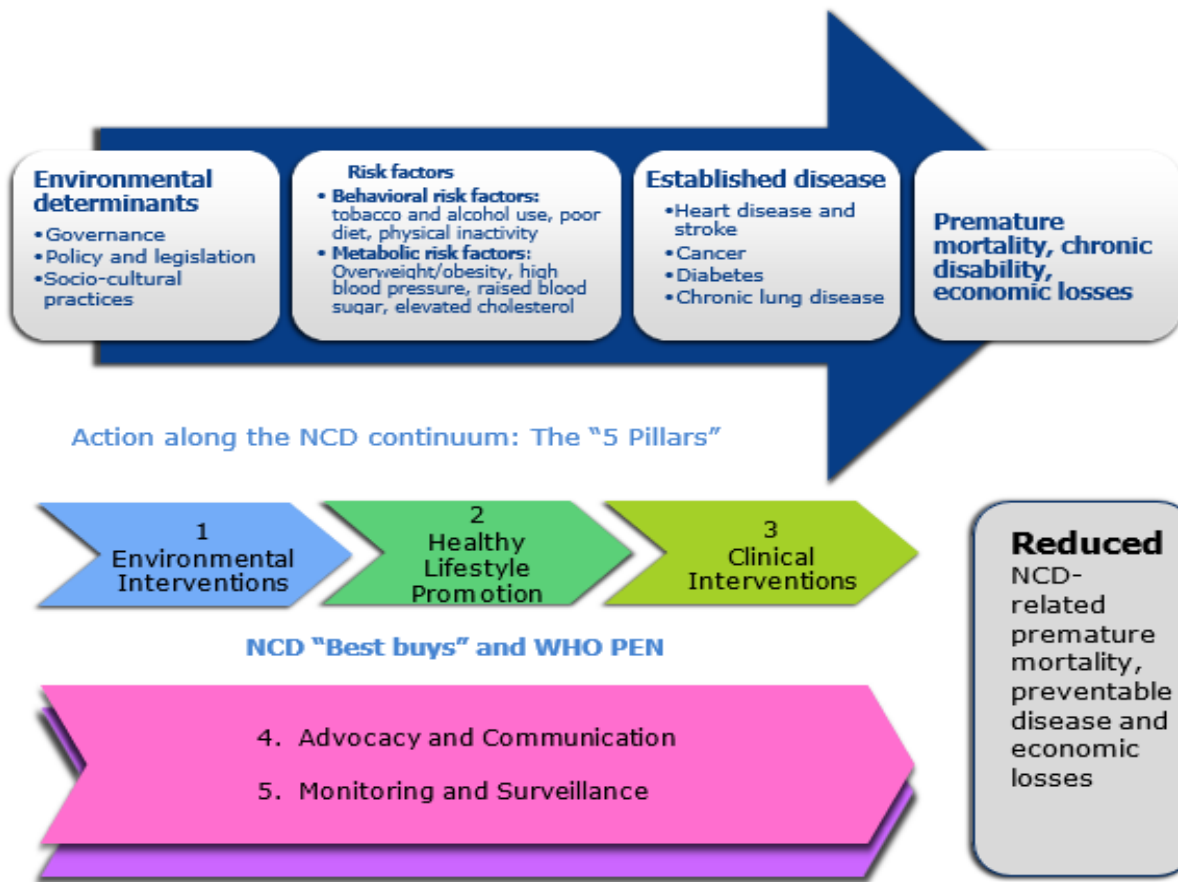


Figure 4. The NCD Continuum and American Samoa’s “5 Pillars” for NCD Prevention and Control

Metaphorical Representation of the NCD Strategic Plan in American Samoa: The Fautasi Journey

If NCD risk factors and diseases are likened to an ocean vortex, envision American Samoans navigating this perilous situation as people in a *fautasi*, a long boat. They endeavor to paddle their way out of the vortex's pull, symbolizing the collective effort to combat NCD challenges. The oars they employ to propel themselves away from danger correspond to the five action areas, with the "best buys" serving as the largest and most effective oars. These strategic interventions act as powerful tools in steering the course toward a healthier future.

The paddlers represent individuals and stakeholders working in a coordinated fashion, emphasizing the value of partnerships and multisectoral coordination. To move swiftly away from the vortex, unity, and synchronized efforts are paramount.

At the helm of the fautasi, there is someone with their eyes fixed on the destination—an imagery depicting visionary leadership. This leader guides the paddlers in the right direction, ensuring a clear trajectory toward the goal of a healthier American Samoa.

The fautasi itself symbolizes the health care system, the vessel through which actions must be carried out. It signifies the infrastructure and mechanisms in place to implement the strategies and interventions outlined in the NCD prevention and control plan.

The entire metaphorical representation can be encapsulated in a pictograph, paying homage to the seafaring traditions of Samoan ancestors (Figure 5). This imagery not only captures the challenges and efforts involved in NCD prevention and control but also reflects the rich cultural heritage and resilience of the community in navigating these health challenges.



Figure 5

1.0 ENVIRONMENTAL INTERVENTIONS

Key Strategy	Responsible Unit/Program	Timeframe	Milestones/Outputs	Aligned Indicator(s) in Other Pillar(s)	Aligned Indicator(s) (UN SDGs)
1.1 Adopt Health Promotion Taskforce	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Legislature	2025	Reactivated Health Promotion Taskforce	-	SDG 3: Good Health and Well-Being
1.2 Public-private coalition NCD policy	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Legislature	2025-2026	Policy on NCD implementation developed	-	SDG 17: Partnerships for the Goals
1.3 Training policy for NCD care	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Legislature	2024-2025	Training policy for NCD care developed	-	SDG 3: Good Health and Well-Being
1.4 Tobacco-free workplaces policy	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Program Managers, Coalition Partners	2025-2026	Tobacco free workplaces policy enacted	-	SDG 3: Good Health and Well-Being
1.5 Legislation on ENDS and ENNDS prohibition	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Program Managers	2025-2027	Legislation enacted on ENDS & ENNDS prohibition	1.4	SDG 3: Good Health and Well-Being
1.6 Stray Animal Legislation	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Program Managers, Legislature	2025-2028	Legislation reviewed for stray animal control	-	SDG 3: Good Health and Well-Being SDG15: Life on Land
1.7 Higher excise taxation on Alcohol	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Program Managers, Legislature	2025-2029	Legislation reviewed on alcohol taxation	-	SDG 3: Good Health and Well-Being.
1.8 Mental Health & Suicide Prevention Policy	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Program Managers, Workplace CEOs, Coalition Partners	2025-2029	Mental Health & Suicide Prevention Policy enacted	-	SDG 3: Good Health and Well-Being

Note that some entries in the "Aligned Indicators (UN SDGs)" column are marked as "-" since the strategies may not directly align with specific SDGs but contribute to broader health and development goals.

2.0 HEALTHY LIFESTYLE PROMOTION

Key Strategies	Responsible Unit/Program/Key Persons	Timeframe	Milestones/Outputs	Aligned Indicator(s)	Aligned Indicator(s) (UN SDGs)
2.1 Educational Campaigns for smoking, nutrition, physical activity and alcohol	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Legislature	2025 - 2026	Monthly programs in workplaces, schools, and communities		SDGs 3,4, 17: Improved public awareness
2.2 Promote breastfeeding for all newborns	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Legislature	2025 - 2030	Breastfeeding awareness sessions conducted		SDG 3, Good Health and Well-being
2.3 Recreational Spaces	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Legislature	2025 - 2030	Walkways, Outdoor gyms built/developed	1.6	SDG 11, Sustainable cities and communities
2.4 Anti-Smoking Campaigns	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Breastfeeding Committee, Program Managers, Nutritionists, Obstetricians, LBJ Team	2025 - 2030	Organized events, Healthy alternatives		SDG 3, Good Health and Well-Being
2.5 Brief Intervention Programs	Health Professionals, NCD Coordinator, Program Manager	Ongoing	Implementation of brief interventions or individuals at risk of excessive alcohol consumption		SDG 3, Good Health and Well-Being
2.6 Mental Health Support	Behavioral Health, Clinical Director, Medical Director	2025-2030	Implementation of counseling interventions for individuals at risk of mental health disorders		SDG 3: Good Health and Well-Being

3.0 CLINICAL INTERVENTIONS

Key Strategy	Responsible Unit/Persons	Timeframe	Milestones/Outputs	Aligned Indicator(s)	Aligned Indicator(s) (UN SDGs)
3.1 Develop and Implement Screening Protocols	CMO, LBJ, Clinical Epidemiologist, Chiefs/Managers of Departments, NCD Consultant, Clinical Director, Medical Director, Primary Care Physicians, Program Managers	2025 - 2028	Cancer screening protocol age thresholds for early detection of precancerous lesions: -Cervical Cancer: 21 years old -Prostate Cancer: 35 years old -Colon Cancer: 35 years old Lung Cancer: 35 years old Breast Cancer: 25 years old Uterine Cancer: 30 years old		SDG 3.4: Reduce premature mortality from NCDs.
3.2 Incorporate NCD Screening in Workplace Programs	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Clinical Director, Medical Director, Primary Care Physicians, Nutritionists, Mental Health Services, LBJ Team, Pediatricians	2025 – 2030	Clinical screenings for NCDs in workplace Health & Wellbeing programs,		SDG 3: Good Health and Well-Being.
3.3 Conduct Necessary Secondary Referrals	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Clinical Director, Medical Director, Primary Care Physicians, Nutritionists, Mental Health Services, LBJ Team, Pediatricians	2025 - 2030	Referrals to Specialists and services, including Substance use and mental disorders		SDG 3: Good Health and Well-Being.
3.4 Equip and Develop Health Facilities	CEO-LBJ, CMO-LBJ, Chiefs/Managers of Departments, NCD Consultant, Program Managers, Clinical Director, Medical Director, Primary Care Physicians	2025 - 2030	Number of decentralized satellite facilities established for the care of oncology and dialysis health services. Equip and develop health facilities to be NCD friendly. i.e. design layout IEC material etc.		SDG 3.8: Achieve universal health coverage.

3.5 Use Innovative Digital Platforms	NCD Consultant, NCD Steering Committee, Program Managers, Clinical Director, Medical Director, Primary Care Physicians	2025 - 2028	Utilization of digital platforms for early detection and continuum of care		SDG 3.8: Achieve universal health coverage
3.6 Conduct Capacity Building	CEO-LBJ, CMO-LBJ, Chiefs/Managers of Departments NCD Consultant, NCD Steering Committee, Program Managers, Clinical Director, Medical Director, Primary Care Physicians, Obstetricians, Internists, Mental Health Services	2025 – 2030	Capacity building of healthcare professionals, including mental health services		SDG 3.c: Increase health financing and support healthcare workforce in developing countries.
3.7 Update treatment and Care Guidelines	CMO-LBJ, Clinical Epidemiologist, Chiefs/Manager of Departments, Clinical Director, Medical Director, NCD Consultant, Primary Care Physicians	2025 – 2030	Development of treatment and care guidelines for all units in LBJ.		SDG 3.4: Reduce premature mortality from NCDs
3.8 Pharmacological Management	Clinical Pharmacists, Primary Care Physicians, Specialist, Clinical Director, Medical Director	Ongoing	Adherence to evidence-based medication regimens for NCDs		SDG 3: Good Health and Well-Being
3.9 Rehabilitation Programs	Rehabilitation Specialists, Physical Therapists, Occupational Therapists	Ongoing	Implementation of rehabilitation for NCDs and complications		SDG 3: Good Health and Well-Being
3.10 Palliative Care	Palliative Care Team, Hospice Services, Department of Nursing, Clinical Director, Primary Care Physicians	Ongoing	Integration of palliative care for advanced stages of NCDs		SDG 3: Good Health and Well-Being
3.11 Advanced Imaging and Diagnostics	LBJ Radiologists, Imaging Specialists, Geneticists, Medical Director, Clinical Director	Ongoing	Utilization of advanced imaging techniques for early detection and accurate diagnose of NCDs.		SDG 3: Good Health and Well-Being
3.13 Telemedicine Services	CEO-LBJ, CMO-LBJ, MIS, Chiefs/Managers of Departments, Medical Director, Clinical Director, Primary Care Physicians, Program Managers	Ongoing	Implementation of telemedicine for optimal patient care		SDG 3.8: Achieve universal health coverage

3.14 Preventive Vaccinations	CEO-LBJ, CML-LBJ, Chief Pediatrics, Infection Control Manager, Vaccination Clinics, Primary Care Providers	Ongoing	Development of supplementary vaccination clinics in LBJ to augment vaccination services.		SDG 3.8: Achieve universal health coverage
3.15 Community-Based Interventions	CEO-LBJ, CMO-LBJ, Lead Physician – Complex Care Management Team, Clinical Epidemiologist, Chiefs/Managers of Departments, Community Health Workers, Local Organizations	2025-2028	Collaborate with at least 3 community-based coalitions/stakeholders/academia on research-driven NCD initiatives for improved patient-centered care.		SDG 3.d: Strengthen capacity for early warning, risk reduction, and management of health risks.
3.16 Home-Based Care	CEO-LBJ, CMO-LBJ, Lead Physician – Complex Care Management Team, Clinical Epidemiologist, Chiefs/Managers of Departments. Home Healthcare Providers, Caregivers	2025 – 2026	Develop complex care multi-disciplinary management team for the complex and advanced clinical management approaches.		SDG 3.8: Achieve universal health coverage
3.17 Counseling and Behavioral Interventions	Psychologists, Counselors, Behavioral Health Specialists	Ongoing	Provision of counseling services for behavioral changes		SDG 3 - Good Health and Well-being
3.18 Collaborate for holistic care approach	Tobacco/Diabetes Program Manager, Pharmacist Francine Amoa, Behavioral Health Manager, Clinical Director, Medical Director	2024 - 2026	Improve tobacco addiction support; Enhance nutritional education through collaborative care programs		SDG 3, SDG 4, SDG 17

<p>3.19 Development of Specialist Care Clinics in Collaboration with ASDOH Programs</p>	<p>CEO-LBJ, CML-LBJ, Chiefs/Managers of Departments, Pediatricians, RHD Program Managers, ASDOH Program Managers</p>	<p>2025 – 2030</p>	<p>Heart Care Clinic is pediatrics initiated for comprehensive care of cardiac patients (including RF/RHD cases).</p> <p>Collaborative MOU between ASDOH and LBJ for the complex and comprehensive care of RE/RHD Patients.</p>	<p>SDG 3.4: Reduce premature mortality from NCDs.</p> <p>SDG 3.8: Achieve universal health coverage.</p>
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4.0 **ADVOCACY & COMMUNICATIONS**

Key Strategy	Responsible Unit/ Program/ Key Persons	Timeframe	Outputs	Aligned Indicator(s)	Aligned Indicator(s) (UN SDGs)
4.1 Strengthen multi-sectoral engagements and partnerships to adopt and promote the Territorial NCD Plan	NCD Consultant, NCD Steering Committee, Key Leaders, Program Managers	2025 - 2030	Accelerate and scale up effective partnerships for advancement of the Territorial NCD Plan		SDG 17: Partnerships for the goals.
4.2 Establish a territorial-wide Communication and Community Engagement Working Group		2025 -2029	Engage and empower the community to become partners in NCDs Prevention and Control		SDG 17: Partnerships for the goals
4.3					

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5.0 MONITORING & SURVEILLANCE

Key Strategy	Responsible Unit/ Program/ Key Persons	Timeframe	Outputs	Aligned Indicator(s)	Aligned Indicator(s) (UN SDGs)
5.1 Develop and enable Registries supporting NCD prevention, control, and continuum of care	NCD Coordinator, Director of Health, NCD Consultant, NCD Steering Committee, Key Leaders, Program Managers, Specialist Doctors	2025-2030	Registries for NCD related diseases and risk factors developed and shared under MOU with LBJ.	-	SDG 3.4: Reduce premature mortality from NCDs.
5.2 Implement surveys (BRFSS, GYTS, etc.) for initiation of GYTS planning and translation with DOE's engagement	Tobacco/Diabetes Program Manager, Department of Health, Tobacco/Diabetes Program, ELC Program, Epidemiologists,	2024 - 2029	Annual BRFSS survey completed	-	SDG 3: Good Health and Well-being
	NCD Coordinator, NCD Consultant, Public Health Physicians, Clinical Director, Department of Education		GYTS survey populated from data elicited from annual BRFSS surveys		
5.3 Develop and/or update NCD surveillance plan and contribute to NCD surveillance dashboards both internally and external to DOH	Department of Health - NCD Programs, NCD Coordinator, NCD Consultant, ELC Program, Epidemiologists, Public Health Physicians, Medical Director	2024 - 2029	Bi-monthly updates to NCD Unit, aligning NCD actions/interventions with established or revised operational unit plan	-	SDG 3: Good Health and Well-being; SDG 17: Partnerships for the Goals

Bibliography

- [1] WHO, "Regional Action Framework for Noncommunicable Disease Prevention and Control in the Western Pacific," 2023. [Online]. Available: <https://www.who.int/publications/i/item/9789290620044>.
- [2] WHO, "For the Future - Towards the Healthiest & Safest Region," August 2019. [Online]. Available: <https://www.who.int/docs/default-source/wpro---documents/regional-committee/session-70/rcm70-inf-1-for-the-future.pdf>.
- [3] WHO, "Regional Framework for the Future of Mental Health in the Western Pacific 2023 - 2030," 2023. [Online]. Available: <https://www.who.int/publications/i/item/9789290620075>.
- [4] K. Heikkilä, A. Sacker, Y. Kelly, M. J. Renfrew and M. A. Quigley, "Breast feeding and child behaviour in the Millennium Cohort Study," *Archives of Disease in Childhood*, pp. 635-642, 12 June 2011.
- [5] M. A. Quigley, C. Hockley, C. Carson, Y. Kelly, M. J. Renfrew and A. Sacker, "Breastfeeding is Associated with Improved Child Cognitive Development: A Population-Based Cohort Study," *The Journal of Pediatrics*, vol. 160, no. 1, pp. 25-32, January 2012.
- [6] D. Benton, "The influence of dietary status on the cognitive performance of children," *Molecular nutrition & food research*, vol. 52, no. 3, pp. 457-470, 2008.
- [7] S. Grantham-McGregor, Y. B. Cheung, S. Cueto, P. Glewwe, L. Richter, B. Strupp and I. C. D. S. Group, "Developmental potential in the first 5 years for children in developing countries," *The Lancet*, vol. 369, no. 9555, pp. 60-70, 2007.
- [8] I. Jáuregui-Lobera, "Iron deficiency and cognitive functions," *Neuropsychiatric disease and treatment*, vol. 10, pp. 2087-2095, 2014.
- [9] F. B. Hu, "Dietary pattern analysis: a new direction in nutritional epidemiology," *Current opinion in lipidology*, vol. 13, no. 1, pp. 3-9, 2002.
- [10] D. Mozaffarian, T. Hao, E. B. Rimm, W. C. Willett and F. B. Hu, "Changes in diet and lifestyle and long-term weight gain in women and men," *New England Journal of Medicine*, vol. 364, no. 25, pp. 2392-2404, 2011.
- [11] L. Booth, T. McCausland, D. Keric, K. Kennington, J. Stevens-Cutler, L. Scott and S. Pettigrew, "Evaluating an alcohol harm-reduction campaign advising drinkers of the alcohol-cancer link," *Addictive Behaviors*, vol. 145, p. 1, 2023.
- [12] I. S. Ockene and N. H. Miller, "Cigarette Smoking, Cardiovascular Disease, and Stroke," *Circulation*, vol. 96, no. 9, pp. 3243-3247, 1997.
- [13] N. L. Benowitz, "Nicotine addiction," *New England Journal of Medicine*, vol. 362, no. 24, pp. 2295-2303, 2010.
- [14] J. A. Critchley and S. Capewell, "Smoking cessation for the secondary prevention of coronary heart disease," *Cochrane Database of Systematic Reviews*, vol. 1, p. 4, 2003.

- [15] L. Arcavi and N. L. Benowitz, "Cigarette smoking and infection," *Archives of Internal Medicine*, vol. 164, no. 20, pp. 2206-2216, 2004.
- [16] D. G. Hackam and S. S. Anand, "Emerging risk factors for atherosclerotic vascular disease: a critical review of the evidence," *Journal of the American Medical Association*, vol. 290, no. 17, pp. 932-940, 2003.
- [17] R. Bonita, J. Duncan, T. Truelsen and R. T. Jackson, "Passive smoking as well as active smoking increases the risk of acute stroke," *Tobacco Control*, vol. 6, no. 4, pp. 368-372, 1997.
- [18] J. Margham, K. McAdam, M. Forster, C. Liu, C. Wright, D. Mariner and C. Proctor, "Chemical Composition of Aerosol from an E-Cigarette: A Quantitative Comparison with Cigarette Smoke," *Chemical Research in Toxicology*, vol. 29, no. 10, pp. 1662-1678, 2016.
- [19] CDC, "E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General," 2016. [Online]. Available: <https://www.ncbi.nlm.nih.gov/books/NBK538680/>.
- [20] K. Farsalinos, V. Voudris and K. Poulas, "E-cigarettes generate high levels of aldehydes only in "dry puff" conditions," *Addiction*, vol. 110, no. 8, pp. 1352-1356, 2015.
- [21] M. Ogunwale, M. Li, M. Ramakrishnam Raju, Y. Chen, M. Nantz, D. Conklin and X. Fu, "Aldehyde detection in electronic cigarette aerosols," *ACS Omega*, vol. 2, no. 3, pp. 1207-1214, 2017.
- [22] M. Sleiman, J. Logue, V. Montesinos, M. Russell, M. Litter, L. Gundel and H. Destailats, "Emissions from electronic cigarettes: key parameters affecting the release of harmful chemicals," *Environ Sci Technol*, vol. 50, no. 17, pp. 9644-9651, 2016.
- [23] R. Schweitzer, T. Wills, E. Tam, I. Pagano and K. Choi, "E-cigarette use and asthma in a multiethnic sample of adolescents," *Prev Med*, vol. 105, no. December, pp. 226-231, 2017.
- [24] Global Initiative for Chronic Obstructive Lung Disease, "Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease," 2021. [Online]. Available: <https://goldcopd.org/2023-gold-report-2/>.
- [25] M. Wang, S. Ho, L. Leung and T. Lam, "Electronic Cigarette Use and Respiratory Symptoms in Chinese Adolescents in Hong Kong," *JAMA Pediatr*, vol. 170, no. 1, pp. 89-91, 2016.
- [26] International Agency for Research on Cancer, "Tobacco smoke and involuntary smoking," 2012. [Online].
- [27] World Health Organization, "WHO Framework Convention on Tobacco Control: Electronic Nicotine Delivery Systems," 2021. [Online]. Available: https://www.who.int/tobacco/framework/WHO_FCTC_english.pdf. [Accessed 2023].
- [28] GHPS, "Global Noncommunicable Diseases Fact Sheet," 3 February 2023. [Online]. Available: <https://www.cdc.gov/globalhealth/healthprotection/resources/fact-sheets/global-ncd-fact-sheet.html>.

[29] SPC, 2019. [Online]. Available: <https://www.spc.int/updates/blog/2019/09/non-communicable-diseases-in-focus-at-the-13th-pacific-health-ministers>.

[30] WHO, 2019. [Online]. Available: https://applications.emro.who.int/docs/EMROPUB_2018_EN_17036.pdf?ua=1.

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Annex II: NCD Strategic Plan Stakeholder Consultation Workshop

DATE:

Venue:

INVITEES LIST			ATTENDEES
NO	NAMES	DESIGNATION/ORGANIZATION	
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